

SAM4S

SAM4s SPS-300 Series Electronic Cash Register

Operator and Programming Manual



SPS-320/345 Shown Above with Optional Card Reader

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Sam4s SPS-300 OP Manual v1.75*

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Revision 2.0 - April 1, 2005

WARNING - U.S.

THIS EQUIPMENT GENERATES, USES AND CAN RADIATE RADIO FREQUENCY ENERGY, AND IF NOT INSTALLED AND USED IN ACCORDANCE WITH THE INSTRUCTIONS MANUAL, MAY CAUSE INTERFERENCE TO RADIO COMMUNICATIONS. IT HAS BEEN TESTED AND FOUND TO COMPLY WITH THE LIMITS FOR A CLASS A COMPUTING DEVICE PURSUANT TO SUBPART J OF PART 15 OF FCC RULES WHICH ARE DESIGNED TO PROVIDE REASONABLE PROTECTION AGAINST SUCH INTERFERENCE WHEN OPERATED IN A COMMERCIAL ENVIRONMENT. OPERATIONS OF THE EQUIPMENT IN A RESIDENTIAL AREA IS LIKELY TO CAUSE INTERFERENCE IN WHICH CASE THE USER, AT HIS OWN EXPENSE, WILL BE REQUIRED TO TAKE WHATEVER MEASURES MAY BE REQUIRED TO CORRECT THE INTERFERENCE.

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CET APPAREIL EST CONFORME AUX NORMES CLASS "A" D'INTERFERENCE RADIO TEL QUE SPECIFIER PAR MINISTRE CANADIEN DES COMMUNICATIONS DANS LES REGLEMENTS D'INTERFERENCE RADIO.

ATTENTION

The product that you have purchased may contain a battery that may be recyclable. At the end of its useful life, under various state and local laws, it may be illegal to dispose of the battery into the municipal waste system.

Check with your local solid waste officials for details concerning recycling options or proper disposal.



Precaution Statements

Follow these safety, servicing and ESD precautions to prevent damage and to protect against potential hazards such as electrical shock.

1-1 Safety Precautions

1. Be sure that all built-in protective devices are replaced. Restore any missing protective shields.
2. When reinstalling the chassis and its assemblies, be sure to restore all protective devices, including nonmetallic control knobs and compartment covers.
3. Make sure there are no cabinet openings through which people - particularly children - might insert fingers and contact dangerous voltages. Such openings include excessively wide cabinet ventilation slots and improperly fitted covers and drawers.
4. Design Alteration Warning:
Never alter or add to the mechanical or electrical design of the ECR. Unauthorized alterations might create a safety hazard. Also, any design changes or additions will void the manufacturer's warranty.
5. Components, parts and wiring that appear to have overheated or that are otherwise damaged should be replaced with parts that meet the original specifications. Always determine the cause of damage or over- heating and correct any potential hazards.
6. Observe the original lead dress, especially near the following areas: sharp edges, and especially the AC and high voltage supplies. Always inspect for pinched, out-of-place, or frayed wiring. Do not change the spacing between components and the printed circuit board. Check the AC power cord for damage. Make sure that leads and components do not touch thermally hot parts.
7. Product Safety Notice:
Some electrical and mechanical parts have special

safety-related characteristics that might not be obvious from visual inspection. These safety features and the protection they give might be lost if the replacement component differs from the original - even if the replacement is rated for higher voltage, wattage, etc.

Components that are critical for safety are indicated in the circuit diagram by shading, () or (). Use replacement components that have the same ratings, especially for flame resistance and dielectric strength specifications. A replacement part that does not have the same safety characteristics as the original might create shock, fire or other hazards.

CAUTION

Danger of explosion if battery is incorrectly replaced. Replace only with the same or equivalent type recommended by the manufacturer. Dispose used batteries according to the manufacturer's instructions.

ATTENTION

Il y a danger d'explosion s'il y a un remplacement incorrect de la batterie.
Remplacer uniquement avec une batterie du même type ou d'un type équivalent recommandé par le constructeur. Mettre au rebut les batteries usagées conformément aux instructions du fabricant.

1-2 Servicing Precautions

WARNING: First read the-Safety Precautions-section of this manual. If some unforeseen circumstance creates a conflict between the servicing and safety precautions, always follow the safety precautions.

WARNING: An electrolytic capacitor installed with the wrong polarity might explode.

1. Servicing precautions are printed on the cabinet. Follow them.
2. Always unplug the units AC power cord from the AC power source before attempting to:
 - (a) Remove or reinstall any component or assembly
 - (b) Disconnect an electrical plug or connector
 - (c) Connect a test component in parallel with an electrolytic capacitor
3. Some components are raised above the printed circuit board for safety. An insulation tube or tape is sometimes used. The internal wiring is sometimes clamped to prevent contact with thermally hot components. Reinstall all such elements to their original position.
4. After servicing, always check that the screws, components and wiring have been correctly reinstalled. Make sure that the portion around the serviced part has not been damaged.
5. Check the insulation between the blades of the AC plug and accessible conductive parts (examples : metal panels and input terminals).
6. Insulation Checking Procedure: Disconnect the power cord from the AC source and turn the power switch ON. Connect an insulation resistance meter (500V) to the blades of AC plug. The insulation resistance between each blade of the AC plug and accessible conductive parts (see above) should be greater than 1 megohm.
7. Never defeat any of the B+ voltage interlocks. Do not apply AC power to the unit (or any of its assemblies) unless all solid-state heat sinks are correctly installed.
8. Always connect an instrument's ground lead to the instrument chassis ground before connecting the positive lead ; always remove the instrument's ground lead last.

1-3 Precautions for Electrostatically Sensitive Devices (ESDs)

1. Some semiconductor (solid state) devices are easily damaged by static electricity. Such components are called Electrostatically Sensitive Devices (ESDs); examples include integrated circuits and some field-effect transistors. The following techniques will reduce the occurrence of component damage caused by static electricity.
2. Immediately before handling any semiconductor components or assemblies, drain the electrostatic charge from your body by touching a known earth ground. Alternatively, wear a discharging wrist-strap device. (Be sure to remove it prior to applying power - this is an electric shock precaution.)
3. After removing an ESD-equipped assembly, place it on a conductive surface such as aluminum foil to prevent accumulation of electrostatic charge.
4. Do not use freon-propelled chemicals. These can generate electrical charges that damage ESDs.
5. Use only a grounded-tip soldering iron when soldering or unsoldering ESDs.
6. Use only an anti-static solder removal device. Many solder removal devices are not rated as anti-static; these can accumulate sufficient electrical charge to damage ESDs.
7. Do not remove a replacement ESD from its protective package until you are ready to install it. Most replacement ESDs are packaged with leads that are electrically shorted together by conductive foam, aluminum foil or other conductive materials.
8. Immediately before removing the protective material from the leads of a replacement ESD, touch the protective material to the chassis or circuit assembly into which the device will be installed.
9. Minimize body motions when handling unpackaged replacement ESDs. Motions such as brushing clothes together or lifting a foot from a carpeted floor can generate enough static electricity to damage an ESD.

Contents

Introduction	15
About the SPS-300 Series	15
Using This Manual.....	16
Using Flowcharts	16
Programmable Features	17
Identifying Components & Connections.....	18
Operator Display Screen.....	19
Operator Display Example.....	20
Customer Display	20
Printers & SD Card.....	21
SD Card Specifications	21
Power Switch.....	23
Mode Switch.....	23
Mode Switch Keys.....	23
VOID (Void Mode).....	24
REG (Register Mode)	24
X (Manager Mode).....	24
Z (Reset Report Mode).....	25
PGM (Program Mode).....	26
S (Service Mode).....	27
Connection Panel.....	27
Keyboards.....	28
SPS-320/SPS-340 Flat Keyboard Version.....	28
SPS-320/SPS-340 Alpha Keyboard Overlay.....	28
SPS-345 Raised Keyboard Version-Default.....	29
SPS-345 Raised Keyboard Version-Expanded.....	29
SPS-345 Alpha Keyboard Overlay – Expanded.....	30
Getting Started	31
Quick Start Steps	31
Steps in this Chapter	31
Unpacking.....	31
Installing the Paper	32
Models with Two Printer Stations	33
Memory All Clear.....	35
SPS-320/SPS-340 Memory All Clear.....	36
SPS-345 Memory All Clear.....	37
Ram All Clear Receipt Example.....	38
Keyboard Expansion.....	39
SPS-345 Keyboard Expansion.....	39
Initial Clear	39
To Perform an Initial Clear:.....	39
Operations	40
Clerk Operations.....	40
Clerk Sign On Instructions	41
Push Button	41
Code Entry.....	41

MCR (Card Reader).....	41
Clerk Sign Off Instructions.....	41
Sign Off using MCR (Card Reader)	41
Clerk Time Keeping	42
Clerk Clock In/Out:.....	42
Receipt On and Off.....	43
If the RECEIPT ON/OFF Key is Located on the Keyboard.....	43
Item Registrations.....	44
Open Keyboard PLU Entry.....	44
Preset Price Keyboard PLU	44
Gallonage PLU Entry	45
Keyboard PLU Repeat Entry	45
Keyboard PLU Multiplication	46
Keyboard PLU Multiplication with Decimal Point	46
Split Pricing (Keyboard PLU)	47
Split Pricing Code Entry PLU	47
Single Item Keyboard PLU.....	48
Open Code Entry PLU.....	48
Preset Price Code Entry PLU.....	48
Code Entry PLU Multiplication.....	49
Code Entry PLU Multiplication with Decimal Point.....	49
PLU Price Inquiry.....	49
Modifier Entries.....	50
Pop-Up Modifier Key Affecting PLU Code.....	50
Age Verification	51
Price Level Key	52
Pop-Up Price Level Keys.....	52
Promo.....	53
Waste	53
Food Stamp Sales.....	54
PLU Look-Up Keys	55
Function Lookup Keys.....	55
Shifting or Exempting Tax.....	56
Shifting Tax	56
Shifting Tax - Individual Item.....	56
Shifting Tax on Sale.....	56
Exempting Tax.....	57
Exempting Tax using Tax Exempt Key.....	57
Exempting Tax using Eat-In/Take-Out/Drive-Thru	57
Discounts & Coupon Operations	58
Percent Discounts	58
Preset Percent Item Discount	58
Open Entry Percent Item Discount	58
Preset Percent Sale Discount.....	59
Open Entry Percent Sale Discount.....	59
Percent Surcharge	59
Coupon on Sale (Vendor Coupon).....	60
Coupon on Item (Store Coupon).....	61
Mix & Match	62
Mix & Match Operation	62
Void and Correction Operations	63
Cancel	63
Error Correct (Void Last Item)	63
Void Previous Item.....	63
Return Merchandise Registrations.....	64
Void Mode Operations.....	64

#/No Sale Operations	65
Open Drawer.....	65
Non Add Number	65
Received On Account Operations.....	66
Paid Out Operations.....	67
Subtotaling Operations.....	68
Subtotal.....	68
Eat In/Take Out/Drive Thru Sales	68
Totaling and Tendering.....	69
Totaling a Cash Sale	69
Tendering a Cash Sale	69
Rounding a Cash Sale.....	69
Totaling a Check Sale.....	70
Tendering a Check Sale.....	70
Totaling a Charge Sale.....	71
Tendering a Charge Sale.....	71
Integrated Payment Operations.....	72
Check Cashing.....	72
Check Endorsement.....	72
Split Tender	73
Post Tender.....	73
Receipt on Request	74
Issue a Second Receipt	74
Currency Conversion.....	75
Clerk Interrupt.....	75
To Enable Clerk Interrupt	75
Using X/Time	76
Validation	76
Check Tracking Operations	78
Overview	78
Posting Balances Manually.....	80
Opening a Check	80
Adding to a Check.....	80
Paying a Manual Balance.....	81
Soft Check	82
Opening a Soft Check	82
Adding to a Soft Check.....	82
Printing a Soft Check.....	83
Paying a Soft Check.....	83
Adding Checks.....	84
Hard Check.....	85
Opening a Hard Check.....	85
Adding to a Hard Check.....	85
Paying a Hard Check.....	86
Fast Food Drive Thru.....	87
Taking a Drive Thru Order	87
Paying a Drive Thru Order.....	87
Charge Posting.....	88
Charge Posting Operations	89
Scale Operations	90
Direct Scale Entry.....	91
Automatic Scale Entry.....	91
Tare Weight Entry	92
Manual Tare Weight Entry	92
Manual Weight Entry	93
Quick Journal Review.....	93

Not Found PLU.....	94
Quick Entry Method	94
Detail Entry Method	95
Not Found PLU Report.....	96
Price Changes	96

Management Functions 97

Manager Mode (X-Mode).....	97
Manager Operation	98
X Reports	98
X Report Options Definitions	99
X & Z Reports Table.....	100
Declaration.....	101
Register Print Format.....	102
Stop Receipt Printing	102
Stop Journal Printing.....	102
Training Mode	103
Electronic Journal Operation	104
Not Found PLU.....	105
Open Check (IRC)	105
Report SD Backup	106

Z Mode 107

Reset Report Mode	107
Z Reports	108
Z Report Options Definitions	109
X & Z Reports Table.....	110
Reset Electronic Journal	111
PC Communication.....	111
Mix & Match Program.....	112
Mix & Match Price & Quantity Settings	112
Mix & Match Scan.....	112
PLU Lookup Program.....	113
Age Verification	114
Reset Not Found PLU.....	114
KP Starting No.....	115
DATATRAN(Debit) Menu.....	115
DATATRAN Menu	116
NEW EMV FUNCTIONS	117
DC DIRECT	117
DC Direct Functions Definitions	117
DC Direct Settings Definitions	118
DC Direct Transactions Definitions.....	118
DC Direct Admin Functions Definitions	119
DEJAVOO.....	119
DEJAVOO Functions Definitions	119
Dejavoo Settings Definitions	120
Dejavoo Transactions Definitions.....	120
Dejavoo Admin Functions Definitions	120

System Reports 121

System Reporting.....	121
Report Table	122
Sample Reports	123

Financial	123
Time.....	127
PLU.....	128
Clerk	129
Individual Clerk.....	130
Groups	131
Day	131
Stock.....	132
Clerk Time.....	133
Open Check	134
PLU Zero Sale	134
Mix & Match	134
Report Balancing Formulas	135

Service Mode Programming 136

Service Mode Menu.....	136
Hardware Test.....	137
Hardware Test Table.....	137
Clear All Totals.....	138
Clear Grand Total	138
Clear PLU File	139
FLASHROM Information.....	139
Memory Allocation.....	140
Memory Allocation Specifications	141
Important Memory Allocation Notes.....	141
Function Key Assignment.....	142
Function Key Codes	144
IRC Options	145
IRC Options Definitions	146
Port Setting Options.....	146
RS-232 PORT 1 ~ 4 Settings.....	147
RS232C Settings Program Notes	149
Ethernet.....	150
SD Card Operation.....	151
Read Carefully: Store Name Notes.....	152
Formatting an SD Card.....	153
Program Backup and Load	154
Program Backup To SD Card	154
Program Load From SD Card	155
Each Program Load.....	155
Report SD Backup	156
Load/Save Receipt Images.....	157
Preparing a Graphic Logo Bitmap for an SPS-300 Series.....	157
Use the PC Utility to Convert the Image	158
Copy the Images to an SD Card.....	158
Load the Images by SD Card	159
Saving Images from an SPS-300 to an SD Card.....	159
Flash ROM Updates	160
Flash ROM Update by SD	160
Boot Area Update.....	160
Application Area Update.....	160
Flash ROM Update by PC Utility	161
Update Files.....	161
PC Connection Cable	161
Update Boot Area.....	161

Update Program Area.....	162
Entry Password	163
Clear Current Batch	163

Program Mode Programming 164

Default Program.....	164
Descriptor Programming Methods.....	165
Program Overlay Method	165
SPS-320/SPS-340 Alpha Keyboard Overlay.....	165
SPS-345 Alpha Keyboard Overlay	166
Descriptor Code Method.....	167
Program Sequence.....	167
Program Example.....	167
Descriptor Code Chart.....	167
Program Mode Menu	168
PLU Programming.....	169
Add/Modify PLU.....	169
PLU Options - Reference Information.....	171
Delete PLU	173
Delete PLU Range.....	174
Group Programming	175
Programming Groups.....	175
Group Programming - Reference Information.....	176
KP PORT # Notes:.....	176
Sales Tax Programming.....	177
Add-On Tax Programming	177
Tax Table Programming.....	178
Example 6% Tax Table.....	178
TAX Table Entry.....	179
VAT Tax Programming (Value Added Tax).....	181
GST Tax Programming.....	182
System Option Programming.....	183
System Option Definitions.....	189
Print Option Programming.....	196
Print Option Definitions.....	200
Function Key Programming.....	204
#/NS.....	205
#/NO SALE Function Options.....	206
%1 -%5	207
%1 -%5 Function Options.....	208
ADD CHECK	209
ADD CHECK Function Options	209
CANCEL	210
CANCEL Function Options.....	210
CASH.....	211
CASH Function Options	211
CHARGE 1-8	212
CHARGE 1-8 Function Options.....	213
Charge Key Notes:.....	214
CHECK.....	215
CHECK Function Options	216
CHECK CASHING	217
CHECK CASHING Function Options.....	217
CHECK ENDORSEMENT	218
CHECK ENDORSEMENT Function Options.....	218

CHECK #.....	219
CHECK # Function Options	220
CURRENCY CONVERSION 1-4.....	221
CURRENCY CONVERSION 1-4 Function Options	221
DATATRAN TIP	222
Datatran Tip Function Options.....	222
EAT-IN TAKE OUT DRIVE THRU	223
EAT-IN/TAKE OUT/DRIVE THRU Function Options.....	223
ERROR CORRECT.....	224
ERROR CORRECT Function Options.....	224
FINALIZE	224
FINALIZE Function Options.....	224
F/S SUBTOTAL.....	225
F/S SUBTOTAL Function Options	225
F/S TEND	225
F/S TEND Function Options.....	226
FUNCTION LOOK UP (1-2).....	227
Removing a Function from a Function Look Up Key	228
GUEST #	228
GUEST Function Options.....	228
LEVEL 1-5 (Price Level 1-5).....	229
LEVEL 1-5 Function Options.....	229
MACRO 1-10	229
MACRO Function Options	229
MDSE RETURN	230
RETURN Function Options.....	230
MODIFIER 1-5.....	231
MODIFIER 1-5 Function Options	232
PBAL	233
PBAL Function Options.....	233
PAID OUT 1-3	234
PAID OUT 1-3 Function Options.....	234
PRICE CHANGE	235
PRICE CHANGE Function Options.....	235
PRINT CHECK	236
PRINT CHECK Function Options	236
PROMO	237
PROMO Function Options	237
RECD ON ACCT 1-3.....	238
RECD ON ACCT 1-3 Function Options	238
SCALE.....	239
SCALE Function Options	239
SERVICE.....	240
SERVICE Function Options	240
SUBTOTAL	241
SUBTOTAL Function Options.....	241
TABLE #	242
TABLE Function Options.....	242
TARE.....	243
TARE Function Options	243
TAX EXEMPT	244
TAX EXEMPT Function Options	244
TIME IN/OUT	245
TIME IN/OUT Function Options	245
TIP	246
TIP Function Options.....	246

VALIDATION	247
VALIDATION Function Options.....	247
VOID ITEM	248
VOID ITEM Function Options.....	248
WASTE	249
WASTE Function Options.....	249
Function Key Descriptions	250
Clerk Programming.....	254
Clerk Programming - Reference Information	254
Logo Descriptor	255
Preamble	255
Postamble.....	256
Endorsement Message	257
Financial Report.....	258
Financial Report Messages	259
Clerk Report	260
Clerk Report Messages	261
Mix & Match Name.....	262
DataTran Message	263
NLU Code Number.....	264
Download Programs.....	265
Clerk In/Out.....	267
PLU Stock.....	268
Entering Stock Quantities.....	268
Drawer Limit.....	269
Check Change Limit.....	269
Time & Date	270
Tare Weight	270
Macro	271
Programming a New Macro.....	271
Edit an Existing Macro	272
Machine No.....	273
PC Schedule Time	274
Training Mode Password.....	274
Level Activate Time	275
Program Scans	275

Appendix 277

P-Mode Password	277
System Option – Password Setting.....	277
Entry Password.....	278
Entry Password Operation.....	278
IRC (Inter-Register Communications).....	279
IRC Configurations.....	279
IRC Functions.....	280
Reports	280
Programming.....	280
Device Sharing	280
IRC Programming & Setup.....	281
IRC Cable Specifications	281
Communication Conduit Size.....	281
Communication Cable Termination.....	282
Straight Thru Cable - Color Coding and Terminal Connection.....	282
Crossover Cable - Color Coding and Terminal Connection.....	283
Ethernet Cable Termination Instructions	283

Ethernet Cable Tips.....	284
Routing Communication Cable	284
Plenum Ceilings	284
Direct Burial Cable.....	284

Integrated Payment 285

Datacap-EMV Tran Series.....	285
Important EMV Notes:	286
Payment Application Best Practice Notes.....	287
Datacap-EMV \ ECR Configurations	287
IPTran LT – Single ECR	287
IPTran LT – Multi-ECR (3 or Less)	288
Tran Server - Multi-ECR (4 or More).....	289
NETePay Hosted – Single ECR.....	290
NETePay Hosted – Multi ECR.....	291
Required ECR Programming	292
Daily Procedures.....	293
Close Batch (<i>Open Batch</i>)	293
Delete SD EMV File.....	294
Register Transactions.....	295
Sample Transaction	295
Sample Draft	295
Sample Draft – With Gratuity	295
Manual Card Entry	296
Merchandise Return.....	296
Sample Draft	296
Void Transaction	297
Cancel EFT	297
Local Total Report.....	298
Tip (Gratuity) Entry.....	298
Sample Tip Chit	298
Close Batch.....	299
Close Batch	299
Local Batch Status Explanations:.....	299
Datatran(Debit) Menu	300
Datatran(Debit) Menu – Definitions	300
Pin-Pad Initialize	301
Close Batch(Debit).....	301
EMV Void Sale By Record No.....	301
EMV Void Return By Record No.....	302
EMV Voice Auth	302
EMV Zero Auth	303
Delete SD EMV File.....	304
Datatran Menu	304
Datatran Menu – Definitions	305
Initialize EFT.....	306
Open Batch.....	306
Close Current Batch	307
EMV Parameter Download.....	308
Change Batch Number / EMV EBT Voucher	308
Issue Transaction.....	309
Issue Batch Status.....	310
Dial In Load \ Dial Out Load	310
Diagnostics	311
Clear Current Batch	311

Local Transaction Report Key	312
Local Transaction Report Field Definitions.....	313
Glossary Of Terms	315
Manual Revision Record	322

Introduction

About the SPS-300 Series

Note: Before using this ECR system for the first time, leave it powered on in the **REG** mode for at least twenty-four hours. This allows the Lithium battery, which maintains the memory of the ECR while the power is off, to charge completely. Proper disposal of batteries is required. Refer to your local codes for disposal requirements.

The SPS-300 Series is offered in three configurations. There are two flat keyboard models that work well for restaurants, food service shops, or convenience stores and a raised-keyboard model for retail applications.

This manual includes instructions for all models. The keyboard and printer configuration define the model. All other features are the same, unless otherwise noted.

- The SAM4s **SPS-320** features a flat 150-position keyboard and a receipt printer.
- The SAM4s **SP-340** features a flat 150-position keyboard and receipt/journal printers.
- The SAM4s **SPS-345** features a raised 56-key keyboard with receipt & journal printers.
(The expanded 63-key raised keyboard version of the SPS-345 is shown here.)



Photos show SPS-300 series ECR's with optional card readers.

Using This Manual

This manual provides you with a means to use your SAM4s cash register to its fullest potential. It is divided into eight sections:

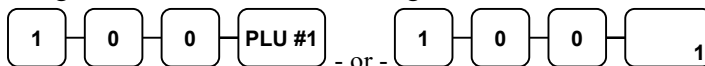
- **"Getting Started"** on page 31 provides quick start steps to help you get up and running for basic applications.
- **"Operations"** on page 40 guides you through operation sequences for registering transactions.
- **"Management Functions"** on page 97 explains manager controlled functions, along with X reports and balancing information.
- **"Z Mode"** on page 107 explains how to reset register reports as well as other functions performed in this mode: mix & match discounts, PLU lookups, DataTran operations, and Age verification.
- **"Service Mode Programming"** on page 121 provides instructions for secure programming – usually done by the installing dealer prior to installation.
- **"Program Mode Programming"** on page 164 provides complete programming instructions, including PLU, function key programs, and system options. This section is recommended for use by store owners and managers. Call your SAM4s dealer if you find you need programming assistance.
- **"Sample Reports"** on page 121 provides a sample of each register report.
- **"Inter-Register Communications"** on page 279 provides notes for IRC installations.
- **"EMV Integrated Payment"** on page 285 provides important operation information for users where optional integrated electronic payments are done using a Datacap appliance.

The SAM4s SPS-300 allows many different user applications; this manual was written with this in mind. Although we have tried to touch on all available options, your specific application may differ.

If you have questions concerning the configuration of your SPS-300, contact your authorized SAM4s dealer.

Using Flowcharts

Flowcharts are used to supplement step-by-step instructions throughout this manual. For example, the following flowchart describes how to register \$1.00 into the PLU1 key:



This flowchart means:

- ⇒ Press numeric key **1**.
- ⇒ Press numeric key **0**.
- ⇒ Press numeric key **0**.
- ⇒ Press **PLU #1**.

Follow the flowchart from left to right, pressing the keys in the order they are shown. Numeric keypad entries are shown as square keys. PLU and function keys are shown as rectangular keys.

Programmable Features

- Memory Allocation System Supports:
 - ⇒ Over 19,000 Price Look Ups (PLU's) are available
 - ⇒ Up to 5 menu levels for each PLU
 - ⇒ Up to 99 PLU Group totals
 - ⇒ Up to 99 clerks with separate report totals
 - ⇒ Electronic Journal
 - ⇒ Hard or Soft Guest Checks
- Up to 5 PLU modifier keys (i.e. small, medium, and large)
- 18-character programmable descriptors for PLU's and functions
- Employee time keeping functions for each clerk with optional employee cards clocking-in/signing-on
- Four tax rates with value added tax (VAT) capability.
- Programmable functionality for each key location
- 24-hour real-time clock with automatic day and date change
- Check, Cash, and up to 8 charge tender functions
- Currency conversion capability for up to 4 foreign currencies
- Training mode
- Food stamp sorting and tendering
- Programmable discount/surcharge/coupon keys
- Error Correct, Void, Cancel and Void Transaction functions
- Function keys for posting charges and payments to accounts or guest checks
- Macro, Function Look-up, Price Inquiry, Promo and Waste functions
- Management reports, with the capability to view most reports on the register display
- Electronic Journal capability
- 6-line programmable preamble and postamble messages
- 10-line programmable check endorsement message
- Programmable descriptors for financial and clerk reports
- Up to 15 PLU look-up keys
- Age verification feature forces date of birth entry
- Up to 99 Mix & Match discounts

Identifying Components & Connections

Printer(s)

SPS-320: 58mm Receipt Printer
 SPS-340/SPS-345: 58mm Receipt and Journal Printers

Standard Customer Rear Display: 1-Line 9-Digit LED

Operator Display

Adjustable 8-line, 32-character Backlit Liquid Crystal Display

Power On/Off Switch & Power Chord

7-Position Control Lock

Optional MSR Card Reader

Keyboards

SPS-320/SPS-340: Flat spill resistant 150 position keyboard. (Shown)

SPS-345: Raised keyboard with 21 PLU keys expandable to a maximum of 63 PLU key locations.

Cash Drawer

Sturdy Metal Cash Drawer with media slots and removable 5 Bill/5 Coin Drawer Insert



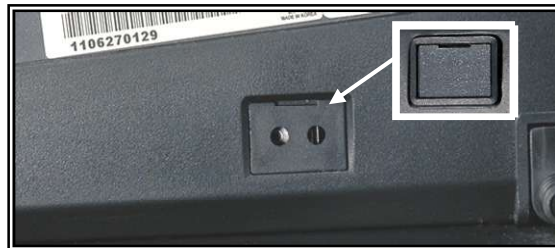
Communication Ports

2-Standard RS-232C ports expandable to 4-ports provide support for these options:

- Load cell scale
- Kitchen printer
- Bar code scanner
- Coin changer
- Pole Display
- Liquor dispensing system
- DataTran Integrated Payment Appliance
- Remote Journal or Video Surveillance System
- SPS-300 PC Utility
- SAM300 Polling Software

Power Switch Cover Options

- ♦ Use pointed object to toggle on/off
- ♦ Pop-out to remove the switch cover
- ♦ Insert shows optional full switch cover that is provided with accessories



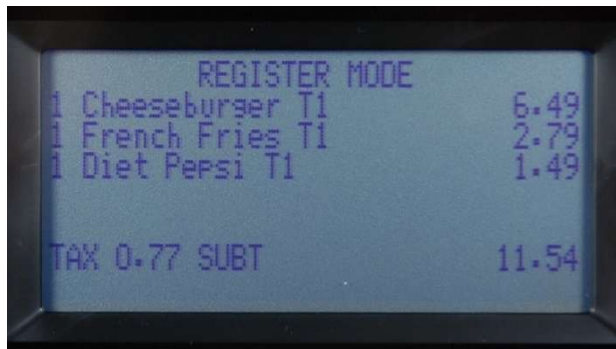
Operator Display Screen

The *SPS-300* Electronic Cash Register has a liquid crystal display screen, providing up to 8 lines of information with up to 32 characters per line. The display is backlit to provide excellent visibility, regardless of lighting conditions (the color of the backlight can be changed through system option programming.) Display screen contrast may be adjusted (the transaction must be finalized):

- Press **PAGE DOWN** in **REG** mode to increase the intensity of the back light.
- Press **PAGE UP** in **REG** mode to decrease the intensity of the back light.

The multiple-line screen lets you keep track of each item, as it is registered. For example:

- When you are operating the register (in the **REG** or **VOID** mode switch positions), you can view a list of items that have been registered, as well as updated tax and sale subtotals.
- If an item is multiplied, or repeated, the display lists the quantity of the item sold. (Note: Only quantities up to 99 are displayed in the quantity field.)
- Up to six items can be displayed simultaneously. When more than six items are registered, the display lists the last six items sold.
- You can scroll through long transactions with the **PAGE UP** and **PAGE DOWN** keys. When more than six items have been registered, you can press the **PAGE UP** key to view items registered earlier in the sale. Press the **PAGE DOWN** key to return to a view of the items registered later in the transaction.
- If you make an error, the screen specifies the type of error.



- Programming options also display. In most cases, you can make changes to your program without consulting this manual by simply following the program menus.

Operator Display Example

Up to six items can be displayed simultaneously.

If an item is multiplied, or repeated, the display lists the quantity of items here.

Tax and sale subtotals are updated with each new item entered.

REGISTER MODE		
1	PLU1 T1	1.00
1	PLU2	2.00
1	PLU3	3.00
1	PLU4	4.00
3	PLU5	15.00
TAX 0.06 SBTTL		25.06

When more than six items have been registered, you can press the **PAGE UP** key to view the items registered earlier in the sale.

When more than six items are registered, the display lists the last six items sold.

1	PLU3	3.00
1	PLU4	4.00
1	PLU5	15.00
1	PLU6	6.00
1	PLU7	7.00
1	PLU8	8.00
TAX 0.06 SBTTL		46.06

Customer Display

The SPS-300 Series ECR also has a 1-Line, 9-Digit LED customer display. The rear customer display shows the quantity and price of the current item being registered.



Printers & SD Card

SD Card Specifications

The SD Card Operations allow dealers and merchants to use an SD Card (*2GB or less*) to Backup and/or Load Program files, Save Reports, Load/Save Receipt image files, or perform Flash ROM firmware updates.

(Flash ROM updates can also be performed through a serial connection to a PC.)

Important! An SD Card is required to be installed on the ECR at all times when you are processing credit card transactions using EMV Integrated Credit with the ECR.

Absolutely no credit card information or customer information is stored at the ECR, only the Invoice number and Transaction amount is saved on the SD Card.

Note: The SD Card must be formatted for FAT32. The SPS-300 Series ECR's can support SD cards up to 2GB according to specifications.

Caution: A 4GB SD card worked when tested, however we cannot 100% recommend using a 4GB SD. Some report 4GB SD cards work well, some report a 4GB SD does not work.

The **SPS-320** features a single thermal receipt printer, the SD Card Port is located to the right of the printer. Remove the screw to access the SD card Port.



The **SPS-340 and SPS-345 Models** feature separate receipt and journal printers, the SD Card Port is located above the receipt printer.



Printer Specifications

Paper: 2 1/4" (58mm) Thermal Paper
 Paper Loading: Drop-in Loading
 Print Speed: 22 Lines per second

SD Card Specifications

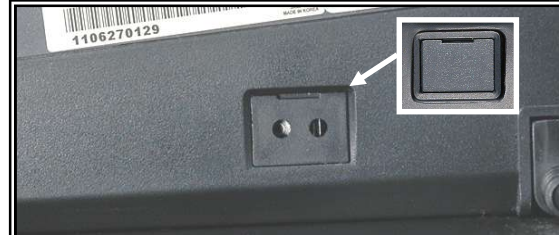
1 Standard SD Port
 2GB Maximum
 Must Format FAT32

Power Switch

To prevent tampering or interference with the power switch, a protective cover is installed. Use a pointed device such as a pen to activate the switch when the cover is installed or simply pop off the cover to access the switch normally. For maximum protection, you can install the solid cover provided in the accessory package.

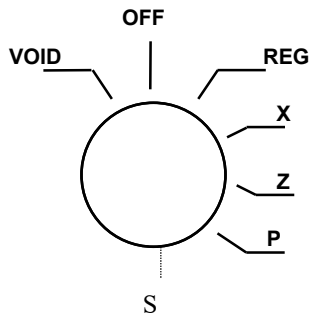
Power Switch Cover Options:

- ♦ Use pointed object to toggle on/off
- ♦ Pop-out to remove
- ♦ Insert shows optional full switch



Mode Switch

The mode switch has 7 positions, accessed with 5 keys. Each ECR is shipped with two full sets of keys.



- VOID** Used to void (correct) transactions.
- OFF** The register is inoperable.
- REG** Use for normal registrations.
- X** Use to read register reports.
- Z** Use to read register reports and reset totals to zero.
- P** Use to program the register.
- S** The “S” position (*Service-Mode*), is a hidden position, reserved for dealer access.

Before performing any operations in Register Mode, a clerk must be signed on. Refer to “Clerk Sign-On/Sign-Off” for a description of clerk operations.

Mode Switch Keys

All SPS-300 series models include two sets of keys that may be used to access the following mode switch positions.

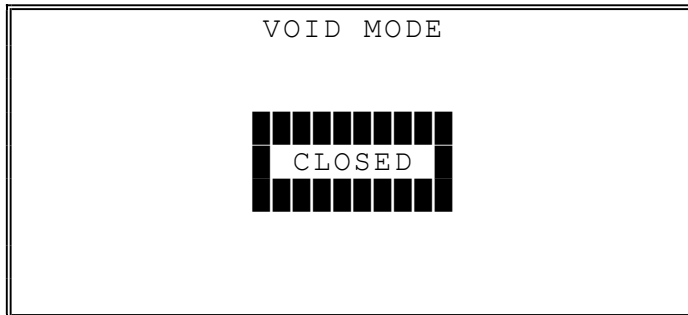
Key	Positions Accessible
REG	OFF, REG
VD	VOID, OFF, REG, X
Z	VOID, OFF, REG, X, Z
P	VOID, OFF, REG, X, Z, P
C	ALL POSITIONS

Note: Keys may be removed from the mode switch in the OFF or REG positions.

VOID (Void Mode)

Void Mode is used to void out sales.

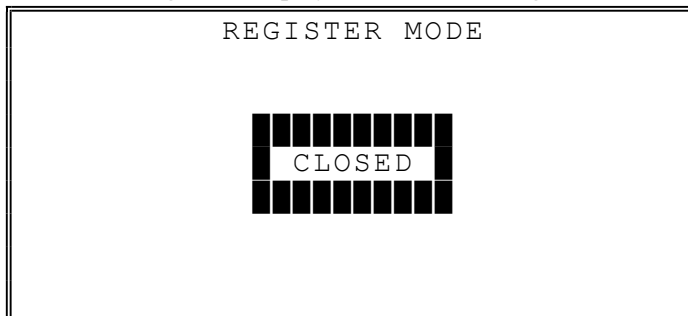
Note: The “CLOSED” message will display if a clerk is not signed on.



REG (Register Mode)

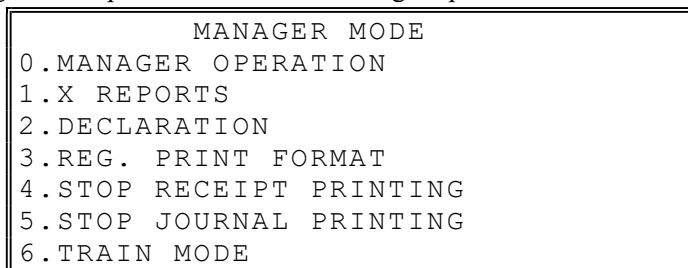
Register Mode is used to register sales.

Note: The “CLOSED” message will display if a clerk is not signed on.

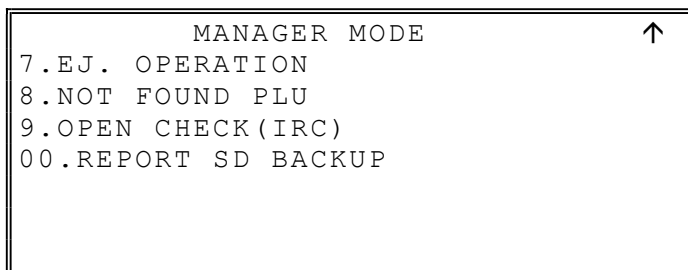


X (Manager Mode)

X-Mode/Manager Mode provides access for Manager operations and View/Print X-Reports and more.



- ◆ Press **PAGE DOWN** to view the remainder of the X MODE menu:



Z (Reset Report Mode)

Z-Mode/Reset Report Mode provides access to View/Print/Reset Z-Reports and more.

```
RESET REPORT MODE ↓
0.Z REPORTS
1.RESET EJ.
2.PC COMMUNICATION
3.MIX & MATCH PROGRAM
4.MIX & MATCH SCAN
5.PLU LOOKUP PROGRAM
6.AGE VERIFICATION
```

- ◆ Press **PAGE DOWN** to view the remainder of the Z MODE menu:

```
RESET REPORT MODE ↑
7.RESET NOT FOUND PLU
8.KP STARTING No.
9.DATATRAN (DEBIT)
00.DATATRAN
DEC. DC DIRECT FUNCTIONS
```

PGM (Program Mode)

Program Mode is used for programming options and settings for the ECR.

```
PROGRAM MODE ↓
0.PLU
1.GROUP
2.SALES TAX
3.SYSTEM OPTION
4.PRINT OPTION
5.FUNCTION KEYS
6.CLERK
```

- ◆ Press **PAGE DOWN** to view the remainder of the PROGRAM MODE menu:

```
PROGRAM MODE ↑
7.LOGO DESCRIPTOR
8.NLU CODE# PROGRAM
9.DOWNLOAD PROGRAMS
00.MORE
```

- ◆ Press **00** to view the MORE PROGRAMS menu:

```
PROGRAM MODE ↓
0.CLERK I/O
1.PLU STOCK
2.DRAWER LIMIT
3.CHECK CHANGE LIMIT
4.TIME & DATE
5.TARE WEIGHT
6.MACRO
```

- ◆ Press **PAGE DOWN** to view the remainder of the PROGRAM MODE page 2 menu:

```
PROGRAM MODE ↑
7.MACHINE NO.
8.PC SCHEDULE TIME
9.TRAINING MODE P/W
DEC.LEVEL ACTIVATE TIME
00.SCAN
```

S (Service Mode)

S-Mode is not labeled on the mode lock and is typically reserved for dealer access. Use this mode to clear totals, edit allocation, assign keys, etc.

```
                SERVICE MODE                ↓
0. HW TEST
1. CLEAR ALL TOTALS
2. CLEAR GRAND TOTAL
3. CLEAR PLU FILE
4. FLASHROM INFORMATION
5. MEMORY ALLOCATION
6. KEY ASSIGNMENT
```

- ◆ Press **PAGE DOWN** to view the remainder of the SERVICE MODE menu:

```
                SERVICE MODE                ↑
7. IRC OPTIONS
8. RS232C PORT
9. SD CARD OPERATION
DEC.ENTRY PASSWORD
00.CLEAR CURR.BATCH
```

Connection Panel

The SPS-300 Series ECRs comes standard with two DB9 RS-232C serial interface ports, a LAN port that can be used for IRC or it can be used for DC Direct, and a 2nd Cash Drawer Port.

The image below also shows the optional 2-Port Serial Board installed; this provides two additional RJ-45 type RS-232C serial port connections. (CRS Item#: 501531)



Keyboards

SPS-320/SPS-340 Flat Keyboard Version

Flat keyboard models have 150 key positions with the default legends and key assignments as shown below. The keyboard legend sheet can be replaced by lifting the protective rubber cover.

Dark Shaded key locations are used for programming. These keys must be reassigned before assigning a new function to the default location.

1	11	21	31	41	51	61	71	81	91	FEED	JOURNAL FEED	ERROR CORR	VOID	CLERK
2	12	22	32	42	52	62	72	82	92	%1	RA	PO	#/NS	RETURN
3	13	23	33	43	53	63	73	83	93	%2	TAKE OUT	EAT IN	DRIVE THRU	TAX 1
4	14	24	34	44	54	64	74	84	94	%3	CHECK #	SERVICE	TABLE #	PRINT CHECK
5	15	25	35	45	55	65	75	85	95	FUNC LOOKUP 1	PAGE UP	YES/NO	PAGE DOWN	CONV 1
6	16	26	36	46	56	66	76	86	96	FUNC LOOKUP 2	CLEAR	PLU	X/TIME	ADD CHECK
7	17	27	37	47	57	67	77	87	97	MACRO 1	7	8	9	CHARGE 1
8	18	28	38	48	58	68	78	88	98	MACRO 2	4	5	6	CHECK
9	19	29	39	49	59	69	79	89	99	MACRO 3	1	2	3	SBTL
10	20	30	40	50	60	70	80	90	100	MACRO 4	0	00	.	CASH

SPS-320/SPS-340 Alpha Keyboard Overlay

The System Option: Program Descriptor By Code must be set to NO to be able to use the Alpha Keyboard.

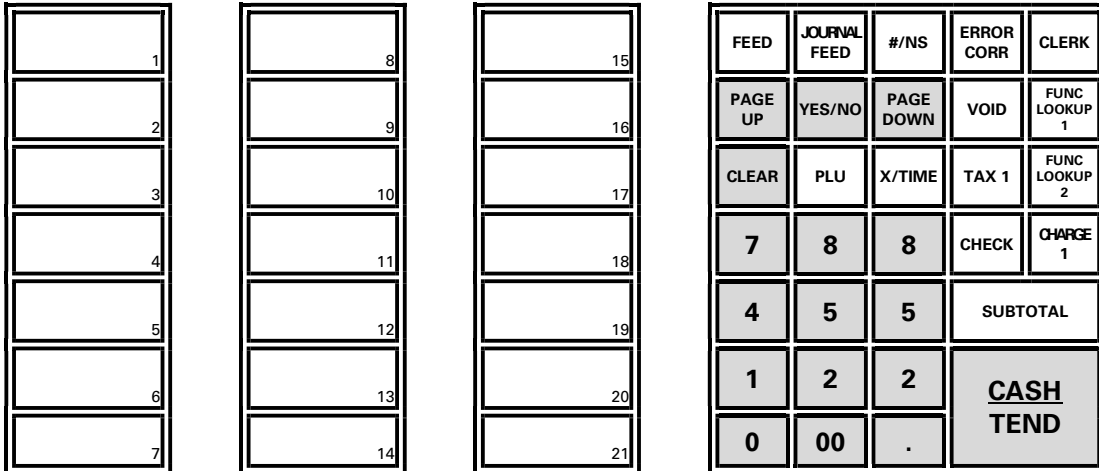
										FEED	JOURNAL FEED			
'	"	<	>	-	+	=	:	?						
!	@	#	\$	%	^	&	*	()					
q	w	e	r	t	y	u	i	o	p		PAGE UP	YES/NO	PAGE DOWN	
a	s	d	f	g	h	j	k	l	;		CLEAR	PLU	X/TIME	
z	x	c	v	b	n	m	,	.	/		7	8	9	
CAP	DOUBLE	SPACE	SPACE	SPACE	SPACE	SPACE	CAP	DOUBLE	BACK		4	5	6	
											1	2	3	SBTL
											0	00	.	CASH

SPS-345 Raised Keyboard Version-Default

The SPS-345 keyboard includes 21 keyboard PLU locations and functions with the default legends and key assignments as shown below. The keyboard can be expanded to 63 PLU key locations.

Dark Shaded key locations are used for programming. These keys must be be reassigned before assigning a new function to the default location.

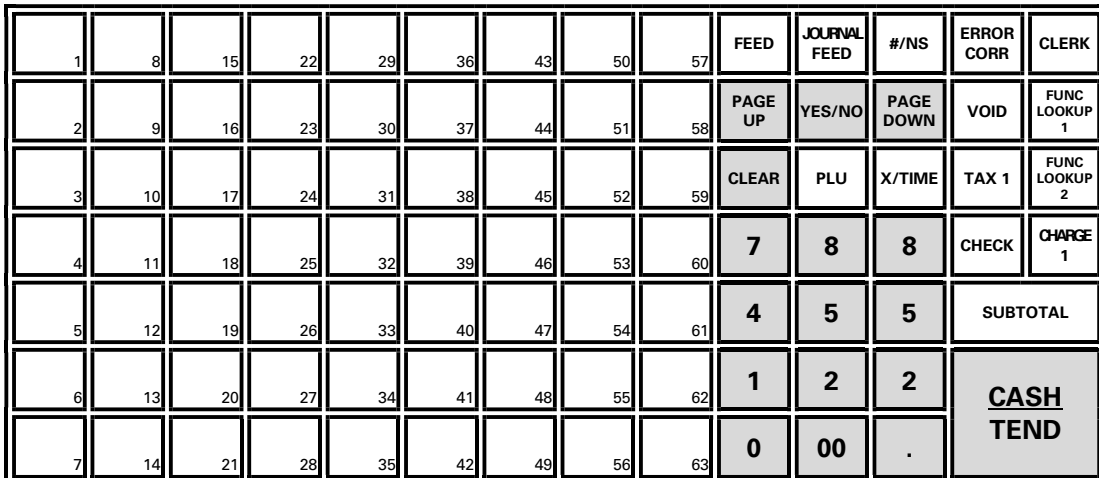
Note: In the default configuration, there are 21 double-width PLU keys. Under each key, the left-most key is inactive and the right-most key is active. The four-key sequence shown with the default configuration will set the keyboard in the default 21-PLU key configuration.



SPS-345 Raised Keyboard Version-Expanded

Your authorized dealer can expand the keyboard to 63 PLU key locations as shown below.

Dark Shaded key locations are used for programming. These keys must be reassigned before assigning a new function to the default location.



SPS-345 Alpha Keyboard Overlay – Expanded

The System Option: ‘Program Descriptor By Code’ must be set to NO to be able to use the Alpha Keyboard.

Note: There is no alpha overlay option for the default 21-PLU key format for the SPS-345 Series. You must use the descriptor code entry method for programming descriptors with the 21-PLU key configuration.

The System Option: ‘Program Descriptor By Code’ must be set to YES to program descriptors using the code entry method.

Dark Shaded key locations are used for programming. These keys must be reassigned before assigning a new function to the default location.

A	H	O	V	#	)	"	SPACE		FEED	JOURNAL FEED			
B	I	P	W	\$	-	,	SPACE		PAGE UP	YES/NO	PAGE DOWN		
C	J	Q	X	%	+	.	CAP		CLEAR	PLU	X/TIME		
D	K	R	Y	^	=	/	DOUBLE		7	8	8		
E	L	S	Z	&	;	<	BACK		4	5	5		SUBTOTAL
F	M	T	!	*	:	>			1	2	2		CASH TEND
G	N	U	@	(	'	?			0	00	.		

Getting Started

Quick Start Steps

Note: Before using this ECR system for the first time, leave it powered on in the REG mode for at least twenty-four hours. This allows the Lithium battery, which maintains the memory of the ECR while the power is off, to charge completely. Proper disposal of batteries is required. Refer to your local codes for disposal requirements.

SAM4s ECR's are designed to work out-of-the-box. You can sign on a clerk, enter amounts and finalize a sale. Most functions are active and ready to use.

Use the Quick Start Instructions provided here to prepare your SPS-300 series ECR for entering a program. Because the SPS-300 features on-screen programming, the dealer or user can simply follow the menus presented when the key is turned to the PGM (program) position. Detailed programming steps and reference information is found in the Program section of this manual.

Steps in this Chapter

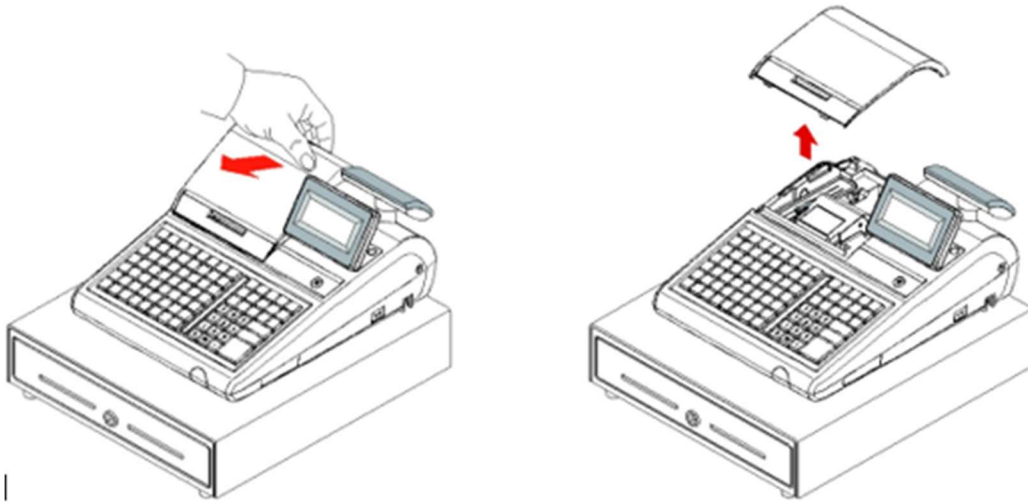
- Unpacking
 - Installing the Paper
- Clearing All Memory
- Keyboard Expansion
- Initial Clear

Unpacking

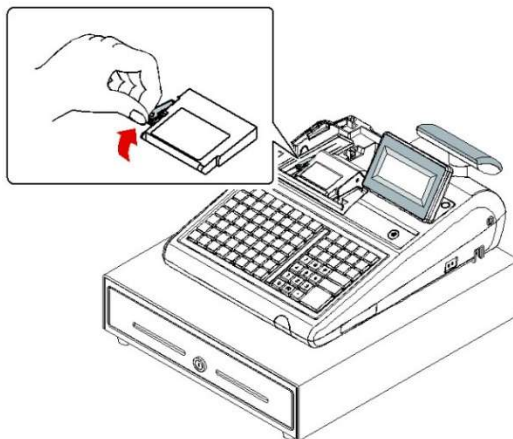
1. Unpack and unwrap the cash register.
2. Locate in the packing the following items:
 - Paper roll(s)
 - 1 rewind spindle (SPS-340 and SPS-345)
 - 2 sets of control keys
3. Remove the cardboard protectors from the cash drawer.
4. Plug the register into a grounded outlet (three-prong), turn the power switch on (note the power switch cover) and insert a control key and turn the key to the REG mode switch position.

Installing the Paper

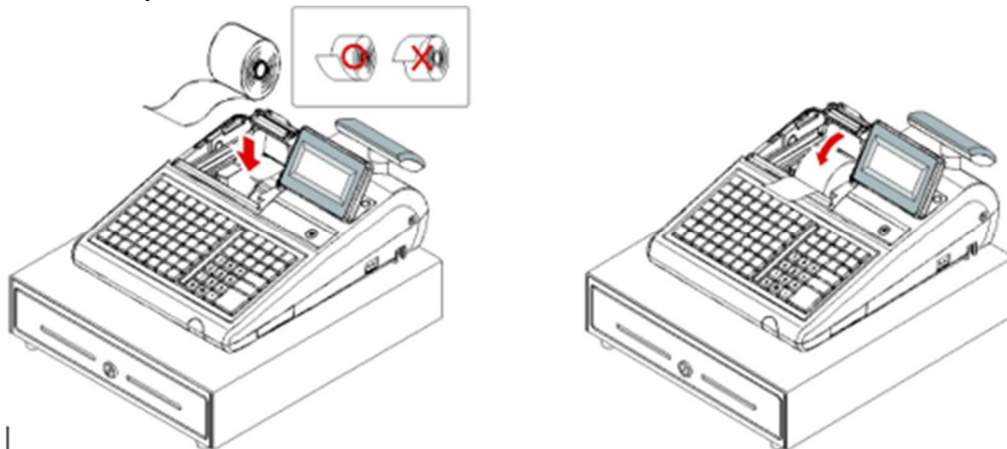
1. Remove the printer cover.



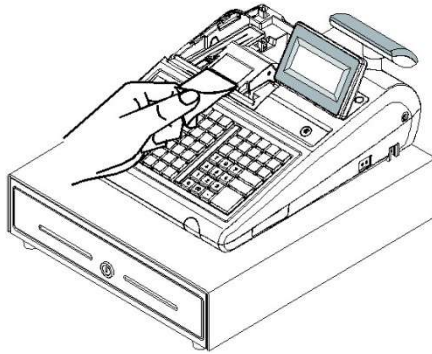
2. Push the blue cap lever and then lift up to open the receipt printer paper cover.



3. Ensure that the paper is being fed from the bottom of the roll and then close the paper cover slowly until it locks firmly.



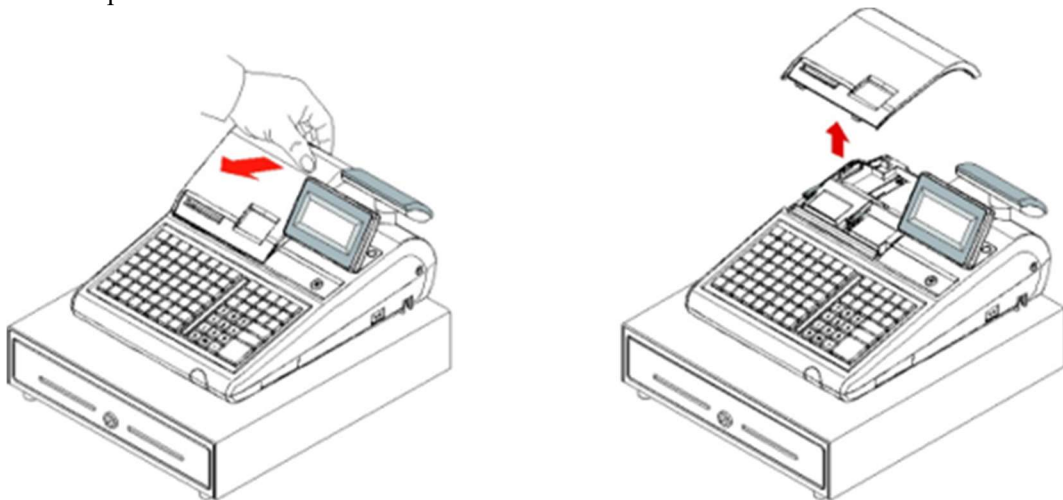
4. Pass the leading edge of the paper through the tear-bar slot. Tear off the excess paper. Replace the printer cover.



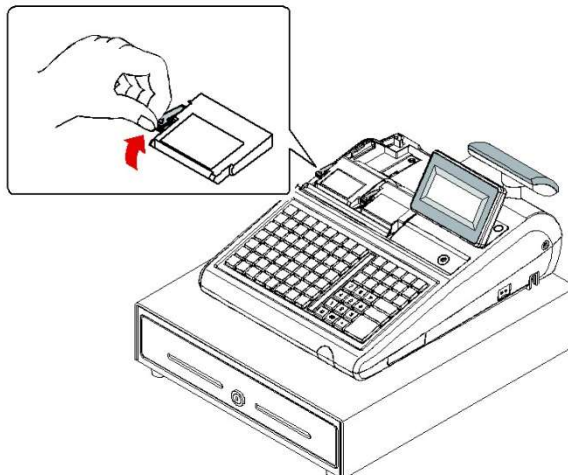
Models with Two Printer Stations

The SPS-340 and PS-345 models are equipped with separate printers for receipt and journal. Paper loading for these models is shown below:

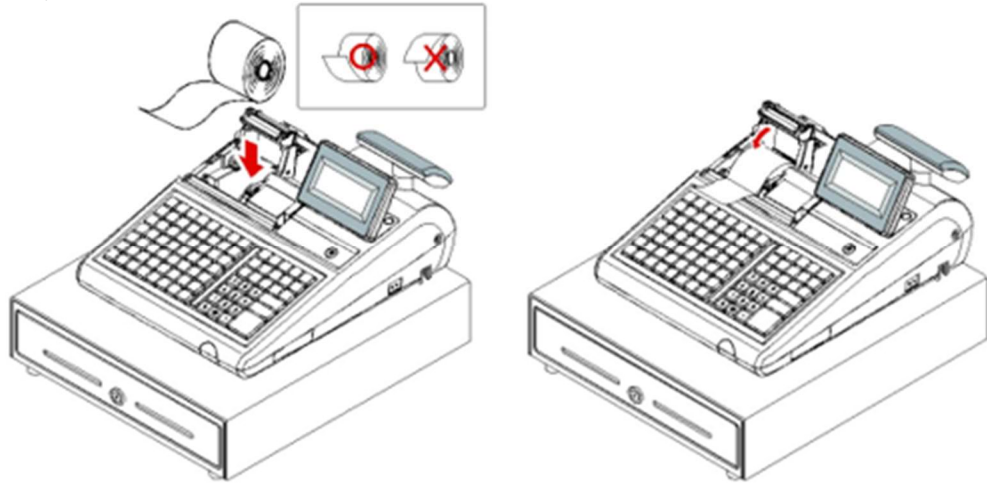
1. Remove the printer cover.



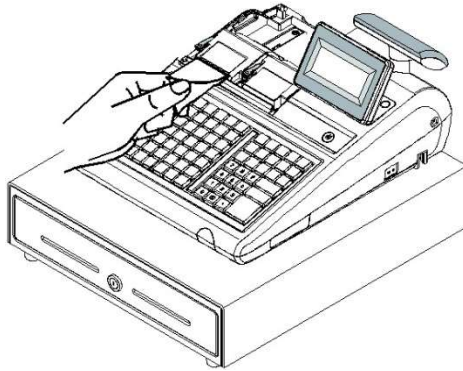
2. Push the blue cap lever and then lift up to open the receipt printer paper cover.



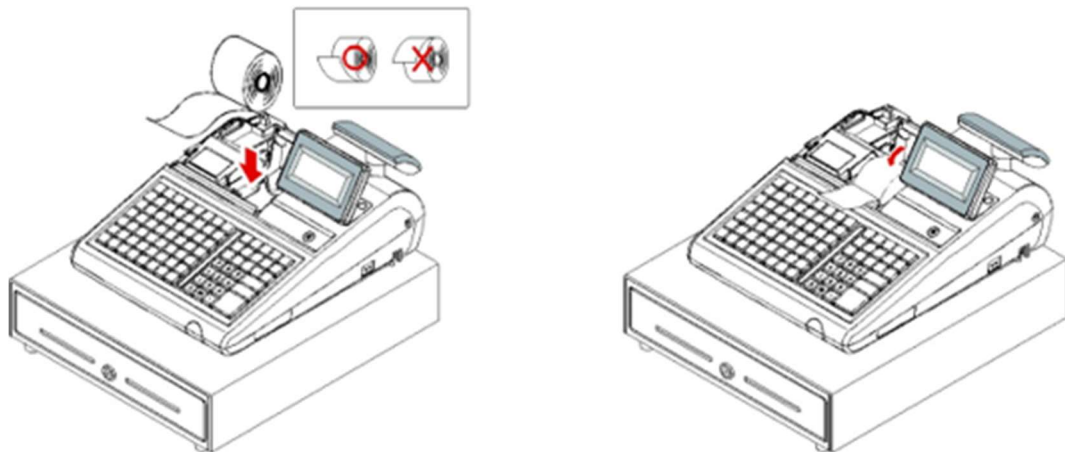
3. Ensure that the paper is being fed from the bottom of the roll and then close the paper cover slowly until it locks firmly.



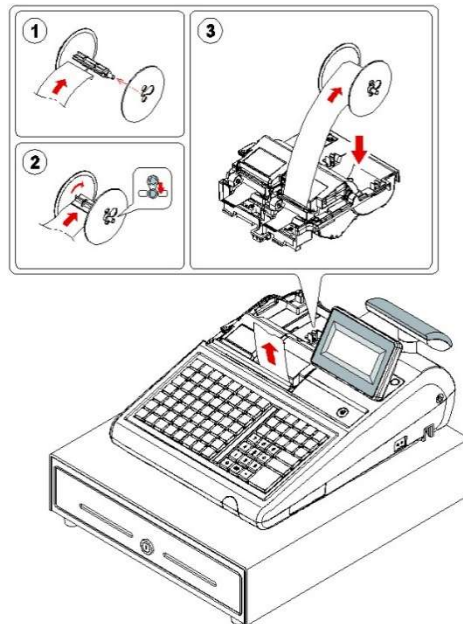
4. Pass the leading edge of the paper through the tear-bar slot. Tear off the excess paper.



5. Push the blue cap lever and then lift up to open the journal printer paper cover.
6. Ensure that the paper is being fed from the bottom of the roll and then close the paper cover slowly until it locks firmly.



7. If you wish to use the printer to print a sales journal, insert the paper into the paper take-up spool. Wind the paper two or three turns around the spool shaft and install the spool in the mount. Insure that the paper is being fed from the bottom of the roll.



8. Replace the printer cover.

Memory All Clear

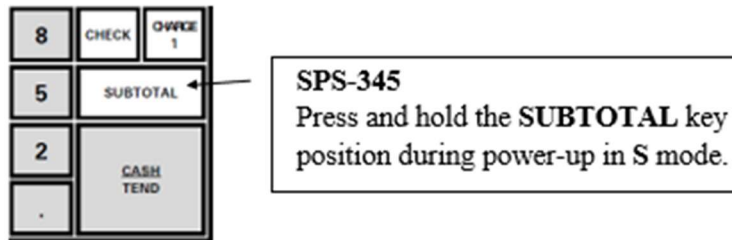
Before you use your SPS-300 Series ECR for the first time, you **must** perform a memory all clear to ensure that all totals and counters are cleared and that the default program is installed.

- **CAUTION:** The procedures described in this area are security sensitive. Clearing the SPS-300 Series memory after the register is put into service will erase all programming as well as totals and counters. Do not share this information with unauthorized users and distribute the key marked “C” only to those you may want to perform these functions.
- **PRINTER SELECTION PROCEDURE NOTE:** During the Memory All Clear sequence you will be asked to indicate the printer configuration of the model you are using, i.e. Single Station printer or 2-Station printer. Printer selection can also be done as a separate procedure: Power up in S-Mode while holding the 00 (*double zero*) key. This procedure will not clear all memory but will reset the keyboard to its default key assignments.
- **AUTO CUTTER SELECTION:** After the station printer selection, you will be prompted for ‘Auto Cut?’ There is no Auto-Cutter installed on terminals, select CLEAR for no cutter.

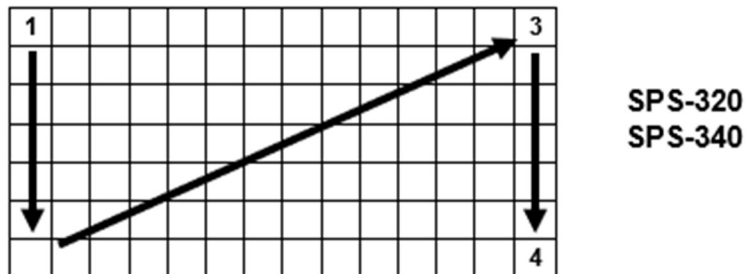
NOTE: Firmware versions v1.116 and later have EMV Integrated Payment capability. With these firmware versions an SD Card is required to be installed in the register for EMV operations. If not using EMV integrated credit, press Clear to bypass the ‘SD Card Required’ message.

SPS-320/SPS-340 Memory All Clear

1. Turn the power switch located on the right side of the register to the **OFF** position.
2. Turn the mode switch to the “**S**” position (*Service-Mode*). where the **CHECK** key is located on the default keyboard layout.
3. Press and hold the key position where the **CHECK** key is located on the default keyboard.



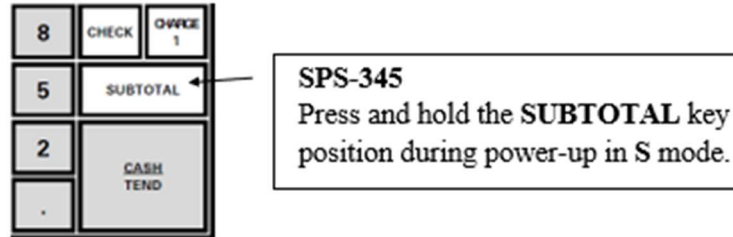
4. Continue to hold the appropriate key while turning the power switch to the **ON** position. The message “RAM ALL CLEAR” displays.
5. Press the upper left key of the keyboard, then the lower left key, then the upper right key, and finally press the lower right key.



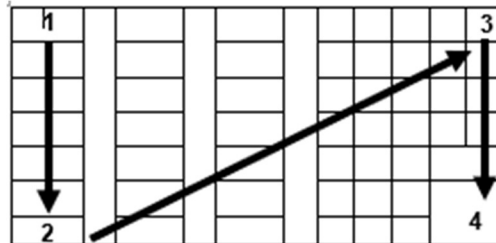
6. After a short delay, the memory is cleared.
 - The message “ERROR SD CARD REQUIRED” will display if there is no SD card in the SD port. An SD card is required for EMV integrated payment operations; insert an SD card in the SD port.
 - If you are not using EMV integrated payment, you can press **CLEAR** to continue the clearing memory.
7. The display reads: RAM (16M). After a short delay, the message: "OK" will display if the RAM check is good. Memory is cleared, the default program is installed and the RAM CLEAR receipt is printed.
 - The display now reads:
2-STATION PRINTER : ‘CASH’ Key
1-STATION PRINTER : ‘CLEAR’ Key
 - If you have an **ER-320** (one printer station), press **CLEAR**.
If you have an **ER-340** (two printer stations), press **CASH**.
 - The display now reads:
AUTO CUT : ‘CASH’ Key
NO CUT : ‘CLEAR’ Key
 - Press **CLEAR**. (There is no ‘Auto Cutter installed.)
8. The **SERVICE MODE** menu displays. The RAM Clear procedure is complete and the receipt prints:
 - “ETHERNET LINK FAIL!!!” prints if the register *is not* connected to another networked register.
 - “ETHERNET LINK SUCCESS!!!” prints if the register *is* connected to another network register.

SPS-345 Memory All Clear

1. Turn the power switch located on the right side of the register to the **OFF** position.
2. Turn the mode switch to the “**S**” position (*Service-Mode*).
3. Press and hold the key position where the **SUBTOTAL** key is located on the default keyboard layout.



4. Continue to hold the appropriate key while turning the power switch to the **ON** position. The message “RAM ALL CLEAR” displays.
5. Press the upper left key of the keyboard, then the lower left key, then the upper right key, and finally press the lower right key.



**SPS-345
Default Configuration
(21 PLU Keys)**



**SPS-345
Expanded Keyboard
(63 PLU keys)**

Note: In the default configuration there are 21 double-width PLU keys. Under each double-wide key, the right-most key is active and the left-most key is inactive. The four-key sequence shown with the default configuration will set the keyboard to the default 21-PLU key configuration.

To expand the keyboard to the full 63 PLU keyboard, you need to remove the double-wide keys in the upper left and lower left key positions. The four-key sequence shown will set the keyboard in the expanded configuration. If you wish to build a custom configuration, you will want to perform a memory clear for the expanded configuration and then assign each key position individually. See “Keyboard Expansion” on page 39 for details.

6. After a short delay, the memory is cleared.
 - The message “ERROR SD CARD REQUIRED” will display if there is no SD card in the SD port. An SD card is required for EMV integrated payment operations; insert an SD card in the SD port.
 - If you are not using EMV integrated payment, you can press CLEAR to continue the clearing memory.

7. The display reads: RAM (16M). After a short delay, the message: "OK" will display if the RAM check is good. Memory is cleared, the default program is installed and the RAM CLEAR receipt is printed.
 - The display now reads:
 - 2-STATION PRINTER : 'CASH' Key
 - 1-STATION PRINTER : 'CLEAR' Key
 - Press **CASH** (the SPS-345 has two printer stations).
 - The display now reads:
 - AUTO CUT : 'CASH' Key
 - NO CUT : 'CLEAR' Key
 - There is no Auto-Cutter; Press **CLEAR**. The message: "PLEASE WAIT . . ." appears briefly.
8. The SERVICE MODE menu displays. The RAM Clear procedure is complete and the receipt prints the FLASHROM INFORMATION.
 - "ETHERNET LINK FAIL!!!" prints if the register *is not* connected to another networked register.
 - "ETHERNET LINK SUCCESS!!!" prints if the register *is* connected to another network register.

Ram All Clear Receipt Example

- "ETHERNET LINK FAIL!!!" prints if the register *is not* connected to another networked register.
- "ETHERNET LINK SUCCESS!!!" prints if the register *is* connected to another network register.

```

DATE 03/23/2022 WED TIME 08:37

=====
RAM ALL CLEAR OK !
=====
RAM (16M) OK

FLASHROM INFORMATION
VERSION : USA 01.158
CHECKSUM : B13E
BOOT/APP : 5AC7/5677
PLUS USED: 300/2000
EFT VER. :
SAM4S PAYMENT APPLICATION V2.0A
MAR 23 2022

CLERK 00 NO.000001 0000

** ETHERNET LINK FAIL!!! **

```

(Note: The EFT Version # prints on firmware versions v1.019 or later)

Keyboard Expansion

The keyboards on the SPS-300 Series Raised-Key terminals can be expanded from their default configuration.

SPS-345 Keyboard Expansion

The keyboard on the SPS-345 is expanded during the Ram Clear operation. Refer to the “Clearing Memory” procedure on page 35 for details.

The default keyboard configuration on the SPS-345 raised keyboard registers uses 3-columns of doublewide keys for a total of 21 PLU’s on the keyboard. The active key under the doublewide key is the key on the right-most key position. All other keyboard PLU positions are inactive.

To activate all 63 PLU keys on the keyboard, you will need to remove the double-wide keytops from the upper-left and lower-left key positions and perform the Memory All Clear (Ram Clear) procedure using the single keys in the Upper-Left most key position and Lower-Left most key position as shown in the chapter “SPS-345 Memory All Clear” on page 37.

Initial Clear

CAUTION: Do not share this information with unauthorized users. The PGM Mode key should only be provided to those you may want to perform this function.

The initial clear function allows you to exit any register activity and return to a beginning or cleared state. Any transaction that is in progress will be exited and totals for that transaction will not be updated.

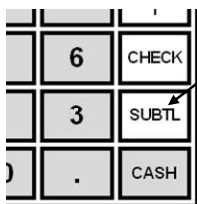
Here are some reasons you may want to perform an initial clear.

- The register is in an unknown state, and you wish to exit the current program or transaction without following normal procedures.
- You have performed a function that includes a compulsory activity and you wish to bypass the compulsion.
- An initial clear may be necessary as part of servicing or troubleshooting.

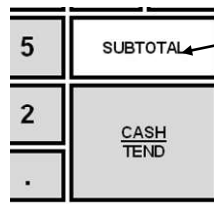
Perform this procedure only as necessary. Contact your SAM4s dealer first if you have questions about operating or programming your SAM4s SPS-300.

To Perform an Initial Clear:

1. Turn the power switch located on the right side of the register to the **OFF** position.
2. Turn the mode switch to the **PGM** position.
3. Press and hold the key position where the **SUBTOTAL** key is located on the default keyboard layout.
4. While continuing to hold the **SUBTOTAL** key, turn the power switch to the **ON** position. When the “Initial Clear Service” message displays release the **SUBTOTAL** key.
5. The message "INITIAL CLEAR OK!" prints when the initial clear is complete. To resume operations, you will need to sign on a clerk.



SPS-320 and SPS-340
Press and hold the **SUBTL** key position during power-up in **PGM** mode.



SPS-345
Press and hold the **SUBTOTAL** key position during power-up in **PGM** mode.

Operations

Clerk Operations

The number of clerks available is determined by memory allocation; the default configuration provides 10 clerks. Refer to “System Option Programming” to review your clerk options for CLERK ENTRY for Push or Code entry sign on, CLERK ASSIGNED WHEN CLERK KEY IS PUSHED, CLERK IS selection: stay-down or pop-up operation. You may also want to check the settings for CLERK INTERRUPT (*set to N*), and the MCR CLERK SIGN ON selection.

Refer to “Memory Allocation” in the "Service Mode Programming" chapter to set the number of clerks as well as other memory variables.

You can choose a push button or code entry clerk system:

- The simplest clerk system is the push button system. This is also the default system; the register will operate this way unless it is programmed otherwise. You simply press the **CLERK** key to sign on the clerk. You can operate only one clerk per register when you choose this method.
- You can provide maximum security in a multiple clerk system with the code entry system. Enter the clerk secret code, and then press the **CLERK** key to sign on the register.
- You can sign off a clerk by entering **0**, then pressing the **CLERK** key.
- Using an optional card reader, you can use employee cards to Sign-On and/or Clock In/Out.

You can also select stay down or pop-up mode for clerk operation:

- Stay down means that once a clerk is signed on, the same clerk will remain signed on until the clerk signs off. A stay down clerk system might be used when only one operator uses the register at a time and a different operator begins when a work shift is changed.
- Pop-up means that the clerk is automatically signed off at the end of each transaction. To begin a transaction, you must first sign a clerk on. A pop-up clerk system might be used in a department store, where several clerks use the register during the same shift and clerk sales information is required.

Refer to “System Options” in the "Program Mode Programming" chapter to set clerk options.

Clerk Sign On Instructions

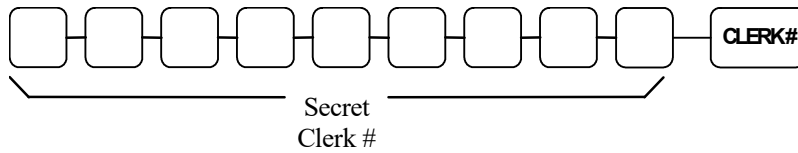
When a clerk is not signed on, the message "CLOSED" is shown on the display. There are three methods for clerks to sign on depending on programming on the ECR.

Note: The current clerk must be signed off before a new clerk can be signed on.

Push Button



Code Entry



MCR (Card Reader)

If the System Option: MCR Clerk Sign On = Y; the clerk can Swipe the Employee Card on the optional integrated MCR to sign on to the ECR.

Clerk Sign Off Instructions

Press **0 CLERK** will sign off the current employee regardless of the method used to sign on.



Sign Off using MCR (Card Reader)

If the System Option: MCR Clerk Sign On = Y; the current clerk can sign-off as indicated above or swipe their employee card on the optional integrated MCR to sign off as well.

Clerk Time Keeping

Clerk time keeping is a standard feature of the *SPS-300*. Clerks can clock in and clock out regardless of whether they are signed on to operate the register. (Clocking in and clocking out are separate functions from signing on or signing off to operate the register.) You must assign secret clerk codes to clock in or clock out. Refer to "System Options" in the "Program Mode Programming" chapter to set up your clerk system and Refer to "Clerk Programming" to assign a secret code.

In addition:

- A maximum of 10 clock in/out records are kept for each clerk. It is recommended that users clear time records on a daily basis.
- If a clerk forgets to clock in or clock out, or if in or out records need to be modified, these corrections can be made in the program mode. Refer to "Clerk In/Out" in the "Program Mode Programming" chapter.
- Clerk times can be read in the **X** mode switch position or reset in the **Z** mode switch position. See the "X-Mode" and/or "Z-Mode" chapters.
- Using an optional card reader, you can use employee cards to clock in or out.

Note: When a function is located on a function look up menu key, you access the function by pressing the appropriate function look up key, then pressing the numeric digit corresponding to the function you wish to select. On the default keyboard, the TIME IN/OUT function is function #8 on the function look up 1 menu, so to use the TIME IN/OUT function, you would first press FUNCTION LOOK#1, then press the numeric 8 key.

Clerk Clock In/Out:

9. Turn the mode switch to the **REG** position.
10. Any current transaction must be finalized before clocking in or out.
11. Press the **TIME IN/OUT** key on the keyboard or select the TIME IN/OUT function from one of the function look up keys.

TIME CLOCK IN/OUT		
ENTER SECRET CODE AND PRESS CASH		

12. Enter the secret code of the clerk that is to clock in, press **CASH**. The display will show the 3 most recent Clock In / Out records for the clerk and the total time worked.

TIME CLERK IN/OUT		
I	01/15/2011	08:00
O	01/15/2011	17:33
I	00/00/0000	00:00
O	00/00/0000	00:00
I	00/00/0000	00:00
O	00/00/0000	00:00
TIME WORKED:		09:33

13. Repeat the procedure from step 1 to clock out.
14. The printer will print Time In and Time Out records as in the examples below.

Sample Time-In\Time-Out Chit

```
THANK-YOU
CALL AGAIN

DATE 06/05/2011 SUN    TIME 08:33

=====
CLERK TIME IN
=====

CLERK 1                                01
IN :          11/09/2011    08:33
CLERK 1          No.000011    00001
```

```
THANK-YOU
CALL AGAIN

DATE 06/05/2011 SUN    TIME 08:33

=====
CLERK TIME OUT
=====

CLERK 1                                01
OUT :          11/09/2011    08:33
CLERK 1          No.000011    00001
```

Receipt On and Off

Merchants may choose not to issue receipts automatically but rather just print a receipt when the customer requests a receipt. The merchant can press the RECEIPT ON/OFF function key if it is located on the keyboard to toggle the receipt printing On or Off.

The RECEIPT ON/OFF key *is not* located on the default keyboard after the memory all clear procedure is performed.

If the Receipt On/Off key *is not* located on the keyboard, merchants can still turn the receipt On or Off from the “X” Mode Switch position. See page 102 for details.

If the RECEIPT ON/OFF Key is Located on the Keyboard

- Press the **RECEIPT ON/OFF** key once to turn the receipt *off*.
- Press the **RECEIPT ON/OFF** key again to turn the receipt *on*.

Item Registrations

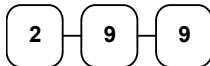
All registrations are accumulated into PLU's. Keyboard PLU's are fixed keys on the keyboard (like traditional department keys) that access specific PLU's.

- Depending upon the specific model and the program installed, there will be a different number of keyboard PLU keys. Flat keyboard models (SPS-320 and SPS-340) provide 100 PLU's on the default keyboard. The raised key model (SPS-345) provides 21 PLU's keys in the standard configuration. This can be expanded by your dealer to 63 PLU's. Your specific program may have a more or less PLU keys depending upon how key locations are set.
- Traditional code-entry PLU's can be registered by entering the PLU number and pressing the PLU key.
- If optional scanning is implemented, the PLU number corresponds to the UPC number and a PLU is registered when an item is scanned.

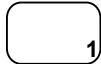
As you make item registrations, you can follow your entries by viewing the display. Remember that the sale and tax totals are updated automatically with each entry.

Open Keyboard PLU Entry

1. Enter an amount on the ten-key pad. *Do not use the decimal key.* For example, for \$2.99, enter:



2. Press a PLU key. Example, press PLU 1:



THANK-YOU CALL AGAIN		
DATE	06/05/2011 SUN	TIME 08:33
PLU1 T1		\$2.99
TAX1		\$0.18
TOTAL		\$3.17
CASH		\$3.17
CLERK 1	No.000001	00001

Preset Price Keyboard PLU

A preset PLU registers the price that was previously programmed for the PLU. Refer to "PLU Programming" in the "Program Mode Programming" chapter to program preset prices.

1. Press a preset PLU key. For example, press PLU 5:



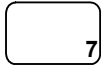
THANK-YOU CALL AGAIN		
DATE	06/05/2011 SUN	TIME 08:33
PLU5		\$1.29
TOTAL		\$1.29
CASH		\$1.29
CLERK 1	No.000002	00001

Gallongage PLU Entry

1. Enter the total fuel purchase on the ten-key pad. *Do not use the decimal key.* For example, for \$20.00, enter:



2. Press a PLU key set to gallonage function. For example, press PLU 7:



THANK-YOU CALL AGAIN		
DATE	06/05/2011 SUN	TIME 08:33
GAL CNT		#5.26
GAL AMT	@	3.799
PLU7		\$20.00
TOTAL		\$20.00
CASH		\$20.00
CLERK 1	No.000003	00001

Keyboard PLU Repeat Entry

Open or preset price PLU's can be repeated as many times as necessary by pressing the same PLU again. The number of times the item is repeated is shown on the display.

1. Enter an amount on the ten-key pad. Do not use the decimal key. For example, for \$2.99, enter:



2. Press a PLU key. Example, press PLU 1:



3. To register a second item exactly as the first, press the PLU key a second time. For example, press PLU 1:



THANK-YOU CALL AGAIN		
DATE	06/05/2011 SUN	TIME 08:33
PLU1 T1		\$2.99
PLU1 T1		\$2.99
TAX1		\$0.36
TOTAL		\$6.34
CASH		\$6.34
CLERK 1	No.000004	00001

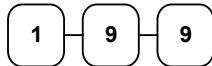
Keyboard PLU Multiplication

When several of the same items are registered for the same PLU, you can use multiplication. You can enter a quantity (1 to 999.999) using the **X/TIME** key. You can multiply open or preset PLU's.

1. Enter the quantity of items being purchased; press the **X/TIME** key. For example, enter **4** on the numeric keypad and press the **X/TIME** key:



2. Enter an amount on the ten-key pad. Do not use the decimal key. For example, to register \$1.99 on a PLU enter:



3. Press a PLU key. Example, press PLU 1:

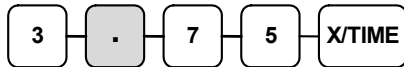


THANK-YOU CALL AGAIN		
DATE	06/05/2011 SUN	TIME 08:33
4X	@1.99	
PLU1 T1		\$7.96
TAX1		\$0.48
TOTAL		\$8.44
CASH		\$8.44
CLERK 1	No.000005	00001

Keyboard PLU Multiplication with Decimal Point

If you are selling items by weight, or if you are selling yard goods, you can multiply a fraction of a unit.

1. Enter the amount with the decimal point; press the **X/TIME** key. For example, for 3.75 pounds of produce, enter:



2. Enter an amount on the ten-key pad. *Do not use the decimal key.* For example, if the price is \$.99 per pound, enter:



3. Press a PLU key. Example, press PLU 1:



THANK-YOU CALL AGAIN		
DATE	06/05/2011 SUN	TIME 08:33
3.75X	@0.99	
PLU1 T1		\$3.71
TAX1		\$0.22
TOTAL		\$3.93
CASH		\$3.93
CLERK 1	No.000006	00001

Split Pricing (Keyboard PLU)

When items are priced in groups, i.e. 3 for \$1.00, you can enter the quantity purchased and let the register calculate the correct price.

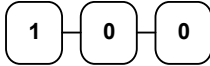
1. Enter the quantity purchased; press the **X/TIME** key. For example, enter:



2. Enter the quantity of the group price; press the **X/TIME** key. For example, if the items are priced 3 for \$1.00, enter:



3. Enter an amount on the ten-key pad. For example, if the items are priced 3 for \$1.00, enter:



4. Press a PLU key. Example, press PLU 1:



THANK-YOU CALL AGAIN		
DATE	06/05/2011 SUN	TIME 08:33
2@3FOR	@1.00	
PLU1 T1		\$0.67
TAX1		\$0.04
TOTAL		\$0.71
CASH		\$0.71
CLERK 1	No.000007	00001

Split Pricing Code Entry PLU

When items are priced in groups, i.e. 3 for \$1.00, you can enter the quantity purchased and let the register calculate the correct price.

1. Enter the quantity purchased, press the **X/TIME** key. For example, enter:



2. Enter the quantity of the group price, press the **X/TIME** key. For example, if the items are priced 3 for \$1.00, enter:



3. Enter the PLU number; press the PLU function key. For example, enter:



THANK-YOU CALL AGAIN		
DATE	06/05/2011 SUN	TIME 08:33
2@3FOR	@2.99	
PLU3 T1		\$1.99
TAX1		\$0.12
TOTAL		\$2.11
CASH		\$2.11
CLERK 1	No.000008	00001

Single Item Keyboard PLU

Single item PLU's automatically total as a cash sale immediately after registration. Use single item PLU's for speedy one item sales. For example, if you are selling admission tickets, and all ticket sales are one item sales, you can use an open or preset PLU. After each registration, the drawer will immediately open, and a separate transaction receipt is printed. Refer to "PLU Programming" in the "Program Mode Programming" chapter to program a single item PLU.

1. Press a single item preset PLU key (or enter a price and press a single item open PLU key.)
For example, press PLU 6:



THANK-YOU CALL AGAIN		
DATE	06/05/2011 SUN	TIME 08:33
PLU6		\$1.29
TOTAL		\$1.29
CASH		\$1.29
CLERK 1	No.000009	00001

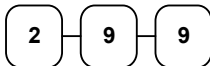
Open Code Entry PLU

If the PRESET status of a PLU is set to N (no), the PLU will operate as an open PLU. Refer to "PLU Programming" in the "Program Mode Programming" chapter to program PLU descriptors and options.

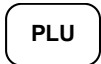
1. Enter the PLU number; press the PLU key.
For example, enter:



2. The display will prompt "ENTER PRICE". Enter an amount on the ten-key pad. *Do not use the decimal key.* For example, for \$2.99, enter:



3. Press the PLU key again.

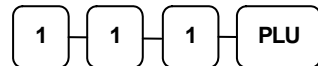


THANK-YOU CALL AGAIN		
DATE	06/05/2011 SUN	TIME 08:33
PLU2 T1		\$2.99
TAX1		\$0.18
TOTAL		\$3.17
CASH		\$3.17
CLERK 1	No.000010	00001

Preset Price Code Entry PLU

1. Enter the number of the PLU; press the PLU function key.

For example to enter PLU# 111:



THANK-YOU CALL AGAIN		
DATE	06/05/2011 SUN	TIME 08:33
PLU111		\$1.29
TOTAL		\$1.29
CASH		\$1.29
CLERK 1	No.000011	00001

Code Entry PLU Multiplication

When several of the same items are to be registered for the same PLU, you can use multiplication. You can enter a quantity (1 to 999.999) using the **X/TIME** key. You can multiply open or preset PLU's.

1. Enter the quantity of items being purchased; press the **X/TIME** key. For example, enter **4** on the numeric keypad and press the **X/TIME** key:



2. Enter the number of the **PLU**; press the **PLU** function key.

For example, to enter PLU# **111**:

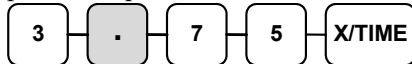


THANK-YOU CALL AGAIN		
DATE	06/05/2011 SUN	TIME 08:33
4X	@1.99	
PLU111 T1		\$7.96
TAX1		\$0.48
TOTAL		\$8.44
CASH		\$8.44
CLERK 1	No.000012	00001

Code Entry PLU Multiplication with Decimal Point

If you are selling items by weight, or if you are selling yard goods, you can multiply a fraction of a unit.

1. Enter the quantity with the decimal point; press the **X/TIME** key. For example, for 3.75 pounds of produce, enter:



2. Enter the PLU number; press the **PLU** key.

For example, enter:



THANK-YOU CALL AGAIN		
DATE	06/05/2011 SUN	TIME 08:33
3.75X	@2.99	
PLU3 T1		\$11.21
TAX1		\$0.67
TOTAL		\$11.88
CASH		\$11.88
CLERK 1	No.000013	00001

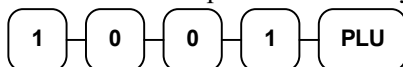
PLU Price Inquiry

To check the price of a PLU without registering the PLU, place a **Price Inquiry** key on the keyboard.

1. Press the **PRICE INQ** key.



2. The message "**PRICEINQ**" displays:
3. Press a keyboard **PLU** key, scan an item, or enter a PLU number and press the **PLU** key:



4. The PLU descriptor and price display on the screen. If the PLU has prices at more than one price level, all prices will be shown.
5. Press the **CLEAR** key to remove the price information from the screen or enter the PLU again to register the item.

Screen Example:

HAMBURGER	
1 :	1.25
2 :	1.75

Modifier Entries

Pressing a modifier key alters the next PLU registered, by changing the code number of the PLU so that a different item is registered, or by just adding the modifier descriptor and registering the same PLU. Refer to "Modifier 1-5" in the "Program Mode Programming" chapter to determine how the modifier key will affect the PLU entry.

Modifiers can be programmed as:

- **Stay Down** – All registrations in the current sale and all subsequent sales will be modified by the same modifier until another modifier is selected. (*Accommodations: Breakfast, Lunch, Dinner menus.*)
- **Pop-Up after each item** – Modifier applies only to the current item registered. (*For registering different sizes: large, medium or small soft drinks.*)
- **Pop-Up after each transaction** – Modifier applies to all items in current sale. (*For example: For entering topping selections for various pizza sizes.*)

Refer to "System Options" in the "Program Mode Programming" chapter to select stay down/pop-up status.

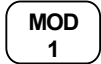
Pop-Up Modifier Key Affecting PLU Code

In this example modifiers are programmed as: **Pop-Up after each item.**

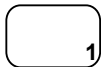
1. Press a PLU key on the keyboard.
For example, press **PLU1**.
2. Press the **MOD 1** key. The message "MOD1" displays.



PLU1 has a preset price of \$1.00 and is registered into the sale.



3. Press the same **PLU1** key. In this example the modifier 1 adds the digit 1 to the fourth digit of the PLU # resulting in the registration of **PLU #1001**. (*PLU1001 price is \$2.25*)
4. Press the **PLU1** key again, the PLU is not modified and PLU1 is registered at \$1.00.



THANK-YOU	
CALL AGAIN	
DATE 06/05/2011 SUN	TIME 08:33
PLU1	\$1.00
MOD1	
PLU1001	\$2.25
PLU1	\$1.00
TOTAL	\$4.25
CASH	\$4.25
CLERK 1	No.000014 00001

Age Verification

Products being sold, that require you to check the customers birth date, such as tobacco products or alcohol products. When an item is registered that requires age verification the display will prompt for Date Of Birth entry.

1. Register a PLU that requires age verification by scanning or pressing the PLU on the keyboard. For example, press **PLU 81**

PLU 81

2. The **DATE OF BIRTH** entry is displayed:

```
ENTER CUSTOMER
DATE OF BIRTH
MM/DD/YYYY
AND PRESS CASH
```

3. Type in the **DOB** (*Date Of Birth*) from the customers ID then press **CASH**.

For example: 01011990

0 — 1 — 0 — 1 — 1 — 9 — 9 — 0 — CASH

4. If the DOB entered satisfies the required age for the product, the sale of the product is allowed. Any additional PLUs entered that have the same age restriction will also be allowed without having to reenter the DOB.
5. If the DOB entered does not satisfy the age requirement for the selected PLU a warning will sound and the **AGE RESTRICTION** message displays:

```
** WARNING **

INVALID
ENTRY

AGE RESTRICTION

PRESS CLEAR KEY
```

Price Level Key

If you choose to use the price level feature, you must allocate memory for each level. Refer to "Memory Allocation" in the "Service Mode Programming" chapter. Note that the default program selects one price level. You must also place price level keys on the keyboard. Refer to "Function Key Assignment" in the "Program Mode Programming" chapter.

If you use this feature, the same PLU can be given up to 5 different preset prices. Price Level keys shift the price that is being registered. Levels can be:

- **Stay Down** so that registrations will stay in the selected level until another level is selected,
- **Pop-Up After Each Item** to register, for example large, medium or small soft drink,
- **Pop-Up After Each Transaction** to register the same level until the transaction is finalized.

Refer to "System Options" in the "Program Mode Programming" chapter to set how the price level keys operate.

Pop-Up Price Level Keys

1. Press a keyboard PLU key. For example, press **PLU 1** programmed with a price of \$1.00 for price level 1.



2. Press the **LEVEL 2** key. The message "LEVEL 2" displays.



3. Press the same **PLU 1** key. In this example the PLU 1 key is programmed with a price of \$2.00 for price level 2.



4. Press another PLU key. In this example press **PLU 2** programmed to register PLU #2 with price level 1. Note that the level 1 price is registered.

THANK-YOU CALL AGAIN		
DATE	06/05/2011 SUN	TIME 08:33
PLU1		\$1.00
PLU1		\$2.00
PLU2		\$1.50
TOTAL		\$4.50
CASH		\$4.50
CLERK 1	No.000015	00001

Promo

The **PROMO** key allows you to account for promotional items, as in "buy two, and get one free". Pressing this key will remove an item's cost from the sale, and the promo item will not be added to the PLU sales total, but it is added to the item sales counter. If stock (inventory) reporting is used, the item will be subtracted from inventory.

1. Register an item. For example, press **PLU 1** programmed with a price of \$1.00 for price level 1.



2. Press the **PROMO** key. The message "PROMO" displays.



3. Enter the item you wish to Promo. You cannot enter an item that has not already been registered in this transaction.



THANK-YOU CALL AGAIN		
DATE	06/05/2011 SUN	TIME 08:33
PLU1		\$1.00
PROMO		
PLU1		
TOTAL		\$0.00
CASH		\$0.00
CLERK 1	No.000016	00001

Waste

The **WASTE** key allows control of inventory by accounting for items that must be removed from stock due to spoilage, breakage or mistakes. Press the **WASTE** key before entering wasted items, and then press the **WASTE** key again to finalize. The **WASTE** key may be under manager control, requiring the mode switch to be in the **X** position. The **WASTE** key is not allowed within a sale.

1. Press the **WASTE** key. The message "WASTE" displays at the top of the screen.



2. Enter the item or items that are wasted.
3. Press the **WASTE** key again to total the wasted items:



THANK-YOU CALL AGAIN		
DATE	06/05/2011 SUN	TIME 08:33
WASTE		
PLU1		\$1.25
PLU2		\$1.50
WASTE		
TOTAL		\$2.75
CLERK 1	No.000017	00001

Food Stamp Sales

The *SPS-300* is capable of sorting food stamp and non-food stamp eligible items. If a customer chooses to pay by food stamps, the eligible total can be subtotaled and food stamp payments accepted.

NOTE: Integrated EBT transactions was added at firmware version v1.034.

If you choose to use this feature, you must:

- Locate the appropriate function keys on the keyboard, **F/S SHIFT**, **F/S SUB**, and **F/S TEND**, and then set the appropriate options for the **F/S TEND** key.
- Determine and set the food stamp status for each PLU item.

Refer to the "Service Mode Programming" and the "Program Mode Programming" chapters to make the appropriate settings.

1. Register the items you wish to sell. You do not need to sort food stamp eligible or non-eligible items. The *ECR* will maintain a subtotal of eligible items based upon the pre-programmed status for each PLU.

If you wish to register an item that is normally food stamp eligible as non-food stamp eligible, press the **F/S SHIFT** key before registering the item. In the same manner, you can register non-food stamp items as food stamp eligible PLU's.

2. If a customer wishes to pay with food stamps, press the **F/S SUB** key to display the food stamp eligible total:

F/S SUB

3. Enter the amount of food stamps tendered by the customer. For example, for \$20.00 enter:

2 0 0 0 **F/S TEND**

4. The remaining amount due is displayed.
5. **Note:** Depending upon programming, change can be issued as CASH or F/S.
6. **Total or Tender** the remaining balance with the appropriate media (*Cash, Check, or Charge*).

THANK-YOU CALL AGAIN		
DATE	06/05/2011 SUN	TIME 08:33
PLU31 F		\$1.29
PLU41		\$4.29
TOTAL		\$5.58
F/S TOTAL		\$1.29
F/S TEND		\$5.00
F/S CRT AMT		\$0.71
TOTAL		\$0.58
CASH		\$5.00
CHANGE		\$4.42
F/S CHANGE		\$3.00
CLERK 1	No.000921	00001

PLU Look-Up Keys

If you have more items than will fit on the default keyboard, PLU Lookup keys can be assigned to allow multiple items to be registered from a single key. There are 15 PLU Lookup keys available, each key can have up to 8 PLU's assigned.

To simplify the operation you can assign similar items to one PLU Lookup. For example, Beverages. You can assign Coffee, Tea, Soft-Drink, Milk, etc. to one PLU Lookup (up to 8-items).

The operation will depend on the System Option Setting "PLU LOOKUP IS"

Pop-Up Operation: The PLU Lookup key is displayed until a selection is registered; After registration the PLU Lookup is hidden until selected again.

Stay Down Operation: The PLU Lookup key remains on the screen after an item is selected, press **CLEAR** to close the PLU lookup.

Press a **PLU LOOKUP** key on the keyboard to open the selection menu. The screen displays the PLU's assigned to the PLU Lookup key (*up to 8 PLU's*).

Enter the number corresponding to the PLU in the list you want to register. The selected PLU item will be entered into the sale.

Function Lookup Keys

If you have more functions than will fit on the default keyboard, Function Lookup keys can be assigned to allow multiple items to be registered from a single key. There are two Function Lookup keys available, **FUNCTION LOOK-UP #1** and **FUNCTION LOOK-UP #2**. Each of these keys can contain a list of up to 8 functions that can be used as if they were located on separate keys. **FUNCTION LOOKUP (1-2)** programming can be found on page 226.

For example: If a function, such as **CHARGE1**, is located on a function look-up key, as it is on the default keyboard, then you must access it by pressing the appropriate function look-up key, then pressing the digit that represents the function, instead of pressing a key on the keyboard.

The default functions assigned to the Function Lookup (1-2) keys is shown below:

FUNCTION LOOK UP #1	FUNCTION LOOK UP #2
1. CANCEL	1. CHAGRGE1
2. MERCHANDISE RETURN	2. CHAGRGE2
3. RA1	3. CHAGRGE3
4. PO1	4. CHAGRGE4
5. TIP	5. CHAGRGE5
6. TAX EXEMPT	6. CHAGRGE6
7. CONVERSION 1	7. CHAGRGE7
8. TIME IN/OUT	8. CHAGRGE8

If you need to make a numeric entry before a function that is located on a function look-up key, first press the numeric key or keys, then press the function look-up key and press the digit that represents the function you wish to select.

1. Press a **FUNCTION LOOKUP** key on the keyboard to open the selection menu. The screen display the functions assigned to the Function Lookup key (*up to 8 functions*).
2. Enter the number corresponding to the function in the list you want to perform. The selected function operation will be initiated.

Shifting or Exempting Tax

PLU's can be programmed to automatically add the appropriate tax or taxes. Occasionally, you may need to sell normally taxable items without tax, or a normally non-taxable item with tax. You can perform this tax shifting with any of the four tax shift keys. These operations will work on items with Add-On Tax or a Tax-Table, not a VAT Tax.

Shifting Tax

The Tax Shift keys will "shift" the tax status for the item/items registered. If a PLU is normally taxable, pressing the Tax shift key before registering the PLU will register the item as Not Taxable.

Conversely, if the PLU is normally Not Taxable pressing the Tax shift key before registering the PLU will register the item as Taxable and the appropriate tax will apply to this PLU.

Shifting Tax - Individual Item

1. Press the tax shift for the tax you wish to shift.

Example: Press **TAX SHIFT 1**:

**TAX 1
SHIFT**

2. If the item is an open price item; Enter an amount on the ten-key pad. *Do not use the decimal key.* For example, for \$2.99, enter:

2 9 9

3. Press a PLU key. Example, press **PLU 1**. If **PLU 1** is normally taxable by tax 1, the PLU registration will be shifted to not taxable.

1

4. Any additional items registered will apply tax as normal.

```
THANK-YOU  
CALL AGAIN  
  
DATE 06/05/2011 SUN   TIME 08:33  
  
PLU1                      $1.99  
PLU2 T1                    $2.22  
TAX1                       $0.18  
TOTAL                      $4.39  
CASH                       $4.39  
CLERK 1                   No.000018  00001
```

Shifting Tax on Sale

Shifting the tax on a sale will only remove the selected Tax (Tax Shift 1-4) from the sale, Tax Shift operations cannot be used to add tax to a sale.

1. Register Items into a sale. Press **SUBTOTAL**.

SUBTOTAL

2. The Subtotal with the tax is displayed. Press the tax shift for the tax you wish to shift. Example: Press **TAX SHIFT 1**:

**TAX 1
SHIFT**

3. Press the **SUBTOTAL** key; On the operator's display, the TAX amount is removed.

SUBTOTAL

4. The PLU(s) registered will still indicate as Taxable, but the TAX is shifted (removed) from the sale.

```
THANK-YOU  
CALL AGAIN  
  
DATE 07/12/2022 TUE   TIME 11:33  
  
PLU15 T1                   $15.00  
PLU16 T1                   $16.00  
PLU17 T1                   $17.00  
TOTAL                      $48.00  
CASH                       $48.00  
CLERK 1                   No.000019  00001
```

Exempting Tax

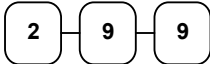
Occasionally, you may need to exempt all taxes from an entire sale or a certain combination of taxes. For example, you might remove all state and local taxes when you sell merchandise to a church or charitable institution. The **TAX EXMT** (tax exempt) function key can be used to accommodate this.

Exempting Tax using Tax Exempt Key

You can program the **TAX EXMT** function to remove all or selected taxes. Refer to the "Tax Exempt" function key programming on page 244 for details.

Note: When a function is located on a function look up menu key, you access the function by pressing the appropriate function look up key, then pressing the numeric digit corresponding to the function you wish to select. On the default keyboard, the **TAX EXMT** function is function #6 on the **FUNCTION LOOK UP #1** menu, so to use the **TAX EXMT** function, you would first press **FUNCTION LOOK#1**, then press the numeric 6 key.

1. Enter an amount on the ten-key keypad. Do not use the decimal key. For example, for \$2.99, enter:



2. Press a taxable PLU key. Example: press **PLU 1**:



3. Press **SBTL**:



4. Press the **TAX EXMT** key (or access **TAX EXMT** function from a function look up menu key):



5. The display reflects the transaction without added taxes. Total the sale with **CASH**, **CHECK**, or a **CHARGE** function. The sale will not include tax 1.

THANK-YOU CALL AGAIN		
DATE	06/05/2011 SUN	TIME 08:33
PLU1 T1		\$2.99
TOTAL		\$2.99
CASH		\$2.99
CLERK 1	No.000020	00001

Exempting Tax using Eat-In/Take-Out/Drive-Thru

Different types of sales, such as "Eat In", "Take Out" and "Drive Thru" can be categorized by placing separate keys on the keyboard. **EAT IN**, **TAKE OUT**, and **DRIVE THRU** keys function as subtotal keys. These destination keys can also be used to Exempt Tax to accommodate areas where food is taxed differently.

The operation is the same as using the Tax Exempt key, you would simply press the appropriate **EAT IN**, **TAKE OUT** or **DRIVE THRU** key instead of Tax Exempt.

You can force the operator to press one of the keys before tendering. Refer to "System Option Programming" in the "Program Mode Programming" chapter. Separate totals will be maintained on the financial report to detail sales counts and amounts for each key.

Discounts & Coupon Operations

Discounts & Coupons may be applied to transactions using the %1 ~ %5 function keys. Each % function key is individually programmable to add or subtract percentages from an individual item or from the sale total or to subtract amounts (coupons) from an item or sale. The % keys may be set as taxable or non-taxable, so that sales taxes are calculated on the net or the gross amount of the item or sale. The discount amount or percentage may set to a preset value or as an open as an open amount or percentage where the cashier will need to enter the value. Refer to Page 207 for %1 ~ %5 function key programming for details.

The SPS-320/340 ECR's have %1, %2 & %3 keys already located on the default keyboard; your actual keyboard may be different. Additional % keys may be located on the keyboard through "Function Key Assignment Programming" (see page 207). Up to five % keys (%1 ~ %5) may be placed on the keyboard. The % keys may also be located on one of the "Function Lookup" keys (see page 227) assigned to the keyboard.

Percent Discounts

A percentage discount can be programmed to apply a preset or open entry percentage discount or as an open entry percentage (%) surcharge (*such as a Tip*) to an individual item in a sale or to the entire sale.

Preset Percent Item Discount

In this example the %1 function is programmed as an *"item discount with a preset rate of 10 %"*. The Item Discount must be pressed immediately after registering the item you want the discount applied to.

1. Register an item into a sale.
2. Press the press the Item Percent Discount key, for example press the %1 key:

% 1

3. The discount is automatically applied and subtracted from the most current item registered.

THANK-YOU CALL AGAIN	
DATE 06/05/2011 SUN	TIME 08:33
PLU2	\$10.00
% 1	-10.000%
AMOUNT	-1.00
TOTAL	\$9.00
CASH	\$9.00
CLERK 1	No.000021 00001

Open Entry Percent Item Discount

You can also operate the percentage functions by entering the percentage of the discount or surcharge, you can enter a fractional percentage up to 3 digits beyond the decimal (i.e. 33.333%).

1. Register an item into a sale.
2. Enter the value for the percentage discount to apply. If you are entering a fraction of a percent, you must use the decimal key. For example, for one third off enter:

3 3 . 3 3 3

3. Press the Item Percent Discount key, for example press the %2 key:

% 2

4. The discount is automatically applied and subtracted from the most current item registered.

THANK-YOU CALL AGAIN	
DATE 06/05/2011 SUN	TIME 08:33
PLU2	\$10.00
% 2	-33.333%
AMOUNT	-3.33
TOTAL	\$6.67
CASH	\$6.67
CLERK 1	No.000022 00001

Preset Percent Sale Discount

Sale discounts differ from item discounts in operation. To apply a sale discount you must first press the SUBTOTAL key before registering (*pressing*) the discount key.

In this example the %3 key is programmed as a “*sale discount with a preset rate of 10%*”.

1. Register items into a sale.
2. Press the **SUBTOTAL** key:

SBTL

3. Press the Percent Sale Discount key, for example press the **%3** key:

% 3

4. The discount is applied and automatically subtracted from the subtotal amount of the sale.

THANK-YOU CALL AGAIN		
DATE	06/05/2011 SUN	TIME 08:33
PLU10		\$10.00
PLU20		\$10.00
% 3		-10.000%
AMOUNT		-2.00
TOTAL		\$18.00
CHECK		\$18.00
CLERK 1	No.000023	00001

Open Entry Percent Sale Discount

You can also operate the percentage functions by entering the percentage of the discount or surcharge, you can enter a fractional percentage up to 3 digits beyond the decimal (i.e. 99.999%).

1. Register an item into a sale.
2. Press the **SUBTOTAL** key:

SBTL

3. Enter the value for the percentage discount to apply. If you are entering a fraction of a percent, you must use the decimal key. For example, for one third off enter:

3 3 . 3 3 3

4. Press the **Percent** key, for example the **%4** key:

% 4

5. The discount is applied and automatically subtracted from the subtotal amount of the sale.

THANK-YOU CALL AGAIN		
DATE	06/05/2011 SUN	TIME 08:33
PLU1		\$5.00
PLU2		\$5.00
% 4		-33.333%
AMOUNT		-3.33
TOTAL		\$6.67
CASH		\$6.67
CLERK 1	No.000024	00001

Percent Surcharge

The operation for applying a Percent Surcharge to an item in a sale or the entire sale is the same as applying a Percent Discount to an item or entire sale. The only difference is in the % key programming, the % key would be programmed as positive instead of negative.

A surcharge may be a fee applied to an individual item or a gratuity added to the entire sale. (*Gratuity entry when not using Guest Check tracking.*)

Coupon on Sale (Vendor Coupon)

When a % key is programmed as "Amount", "Sale", "Open or Preset" and "Negative", the % key will apply as a coupon against the sale. (*Vendor or Manufacturer Coupons*)

Also, depending upon programming:

- You may be allowed only one coupon entry in a sale, after the **SBTL** key is pressed,
- You may be allowed to enter multiple coupons, but you must press the **SBTL** key before each coupon entry, or
- You may be allowed to enter multiple coupons, without first pressing **SBTL**.

NOTE: You cannot program a % key as a Positive Amount, for this you would need to use a PLU.

In this example the %5 key is programmed as an “*open amount sale coupon*”; the options are set so a coupon may be entered only once and you must first press **SBTL**.

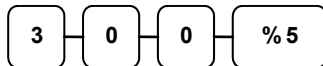
1. Register the items you wish to sell.
2. Press the **SBTL** key:



REGISTER MODE		
1	PLU16 T1	16.66
	%5	-3.00
TAX	1.48 SUBT	15.14

3. If the coupon (% key) is programmed as “Open”:
 - * Enter the **amount of the coupon**,
 - * Press the appropriate **Coupon** key.

For example:



4. The coupon is automatically subtracted.
5. The **Coupon** is reflected on the receipt when the sale is tendered.

THANK-YOU CALL AGAIN		
DATE 06/05/2011 SUN TIME 08:33		
PLU16		\$16.66
%5		-3.00
TAX1		\$1.48
TOTAL		\$15.14
CHARGE1		\$15.14
CLERK 1	No.000025	00001

Note: A vendor or manufacturer coupon (*not one of the %1 ~ %5 keys*) may have a barcode on the coupon. These manufacturer coupons can be added as negative PLU’s in the ECR and scanned to apply the coupon in a sale.

Coupon on Item (Store Coupon)

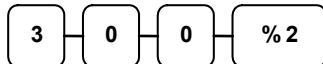
When a % key is programmed as "Amount", "Item", "Preset or Open" and "Negative", the % key will perform a coupon against an item in the sale. (*Store Coupon*)

In this case you must press the PLU (*or enter the PLU number and press the PLU function*) you wish the coupon to be subtracted from.

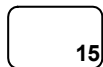
NOTE: You cannot program a % key as a Positive Amount, for this you would need to use a PLU.

In this example %2 is programmed as an **“open amount, item coupon”**.


1. Register the items you wish to sell.
2. Enter the **amount of the coupon**, press the appropriate **Coupon** key. %2 in this example:



3. The Item Coupon amount is displayed on the screen (**CPN : 3.00**).
4. Press the PLU key registered in the sale you wish to apply the coupon to (or enter the PLU number and press **PLU** function key.)



5. The coupon displays on the screen as applied to the item (**1 PLU15 C**) and the coupon amount is subtracted from the sale.
6. When the sale is tendered, the **Coupon** is reflected on the receipt with a **“C”** for the item it was applied to (**PLU15 C**).

REGISTER MODE		
1	PLU15	15.55
		
TAX	1.38	SUBT 16.93

REGISTER MODE		
1	PLU15	15.55
1	PLU15 C	-3.00
TAX	1.38	SUBT 13.93

THANK-YOU CALL AGAIN		
DATE	06/05/2011 SUN	TIME 08:33
PLU15		\$15.55
PLU15 C		-3.00
TAX1		\$1.38
TOTAL		\$13.93
CASH		\$13.93
CLERK 1	No.000026	00000

Mix & Match

Retailers often offer discounts when multiples of different items are purchased. The Mix & Match program sets the number of items that must be purchased to receive the discount and the amount of the discount. For example, the offer: “Save \$5 on any three bottles of wine” can be handled by a mix and match discount. The SPS-300 series can accommodate up to 99 different mix and match discounts.

The Mix & Match Table options are set through separate programs:

- In the **Z** mode switch position:
 - **“Mix & Match Program”** – To program each Mix & Match table.
Refer to Page 112 for programming details.
 - **“Mix & Match Scan”** – For printing out the current Mix & Match programming.
Refer to Page 112 for operation.
- In the **P** mode switch position:
 - **“Logo Descriptor” “Mix & Match Name”** – You can set a 12-character name for each M & M.
See page 262 for Mix & Match Name programming.
 - **“PLU Programming”** – You must link eligible items to the appropriate M & M discount table.
See page 169 for PLU programming details (*P6 of PLU programming*).
 - **“System Option Programming”** – Optionally, you can choose to make M & M discount taxable.
(*Tax is applied to the “Net amount after the M & M discount*).
See page 183 for system option programming, MIX & MATCH IS TAXABLE is on P18 of the system options.

Mix & Match Operation

When the Mix & Match discount has been programmed and eligible items are assigned to the M & M discount, when the eligible items are registered in a sale, the Mix & Match discount will automatically be applied.

WHITE WINE	DATE 06/14/2011 SUN	TIME 03:15	
ROSE WINE	W. WINE T12	\$15.00	
RED WINE	ROSE WINE T12	\$15.00	
CHARGE	RED WINE T12	\$15.00	
	M & M 1	-5.00	
	TAX1	\$3.94	
	TAX2	\$1.80	
	TOTAL	\$45.74	
	CHARGE	\$45.74	
	CLERK 1	000111	00121

Register 3 Bottles of Wine

Mix & Match is Applied Automatically

Void and Correction Operations

Cancel

The **CANCEL** key allows you to stop any transaction. Anything registered within the transaction before the **CANCEL** key is pressed is automatically corrected. The **CANCEL** key can be inactivated through programming, Refer to "Function Key Programming" in the "Program Mode Programming" chapter, or the key can be programmed to require manager control.

Note: When a function is located on a function look up menu key, you access the function by pressing the appropriate function look up key, then pressing the numeric digit corresponding to the function you wish to select. On the default keyboard, the **CANCEL** function is function #1 on the function look up 1 menu, so to use the **CANCEL** function you would first press **FUNCTION LOOK#1**, then press the numeric 1 key.

1. Register the items you wish to sell.
2. Press the **CANCEL** key (or access the **CANCEL** function from the function look up menu.)



THANK-YOU CALL AGAIN		
DATE	06/05/2011 SUN	TIME 08:33
PLU1	T1	\$2.29
PLU2		-0.50
CANCEL	*****	
CLERK	1	No.000411 00001

Error Correct (Void Last Item)

If no other key has been pressed, the **ERROR CORRECT** function corrects (removes) the last item entered.

1. Register the item you wish to sell.
2. Press the **ERROR CORR** key:



THANK-YOU CALL AGAIN		
DATE	06/05/2011 SUN	TIME 08:33
PLU1	T1	\$2.29
PLU2		\$1.29
ERR CORR	-----	
PLU2		-1.29
TAX1	AMT	\$0.14
TOTAL		\$2.43
CASH		\$2.43
CLERK	1	No.000311 00001

Void Previous Item

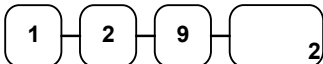
This function allows you to correct an item registered previously in the current transaction.

1. Register an item. Then register a second item.
2. To correct the first item, press

VOID:



3. Enter the price of the first item; then press the **PLU** key where it was registered originally.



THANK-YOU CALL AGAIN		
DATE	06/05/2011 SUN	TIME 08:33
PLU2		\$1.29
PLU1	T1	\$2.29
VOID	-----	
PLU2		-1.29
TAX1	AMT	\$0.14
TOTAL		\$2.43
CASH		\$2.43
CLERK	1	No.000312 00001

Return Merchandise Registrations

The Merchandise Return is used when a customer brings a product in for a refund\return. Returns may be registered separately or as part of a sale. On the default keyboard, the MERCHANDISE RETURN function is located on the FUNCTION LOOK UP 1 menu as function#2.

Note: When a function is located on a function look up menu key:

- ⇒ Access the function by pressing the appropriate function look up key
- ⇒ Press the numeric digit corresponding to the function you wish to select.

Merchandise Return Operation

1. Press the **RETURN** function key:



2. Enter the price of the item you wish to return then register the PLU you wish to RETURN.



3. Total the sale with **CASH**, **CHECK**, or a **CHARGE** function.

THANK-YOU CALL AGAIN		
DATE	06/05/2011 SUN	TIME 08:33
RETURN	*****	
PLU2 T1		-2.99
TAX1 AMT		-0.18
TOTAL		-3.17
CASH		-3.17
CLERK 1	No.000211	00001

Void Mode Operations

You can use the **VOID** mode switch position to correct any previously complete transaction.

Transaction Void Operation:

1. Turn the mode switch to the **VOID** position.
2. Enter the transaction you wish to correct exactly as it was entered originally in the **REG** mode switch position. You can enter discounts, voids, returns, tax exemptions or any other function.
3. All totals and counters are corrected as if the original transaction did not take place.

THANK-YOU CALL AGAIN		
DATE	06/05/2011 SUN	TIME 08:33
VOID MODE	*****	
PLU1 T1		-2.29
PLU2		-1.00
TAX1 AMT		-0.14
TOTAL		-3.43
CASH		-3.43
CLERK 1	No.000412	00001

#/No Sale Operations

The **#/NO SALE** key is used to open the cash drawer when not currently in a sale, or to include a Non-Add Number to be printed on the receipt for the current sale.

Open Drawer

The **#/NO SALE** key will open the cash drawer when you have not already started a transaction. The no sale function can be disabled or placed under manager control through programming, Refer to "Function Key Programming" in the "Program Mode Programming" chapter.

1. Press **#/NS**:



2. The drawer will open and the receipt will print as in the example on the right.

THANK-YOU CALL AGAIN		
DATE 06/05/2011 SUN	TIME 08:33	
NO SALE	-----	
CLERK 1	No.000511	00001

Non Add Number

You can also use the **#/NO SALE** key to print any number (up to 9 digits) on receipts. You can enter the number any time during a transaction. For example, if you wish to record a checking account number, enter the number and press the **#/NO SALE** key before totaling the sale with the **CHECK** key.

1. Register the items you wish to sell.
2. Enter the number you wish to record, for example enter:



3. Press **#/NS**:



4. Press **CHECK**:



THANK-YOU CALL AGAIN		
DATE 06/05/2011 SUN	TIME 08:33	
PLU1 T1		\$2.99
NON-ADD#		1234
TAX1 AMT		\$0.18
TOTAL		\$3.17
CHECK		\$3.17
CLERK 1	No.000512	00001

Received On Account Operations

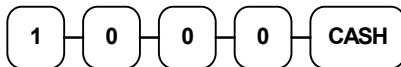
You can use the received on account functions (**RA1-RA3**) to accept cash, checks or charges into the cash drawer when you are not actually selling merchandise. For example, use received on account to accept payments for previously sold merchandise or record loans to the cash drawer.

Note: When a function is located on a function look up menu key, you access the function by pressing the appropriate function look up key, then pressing the numeric digit corresponding to the function you wish to select. On the default keyboard, the RA1 function is function #3 on the function look up 1 menu, so to use the RA1 function, you would first press FUNCTION LOOK#1, then press the numeric 3 key.

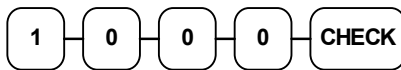
1. When not in an active transaction; Press one of the received on account keys (**RA1-RA3**) or select one of the received on account functions from a function look up menu:



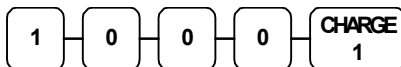
2. Enter the amount of cash received (*up to 7-digits*), press **CASH**.



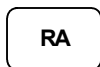
3. Enter the check amount received (*up to 7-digits*), press **CHECK**.



4. Enter the charge amount received (*up to 7-digits*), press a **CHARGE** key, (or press the **FUNCTION LOOKUP** key and press the numeric key representing the appropriate charge key.)



5. You can continue to itemize receipts, or you can finalize by pressing or selecting the same received on account key.



THANK-YOU	
CALL AGAIN	
DATE 06/05/2011 SUN	TIME 08:33
RA1	
CASH	\$10.00
CHECK	\$10.00
CHARGE1	\$10.00
RA1	\$30.00
CLERK 1	No.000611 00001

Paid Out Operations

You can use the **PAID OUT** function keys (PO1-PO3) to track cash or checks paid out or to record loans/withdrawals from the cash drawer.

Note: When a function is located on a function look up menu key, you access the function by pressing the appropriate function look up key, then pressing the numeric digit corresponding to the function you wish to select. On the default keyboard, the PO1 function is function #4 on the function look up 1 menu, so to use the PO1 function, you would first press FUNCTION LOOK#1, then press the numeric #4 key.

1. When not in an active transaction; Press one of the paid out keys (**PO1-PO3**) or select one of the paid out functions from a function look up menu:

PO

2. Enter the amount of cash paid out (*up to 7-digits*), press **CASH**.

1 0 0 0 **CASH**

3. Enter the check amount paid out (*up to 7-digits*), press **CHECK**.

2 0 0 0 **CHECK**

4. Enter the charge amount received (*up to 7-digits*), press a **CHARGE** key.

3 0 0 0 **CHARGE 1**

5. You can continue to itemize paid outs (*up to 7-digits*), or you can finalize by pressing or selecting the same paid out key.

PO

THANK-YOU CALL AGAIN		
DATE	06/05/2011 SUN	TIME 08:33
PO1		
CASH		-10.00
CHECK		-20.00
CHARGE1		-30.00
PO1		-60.00
CLERK 1	No.000711	00001

Subtotaling Operations

Subtotal

Press the SBTL key at any time during a transaction to view the total due, including tax and after adjustments. The display will indicate Sub for subtotal.

1. Register the items you wish to sell.
2. Press **SBTL**. The subtotal will display with the message "Sub" indicated on the rear display.

SUBTL

The subtotal can be printed if the print option: print subtotal when pressed is set. Refer to "Print Option Programming" on page 196.

Eat In/Take Out/Drive Thru Sales

For a restaurant or fast food application the "Eat In", "Take Out" and "Drive Thru" keys can be used to provide totals for each type of sale. The **EAT IN**, **TAKE OUT**, and **DRIVE THRU** keys function as subtotal keys. You can force the operator to press one of the keys before tendering. Refer to "System Option Programming" in the "Program Mode Programming" chapter. Separate totals will be maintained on the financial report to detail sales counts and amounts for each key.

Note: EAT IN, TAKE OUT, and DRIVE THRU can be programmed to exempt taxes to accommodate areas where food is taxed differently.

Totaling and Tendering

There are ten tender functions available to categorize sales. **CASH** and **CHECK** are individual keys on the keyboard. The eight charge functions **CHARGE 1 - CHARGE 8** are available on the **FUNCTION LOOK#2** key on the default keyboard.

Depending upon how your register is programmed you might find charge keys as individual function keys on the keyboard or listed on one of the function look up keys.

Totaling a Cash Sale

1. Register the items you wish to sell.
2. To total a cash sale, press **CASH**:

CASH

3. The display will indicate the total amount of the cash sale.

```
THANK-YOU
CALL AGAIN

DATE 06/05/2011 SUN   TIME 08:33

PLU2                      $7.96
TOTAL                     $7.96
CASH                      $7.96
CLERK 1                   No.000811  00001
```

Tendering a Cash Sale

1. Register the items you wish to sell.
2. Enter the amount tendered by the customer. For example, for \$20.00 enter:

2 0 0 0

3. Press **CASH**:

CASH

4. The display will indicate the total amount of the cash tendered and the change due, if any.

```
THANK-YOU
CALL AGAIN

DATE 06/05/2011 SUN   TIME 08:43

PLU1 T1                   $2.99
PLU1 T1                   $2.99
4X                        $1.99
PLU2                      $7.96
TAX1                      $0.36
TOTAL                    $14.30
CASH                      $20.00
CHANGE                   $5.70
CLERK 1                   No.000812  00001
```

Rounding a Cash Sale

1. Register the items you wish to sell.
2. To total a cash sale, press **CASH**:

CASH

3. The display will indicate the total amount of the cash sale.

*(The **ROUND** amount printing on the receipt is available at v2.018 and later.)*

```
THANK-YOU
CALL AGAIN

DATE 06/05/2011 SUN   TIME 09:33

PLU9 T1                   $7.96
TAX1                      $0.62
TOTAL                    $8.60
ROUND                     $0.02
CASH                      $8.60
CLERK 1                   No.000813  00001
```

Totaling a Check Sale

1. Register the items you wish to sell.
2. To total a cash sale, press **CHECK**:

CHECK

3. The display will indicate the total amount of the cash sale.

THANK-YOU	
CALL AGAIN	
DATE 06/05/2011 SUN	TIME 08:33
PLU2	\$7.96
TOTAL	\$7.96
CHECK	\$7.96
CLERK 1	No.000911 00001

Tendering a Check Sale

1. Register the items you wish to sell.
2. Enter the amount tendered by the customer. For example, for \$20.00 enter:

2 0 0 0

3. Press **CHECK**:

CHECK

4. The display will indicate the total amount of the check tendered and the change due, if any.

THANK-YOU	
CALL AGAIN	
DATE 06/05/2011 SUN	TIME 08:33
PLU1 T1	\$2.99
PLU1 T1	\$2.99
4X	\$1.99
PLU2	\$7.96
TAX1	\$0.36
TOTAL	\$14.30
CHECK	\$20.00
CHANGE	\$5.70
CLERK 1	No.000912 00001

Totaling a Charge Sale

Use the charge keys to track charge or credit card sales. Refer to "Function Key Programming" in the "Program Mode Programming" chapter to change the descriptors for the charge tender functions.

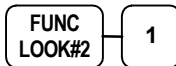
For example, you can use CHARGE 1 to track Visa card sales. The descriptor "VISA" will display on the function look up menu and print on the printer. You can also set tendering options for the charge keys, i.e. whether to allow over tendering or to enforce tendering.

Note: When a function is located on a function look up menu key, you access the function by pressing the appropriate function look up key, then pressing the numeric digit corresponding to the function you wish to select. On the default keyboard, the CHARGE 1 function is function #1 on the function look up 2 menu key. So, to use the CHARGE 1 function, you would first press FUNCTION LOOK#2, then press the numeric 1 key.

1. Register the items you wish to sell.
2. Press one of the charge keys located on the keyboard:



Alternatively, if the charge function is located on a function look up key press **FUNCTION LOOK2**, then press the digit representing the charge function you are using:

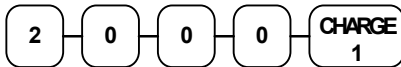


THANK-YOU CALL AGAIN		
DATE		TIME
06/05/2011	SUN	08:33
PLU1	T1	\$2.99
PLU1	T1	\$2.99
4X		\$1.99
PLU2		\$7.96
TAX1		\$0.36
TOTAL		\$14.30
CHARGE1		\$14.30
CLERK 1	No.000913	00001

Tendering a Charge Sale

Tendering a charge sale may or may not be allowed. Refer to "Function Key Programming" in the "Program Mode Programming" chapter to set tendering options for the charge keys, i.e. whether to allow over tendering or to enforce tendering.

1. Register the items you wish to sell.
2. Enter the amount of the charge and press one of the charge keys located on the keyboard:



Alternatively, if the charge function is located on a function look up key, enter the amount of the charge:



3. Press **FUNCTION LOOK2**, then press the digit representing the charge function you are using:



THANK-YOU CALL AGAIN		
DATE		TIME
06/05/2011	SUN	08:33
PLU1	T1	\$2.99
PLU1	T1	\$2.99
4X		\$1.99
PLU2		\$7.96
TAX1		\$0.36
TOTAL		\$14.30
CHARGE1		\$20.00
CHANGE		\$5.70
CLERK 1	No.000914	00001

Integrated Payment Operations

Non-EMV programming and operation information can be found in the “Non-EMV Integrated Payment Appendix” on page 285.

For EMV Integrated Payment programming & operation related information refer to the EMV supplements available on the CRS web site.

Check Cashing

Check cashing is the process of exchanging cash for a check. If you cash checks, you must place the **CHECK CASHING** key on the keyboard. Refer to “Function Key Assignment” in the “Program Mode Programming” chapter.

1. Enter the amount of the check tendered by the customer. For example, for \$20.00 enter:



2. Press **CHKCASH**:



3. The display will indicate the amount of the check and the cash change.

THANK-YOU	
CALL AGAIN	
DATE 06/05/2011 SUN	TIME 08:33
CHKCASH	
CHECK	\$20.00
CASH	-20.00
CLERK 1	No.000915 00001

Check Endorsement

If you are accepting CHECKS as payment for sales transactions, or providing CHECK CASHING services, you can program the CHECK key and the CHECK CASHING key for Compulsory Check Endorsement.

To use this feature an optional external slip printer is required. A separate Check Endorsement Message can be programmed for printing on checks. Refer to “Endorsement Message” programming on page 257.

The procedures are the same as explained for the Check Tender and Check Cashing operations.

1. When the transaction is finalized you will be prompted to perform the Check Endorsement.
2. Insert the check into the Slip Printer and press the **CHECK ENDORSEMENT** key.

Split Tender

Split tendering is paying for one transaction by more than one payment method. For example, a \$20.00 sale could be split so \$10.00 is paid in cash, and the remaining \$10.00 is paid by a check. If necessary, you can make several different payments.

Note: By default, **CASH** and/or **CHECK** under tenders are allowed. This can be changed through function key programming.

1. Register the items you wish to sell.
2. Enter the amount of cash tendered by the customer.
For example, enter \$10.00 and press **CASH**:

1 0 0 0 CASH

3. The display will indicate the \$10.00 cash tender and the \$10.00 total still due.
4. Enter the amount of check tendered by the customer.
For example, enter \$10.00 and press **CHECK**:

1 0 0 0 CHECK

5. When the total tendered equals or exceeds the total due, the receipt will print and the transaction is complete.

```

THANK-YOU
CALL AGAIN

DATE 06/05/2011 SUN    TIME 08:33

PLU2                      $20 00
TOTAL                      $20.00
CASH                       $10.00
TOTAL                      $10.00
CHECK                      $10.00
CLERK 1                    No.000916  00001
  
```

Post Tender

Post tendering means computing change after the sale has been totaled and the drawer is open. This feature is useful when a customer changes the amount of the tender or when a "quick change artist" confuses a clerk. Normally, this function is not allowed. If you wish to allow post tendering, you must set the appropriate system option. Refer to "System Option Programming" in the "Program Mode Programming" chapter. (A separate system option determines whether the drawer opens on the post tender.)

1. Register the items you wish to sell.
2. Press **CASH**:

CASH

3. The display will indicate the total of the cash sale.
4. Enter the amount of the new tender, Press **CASH**:

2 0 0 0 CASH

5. The display will indicate the change due.

```

THANK-YOU
CALL AGAIN

DATE 06/05/2011 SUN    TIME 08:33

PLU1 T1                    $2.00
TAX1                       $0.12
CASH                       $2.12
CLERK 1                    No.000917  00001
  
```

Receipt on Request

When a receipt is not normally issued the receipt function can be turned off. Refer to “Stop Receipt Printing” on page 102 in the "X-Mode" chapter.

If a customer requests a receipt after a sale has been finalized, pressing the CASH key will issue a complete buffered receipt. This operation is the same no matter the type of tender used (*Cash, Check, Charge*).

Note: The System Option “Allow Multiple Receipt” must be enabled.

Printing a Receipt after the Sale

- ◆ After the sale has been totaled, but before the next transaction is started, press the **CASH** key:



Issue a Second Receipt

If the Receipt is normally ON and a second receipt is needed or requested, pressing the CASH key will issue a complete buffered receipt. This operation is the same no matter the type of tender used (*Cash, Check, Charge*).

Note: The Print Option “Buffer Receipt Issue When Receipt Is On” must be enabled.

Issuing a Second Receipt after the Sale

- ◆ After the sale has been totaled, but before the next transaction is started, press the **CASH** key:



Currency Conversion

If you normally accept currency from neighboring nations, you can program the *SPS-300* to convert the subtotal of a sale to the equivalent cost in the foreign currency. You can set up to four separate conversion functions for different foreign currencies. To do this, you need to program the conversion factor. For example, if the US dollar (home currency) is worth 1.3720 Canadian dollars (foreign currency), the conversion factor is 1.3720. Refer to "Function Key Programming" in the "Program Mode Programming" chapter to set a conversion factor.

Note: When a function is located on a function look up menu key, you access the function by pressing the appropriate function look up key, then pressing the numeric digit corresponding to the function you wish to select. On the default keyboard, the CONV1 function is function #7 on the function look up 1 menu, so to use the CONV1 function, you would first press FUNCTION LOOK#1, then press the numeric 7 key.

1. Register the items you wish to sell.
 2. Press the **CONV1** key if it is located on the keyboard:
3. Alternatively, if the conversion is located on a function look up key press **FUNCTION LOOK2**, then press the digit representing the **CONV1** function:

CONV1

FUNC LOOK#2 7

4. The amount due in foreign currency is displayed.
 5. Enter the amount of the foreign currency tender, Press **CASH**:
6. The display will indicate the amount of foreign currency tendered and display \$5.17 change due. **The change due is computed in home currency!**

1 0 0 0 CASH

```
THANK-YOU
CALL AGAIN

DATE 06/05/2011 SUN   TIME 08:33

PLU1 T1                $2.00
TAX1                   $0.12
TOTAL                  $2.12
CONV 1                 ¥2.90
CHANGE RATE            @1.3720
HOME AMT.              $10.00
CHANGE                 $5.17
CLERK 1                No.000922 00001
```

The currency symbol you program will display here. Refer to "Print Option Programming" in the "Program Mode Programming" chapter.

Clerk Interrupt

Clerk interrupt allows you to temporarily suspend a transaction in progress by allowing a new clerk to sign on and register a new transaction. After the new transaction is complete, the original clerk can sign on, the suspended transaction is recalled and may be completed.

To Enable Clerk Interrupt

Set System Option Programming to enable Clerk Interrupt.

Using X/Time

- ⇒ Use **X/Time** to multiply a quantity entry of PLU entries as described in the “Keyboard PLU Multiplication” section on page 46.
- ⇒ The **X/Time** key can be used to calculate split pricing on items (purchase 2 items on a 3 for \$3.00) as shown in the chapter “Split Pricing” on page 47.
- ⇒ When you are in the program mode, you can press the **X/Time** key to print the current programming screen, as well.
- ⇒ When the ECR is idle (*not in a transaction or other operation*) pressing **X/Time** will operate as a ‘Print Screen’ key. The current screen that is displayed will print on the register receipt. This operation will work in all keylock positions; VOID- Mode, REG-Mode, X-Mode, Z-Mode and S-Mode.

Validation

Validation is possible when an optional slip printer is connected to one of the available RS-232C ports. Use the **VALIDATION** key (key code #401) to print a three-line validation on a separate form or piece of paper. Refer to the Validation Function Key programming on page 247 to define the validation printer port # and other validation settings.

Validations can be performed after registering a PLU, discount or payment operation by pressing the **VALIDATION** key. When validating a payment, the system option ‘Tender Validation’ determines whether the amount of the sale or the amount tendered is printed on the validation. If an operation is programmed with validation compulsory, the cash drawer will not open until the compulsion is satisfied. Validation can be set to be compulsory after selected functions, including:

- Add Check
- Cash
- Charge 1-8
- Check
- Check Cashing
- Eat-In/Take-Out/Drive-Thru
- Food Stamp Tender
- Merchandise Return
- Paid Out
- Received on Account
- Service
- Tax Exempt
- Time In/Out
- % Key Functions
- Waste

Sample Validation Printout

Validated PLU Entry

10 06/09/2023 15:51 000043 PLU
CHECK \$25.00
CLERK 10

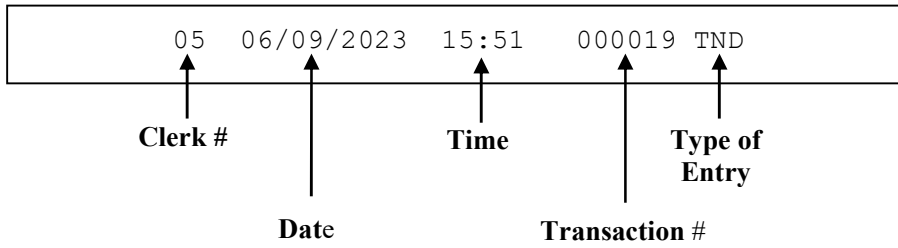
Validated Received On Account

02 06/09/2023 15:51 000119 R/A
CHECK \$111.11
CLERK 2

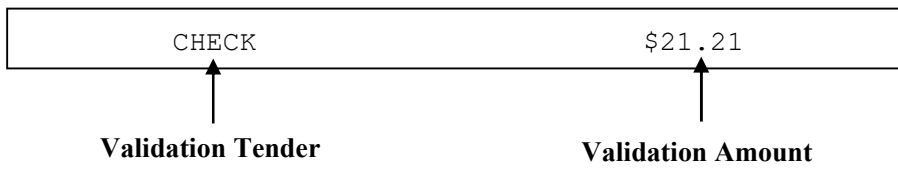
Validated Check Tender

05 06/09/2023 15:51 000019 TND
CHECK \$21.21
CLERK 5

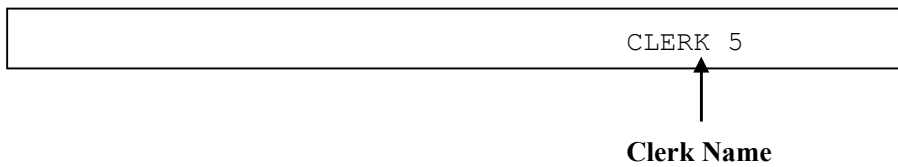
Validation First Line



Validation second Line



Validation Third Line



Check Tracking Operations

Overview

The *SPS-300* can employ a manual previous balance, hard check, or soft check system. (You must select hard or soft check posting in memory allocation programming - the default selection is soft.)

- If manual previous balance is selected, the check balance is not saved in memory and is input manually by the operator (use the **PBAL** key).
- If a hard check system is selected, only the previous balance is maintained in memory.
- If a soft check system is selected, the check detail is kept in memory until the check is paid. (The maximum size of the soft check is set in memory allocation programming.)

Important Note: All Check Tracking operations must take place on the same register the guest check was originated on. If an IRC register system is implemented, each ECR maintains its own check tracking files. You cannot access checks originated at other register within the system. You must open, store, recall, add to, and/or pay the check at the same register it was originated on.

Options

For hard or soft check operations, the following tracking options are available:

- Tracking by manually entering the check number. (The number of digits in the check number may be set from 0-9, with zero meaning no fixed length.)
- Tracking by automatically assigning a check number. The starting check is always #1.
- Enforcing entry of a table number, where a check number is also assigned, allows the check balance to be recalled by either the check or table number. Multiple checks may be assigned at the same table. (If there are multiple checks assigned to the same table, an attempt to recall by table number will recall the check with the lowest number.)
- The check number can be scanned from a printed bar code. For example, a bar code can be printed on a customer identification badge.

For soft check operations, the following additional option is available:

- Consolidation of like items can be selected for guest check printing. For example, if three rounds of drinks are served, the check will print "3 TAP BEER" rather than "1 TAP BEER" three times.

Check Tracking Function Keys

Although none of the functions necessary for check tracking operations appear on the default keyboard, any or all the following functions can be located on the keyboard:

CHECK #	The CHECK # key is used to begin a new or access an existing balance (hard check) or itemized bill (soft check.) Check track numbers that are entered manually may be set at a fixed length of one to nine digits. Check track numbers assigned automatically will begin with #1. Existing checks are accessed by entering the check track number and pressing the CHECK# key. In a drive thru system, simply pressing the PBAL key will recall the oldest open balance (lowest check track #).
GUEST	Use to enter the count of guests served as part of a guest check. Guest count entry can be enforced when opening a guest check, or for all transactions.
P/BAL	Use to enter the amount of an outstanding balance. The P/BAL key will take the recall function if the <i>drive thru</i> feature is enabled in CHECK # key programming.
SERVICE	Use to temporarily finalize Previous Balance or check tracking transactions. (If you are using a hard check system, you must program the SERVICE key for the port where the slip printer is connected.)
TABLE	You can enforce the entry of a table number for guest check transactions, or for all transactions. If you are tracking guest check balances, the balance can be recalled either by entering the check number or the table number.
PRINT CHECK	Use to print a guest check. The check can be printed on an optional (RS-232C) printer or can be printed on the receipt printer. The PRINT CHECK key can be set to automatically service the check.
TIP	The TIP key allows a gratuity to be added to a guest check before payment. The TIP key may be programmed as either a percentage or amount. If programmed as a percentage, tax programming defines whether the percentage is calculated on the net (taxable = no) amount, or the amount after taxes.

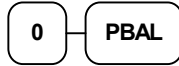
Function Key Assignment & Programming

- Refer to "Function Key Assignment" in the "Service Mode Programming" chapter to assign the functions necessary for your application on the keyboard or Function Lookup.
- Refer to "Function Key Programming" in the "Program Mode Programming" chapter to set the options as necessary for each function key.

Posting Balances Manually

Opening a Check

1. Enter the previous balance (if this is the first posting, enter **0**) press the **PBAL** key:



2. Register the items you wish to sell.
3. To total the posting, press **SERVICE**:



4. If the allocation is set for soft check the receipt prints when service is pressed.
5. If the allocation is set for hard check, place a slip in an optional slip printer, press the **PRINT CHECK** key.

Receipt Example:

THANK-YOU CALL AGAIN		
DATE 06/05/2011 SUN	TIME 08:33	
PBAL		\$0.00
PLU2		\$1.00
SERVICE		\$1.00
BFWD		\$1.00
CLERK 1	No.000011	00001

Adding to a Check

1. Enter the previous balance, press the **PBAL** key:



2. Register the next items you wish to sell.
3. To total the posting, press **SERVICE**:



4. If the allocation is set for soft check the receipt prints when service is pressed.
 - If the allocation is set for hard check, place a slip in an optional slip printer, press the **PRINT CHECK** key.

Receipt Example:

THANK-YOU CALL AGAIN		
DATE 06/05/2011 SUN	TIME 08:33	
PBAL		\$1.00
PLU3		\$2.00
SERVICE		\$2.00
BFWD		\$3.00
CLERK 1	No.000012	00001

Paying a Manual Balance

1. Enter the previous balance, press the **PBAL** key:

3 0 0 PBAL

2. If necessary, add additional items. If you wish to add a tip, press **SBTL**, then enter the tip amount and press the **TIP** key:

SBTL

5 0 TIP

3. Pay the balance as you would normally tender a transaction, with **CASH**, **CHECK**, or one of the **CHARGE** functions. If the tender is greater than the balance due, change is displayed:

1 0 0 0 CASH

4. If the allocation is set for soft check, the receipt prints when the service key is pressed.
 - If the allocation is set for hard check, place a slip in an optional slip printer, press the **PRINT CHECK** key.

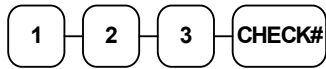
Receipt Example:

THANK-YOU CALL AGAIN		
DATE	06/05/2011 SUN	TIME 08:33
PBAL		\$3.00
TIP		\$0.50
CHECKS PAID		\$3.50
CASH		\$10.00
CHANGE		\$6.50
CLERK 1	No.000013	00001

Soft Check

Opening a Soft Check

1. Enter the number of the guest check, press the **CHECK #** key:



Alternatively, press the **CHECK #** key if set to automatically assign a check #:



2. If required, enter the table number and press the **TABLE** key:



3. If required, enter the number of guests and press the **GUEST** key:



4. Register the items you wish to sell.
5. To total the posting, press **SERVICE**:



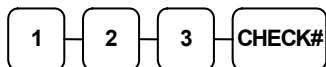
Receipt Example:

THANK-YOU CALL AGAIN	
DATE 06/05/2011 SUN	TIME 08:33
CHECK #	#123
PBAL	\$0.00
TABLE	#3
GUEST	#2
CHICKEN	\$7.00
STEAK	\$10.00
SERVICE	\$17.00
BFWD	\$17.00
CLERK 1	No.000111 00001

Note: If a table number entry is required for all guest checks, and checks are assigned by register, the check will be assigned by the register when the table # is entered.

Adding to a Soft Check

1. Enter the number of the guest check, press the **CHECK #** key:



or, if you entered a table number, enter the table number and press the **TABLE** key:



2. Register the next items you wish to sell.
3. To total the posting, press **SERVICE**:

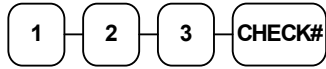


Receipt Example:

THANK-YOU CALL AGAIN	
DATE 06/05/2011 SUN	TIME 08:33
CHECK #	#123
PBAL	\$17.00
TABLE	#3
GARLIC BREAD	\$2.00
SERVICE	\$2.00
BFWD	\$19.00
CLERK 1	No.000112 00001

Printing a Soft Check

1. Enter the number of the guest check, press the **CHECK #** key:



or, if you entered a table number, enter the table number and press the **TABLE** key:



2. Press **PRINT CHECK** to print the complete check. If programmed to do so, the **PRINT CHECK** key will automatically service the check:



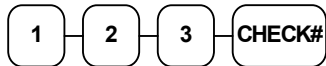
CHK # : is the number of times this check has been printed is counted and printed on the check.

Sample of soft check printed on the receipt:

THANK-YOU CALL AGAIN	
DATE 06/05/2011 SUN	TIME 08:33
CHECK #	#123
PBAL	\$19.00
TABLE	#3
CHICKEN	\$7.00
STEAK	\$10.00
GARLIC BREAD	\$2.00
SERVICE	\$0.00
BFWD	\$19.00
	CHK # : 2
CLERK 1	No.000112 00001

Paying a Soft Check

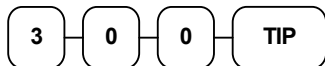
1. Enter the number of the guest check, press the **CHECK #** key:



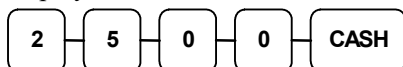
or, if you entered a table number, enter the table number and press the **TABLE** key:



2. If necessary, add additional items. If you wish to add a tip, press **SBTL**, then enter the tip amount and press the **TIP** key:



3. Pay the balance as you would normally tender a transaction, with **CASH**, **CHECK**, or one of the **CHARGE** functions. If the tender is greater than the balance due, change is displayed.



Sample of soft check printed on the receipt:

THANK-YOU CALL AGAIN	
DATE 06/05/2011 SUN	TIME 08:33
CHECK #	#123
PBAL	\$19.00
TABLE	#3
TIP	\$3.00
CHECKS PAID	\$22.00
CASH	\$25.00
CHANGE	\$3.00
	CHK # : 2
CLERK 1	No.000114 00001

Adding Checks

The Add Check key is used to combine one SOFT check with another SOFT check. This operation does not work with a hard check.

1. Press the **ADD CHECK** key.
2. Enter the number of the check you wish to combine with another check (FROM CHECK#).

3 0 0 CASH

3. Press ENTER (**CASH KEY**).
4. Check #300 prints on the receipt.
5. Enter the number of the check to add the items from the first check to (TO CHECK#).

4 0 0 CASH

6. Press ENTER (**CASH KEY**).
7. Check #300 is added to Check #400
8. When check #400 is recalled it will include the items from check#300.

The display shows:

```

CHECK# ADD
FROM CHECK# :      0
TO CHECK#  :      0
  
```

Sample of soft check printed on the receipt:

```

DATE 06/05/2011 SUN   TIME 08:33

CHECK #                # 300
PBAL                   $0.00
Coffee                 $3.00
Entre'                 $30.00
Desert                 $12.00
SERVICE               $45.00
BFWD                   $45.00
CLERK 1                No.000213  00001
  
```

```

DATE 06/05/2011 SUN   TIME 08:33

CHECK #                # 400
PBAL                   $0.00
Draft Beer             $6.00
Entre'                 $24.00
Desert                 $10.00
SERVICE               $40.00
BFWD                   $40.00
CLERK 1                No.000214  00001
  
```

```

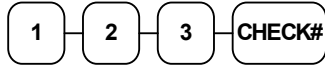
DATE 06/05/2011 SUN   TIME 08:33

** ADD TABLE **
#300                   ->      #400
CLERK 1                No.000215  00001
  
```

Hard Check

Opening a Hard Check

1. Enter the number of the guest check, press the **CHECK #** key:



- Or just press the **CHECK #** key if programmed to automatically assign a check#:



2. If required, enter the table number and press the **TABLE** key:



3. If required, enter the number of guests and press the **GUEST** key:



4. Register the items you wish to sell.
5. Place a slip in an optional slip printer, the check will print automatically when you press **SERVICE**:

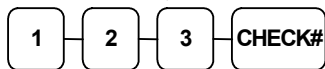


Receipt Example:

THANK-YOU CALL AGAIN	
DATE 06/05/2011 SUN	TIME 08:33
CHECK #	#123
PBAL	\$0.00
TABLE	#3
GUEST	#2
CHICKEN	\$7.00
STEAK	\$10.00
SERVICE	\$17.00
BFWD	\$17.00
CLERK 1	No.000311 00001

Adding to a Hard Check

1. Enter the number of the guest check, press the **CHECK #** key:



- or, if you entered a table number, enter the table number and press the **TABLE** key:



2. Register the next items you wish to sell.
3. To total the posting, press **SERVICE**:

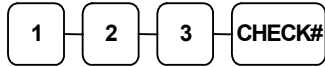


Receipt Example:

THANK-YOU CALL AGAIN	
DATE 06/05/2011 SUN	TIME 08:33
CHECK #	#123
PBAL	\$17.00
TABLE	#3
GARLIC BREAD	\$2.00
SERVICE	\$2.00
BFWD	\$19.00
CLERK 1	No.000312 00001

Paying a Hard Check

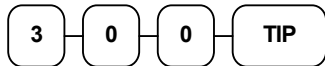
1. Enter the number of the guest check, press the **CHECK #** key:



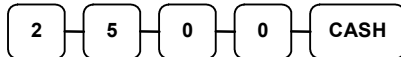
- or, if you entered a table number, enter the table number and press the **TABLE** key:



2. If necessary, add additional items. If you wish to add a tip, press **SBTL**, then enter the tip amount and press the **TIP** key:



3. Pay the balance as you would normally tender a transaction, with **CASH**, **CHECK**, or one of the **CHARGE** functions. If the tender is greater than the balance due, change is displayed.



Sample of Hard Check postings printed on an optional printer:

DATE	12/01/2011	WED
CHECK #		#4
PBAL		\$0.00
STEAK T1		\$15.50
LOBSTER T1		\$19.50
WINE T1		\$2.50
WINE T1		\$2.50
TAX1		\$3.60
SERVICE		\$43.60
BFWD		43.60
No.000017	REG 01 KELLY	TIME 09:15
PBAL		\$43.60
2X	@2.50	
WINE T1		\$5.00
TAX1		\$4.05
SERVICE		\$5.45
BFWD		49.05
No.000019	REG 01 KELLY	TIME 09:47
PBAL		\$49.05
2X	@2.50	
WINE T1		\$5.00
TAX1		\$4.50
CHECKS PAID		\$54.50
TOTAL		\$54.50
CASH		\$54.50
No.000321	REG 01 KELLY	TIME 10:16

Fast Food Drive Thru

For fast food drive thru windows, the *SPS-300* has the capability of storing orders when they are taken and then recalling the next order automatically at the payment window. (Note: Drive thru storing & recalling must be done at the same register.)

- The **PBAL** function becomes a recall function when the drive thru feature is enabled in the **CHECK #** function key program. Press the **PBAL** key to recall the lowest tracking number balance.
- Orders are stored by first pressing the **CHECK #** key to automatically assign the next tracking number, then pressing **SERVICE**. (A macro sequence key could be created to execute both functions sequentially by pressing the **MACRO** key.)

Refer to "Function Key Programming" in the "Program Mode Programming" chapter.

Taking a Drive Thru Order

1. Register the items you wish to sell.
2. Press the **CHECK #** key to begin an automatically assigned check:



3. To store the posting, press **SERVICE**:

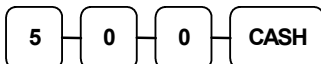


Receipt Example:

THANK-YOU CALL AGAIN	
DATE 06/05/2011 SUN	TIME 08:33
HAMBURGER	\$2.00
FRIES	\$1.00
CHECK #	# 3
PBAL	\$0.00
SERVICE	\$3.00
BFWD	\$3.00
CLERK 1	No.000411 00001

Paying a Drive Thru Order

1. Press the **PBAL** key:
2. If necessary, add additional items, register discounts or coupons.
 3. Pay the balance as you would normally tender a transaction, with **CASH**, **CHECK**, or one of the **CHARGE** functions. If the tender is greater than the balance due, change is displayed.



Receipt Example:

THANK-YOU CALL AGAIN	
DATE 06/05/2011 SUN	TIME 08:33
CHECK #	# 3
PBAL	\$3.00
CHECKS PAID	\$3.00
TOTAL	\$3.00
CASH	\$5.00
CHANGE	\$2.00
CLERK 1	No.000412 00001

Charge Posting

The SPS-300 Series check tracking system can be used to post charges and payments to house accounts. This posting system is ideal for small resorts, campgrounds, motels/hotels or retail stores that accept house charges.

Charge posting features include:

- Manual balance posting, soft check posting, or hard check posting. For house account posting, the hard check posting method with an optional slip printer is recommended. (Because house accounts are usually maintained over a period of time, the soft check system may not have the memory capacity to track the ongoing account activity.)
- Payments can be posted before charges are posted and credit balances can be carried forward.
- Overpayments can be issued as change or carried forward.
- Managers can control access to new account numbers or closing accounts.
- Zero balance accounts can remain active.
- The total of outstanding accounts prints at the end of the open check report and will also print on the Financial report. (The total is not reset when the financial report is cleared.)
- The total of house account charges (Service Total) and payments are reported to facilitate accounts receivable balancing.

In order to implement this system, you must enable the charge posting features. The flag to enable charge posting is located on the function key options for the FINALIZE key. Refer to “FINALIZE” on page 224. You must also assign the necessary function keys for your application.

Charge Posting Function Keys

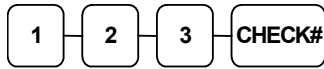
CHECK # (ACCT #)	The CHECK # key is used to begin a new or access an existing balance (hard check) or itemized bill (soft check.) Existing checks are accessed by entering the check track number and pressing the CHECK# key. You may wish to reprogram the descriptor of the CHECK # key to ACCT# .
P/BAL	Use to manually enter the amount of an outstanding balance. The P/BAL key is not used when hard or soft check posting is used.
SERVICE (HOUSE CHARGE)	Use to temporarily finalize Previous Balance or house account transactions. (If you are using a hard check system, you must program the SERVICE key for the port where the slip printer is connected.) You may wish to reprogram the descriptor of the SERVICE key to HOUSE CHARGE .
PAYMENT	Press PAYMENT , to make a partial payment or pre-payment while posting to a check (account). If the payment amount exceeds the check balance, the screen will display the option to apply the change to the account or to issue the overpayment as change. Charge Posting must be enabled on the Finalize key.
PRINT CHECK	Use to print a check. The check can be printed on an optional (RS-232C) printer or can be printed on the receipt printer. The PRINT CHECK key can be set to automatically service the check.
FINALIZE	Pressing the FINALIZE key before closing a check will close the account and the account number will no longer be reported on the open check report.

Charge Posting Operations

The flag to enable charge posting is located on the FINALIZE function key options. Refer to the “FINALIZE” function key on page 224.

Opening an Account

1. Enter the number of the account and press the **CHECK #** key. You may be required to turn the mode switch to the **MGR** position.

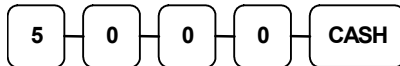


Accepting an Advance Payment

2. Press the **PAYMENT** key.



3. Enter the amount of the payment and press the appropriate tender key: cash, check or charge.



4. Press the **SERVICE** key to finalize and store the balance.



Posting New Charges

5. Enter the number of the account and press the **CHECK #** key.
6. Enter items to be purchased. Press the **SERVICE** key to store the balance.

Accepting an Overpayment and Issuing Change

7. Enter the number of the account and press the **CHECK #** key.
8. Press the **PAYMENT** key.
9. Enter the amount of the payment and press the appropriate tender key: cash, check or charge.
10. If the payment exceeds the balance, the display will read: “0: APPLY TO ACCOUNT BALANCE, 1: RETURN AS CHANGE. Press “1”. After completing the payment, the cash drawer opens.
11. Close the cash drawer and press the **SERVICE** key to finalize and store the balance.

Sample of Hard Check postings printed on an optional printer:

DATE	12/01/2012	WED
CHECK #		#123
PBAL		\$0.00
PAYMENT		\$50.00
CHECK		\$50.00
SERVICE		\$0.00
BFWD		-50.00
No.000017	REG 01 ETHAN	TIME 09:15
DATE	12/01/2012	WED
PBAL		\$50.00
ROOM		\$75.00
SERVICE		\$75.00
BFWD		25.00
No.000019	REG 01 ETHAN	TIME 09:47
DATE	12/01/2012	WED
PBAL		\$25.00
CHANGE		\$5.00
TENDER		\$30.00
CASH		\$25.00
SERVICE		\$0.00
BFWD		\$0.00
No.000421	REG 01 ETHAN	TIME 10:16

Scale Operations

The *SPS-300* can be interfaced to an optional load-cell scale. The scale interface allows direct automatic entry of an item's weight using the **SCALE** function. You can also choose "manual entry" scale operation if you are working with a standalone scale that is not interfaced to the cash register.

- PLU's must be set with "scalable" status to allow scale multiplication. If you attempt an entry into a PLU that has been programmed "scalable", an error tone will sound and the message "REQ. SCALE ENTRY" will display.
- PLU's can be set to "auto scale" status to speed up scale entries by automatically retrieving the weight on the scale and multiplying it times the amount entered.

The TARE weight can be entered using the **TARE** key (*key code #389*). The tare weight is the amount of weight to be accounted for the container or packaging. By entering a tare weight (as required by law in some areas) the weight of the container is subtracted and only the true weight of the product is measured on the scale. The ECR can account for up to 5 Tare weights. By entering the tare number (1-5) the operator can automatically subtract the predetermined container weight when a product is on the scale.

- PLU's can be set to "auto tare" status to automatically subtract one of the preprogrammed tare weights when the PLU is registered.

Refer to the "Service Mode Programming" to assign the necessary function keys to the keyboard or function lookup and set up a port for the scale interface.

- **"Function Key Assignment"** to place SCALE and TARE keys on the keyboard.
 - *SCALE key = key code 386*
 - *TARE key = key code 389*
- **"RS232C Port Options"** to attach a scale to one of the ports.
 - *Baud Rate = 9600, Parity = NONE, Data Bits = 7, Stop Bits = 1, Device Function = Scale*
 - *Scale Type = Appropriate selection for your scale type.*

Refer to the "Program Mode Programming" chapters to set your scale key options and create & program the appropriate scale PLU's

- **"Function Key Programming"** to set options for the SCALE and TARE keys.
- **"PLU Programming"** to set scalable, auto scale, or auto tare status.

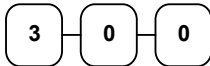
Direct Scale Entry

Place a product on the scale and access the **SCALE** function to display the weight on the cash register. Then make the appropriate entry; the PLU must have "Scalable" status.

1. Place an item on the scale.
2. Press the **SCALE** key.



3. Note that the weight is displayed on the screen. Enter the price per pound on the ten-key pad. Do not use the decimal key. For example, for \$3.00, enter:



4. Press a **Scalable PLU** key. For example, press **PLU 1**:



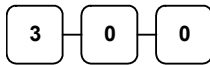
THANK-YOU CALL AGAIN		
DATE	06/05/2011 SUN	TIME 08:33
1.50 lb	@3.00/lb	
PLU1		\$4.50
TAX1		\$0.27
TOTAL		\$4.77
CASH		\$4.77
CLERK 1	No.000411	00001

Automatic Scale Entry

Place a product on the scale and make the appropriate PLU entry. The PLU pressed must be set with the status settings "Scalable" and "Auto Scale" enabled.

1. Place an item on the scale.
2. If the item is a preset price item, Press an **Auto-Scalable PLU** key to register the product.

If the scale item is an open price item, enter the price per pound on the ECR ten-key pad. Do not enter the decimal key. For example, for \$3.00, enter:



3. Press the **Auto-Scale PLU** key to register the product. For example, press **PLU 1**:



THANK-YOU CALL AGAIN		
DATE	06/05/2011 SUN	TIME 08:33
1.50 lb	@3.00/lb	
PLU1		\$4.50
TAX1		\$0.27
TOTAL		\$4.77
CASH		\$4.77
CLERK 1	No.000411	00001

Tare Weight Entry

1. Place an item on the scale.
2. Enter the preprogrammed tare number. Press the **TARE** key.

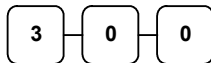


3. Press the **SCALE** key.

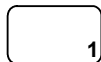


Note that the weight, minus the tare weight, is displayed on the screen.

4. Enter the price per pound on the ten-key pad. Do not use the decimal key. For example, for \$3.00, enter:



5. Press a **Scalable PLU** key. For example, press **PLU 1**:



THANK-YOU CALL AGAIN		
DATE 06/05/2011 SUN	TIME 08:33	
1.50 lb	@3.00/lb	
PLU1		\$4.50
TAX1		\$0.27
TOTAL		\$4.77
CASH		\$4.77
CLERK 1	No.000511	00001

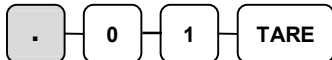
Manual Tare Weight Entry

1. Place an item on the scale.
2. Enter the manual tare number **5**. Press the **TARE** key:



Enter the tare weight with the decimal – the maximum weight entry is up to 2-digits before and 3-digits after the decimal i.e. 99.999).

For example, enter **.01**, press the tare key:



3. Press the **SCALE** key.



4. Note that the weight, minus the tare weight, is displayed on the screen. Enter the price per pound on the ten-key pad. Do not use the decimal key. For example, for \$3.00, enter:



5. Press a **Scalable PLU** key. For example, press **PLU 1**:



THANK-YOU CALL AGAIN		
DATE 06/05/2011 SUN	TIME 08:33	
1.50 lb	@3.00/lb	
PLU1		\$4.50
TAX1		\$0.27
TOTAL		\$4.77
CASH		\$4.77
CLERK 1	No.000512	00001

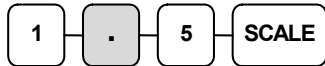
Manual Weight Entry

Note: Manual weight entry is allowed only when a scale is not connected and the RS-232C port is not set to the scale function. Manual Weight is also used when voiding or returning a scale item without using the scale.

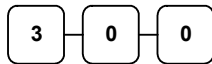
Operators can make manual weight entries if the item has been programmed to accept them. You must use the decimal key to enter fractional manual weights.

1. Place an item on the scale.
2. Enter the weight including the decimal key for fractional weights. The maximum weight entry is up to 2-digits before and 3-digits after the decimal i.e. 99.999).

For example enter **1.5**, press the **SCALE** key:



3. For an open prices scale item, enter the price per pound on the ten-key pad. Do not use the decimal key. For example, for \$3.00, enter:



4. Press a **Scalable PLU** key. For example, press **PLU 1**:



THANK-YOU CALL AGAIN		
DATE	06/05/2011 SUN	TIME 08:33
1.50 lb	MANUAL WT. @	@3.00
PLU1		\$4.50
TAX1		\$0.27
TOTAL		\$4.77
CASH		\$4.77
CLERK 1	No.000513	00001

Quick Journal Review

This feature was designed for use with the SPS-320 where a separate journal printer is not provided. It allows the operator to quickly print out the details of the last transaction or transactions for review. Quick Journal Review is available if set in Print Option Programming (See option: "Print Last Line Of EJ" in Print Option programming on the 16th page.)

In the **REG** mode switch position (outside of a transaction) enter **1 0** and press the **SBTL** key. Recent journal entries are printed. (The last XX lines of the electronic journal are printed, where XX is set in Print Option programming.)

Not Found PLU

Designed to be used in a scanning system the “Not Found PLU” feature allows the operator to immediately enter basic PLU information during the sale for a scanned item that is not in the PLU file. If an item is scanned that is not programmed in the PLU file, the operator has the option to input the price of the item and assign it the same descriptor and properties of another PLU or enter the descriptor and tax status independently. This provides a simple mechanism for quickly building an item file for a simple scanning installation.

(Note: Beginning at version 1.043, the error sound continually when a Not Found PLU is attempted.)

There are two methods for inputting items using the Not Found PLU operation, Quick Entry & Detail Entry.

Quick Entry Method

The Quick Entry method copies the status of an existing PLU on the keyboard to the new item.

1. Scan an item or input a **PLU** number. If the item is in the PLU file, it will register, if an item is not in the PLU file, an error will sound continually.
2. Press **CLEAR**, the **NOT FOUND PLU** screen will display:

```
NOT FOUND PLU PROGRAM ?
0 : NO   1 : YES
```

3. Press the numeric “**1**” key to allow the registration of the PLU. The cursor will point at the **SELECT COPY PLU** field.

```
NOT FOUND PLU PROGRAM ?

SELECT COPY PLU
PRICE :                                0 ←
                                           0
```

4. Press the **PLU** on the keyboard or enter a PLU number and press the PLU key that you want to copy the status from. The cursor will advance to the price field.

Note: Items added using the Not Found PLU feature will assume the same attributes as the PLU selected here. For example, Preset or Not Preset, Taxable or Not Taxable, Group assignments, and so on.

Be sure to Copy a PLU with the attributes you want for the new item being added.

5. Enter the **PLU price** and press **CASH**. The PLU will register using the descriptor and tax status of the copied PLU.

Detail Entry Method

The Detail Entry method allows the operator to enter the Price, Descriptor, Tax & Group assignment for the new item.

1. Scan an item or input a **PLU** number. If the item is in the PLU file, it will register, if an item is not in the PLU file, an error will sound continually.
2. Press **CLEAR**, the **NOT FOUND PLU** screen will display:

```
NOT FOUND PLU PROGRAM ?
0 : NO    1 : YES
```

3. Press the numeric **"1"** key to allow the registration of the PLU. The cursor will point at the **SELECT COPY PLU** field.

```
NOT FOUND PLU PROGRAM ?

SELECT COPY PLU                                0 ←
PRICE:                                         0
```

4. Enter **"0"** and press the **PLU** key. The cursor will advance to the price field and additional fields will display to allow entry of a unique descriptor and PLU tax status.

(Note: Group #1 Entry field was added at firmware version v01.078.)

```
NOT FOUND PLU PROGRAM ?

SELECT COPY PLU                                0
PRICE:                                         0
DESC :
TAX :   1N 2N 3N 4N
GROUP #1 (1-20)                               1 ←
```

5. Enter the **PLU price** and press **CASH**. The cursor will advance to the descriptor field.
6. Enter a **Descriptor** using the descriptor method set up on your register, keyboard overlay or descriptor code. (Refer to "Descriptor Programming Methods" on page 164.) After entering the descriptor, press **CASH**. The cursor will advance to the TAX (1N) field.
7. For each of the TAX : 1N 2N 3N 4N entries, Press the **YES/NO** key to toggle the tax status from **No** to **Yes**. Set the status for the four possible tax rates and press **CASH** after each entry.
8. Beginning at software version 1.078 you can enter the **Group #1** group assignment. Enter the desired group assignment then press **CASH**; the PLU entry is completed.

Not Found PLU Report

Managers will typically use the “Not Found PLU Report” as a tool to verify & update items that were added to the PLU file using the Not Found PLU method. A list of up to 50 not found PLU items are retained in the report.

You can view the Not Found PLU report list from the **X** position. When the capacity is reached, you must clear (**Z**) the Not Found PLU report; See Z-Mode for the “Reset Not Found PLU” procedure on page 114.

- To run an **X** Report of not found PLU’s, choose “NOT FOUND PLU” (selection #8) from the Manager Mode menu.
- To run a **Z** Report of not found PLU’s, choose “RESET NOT FOUND PLU” (selection #7) from the Z Mode menu.

Price Changes

The operator can use this function to permanently change the price of an item during a sale. Alternatively, the key can be programmed to allow a temporary price override but not change the price permanently. An option to display a prompt to change the price is also available and the key can be set to operate only in the **X** mode switch position (manager control.)

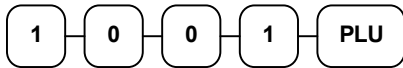
Note: The PRICE CHANGE Function key was added beginning at version 1.081.

Refer to “PRICE CHANGE” on page 235 to set the options for this function key

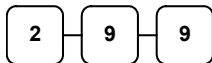
1. Press the **PRICE CHANGE** key.



2. Press a preset PLU key, or enter a PLU number and press the PLU key:



3. Enter the new price.



4. Press the **PRICE CHANGE** key again.



5. The item is registered with the new price. Additional items if necessary; Press the appropriate tender key; **CASH**, **CHECK** or **CHARGE** to finalize.

The item is registered with the new price.

DATE 06/14/2011 SUN TIME 08:37		
PLU 1001 T1		\$2.99
TAX1		\$0.15
TOTAL		\$3.14
CASH		\$3.14
CLERK 1	000001	00001

Management Functions

Manager Mode (X-Mode)

All Management Functions take place with the mode switch in the **X** or **Z** position. In this way, only those with the correct key will have access to these functions. All reports require a control key that will access the **X** or **Z** position.

Some register operations may be programmed as ‘Under MGR Control’, which require the mode switch to be in the **X** position to allow the operation.

- **Functions & Operations** – Some register functions and operations may be programmed to require the mode switch in the “**X**” position (Manager Control) in order to operate.
- **X reports** – (*eXamine*) Read and Print reports but without resetting report totals and counters.
- **Cash Declaration** – When the System Option is set to require Cash Declaration before running reports.
- **Register Printing Format** – Can be set for normal receipt or set as journal printing.
- **Turn Off Receipt or Journal Printing** – Follow prompts on the screen.
- **Access Training Mode** – Refer to page 103 for details.
- **Electronic Journal Operation** – Refer to page 104 for details.
- **Not Found PLU** – Refer to page 105 for details.
- **Open Check (IRC)** – Refer to page 105 for details.
- **Backup X-Reports to SD** – Refer to page 106 for details.

1. Turn the mode switch to the **X** position to display the **MANAGER MODE** menu:

```
MANAGER MODE ↓
0.MANAGER OPERATION
1.X REPORTS
2.DECLARATION
3.REG. PRINT FORMAT
4.STOP RECEIPT PRINTING
5.STOP JOURNAL PRINTING
6.TRAIN MODE
```

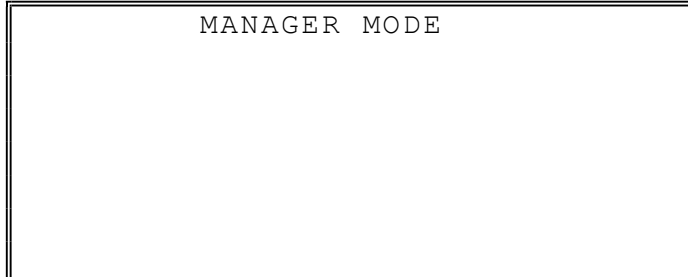
2. Press **PAGE DOWN** to display the second page of **MANAGER MODE** options:

```
MANAGER MODE ↑
7.EJ. OPERATION
8.NOT FOUND PLU
9.OPEN CHECK (IRC)
00.REPORT SD BACKUP
```

Manager Operation

Choose Manager Operation to access the Manager Mode screen, this is where operations allowed only with manager control can be performed.

1. From the “X” position, **MANAGER MODE** menu press **0** to select **MANAGER OPERATION**. The screen displays **MANAGER MODE** at the top.



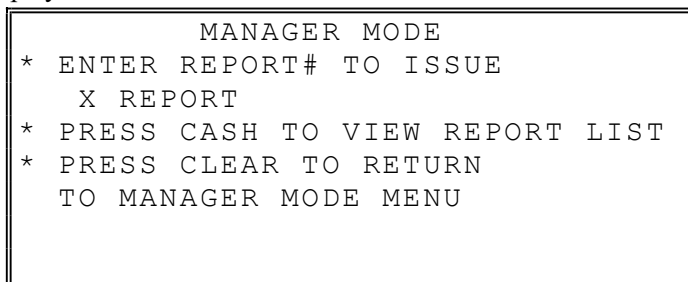
2. Complete the operation requiring manager control.

Note: Be aware, regular Sales Transactions entered while in “X” Manager Mode will not be reported to sales totals on reports.

X Reports

“X” Reports allow you to read and print report data (*eXamine*) without resetting the totals and counters within the report. The Report Counter on the X Report indicates the number of Z reports that have been generated for this Report Level & Report Type. After each Z report, this number advances on the next X and Z report. There is a separate report counter for each Z1 (Daily) and Z2 (Period) Report Type.

1. From the “X” position **MANAGER MODE** menu; press **1** to select **X REPORTS**. The Manager Mode screen is displayed.



2. If you know the number of the report you wish to generate, enter the number and press **CASH**. If you wish to look up the report number, press **CASH** to view the X Report List, then press the number of the report you wish to generate. Pressing **CLEAR** will return to the main Manager Mode screen.



* Press **PAGE DOWN** to view the second page of report selections:

```

X REPORT LIST          P2 ↑
7. CLERK TIME
8. OPEN CHECK
9. DRAWER TOTALS
00. PLU ZERO SALE
DEC. MIX & MATCH
  
```

3. When a report is selected, the **X REPORT OPTIONS** screen displays:

```

X REPORT OPTIONS
RPT# :                FINANCIAL
1. TYPE                0 ←
   0:DAILY 1:PERIOD
2. 0:PRINT 1:DISPLAY   0
3. IRC                 0
   0:STANDALONE
   1:ALL 2:SELECT
  
```

4. Select the **TYPE** (0 = DAILY or 1 = PERIOD), **PRINT** or **DISPLAY**, and the **IRC** configuration.
5. Refer to the explanations in the table below. Press **CASH** after each selection. After the last selection has been entered the report will start.
6. If you chose **IRC 2 : SELECT**, the register selection displays the register # selections:

```

X REPORT OPTIONS
RPT# :                FINANCIAL
1. TYPE                0
   0:DAILY 1:PERIOD
2. 0:PRINT 1:DISPLAY   0
3. IRC                 2
   0:STANDALONE
# 1Y←2N 3N 4N 5N 6N 7N 8N
  
```

7. Press the **YES/NO** key at each register # to select whether you wish to include each register in the consolidated report. Press **CASH** after each selection. After the last selection has been entered the report will start.

X Report Options Definitions

Field	Description
1. TYPE	Select 0 = Daily (X1) or 1 = Period (X2) if available for the selected report.
2. OUTPUT	0: PRINT = Prints the report to the register receipt printer. 1: DISPLAY = Displays the report on the operator display without printing.
3. IRC	Select 0 = STANDALONE, 1 = ALL, or 2 = SELECT if available for the selected report. If SELECT, the screen will prompt for selection of registers - the screen will initially show the registers available from the from/to IRC register programming, for example if the IRC range is from 1 to 3, then the selection will default to: <div style="border: 1px solid black; padding: 5px; margin: 5px 0;"> <pre> 1 2 3 4 5 6 7 8 Y Y Y N N N N N </pre> </div>

X & Z Reports Table

Report Number	Report Type	Daily / Period	Mode Available	Standalone or IRC	Range Selection
0	Financial	Daily & Period	X and Z	Standalone & IRC	N/A
1	Time	Daily & Period	X and Z	Standalone & IRC	N/A
2	PLU	Daily & Period	X and Z	Standalone & IRC	0. ALL 1. FROM / TO <i>(X-Mode Only)</i>
3	Clerks	Daily & Period	X and Z	Standalone & IRC	0. ALL 1. FROM / TO <i>(X-Mode Only)</i>
4	Groups	Daily & Period	X and Z	Standalone & IRC	0. ALL 1. FROM / TO <i>(X-Mode Only)</i>
5	Day	Period Only	X and Z	Standalone & IRC	N/A
6	Stock	Daily Only	X and Z	Standalone & IRC	0. ALL 1. FROM / TO <i>(X-Mode Only)</i>
7	Clerk Time	Daily Only	X and Z	Standalone Only	0. ALL 1. FROM / TO <i>(X-Mode Only)</i>
8	Open Check	Daily Only	X and Z	Standalone Only*	0. NORMAL 1. BY CLERK <i>(X-Mode Only)</i>
9	Drawer Totals	Daily Only	X Only	Standalone Only	N/A
00	PLU Zero Sale	Daily Only	X and Z	Standalone Only	N/A
DEC	Mix & Match	Daily & Period	X and Z	Standalone & IRC	N/A

* **Note:** Only each individual registers Open Check report data is available in the **X** and **Z** Reports selection menu. Open Check IRC reports can only be generated from the main **X** position **MANAGER MODE** operation menu page P2 by selecting **9. OPEN CHECK (IRC)**. You will have the option of printing the report or writing the report to an SD card inserted in the SD port on the ECR. Refer to “Open Check (IRC)” on page 105.

Declaration

Cash declaration is the process of counting and reporting media in drawer before a report is taken. "Enforce cash declaration" is an option that requires the operator to declare amounts of media in the drawer before a financial, clerk, or cash in drawer report can be generated. The purpose of this feature is to insure accurate reporting, even in the case of an overage. You can enforce declaration by setting the appropriate system option. Refer to "System Option Programming" in the "Program Mode Programming" chapter.

1. From the **MANAGER MODE** menu press **2** to display the **DECLARATION SCREEN**. The cash drawer opens.

DECLARATION SCREEN	
CASH	0.00
CHECK	0.00
CHARGE1	0.00
F/S TEND	0.00
TOTAL	0.00

2. At the **DECLARATION SCREEN**, enter cash amounts for **CASH**, **CHECK**, **CHARGE**, and **F/S TEND**.
 - * Enter all cash amounts, press the **CASH** key. You may wish to use the **X/TIME** key to multiply. For example, if you are declaring 37 quarters, you can enter **37**, press **X/TIME**, enter **25**, and then press **CASH**. The result is added to the cash declared running total on the screen.
 - * Enter checks individually, or enter the total of all checks, press the **CHECK** key.
 - * Enter charges in the drawer, press the appropriate **CHARGE** key after each entry.
 - * Enter Food Stamps, press the **F/S TEND** key. You can make as many entries as you wish, the screen will keep the running totals.
3. When you have completed declaration entries, press the **CASH** key again to finalize and total your declaration. The screen will display the total declared input, the drawer total and the difference (over/short).

DECLARATION SCREEN	
INPUT AMT	31.00
DRAWER TTL	17.00
DIFFERENCE	-14.00

Register Print Format

You can designate the *SPS-320* printer to print either a receipt, or a sales journal. If you select journal format, the Preamble/Postamble will not print. If you select receipt format, the Preamble/Postamble will print and the receipt will feed sufficiently for paper tear-off.

1. From the **MANAGER MODE** menu press **3** to set the receipt format:

REG. PRINTING FORMAT

REGISTER PRINTING IS
CURRENTLY RECEIPT

TO SET TO JOURNAL
PRESS YES AND ENTER

2. The **REG. PRINTING FORMAT** screen displays. Press the **YES/NO** key to toggle from receipt to journal format. The screen will display the current printer format. Press the **YES/NO** key and then **CASH** to set the new format.

Stop Receipt Printing Stop Journal Printing

You can turn the register receipt & journal printers *on* or *off* in the Manage Mode. When in the *off* condition, transactions will not be printed but reports will continue to print when requested.

1. From the **MANAGER MODE** menu press **4** to set **RECEIPT PRINTING ON / OFF**, or press **5** to set **JOURNAL PRINTING ON / OFF** (SPS340/345 only):

REG. PRINTING ON/OFF

REGISTER PRINTING
IS CURRENTLY ON

TO TURN OFF
PRESS YES AND CASH

2. The **REG. PRINTING ON/OFF** or **JOURNAL PRINTING ON/OFF** screen displays. Press the **YES/NO** key to toggle the selection to ON or OFF. The screen will display the current printing status.
3. Press **CASH** to set the new printing format selection.

Note: When the receipt is OFF, a receipt may be printed after the sale by pressing the **CASH** key after the transaction is complete. This requires the System Option “Allow Multiple Receipt” = Y.

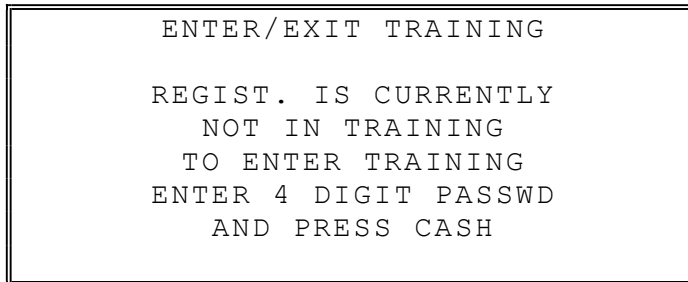
If the receipt is ON, a second receipt may be printed pressing the **CASH** key after the initial receipt is printed. This requires the Print Option “Buffer Receipt Issue When Receipt Is On” = Y.

Training Mode

A training mode is available so that the register can be operated (to practice registrations) without updating totals and counters. If you choose to use training mode, you must set a training mode password (Refer to "Training Mode Password" in the "Program Mode Programming" chapter.)

Note: You must close all open checks prior to entering and exiting training mode. If you make registrations to guest check tracking numbers in training mode, remember that the check tracking total will be updated. Remember to pay or clear the check file (Reset Report Mode Menu / Z-Position / Open Checks) before resuming normal operations.

1. From the **MANAGER MODE** menu press **6** to enter or exit training mode:



```
ENTER/EXIT TRAINING

REGIST. IS CURRENTLY
NOT IN TRAINING
TO ENTER TRAINING
ENTER 4 DIGIT PASSWD
AND PRESS CASH
```

2. The **ENTER/EXIT TRAINING** screen displays. The screen will display the current status.
3. To enter training mode, type your four-digit password (you must enter preceding zeros) and press **CASH**. Refer to "Training Mode Password" programming on page 274 for details.
4. To exit training mode, type **0000** and press **CASH**.

Electronic Journal Operation

An electronic journal feature is available on the *SPS-300*. The electronic journal captures the sales journal in the register memory. If you intend to use the electronic journal, you must allocate sufficient memory, (refer to "Memory Allocation" in the "Service Mode Programming" chapter) activate the journal and set related electronic journal capture options. (Refer to "System Option Programming" in the "Program Mode Programming" chapter.)

Use this program to print all or selected parts of the electronic journal memory.

Note: This program **will not** clear the electronic journal. To print & clear the EJ, refer to the "Reset Electronic Journal" section in the "Z-Mode" on page 111.

1. From the **MANAGER MODE** menu press **7** to display the electronic journal menu:

```
ELECTRONIC JOURNAL      ↓
0.PRT ALL EJ
1.PRT ONLY CASH
2.PRT ONLY CHECK
3.PRT ONLY MISC/TEND
4.PRT ONLY %
5.PRT ONLY RA/PO
6.PRT ONLY RETURN
```

- * Press **PAGE DOWN** to view the remaining electronic journal options:

```
ELECTRONIC JOURNAL      ↑
7.PRT ONLY ERR.CORR/VOID
8.PRT ONLY NOSALE
9.PRT ONLY CANCEL
00.PRT BY CLERK
DEC.PRINT ALL EJ (BY IRC)
```

2. Type the digit that represents the portion of the electronic journal you wish to print. If you select **00** for **PRINT BY CLERK**, you will be prompted to enter the appropriate clerk number.

Note: If you select "PRINT ALL EJ (BY IRC)", you will be presented with the option **SD : 0 / PRINT : 1** to print the report or save the report to **SD**. If you choose print, the EJ will print sequentially for each ECR in the system. If you choose **SD**, a file for each register will be saved to **SD** that can be viewed by the PC Utility.

Beginning at firmware version 1.071, if you select "0.PRT ALL EJ" (Standalone) you will be presented with the option **SD : 0 / PRINT : 1** to print the report or save the report to **SD**.

Not Found PLU

Managers will typically use the “Not Found PLU Report” as a tool to verify & update items that were added to the PLU file using the Not Found PLU method. A list of up to 50 not found PLU items are retained in the report. To view the list of items added using the Not Found PLU operation, run the Not Found PLU report in the X position, Manager Mode.

When the Not Found PLU capacity is reached, you must clear (Z) the Not Found PLU report; See Z-Mode for the “Reset Not Found PLU” procedure on page 114.

To run the **X Report** for **Not Found PLU**:

1. From the **X** position **MANAGER MODE** menu, Press **8** to print the **Not Found PLU List**.

Open Check (IRC)

Note: SPS-300 Series ECR's do not share access to a common check file.

This operation allows access to the individual check files that are located in separate SPS-300 series ECR's. This information is not consolidated but rather reported separately for each register.

1. From the **MANAGER MODE** menu press **9** to report open check by IRC. The display returns the message shown below:

The screenshot shows a terminal window with the following text:

```
MANAGER MODE      ↑
7.EJ. OPERATION
8.NOT FOUND PLU
9.OPE ██████████
00.RE ██████████ SD : 0 / PRINT : 1 ██████████
```

2. Press **1** to print the report. The open check file will print sequentially for each ECR in the system, or Press **0** to save the reports to an SD card installed in the SD port on the ECR. A separate report file will be saved for each register in the IRC. Use the PC Utility to view the file.

Report SD Backup

You can choose to save the current X1 report data from the SPS-300 series ECR to an SD memory card. Reports can be saved in .rep file format (*report format*) for viewing with the 300 PC Utility or .csv file format (*spreadsheet format*) that can be opened in Microsoft Excel™.

When backing up and restoring data, an 8-character store name must be programmed in system options P18. The default store name is “STORE-A0”.

The SPS-300 will write the program files to different folders depending on whether REP or CSV format is selected.

- **SD:\SPS300\REPBACK\STORENAME\DATETIME** (for REP format)
- **SD:\SPS300\CSVBACK\STORENAME\DATE/TIME** (for CSV format)

The CSVBACK folder is date stamped in **YYYYMMDD** format. (For example, 20111116 is November 16, 2011.)

The CSVBACK folder is time stamped in military time **1326** format. (For example, 1326 is 1:26 PM.)

Each individual report file backed also has the time the report was backed up.

For example, “**CLK1326**” represents a Clerk report taken at 1:26 PM (in a 24-hour time format).

In this manner, multiple reports backed up at different times on the same day will collect in the same “date” folder.

The REPBACK folder is date stamped in **YYYYMMDD** format. (For example, 20111116 is November 16, 2011.)

There is no time stamp for the REPBACK file.

The Report SD Backup can also be performed from the S-Mode SD Card Operations, see page 156 for details.

1. From the **X** position **MANAGER MODE** menu press **00** to save the current **X1** report data to an SD card. The report format selection displays.
2. Press **0** to save reports to the SD as a REP file (to view using the 300pc utility).
3. Press **1** to save reports to the SD as a CSV file (to save as spreadsheet format).
4. The ECR will pause briefly, then print the acknowledgment as each report is backed up.

Successful Receipt Sample

```











DATE 06/10/2022 FRI TIME 13:29
*****
Store Name : SAM4S300
*****
REPORT (X1) SPS300->SD
*****
FINANCIAL UPLOAD
TIME REPORT UPLOAD
PLU REPORT UPLOAD
CLERK REPORT UPLOAD
GROUP REPORT UPLOAD
DAY REPORT UPLOAD
STOCK REPORT UPLOAD
TABLE REPORT UPLOAD
MIX & MATCH REPORT UPLOAD
EJ REPORT UPLOAD
CLERK 1          000034  0000
  
```

Unsuccessful Receipt Sample











```

DATE 06/10/2022 FRI TIME 13:39
*****
Store Name : SAM4S300
*****
REPORT (X1) SPS300->SD
*****
SD TEST : Initial Error!
CLERK 1          000034  0000
  
```

SD:\SPS300\CSVBACK\ SAM4S300\20250612\0812

-  CLK00812.csv
-  DAY00812.csv
-  EJ_00812.csv
-  FIN00812.csv
-  GRP00812.csv
-  MNM00812.csv
-  PLU00812.csv
-  STK00812.csv
-  TBL00812.csv
-  TIM00812.csv

SD:\SPS300\REPBACK\ SAM4S300\20250612

-  CLK00812.rep
-  DAY00812.rep
-  EJ_00812.rep
-  FIN00812.rep
-  GRP00812.rep
-  MNM00812.rep
-  PLU00812.rep
-  STK00812.rep
-  TBL00812.rep
-  TIM00812.rep

Z Mode

Reset Report Mode

All Management Functions take place with the Mode Switch in the **X** or **Z** position. In this way, only those with the correct key will have access to these functions. All reports require a control key that will access the **X** or **Z** position. The following operations are done from the “Z” Reset Report Mode menu:

- Z Reports
- Reset Electronic Journal
- PC Communication
- Mix & Match Programming and Scan
- PLU Lookup Programming
- Age Verification
- Reset Not Found PLU
- KP Stating Number Setting
- Datatran (Debit)
- Datatran
- New EMV Functions

Z-Mode DC Direct Functions\Settings were added at v2.000 to be used with the DC Direct integrated payment device with the ECR. DC Direct Functions was changed at v2.0.15 to New EMV Functions. The DEJAVOO Functions and settings were added at v2.0.15 and are only used with the DEJAVOO integrated payment device with the ECR. *Dejavoo is currently in development, it is not used at this time.*

1. Turn the mode switch to the **Z** position to display the **RESET REPORT MODE** menu:

```
RESET REPORT MODE ↓
0.Z REPORTS
1.RESET EJ.
2.PC COMMUNICATION
3.MIX & MATCH PROGRAM
4.MIX & MATCH SCAN
5.PLU LOOKUP PROGRAM
6.AGE VERIFICATION
```

2. Press **PAGE DOWN** to view the remaining Reset Report Mode options:

```
RESET REPORT MODE ↑
7.RESET NOT FOUND PLU
8.KP STARTING NO.
9.DATATRAN (DEBIT)
00.DATATRAN
DEC. NEW EMV FUNCTIONS
```

Note: Selection #8. KP Starting No. was added at firmware version 1.034 and DEC. DC Direct Functions selection was added at v2.000.

Z Reports

“Z” Reports will read, print and clear report totals (*Zero out the Report totals*) for the Daily (“Z1”) and Period (“Z2”) report as selected. The report counter advances each time a Z report is generated. There is a separate counter for Daily Z1 and Period Z2 reports.

1. From the **RESET REPORT MODE** menu press **0** to select “Z” Reports:

```
RESET REPORT MODE
* ENTER REPORT# TO ISSUE
  Z REPORT
* PRESS CASH TO VIEW REPORT LIST
* PRESS CLEAR TO RETURN TO
  RESET REPORT MODE MENU
```

2. If you know the number of the report you wish to generate, enter the number and press **CASH**. If you wish to look up the number, press **CASH** to view the “Z” Report List, then press the number of the report you wish to generate.

```
      Z REPORT LIST                P1↓
0.FINANCIAL
1.TIME
2.PLU
3.CLERK
4.GROUPS
5.DAY
6.STOCK
```

3. Press **PAGE DOWN** to view the second page of report selections:

```
      Z REPORT LIST                P2↑
7.CLERK TIME
8.OPEN CHECK
00.PLU ZERO SALE
DEC.MIX & MATCH
```

4. When a report is selected, the **Z REPORT OPTIONS** screen displays:

```
      Z REPORT OPTIONS
RPT# :                FINANCIAL
1. TYPE                0←
   0:DAILY 1:PERIOD
2. 0:PRINT             0
3. IRC                 0
   0:STANDALONE
   1:ALL 2:SELECT
```

5. Select the **TYPE** (0 = DAILY or 1 = PERIOD) and the **IRC** configuration. Refer to the explanations in the table below. Press **CASH** after each selection. After the last selection, the report will print.

6. If you chose **IRC 2 : SELECT**, then the register selection displays:

```

      Z REPORT OPTIONS
RPT#  :                               FINANCIAL
1. TYPE :                               0
   0:DAILY 1:PERIOD
2. 0:PRINT                               0
3. IRC                                   2
   0:STANDALONE
# 1Y<2N 3N 4N 5N 6N 7N 8N

```

7. Press the **YES/NO** key at each register # to select whether you wish to include each register in the consolidated report. Press **CASH** after each selection. After the last selection, the report will start.

Z Report Options Definitions

Field	Description
1. TYPE	Select 0 = Daily or 1 = Period if available for the selected report.
2. OUTPUT	PRINT the selected report to the register receipt.
3. IRC	Select 0 = STANDALONE, 1 = ALL, or 2 = SELECT if available for the selected report. If SELECT, the screen prompts for selection of registers - the screen will initially show the registers available from the from/to IRC register programming, for example if the IRC range is from 1 to 3, then the selection will default to: <div style="border: 1px solid black; padding: 2px; width: fit-content; margin: 5px auto;">1Y 2N 3N 4N 5N 6N 7N 8N</div>

Additional Selections for Reports

Some reports (*PLU, CLERKS, GROUPS, STOCK, CLERK TIME*) have the additional selections for:

Field	Description
0. ALL	Selects ALL of the report data for the report type selected.
1. FROM / TO	Allows you to select specific range of the report data for the selected report type.

The Open Check Report has the additional selections for:

Field	Description
0. NORMAL	Prints all Open Checks for all Clerks.
1. BY CLERK	Allows you to view Open Checks for just a selected Clerk.

X & Z Reports Table

Report Number	Report Type	Mode Available	Daily / Period	Standalone or IRC	Range Selection
0	Financial	X and Z	Daily & Period	Standalone & IRC	N/A
1	Time	X and Z	Daily & Period	Standalone & IRC	N/A
2	PLU	X and Z	Daily & Period	Standalone & IRC	0. ALL 1. FROM / TO <i>(X-Mode Only)</i>
3	Clerks	X and Z	Daily & Period	Standalone & IRC	0. ALL 1. FROM / TO <i>(X-Mode Only)</i>
4	Groups	X and Z	Daily & Period	Standalone & IRC	0. ALL 1. FROM / TO <i>(X-Mode Only)</i>
5	Day	X and Z	Period Only	Standalone & IRC	N/A
6	Stock	X and Z	Daily Only	Standalone & IRC	0. ALL 1. FROM / TO <i>(X-Mode Only)</i>
7	Clerk Time	X and Z	Daily Only	Standalone Only	0. ALL 1. FROM / TO <i>(X-Mode Only)</i>
8	Open Check	X and Z	Daily Only	Standalone Only*	0. NORMAL 1. BY CLERK <i>(X-Mode Only)</i>
9	Drawer Totals	X Only	Daily Only	Standalone Only	N/A
00	PLU Zero Sale	X and Z	Daily Only	Standalone Only	N/A
DEC	Mix & Match	X and Z	Daily & Period	Standalone & IRC	N/A

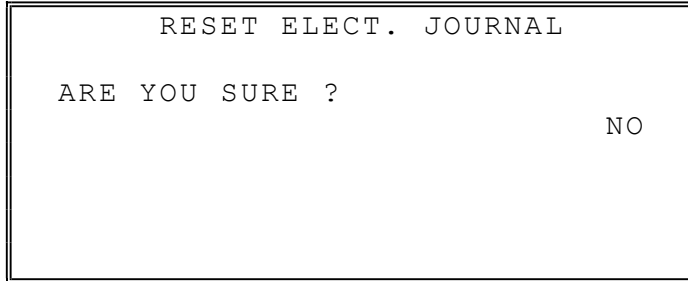
* **Note:** Only each individual registers Open Check report data is available in the **X** and **Z** Reports selection menu. Open Check IRC reports can only be generated from the main **X** position **MANAGER MODE** operation menu on page P2 by selecting **9. OPEN CHECK (IRC)**. You will have the option of printing the report or writing the report to an SD card inserted in the SD port on the ECR. Refer to “Open Check (IRC)” on page 105.

Reset Electronic Journal

An electronic journal feature is available on the *SPS-300*. The electronic journal captures the sales journal in the register memory. If you intend to use the electronic journal, you must allocate sufficient memory (Refer to "Memory Allocation" in the "Service Mode Programming" chapter) and activate the journal and set related journal capture options (Refer to "System Option Programming" in the "Program Mode Programming" chapter.)

Use this to clear the journal memory. The journal will not be printed. To read all or selected parts of the EJ., Refer to "EJ. Operation" in the "X-Mode" chapter.

1. From the **RESET REPORT MODE** menu press **2** to **RESET EJ** (clear the electronic journal):



2. The screen asks: **ARE YOU SURE ?**
3. Press the **YES/NO** key to toggle to **YES** and then press **CASH** to clear the report.

PC Communication

To be polled by a PC, the register must be placed in the PC ONLINE MODE. The register is automatically placed into PC ONLINE MODE when the PC utility or Polling Software initiates the session.

If desired, you can place the register in ONLINE MODE manually by selecting the PC COMMUNICATION function from the RESET REPORT MODE menu. If you wish to complete unattended polling, you can program the *ER-650/650R* to automatically enter the PC ONLINE MODE at a scheduled time. Refer to "PC Schedule Time" in the "Program Mode Programming" chapter to set a polling time.

You must also configure one of the RS232C ports for PC communications. See the "Service Mode Programming" chapter.

Note: PC polling requires optional polling software. Contact your authorized dealer for information.

Mix & Match Program

Retailers often offer discounts when multiples of different items are purchased. The Mix & Match program sets the number of items that must be purchased to receive the discount and the amount of the discount. For example, the offer: “Save \$5 on any three bottles of wine” can be handled by a mix and match discount. The SPS-300 series can accommodate up to 99 different mix and match discounts.

You must also set the following additional Mix & Match discount options that are set through separate programs:

- In the **P** mode switch position:
 - **“Logo Descriptor” “Mix & Match Name”** – You can set a 12-character name for each M & M. See page 262 for Mix & Match Name programming.
 - **“PLU Programming”** – You must link eligible items to the appropriate M & M discount table. See page 169 for PLU programming details (*P6 of PLU programming*).
 - **“System Option Programming”** – Optionally, you can choose to make M & M discounts taxable. (*Tax is applied to the item “Net amount” after the M & M discount*). See page 183 for system option programming, the MIX & MATCH IS TAXABLE setting is on P18 of the system options.

Mix & Match Price & Quantity Settings

1. Select **Mix & Match** Program from the **Z Mode** Menu to display the M & M screen:

MIX & MATCH	
ENTER MIX & MATCH	
NUMBER (1-99)	0 ←

2. Enter the number of the **Mix & Match** table you wish to program and press **CASH**.

MIX & MATCH	
M & M 1	
COUNT :	0 ←
AMOUNT :	0.00

3. At the **COUNT** field, enter the number of items that need to be purchased to qualify for the discount.
4. At the **AMOUNT** field, enter the amount of the discount to apply.
5. Press **CASH** to advance to the next Mix & Match or press **CLEAR** to exit.

Mix & Match Scan

The Mix & Match Scan will print out the programming for each Mix & Match discount table.

1. From the **RESET REPORT MODE** menu press **4** to select **Mix & Match Scan**.
2. The programming for each Mix & Match is printed on the register receipt.

PLU Lookup Program

PLU Lookup keys (function key codes 402~416) are used to display a list of up to 8 selected PLU's you can select for registration within a sale. You can assign up to fifteen **PLU LOOK UP** keys on the keyboard. (Refer to "Function Key Assignment" in the "Service Mode Programming" chapter.) Each **PLU LOOK UP** key can be programmed here to list specific PLU's, such as condiments to add to items.

1. From the **RESET REPORT MODE** menu press **5** to select **PLU LOOKUP PGM**.

* The PLU LOOKUP PGM screen displays:

```
PLU LOOKUP PROGRAM

PUSH LOOKUP NUMBER
TO BE PROGRAMMED
AND PRESS CASH
(1-15)                                0 ←
```

2. Enter the number of the **PLU LOOKUP** key you wish to program, press **CASH**.

```
1.                                0 ←
2.                                0
3.                                0
4.                                0
5.                                0
6.                                0
7.                                0
8.                                0
```

3. With the cursor pointed at the first position of the **PLU LOOKUP** screen, select a PLU by typing the PLU number and pressing **CASH**. The descriptor for the PLU will display, and the cursor will advance to the next position.

```
1.                                PLU123
2.                                0 ←
3.                                0
4.                                0
5.                                0
6.                                0
7.                                0
8.                                0
```

4. Continue to select PLU's for the PLU LOOKUP key as necessary. If you are editing an existing PLU LOOK UP key, press **CASH** to advance the cursor without changing the current line.
5. If you wish to remove an item from the PLU LOOKUP key, place the cursor on the line to be removed, press the **VOID** key.
6. Press **CLEAR** to return to the **RESET REPORT MODE** menu and save changes.

Age Verification

In most areas, the sale of tobacco and/or alcoholic beverages to minors is prohibited. The *SPS-300* series offers an age verification feature that helps control the sale of restricted items by forcing the operator to enter a birth date before a controlled item can be registered. If the date entered shows that the customer has not yet reached the appropriate age, the item cannot be registered. This feature serves as a reminder to check the customer's identification.

Because different categories of items might require different ages (for example, alcohol might require age 21, while tobacco might require age 18) up to five different age categories can be defined.

This program allows you to set the required age for each of the five available age categories. Refer to "Group Programming" in the "Program Mode Programming" chapter to link an age category to groups of PLU items.

Note: When age verification is implemented, an age entry is required only for the first controlled item from each age category.

1. From the **RESET REPORT MODE** menu press **6** to select **AGE VERIFICATION**.
 - * The AGE VERIFICATION screen displays:

AGE VERIFICATION	
1 .	0 ←
2 .	0
3 .	0
4 .	0
5 .	0

2. Enter the age required for the first group of age-restricted items, press **CASH**.
For example, for Age Verification #1 enter 21 if the sale of liquor requires an age of 21. You must also program the age verification category of "1" for all groups of liquor items.)
3. Program additional age verification settings as necessary.
4. Press **CLEAR** to return to the **RESET REPORT MODE** menu and save changes.

Reset Not Found PLU

Managers will typically use the "Not Found PLU Report" as a tool to verify & update items that were added to the PLU file using the Not Found PLU method. A list of up to 50 not found PLU items retained in the report. When the capacity is reached, you must clear (Z) the Not Found PLU report.

To run the "Reset Not Found PLU" report:

1. To print and reset the not found PLU report list, choose "RESET NOT FOUND PLU" (selection #7) from the **Z** Mode menu.

KP Starting No.

In many fast service installations multiple registers may print to the kitchen. The KP Starting Order Number allows merchants to assign the KP starting order number for each register in an IRC system. This allows the staff to easily track the register that each order originates from. *(Requires v1.0.34 or later.)*

When using a kitchen printer or requisition receipt, you can program the starting order number that will appear on the requisition. When a Z1 financial report is taken, the Starting KP Order Number will reset and begin again at the number set here.

1. From the **RESET REPORT MODE** menu press 8 to select KP STARTING No.
 - * The **KP STARTING ORDER** screen displays:

KP STARTING ORDER
NUMBER (0-9999)
0 ←

2. At each register in the system, enter the **KP Starting Order** Number and press **ENTER**.
For Example, **REG#1** may start with **1000**; **REG#2** may start with **2000**, etc.

DATATRAN(Debit) Menu

The Datatran (Debit) selection is used with Datacap EMV and Non-EMV installations. Information for the Datatran(Debit) Operation Menu when using Datacap EMV integrated payment equipment, is described “EMV Integrated Payment Appendix”, in the “Datatran(Debit) Menu” chapter on page 300 of this manual.

Important! An SD Card is required to be installed on the ECR at all times when you are processing credit card transactions using EMV Integrated Credit with the ECR.

For installations using Non-EMV integrated credit with Datacap equipment, please refer to the separate document “SPS-300 Series Non-EMV Datacap Supplement” available on the CRS website.

1. From the **RESET REPORT MODE** menu press **9. DATATRAN(DEBIT)** to display the **DATATRAN OPERATION.** menu selections:

DATATRAN OPERATION.
0.PIN PAD INITIALIZE
1.CLOSE BATCH(DEBIT)
2.EMV VOID SALE BY RECORD NO.
3.EMV VOID RETN BY RECORD NO.
4.EMV VOICE AUTH
5.EMV ZERO AUTH
6.DELETE SD EMV FILE

2. From the **DATATRAN OPERATION.** menu:
 - Press **0** to initialize the Pin Pad.
 - Press **1** to close the debit batch. You will be prompted “Are you sure?”
 - Press the **YES/NO** key to toggle to **YES** and press **CASH** to continue.
3. Selection **2** thru **6** are used specifically for **EMV** operations; please refer to the SPS-300 EMV Supplement for details about these operations.

DATATRAN Menu

The Datatran selection is used with Datacap EMV and Non-EMV installations. Information for the Datatran Menu operations when using Datacap EMV integrated payment equipment, is described “EMV Integrated Payment Appendix”, in the “Datatran Menu” chapter on page 304 of this manual.

For installations using EMV integrated credit with Datacap-EMV equipment, please refer to the separate document “SPS-300 EMV-Datacap Supplement” available on the CRS website.

1. From the **RESET REPORT MODE** menu press **00. DATATRAN** to display the **DATATRAN OPERATION** menu:

```
          DATATRAN OPERATION          ↓
0.INITIALIZE EFT
1.OPEN BATCH
2.CLOSE CURR. BATCH
3.EMV PARAMETER DOWNLOAD
4.CHG. BATCH NUMBER
5.ISSUE LOCAL TOTAL
6.ISSUE TRANSACTION
```

- * Press **PAGE DOWN** to display the second page of the DataTran Operation menu:

```
          DATATRAN OPERATION          ↑
7.ISSUE BATCH STATUS
8.DIAL IN LOAD
9.DIAL OUT LOAD
DEC.DIAGNOSTIC
```

2. Select the operation from the list you wish to perform.

NEW EMV FUNCTIONS

Z-Mode DC Direct Functions\Settings were added at v2.000 to be used with the DC Direct integrated payment device with the ECR. The Z-Mode DC Direct Functions was changed at v2.0.15 to New EMV Functions. The DEJAVOO Functions and settings were added at v2.0.15 and are only used with the DEJAVOO integrated payment device with the ECR. ***Dejavoo is currently in development, it is not used at this time.***

For DC Direct integration, refer to the SPS-300 Datacap DC Direct guide for setup and operation details.

For Dejavoo integration, refer to the SPS-300 Dejavoo guide for setup and operation details.

Important! An SD Card is required to be installed on the ECR at all times when you are processing credit card transactions using EMV Integrated Credit with the ECR.

Warning! You cannot set up an IRC installation when you install and enable DC DIRECT or DEJAVOO. To use the IRC on any ECR you must be sure the Enable DC Direct \ DEJAVOO selections are set to N at all ECR's. As soon as you Enable DEJAVOO, you will turn the IRC OFF on the ECR.

DC DIRECT

DC Direct Functions\Settings were added at v2.000 and are only used with the DC Direct integrated payment device when connected to the ECR. Refer to the SPS-300 Series EMV-Datacap DC Direct guide for setup an operation details.

the DC Direct functions and settings are only available with the DC Direct integrated payment enabled in the S-Mode > Port Settings > Ethernet setting.

DC Direct requires a connection to the ECR on the ethernet port. There is no IRC available when connecting the DC Direct device. Refer to the DC Direct integrated payment supplement for complete setup details.

1. Move the mode switch key to the **Z** position to display the **RESET REPORT MODE** menu.
2. You can use the **PAGE UP** and the **PAGE DOWN** keys to scroll up and down through the **Z-Mode** menu to select the **NEW EMV FUNCTIONS** menu selections or press **DEC.** on the numeric keypad. *(The numeric keyboard decimal key.)*
 1. **DC DIRECT**
 2. **DEJAVOO** *(Currently in development, not used at this time.)*
3. Press **1** for **DC DIRECT**. The DC Direct Functions selections display.
 1. **SETTINGS**
 2. **TRANSACTIONS**
 3. **ADMIN FUNCTIONS**

DC Direct Functions Definitions

The DC Direct Functions menu operations and definitions is shown below. Refer to the DC Direct integrated payment supplement for complete DC Direct Functions details.

Menu #	Operation	Definition
1.	Settings	Use the settings menu to enter the configuration settings to set up the connection between the DC Direct device and the ECR.
2.	Transactions	Use the operations in this menu to Add or delete transactions within the current batch.
3.	Admin Functions	This operation contain settlement and maintenance operations for the current batch.

DC Direct Settings Definitions

The DC Direct Settings menu operations and definitions is shown below, the Set IP, and the Merchant ID settings are required to connect and utilize DC Direct devices with the ECR.

1. From the **Z** position press **DEC.** (*the numeric decimal key*) on the numeric keypad, Press **1** for **DC Direct**; then press **1** to access the DC Direct **SETTINGS** menu.

Menu #	Operation	Definition
1.	Set IP	Enter the IP ADDRESS that is assigned to the DC Direct Device.
2.	Set Merchant ID	Enter the Merchant ID from Datacap for DC-Direct Credit Card processing. (<i>MID from Datacap.</i>)
3.	Set Gift Merchant ID	Enter the Merchant ID from Datacap for DC Direct Gift Card processing if you are integrating Gift Card sales through the DC Direct device. This is a separate unique Merchant ID for Gift Card operations and processing. (<i>Gift MID from Datacap.</i>)
4.	EMV PAD Reset	Use this operation to Reset/Initialize the DC Direct PIN-Pad device once the IP settings are entered.
5.	DC Direct Timeout	(<i>Added at v2.011</i>) Used to edit the PAD RESET setting (100~300) for troubleshooting if the ECR stays on “Waiting For EFT” even after the transaction shows APPROVED at the Pin-Pad. Set this to 300 for troubleshooting.
6.	Gratuity Suggestions	Optional, this setting is used when the System Option: Prompt Suggestive TIP = Y. The gratuity suggestions setting determines what TIP prompt will be displayed on the Datacap DC Direct Terminal. Type in the desired command.

DC Direct Transactions Definitions

The DC Direct Transactions menu operations and definitions is shown below. The Transactions operation menu is used to add or delete transactions within the current batch.

1. From the **Z** position press **DEC.** (*the numeric decimal key*) on the numeric keypad, Press **1** for **DC Direct**; then press **2** to access the DC Direct **TRANSACTIONS** menu.

Menu #	Operation	Definition
1.	VD Sale By REC No	Use these operations to void transactions when the card is not present. CAUTION: These void operations will not correct the sale totals on the ECR, (i.e. PLU sales) but will maintain a separate total on the Financial Report. Turn the Mode Switch to the VOID mode at the ECR to perform transaction voids that will correct the appropriate ECR sales totals.
2.	VD Refund By REC No	
3.	Voice Auth	Use to enter a voice authorized sale into the current batch.
4.	Zero Authorization	Use this operation to verify if a card is valid, activated, not reported as lost or stolen.
5.	EMV EBT Voucher	EMV EBT Voucher is used to manually enter EBT transactions.
6.	Gift Card Cash Out	This operation allows the customer to receive a CASH OUT payment for the remaining balance available on their gift card.
7.	Gift Void Issue	This operation can be used after issuing a Gift Card to nullify the issuance, but it must be performed as the very next transaction.
8.	Return By REC NO	Use this operation to return to the customer the total sale amount or a partial amount of a sale.

DC Direct Admin Functions Definitions

The DC Direct Admin Functions menu operations and definitions is shown below; the PARAM Download operation should be performed after setting up the DC Direct/Settings.

1. From the **Z** position press **DEC.** (*the numeric decimal key*) on the numeric keypad, Press **1** for **DC Direct**; then press **3** to access the DC Direct **ADMIN FUNCTIONS** menu.

Menu #	Operation	Definition
1.	PARAM Download	This operation tells the DC Direct Pin-Pad device to get new parameters from Datacap. Perform this operation after installing the Datacap DC Direct device.
2.	Batch Summary	Use this operation to print a summary of the transactions in the current batch.
3.	Batch Close	Closes the current batch; a new batch is opened automatically.
4.	Delete SD EMV File	This clears the internally stored token file that stores the Authorization Response messages that allow the ECR to perform “By Record” operations.

DEJAVOO

Dejavoo is currently in development, it is not used at this time.

The Dejavoo integrated payment was added beginning at v2.0.15, the Dejavoo functions and settings are only available when the Dejavoo integrated payment device is enabled in the S-Mode > Port Settings > Ethernet setting.

Dejavoo requires a connection to the ECR on the ethernet port. There is no IRC available when connecting the Dejavoo device. Refer to the Dejavoo integrated payment supplement for complete setup details.

1. Move the mode switch key to the **Z** position to display the **RESET REPORT MODE** menu.
2. You can use the **PAGE UP** and the **PAGE DOWN** keys to scroll up and down through the **Z-Mode** menu to select the **NEW EMV FUNCTIONS** menu selections or press **DEC.** on the numeric keypad. (*The numeric keyboard decimal key.*)
 1. DC DIRECT
 2. DEJAVOO
3. Press **2** for **DEJAVOO**.

DEJAVOO Functions Definitions

Dejavoo is currently in development, it is not used at this time.

The Dejavoo Functions menu operations and definitions is shown below. Refer to the Dejavoo integrated payment supplement for complete Dejavoo Functions details.

Menu #	Operation	Definition
1.	Settings	Use the settings menu to enter the configuration settings to set up the connection between the DEJAVOO device and the ECR.
2.	Transactions	Use the operations in this menu to Add or delete transactions within the current batch.
3.	Admin Functions	This operation contain settlement and maintenance operations for the current batch.

Dejavoo Settings Definitions

The Dejavoo Settings are required to connect and utilize the DEJAVOO device with the ECR.

1. From the **Z** position press **DEC.** (*the numeric decimal key*) on the numeric keypad, Press **2** for **DEJAVOO**; then press **1** to access the **DEJAVOO SETTINGS** menu.

Refer to the Dejavoo integrated payment supplement for complete Settings Function operation details.

Menu #	Operation	Definition
1.	Set IP	Enter the IP ADDRESS that is assigned to the DEJAVOO Device. (Check in the Dejavoo EFT device, click the WiFi symbol to see the connected IP.)
2.	Set Register ID	Enter the Register ID from the DEJAVOO EFT device. (For Raised Keyboard model ECRs you must use the 3-digit character code entry method.)
3.	Set TPN	This is the T erminal P rofile N umber from the Dejavoo EFT device.
4.	Set AUTH Key	Enter any random Alphanumeric value.

Dejavoo Transactions Definitions

The Dejavoo Transactions menu operations is shown below, these optional operations and are not required for setting up the DEJAVOO with the ECR but are used for editing the current batch.

1. From the **Z** position press **DEC.** (*the numeric decimal key*) on the numeric keypad, Press **2** for **DEJAVOO**; then press **2** to access the **DEJAVOO TRANSACTIONS** menu.

Refer to the Dejavoo integrated payment supplement for complete Transactions operation details.

Menu #	Operation	Definition
1.	VD Sale By REC No	Use these operations to void transactions when the card is not present. CAUTION: These void operations will not correct the sale totals on the ECR, (i.e. PLU sales) but will maintain a separate total on the Financial Report. Turn the Mode Switch to the VOID mode at the ECR to perform transaction voids that will correct the appropriate ECR sales totals.
2.	VD Refund By REC No	

Dejavoo Admin Functions Definitions

The Dejavoo Admin Functions menu operations and definitions are shown below. The PARAM Download operation should be performed on the Pin-Pad after setting up the DEJAVOO\Settings.

1. From the **Z** position press **DEC.** (*the numeric decimal key*) on the numeric keypad, Press **2** for **DEJAVOO**; then press **3** to access the **DEJAVOO ADMIN FUNCTIONS** menu.

Refer to the Dejavoo integrated payment supplement for complete Admin Function operation details.

Menu #	Operation	Definition
1.	PARAM Download	<i>Not Used. The Parameter Download is performed on the Pin-Pad.</i>
2.	Batch Summary	Use this operation to print a summary of the transactions in the current batch.
3.	Batch Close	Closes the current batch; a new batch is opened automatically.
4.	Delete SD EMV File	This clears the internally stored token file that stores the Authorization Response messages that allow the ECR to perform "By Record" operations.

System Reports

System Reporting

System reports are divided into two basic categories, X-Reports and Z-Reports. Refer to the Report Table on page 122 for details.

X Reports

- “X” Reports allow managers to read and print the Daily (“X1”) and Period (“X2”) report data (*eXamine*) without resetting the totals and counters within the report.

Z Reports

- “Z” Reports will read, print and clear (*Zero out*) report totals for the Daily (“Z1”) and Period (“Z2”) report data as selected.

Most reports are available in both categories. Some reports, such as the Cash-in-Drawer report and the From-To PLU report are available only as “X” reports.

Some reports also provide identical but separate *period to date* reports. These reports maintain a separate set of totals which may be allowed to accumulate over a period of days, weeks, months, or even years. X2 reports read period to date totals without resetting, and Z2 reports read period to date totals and reset them to zero. Period to date totals are updated each time a Z1 report is completed.

- A complete list of available reports is presented in the Report Table chart on the following page.
- Refer to “Sample Reports” on page 123 for an example of each report.
- If the register is programmed for pop-up clerks, a clerk must sign on in the **REG** mode switch position prior to running reports.

Report Notes

Report Header: The Date & Time the report was ran is printed on the top line. The next line shows the Report Level and the Report Counter. Below the report level & counter is the Report Type that was ran.

Note: The Report Counter indicates the number of Z reports that have been generated for this Report Level & Report Type. X1 Financial report for example. After each Z report, this number will increase on the next X report.

Report Footer: The last line on all reports shows the Employee that generated the report, the Consecutive Number, and the Machine Number (*if used*).

Note: The Consecutive Number advances each time any report is generated or transaction registered. There is only one Consecutive Number counter for all operations. The counter advances when any X1, X2 or Z1, Z2 report is generated.

Report Table

Report Number	Report Type	Mode Available	Daily / Period	Standalone or IRC	Range Selection
0	Financial	X and Z	Daily & Period	Standalone & IRC	N/A
1	Time	X and Z	Daily & Period	Standalone & IRC	N/A
2	PLU	X and Z	Daily & Period	Standalone & IRC	0. ALL 1. FROM / TO <i>(X-Mode Only)</i>
3	Clerks	X and Z	Daily & Period	Standalone & IRC	0. ALL 1. FROM / TO <i>(X-Mode Only)</i>
4	Groups	X and Z	Daily & Period	Standalone & IRC	0. ALL 1. FROM / TO <i>(X-Mode Only)</i>
5	Day	X and Z	Period Only	Standalone & IRC	N/A
6	Stock	X and Z	Daily Only	Standalone & IRC	0. ALL 1. FROM / TO <i>(X-Mode Only)</i>
7	Clerk Time	X and Z	Daily Only	Standalone Only	0. ALL 1. FROM / TO <i>(X-Mode Only)</i>
8	*Open Check*	X and Z	Daily Only	*Standalone Only*	0. NORMAL 1. BY CLERK <i>(X-Mode Only)</i>
9	Drawer Totals	X Only	Daily Only	Standalone Only	N/A
00	PLU Zero Sale	X and Z	Daily Only	Standalone Only	N/A
DEC	Mix & Match	X and Z	Daily & Period	Standalone & IRC	N/A

* **Note:** Only each individual registers Open Check report data is available in the **X** and **Z** Reports selection menu. **Open Check IRC reports** can only be generated from the main **X** position **MANAGER MODE** operations menu on page **P2** by selecting **9. OPEN CHECK (IRC)**. You will have the option of printing the report or writing the report to an SD card inserted in the SD port on the ECR. Refer to “Open Check (IRC)” on page 105.

Report Notes

Report Header: The Date & Time the report was ran is printed on the top line. The next line shows the Report Level and the Report Counter. Below the report level & counter is the Report Type that was ran.

Note: The Report Counter indicates the number of Z reports that have been generated for this Report Level & Report Type. After each Z report, this number advances on the next X and Z report.

Report Footer: The last line on all reports shows the Employee that generated the report, the Consecutive Number, and the Machine Number *(if used)*.

Note: The Consecutive Number advances each time any report is generated or transaction is registered. There is only one Consecutive Number counter for all operations.

Sample Reports

Financial

DATE 11/10/2011 WED TIME 13:32	
Z 1 REPORT	00003

FINANCIAL	
+PLU TTL	179.56
	\$288.60
-PLU TTL	10
	-20.00
ADJST TTL	189.56
	\$268.60

NONTAX	\$30.47
TAX1 SALES	\$153.60
TAX2 SALES	\$11.92
TAX3 SALES	\$16.77
TAX4 SALES	\$31.89
TAX1	\$10.00
TAX2	\$1.21
TAX3	\$1.18
TAX4	\$2.18
XMPT1 SALES	\$7.00
XMPT2 SALES	\$1.50
XMPT3 SALES	\$7.95
XMPT4 SALES	\$7.50
EATIN TTL	1
	\$10.12
TAKEOUT TTL	2
	\$40.77
DRTHRU TTL	1
	\$3.04
ITEM DISC.	3
	-0.48
SALE DISC.	2
	-5.22
SALE SURCH.	3
	\$3.23
% 4	0
	\$0.00
% 5	0
	\$0.00
NET SALE	26
	\$281.18

Report counter

Total and count of all positive PLU's

Total and count of all Negative PLU's

Total of +PLU and -PLU sales

Total of Non-taxable sales

Total of tax eligible sales for each sale tax

Total of tax collected for each tax

Total exempted sales for each tax

Total sales for each destination type.

Total and count for each % function key (i.e. discounts & coupons)

Net Sales transaction Count and amount.

continued...

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Credited tax for each tax. (Tax is credited for negative taxable sales, i.e. MDSE Return transactions.)	CREDIT TAX1	4
	CREDIT TAX2	-1.11
	CREDIT TAX3	1
	CREDIT TAX4	-0.23
Food stamp change credited to sales.	FD/S CREDIT	2
	RETURN	-0.89
Total and count for each type of transaction correction.	ERROR CORR	1
	PREVIOUS VD	0
	MODE VOID	\$0.23
	CANCEL	33
Gross Sales	GROSS SALES	-59.73
	CASH SALES	2
Totals and counters for CASH and CHECK sales	CHECK SALES	-4.00
	R/A 1	1
Total and count for each type R/A (received on account) and P/O (paid out) key.	R/A 2	-1.50
	R/A 3	-2
	P/O 1	-6.40
	P/O 2	2
	P/O 3	\$16.00
		\$375.63

continued...

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Total and count of items sold with HASH status.	HASH TTL	0	
		\$0.00	
Count of No Sales.	NOSALE	4	
	NON ADD #	547	
	CASH-IN-D	14	Total of numbers entered into the NON-ADD key.
		\$270.00	
	CASH DEC AMT	270.00	
	OVER/SHORT	\$0.00	
	CHECK-IN-D	3	
		-108.45	
Total and count of expected CASH, CHECK in drawer. Declaration amounts and OVER/SHORT calculations.	CHECK DEC AMT	\$0.00	
	OVER/SHORT	-108.45	
	FD/S-IN-D	2	
		\$21.00	
	FOOD DEC AMT	\$0.00	
	OVER/SHORT	\$21.00	
Total and count of expected in drawer amount for each charge function key. (Charge-In-Drawer will differ from Charge Sales if the charge is over-tendered.)	CHG1-IN-D	0	
		\$0.00	
	CHG2-IN-D	1	
		\$8.43	
	CHG3-IN-D	1	
		\$8.52	
	CHG4-IN-D	2	
		-1.60	
	CHG5-IN-D	1	
		\$2.67	
	CHG6-IN-D	2	
		\$13.09	
	CHG7-IN-D	0	
		\$0.00	
	CHG8-IN-D	1	
		\$3.04	
Total count and amount for sales registered for each CHARGE function key.	CHG1 SALES	0	
		\$0.00	
	CHG2 SALES	1	
		\$8.43	
	CHG3 SALES	1	
		\$8.52	
	CHG4 SALES	2	
		-1.60	
CHG5 SALES	1		
	\$2.67		
CHG6 SALES	2		
	\$13.09		
CHG7 SALES	0		
	\$0.00		
CHG8 SALES	1		
	\$3.04		

continued...

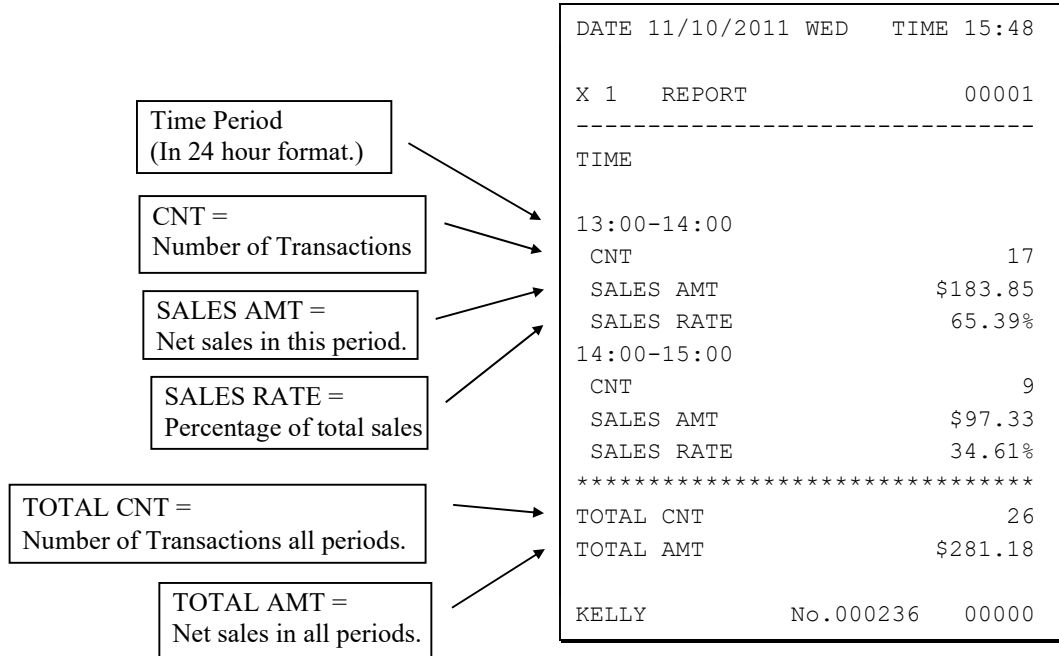
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Total for each Foreign currency in drawer.	FOREIGN 1	0.00	
	FOREIGN 2	0.00	
	FOREIGN 3	0.00	
	FOREIGN 4	0.00	
Total of CASH, CHECKS and CHARGES in drawer.	DRWR TTL	\$216.69	Mix & Match Discounts applied.
	MIX & MATCH	0	
		\$0.00	
	PROMO	1	
		\$1.50	
Total and count for PROMO and WASTE.	WASTE	8	
		\$12.50	
Total and count of Training Mode activity.	TRAIN TTL	5	
		\$62.59	
Total and count of balances entered into PBAL key.	BAL FORWARD	4	
		\$88.13	Total number of guests served.
Total and count of CHECK balances paid.	GUESTS	5	
	P/BAL	4	
		\$0.00	Total and count of all balances serviced.
Total and count of CHECK balances paid.	CHECKS PAID	2	
		\$18.64	
	SERVICE	4	
		\$88.13	Total of open checks (tracking totals) from open check report. Will not reset with financial Z report.
Cash Rounding total.	ROUND EFFECT	\$0.01	
	AVG ITEM/CUST	7.29	
	AVG \$/CUST	\$10.81	
Total and count of items serviced.	OPEN CHECK TOTAL	\$26.02	

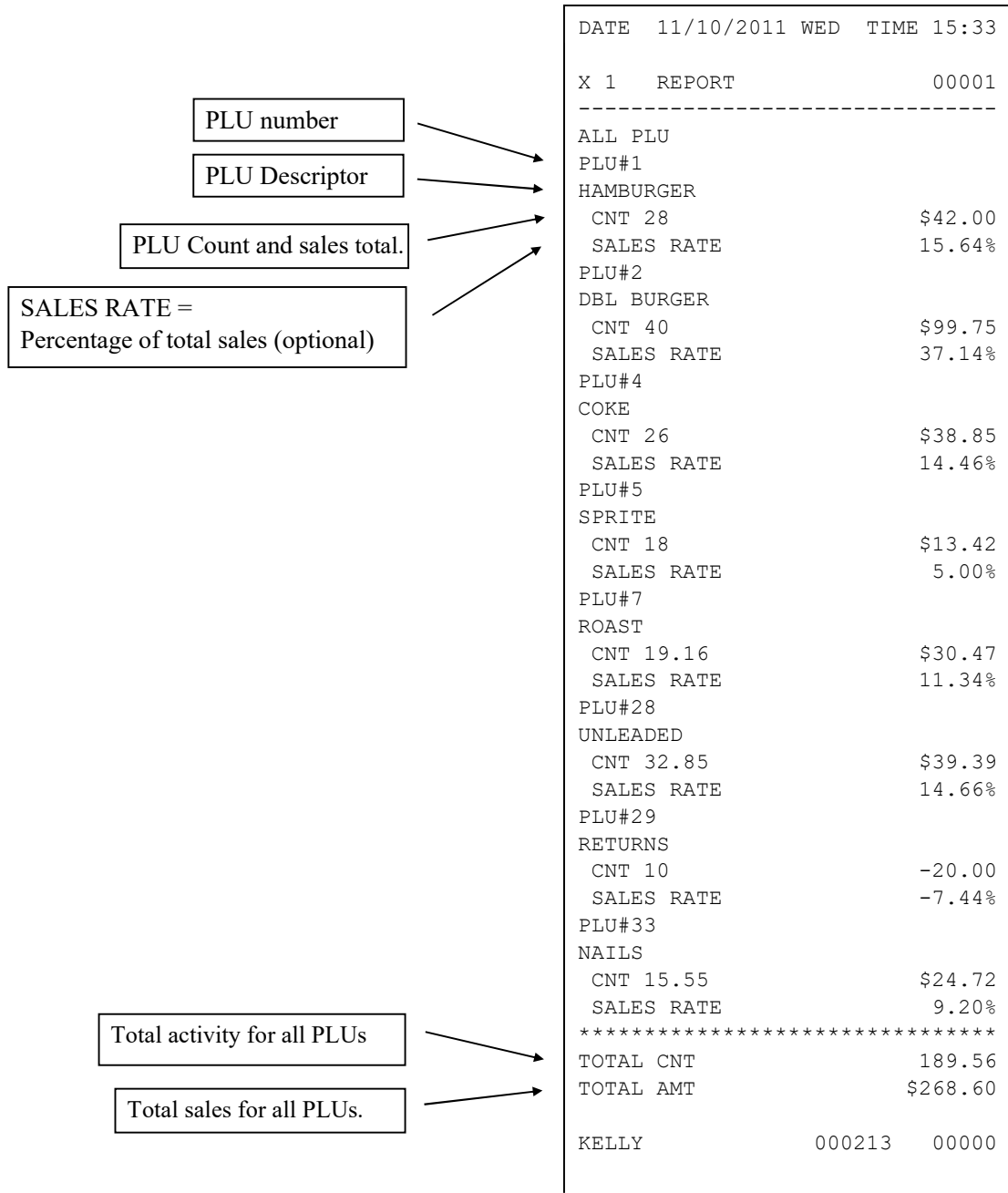
Average number of items per customer, and average dollar sales per customer.	GRAND	\$375.63	Grand total (NRGT) When set to print on X and/or Z report.
	KELLY	No.000209 00000	

Time

The time report breaks down sales data by each hour based on a 24 hour day.



PLU



Clerk

Note: Media totals can be printed for each clerk if selected in Print Option Programming.

Each clerk will print on the report, when the Print Option: "Skip media totals with zero activity on the Clerk report?" is selected, the clerk descriptor prints but no NET SALE or DRWR TTL is printed.

DATE 11/10/2011 WED	TIME 15:36
X 1 REPORT	00001

ALL CLERK	
KELLY	
NET SALE	10
	\$155.23
DRWR TTL	\$109.81

ZACH	
NET SALE	5
	\$45.14
DRWR TTL	\$43.22

ANNA	
NET SALE	4
	\$78.75
DRWR TTL	\$67.03

LAURA	
NET SALE	2
	\$0.00
DRWR TTL	\$18.64

PEGGY	

MOLLY	
NET SALE	5
	\$2.06
DRWR TTL	-22.01

KELLY	No.000218 00000

Clerk Name → KELLY

Drawer total for this clerk. → DRWR TTL

Number of Transactions → NET SALE

Net sales for this clerk → \$155.23

Individual Clerk

Individual Clerk Report with media totals.

	DATE 11/10/2011 WED	TIME 15:36
	X 1 REPORT	00001

	INDIVIDUAL CLERK	
Clerk Name	KELLY	
	NET SALE	5
		\$720.00
	NONTAX	\$500.00
	TAX1 SALES	\$200.00
	TAX1	\$20.00
	GROSS SALES	\$720.00
	CASH SALES	2
		\$100.00
	CHECK SALES	1
		\$220.00
	HASH TTL	1
		\$110.00
	CASH-IN-D	2
		\$100.00
	CHECK-IN-D	1
		\$220.00
	CHG8 SALES	2
		\$400.00
Drawer total for this clerk	DRWR TTL	\$720.00

	KELLY	No.000218 00000

Number of transactions

Net sales total for this clerk

Groups

	DATE 11/10/2011 WED	TIME 15:34
	X 1 REPORT	00001

	GROUP	
Group Descriptor	GROUP : 1 FOOD	
Number of items sold in this group	CNT	68
Net sales for this group	SALES AMT	\$141.75
	GROUP : 2 DRINK	
	CNT	44
	SALES AMT	\$52.27
	GROUP : 3 REST.	
	CNT	112
	SALES AMT	\$194.02
	GROUP : 5 STORE	
	CNT	19.16
	SALES AMT	\$30.47
	GROUP : 8 MDSE	
	CNT	58.40
	SALES AMT	\$44.11
	GROUP : 9 STORE MDSE	
	CNT	77.56
	SALES AMT	\$74.58

Number of items sold in all groups.	TOTAL CNT	189.56
Net sales for all groups.	TOTAL AMT	\$268.60
	KELLY	No.000237 00000

Day

The Day (*Daily Sales*) report lists net sales for each day of the month.

	DATE 11/10/2011 WED	TIME 15:47
	X 2 REPORT	00001

	DAY	
	DAY : 12	
Count	CNT	2
Net Sales	SALES AMT	\$6.00
Percentage of total	SALES RATE	50.00%
	DAY : 12	
	CNT	2
	SALES AMT	\$6.00
	SALES RATE	50.00%

	TOTAL CNT	4
	TOTAL AMT	\$12.00
	CLERK 1	No.00047 0000

Stock

PLU number

PLU Descriptor

Current inventory count

```
DATE 11/10/2011 WED    TIME 15:47
X 1  REPORT              00001
-----
ALL PLU STOCK
PLU#1
HAMBURGER
  CNT                      26
PLU#2
DBL BURGER
  CNT                      15
PLU#7
ROAST
  CNT                    25.96
PLU#28
UNLEADED
  CNT                    1488.47
PLU#33
NAILS
  CNT                    161.25
KELLY          No.000228  00000
DATE 11/10/2011 WED    TIME 15:47
```

Clerk Time

Clerk Name	DATE 11/10/2011 WED TIME 15:36
Date and time for the last ten time clock punches (in & out)	X 1 REPORT 00001
Total time for clerk	----- INDIVI. CLERK TIME
	KELLY
	TIME IN : 11/09/2011 07:52
	TIME OUT: 11/09/2011 15:44
	TIME IN : 11/10/2011 07:52
	TIME OUT: 11/10/2011 13:50
	TIME WORKED : 0013:50
	ZACH
	TIME IN : 11/09/2011 07:26
	TIME OUT: 11/09/2011 14:55
	TIME IN : 11/10/2011 07:26
	TIME OUT: 11/10/2011 14:22
	TIME IN : 11/11/2011 06:58
	TIME WORKED : 0014:25
	ANNA
	TIME IN : 11/09/2011 12:52
	TIME OUT: 11/09/2011 15:42
	TIME IN : 11/10/2011 06:44
	TIME OUT: 11/10/2011 14:55
	TIME WORKED : 0011:01
	LAURA
	TIME IN : 11/09/2011 02:33
	TIME OUT: 11/09/2011 07:55
	TIME IN : 11/09/2011 12:44
	TIME OUT: 11/09/2011 18:44
	TIME IN : 11/10/2011 09:55
	TIME WORKED : 0011:22
	PEGGY
	TIME IN : 11/10/2011 13:52
	TIME WORKED : 0000:00
	MOLLY
	TIME IN : 11/09/2011 01:05
	TIME OUT: 11/09/2011 09:55
	TIME IN : 11/10/2011 07:44
	TIME WORKED : 0008:50
Total time for all clerks	----- TOTAL WORKED : 0059:28
	KELLY No.000217 00000

Open Check

Open check number and balance.

Clerk responsible for the check.

```

DATE 11/10/2011 WED    TIME 15:59
X 1  REPORT              00001
-----
OPEN CHECK
CHECK : 3                  $24.07
MOLLY
CHECK : 4                  $45.42
KELLY
CHECK : 5                  $24.50
KELLY
CHECK : 6                  $28.33
KELLY
KELLY                      No.000243  00000
    
```

PLU Zero Sale

PLU Descriptor

PLU Number

```

DATE 11/10/2011 WED    TIME 15:59
X 1  REPORT              00001
-----
PLU ZERO SALE
ITEM                      PLU#
-----
PLU11                     #11
PLU14                     #14
PLU15                     #15
PLU16                     #16
PLU19                     #19
PLU20                     #20
CLERK 1                    No.000243  00000
    
```

Mix & Match

```

DATE 12/30/2011 FRI    TIME 16:48
X 1  REPORT              00001
-----
MIX & MATCH
M & M 1
  CNT 1                   -2.00
M & M 2
  CNT 4                   -8.00
M & m 3
  CNT 3                   -3.00
*****
TOTAL CNT                  6
TOTAL AMT                 -13.00
CLERK 1                    No.000027  00000
    
```

Report Balancing Formulas

+/-	Net Sales	\$ Example
=	PLU Sales Total	\$
+	Tax 1	\$
+	Tax 2	\$
+	Tax 3	\$
+	Tax 4	\$
+	Sale Coupon Amounts	\$
+	Sale Percent Discounts	\$
+	Sale Surcharge Amounts	\$
=	Net Sales	\$

+/-	Gross Sales	\$ Example
=	Net Sales	\$
+	Negative PLU Total	\$
+	Item Coupon Total	\$
+	Item Percent Discount	\$
+	Sale Coupon Amounts	\$
+	Sale Percent Discounts	\$
+	Credit Tax 1	\$
+	Credit Tax 2	\$
+	Credit Tax 3	\$
+	Credit Tax 4	\$
+	Merchandise Return	\$
+	Void Position Total	\$
+	Mix & Match Total	\$
=	Gross Sales	\$

Service Mode Programming

Service Mode Menu

The Service Mode programming is meant to be a one-time event since the most basic register and system options are fixed at this time. Changes to the Service Mode programming may influence the way the machine operates and it is recommended that they are not done by the end user.

The Service Mode keylock position is only accessible with the "C" key. This key should be released to the end user ONLY when they fully understand S-Mode programming procedures. All S-Mode programming is best done at the dealer level. Existing totals may be reset to zero accidentally and the existing program may also be destroyed.

Caution: For information security, distribute the “C” key only to owners or managers who will need to use these procedures.

The following procedures are done from the Service Mode menu.

- Hardware Tests
- Clear PLU file
- Assignment of functions to keyboard locations
- SD Card Operations, including Program Backup and Loading
- Clear all totals
- FLASH ROM Information
- IRC Options
- Clear Current Batch (Integrated Payment Applications only)
- Clear grand total
- Memory Allocation
- RS232C Port Options

1. Turn the key to the “S” position (*Service-Mode*) (one position clockwise from the **PGM** position) to display the **SERVICE MODE** menu:

```
          SERVICE MODE          ↓
0. HW TEST
1. CLEAR ALL TOTALS
2. CLEAR GRAND TOTAL
3. CLEAR PLU FILE
4. FLASHROM INFORMATION
5. MEMORY ALLOCATION
6. KEY ASSIGNMENT
```

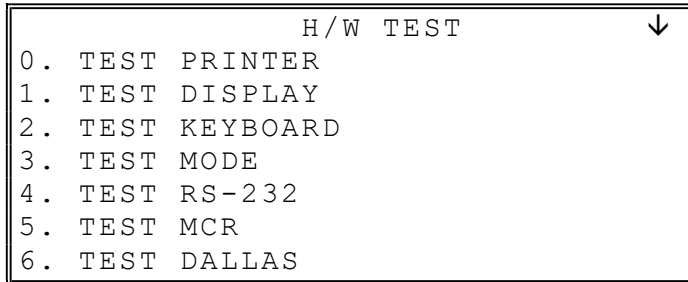
- * Press **PAGE DOWN** to view the remainder of the **SERVICE MODE** menu:

```
          SERVICE MODE          ↑
7. IRC OPTIONS
8. RS232C PORT
9. SD CARD OPERATION
00.CLEAR CURR.BATCH
```

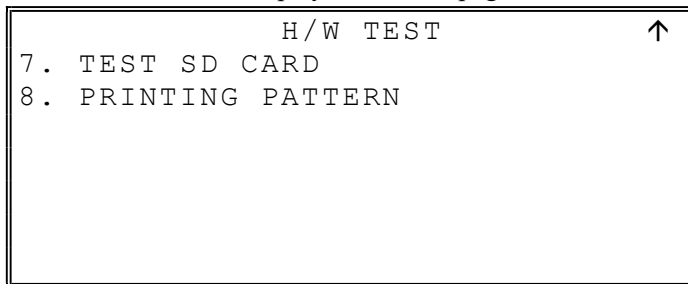
Hardware Test

Various components of the *SPS-300* ECR are tested using this program.

- From **SERVICE MODE** menu press **0** to display the **H/W TEST** menu:



- * Press **PAGE DOWN** to display the second page of **H/W TEST** selections:



- Press the numeric digit representing the test you wish to perform. See the table that follows for notes about each test.

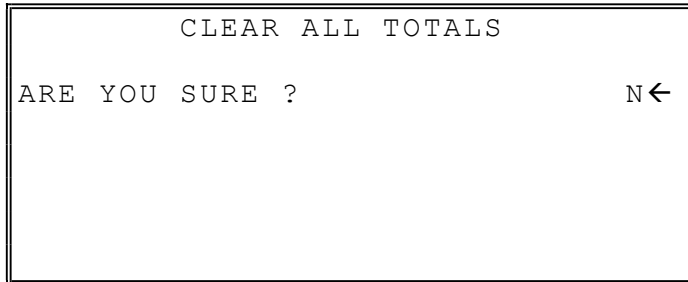
Hardware Test Table

TEST	NOTES
PRINTER	A printer test pattern is printed. The H/W TEST menu automatically returns when the test is complete.
DISPLAY	A display test is initiated. The H/W TEST menu automatically returns when the test is complete.
KEYBOARD	The display indicates: "KEYBOARD TEST". Press any key location to display its' position. Turn the mode switch to end the test.
MODE	Check the mode lock and/or the optional "real" clerk mode switch with this test. As you turn the mode switch, the display will show the current position. The display will also indicate the "real" key that is inserted. Return the key to the SERVICE position to end the test.
RS-232	Select LOOP TEST PORT 1-4, Initialize Ethernet, or the IRC Range test. To loop test port 1-4, a loop back connector must be in place.
MCR	Select to test read a magnetic card.
DALLAS	Option not available
SD	Insert an SD card and select to run a read/write test. The results will print. Press CLEAR to exit the test.
PRINTING PATTERN	ENDLESS PRINTING and LIFE TEST PRINT are factory tests. Toggle the power switch on and off to end the test.

Clear All Totals

This selection will clear all of the totals and counters on the ECR, including the grand total.

1. From **SERVICE MODE** menu press **1** to display the **CLEAR ALL TOTALS** screen:



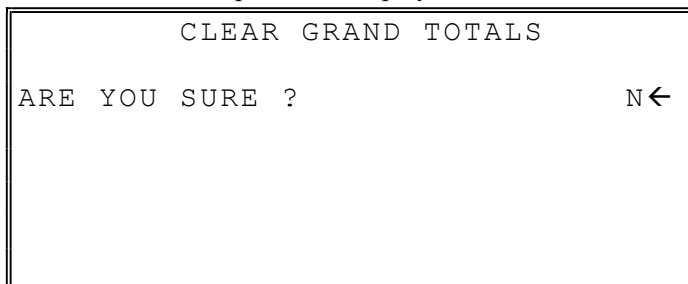
```
      CLEAR ALL TOTALS
ARE YOU SURE ?                N ←
```

2. Press the **YES/NO** key to display **Y** at the "ARE YOU SURE ?" question. Press **CASH**.
3. The display reads: "PLEASE WAIT". The message "ALL TOTAL CLEAR" is printed and the screen returns to the **SERVICE MODE** menu.

Clear Grand Total

This selection only clears the grand total on the ECR.

1. From **SERVICE MODE** menu press **2** to display **CLEAR GRAND TOTALS** screen:



```
      CLEAR GRAND TOTALS
ARE YOU SURE ?                N ←
```

2. Press the **YES/NO** key to display **Y** at the "ARE YOU SURE ?" question. Press **CASH**.
3. The message "GRAND TOTAL CLEAR" is printed and the screen returns to the **SERVICE MODE** menu.

Clear PLU File

This selection clears the entire PLU file, even the default PLU's 1-300, including totals, counters and programming.

1. From **SERVICE MODE** menu press **3** to display the **CLEAR PLU FILE** screen:

```
          CLEAR PLU FILE
ARE YOU SURE ?          N ←
```

2. Press the **YES/NO** key to display **Y** at the "ARE YOU SURE ?" question. Press **CASH**.
3. The message "PLU FILE CLEAR" is printed and the screen returns to the **SERVICE MODE** menu.

FLASHROM Information

This selection displays the flash ROM information as shown below. You may be asked to check your Flash ROM version if you contact your dealer for assistance. You should also verify that all registers in an IRC configuration have the same version Flash ROM.

1. From the **SERVICE MODE** menu press **4** to view the **FLASHROM INFORMATION**. The message "PLEASE WAIT . . ." displays momentarily then the FLASHROM INFORMATION displays.

```
          FLASHROM INFORMATION
VERSION   :          USA 02.031
CHECKSUM  :          693C
BOOT/APP  :          38FB/3041
PLUs USED:          300/2000
EFT VER.  :
Sam4s Payment Application v2.0a
          APR 14 2026
```

2. If you want to print this information, press the **X/Time** key.
3. **MAC ADDRESS** printing was added at v2.0.10 and later.
4. Press **CLEAR** to return to the **SERVICE MODE** menu.

Printed Receipt Example:

```
          FLASHROM INFORMATION
VERSION   :          USA 02.031
CHECKSUM  :          693C
BOOT/APP  :          38FB/3041
PLUs USED :          300/2000
EFT VER.  :
Sam4s Payment Application v2.0a
          APR 14 2026

MAC ADDRESS : FF.FF.A1.B2.C3.00
```

Memory Allocation

Memory Allocation is set to default when the Memory All Clear operation is performed as described in the "Clearing Memory" chapter on page 35.

The procedure described in this area are security sensitive. Memory is automatically cleared after memory allocation is set.

Warning! Do not change memory allocation after your system has been installed, all programming, totals, and counters will be cleared.

You must step through every memory allocation field to implement new memory allocation settings. If you press CLEAR, at any field you will abort the memory allocation processes without making any changes. Any changes made to Memory Allocation will clear all current program data.

1. At the **Service Mode** menu, press **5** for Memory Allocation programming. The **MEMORY ALLOCATION** screen displays:

MEMORY ALLOCATION.	
TTL AVAIL :	1847296
TTL USED :	316485
# PLU'S	2000 ←
# LEVELS (1-5)	1
# CLERKS	10
# GROUP TOTALS	20

2. The total available memory is displayed on the first line of the screen (TTL AVAIL). The total memory currently allocated is displayed on the second line of the screen (TTL USED). The TTL USED field is updated when you complete a change and press **CASH**.

NOTE: You must allocate at least one line of electronic journal (EJ) and at least one check for each clerk allocated. To increase the number of clerks from the default allocation, you must first increase the number of checks to a value equal to or greater than the desired number of clerks.

3. Starting at the PLU's field, enter the quantity of each memory field. Press **CASH** after each entry, and the cursor will move to the next field. Page 2 of Memory Allocation will display after the # OF GROUP TOTALS field is set:

MEMORY ALLOCATION	
TTL AVAIL :	1847296
TTL USED :	316485
# EJ LINES	1000 ←
# CHECKS	10
Y=HARD/N=SOFT CHK	N
# LINES/SFT CHK	50

4. Continue filling each field until complete. Press **CASH** after setting the last field, "# LINES / SFT CHK". The screen will display "ARE YOU SURE?". N (No) will display as the default answer to the question. If you wish to implement the new allocation you have entered, press the **YES/NO** key, and then press **CASH**.
5. The message "PLEASE WAIT . . ." displays until the printer prints either: "MEMORY ALLOCATION OK !" or "MEMORY ALLOCATION SIZE OVER" if you attempt to allocate features requiring more memory than is available.
6. The SERVICE MODE menu screen displays when memory allocation programming is completed.

Memory Allocation Specifications

Allocation Area	Default Value	Minimum Value	Maximum Value
# PLUS	2000	300	20,000
# LEVELS (1 – 5)	1	1	5
# CLERKS	10	1	99
# GROUP TOTALS	20	1	99
# EJ LINES	1000	1	50,000
# CHECKS	10	1	200
Y=HARD / N=SOFT	N	(Default = N)	Y or N
# LINES / SFT CHK	50	1	230

Important Memory Allocation Notes

- Memory allocation maximum values are theoretical. For example, if all other allocation variables are at or near zero, then 20,000 PLUs are possible.
 - Check# memory, especially soft check memory, and clerk memory consume considerable memory.
- The clerk interrupt feature requires allocation of at least one guest check for each clerk and sufficient soft check lines to support the interrupted transaction. If you wanted 99 Clerks, you must first increase the allocation for CHECK# to at least 99 Checks. If 20 soft check lines are allocated, a transaction with up to 20 lines can be interrupted.
 - See System Option P17 to enable clerk interrupt.
- All models default to 1000 lines of electronic journal. For models with journal printers, you may wish to set electronic journal to “1” so that memory may be used for other allocation settings.

Function Key Assignment

Any programmable key location may be reprogrammed with a function from the list of available functions shown on page 144 of this manual. The default program installs the functions as they are shown with the standard key legends. To see the default keyboard layout, see "Keyboards" on page 27.

NOTES:

- **Numeric keys (0-9), CLEAR, and CASH** cannot be removed from the keyboard unless they have first been reassigned to a new keyboard location. This protects the programmer from accidentally removing keys that are required for register programming and operations.
- **Page Up, Page Down, and the Yes/No** keys are used for navigating and making program changes and *should not* be reassigned. Attempting to reassign these keys will result in ERROR : NO ENTER(CASH) KEY.
- If you wish to program the **CASH** key, select it immediately after selecting KEY ASSIGNMENT from the SERVICE MODE menu. After the initial key is programmed, the CASH key is used to finalize the program.

To change the function on a specific key:

1. From the **Service Mode** menu, press **6** for **KEY ASSIGNMENT** programming.

* The **KEY ASSIGNMENT** screen displays:

```
KEY ASSIGNMENT

PUSH KEY TO BE
PROGRAMMED

0 ←
```

2. Press any **key location**. The current key assignment is displayed:

```
KEY ASSIGNMENT

KEY NUMBER :           322
CURRENT ASSIGNMENT
                    CASH
ENTER NEW CODE,
PRESS CASH

0 ←
```

3. Enter a new key code from the list of "Function Key Codes" on page 144 and press **CASH** or press **PAGE DOWN** to display a list of key codes on the screen.

```
FUNCTION                KEYCODE
-----
-
NLU#1 - NLU#150 (1-150)
ONE                     301
TWO                     302
THREE                   303
FOUR                    304
FIVE                    305
```

4. With the key code list displayed you can press the **PAGE DOWN** or **PAGE UP** keys until you find the key code number for the function key you wish to use.

5. Type the **FUNCTION KEY Code Number** you wish to place and press **CASH**.
6. The **KEY ASSIGNMENT** screen displays again:

KEY ASSIGNMENT

PUSH KEY TO BE
PROGRAMMED

PRESS CASH TO EXIT

0 ←

7. Continue to assign function keys to keyboard locations as necessary. When you have completed function key programming, press the **CASH** key to finalize. The screen displays:

KEY ASSIGNMENT

PRESS CASH TO SAVE CHANGES
OR
PRESS CLEAR TO EXIT
WITHOUT SAVING

8. Press **CASH** to save the changes you have made. Pressing **CLEAR** will exit without saving changes.
9. The printer will print out a receipt showing all the changes made to the keyboard.

Function Key Codes

Code	Function
1 ~ 300	NLU 1 <i>Through</i> NLU 300
301	Numeric 1
302	Numeric 2
303	Numeric 3
304	Numeric 4
305	Numeric 5
306	Numeric 6
307	Numeric 7
308	Numeric 8
309	Numeric 9
310	Numeric 0
311	Numeric 00
312	Decimal
313	#/NS
314	%1
315	%2
316	%3
317	%4
318	%5
319	X/TIME
320	ADD CHECK
321	CANCEL
322	CASH
323	CHARGE 1
324	CHARGE 2
325	CHARGE 3
326	CHARGE 4
327	CHARGE 5
328	CHARGE 6
329	CHARGE 7
330	CHARGE 8
331	CHECK CASHING
332	CHECK ENDORSE
333	CHECK
334	CHECK TRACK #
335	CLEAR

Code	Function
336	CLERK #
337	CURRENCY CONV.1
338	CURRENCY CONV.2
339	CURRENCY CONV.3
340	CURRENCY CONV.4
341	DRIVE THRU
342	EAT-IN
343	ERROR CORRECT
344	F/S SHIFT
345	F/S SUB
346	F/S TEND
347	Function Lookup #1
348	Function Lookup #2
349	GUEST #
350	PLU(CODE ENTRY)
351	PRICE LEVEL 1
352	PRICE LEVEL 2
353	PRICE LEVEL 3
354	PRICE LEVEL 4
355	PRICE LEVEL 5
356	MACRO 1
357	MACRO 2
358	MACRO 3
359	MACRO 4
360	MACRO 5
361	MACRO 6
362	MACRO 7
363	MACRO 8
364	MACRO 9
365	MACRO 10
366	MDSE RETURN
367	MODIFIER 1
368	MODIFIER 2
369	MODIFIER 3
370	MODIFIER 4
371	MODIFIER 5
372	P/BAL
373	PAGE DOWN

Code	Function
374	PAGE UP
375	PAIDOUT1
376	PAID OUT 2
377	PAID OUT 3
378	PAPER FEED
379	PLU PRICE INQ
380	PRINT CHECK
381	PROMO
382	RECD ON ACCT 1
383	RECD ON ACCT 2
384	RECD ON ACCT 3
385	SBTL(SUBTOTAL)
386	SCALE
387	SERVICE
388	TABLE #
389	TARE
390	TAKE OUT
391	TAX EXEMPT
392	TAX SHIFT 1
393	TAX SHIFT 2
394	TAX SHIFT 3
395	TAX SHIFT 4
396	TIME IN/OUT
397	TIP
398	VOID ITEM
399	WASTE
400	YES/NO
401	VALIDATION
402 - 416	PLU LOOKUP1 ~ PLU LOOKUP15
417	PRICE CHANGE
418	DATATRAN TIP
419	Not Used
442	PAYMENT
443	FINALIZE
444	JFEED
445	INACTIVE

**PRICE CHANGE (function key code 417) is available at version v01.081 and later.*

IRC Options

If you have multiple registers connected in an IRC system you must define the Register number for each register in the IRC and set the IRC range for the system. Register numbers should be consecutive and begin with REG#1.

Up to 8 registers can be connected via the LAN port in an IRC configuration. The LAN is a standard ethernet connection, 2 registers can be connected using a crossover cable, 3 or more registers can be connected to a switch using a standard straight through ethernet LAN cable. Set the IRC Options as required for your installation.

Refer to the IRC (Inter Register Communications) chapter in the Appendix on page 281 for complete details.

The DC Direct interface was added beginning at v02.000. Integrated payment processing utilizing Datacap DC Direct API is a semi-integrated solution (Out of Scope) for processing electronic payments with SPS-300 Series ECR's.

Warning! You cannot set up an IRC if you intend to install the DC Direct integrated payment terminal. To use the IRC on any ECR you must be sure to set the Ethernet setting: Enable DC Direct selection to **N** at all ECR's. As soon as you Enable DC Direct, you will turn the IRC OFF on the ECR.

1. At the **Service Mode** menu, press **7** for IRC Option programming.

The **IRC OPTIONS** screen displays.

IRC OPTIONS		
REG# (1-8)		1 ←
STORE#	000000	
FROM REG#		1
TO REG#		1
IRC RETRIES (0-99)		3
#SHARE KP REG# (1-8)		0

2. Required settings are: **REG# (1-8)**, **STORE #**, **FROM REG#**, **TO REG#**, **IRC RETRIES (0-99)**, enter the settings as necessary pressing **CASH** after each entry. Set the optional settings **# Share KP Reg# (1-8)** if necessary pressing **CASH** after each entry.
3. **Page 2 of IRC Options** will display after the **#SHARE KP REG# (1-8)** field is set. If used, enter the Reg# as necessary, press **CASH** to enter the selection and return to the Service Mode screen.

IRC OPTIONS		
#SHARE DATATRAN REG# (1-8)		0 ←

4. Refer to the table below to fill the fields on the **IRC OPTIONS** screen. You may not need to enter values for every field, press **CASH** to advance to the next option setting.
5. Press the **CLEAR** key to finalize and return to the **SERVICE MODE** screen.

IRC Options Definitions

Option	Entry	Description
REG#	1-8	Enter the sequential number of the register in the IRC System. For a standalone register use REG# 1.
STORE#	6-digits	Enter the store number if desired.
FROM REG#	1-8	Enter the number of the first register in the IRC range.
TO REG#	1-8	Enter the number of the last register in the IRC range.
IRC RETRIES	0-99	Enter the number of IRC retries, "3" is recommended.
# SHARE KP REG#	0-8	Enter the number of the register where the shared kitchen printer is connected. Enter 0 if not shared.
# SHARE DATATRAN REG#	0-8	Used with Datacap Tran Series integrated equipment. Enter the number of the register where the shared DATATRAN device is connected.

Port Setting Options

There are two standard DB9M RS-232C serial ports available on the SPS-300 series ECR for peripheral devices. The RS-232 option interface CRS P/N 501531 provides two additional RJ45 serial ports. Peripheral devices can be connected to any of the 4 available serial ports. You must define the device(s) attached to the RS-232C communications ports and program the options for each device(s).

Note: The Scale Type selections changed at v1.154 and later. The CAS selection was removed and the DLS selection added. The DLS selection supports the Datalogic Scale/Scanner combo models: 9300/9400/9800.

The LAN Port can be used for IRC or for connecting to a DC Direct Integrated Payment device.

The Ethernet port settings are used for connecting to a DC Direct device. You cannot set up an IRC installation if you intend to install the DC Direct terminal. To use the IRC on any ECR you must be sure to set the Enable DC Direct selection to N at all ECR's. As soon as you Enable DC Direct, you will turn the IRC OFF on the ECR.

RS-232 PORT 1 ~ 4 Settings

1. At the **Service Mode** menu, press **8** for **RS232 PORT** programming. The RS232 PORT selection screen displays.

```
PORT SETTING
1. RS232 PORT 1
2. RS232 PORT 2
3. RS232 PORT 3
4. RS232 PORT 4
5. ETHERNET
```

2. Enter the digit (1-4) corresponding to the port you wish to program. The appropriate **PORT PROGRAM** screen displays.

```
PORT 1 PROGRAM PG1
BAUD RATE                                0 ←
0:9600    1:1200    2:2400
3:4800    4:19200   5:38400
6:57600   7:115200
PARITY CHECK                              0
0:NONE    1:ODD     2:EVEN
DATA BITS (0:8 1:7)                       0
```

3. At each field, press **CASH** to view the selections. Enter the digit representing your selection.
4. Press **PAGE DOWN** to view page **2** of the **PORT PROGRAM**.

```
PORT 1 PROGRAM PG2
STOP BITS (0:1 1:2)                       0 ←
DEVICE FUNCTION                            0
-----
0:NONE    1:PC      2:SCL
3:RJ      4:RP      5:LIQUOR
6:SCAN    7:COIN    8:RESERVED
9:POLE    10:EFT    11:PDC
```

5. Press **PAGE DOWN** to view page **3** of the **PORT PROGRAM**.

```
PORT 1 PROGRAM PG3
INITIAL FEEDING LINE ON KP                0 ←
(0-20)
ENDING FEEDING LINE ON KP                 0
(0-20)
INITIAL FEEDING LINE ON SLIP              0
(0-20)
```

6. Press **PAGE DOWN** to view page 4 of the **PORT PROGRAM**.

```
PORT 1 PROGRAM PG4
PRINT LINE ON GUEST CHECK          0 ←
(0-50)
SCALE TYPE                          0
0:NCI          1:DLS          2:OZ
PRINTER TYPE                          0
0:NONE
1:SAM4S ELLIX 10
```

7. Press **PAGE DOWN** to view page 5 of the **PORT PROGRAM**.

```
PORT 1 PROGRAM PG5
PRINTER TYPE                          0 ←
2:SAM4S ELLIX 20II
3:SAM SRP-250
4:SAM SRP-350
5:CITIZEN 3550/3551
6:CITIZEN 810
7:CITIZEN 230
```

8. Press **PAGE DOWN** to view page 6 of the **PORT PROGRAM**.

```
PORT 1 PROGRAM PG6
PRINTER TYPE                          0 ←
8:EPSON TM-T88-2
9:EPSON U200
10:EPSON U295
11:EPSON U300
12:EPSON U325
13:EPSON U375
```

9. Press **PAGE DOWN** to view page 7 of the **PORT PROGRAM**.

```
PORT 1 PROGRAM PG7
PRINTER TYPE                          0 ←
14:STAR SP-200
15:STAR SP-298
16:STAR SP-300
17:STAR TSP-200
```

10. Press **PAGE DOWN** to view page 8 of the **PORT PROGRAM**.

```
PORT 1 PROGRAM PG8
POLE DISPLAY TYPE                      0 ←
0:EPSON          1:ICD
RESERVED
```

11. Refer to the "RS232C Settings Screen Program Notes" on the next page to fill the fields for each port.
Press the **CLEAR** key to finalize and return to the **SERVICE MODE** screen.

RS232C Settings Program Notes

Option	Description
BAUD RATE	Select 9600, 1200, 2400, 4800, 9600, 19200, 38,400, 57,600, or 115,200 from the pop-up window; 9600 is the default.
PARITY	Select NONE, EVEN, or ODD from the pop-up window; NONE is the default.
DATA BITS	Select 8 or 7 from the pop-up window; 8 is the default.
STOP BITS	Select 1 or 2 from the pop-up window; 1 is the default.
DEVICE FUNCTION	Enter the number for the device you wish to attach to this port from the code numbers displayed. The device function codes are: 1: PC Communications 2: Scale 3: Remote Journal Printer 4: Remote Printer 5: Liquor 6: Scanner 7: Coin Dispenser 8: Reserved 9: Remote Pole Display 10: EFT (i.e. DataTran) 11: PDC (DataTran Peripheral Device Controller)
PRINT LINE ON GUEST CHECK (0-50)	Enter the maximum number of lines that can be printed on a guest check.
SCALE TYPE	Select the digit that represents the scale type connected to this port. 0:NCI 1:DLS 2:OZ
PRINTER TYPE	Select the digit representing the printer type connected to this port. (0 ~ 17)
POLE DISPLAY TYPE	Select the digit representing the pole display type connected to this port. 0:EPSON 1:ICD
RESERVED	Not Used

Note: The Scale Type selections changed at v1.154 and later. The CAS selection was removed and the DLS selection added. The DLS selection supports the Datalogic Scale/Scanner combo models: 9300/9400/9800.

Ethernet

The Ethernet port settings were added at v02.000 and is used only for connecting to a Datacap DC Direct or to a Dejavo (added at v2.015) integrated payment device. This controls the LAN port on the ECR. You can choose to set up IRC or to set up the Ethernet settings for DC Direct, or for Dejavo.

NOTE: Do not enable either of these devices if they are not connected the ECR.

Warning! You cannot set up an IRC installation when you install and enable DC DIRECT or DEJAVOO. To use the IRC on any ECR you must be sure the Enable DC Direct \ Enable DEJAVOO selections are set to N at all ECR's. As soon as you Enable DC Direct or DEJAVOO, you will turn the IRC OFF on the ECR.

Important! An SD Card is required to be installed on the ECR at all times when you are processing credit card transactions using EMV Integrated Credit with the ECR.

Note: Your Ethernet settings will be different than the settings as shown in the example below.

1. Move the mode switch to the **S** position to display the **Service Mode** menu.
2. From the Service Mode menu press **8** to access **PORT SETTING**.
3. From the PORT SETTING menu, press **5** to access the **ETHERNET** selection. Enable DC Direct or Enable Dejavo do not enable both at the same time. Enter the Ethernet settings for the ECR.

```
ETHERNET
ENABLE DC DIRECT?      N ←
ENABLE DEJAVOO?       N
ECR IP                 192.168.1.5
ECR SUBNET             255.255.255.0
ECR GATEWAY            192.168.1.254
```

- a. To **Enable DC Direct** press the **YES/NO** key to select **Y** on the **ENABLE DC Direct?** line.
 - b. To **Enable DEJAVOO** press the **YES/NO** key to select **Y** on the **ENABLE DEJAVOO?** line.
(Do not enable both DC Direct and Dejavo at the same time.)
 - c. Enter the **ECR IP**:
 - * Enter the value **192**, press the **CASH** key.
 - * Enter the value **168**, press the **CASH** key.
 - * Enter the value **1**, press the **CASH** key.
 - * Enter the value **5**, press the **CASH** key.
 - d. Follow the same procedure to enter the values for the **ECR SUBNET** and the **ECR GATEWAY**.
4. When all of the settings are entered, Press **CLEAR** to initialize the network.
 - a. The **Please Wait** message displays.
 - b. Then the ECR **Static IP Setting** is printed on the receipt printer.

Receipt Sample

```
DATE 02/18/2026 TUE TIME 13:13
STATIC IP: 192.168.1.5
CLERK 1          No.000012 00000
```

SD Card Operation

The SD Card Operations allow dealers and merchants to use an SD Card (2GB or less) to Backup and/or Load Program files, Save Reports, Load/Save Receipt image files, or perform Flash ROM firmware updates.

(Flash ROM updates can also be performed through a serial connection to a PC.)

When backing up and restoring program data, an 8-character store name must be programmed in system option programming. The program data is backed up in a separate folder on the SD card named with the store name that is set on page P18 of system options.

Important! An SD Card is required to be installed on the ECR at all times when you are processing credit card transactions using EMV Integrated Credit Card equipment with the ECR. The SPS-300 Series ECR's can support up to 2GB SD cards and must be formatted for FAT32.

Note: The SD slot is located inside the printer compartment. (On the SPS-320, the SD slot is located to the right of the printer mechanism; on the SPS-340 and 345, the SD slot is located to the rear of the receipt printer.) Remove the security screw to access the slot. See page 20 for details.

The SPS-300 Series ECR's can support SD cards up to 2GB according to specifications and the SD Card must be formatted for FAT32.

Caution: A 4GB SD card worked when tested, however we cannot 100% recommend using a 4GB SD. Some report 4GB SD cards work well; some report a 4GB SD does not work.

1. At the **Service Mode** menu, press **9** for SD Card Operation.

The SD CARD OPERATION screen displays:

SD CARD OPERATION	
1. PROGRAM BACKUP	
2. PROGRAM LOAD	3. REPORT BACKUP
4. PRE-IMAGE LOGO LOAD	
5. PRE-IMAGE LOGO BACKUP	
6. POST-IMAGE LOGO LOAD	
7. POST-IMAGE LOGO BACKUP	
8. EACH PROGRAM LOAD	

2. Insert the **SD card** in the register's SD slot.
3. Enter the digit (1-8) corresponding to the function you wish to access. A complete explanation of each function follows.

Note: Option **8. EACH PROGRAM LOAD** was added at firmware version 1.038. This option allows you to choose individual program areas to load. Program areas you can load individually include:

PRESS MENU No. & CASH KEY	
0. PLU	1. GROUP
2. TAX	3. SYSTEM OPTIONS
4. PRINT OPTIONS	5. FUNCTION KEY
6. CLERK	7. LOGO DESC.
8. REPORT LOGO	9. STOCK
10. MISC.	11. MACRO
12. PLU LOOKUP	13. MIX & MATCH

Read Carefully: Store Name Notes

STORE NAME – You must program an 8-character Alpha-Numeric Store name in System Option programming (18th page). This is used to identify program and report data on the SD card. The store name should have no punctuation or other special characters (*?, !, *, -, #, \$, etc.*) other than Alpha-Numeric characters.

You cannot use the default store name “STORE-A”. The program may backup to the SD but may not load back when using the default Store Name “STORE-A”

The Store Name field is 8-characters in length. If the store name is set to less than 8-characters, the 5-digit machine number will be combined with the store name to create a unique 8-character identifier.

For example, if the machine number is “12345” and the store name is only 6-characters “AAAAAA”, the store folders for all of the program backup directories (*PGMBACK, REPBACK and CSVBACK*) will be named “AAAAAA45”. If the store name is only 3-characters “DDD” and the machine number is “12345”, the folder name for all of the program backup directories will be “DDD12345”.

To restore the program, you will need to reset the exact same store name in System Options to match the store name on the SD card. For this reason it is best to use an **8-character store name** in system options.

If you are using the SD Card to back up the ECR program data to use the program or report data with the PC Utility, you must pay close attention to the store name.

- Enter all 8 characters for the Store Name on the ECR.
- Do not use characters such as hyphens “-” or spaces in the Store Name that cannot be used in naming the store file folder on your PC Utility. If you use such a character in your store name, you will not be able to read the backup files on your PC Utility.

NOTES: The SD Card port is located inside the printer compartment. On the SPS-320/325 the SD Port is located to the right of the receipt printer. On the SPS-340/345 the SD Port is located to the rear of the receipt printer.

The SD Card must be 2GB (or less) and formatted for FAT32 before using with the ECR. The ER-900 Series ECR’s can support SD cards up to 2GB according to specifications.

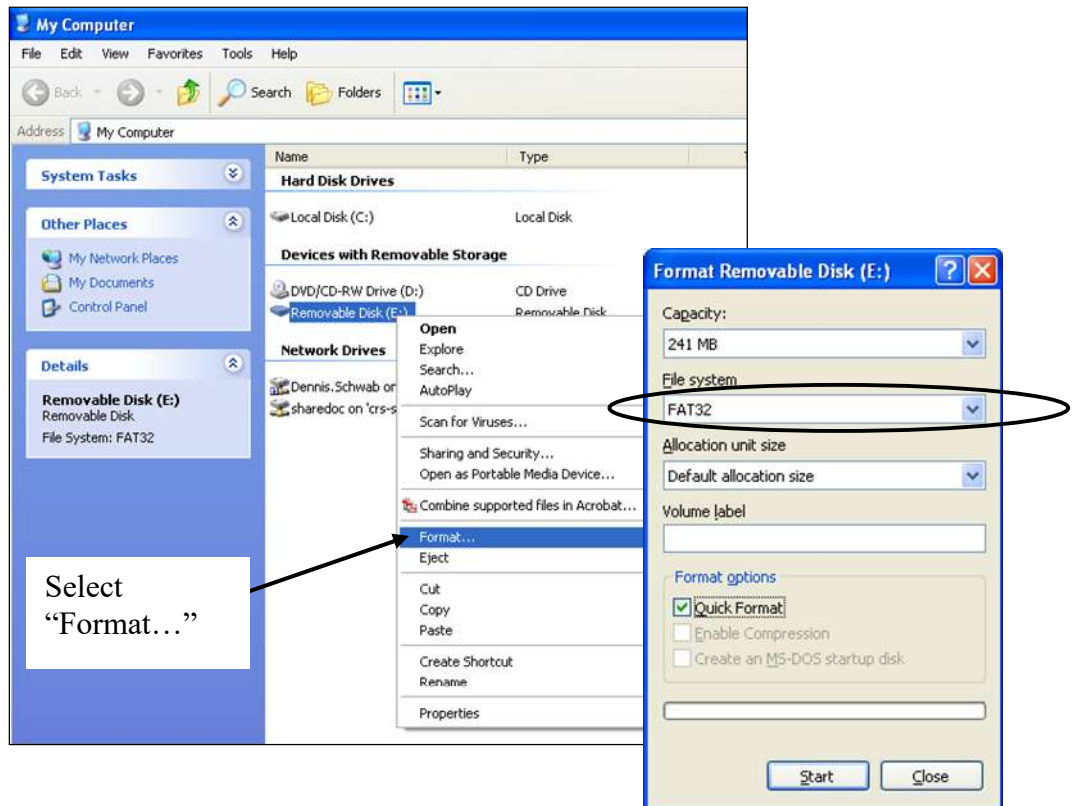
CAUTION! A 4GB SD card worked in some cases when tested, however we cannot 100% recommend using a 4GB SD. Some report 4GB SD cards work well; some report a 4GB SD does not work.

Formatting an SD Card

NOTE: You must use an SD card with a capacity of 2GB or smaller. SD cards must be formatted as FAT 32.

⚠ CAUTION: Formatting the SD card will clear all data on the SD card and prepare it for use.

1. Start Windows Explorer (File Manager).
2. Select the SD card drive (Removable Disk (E:) in the example),
3. **Right click** on the SD Card drive and select **Format**.
(Win XP screen shown; slightly different procedures are used with different operating systems.)



4. From the **Format** dialog, you must select the File System: **FAT32**
5. From the format options check the **Quick Format** selection.
6. Click **Start** to format the SD card.

Program Backup and Load

You can backup and load (restore) all program files using an SD flash memory card (2GB or less & formatted for FAT32). This greatly reduces the time required to program multiple ECR's with the same programming.

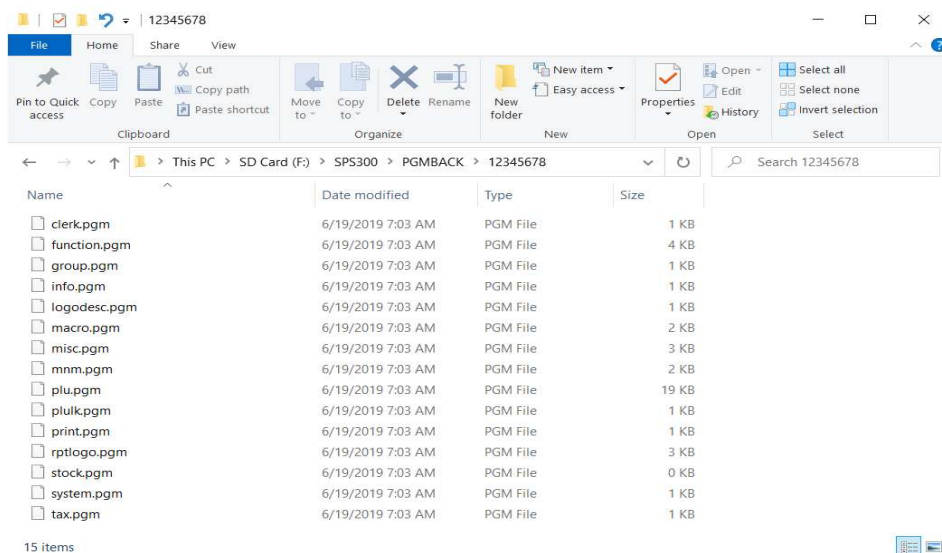
CAUTION! Before backing up or restoring program data, an **8-character store name** must be programmed in **System Option** programming. The program data is backed up in a separate folder on the SD card named with the store name that is set on **System Options page P18**.

The default store name "STORE-A" is only 7-characters and has a "dash" in the name. For this reason it is recommender to enter your own 8-character store name. See page 152 for more information about the store name.

Also Note: To restore your program backup, the memory allocation settings must be programmed to the same or higher values as the saved program. Be sure to print out the memory allocation when backing up the program to SD so that it can be re-entered before restoring the program. From the **S-MODE**: Press **X/Time** on each of the **Memory Allocation** screens.

Program Backup To SD Card

1. Insert the properly formatted SD card in the register's SD slot.
2. Turn the mode switch to the "S" position (*Service-Mode*).
3. Press **5** for Memory Allocation. Press **X/TIME** to print the first memory allocation screen; press **Page Down**, then press **X/TIME** to print the second memory allocation screen. Then press **Clear**.
4. Go to the second page of the Service Mode menu, select **9. SD Card Operation**.
5. From the SD Card Operation menu select **1. Program Backup**.
6. The SPS-300 will write the program files to the folder: **SPS300/PRGBACK/STORENAME** (This is the Store Name as programmed on page P18 of system options.) In the example below, the store name is "12345678".
7. After a short pause, the register will print confirmation of the successful upload with the message "UPLOAD PASS" for each program segment.
8. When you insert the SD into a PC SD Card Reader, you can view the backup file. The image below is an Explorer view of the backed-up files.



Program Load From SD Card

Programs saved to an SD Card can be restored to the same ECR or a different ECR. Before restoring the program from an SD card to an ECR there are a few settings you will need to make.

- **The Firmware version on the ECR the program is being restored to should be the same as the ECR the program was backed up form. If they are different versions you may not be able to restore all program files, refer to the Version Notes document for program areas not to restore.**
- **Memory Allocation cannot be loaded from the backup. The allocation settings must be set at the ECR to the same or higher values than the settings from the saved program on the SD Card.**
- **The same 8-character Store Name must be programmed in System Option 30 on the ECR.**

1. Set the **P-Mode System Option > Store Name:** to match the Store Name of the store folder you wish to restore.
2. Insert the SD card in the register's SD slot.
3. Turn the mode switch to the "**S**" position (*Service Mode*).
4. From the second page of the Service Mode menu, select **9. SD Card Operation**.
5. From the SD Card Operation menu select **2. Program Load**.
6. The register will print a confirmation "PROGRAM DATA SD -> SPS300". Then for each successful program area is downloaded the message "DOWNLOAD PASS" is printed for each successful program area loaded.

Each Program Load

The operation for loading each program area individually was added at firmware version 1.038. This option allows you to select an individual program segment to load. Program components you can load individually include:

1. Enter the Store Name in **P-Mode > System Option > Store Name:** to match the Store Name of the store folder you wish to restore.
2. Insert the SD card in the register's SD slot.
3. Turn the mode switch to the "**S**" position (*Service Mode*).
4. From the second page of the Service Mode menu, select **9. SD Card Operation**.
5. From the SD Card Operation menu select **8. Each Program Load**.
6. From the menu selections, choose the number for the program category you want to load and press the **CASH** key.

PRESS MENU No. & CASH KEY	
0 . PLU	1 . GROUP
2 . TAX	3 . SYSTEM OPTIONS
4 . PRINT OPTIONS	5 . FUNCTION KEY
6 . CLERK	7 . LOGO DESC .
8 . REPORT LOGO	9 . STOCK
10 . MISC .	11 . MACRO
12 . PLU LOOKUP	13 . MIX & MATCH

7. The register will print a confirmation "PROGRAM DATA SD -> SPS300". "DOWNLOAD PASS" for each program segment. Then the message "DOWNLOAD PASS" is printed after the program area loads.
8. Repeat the process for each program category you wish to load.

Report SD Backup

You can choose to save the current X1 report data from the SPS-300 series ECR to an SD memory card. Reports can be saved in .rep file format (*report format*) for viewing with the 300 PC Utility or .csv file format (*spreadsheet format*) that can be opened in Microsoft Excel™.

When backing up and restoring data, an 8-character store name must be programmed in system options (on P18). The default store name is “STORE-A0”.

The SPS-300 will write the program files to different folders depending on whether REP or CSV format is selected.

- **SD:\SPS300\REPBACK\STORENAME\DATE** (for REP format)
- **SD:\SPS300\CSVBACK\STORENAME\DATE\TIME** (for CSV format)

The CSVBACK folder is date stamped in **YYYYMMDD** format. (For example, 20111116 is November 16, 2011.)

The CSVBACK folder is time stamped in military time **1326** format. (For example, 1326 is 1:26 PM.)

Each individual report file backed also has the time the report was backed up.

For example, “**CLK1326**” represents a Clerk report taken at 1:26 PM (in a 24-hour time format.)

In this manner, multiple reports backed up at different times on the same day will collect in the same “date” folder.

The REPBACK folder is date stamped in **YYYYMMDD** format. (For example, 20111116 is November 16, 2011.)

There is no time stamp for the REPBACK file.

The Report SD Backup can also be performed from the X-Mode, see page 106 for details.

1. Turn the mode switch to the “**S**” position (*Service-Mode*).
2. From the second page of the Service Mode menu, select “**9 SD Card Operation**”.
3. From the SD Card Operation menu select “**3 Report Backup**”. The display offers two format choices:
 - Press **0** to save in **.REP** format. The REP format is proprietary and can be viewed using the SAM4s SPS-300 PC Utility.
 - Press **1** to save in **.CSV** format. This format can be read without conversion by many PC applications, including Microsoft Excel™.
4. The register will print a confirmation of the successful report upload with the name of the report and “**UPLOAD**” for each report. If the save is unsuccessful, the register will print an error message.

Successful Receipt Sample

```

DATE 06/10/2022 FRI TIME 13:29
*****
Store Name : SAM4S300
*****
REPORT (X1) SPS300->SD
*****
FINANCIAL UPLOAD
TIME REPORT UPLOAD
PLU REPORT UPLOAD
CLERK REPORT UPLOAD
GROUP REPORT UPLOAD
DAY REPORT UPLOAD
STOCK REPORT UPLOAD
TABLE REPORT UPLOAD
MIX & MATCH REPORT UPLOAD
EJ REPORT UPLOAD
CLERK 1          000034  0000
    
```











Unsuccessful Receipt Sample

```

DATE 06/10/2022 FRI TIME 13:39
*****
Store Name : SAM4S300
*****
REPORT (X1) SPS300->SD
*****
SD TEST : Initial Error!
CLERK 1          000034  0000
    
```











SD:\SPS300\CSVBACK\ SAM4S300\20250612\0812

```

 CLK00812.csv
 DAY00812.csv
 EJ_00812.csv
 FIN00812.csv
 GRP00812.csv
 MNM00812.csv
 PLU00812.csv
 STK00812.csv
 TBL00812.csv
 TIM00812.csv
    
```

SD:\SPS300\REPBACK\ SAM4S300\20250612

```

 CLK00812.rep
 DAY00812.rep
 EJ_00812.rep
 FIN00812.rep
 GRP00812.rep
 MNM00812.rep
 PLU00812.rep
 STK00812.rep
 TBL00812.rep
 TIM00812.rep
    
```

Load/Save Receipt Images

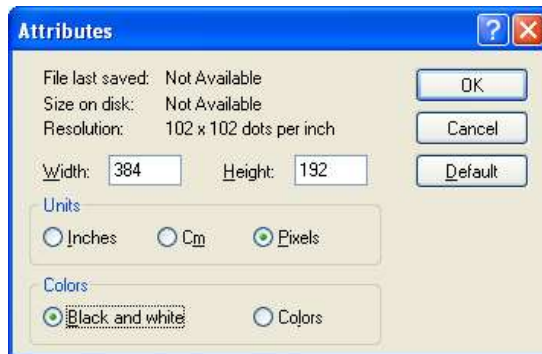
If desired, you can load a customized preamble and postamble image for your receipt or soft guest check. Before loading, the images must be converted by the PC Utility to .img format. After conversion, they can be loaded directly by connecting a PC to the SPS-300 or by copying the images to a SD card and loading (or saving the image) using the SD utility program described here.

NOTE: After loading the images to the ECR you must set the Print Options on page P14 of the Print Options: PRE-PRN GRAPHIC LOGO & POST-PRN GRAPHIC LOGO ON RECEIPT to activate the image printing.

Preparing a Graphic Logo Bitmap for an SPS-300 Series

The image must be black/white, 384 x 192 pixels, and 10 Kbytes or less in size.

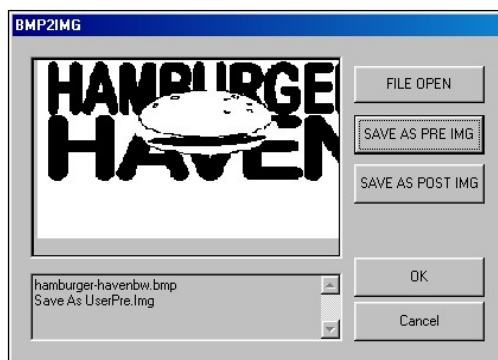
1. Open MS Paint.
2. Open the **image file** you wish to use.
3. Choose **Attributes** from the **Image** menu. The **Attributes** dialog box displays.



4. The image dimensions must be no larger than 384 pixels wide by 192 pixels high. If the image size in pixels is greater than the maximum, you must resize your image.
 - a. Click **OK** to exit the Attributes dialog.
 - b. Select your image. (Choose **Select All** from the **Edit** menu.)
 - c. Using the handles of the selected image, resize the image. Keep the image in the upper left corner of the screen.
 - d. Choose **Attributes** from the **Image** menu. The **Attributes** dialog box displays again. Enter 384 in the **Width** field; enter 192 in the **Height** field; select **Pixels** as the unit. Click **OK** to exit the dialog box.
 - e. Your image will be cropped to the 384 x 192 pixel size. If you cropped part of the image you wish to keep, you can undo (Ctrl + Z) and try again. You may have to experiment a bit to resize the image inside the 384 x 192 pixel limit.
5. After the image is sized, select **Black and white** in the **Attributes** dialog.
6. Save your image as type “Monochrome Bitmap (*.bmp,*.dib)” and confirm that the size is 10k or less. If you resized your original image, you may wish to rename when you save, so that you preserve a copy of the original image.

Use the PC Utility to Convert the Image

1. Install the *SPS-300 PC Utility* on your PC.
2. At your PC, start the SPS300 PC Utility. (Select **Start, Programs, SHC PC UTILITY, SPS300 PC UTILITY.**) The **Store Setting** dialog box displays.
3. If you are starting the SPS300 PC Utility for the first time, you must define a store name, or if a store is already defined, you can select the store from the drop-down list. After the store is defined or selected, click **Close**. The PC Utility program starts.
4. Move the bitmap (.bmp) logos you wish to use into the store directory (i.e. C:\SPS-300PC\storename.)
5. At the PC Utility, choose **Convert Logo Image** from the **Utility** menu. The Bmp dialog box displays.
6. Click **FILE OPEN**. Select the bitmap image you wish to use from the **Open** dialog and click the **Open** command button.
7. Click the **SAVE AS PRE IMG** or **SAVE AS POST IMG** button.



8. When the image is selected, click **OK**. Verify that the message “Save As UserPre.Img” or “Save As UserPost.Img” displays. If the file is too large, and cannot be loaded, the message “File Size Error” displays.

Copy the Images to an SD Card

The PC Utility will create two image files:

- USERPRE.IMG
- USERPOST.IMG

They will be located on your PC at:

C:\SPS-300PC\Store Name

Copy the mages to the following path on your SD card:

SD\SPS300\PGMBACK\Store Name

Important: In the path: C:\SPS-300PC\Store Name, the store name is the name you have defined as the store in the PC Utility. **Note:** You must use the same store name in the SPS-300 Series ECR at System Options page 18. **Note** that the default store name is “STORE-A”.

Load the Images by SD Card

1. **Insert the SD card** in the register's SD slot.
2. Turn the mode switch to the "**S**" position (*Service-Mode*).
3. From the second page of the Service Mode menu, select "**9 SD Card Operation**".
4. From the SD Card Operation menu select "**4 PRE-IMAGE LOGO LOAD**".
5. The message "PREAMBLE LOGO LOADED!" will print on the receipt printer.

NOTE: After loading the images to the ECR you must set the Print Options on page P14: PRE-PRN GRAPHIC LOGO & POST-PRN GRAPHIC LOGO ON RECEIPT to activate the image printing.

Saving Images from an SPS-300 to an SD Card

1. **Insert the SD card** in the register's SD slot.
2. Turn the mode switch to the "**S**" position (*Service-Mode*).
3. From the second page of the Service Mode menu, select "**9 SD Card Operation**".
4. From the SD Card Operation menu select "**5 PRE-IMAGE LOGO BACKUP**".
5. The message "PREAMBLE LOGO BACKUP!" will print on the receipt printer.

Flash ROM Updates

The SPS-300 series register software is loaded in flash ROM. This program may occasionally be updated by the manufacturer. Your SAM4s dealer can update the software if necessary.

The Flash ROM can be loaded from a PC using the NEWNET_DOWN Utility or by SD card.

CAUTION: Flash ROM updates by either method must be done by a qualified, trained technician. **DO NOT POWER OFF OR ABORT** during any program loading once the procedure has started. Failure to follow the procedures exactly may cause the program to load incompletely and for the register to fail completely.

Flash ROM Update by SD

The SPS-300 Flash ROM program is contained in a file named **SPS300.BIN**. This file will be provided to the authorized dealer by CRS, Inc. and contains both the Boot program area and the Application program area. You will need to load both the Boot and Application area when updating the SPS-300.

1. At your PC, format the SD Card for **FAT32**. (Refer to "Formatting an SD Card" on page 153 for this procedure.)
2. Create a folder named **update** in the root of the SD card.
3. Copy the **SPS300.bin** file into the update folder: **SD:\update\SPS300.bin**
4. Insert the SD card into the register.

(The SD slot is located inside the printer compartment. Remove the security screw and open the flap securing the SD slot. Insert the SD card until you hear a click and the SD card is locked in.)

Boot Area Update

5. At the SPS-300, turn the mode switch to the "**S**" position (*Service-Mode*).
6. Power **OFF** the SPS-300.
7. Press and hold the Numeral **1** key on the keyboard. While continuing to hold the Numeral **1** key, turn **ON** the power switch.
8. A rapid **beep-beep-beep** will be heard. Release the Numeral 1 Key.
9. The display the display will flash slowly at first and then will flash rapidly.
When the load is complete (about 5 seconds), a rapid **beep-beep-beep** will be heard again the display will stop flashing and display a green color to confirm update completion.
10. Turn the ECR power switch **OFF** and proceed directly to the next step: Application Area Update.

Application Area Update

11. Set the mode switch to the "**S**" position (*Service-Mode*).
12. Press and hold the Numeral **2** key on the keyboard. While continuing to hold the Numeral **2** key, turn **ON** the power switch.
13. A rapid **beep-beep-beep** will be heard. Release the Numeral 2 Key.
The display will flash (Current program is being erased), after a few seconds, the display will continue to flash, but at a slower rate. This continues for about 1-minute while the new program is being loaded.
When the load is complete, a rapid beep-beep-beep will be heard again and the display will stop flashing and display a green color to confirm update completion.
14. Power the register **OFF**. The FLASH ROM update is complete.
15. Remove the SD card from the register.
16. Perform a **MEMORY ALL CLEAR** on the ECR. Refer to the "Clearing Memory" section on page 35 for details. The ECR is now ready to program or to load a previously saved end-user program.

Flash ROM Update by PC Utility

Update Files

To complete the firmware update, you will be supplied with the following files:

- NEWNET_DOWN.exe (The update utility program)
- SPS300.bin

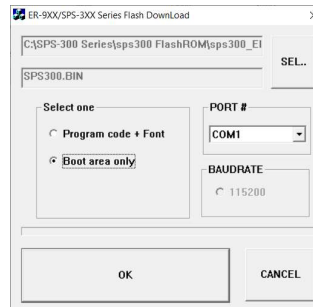
PC Connection Cable

YOU MUST USE Port #1. Use the following cable:

- CRS Part # 522120 (Register DB-9MF COM 1 to PC DB-9F)

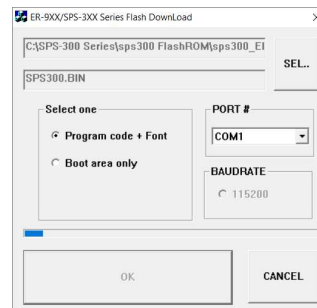
Update Boot Area

1. Connect the **Serial Cable** from ECR to PC.
2. At the register, turn the mode switch to the “**S**” position (*Service-Mode*).
3. Turn the power switch to the **OFF** position.
4. Press and hold the **CASH** and **CLERK** keys. (Use the keys in their default locations, the upper-right and lower-right keys on the keyboard.)
5. While continuing to hold the **CASH** and **CLERK** keys, turn the power switch to the **ON** position. (The display will illuminate and the error tone will sound beep-beep-beep in quick succession.) Release the keys.
6. At the PC, execute the program **NEWNET_DOWN.exe**. The Download dialog box displays.



7. Select the appropriate com port connection at your **PC** at the **PORT#** option buttons.
8. Click **SEL...** find the folder where the update files are located and select SPS300.bin.
9. Select **Boot Area Only** in the **Select One** option buttons.

10. Press **OK** Button. The download takes about 30 seconds; the scroll bar will track the progress of the download. At the ECR, the display will flash slowly while the update is taking place.

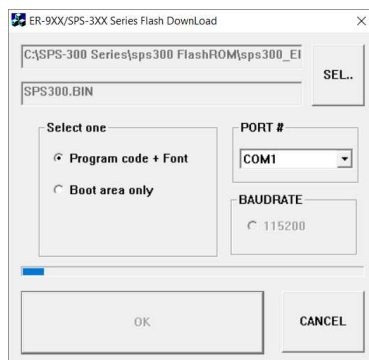


11. When complete, the message Completed displays on the PC. Click **OK** and the Download program will close. At the ECR, the display will change to a green color indicating the update is complete. Turn the power switch **OFF**.

Update Program Area

12. Connect the **Serial Cable** from ECR to PC.
13. At the register, turn the mode switch to the “**S**” position (*Service-Mode*).
14. Turn the power switch to the **OFF** position.
15. Press and hold the **CASH** and **CLERK** keys. (Use the keys in their default locations, the upper-right and lower-right keys on the keyboard.)
16. While continuing to hold the **CASH** and **CLERK** keys, turn the power switch to the ON position. (The display will illuminate and the error tone will sound *beep-beep-beep* in quick succession.) Release the keys.
17. At the PC, execute the program “**NEWNET_DOWN.exe**”. The Download dialog box displays.
18. Select the appropriate com port connection at your **PC** at the **PORT#** option buttons.
19. Click **SEL...** find the folder where the update files are located and select SPS300.bin.
20. Select **Program code + Font** in the **Select One** option buttons.
21. Press **OK** Button.

The download takes about 3 minutes. At the PC, the scroll bar will track the progress of the download. At the ECR, the display will flash (Current program is being erased), after a few seconds, the display will continue to flash, but at a slower rate. This continues for about 3 minutes while the new program is being loaded.

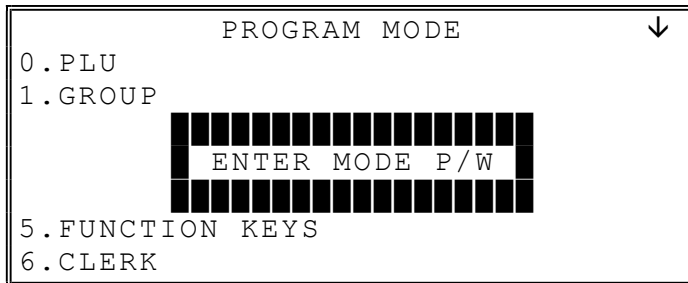


22. When complete, the message **Completed** displays at the PC. Click **OK** and the Download program will close. At the ECR, when the load is complete, a rapid *beep-beep-beep* will be heard, and the display will flash rapidly. Turn the power switch to **OFF**, the program update is complete.
23. Perform a **MEMORY ALL CLEAR** on the ECR. Refer to the “Clearing Memory” section on page 35 for details. The ECR is now ready to program or to load a previously saved end-user program.
24. Disconnect the PC cable.

Entry Password

Password control for access to the P-Mode Menu was added in version v1.059 and later. Refer to the “**P-Mode Password**” on page 277 in the Appendix for programming and operation details. Elements of the feature include:

1. The **System Option: Use Mode Password** (*on P20*) must be set to enable password control of **P-Mode**.
2. In the **Service Mode: DEC. ENTRY PASSWORD**, Enter a four-digit numeric Entry Password.
Note: DEC. Refers to the decimal key (.) on the numeric keypad.
3. When you turn the control key to **PGM**, the **ENTER MODE P/W** dialog displays on the screen.



4. Press CLERK, Enter the 4-digit password, Press CLERK
5. If the correct password is entered, the **PROGRAM MODE** screen opens.

Clear Current Batch

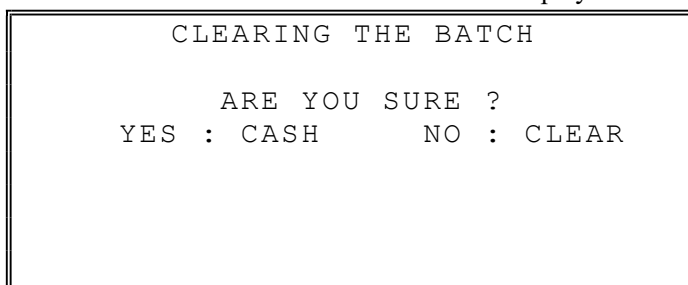
The clear batch command erases all Credit Card transactions in the current batch stored in the integrated credit equipment memory even if the transactions have not been settled.

Warning: This operation is not reversable and cannot be undone, all currently save credit card transactions will be cleared from the integrated credit equipment!

This operation should only be performed under the direction of DATACAP.

If this is a Non-EMV installation: A LOCAL TRANSACTION INQUIRY should be printed prior to clearing the batch. This will ensure that the operator has the transaction detail to re-enter if required.

1. From the **Service Mode** , press **00** to access the **CLEAR CURR. BATCH** operation.
2. The confirmation screen **CLEARING THE BATCH** is displayed.



3. Press **CASH** for **Yes** or press **CLEAR** for **No**.

Note: This is not a valid operation on EMV - there is no batch transaction information stored at the ECR or Tran. All transaction information resides at processor only.

Program Mode Programming

Default Program

Before programming the register perform the Memory All Clear procedure on the ECR, when the Memory All Clear is performed on the SPS-300 series ECR it is loaded with a default program. Program options and all settings are set a default setting, which means the cash register can be operated immediately after a Memory All Clear procedure is performed. Refer to page 35 for details about “Clearing Memory” on the ECR.

After the Memory All Clear is performed you will need to set the memory allocation as necessary for your program requirements. Refer to page 140 for details about “Memory Allocation” settings.

Warning! Do not change the memory allocation settings after your system has been programmed and installed, all programming, totals, and counters will be cleared.

NOTE: The DC Direct integrated credit interface was added beginning at v02.000. Datacap DC Direct API is a semi-integrated solution (Out of Scope) for processing electronic payments with SPS-300 Series ECR’s.

Programming Notes:

- Option settings can be toggled between Yes & No by pressing the **YES/NO** function key; after changing a selection you must press the **CASH** key (when prompted to press **ENTER**) set the new setting and advance to the next option.
- You can also use the **CASH** key to advance to the next option setting without making a change. Just press the **CASH** key repeatedly until the desired option is selected.
- The **Page Up****Page Down** keys can be used to advance to the next page or go back to the previous page. This is quicker when advancing through option settings, such as System Options & Print Options where there are multiple pages of settings.
- Press the **CLEAR** key to **ESCAPE** \ **EXIT** out of the program area.

Descriptor Programming Methods

Descriptors are programmable for PLU's, function keys, groups, clerks and the logo/messages. There are two methods available to program descriptors, the *Program Overlay Method* and the *Descriptor Code Method*. This chapter describes both methods. Refer to each program area for specific steps for programming descriptors for PLU's, groups, function keys, etc.

- * The Alpha Keyboard Overlays can be found on page 165 ~ 166
- * The Descriptor Code Chart can be found on page 167

Program Overlay Method

SPS-320/SPS-340 Alpha Keyboard Overlay

This method is the default descriptor program method for the flat keyboard models SPS-320 and SPS-340 when the system option PROGRAM DESC BY CODE = N. When the descriptor field is selected on the program screen, you can simply type the descriptor placing a copy of the overlay over the keyboard: Press enter to finalize your descriptor.

1	11	21	31	41	51	61	71	81	91	FEED	JOURNAL FEED			
2	12	22	32	42	52	62	72	82	92					
'	"	<	>	-	+	=	:	?						
!	@	#	\$	%	^	&	*	()					
q	w	e	r	t	y	u	i	o	p		PAGE UP	YES/NO	PAGE DOWN	
a	s	d	f	g	h	j	k	l	;		CLEAR	PLU	X/TIME	
z	x	c	v	b	n	m	,	.	/		7	8	9	
CAP	DOUBLE	SPACE	SPACE	SPACE	SPACE	SPACE	CAP	DOUBLE	BACK		4	5	6	
9	19	29	39	49	59	69	79	89	99		1	2	3	SBTL
10	20	30	40	50	60	70	80	90	100		0	00	.	CASH

NOTE: Use the CAP keys to toggle between upper and lower case characters.

SPS-345 Alpha Keyboard Overlay

Descriptor programming by alpha code entry is the default program method for the SPS-345 when the system option PROGRAM DESC BY CODE = Y. The standard configuration of this model has 21 keyboard PLU locations and will not support descriptor programming by keyboard overlay.

However, if the SPS-345 keyboard is expanded to 63 keyboard locations, using the overlay descriptor programming is available by setting the system option PROGRAM DESC BY CODE = N. The Alpha Overlay for the expanded/raised keyboard is shown below.

Because SPS-345 key labels are inserted individually underneath the key cap, the overlay function should accompany the key's normal function on the key check, perhaps by placing the alpha function in a corner of the key. The keyboard below shows the placement of alpha function on the expanded SPS-345 keyboard.

A	H	O	V	#	)	"	SPACE		FEED	JOURNAL FEED			
B	I	P	W	\$	-	,	SPACE						
C	J	Q	X	%	+	.	CAP		CLEAR	PLU	X/TIME		
D	K	R	Y	^	=	/	DOUBLE		7	8	8		
E	L	S	Z	&	;	<	BACK		4	5	5	SUBTOTAL	
F	M	T	!	*	:	>			1	2	2	CASH TEND	
G	N	U	@	(	'	?			0	00	.		

NOTE: Use the CAP keys to toggle between upper and lower case characters.

Descriptor Code Method

If you customize your keyboard by covering key locations, or by installing double or quad size keys, you will need to program descriptors using the descriptor code method.

Refer to “System Option Programming” on page 183. 89You must set the system option PROGRAM DESC BY CODE = Y (found on page P17 of System Options) to use the descriptor code method.

Program Sequence

1. With the cursor pointed at a descriptor field, refer to the Descriptor Code Chart below and type the code for the first character. Press the decimal [.] key.
2. For each additional character, type the code and press the decimal key. Each character will be displayed as it is entered.
3. Press **CASH** when the descriptor is complete.

Program Example

To program the descriptor "APPLE", type:

[65] [.] [80] [.] [80] [.] [76] [.] [69] [.] [CASH]
 A P P L E

Note:

For lower case characters enter **98** after the descriptor code.

a = [6598] [.] [CASH]

For example, To program the descriptor "Apple" type:

[65] [.] [8098] [.] [8098] [.] [7698] [.] [6998] [.] [CASH]
 A p p l e

For DOUBLE wide (**BOLD**) characters enter **99** after the descriptor code. For example:

A = [6599] [.] [CASH]

Descriptor Code Chart

Char.	Space	!	"	#	\$	%	&	'	()
Code	32	33	34	35	36	37	38	39	40	41
Char.	*	+	,	-	.	/	0	1	2	3
Code	42	43	44	45	46	47	48	49	50	51
Char.	4	5	6	7	8	9	:	;	<	=
Code	52	53	54	55	56	57	58	59	60	61
Char.	>	?	@	A	B	C	D	E	F	G
Code	62	63	64	65	66	67	68	69	70	71
Char.	H	I	J	K	L	M	N	O	P	Q
Code	72	73	74	75	76	77	78	79	80	81
Char.	R	S	T	U	V	W	X	Y	Z	[
Code	82	83	84	85	86	87	88	89	90	91
Char.	\	\]	^	_		Back-space	CAPS	Double	1line Delete	
Code	92	93	94	95	96	97	98	99	0	

Program Mode Menu

1. Turn the mode switch to the **PGM** position. The first page of the **PROGRAM MODE** menu displays:

```
PROGRAM MODE ↓
0.PLU
1.GROUP
2.SALES TAX
3.SYSTEM OPTION
4.PRINT OPTION
5.FUNCTION KEYS
6.CLERK
```

2. Press **PAGE DOWN** to view the remainder of the **PROGRAM MODE** menu:

```
PROGRAM MODE ↑
7.LOGO DESCRIPTOR
8.NLU CODE# PROGRAM
9.DOWNLOAD PROGRAMS
00.MORE
```

3. Press **00** to view the **MORE PROGRAMS** menu:

```
PROGRAM MODE P1 ↓
0.CLERK IN/OUT
1.PLU STOCK
2.DRAWER LIMIT
3.CHECK CHANGE LIMIT
4.TIME & DATE
5.TARE WEIGHT
6.MACRO
```

4. Press **PAGE DOWN** to view the remainder of the **PROGRAM MODE** page 2 menu:

```
PROGRAM MODE P2 ↑
7.MACHINE NO.
8.PC SCHEDULE TIME
9.TRAINING MODE P/W
DEC.LEVEL ACTIVATE TIME
00.SCAN
```

PLU Programming

To accommodate UPC scanning, each PLU can be given an identifying number up to 14 digits in length.

1. At the **PGM** mode switch position menu, press **0** for PLU Programming. The **PLU PROGRAMMING** screen displays:

```
PLU PROGRAMMING

0 .ADD/MODIFY PLU
1 .DELETE PLU
```

Add/Modify PLU

1. Press **0** to add or modify a PLU. The **PLU NUMBER** screen displays:

```
PLU NUMBER

* ENTER PLU NUMBER
AND PUSH PLU, OR
* PRESS A PLU KEY ON
THE KEYBOARD

0 ←
```

2. To view the **PLU # PROGRAMMING** screen:
 - Enter the number for the PLU you wish to program and press the PLU function key, or
 - Press a PLU key located on the keyboard, or
 - Press a modifier key followed by a PLU key located on the keyboard, or
 - Scan the barcode on an item.
3. Refer to “PLU Options – Reference Information” on page 171 to make program entries or changes, press the **CLEAR** key to finalize and return to the **PROGRAM MODE** screen.

Descriptor → Type the descriptor using the Program Overlay, or by using the descriptor code method (see page 117.) The overlay is automatically activated when the cursor is pointing at the DESC field.

```

PLU#                               1 P1
DESC: PLU1                          ←
PRESET                               Y
PRICE/HALO1                          0.00

```

Press **ENTER** to advance the arrow to the next option.

Press **YES/NO** key to toggle from "Y" to "N" for Yes or No decisions.

The # of PRICE/HALO fields displayed is determined by memory allocation.

```

PLU#                               1 P2 ←
PRESET OVERRIDE                      Y ←
TAXable BY:                          1 2 3 4
                                       N N N N
FOOD STMP ELIGIBLE                   N
GROUP #1 (1-20)                       1
GROUP #2 (1-20)                       0
GROUP #3 (1-20)                       0

```

Press **PAGE DOWN** to view the second PLU Programming screen. Press **PAGE UP** once to return to the first option on a screen. Press **PAGE UP** again to return to the previous screen.

```

PLU#                               1 P3 ←
NEGATIVE ITEM                         N ←
HASH                                  N
SINGLE ITEM                            N
NON-ADD # COMP.                       N
GALLONAGE ITEM                        N
INVENTORY ITEM                        N
DISABLE                               N

```

Press **PAGE DOWN** to view the third PLU Programming screen.

```

PLU#                               1 P4 ←
SCALABLE                              N ←
AUTO SCALE                             N
AUTO TARE (1-5)                        0
CONDIMENT                              N
COMP. CONDIMENT                        N
PRINT ON RECEIPT                       Y
PRINT ON DISPLAY                       Y

```

Press **PAGE DOWN** to view the fourth PLU Programming screen.

```

PLU# 1 P5
PRINT ON CHECK Y←
PRINT PRICE ON RECEIPT Y
PRINT PRICE ON CHECK Y
DISABLE PROMO N
COUNTER NOT RESET N
PRESET OVERRIDE
IN MGR CONTROL N

```

Press **PAGE DOWN** to view the 5th PLU Programming screen.

If you wish the registration of this PLU to automatically cause the registration of another PLU, Enter the PLU # you wish to link with the 10-key pad. Enter '0' for no link.

```

PLU# 1 P6
LINK PLU:
MIX&MATCH (1-99) 0
DISABLE VOID MODE & RETURN N

```

Press **PAGE DOWN** to view the 6th and last PLU Programming screen.

PLU Options - Reference Information

Option	Entry	Description
DESC	Alphanumeric 18 character	You can program up to an 18-character descriptor for each PLU. Note: Only 12-characters are sent to a Kitchen Printer if used. Also Note: Double wide characters will count as two characters. Type the descriptor using the Program Overlay, or by using the descriptor code method (see page 167.) The overlay is automatically activated when the cursor is on the DESC field. The default descriptors are PLU #1, PLU #2, etc.
PRESET	Y or N	Choose Y for a preset PLU. Choose N for an open PLU. Open PLU's accept amount entries. Use open PLU's to enter different priced items into the same PLU. Preset PLU's automatically register a preprogrammed price when the PLU is entered. Use preset PLU's to register an individual item quickly and accurately. For example, cigarette packs or food items can be assigned to PLU's.
PRICE/HALO1 PRICE/HALO2 PRICE/HALO3 PRICE/HALO4 PRICE/HALO5	7-digit amount	Up to five price levels are available. (Note that price level fields 2-5 will display only if you allocate memory for additional price levels.) If the PLU is open, the amount entered here is the high amount lock out (HALO). You can limit errors by setting the maximum amount that can be entered into a PLU. If the PLU is preset, the amount entered here is the amount that is registered automatically when the PLU is entered.
PRESET OVERRIDE	Y or N	If Y , you can enter a price to override the preset Price/HALO.

Option	Entry	Description
TAXable BY TAX1 TAXable BY TAX2 TAXable BY TAX3 TAXable BY TAX4	Y or N	Select N for non-taxable items. Select Y to apply the appropriate tax automatically for this PLU.
FOOD STMP ELIGIBLE	Y or N	Select Y to accumulate a total of food stamp eligible items in the current sale. The total can be viewed by pressing the F/S SUB key and food stamps can be tendered with the F/S TEND key.
GROUP #1 GROUP #2 GROUP #3	0-99	For each of three group assignments, enter a group where this PLU's sales will accumulate. The number of groups available is determined by memory allocation.
NEGATIVE ITEM	Y or N	Select Y to register items that subtract, rather than add to the sale total.
HASH	Y or N	Items designated with HASH status add to the current sale, but do not add to the registers grand total. HASH items may or may not add to the net sales total - see system option programming. Use hash for lottery sales or bottle deposits.
SINGLE ITEM	Y or N	Select Y for a single item PLU. Single item PLU's automatically total as a cash sale immediately after the PLU entry. Single item PLU's are used to speed up one item sales.
NON-ADD # COMP	Y or N	Select Y to enforce the non-add number entry before the item is registered.
GALLONAGE ITEM	Y or N	Select Y to compute gallons sold. The gallons sold will print along with the price entry on the receipt. The total gallons sold will accumulate in the PLU counter. You must program the price per gallon (in tenths of a cent, i.e. \$1.299 for \$1.29 and 9/10) in the PRICE/HALO field.
INVENTORY ITEM	Y or N	Select Y if you wish to track the number of items remaining in inventory using the Stock report.
DISABLE	Y or N	Select Y to disable the PLU. Entries cannot be made into disabled PLU's.
SCALABLE	Y or N	If Y , the PLU will work only when you are multiplying a weight from an optional scale or when multiplying a manually entered weight. (For example, enter weight, press SCALE , then register PLU.)
AUTO SCALE	Y or N	Select Y if you wish entries into this PLU to be automatically multiplied by the weight on the optional scale
AUTO TARE (1-5)	0-5	Enter a value (1-5) to indicate the number of the preprogrammed tare weight you want to automatically subtract when the PLU is used for a scale entry (using an optional scale). Enter 0 to disable automatic tare subtraction.
CONDIMENT	Y or N	Select Y if you wish the item to act like a condiment on the kitchen printer. Items with this status will satisfy the requirements of items with compulsory condiment status.
COMPULSORY CONDIMENT	Y or N	Select Y if you wish to force the entry of a condiment after this item is entered.
PRINT ON RECEIPT PRINT ON DISPLAY PRINT ON CHECK	Y or N	Select N if you wish to suppress printing (or display) of the item at the designated location.
PRT PRICE ON RCPT	Y or N	Select N if you wish to suppress printing of the item's price on the receipt.
PRT PRICE ON CHK	Y or N	Select N if you wish to suppress printing of the item's price on the check.
DISABLE PROMO	Y or N	Select Y to block the PROMO function on this PLU.
COUNTER NOT RESET	Y or N	Select Y if you do not wish to reset the PLU item counter on the Z PLU report.
PRESET OVERRIDE IN MGR CONTROL	Y or N	If preset override is Y , then you can force manager control for preset override by setting this option to Y .

Option	Entry	Description
LINK PLU	14 digits maximum	If you wish the registration of this PLU to automatically cause the registration of another PLU, enter the PLU # you wish to link with the 10-key pad. Enter 0 for no link.
MIX&MATCH# (1-99)	0 - 99	Enter a value from 1 to 99 to indicate the number of the preprogrammed MIX & MATCH TABLE this PLU is associated with. Enter 0 to disable.
DISABLE VOID MODE & RETURN	Y or N	If N, you cannot correct this PLU through void mode nor can you perform a merchandise return of this PLU item. The Y value is recommended when using liquor control systems.

Delete PLU

Note: To delete PLU's, all totals for the PLU's must be cleared from Z reports including Stock, PLU Daily & Period reports and Reset Not Found PLU.

- From the **PLU PROGRAMMING** screen, press **1** to display the **DELETE PLU** screen:

```

DELETE PLU

0 .DELETE ONE PLU
1 .DELETE PLU RANGE

```

- Press **0** to delete an individual PLU. The **PLU NUMBER** screen displays:

```

PLU NUMBER
* ENTER PLU NUMBER
AND PUSH PLU, OR
* PRESS A PLU KEY ON
THE KEYBOARD

0 ←

```

- Enter the number of the PLU you wish to delete, or press a PLU key on the keyboard, or press modifier key followed by the PLU key on the keyboard. The **CONFIRM DELETE** screen displays:

```

CONFIRM DELETE

ARE YOU SURE YOU
WISH TO DELETE PLU#           963

CASH=DELETE
CLEAR=ABORT

```

- Press **CASH** to delete the PLU; press **CLEAR** to return to the **PLU DELETE** screen without deleting.

Delete PLU Range

Note: To delete PLU's, all totals for the PLU's must be cleared from Z reports including Stock, PLU Daily & Period reports and Reset Not Found PLU.

1. From the **PLU PROGRAMMING** screen, press **1** for to display the **DELETE PLU** screen:

```
DELETE PLU
0.DELETE ONE PLU
1.DELETE PLU RANGE
```

2. Press **1** to delete a range of PLU's. The **PLU NUMBER** screen displays:

```
PLU NUMBER
* ENTER NUMBER OF
THE FIRST PLU IN THE RANGE
AND PUSH PLU
0 ←
```

3. Enter the number of the first PLU in the range you wish to delete and press PLU. The screen prompts for the last PLU in the range:

```
PLU NUMBER
* ENTER NUMBER OF
THE LAST PLU IN THE RANGE
AND PUSH PLU
0 ←
```

4. Enter the number of the last PLU in the range you wish to delete and press PLU. The **CONFIRM DELETE** screen displays:

```
CONFIRM DELETE
ARE YOU SURE YOU
WISH TO DELETE PLU#
1234 TO
1240
CASH=DELETE
CLEAR=ABORT
```

5. Press **CASH** to delete the PLU; press **CLEAR** to return to the **PLU DELETE** screen without deleting the PLU.

Group Programming

Up to 99 groups (*the exact number is determined by memory allocation*) are available to summarize PLU sales. Group totals appear on reports, so that you can track sales of different types of items.

- The group descriptors programmed here will replace the default descriptors GROUP 1 through GROUP 99 that appear on reports. You can program up to a 12-character descriptor for each group.
- Each PLU can report totals to one, two or three different groups. If a PLU sends totals to more than one group, the group total that appears on the Group report will not represent PLU sales. Therefore, you also have the option of deciding whether each group's total will add to the group total on the Group report.

Programming Groups

1. At the **PGM** mode switch position menu, press **1** for **GROUP**. The **GROUP PROGRAMMING** screen displays: (The maximum group number is set by memory allocation.)

```

GROUP PROGRAMMING

GROUP NO? (1-20)                0 ←
  
```

2. Enter the number of the group to be programmed, press **CASH**. The **GROUP# PROGRAMMING** screen displays:

```

GROUP #1 PROGRAMMING
DESC : GROUP 1                      ←
ADD TO GROUP TTL                    Y
SEND TO KP                          N
KP PORT# :                          1 2 3 4 R
SAT.                                N N N N Y
SER.                                N N N N
PRINT RED ON KP                     N
  
```

3. Press **PAGE DOWN** to view the second page of group programming:

```

GROUP #1 PROGRAMMING
RESERVED
RESERVED
RESERVED
GIFT CARD (1-2)                    0 ←
  1:ACTIVATE    2:ADD
AGE VERIFICATION (0-5)            0
  
```

4. Refer to the table below to fill the fields of the **GROUP PROGRAMMING** screens.
5. Press **CASH** to return to the **GROUP PROGRAMMING** screen. Continue to program groups as necessary. Press **CLEAR** to return to the **PROGRAM MODE** screen.

Group Programming - Reference Information

Option	Entry	Description
DESC	Alphanumeric 12 character	The default descriptors are GROUP 1, GROUP 2, etc. You can program a unique descriptor for each group. Type the descriptor using the Program Overlay or by using the descriptor code method (see page 167.). The overlay is automatically activated when the cursor is on the DESC field.
ADD TO GROUP TOTAL	Y or N	Select N if you do not wish this groups total to be added to the total of all groups on the Group report.
SEND TO KP	Y or N	Select Y if you wish to send PLU's reporting to this group to a kitchen printer.
KP PORT #	Y or N	The KP Port # settings are only used when the option Send To KP = Y. SAT: Select Y or N to direct KP items to the device attached to a serial port (1-4) on this register. Use the R option (Y or N) to control the KP printing at this registers receipt printer. SER: Select Y or N to direct items to the shared KP attached to the server register serial port (1-4). You must set the register number where the Shared KP is attached in IRC Options programming, see page 145.
PRINT RED ON KP	Y or N	Select Y if you wish items reporting to this group to print in red on the kitchen printer. Notes: The kitchen printer must have red/black printing capability. This option does not apply to the register receipt printer. This option has no effect on E-PAD\KVS.
GIFT CARD	0, 1 or 2	If a PLU in this group is used to register a new gift card, select 1 for "activate". If a PLU in this group is used to add a value to an existing gift card, select 2 for "add". For normal PLU registrations use the default value of "0".
AGE VERIFICATION	0-5	When an item in this group is registered (first time in a transaction only), the register will prompt the operator to enter the customer's date of birth. The sale of the item will be registered only if the customer has reached the appropriate age. Set "0" for no age requirement. Select "1" to "5" to set the required age to purchase PLU's in this group according to the Age Verification as programmed in the Z Mode.

KP PORT # Notes:

When the KP Printer (*or KVS*) is being shared by all registers connected in an IRC system, the **S-Mode IRC Option: #SHARE KP REG# (1-8)** must be set to define the Server Register in the IRC (*register where the KP is connected*). Refer to "IRC Options" on page 145 for details.

All shared devices: printers, KVS or Datatran need to be connected to the same Register in the IRC.

The KP Group programming must be set to define the port number where the KP Printer (*or KVS*) is connected to on the Server Register and all other registers in the IRC.

The SAT setting is used when the kitchen printer is connected to this register, or when this register is set as the KP Server register (as defined in the IRC options) to define the KP Port#.

- If the KP (KVS) is connected to this station, set the **KP PORT#** setting on the **SAT** line.

Select **Y** or **N** to direct items to the device attached to a serial port (1-4) on this register. (KP Server register.)

- The **R** option (**Y** or **N**) is used to print a kitchen requisition at the local registers receipt printer.

The SER setting is used at all other registers in the IRC when sharing a KP Printer (or KVS) to define the KP Port# on the server ECR where the KP Printer (or KVS) is connected to. Select **Y** or **N** to direct items to the appropriate serial port (1-4) on the KP Server register in the IRC.

- If the KP is on a server ECR, set the **KP PORT#** on the **SER** line.

Sales Tax Programming

The *SPS-300* allows three separate calculation options for each of the four possible taxes.

- **Add-On** - most sales taxes can be programmed by entering an *add-on* tax percentage rate.
- **Tax Table** - if a tax entered as an add-on tax percentage does not follow exactly the tax chart that apply in your area, *tax table* programming will match tax collection exactly to the break points of your tax table. (Tax table programming allows up to 75 breakpoints.)
- **VAT** - if tax is included in the cost of the item, you can use value added tax (*VAT*) to calculate the tax share of each sale.
- **GST** - Canadian Goods and Services Tax (*GST*) can be set using tax rate 4.

Important Note: After you have entered your tax program, test for accuracy by entering several transactions of different dollar amounts. Carefully check to make sure the tax charged by the cash register matches the tax amounts on the printed tax chart for your area. As a merchant, you are responsible for accurate tax collection. If the cash register is not calculating tax accurately, or if you cannot program your tax properly from the information in this manual, contact your Dealer for assistance.

Add-On Tax Programming

When tax requirements can be met using a simple straight percentage tax rate, use the following method to program the tax rate percentage. The Add-On tax can be entered up to 3 decimal places.

1. Turn the mode switch to the **PGM** position.
2. From the **PROGRAM MODE** menu, press **2** to view the **TAX PROGRAMMING** screen:

```
TAX PROGRAMMING
TAX NUMBER (1-4)          1 ←
DESC : TAX1
TAX TYPE (0-2)           0
 0 : ADD-ON
 1 : TAX TABLE
 2 : VAT
```

3. When the arrow is pointed at the **TAX NUMBER** field, enter the number of the tax you wish to program. (There are four taxes available, enter 1, 2, 3, or 4.)
4. The arrow will move to the **DESC** field. Enter a descriptor for the tax rate if desired, Press **CASH**.
5. The arrow will move to the **TAX TYPE** field. Enter **0** for an **ADD-ON** tax with a straight percentage rate. The appropriate **TAX # PROGRAMMING** screen displays:

```
TAX #1 PROGRAMMING
TAX RATE                  0.000 ←
```

6. When the arrow is pointed at the **TAX RATE** field, enter the percentage rate for the sales tax. For example: if the tax is 7.5 percent, enter 7.5 or 7500. If the tax is 10 percent, enter 10.0 or 10000. Press **CASH** to set the rate.

TAX #1 PROGRAMMING	
TAX RATE	7.500 ←

- The **TAX PROGRAMMING** screen will return and automatically select the next tax rate. Continue to program additional taxes as necessary or press **CLEAR** to return to the main **PROGRAM MODE** screen.

Tax Table Programming

Sometimes a tax that is entered as a percentage does not exactly follow the tax charts that apply in your area (even if the tax chart is based on a percentage). In these cases we recommend that you enter your tax using tax table programming. This method will match tax collection exactly to the break points of your tax table.

Before programming, obtain a copy of the tax table you wish to program. You will need to obtain the appropriate printed tax table if you wish to determine the break point entries yourself.

Note: You can enter up to a maximum of 75 break points.

Example 6% Tax Table

- Examine the printed tax table for the tax you are programming.
- Calculate the break point differences by subtracting the high side of the previous range from the high side of the sale amount range.
- Examine the pattern of break point differences to determine when the break points begin to repeat. Mark the beginning break points that do not fit a pattern as “non-repeat breaks.” Mark the break points that are repeating in a pattern as “repeat breaks.” Count the number of repeat and non-repeat breaks.

Tax Charged	Sale Amount Range	Break Point Differences	
\$0.00	\$0.00 - \$0.10		
\$0.01	\$0.11 - \$0.21	11	← Non-Repeat Breaks
\$0.02	\$0.22 - \$0.38	17	
\$0.03	\$0.39 - \$0.56	18	
\$0.04	\$0.57 - \$0.73	17	← Repeat Breaks
\$0.05	\$0.74 - \$0.91	18	
\$0.06	\$0.92 - \$1.08	17	
\$0.07	\$1.09 - \$1.24	16	
\$0.08	\$1.25 - \$1.41	17	
\$0.09	\$1.42 - \$1.58	17	
\$0.10	\$1.59 - \$1.74	16	
\$0.11	\$1.75 - \$1.91	17	
\$0.12	\$1.92 - \$2.08	17	
\$0.13	\$2.09 - \$2.24	16	
\$0.14	\$2.25 - \$2.41	17	

TAX Table Entry

To enter the example 6% tax table.

1. Turn the mode switch to the **PGM** position.
2. From the **PROGRAM MODE** menu, press **2** to view the **TAX PROGRAMMING** screen:

TAX PROGRAMMING	
TAX NUMBER (1-4)	2 ←
DESC : TAX1	
TAX TYPE (0-2)	1
0 : ADD-ON	
1 : TAX TABLE	
2 : VAT	

3. When the arrow is pointed at the **TAX NUMBER** field, enter the number of the tax you wish to program. (There are four taxes available, enter 1, 2, 3, or 4.)
4. The arrow will move to the **DESC.** field. Enter a descriptor for the tax rate if desired, Press **CASH**.
5. The arrow will move to the **TAX TYPE** field. Enter **1** for **TAX TABLE** programming. The appropriate **TAX # PROGRAMMING** screen displays:

TAX #2 PROGRAMMING	
FIRST TAX AMOUNT	0.01 ←
NON-TAXABLE AMOUNT	0.10
# OF NON-REPEAT BREAK	5
# OF REPEAT BREAK	3

- * Use the table below as a guide in filling the fields on this screen.

Tax Field	Description
FIRST TAX AMOUNT	Enter the first tax amount that is charged. For this example, the entry is 0.01.
NON-TAXable AMOUNT	Enter the highest amount where no tax is charged. For this example, the entry is 0.10.
# OF NON-REPEAT BREAK	Enter the number of Non-repeat breaks. For this example, the entry is 5.
# OF REPEAT BREAK	Enter the number of repeat breaks. For this example, the entry is 3.

6. After entering the **# OF REPEAT BREAK** field, the next **TAX TABLE PROGRAMMING** screen will display.

7. Using the printed copy of your tax table, enter information in the **SALE AMOUNT RANGE** fields. Enter the high amount of the first range where you are prompted. The low amount of the next range will be computed automatically.
8. After completing the tax range entries, your screen should look like the following screen. This screen should look exactly like the corresponding part of the printed tax table.

TAX TABLE PROGRAMMING			↓
TAX	SALE	AMT	RANGE
0.00	0.00	-	0.10
0.01	0.11	-	0.21
0.02	0.22	-	0.38
0.03	0.39	-	0.56
0.04	0.57	-	0.73
0.05	0.74	-	0.91 ←

9. Because this tax table has more than 5 break points (the number of break points that can be displayed on the first screen), you must continue to enter **SALE AMT RANGE** information on the additional screens until all information has been entered for each break point.
10. After completing the tax range entries, your screen should look like the following screen. This screen should look exactly like the corresponding portion of the printed tax table.

TAX TABLE PROGRAMMING			
TAX	SALE	AMT	RANGE
0.06	0.92	-	1.08
0.07	1.09	-	1.24
0.08	1.25	-	1.41 ←

11. After you have entered the last **SALES AMOUNT RANGE** information Press **CASH**. The **TAX PROGRAMMING** screen will return and automatically select the next tax rate. Continue to program additional taxes or press **CLEAR** to return to the **PROGRAM MODE** screen.

Note: Some tax tables are very complex. You can enter up to a maximum of 75 break points. Contact your Dealer for assistance should you have difficulty entering your Tax Table.

VAT Tax Programming (Value Added Tax)

When the tax is included in the cost of the item, instead of being added-on to the item, use the VAT Tax program (value added tax) to calculate the tax share of each item in the sale.

1. Turn the mode switch to the **PGM** position.
2. From the **PROGRAM MODE** menu, press **2** to view the **TAX PROGRAMMING** screen:

```
TAX PROGRAMMING
TAX NUMBER (1-4)          3 ←
DESC : TAX1
TAX TYPE (0-2)           2
 0 : ADD-ON
 1 : TAX TABLE
 2 : VAT
```

3. When the arrow is pointed at the **TAX NUMBER** field, enter the number of the tax you wish to program. (There are four taxes available, enter 1, 2, 3, or 4.)
4. The arrow will move to the **DESC.** field. Enter a descriptor for the tax rate if desired, Press **CASH**.
5. The arrow will move to the **TAX TYPE** field. Enter **2** for **VAT**. The appropriate **TAX # PROGRAMMING** screen displays:

```
TAX #3 PROGRAMMING
TAX RATE                  10.000 ←
```

6. When the arrow is pointed at the **TAX RATE** field, enter the VAT rate. For example:
 - * If the tax is 6 percent, enter 6.000 or 6.0 using the decimal key.
 - * If the tax is 7.5 percent, enter 7.500 or 7.5 using the decimal key.
 - * If the tax is 10 percent, enter 10.000 or 10 using the decimal key.
7. Press **CASH** to set the tax rate.
8. The **TAX PROGRAMMING** screen will return and automatically select the next tax rate. Continue to program additional taxes or press **CLEAR** to return to the **PROGRAM MODE** screen.

GST Tax Programming

Tax 4 can be programmed to accommodate the Canadian Goods and Services tax (GST).

1. Turn the mode switch to the **PGM** position.
2. From the **PROGRAM MODE** menu, press **2** to view the **TAX PROG.** screen:

```
TAX PROGRAMMING
TAX NUMBER (1-4)          4 ←
DESC : TAX4
TAX TYPE (0-2)           0
 0 : ADD-ON
 1 : TAX TABLE
 2 : VAT
```

3. When the arrow is pointed at the **TAX NUMBER** field, enter **4**, press **CASH (CASH)**.
4. The arrow will move to the **DESC.** field. Enter a descriptor for the tax rate if desired, Press **CASH**.
5. The arrow will move to the **TAX TYPE** field. Press **CASH**. The **TAX #4 PROGRAMMING** screen displays:

```
TAX #4 PROGRAMMING
TAX RATE                  0.000 ←
GST IS TAXABLE BY
RATE 1                    N
RATE 2                    N
RATE 3                    N
```

6. When the arrow is pointed at the **TAX RATE** field, enter the GST rate. For example, if the tax is 6 percent, enter **6000** or **6.0**. If the tax is 10 percent, enter **10000** or **10.0**. Press **CASH** to set the rate.
7. For the **GST IS TAXABLE BY** rate 1-3 selections; At the **RATE 1** field, indicate if the GST is taxable by rate 1 (tax on tax) by pressing the **YES/NO** key, then pressing the **CASH** key. The arrow advances to the **RATE 2** field. Enter taxable status for **RATE 2**, Press **CASH**. The arrow advances to the **RATE 3** field; Enter taxable status for **RATE 3**; Press **CASH**.

```
TAX #4 PROGRAMMING
TAX RATE                  5.050 ←
GST IS TAXABLE BY
RATE 1                    Y
RATE 2                    N
RATE 3                    N
```

8. When the Taxable by Rate 3 selection is entered The **PROGRAM MODE** screen returns.

System Option Programming

Refer to the “System Option Definitions” to review the setting definitions for each system option. Read each option carefully to determine if you wish to make any changes to the current option setting.

NOTE: Typical selections are set as the default selection. After clearing memory all options settings are automatically set to the default setting. Therefore, there is no need to program unless you are setting an option for other than the default setting.

The Numeric keys and the YES/NO function key are used to change the option settings from their current setting.

Press ENTER (CASH key) to apply changes made to the current option setting and/or advance to the next option.

The Page Up & Page Down keys can be used to navigate back one page & forward one page without having to go through each option individually.

1. At the PGM mode switch position menu, press 3 for SYSTEM OPTION Programming. The SYSTEM OPTION pg. 1 screen displays.
2. Refer to “System Options – Reference Information” on page 189 to make program entries or changes, press the CASH key to finalize.

The 1st System Option screen.

```
SYSTEM OPTION          P1
BEEPER ACTIVE          Y ←
RESERVED
CLERK ENTRY           0
  0:PUSH 1:CODE
CLERK ASSIGNED WHEN CLERK KEY IS
  PUSHED (1-99)       1
```

Press ENTER after making a change, or press ENTER to advance the arrow to the next option without making a change.

Press PAGE DOWN to view the 2nd System Option screen.

```
SYSTEM OPTION          P2
CLERK IS Y:POP-UP     N ←
      N:STAY-DOWN
DRAWER NEEDS TO BE SHUT TO
  OPERATE              Y
ACTIVATE OPEN DRAWER ALARM  N
```

Press PAGE UP to return to the previous screen.

NOTE:
Be sure to press ENTER after changing a selection. If you do not press ENTER, the change will not be accepted.

Press
PAGE DOWN
to view the 3rd
System Option
screen.

SYSTEM OPTION		P3
SECONDS TO ALLOW DRAWER OPEN	30	←
(0-99)		
ALLOW POST TENDER	N	
OPEN DRAWER ON POST TENDER	Y	
ALLOW MULTIPLE RECEIPT	N	

Use the **NUMERIC KEYS** to change or select numbered value selections.

Press
PAGE DOWN
to view the 4th
System Option
screen.

SYSTEM OPTION		P4
CASH DECLARATION REQ		
BEFORE REPORTS	N	←
MGR CONTROL TO TEND.		
NEGATIVE BALANCE	N	
ZERO BALANCE	N	
RESET TRANSACTION NO.ON Z RPT	N	

Press **YES/NO** key to toggle option from 'Y' to 'N' for Yes or No decisions.

Press
PAGE DOWN
to view the 5th
System Option
screen.

SYSTEM OPTION		P5
RESET GRAND TOTAL AFTER	N	←
Z REPORT		
OPEN DRAWER WHEN REPORTS		
ARE RUN	Y	
OPEN DRAWER DURING TRAIN MODE	Y	
DECIMAL PLACE (0-3)	2	

NOTE:
Be sure to press **ENTER** after changing a selection. If you do not press **ENTER**, the change will not be accepted.

Press
PAGE DOWN
to view the 6th
System Option
screen.

SYSTEM OPTION		P6
DATE FORMAT IS	0	←
0:MDY 1:DMY 2:YMD		
MODIFIER	0	
0:POP UP AFTER ITEM		
1:POP UP AFTER SALE		
2:STAYDOWN		

Press
PAGE DOWN
to view the 7th
System Option
screen.

SYSTEM OPTION		P7
% AND TAX CALCULATION	0	←
SPLIT PRICE CALCULATION	0	
CALCULATION CHART		
0:ROUND UP AT 0.50		
1:ROUND UP		
2:ROUND DOWN		

Press
PAGE DOWN
to view the 8th
System Option
screen.

SYSTEM OPTION		P8
COMPULSORY EAT-IN T-OUT D-THRU BEFORE TENDERING	N	←
HASH IS	Y	
Y:NORMAL N:NON-ADD		
ALLOW PRINT SCREEN ON X/TIME	Y	

Press **YES/NO** to
toggle from 'Y' to
'N' for YES or NO
decisions.

Press
PAGE DOWN
to view the 9th
System Option
screen.

SYSTEM OPTION		P9
RESET Z COUNTER AFTER Z1 REPORT FINANCIAL REPORT	N	←
TIME REPORT	N	
PLU REPORT	N	
CLERK REPORT	N	
GROUP REPORT	N	

NOTE:
Be sure to press
ENTER after
changing a selection.
If you do not press
ENTER, the change
will not be accepted.

Press
PAGE DOWN
to view the 10th
System Option
screen.

SYSTEM OPTION		P10
RESET Z COUNTER AFTER Z2 REPORT DAILY SALES RPT	N	←
PRINTER PAPER SENSOR ACTIVE	Y	
DEACTIVATE SPLIT PRICING	N	

Press
PAGE DOWN
to view the 11th
System Option
screen.

SYSTEM OPTION		P11
ALLOW DIRECT MULTIPLICATION	N	←
INVENTORY CNT PGM	N	
Y:ADD CURRENT LVL N:COUNTER REPLACE CURRENT LEVEL		
GLOBAL ENTRY LIMIT (0-14)	0	

Use the **NUMERIC
KEYS** to change or
select numbered
value selections.

Press
PAGE DOWN
to view the 12th
System Option
screen.

SYSTEM OPTION		P12
DISABLE PRICE LEVEL KEY		
LEVEL 1:	N	←
LEVEL 2:	N	
LEVEL 3:	N	
LEVEL 4:	N	
LEVEL 5:	N	

Press
PAGE DOWN
to view the 13th
System Option
screen.

SYSTEM OPTION		P13
PRICE LEVEL IS		0 ←
0:POP UP AFTER ITEM		
1:POP UP AFTER SALE		
2:STAYDOWN		
ELECTRONIC JOURNAL		N

Use the **NUMERIC KEYS** to change or select numbered value selections.

Press
PAGE DOWN
to view the 14th
System Option
screen.

SYSTEM OPTION		P14
PROMPT OPERATOR WHEN EJ BUFFER IS FULL		N ←
STOP OPERATIONS WHEN EJ BUFFER IS FULL		N
SEND ONLY NEGATIVE ENTRIES TO EJ		N
X REPORT & DECLARATION TO EJ		N

Press **YES/NO** to toggle from 'Y' to 'N' for YES or NO decisions.

Press
PAGE DOWN
to view the 15th
System Option
screen.

SYSTEM OPTION		P15
SEND RESET REPORT TO EJ		N ←
DIRECT MULTIPLICATION MORE THAN ONE DIGIT		N
TENDER VALIDATION		N
Y:AMOUNT TENDERED		
N:AMOUNT OF SALE		

NOTE:
Be sure to press **ENTER** after changing a selection. If you do not press **ENTER**, the change will not be accepted.

Press
PAGE DOWN
to view the 16th
System Option
screen.

SYSTEM OPTION		P16
EUROPEAN ROUNDING		N ←
# START END	VALUE	
1 00 - 00	0	
2 00 - 00	0	
3 00 - 00	0	
4 00 - 00	0	
5 00 - 00	0	

Press
PAGE DOWN
to view the 17th
System Option
screen.

SYSTEM OPTION		P17
DISABLE NOT FOUND PLU		N ←
EMBEDDED PRICE BAR CODETYPE		0
1/3/4/7		
CLERK INTERRUPT		N
PROGRAM DESC BY CODE		N
AUTO CUTTER		N
USE SPOOL		N

Press
PAGE DOWN
to view the 18th
System Option
screen.

SYSTEM OPTION		P18
MCR CLERK SIGN ON		N ←
USE TRACK 1&2 :	0	
TRACK 2&3 :	1	
DISABLE EFT AMT CONFIRMATION		N
STORE NAME:		
	STORE-A	
MIX & MATCH IS TAXABLE		N

Press
PAGE DOWN
to view the 19th
System Option
screen.

SYSTEM OPTION		P19
BACK LIGHT COLOR (0-7)		0 ←
0:ON 1:RED 2:GREEN 3:BLUE		
4:RED+GREEN 5:GREEN + BLUE		
6:RED+BLUE 7:OFF		
SELECT LANGUAGE		0
0:ENGLISH 1:SPANISH 2:FRENCH		
PUERTO RICO RJ FLAG		N

Use the **NUMERIC KEYS** to change or select numbered value selections.

Press
PAGE DOWN
to view the 20th
System Option
screen.

SYSTEM OPTION		P20
ALLOW PRICE LEVEL		
ONLY MGR MODE		N ←
DISPLAY ADD PRICE		
OF LINKED ITEMS		N
ALLOW SALE WITH 0 STOCK		Y
ALLOW Z STOCK RPT		Y
USE MODE PASSWORD		N

Press **YES/NO** to toggle from 'Y' to 'N' for YES or NO decisions.

Press
PAGE DOWN
to view the 21st
System Option
screen.

SYSTEM OPTION		P21
EFT DRAFT IS		Y ←
Y:DATATRAN N:FINE DINING		
MSR CONNECTED		0
0:DATATRAN 1:PDC 2:REGISTER		
PIN PAD TYPE		Y
Y:DUKPT N:ROTAT		
PIN PAD (0-4)		0

NOTE:
Be sure to press **ENTER** after changing a selection. If you do not press **ENTER**, the change will not be accepted.

Press
PAGE DOWN
to view the 22nd
System Option
screen.

SYSTEM OPTION		P22
PRINT SIGNATURE LINE ON		0 ←
CUSTOMER COPY		
DATATRAN WAIT VALUE		0
ON REMOTE REGISTER		
MGR REQUIRED TO OPEN CHECKS		N
ALLOW Z CLERK TIME REPORT		
IF EMPLOYEES ARE CLOCKED IN		N

Press
PAGE DOWN
to view the 23rd
System Option
screen.

SYSTEM OPTION		P23
MGR REQUIRED TO ADD NEW CHKS	N	←
CANADIAN ROUNDING ON CASH	N	
EFT SUPPORT NEW EMV PROTOCOL	N	
COLLECT CARDHOLDER NAME	N	
USE "TEST" AS CLERK ID	N	

Press **YES/NO** to
toggle from 'Y' to
'N' for YES or NO
decisions.

Press
PAGE DOWN
to view the 24th
System Option
screen.

SYSTEM OPTION		P24
PLU LOOKUP KEY IS N:POP-UP	N	←
	Y:STAYDOWN	
PROMPT SUGGESTIVE TIP	N	
ALLOW EFT MULTI PRICING	N	
SHOW TIP AMOUNTS	N	
SAVE DSC LOG TO SD	N	
SURCHARGE INCLUDING TAX	Y	

NOTE:
Be sure to press
ENTER after
changing a selection.
If you do not press
ENTER, the change
will not be accepted.

SYSTEM OPTION		P25
MULTI PRICE INCLUDING TAX	Y	←

System Option Definitions

System Option	Entry	Description
BEEPER ACTIVE	Y or N	Select N for a silent keyboard.
RESERVED	N	
CLERK ENTRY 0:PUSH 1:CODE	0 or 1	Select PUSH for a push button clerk, select CODE for a code entry clerk system (number - clerk or clerk - number - clerk) sequence.
CLERK ASSIGNED WHEN CLERK KEY IS PUSHED (1-10)	1-10	If the PUSH system is selected, you can select the clerk that is signed on when the CLERK # key is pressed. Note that the maximum clerk number you can enter here is determined by how many clerks are allocated in memory.
CLERK IS Y:POP-UP N:STAY-DOWN	Y or N	Select Y for pop-up clerks, you must sign on for each transaction. Select N for stay down clerks, the same clerk remains signed on until they sign off.
DRAWER NEEDS TO BE SHUT TO OPERATE	Y or N	Select Y to enforce closed drawer for register operations.
ACTIVATE OPEN DRAWER ALARM	Y or N	Select Y if you want the error tone to automatically sound when the drawer stays open longer than the time set in the following field.
SECONDS TO ALLOW DRAWER OPEN	1-99	If you enable the open drawer alarm above, you can set the length of time (1-99 seconds) before the alarm sounds.
ALLOW POST TENDER	Y or N	Select Y to allow re-tendering should a second change calculation be necessary. Re-enter the tendered amount and press the CASH key to show the new change computation.
OPEN DRAWER ON POST TENDER	Y or N	If you enable post tendering, select N to not open the cash drawer after the second tender.
ALLOW MULTIPLE RECEIPT	Y or N	Set to Y to issue more than one copy of a transaction receipt.
CASH DECLARATION REQ BEFORE REPORTS	Y or N	Select Y to enforce a cash declaration function before a report can be generated.
MGR CONTROL TO TEND. NEGATIVE BALANCE ZERO BALANCE	Y or N	Select Y to control negative or zero balance transactions (when cash is removed from the drawer). When selected the mode switch must be in the X position to finalize the transaction.
RESET TRANSACTION # ON Z REPORT	Y or N	Select Y to reset the transaction number (often called the receipt counter) to zero after the financial report is reset.
RESET GRAND TOTAL AFTER Z REPORT	Y or N	Select Y to reset the grand total to zero after the financial report is reset.
OPEN DRAWER WHEN REPORTS ARE RUN	Y or N	Select N to stop the drawer from opening when reports are run.
OPEN DRAWER DURING TRAIN MODE	Y or N	Select N if you do not want the cash drawer to open during training mode operations.
DECIMAL PLACE	0-3	Enter a digit to place the decimal point the selected number of positions from the right.
DATE FORMAT IS 0:MDY 1:DMY 2:YMD	0, 1, 2	Select 0 for MMDDYY, select 1 for DDMMYY, or select 2 for YYMMDD date printing format.

System Option	Entry	Description
MODIFIER: 0:POP UP AFTER ITEM 1:POP UP AFTER SALE 2:STAYDOWN	0, 1, 2	A MODIFIER key alters the next PLU registered, either by changing the code number of the PLU so that a different item is registered, or by adding the modifier descriptor and not changing the code of the subsequent PLU. If you press a modifier key, you have the option of the modifier applying only to the next item (0), having the same modifier apply to any subsequent item registered in the same transaction (1), or having the same modifier apply to any subsequent item on any subsequent transaction (2).
% AND TAX CALCULATION	0, 1, 2	Select the digit that represents the appropriate rounding method for tax and discount calculations: 0 for round up at half of a penny (0.005), 1 for always round up or 2 for always round down.
SPLIT PRICE CALCULATION	0, 1, 2	Select the digit that represents the appropriate rounding method for split pricing (i.e. 2 at 3 for \$1.00) calculations: 0 for round up at 0.5 (half of a penny 0.005), 1 for always round up or 2 for always round down.
CALCULATION CHART 0: ROUND UP AT 0.50 1: ROUND UP (Always) 2: ROUND DOWN (Always)	0, 1, 2	The values defined here are used with the % and Tax Calculation as well as the Split Price Calculation.
COMPULSORY EAT-IN T-OUT D-THRU BEFORE TENDERING	Y or N	Choose Y to enforce the use of one of the destination keys (EAT-IN, TAKE OUT, or DRIVE THRU) before the sale is finalized.
HASH IS Y:NORMAL N:NON-ADD	Y or N	Y : Hash adds to all report totals except the gross and net sales totals on the financial report. N : Hash does not add to any report totals, except for the HASH total on the financial report.
ALLOW PRINT SCREEN ON X/TIME KEY	Y or N	Choose N to disable the print screen function of the X/TIME key.
RESET Z COUNTER AFTER Z1 REPORT FINANCIAL REPORT TIME REPORT PLU REPORT CLERK REPORT GROUP REPORT	Y or N	Choose Y or N to determine whether to reset the Z counter after a Z1 of each report listed.
RESET Z COUNTER AFTER Z2 REPORT DAILY SALES RPT	Y or N	Choose Y or N to determine if you wish to reset the Z counter after a Z2 of the daily sales report.
PRINTER PAPER SENSOR ACTIVE	Y or N	A built-in paper sensor determines whether paper is currently loaded in the printer. If Y , operations are not allowed without paper loaded. If N , operations are allowed when paper is out.
DEACTIVATE SPLIT PRICING	Y or N	If N , both multiplication and split pricing calculations can be done with the X/TIME key. If Y , only multiplication can be done with the X/TIME key.
ALLOW DIRECT MULTIPLICATION	Y or N	If Y , you can multiply preset items by simply entering the quantity, then pressing the preset PLU key.

System Option	Entry	Description
INVENTORY CNT PGM Y:ADD CURR. LEVEL N:COUNTER REPLACE CURR LEVEL	Y or N	Choose Y or N to determine whether the quantity of inventory you enter in the PLU stock program adds to existing inventory quantity, or whether it replaces the current inventory quantity.
GLOBAL ENTRY LIMIT (0-14)	0-14	Enter a digit to determine the number of numeric digits that can be entered for any register function. Enter 0 for no limit.
DISABLE PRICE LEVEL KEY LEVEL 1: LEVEL 2: LEVEL 3: LEVEL 4: LEVEL 5:	Y or N	You can choose to disable any of the price level keys here.
PRICE LEVEL IS 0:POP UP AFTER ITEM 1:POP UP AFTER SALE 2:STAYDOWN	0, 1, 2	Select the operation for Price Level Leys. (0) : The price level applies for the next PLU only, then returns to the default. (1) : The price level remains active for the remainder of the transaction, then returns to the default price level when the transaction is finalized. (2) : The same price level applies to any subsequent item on any subsequent transaction. Note: Set to "STAYDOWN" when using time activated price levels. Also set level activate time in program mode.
ELECTRONIC JOURNAL	Y or N	Select Y to enable the electronic journal. The electronic journal captures in memory what you would print line by line on a traditional journal. The four options that follow control the electronic journal feature. The electronic journal can be read and printed in the X mode switch position or reset and printed in the Z mode switch position.
PROMPT OPERATOR WHEN EJ. IS FULL	Y or N	If the electronic journal is enabled above, select Y if you wish to display a message to notify the operator when the journal memory is full.
STOP OPERATIONS WHEN EJ. IS FULL	Y or N	If the electronic journal is enabled above, select Y if you wish to stop operations when the journal memory is full.
SEND ONLY NEGATIVE ENTRIES TO EJ.	Y or N	If the electronic journal is enabled above, select Y if you wish to save only transactions with negative entries to the EJ.
X REPORT & DECLARATION TO EJ	Y or N	If the electronic journal is enabled above, select Y if you wish to X reports and Cash Declaration operations to the EJ.
SEND RESET REPORT TO EJ	Y or N	If the electronic journal is enabled above, select Y if you wish to send RESET REPORTS (Z-reports) to the EJ.
DIRECT MULTIPLICATION MORE THAN ONE DIGIT	Y or N	If you allow direct multiplication of a preset PLU, you can allow only single digit multiplication or multiplication by more than one digit.
TENDER VALIDATION Y:AMOUNT TENDERED N:AMOUNT OF SALE	Y or N	Validation is allowed if an appropriate optional printer is connected to an RS-232C port. Here you can choose the content of single line validation

System Option	Entry	Description
EUROPEAN ROUNDING # START END VALUE 1 00 - 00 0 2 00 - 00 0 3 00 - 00 0 4 00 - 00 0 5 00 - 00 0	Y or N	Select Y to implement the rounding system that you enter on this page. Enter the START, END and VALUE for the desired ranges. For example: # START END VALUE 1 00 - 02 000 (.00-.02 rounds to .00) 2 03 - 07 005 (.03-.07 rounds to .05) 3 08 - 09 010 (.08-.09 rounds up to .10)
DISABLE NOT FOUND PLU	Y or N	Select N to allow the operator to enter a new PLU when the entered PLU number is not found in the PLU file.
EMBEDDED PRICE BARCODE TYPE 1/3/4/7	1, 3, 4, 7	Enables price embedded bar codes: 0 = Embedded barcode feature is <i>not used</i> . 1 = Type 1 embedded barcodes have 5 item codes with a price check sum and a 4 digit price field. 3 = Type 3 embedded barcodes have 6 item codes without a price check sum and a 4 digit price field. 4 = Type 4 embedded barcodes have 5 item codes without a price check sum and a 5 digit price field. 7 = Choose 7 if you are embedding a weight, rather than a price. Use weight when different items are sold in bulk, such as nut/bolts in a hardware store. When a weight embedded bar code is scanned the weight is displayed and must be extended by a price at the cash register.
CLERK INTERRUPT	Y or N	If you have selected the clerk interrupt option, a new clerk can be signed on in the middle of a transaction. In this circumstance, the initial transaction is suspended. When the interrupt transaction is completed, then the suspended transaction can be continued.
PROGRAM DESCRIPTOR BY CODE	Y or N	When N , program descriptors by pressing the appropriate key on the program overlay. When Y , program descriptors by typing the code for each descriptor character.
AUTO CUTTER	Y or N	Always N – NOT USED.
USE SPOOL	Y or N	Choose Y if the paper take-up spool is being used (single printer models only.)
MCR CLERK SIGN ON	Y or N	Choose Y to use the optional card reader for clerk Sign-On operations. **Employee Cards need to have data on both Track #1 and Track #2; Even if it's the same data.** ECR inputs the data from Track#2 into the Clerk - Code Section (Just be Swiping the Card).
USE TRACK 1&2 : 0 USE TRACK 3&4 : 1	0 1	Select 0 to read tracks 1 & 2 on the card reader. Select 1 to read tracks 2 & 3 on the card reader.
DISABLE EFT AMOUNT CONFIRMATION	Y or N	Is not used with DEJAVOO. Used in EMV operations, Select Y if you want to skip the amount confirmation on the Pin-Pad (<i>v1.138 or later</i>);
STORE NAME	8 Characters	Stored files will be saved on SD under a folder with the store name; Do not include spaces in the store name. The default store name is "STORE-A".
MIX & MATCH IS TAXABLE	Y or N	If Y, mix and match discounts are taxable, tax is applied to the net sale amount, rather than the gross amount.

System Option	Entry	Description
BACK LIGHT COLOR	0-7	0=ON (standard light blue backlight) 1=RED; 2=GREEN; 3= BLUE; 4=RED+GREEN; 5=GREEN+BLUE; 6=RED+BLUE 7=OFF (no backlight)
SELECT LANGUAGE	0, 1, 2	Converts system descriptors to selected language. 0: English, 1: Spanish, 2: French
PUERTO RICO RJ FLAG	Y or N	For Puerto Rico Only, only available with special firmware. (Requires v1.0.27 or later.)
ALLOW PRICE LEVEL ONLY MGR MODE	Y or N	Choose Y to require the X Mode key to operate the Price Level keys.
DISPLAY ADD PRICE OF LINKED ITEMS	Y or N	When Y, the customer display shows a total of the item and linked item. For example, if PLU is \$1.00 and is linked to PLU2, which is \$0.25, the customer display will show \$1.25.
ALLOW SALE WITH 0 STOCK	Y or N	When N, inventory PLU's cannot be sold when stock reaches "0".
ALLOW Z STOCK RPT	Y or N	When N, the operator is not allowed to clear (Z) stock.
USE MODE PASSWORD	Y or N	When Y, password control for access to the P-Mode Menu is necessary. (Set password in S-Mode)
EFT DRAFT IS	Y or N	Used with EMV and Non-EMV installations, is not used with DEJAVOO . Y = DATATRAN for a normal EFT draft. N = FINE DINING (EFT draft with a tip entry line).
MSR CONNECTED	0, 1, 2	Used with EMV and Non-EMV installations only, it is not used with DC Direct or DEJAVOO . Choose the MSR location for EFT operations. 0 = MSR is connected to the DATATRAN. 1 = MSR is connected to the PDC. 2 = MSR is connected to the REGISTER.
PIN PAD TYPE	Y or N	Used with EMV and Non-EMV installations, is not used with DC Direct or DEJAVOO . Y = DUKPT (DUKPT is the only type supported.) N = ROTAT (Do not use, not supported.)
PIN PAD (0-4)	0-4	Used with EMV and Non-EMV installations, is not used with DC Direct or DEJAVOO . Indicate the port # where the PIN PAD is connected.
(v1.157 and later) PRINT SIGNATURE LINE ON CUSTOMER COPY ===== (v1.156 and earlier) NO SIGN IF TRANSACTION TTL LESS THAN 0.00	0, 1, 2 ===== 00.00	(v1.157 and later) Used with EMV and Non-EMV installations, is not used with DC Direct or DEJAVOO . 0 = Print the signature line on both copies. 1 = Print the signature line on the Merchant copy only. 2 = Do not print the signature line on either copy. ===== (v1.156 and earlier) Used with Non-EMV installations only. Enter the maximum amount where no signature is required. (i.e. if 20.00 is set here, no signature is required on transactions of \$20.00 or less.)

System Option	Entry	Description
DATATRAN WAIT VALUE ON REMOTE REGISTER	0-99	Used with Non-EMV installations only. Setting this field may be required in IRC systems of two or more ECR's where a DialTran (telephone line authorization) and other peripherals are shared. If an "INVALID ENTRY—TIME OVER" message is displayed at a remote register. The Value to Time is a 1:6 ratio, for example: 1 = 6 seconds, 2 = 12 seconds, 3 = 18 seconds, etc. If this value is set to 0, the wait time is 6 seconds (default).
MGR REQUIRED TO OPEN CHECKS	Y or N	Set this field to Y in a charge posting environment. New checks can be assigned in manager mode (X position).
ALLOW Z CLERK TIME REPORT IF EMPLOYEES ARE CLOCKED IN	Y or N	Allows clerk report even when employees are still clocked in. (Available at firmware version 1.031 or later.)
MGR REQUIRED TO ADD NEW CHKS	Y or N	If set to Y , the manager is required to start a new check, but the clerks can access it without the manager key. (Available at firmware version 1.035 or later.)
CANADIAN ROUNDING ON CASH	Y or N	Rounds cash transaction total to the nearest nickel 0.05¢. Rounding values are set in the European Rounding (System Option P16). (Available at firmware version 1.043 or later.) The ROUND total is printed on receipts beginning at v2.0.18.
EFT SUPPORT NEW EMV PROTOCOL	Y or N	Used with EMV Integrated Credit. Select Y when integrated payment equipment is set up to accept EMV (chip cards). (Available at firmware version v1.116 or later.)
COLLECT CARDHOLDER NAME	Y or N	Used with EMV and Non-EMV installations, is not used with DEJAVOO . Choose Y if you want the cardholder's name to print below the signature line.
USE "TEST" AS CLERK ID	Y or N	Always set to N (No) for live installations.
PLU LOOKUP KEY IS	Y or N	N = Pop-Up operation: the PLU Lookup key is displayed until a selection is registered; After registration the PLU Lookup is hidden until selected again. Y = Stay Down operation: the PLU Lookup key remains on the screen after an item is selected, press CLEAR to close the PLU lookup. (Added at v1.083)
PROMPT SUGGESTIVE TIP	Y or N	This option is only used with DC Direct. It is not used with DEJAVOO. Will prompt at the PIN-Pad for the programmed suggested gratuity percentages as set in the Z position, DC Direct Functions > Settings: Gratuity Suggestions. (Added at v2.000)
ALLOW MULTI PRICING	Y or N	This option is only used with Datacap DC Direct. It is not used with DEJAVOO. Used with the Charge keys Multi-Pricing rate setting. This allows for separate Cash, Credit, Debit and Food Stamp amounts to show on the Pin-Pad when DC Direct integrated payment is used. (Added at v2.000)
SHOW TIP AMOUNTS	Y or N	This option is only used with DC Direct. It is not used with DEJAVOO. This option is used with System Option: Prompt Suggestive TIP. Setting this option to Y will show the Gratuity Suggestions TIP percentage and the TIP amount for each gratuity suggestion on the Pin-Pad. (Added at v2.000)

System Option	Entry	Description
SAVE EFT LOG TO SD	Y or N	<i>This option is used with DC Direct and with Dejavoo. (Requires v2.008 or later.)</i> Leave this setting at N . Only set to Y for troubleshooting purposes. This will save the EFT log data to the SD Card.
SURCHARGE INCLUDING TAX	Y or N	<i>(Added at v02.026 for DC Direct.)</i> Select Y to include TAX when calculating the SURCHARGE amount.
MULTI PRICE INCLUDING TAX	Y or N	<i>(Added at v02.026 for DC Direct.)</i> Select Y to include TAX when calculating the MULTI-PRICE amount.

Print Option Programming

Refer to the "Print Option Definitions" to review the setting definitions for each print option. Read each option carefully to determine if you wish to make any changes to the current option setting.

NOTE: Typical selections are set as the default selection. After clearing memory all options settings are automatically set to the default setting. Therefore, there is no need to program unless you are setting an option for other than the default setting.

The Numeric keys and the YES/NO function key are used to change the option settings from their current setting. Press ENTER (CASH key) to apply changes made to the current option setting and/or advance to the next option.

The Page Up & Page Down keys can be used to navigate back one page & forward one page without having to go through each option individually.

1. At the PGM mode switch position menu, press 4 for PRINT OPTION Programming. The PRINT OPTION pg. 1 displays:
2. Refer to "Print Option Definitions" on page 200 to make program entries or changes, press the CASH key to finalize.

The 1st Print Option screen

PRINT OPTION		P1
PRINT MEDIA TOTALS		
ON CLERK REPORT	N	←
PRINT TAX SYMBOL	Y	
PRINT VOID MODE AND RETURN		
ON REPORT	Y	
PRINT AUDACTION ON REPORT	N	

Press ENTER after making a change, or press ENTER to advance the arrow to the next option without making a change.

Press PAGE DOWN to view the 2nd Print Option screen.

PRINT OPTION		P2
SKIP ZERO TOTALS ON		
FINANCIAL REPORT	Y	←
SKIP ZERO TOTALS ON		
CLERK REPORT	Y	←
PRINT CLERK REPORT AFTER		
FINANCIAL REPORT	N	
PRINT SALE ITEM NO.	N	

Press PAGE UP to return to the previous screen.

Press YES/NO key to toggle option from 'Y' to 'N' for Yes or No decisions.

Press PAGE DOWN to view the 3rd Print Option screen.

PRINT OPTION		P3
PRINT PLU WITH ZERO TOTALS		
ON REPORT	N	←
PRINT SUBTOTAL WHEN PRESSED		
	N	
PRINT % OF SALES ON PLU REPORT		
	N	
PRINT CONSECUTIVE NO.	Y	

NOTE:
Be sure to press ENTER after changing a selection. If you do not press ENTER, the change will not be applied/accepted.

Press **PAGE DOWN** to view the 4th Print Option screen.

```

PRINT OPTION                                P4
PRINT DATE                                  Y ←
PRINT TIME                                  Y
PRINT MACHINE NO.                          Y
PRINT CLERK NAME                            Y
HOME CURRENCY SYMBOL IS                     $
PRINT Z COUNTER                             Y
  
```

Press **ENTER** after making a change, or press **ENTER** to advance the arrow to the next option without making a change.

Press **PAGE DOWN** to view the 5th Print Option screen.

```

PRINT OPTION                                P5
PRINT RECEIPT WHEN SIGN ON/OFF              Y ←
PRINT GRAND TOTAL
ON X REPORT                                  Y
ON Z REPORT                                  Y
  
```

Press **PAGE UP** to return to the previous screen.

Press **PAGE DOWN** to view the 6th Print Option screen.

```

PRINT OPTION                                P6
PRINT GROSS TOTAL
ON X REPORT                                  Y ←
ON Z REPORT                                  Y
PRINT SUBTOTAL W/O TAX                      N
TAX AMOUNT IS                               N
Y:COMBINE      N:ITEMIZE
  
```

Press **YES/NO** key to toggle option from 'Y' to 'N' for Yes or No decisions.

Press **PAGE DOWN** to view the 7th Print Option screen.

```

PRINT OPTION                                P7
PRINT TAX AMOUNT                            Y ←
PRT TAXABLE TOTAL                           N
PRINT TAX % RATE                             N
VAT BREAKDOWN                               N
PRINT TRAIN MODE TITLE
IN TRAINING MODE                             Y
  
```

NOTE:
Be sure to press **ENTER** after changing a selection. If you do not press **ENTER**, the change will not be applied/accepted.

Press **PAGE DOWN** to view the 8th Print Option screen.

```

PRINT OPTION                                P8
CURRENCY SYMBOL
CONV#1                                       ■ ←
CONV#2                                       ■
CONV#3                                       ■
CONV#4                                       ■
E.J. PORT (0-4)                             0
REPORT PORT(0-4)                             0
  
```

Use the **NUMERIC KEYS** to change or select numbered value selections.

Press
PAGE DOWN
to view the 9th
Print Option
screen.

PRINT OPTION		P 9
PRT KP ORDER # ON RECEIPT	Y	←
PRINT PRICE ON KP	N	
SEND TO KP IN VOID MODE	Y	
SEND TO KP IN TRAIN MODE	N	

Press **ENTER** after making a change, or press **ENTER** to advance the arrow to the next option without making a change.

Press
PAGE DOWN
to view the 10th
Print Option
screen.

PRINT OPTION		P 10
COMBINE LIKE ITEMS ON KP	N	←
CONSOLIDATION ON CHECK TRACK		
VOLUME UNIT	0	
0:GAL 1:LTR		

Press **PAGE UP** to return to the previous screen.

Press
PAGE DOWN
to view the 11th
Print Option
screen.

PRINT OPTION		P 11
PRINT PREAMBLE	Y	←
PRINT POSTAMBLE	Y	
MESSAGE ON RECEIPT		
PRINT PREAMBLE	N	
PRINT POSTAMBLE	N	
ON THE GUEST CHECK		

Press
PAGE DOWN
to view the 12th
Print Option
screen.

PRINT OPTION		P 12
PRINT ON FINANCIAL REPORT		
AVG ITEM/CUST	Y	←
AVG \$/CUST	Y	
BUFFER RECEIPT ISSUE WHEN		
RECEIPT IS ON	N	
PRIORITY PRINT BY GROUP		
ON KP/KV		

Press
PAGE DOWN
to view the 13th
Print Option
screen.

PRINT OPTION		P 13
GRAND TOTAL IS	N	←
Y: NET N: GROSS		
PRINT E.J FROM	N	
Y: OLDEST N: NEWEST		
PRINT JOURNAL IS SMALL	N	
SEND ORDER TO KP AT SUBTOTAL	N	
PRINT PLU# ON REPORT	N	

Press
PAGE DOWN
to view the 14th
Print Option
screen.

PRINT OPTION		P14
PRINT PLU# ON RECEIPT	N	←
PRE-PRN GRAPHIC LOGO	N	
POST-PRN GRAPHIC LOGO	N	
ON RECEIPT		
PRE-PRN GRAPHIC LOGO	N	
POST-PRN GRAPHIC LOGO	N	
ON GUEST CHECK		

Press **ENTER** after making a change, or press **ENTER** to advance the arrow to the next option without making a change.

Press
PAGE DOWN
to view the 15th
Print Option
screen.

PRINT OPTION		P15
PRE-FEED LINE# RECEIPT (0-5)	0	←
POST-FEED LINE# RECEIPT (0-5)	0	
PRINT IN HIGH DENSITY	N	
PRINT DATE ON SERVICE	N	
ON HARD CHECK		
PRINT TAX CHARGED	N	
FOR LAST SERVICED ITEMS		

Press **PAGE UP** to return to the previous screen.

Press
PAGE DOWN
to view the 16th
Print Option
screen.

PRINT OPTION		P16
NOT PRINT WHEN POLLING REPORT	N	←
PRINT WHEN PROGRAM UP/DOWN	N	
ADJUSTABLE CUT (0-70)	40	
COPY OF DATATRAN RECPT. (0-99)	1	
PRINT WHOLE CARD NO.	N	
PRINT EXP. DATE	N	
PRINT LAST LINE OF EJ	0	

Press
PAGE DOWN
to view the 17th
Print Option
screen.

PRINT OPTION		P17
ORDER OF PLU PRINTED		
ON KP BY GROUP	N	←
PRINT GROUP DESC ON KP	N	
PRINT DATE LAST Z REPORT	N	
ON Z REPORT		
DISABLE LINE FIND ON THE	N	
SLIP PRINTER		

Press
PAGE DOWN
to view the 18th
Print Option
screen.

PRINT OPTION		P18
ALWAYS PRINT CHECK NUMBER		
ON SLIP PRINTER	N	←

Pressing **PAGE DOWN** again will to advance to the 1st Print Option screen.

Press
PAGE UP to return to the previous Print Option screen.

Print Option Definitions

Print Option	Entry	Description
PRINT MEDIA TOTALS ON CLERK REPORT	Y or N	Select Y to print media totals for each clerk, thus allowing clerk cash drawer accountability.
PRINT TAX SYMBOL	Y or N	Select N to remove the tax symbol (i.e."T1") from the print and display.
PRINT VD MODE AND RETURN ON REPORT	Y or N	Select N to remove the VOID MODE and RETURN totals from the financial and clerk reports.
PRINT AUDACTION ON REPORT	Y or N	Select N to remove the AUDACTION total from the financial and clerk reports.
SKIP ZERO TOTALS ON FINANCIAL REPORT	Y or N	By default, the register prints only totals with information other than zero. Select N if you wish to print the contents of all the financial report totals, even if the total is zero.
SKIP ZERO TOTALS ON CLERK REPORT	Y or N	By default, the register prints only totals with information other than zero. Select N if you wish to print the contents of all the clerk report totals, even if the total is zero.
PRT CLERK REPORT AFTER FINANCIAL REPORT	Y or N	Select Y if you wish to include the clerk report information at the end of the financial report.
PRINT SALE ITEM NO.	Y or N	Select Y if you want to print the total number of items registered in a transaction on the receipt.
PRINT PLU WITH ZERO TOTALS ON REPORT	Y or N	By default, the register prints only totals with information other than zero. Select Y if you wish to print the contents of all the PLU's, even if the total is zero.
PRINT SUBTOTAL WHEN PRESSED	Y or N	Select Y if you wish the subtotal to print when the SBTL key is pressed.
PRINT % OF SALES ON PLU REPORT	Y or N	The register can calculate the percentage of sales represented by each PLU. Select Y if you wish to print this percentage on the PLU report. Note: the percentage will print only on standalone register reports, not IRC report.
PRINT CONSECUTIVE NO.	Y or N	The consecutive number (also referred to as the transaction counter, or receipt counter) normally prints on each receipt. Select N if you do not wish to print this counter.
PRINT DATE	Y or N	Select N if you wish to delete the printing of the date.
PRINT TIME	Y or N	Select N if you wish to delete the printing of the time.
PRINT MACHINE NO.	Y or N	If you are using more than one cash register, you can identify the specific register where a receipt was printed. Enter Y if you wish to print the machine number on the receipt. Machine Number can be defined in Program Mode 00 \ 7.
PRINT CLERK NAME	Y or N	Select N if you wish to delete the printing of the clerk name on the receipt.
HOME CURRENCY SYMBOL IS	\$	Users outside of the USA can designate a different currency symbol. To select a different symbol, press the symbol you wish to use on the Alpha Keyboard overlay. When this field is selected, press 00 to display a list of optional symbols.
PRINT Z COUNTER	Y or N	Select N if you wish to delete the printing of the reset counter on Z reports.

Print Option	Entry	Description
PRINT RECEIPT WHEN SIGN ON/OFF	Y or N	Select N if you do not wish to print a receipt when signing on or off a clerk.
PRINT GRAND TOTAL ON X REPORT ON Z REPORT	Y or N	Select N if you wish to delete the printing of the grand total on the financial report reading (X report) or the financial report resetting (Z report).
PRINT GROSS TOTAL ON X REPORT ON Z REPORT	Y or N	Select N if you wish to delete the printing of the gross sales total on the financial report reading (X report) or financial report resetting (Z report).
PRINT SUBTOTAL WITHOUT TAX	Y or N	If you hand-write credit card slips, you may find it useful to print the merchandise subtotal. Select Y if you wish to print the subtotal without tax on the receipt.
TAX AMOUNT IS Y:COMBINE N:ITEMIZE	Y or N	Select Y if you are calculating and reporting more than one sales tax rate separately and you wish to print just the total of multiple taxes rather than itemize each tax on the receipt.
PRINT TAX AMOUNT	Y or N	Default = Y; Select N if you wish to delete the printing of the tax amount on the receipt.
PRINT TAXABLE TOTAL	Y or N	Select Y if you wish to print the total of merchandise eligible for each tax on the receipt.
PRINT TAX % RATE	Y or N	If you are calculating a tax percentage (add-on or VAT), select Y if you wish to print the tax rate on each receipt.
VAT BREAKDOWN	Y or N	If Y, a breakdown of the VAT eligible sale will print, the net amount and the VAT amount.
PRINT TRAIN MODE TITLE IN TRAIN MODE	Y or N	When in training mode, the message "TRAIN MODE" normally prints on each receipt. Select N if you wish to delete this message.
CURRENCY SYMBOL CONV.#1 CONV.#2 CONV.#3 CONV.#4	Y or N	If you are using the currency conversion feature, you can select the appropriate symbol for each foreign currency you are accepting. To select a different symbol, press the symbol you wish to use on the Alpha Keyboard overlay. When one of these fields are selected, press 00 to display a list of optional symbols.
EJ. PORT	0-4	Choose a port for a remote printer to print electronic journal reports instead of the register printer.
REPORT PORT	0-4	Choose a port for a remote printer to print reports instead of the register printer.
PRINT KP ORDER # ON RECEIPT	Y or N	A system wide counter creates an order number for each kitchen requisition. Choose Y or N to print the order number on the kitchen printer requisition.
PRINT PRICE ON KP	Y or N	You can choose to print the item with or without its' price on the kitchen requisition.
SEND TO KP IN VOID MODE	Y or N	You can choose whether to print or not print registrations in void mode on kitchen requisitions.
SEND TO KP IN TRAIN MODE	Y or N	You can choose whether to print or not print registrations in training mode on kitchen requisitions.

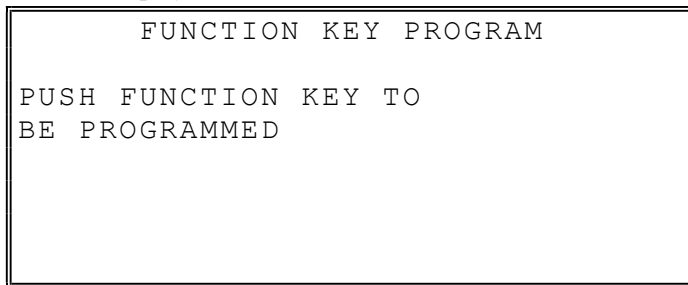
Print Option	Entry	Description
COMBINE LIKE ITEMS ON KP	Y or N	If two of the same items are registered in the same transaction, you can choose the format on the kitchen requisition. For example, if Y, "2 HAMBURGERS"; if N, "1 HAMBURGER" and "1 HAMBURGER".
CONSOLIDATION ON CHECK TRACK	Y or N	Consolidation of like items can be selected for soft guest check printing. For example, if three rounds of drinks are served, the check will print "3 TAP BEER" rather than "1 TAP BEER" three times.
VOLUME UNIT 0:GAL 1:LTR	0 or 1	If gallonage is selected in PLU programming, choose the volume unit. 0: for Gallons or choose 1: for Liters here.
PRINT PREAMBLE PRINT POSTAMBLE MESSAGE ON RECEIPT	Y or N	Choose whether to print the PREAMBLE on the receipt. Choose whether to print the POSTAMBLE on the receipt.
PRINT PREAMBLE PRINT POSTAMBLE ON THE GUEST CHECK	Y or N	Choose whether to print the PREAMBLE on the guest check. Choose whether to print the POSTAMBLE on the guest check.
PRINT ON FINANCIAL REPORT AVG ITEM/CUST AVG \$/CUST	Y or N	Choose whether to print the average items per customer (PLU sales counter/Net sales counter) or the average sales per customer (Net Sales/Net Sales counter).
BUFFER RECEIPT ISSUE WHEN RECEIPT IS ON	Y or N	Determine whether you can issue a second receipt for the same transaction with the CASH key.
PRIORITY PRINT BY GROUP ON KP/KV	Y or N	If Y , the order in which items appear on a kitchen requisition is determined by the group to which the item is assigned, i.e. items reported to group 1 will print before items reported to group 2.
GRAND TOTAL IS Y:NET N:GROSS	Y or N	Choose Y if you wish the grand total to accumulate daily net sales totals. Choose N if you wish the grand total to accumulate daily gross sales totals.
PRINT EJ FROM Y:OLDEST N:NEWEST	Y or N	Y: Prints electronic journal from lowest to highest consecutive number. N: Prints electronic journal from highest to lowest consecutive number.
PRINT JOURNAL IS SMALL	Y or N	If Y , the font size on the journal print is smaller than normal.
SEND ORDER TO KP AT SUBTOTAL	Y or N	Choose Y to print orders on the KP when the SUBTOTAL key is pressed. Choose N to print orders on the KP when the order is finalized.
PRINT PLU # ON PLU REPORT	Y or N	If Y , the PLU number will print with the descriptor on reports. If N , only the PLU descriptor will print.
PRINT PLU # ON RECEIPT	Y or N	If Y , the PLU number will print with the descriptor on receipts. If N , only the PLU descriptor will print.
PRE & POST-PRN GRAPHIC LOGO LOGO ON RECEIPT	Y or N	If Y , the selected graphic logo will print on the receipt Preamble and/or Postamble. (<i>Graphic Logos are created using the 300pc utility.</i>)

Print Option	Entry	Description
PRE & POST-PRN GRAPHIC LOGO ON GUEST CHECK	Y or N	If Y , the selected graphic logo will print on the guest check Preamble and/or Postamble. <i>(Graphic Logos are created using the 300pc utility.)</i>
PRE-FEED LINE# RECEIPT (0-5)	0-5	Enter the number of pre-feeding lines for the receipt. This will feed lines before printing the receipt. <i>(Default setting = 0)</i>
POST-FEED LINE# RECEIPT (0-5)	0-5	Enter the number of post-feeding lines for the receipt. This will feed lines after printing the receipt. <i>(Default setting = 0)</i>
PRINT IN HIGH DENSITY	Y or N	NA
PRINT DATE ON SERVICE ON HARD CHECK	Y or N	If Y , the posting date will print at every posting on the hard check.
PRINT TAX CHARGED FOR LAST SERVICED ITEMS	Y or N	Prints the tax for current items only when using check tracking and the order is serviced.
NOT PRINT WHEN POLLING REPORTS	Y or N	Choose Y if you would like to suppress register printing when reports are polled.
PRINT WHEN PROGRAM UP/DOWN	Y or N	When N is selected no printing will occur at the ECR when you upload/downloading from PC software.
ADJUSTABLE CUT (0~70)	40	NOT USED (There is no internal cutter installed.)
COPY OF DATATRAN RECEIPT (0~99)	0-99	Used with Non-EMV, EMV Tran Series, and DC Direct. Enter the number of copies of the DataTran (integrated credit) EFT receipts.
PRT WHOLE CARD NO.	Y or N	Used with Non-EMV, EMV Tran Series, and DC Direct. If N , only the last four digits of the credit/debit card will print.
PRT EXP. DATE	Y or N	Used with Non-EMV, EMV Tran Series, and DC Direct. If N , the credit card expiration date will not print on the DataTran (integrated credit) EFT receipt.
PRINT LAST LINE OF EJ	0-99	Quick journal review (R-Mode/10 Subtotal) prints last xx lines of electronic journal. (Where xx is 0-99.)
ORDER OF PLU PRINTED ON KP BY GROUP	Y or N	By default (N) KP items will print in the order they are entered. If Y , KP items are sorted by group with a separate chit printed for each group. (Requires v1.046 or later.)
PRINT GROUP DESC ON KP	Y or N	If the option above is set to Y , choose Y here to print the group descriptor at the top of each KP chit. (Requires v1.046 or later)
PRINT DATE LAST Z REPORT ON Z REPORT	Y or N	If Y , the Z report will print the date of the last Z report. (Requires v1.083 or later)
DISABLE AUTO LINE ON THE SLIP PRINTER	Y or N	If Hard Check system and optional slip printer are used, and this option = Yes , the automatic line find will be disabled. Printing on the slip will begin where the slip is inserted. (Requires v01.130 or later.)
ALWAYS PRINT CHECK NUMBER ON SLIP PRINTER	Y or N	When the memory allocation is set to "Hard Check" the register currently prints the check number once at the top of the check. To print the check number every time the check is opened, set this option to Yes . (Requires v1.131 or later.)

Function Key Programming

The default program installs the functions as they are shown with the standard key legends in the “Keyboards” chapter on page 27 of this manual. Any key location on the keyboard may be reprogrammed with a function from the list of available functions shown on page 144 of this manual. Definitions for each function key operation can be found in the “Function Key Descriptions” chapter on page 250.

1. From the **PGM** mode switch position menu, press **5** for **FUNCTION KEY**. The **FUNCTION KEY PROGRAM** screen displays:

A rectangular box representing a screen display. The text inside is centered and reads: "FUNCTION KEY PROGRAM" on the first line, "PUSH FUNCTION KEY TO" on the second line, and "BE PROGRAMMED" on the third line.

```
FUNCTION KEY PROGRAM
PUSH FUNCTION KEY TO
BE PROGRAMMED
```

2. Press the **FUNCTION KEY** you wish to program.

Note: If the function you wish to program is located on a Function Look-Up key, press the appropriate function look-up key, then press 1 to select STATUS PROGRAM (meaning you wish to program the status of the function not the menu assignment of the function look-up key) then press the digit corresponding to the function within the Function Look-Up you wish to program.

See **FUNCTION LOOKUP (1-2)** programming on page 227 for details.

#/NS

(Keycode 313) This key is used to add a number to a transaction or as a No-Sale operation to open the drawer.

1. Press the #/NS key to view the #/NS function key options:

#/NS KEY PROG.	↓
DESC1: NOSALE	←
DESC2: NON ADD #	
NO SALE KEY DISABLE	N
UNDER MGR CONTROL	N
INHIBIT NO SALE	
AFTER NON-ADD #	N

2. Press **CASH** from the last field or press **PAGE DOWN** to view the second page of #/NS function key options:

#/NS KEY PROG.	↕
ENFORCE# ENTRY AT	
START OF SALE	N←
PRINT ON N/S	Y
NON-ADD# PROHIBIT	N
COMP. NON-ADD# MUST	
MATCH MAX DIGIT	N
MAX DIGIT(0-8)	0

3. Press **CASH** from the last field or press **PAGE DOWN** to view the third page of #/NS function key options:

#/NS KEY PROG.	↑
PRINT NON-ADD ON GUEST CHECK	
	N←

4. Press **CASH** from the last field to return to the **FUNCTION KEY PROGRAM** screen or press **CLEAR** at any time to return to the **FUNCTION KEY PROGRAM** screen without saving changes.

#/NO SALE Function Options

Option	Entry	Description
DESC1	Alphanumeric 12 character	You can program a unique descriptor for the no sale function. The default descriptor is NO SALE.
DESC2	Alphanumeric 12 character	You can program a unique descriptor for the non-add # function. The default descriptor is NON ADD #.
NO SALE KEY DISABLE	Y or N	Select Y to disable the no sale function (only non-add # entries are allowed).
UNDER MGR CONTROL	Y or N	Select Y to allow operation only in manager operation mode.
INHIBIT NO SALE AFTER NON-ADD #	Y or N	Select Y if you want to not allow the NO SALE function after a non-add number is entered.
ENFORCE # ENTRY AT START OF SALE	Y or N	Select Y if you wish to enforce the entry of a non-add number at the beginning of each transaction. (For example, to track the number of customers in each sale, or to identify a customer number with each sale.)
PRINT ON N/S	Y or N	Select N to stop printing when a NO SALE is performed.
NON-ADD # PROHIBIT	Y or N	Select Y to disable the non-add # function.
COMP NON-ADD # MUST MATCH MAX DIGIT	Y or N	Select Y if you wish all non-add number entries to have the exact number of digits selected in the MAX DIGIT flag below.
MAX DIGIT (0-8)	0-8	Enter the maximum number of digits for non-add number entry. Zero (0) means no limit.
PRINT NON-ADD ON GUEST CHECK	Y or N	Select Y to print the Non-Add number on Guest Checks.

%1 -%5

(*Keycodes 314~318*) Each % key is set with a specific operation such as item discount or surcharge or sale discount or surcharge.

1. Press the one of the % keys to view the appropriate % function key options:

%1 PROGRAMMING		↓
DESC : % 1		←
AMOUNT:Y %:N		
RATE	0.000	
KEY DISABLE	N	
UNDER MGR CONTROL	N	
OPEN:Y PRESET:N	N	
SALE:Y ITEM:N	N	

2. Press **CASH** from the last field or press **PAGE DOWN** to view the second page of % function key options:

%1 PROGRAMMING		↕
OVERRIDABLE	N	←
POS.:Y NEG.:N	N	
TAXABLE BY TAX1	N	
TAXABLE BY TAX2	N	
TAXABLE BY TAX3	N	
TAXABLE BY TAX4	N	
F/S ELIGIBLE	N	

3. Press **CASH** from the last field or press **PAGE DOWN** to view the next page of % function key options:

%1 PROGRAMMING		↕
ALLOW ONLY ONE TIME		
SUBTOTAL ENTRY	N	←
ALLOW MULTIPLE AMT		
DISCOUNT (COUPON)		
WITHOUT SUBTOTAL	N	
PRESET OVERRIDE IN		
MGR ONLY	N	

4. Press **CASH** from the last field or press **PAGE DOWN** to view the last page of % function key options:

%1 PROGRAMMING		↑
COMPULSORY VALID	N	←

5. Press **CASH** from the last field to return to the **FUNCTION KEY PROGRAM** screen or press **CLEAR** at any time to return to the **FUNCTION KEY PROGRAM** screen without saving changes.

%1 -%5 Function Options

Option	Entry	Description
DESC	Alphanumeric 12 character	You can program a unique descriptor. The default descriptors are % 1-4.
AMOUNT: Y %: N	Y or N	Select Y if you wish this key to apply an amount (such as for a coupon). Select N if you wish this key to apply a percentage (such as for a % discount or % surcharge).
RATE	5 digits	If the function is an amount, enter an amount from 0 to 999.99. If not zero, the amount will be the preset coupon amount. If the function is a percentage, enter a percentage from 0 to 99.999%. If not zero, the percentage will be the preset percentage.
KEY DISABLE	Y or N	Select Y to disable this function.
UNDER MGR CONTROL	Y or N	Select Y if you do not want to allow the operator to use this function in REGISTER mode. When selected, the function is allowed only in the X mode switch position.
OPEN:Y PRESET:N	Y or N	Select Y if you wish the amount or percentage to be entered by the operator. Select N if you wish the amount or percentage to be preset.
SALE:Y ITEM:N	Y or N	Select Y if you wish the amount or percentage to apply to the sale total. Select N if you wish the amount or percentage to apply to an item within the sale.
OVERRIDABLE	Y or N	Select Y if you wish to enter a percentage or amount to override the preset percentage or amount set in the RATE field. Select N if you do not want to allow override of the preset percentage or amount.
POS.:Y NEG.:N	Y or N	Select Y to add the percentage or amount to the sale or item. Select N to subtract the percentage or amount from the sale or item.
TAXable BY TAX1 TAXable BY TAX2 TAXable BY TAX3 TAXable BY TAX4	Y or N	Select N to tax any taxable items before the discount or surcharge is applied. The discount or surcharge amount is not included in the Tax Sales amount. Select Y to tax any taxable items after the discount or surcharge is applied. The discount or surcharge amount reduces or adds to the Tax Sales amount.
F/S ELIGIBLE	Y or N	Select Y to reduce (or increase) the food stamp subtotal by the amount of % key value.
ALLOW ONLY ONE TIME SUBTOTAL ENTRY	Y or N	If Y , you can enter only a single coupon and you must press the SBTL key before the coupon entry.
ALLOW MULTIPLE AMOUNT DISCOUNT (COUPON) WITHOUT SUBTOTAL ENTRY	Y or N	If you set a % key to be used for vendor coupons (i.e. amount, negative and sale status) then choose Y to allow the function to be operated multiple times, without requiring the SBTL key to be pressed prior to each subsequent coupon entry.
PRESET OVERRIDE IN MGR ONLY	Y or N	Select Y to allow preset override only in manager operation mode.
COMPULSORY VALIDATION	Y or N	Choose Y to enforce validation if an optional printer with validation capability is connected to an RS-232C port.

ADD CHECK

(Keycode 320) Use this key to combine open checks for payment.

1. Press the **ADD CHECK** key to view the add check function key options:

ADD CHECK PROG .	↓
DESC : ADDCHK	←
KEY DISABLE	N
COMPULSORY BEFORE TENDERING	N
CONSECUTIVE NUMBER ADVANCED	Y
RECEIPT CONDENSING	N

2. Press **CASH** from the last field or press **PAGE DOWN** to view the second page of add check function key options:

ADD CHECK PROG .	↑
EXEMPT TAX 1	N ←
EXEMPT TAX 2	N
EXEMPT TAX 3	N
EXEMPT TAX 4	N
COMPULSORY VALID	N

3. Press **CASH** from the last field to return to the **FUNCTION KEY PROGRAM** screen or press **CLEAR** at any time to return to the **FUNCTION KEY PROGRAM** screen without saving changes.

ADD CHECK Function Options

Option	Entry	Description
DESC	Alphanumeric 12 character	You can program a unique descriptor. The default descriptor is ADD CHECK.
KEY DISABLE	Y or N	Select Y to disable this function.
COMPULSORY BEFORE TENDERING	Y or N	Select Y if you want to force the operator to use the ADD CHECK function before tendering.
CONSECUTIVE NUMBER ADVANCED	Y or N	Select Y if you want to advance the consecutive number each time the ADD CHECK key is used.
RCPT CONDENSING	Y or N	Select Y if you want to delete the preamble and postamble each time the ADD CHECK key is used.
EXEMPT TAX 1-4	Y or N	Select Y to exempt the appropriate tax automatically when finalized with this key.
COMPULSORY VALIDATION	Y or N	Choose Y to enforce validation if an optional printer with validation capability is connected to an RS-232C port.

CANCEL

(Keycode 321) This key is used to cancel the current transaction; no totals are updated to reports.

1. Press the **CANCEL** key to view the cancel function key options:

CANCEL KEY PROG.		
DESC :	CANCEL	←
KEY HALO		0.00
	(0 : NO LIMIT)	
KEY DISABLE		N
UNDER MGR CONTROL		N

2. Press **CASH** from the last field to return to the **FUNCTION KEY PROGRAM** screen or press **CLEAR** at any time to return to the **FUNCTION KEY PROGRAM** screen without saving changes.

CANCEL Function Options

Option	Entry	Description
DESC	Alphanumeric 12 character	You can program a unique descriptor. The default descriptor is CANCEL.
HALO	7 digit amount	You can limit errors by setting the maximum amount that can be used with this function, "0" means that there is no entry limit.
KEY DISABLE	Y or N	Select Y to disable this function.
UNDER MGR CONTROL	Y or N	Select Y if you do not want the operator to use this function in REGISTER mode. When selected, the function is allowed only in the X mode switch position.

CASH

(Keycode 322) Use this key when a customer pays for their purchase using Cash.

1. Press the **CASH** key to view the cash function key options:

CASH KEY PROG.		↓
DESC : CASH		←
HALO	0.00	
(0 : NO LIMIT)		
AMOUNT TEND COMPULSORY		N
OVER/UNDER TENDER		
IN MGR CONTROL		N
DISABLE UNDER TND.		N

2. Press **CASH** from the last field or press **PAGE DOWN** to view the second page of cash function key options:

CASH KEY PROG.		↑
DOES DRAWER OPEN		Y ←
EXEMPT TAX 1		N
EXEMPT TAX 2		N
EXEMPT TAX 3		N
EXEMPT TAX 4		N
COMPULSORY VALID		N

3. Press **CASH** from the last field to return to the **FUNCTION KEY PROGRAM** screen or press **CLEAR** at any time to return to the **FUNCTION KEY PROGRAM** screen without saving changes.

CASH Function Options

Option	Entry	Description
DESC	Alphanumeric 12 characters	You can program a unique descriptor. The default descriptor is CASH.
HALO	8-digit amount	You can limit errors by setting the maximum amount that can be tendered. "0" means that there is no entry limit.
AMOUNT TEND COMP.	Y or N	Select Y if you want to force the operator to enter the tendered amount and let the register calculate the change.
OVER/UNDER TENDER IN MGR CONTROL	Y or N	Select Y if you do not want the operator to tender more than the amount of the sale and issue change. When selected, over and under tendering is allowed only in the X position.
DISABLE UNDER TEND.	Y or N	Select Y if you do not want the operator to tender less than the amount of the sale.
DOES DRAWER OPEN	Y or N	Select N if you do not want the drawer to open with this key.
EXEMPT TAX 1-4	Y or N	Select Y to exempt the appropriate tax automatically when finalized with this key.
COMPULSORY VALIDATION	Y or N	Choose Y to enforce validation if an optional printer with validation capability is connected to an RS-232C port.

CHARGE 1-8

(Keycodes 323~330) Used to track payments made using Credit, Debit (*Not used with EMV*), Gift cards and for Cash Benefit for EBT Cash operation.

The NP Credit was added at v1.158 (*Partial Tender on credit card sales will be declined*).

1. Press one of the **CHARGE** key to view the appropriate charge function key options:

CHARGE 1 PROG.	↓
DESC : CHARGE1	←
KEY HALO	0.00
(0 : NO LIMIT)	
AMOUNT TEND COMPULSORY	N
ALLOW OVER TENDERING	
IN MANAGER CONTROL MODE ONLY	N
DISABLE UNDER TND.	N

2. Press **CASH** from the last field or press **PAGE DOWN** to view the second page of charge function key options:

CHARGE 1 PROG.	↕
DOES DRAWER OPEN	N←
ALLOW OVER TEND.	N
NON-ADD # COMPULSORY	N
EXEMPT TAX 1	N
EXEMPT TAX 2	N
EXEMPT TAX 3	N
EXEMPT TAX 4	N

3. Press **CASH** from the last field or press **PAGE DOWN** to view the last page of charge function key options:

CHARGE 1 PROG.	↑
COMPULSORY VALID	N←
SEND TO EFT	N
ALLOW UNDER TENDERING	N
IN MANAGER CONTROL MODE ONLY	
SELECT (1:CREDIT, 2:DEBIT,	0
3:NP Credit, 4:GIFT-NO NSF,	
5:CASH BENEFIT)	

**** NOTE** In v1.158 the CHARGE key type **SELECT** for **(3: GIFT)** was changed to **3: NP Credit**.

4. Press **CASH** from the last field or press **PAGE DOWN** to view the last page of charge function key options:

CHARGE 1 PROG.	↑
SHOW TIP ON(0:REG, 1:PINPAD	2←
2:PRINT TIP LINE ONLY)	
SURCHARGE%	0.00
MULTI PRICING %	0.00
MANUAL ENTRY	N
UNDER TENDER NOT ALLOWED	

5. Press **CASH** from the last field to return to the **FUNCTION KEY PROGRAM** screen or press **CLEAR** at any time to return to the **FUNCTION KEY PROGRAM** screen without saving changes.

CHARGE 1-8 Function Options

Option	Entry	Description
DESC	Alphanumeric 12 character	You can program a unique descriptor. The default descriptors are CHARGE 1-8.
HALO	8-digit amount	You can limit errors by setting the maximum amount that can be tendered. "0" means that there is no entry limit.
AMOUNT TEND COMP.	Y or N	Select Y if you want to force the operator to enter the tendered amount and let the register calculate the change.
ALLOW OVER TENDERING IN MANAGER CONTROL MODE ONLY	Y or N	NOTE: Option changed at version 1.046 or later. Before v1.046, this selection controlled both over and under tenders. When selected, over tendering is allowed only in the X mode switch position.
DISABLE UNDER TEND.	Y or N	Select Y if you do not want the operator to tender less than the amount of the sale. (At v02.006) This is used for EFT Partial Auth for both DataTran and DC Direct.
DOES DRAWER OPEN	Y or N	Select N if you do not want the drawer to open with this key.
ALLOW OVER TEND.	Y or N	Select Y if you wish to allow tender greater than the amount of the sale.
NON-ADD # COMP.	Y or N	Select Y if you wish to enforce the entry of a non-add number prior to tendering.
EXEMPT TAX 1 EXEMPT TAX 2 EXEMPT TAX 3 EXEMPT TAX 4	Y or N	Select Y to exempt the appropriate tax automatically when finalized with this key.
COMPULSORY VALIDATION	Y or N	Choose Y to enforce validation if an optional printer with validation capability is connected to an RS-232C port.
CONNECT EFT	Y or N	Select Y if you want this key to send to total to the connected DataTran device.
ALLOW UNDERTENDERING IN MANAGER CONTROL MODE ONLY	Y or N	Option added at version 1.046 or later. Before v1.046, the selection controlled both over and under tenders. When selected, under tendering is allowed only in the X mode switch position.
SELECT 1:CREDIT, 2:DEBIT, 3:NP Credit, 4: GIFT-NO NSF 5: CASH BENEFIT	1, 2, 3, 4, 5 (Choose one selection only.)	Select card type: (Only used when Send To EFT = Y) 1: = Credit; 2: = Debit (Not used with EMV) 3: GIFT was changed to 3: NP Credit at v1.158 Partial Tender on credit card sales will be declined. 3: NP CREDIT – At v2.0.23 with DC Direct or Dejavo, this operates as a regular credit. 4: Gift-NO NSF indicates that a Gift card with a value less than the amount of the sale will be accepted as an under tender. (Applies to DataTran operations only.) 5: Cash Benefit function was added at version 1.034 EBT cash can be used to purchase any item at a grocery store; food stamps can only be used to purchase certain food items.
SHOW TIP ON: 0:REG, 1:PINPAD 2:PRINT TIP LINE ONLY	0, 1, 2	Used only with Datacap EMV enabled applications.

Option	Entry	Description
Surcharge % (See ** Notes: below)	DC Direct Only 0.00-4.00	(Added at v02.000 for DC Direct only.) Allowable % rate entries are from 0.00 to 4.00 percent. The Default setting = 0.00 (No Surcharge). Surcharge maintains a separate balance on the financial report and updates the drawer total.
Multi-Pricing % (See ** Notes: below)	DC Direct Only 0.00-4.00	(Added at v02.000 for DC Direct only.) Used when the System Option: Allow Multi-Pricing For EFT is enabled. Allowable rate settings range from 0.25 to 4.00 %. You must enter all 3 digits (without the decimal) for the % Rate value.
MANUAL ENTRY	Y or N	(Added at v02.000 for DC Direct only.) Manual credit card entry requires a separate charge key. Set this option to Y to allow manual credit card entry.

Charge Key Notes:

- You must set the option to “**SEND TO EFT**” and select the “**SELECT (CARD TYPE)**”.
- Before selecting the ‘**SHOW TIP ON**’ option setting, you need to determine the store payment method and when tips are to be entered.
 - **Pay at Counter** – If all Card payments are made at a cashier station by the Cashier, choose (**REG**) to prompt the cashier to ask the customer for tip on the ECR display.
 - **Pay at Counter** – If all Card payments are made at a cashier station by the Customer, choose (**PINPAD**) to prompt for the tip at the Pin-Pad. The PIN-Pad will prompt the customer for the tip entry at the time the transaction is finalized.
 - **Pay at Table** – If the EFT draft will be presented to the customer to write a TIP amount on the slip and sign the EFT draft, select (**PRINT TIP LINE ONLY**). The cashier/manager will add any TIP indicated by the customer using the EFT TIP Entry operation.
- The “**Multi-Pricing %**” Rate setting and the “**Surcharge %**” Rate setting on the CHARGE 1-8 Tender keys are separate features for DC Direct integrated credit installations only. For DEJAVOO integrated credit installations, these settings are programmed on the iPOSpays Portal. You would set up one or the other of these features, but not both features at the same time.
 - Allowable % rate entries are from 0.25 to 4.00 percent, you must enter all 3 digits. The Default setting = 0.00 (No Surcharge).
 - Multi-Pricing is used when the System Option: Allow Multi-Pricing For EFT is enabled.
 - Surcharge & Multi-Pricing features maintain separate balances on the financial report and updates the drawer total.
 - The processing time is about 20-24 seconds for Credit Cards using the Surcharge % rate; if the Multi-Pricing % rate is enabled it is longer than 30 seconds. This is due to another communication string needed after selecting the media type.
- “**Manual Entry**” operations for DC Direct requires a separate charge key with this option selected. With DC Direct integrated payment you will have two charge keys, one for regular credit card operations and one for manual entry of a credit card. Set this option to **Y** to allow manual card entry.

CHECK

(Keycode 333) This is the Check Tender key. Use this key to pay for the purchase with a written check.

1. Press the **CHECK** key to view the check function key options:

CHECK KEY PROG.	↓
DESC : CHECK	←
HALO	0.00
(0 : NO LIMIT)	
AMOUNT TEND COMPULSORY	N
OVER/UNDER TENDER	
IN MGR CONTROL	N
DISABLE UNDER TENDER	N

2. Press **CASH** from the last field or press **PAGE DOWN** to view the second page of check function key options:

CHECK KEY PROG.	↕
DOES DRAWER OPEN	N
EXEMPT TAX 1	N
EXEMPT TAX 2	N
EXEMPT TAX 3	N
EXEMPT TAX 4	N
COMPULSORY CHECK ENDORSEMENT	N

3. Press **CASH** from the last field or press **PAGE DOWN** to view the third page of check function key options:

CHECK KEY PROG.	↑
COMPULSORY VALID	N

4. Press **CASH** from the last field to return to the **FUNCTION KEY PROGRAM** screen or press **CLEAR** at any time to return to the **FUNCTION KEY PROGRAM** screen without saving changes.

CHECK Function Options

Option	Entry	Description
DESC	Alphanumeric 12 character	You can program a unique descriptor. The default descriptor is CHECK.
HALO	8-digit amount	You can limit errors by setting the maximum amount that can be tendered. "0" means that there is no entry limit.
AMOUNT TEND COMP.	Y or N	Select Y if you want to force the operator to enter the tendered amount and let the register calculate the change.
OVER/UNDER TENDER IN MGR CONTROL	Y or N	Select Y if you do not want the operator to tender more than the amount of the sale and issue change. When selected, over tendering is allowed only in the X mode switch position.
DISABLE UNDER TEND.	Y or N	Select Y if you do not want the operator to tender less than the amount of the sale.
DOES DRAWER OPEN	Y or N	Select N if you do not want the drawer to open with this key.
EXEMPT TAX 1 EXEMPT TAX 2 EXEMPT TAX 3 EXEMPT TAX 4	Y or N	Select Y to exempt the appropriate tax automatically when finalized with this key.
COMPULSORY CHECK ENDORSEMENT	Y or N	Choose Y to enforce check endorsement if an optional printer with endorsement capability is connected to an RS-232C port.
COMPULSORY VALIDATION	Y or N	Choose Y to enforce validation if an optional printer with validation capability is connected to an RS-232C port.

CHECK CASHING

(*Keycode 331*) Can be used to exchange a written check for cash from the ECR drawer.

1. Press the **CHECK CASHING** key to view the check cashing function key options:

CHECK CASH PROGRAMMING		
DESC :	CHKCASH	←
KEY HALO		0.00
(0 : NO LIMIT)		
KEY DISABLE		N
UNDER MGR CONTROL		N
COMPULSORY VALID		N
COMPULSORY CHECK ENDORSEMENT		N

2. Press **CASH** from the last field to return to the **FUNCTION KEY PROGRAM** screen or press **CLEAR** at any time to return to the **FUNCTION KEY PROGRAM** screen without saving changes.

CHECK CASHING Function Options

Option	Entry	Description
DESC	Alphanumeric 12 character	You can program a unique descriptor. The default descriptor is CHKCASH.
HALO	7-digit amount	You can limit errors by setting the maximum amount that can be used with this function. "0" means that there is no entry limit.
KEY DISABLE	Y or N	Select Y to disable this function.
UNDER MGR CONTROL	Y or N	Select Y if you do not want the operator to use this function in REGISTER mode. When selected, the function is allowed only in the X mode switch position.
COMPULSORY VALIDATION	Y or N	Choose Y to enforce validation if an optional printer with validation capability is connected to an RS-232C port.
COMPULSORY CHECK ENDORSEMENT	Y or N	Choose Y to enforce check endorsement if an optional printer with validation capability is connected to an RS-232C port.

CHECK ENDORSEMENT

(Keycode 332) When the merchant accepts written checks for payment and you have an option slip printer connected to the ECR, you can use the check endorsement key to endorse the check. Use this key to print a check endorsement message (up to 10 lines) on written checks using an optional slip printer.

1. Press the **CHECK ENDORSEMENT** key to view the check endorsement function key options:

CHECK ENDORSEMENT	↓
DESC : CHKENDOR	←
KEY DISABLE	N
PRINT CHECK AMT IN THE ENDORSEMENT	N
PRINT OPTION	
PRINT DATE	N
PRINT TIME	N

2. Press **CASH** from the last field or press **PAGE DOWN** to view the second page of charge function key options:

CHECK ENDORSEMENT	↓
PRINT CLERK	N ←
CONSECUTIVE NO.	N
SLIP OUTPUT	
COMM. PORT# (0-4)	0

3. Press **CASH** from the last field to return to the **FUNCTION KEY PROGRAM** screen or press **CLEAR** at any time to return to the **FUNCTION KEY PROGRAM** screen without saving changes.

CHECK ENDORSEMENT Function Options

Option	Entry	Description
DESC	Alphanumeric 12 character	You can program a unique descriptor. The default descriptor is CHKENDOR.
KEY DISABLE	Y or N	Select Y to disable this function.
PRINT CHECK AMT IN THE ENDORSEMENT	Y or N	Choose Y to print the amount of the check as well as the endorsement message. Choose N to print only the endorsement message. Note: A 10-line / 32 characters per line, check endorsement message may be programmed. Refer to "Endorsement Message" on page 257 for more information.
PRINT OPTION PRINT DATE PRINT TIME PRINT CLERK CONSECUTIVE No.	Y or N	Select Y to print the selection on the slip.
SLIP OUTPUT COMM. PORT# (0-4)	0-4	Enter the com port number where the slip printer is connected.

CHECK

(*Keycode 334*) The check track number function key is used for guest check tracking or drive-thru operations.

1. Press the **CHECK TRACK #** key to view the check# (guest check tracking) function key options:

CHECK TRACK PROGRAMMING	↓
DESC : CHECK #	←
KEY DISABLE	N
COMPULSORY FOR ALL SALES	N
OPENING CLERK HAS EXCLUSIVE ACCESS	N
PRINT ON RECEIPT	Y

2. Press **CASH** from the last field or press **PAGE DOWN** to view the second page of check track function key options:

CHECK TRACK PROGRAMMING	↕
PRINT CHKS ON RP	Y←
ALLOW ONLY ONE CHK PER TABLE	N
CHECK # ASSIGNED BY REGISTER	N
DRIVE THRU FEATURE ENABLED	N

3. Press **CASH** from the last field or press **PAGE DOWN** to view the second page of check track function key options:

CHECK TRACK PROG.	↑
LENGTH OF CHECK (0-9)	0←
SCAN CHECK #	N

4. Press **CASH** from the last field to return to the **FUNCTION KEY PROGRAM** screen or press **CLEAR** at any time to return to the **FUNCTION KEY PROGRAM** screen without saving changes.

CHECK # Function Options

Option	Entry	Description
DESC	Alphanumeric 12 character	You can program a unique descriptor. The default descriptor is CHKTRACK.
KEY DISABLE	Y or N	Select Y to disable this function.
COMPULSORY FOR ALL SALES	Y or N	Select Y you must begin a new or recall an existing tracking number before registering items.
OPENING CLERK HAS EXCLUSIVE ACCESS	Y or N	If Y , the clerk that begins a tracking number is the only clerk who can recall a check. If N , any clerk can recall any check.
PRINT ON RECEIPT	Y or N	If N , the check track number and balance will not print on the receipt.
PRINT ON REMOTE	Y or N	If N , the check track number and balance will not print on the remote.
ALLOW ONLY ONE CHK PER TABLE	Y or N	If Y , you can begin only one check with the same table #.
CHECK # ASSIGNED BY REGISTER	Y or N	If Y , press the CHECK. # key to automatically assign the next sequential check. Check numbers will begin with #1 and continue until the open check report is reset, at which point the check number will be reset and start at #1 again.
DRIVE THRU FEATURE ENABLED	Y or N	If you wish to implement a drive thru recall key, this setting changes the function of the PBAL key to that of a recall key. Press the PBAL key directly to automatically recall the open check with the lowest tracking number
LENGTH OF CHECK (0-9)	0 - 9	Set the length of check in number of digits. For example, if 4, then checks must be used in the range from 1000, to 9999. This setting applies only to check numbers input by the operator, not to check numbers assigned by the register.
SCAN CHECK #	Y or N	Choose Y to allow the check number to be input by a scanner (must be nine digits or less).

CURRENCY CONVERSION 1-4

(Keycodes 337~339) Use to convert foreign currency to local currency value for sales payments.

1. Press one of the **CURRENCY CONVERSION** keys to view the appropriate currency conversion function key options:

CONVERSION #1 PROG.	
DESC : CONV1	←
RATE	0
NUMBER OF DECIMAL	0

2. Press **CASH** from the last field to return to the **FUNCTION KEY PROGRAM** screen or press **CLEAR** at any time to return to the **FUNCTION KEY PROGRAM** screen without saving changes.

CURRENCY CONVERSION 1-4 Function Options

Option	Entry	Description
DESC	Alphanumeric 12 character	You can program a unique descriptor for each foreign currency. The default descriptors are CONV 1-4.
RATE	5 digits	Enter the exchange rate of up to 5 digits (do not enter the decimal point). See the examples on the next page.
NUMBER OF DECIMAL	1 - 6	Enter a number from 0 to 6 to indicate the decimal position of the exchange rate. Count the decimal position from the right. See the examples below.

Currency Exchange Rate Programming Examples

Note: Foreign currency exchange rates can be stated as “foreign currency in dollars”, or “dollars in foreign currency”. Use the rate stated in “dollars in foreign currency” when you are programming this section.

The US dollar (home currency) is worth 1.3720 Canadian dollars (foreign currency).

RATE: **13720**

NUMBER OF DEC.: **5**

The US dollar (home currency) is worth 110.24 Japanese Yen (foreign currency).

RATE: **11024**

NUMBER OF DEC.: **2**

DATATRAN TIP

(Keycode 418) Firmware versions supporting the EMV protocol for integrated payment, provide a new DATATRAN TIP function key for tip entry in register mode when using integrated payment.

If your application is set for “Fine Dining” you must place this function on the keyboard. The key is programmable for manager control.

1. Press one of the **DATATRAN TIP** key to view the Datatran TIP function key options:

DTRAN TIP PROGRAMMING		
DESC :	DTRAN TIP	←
UNDER MGR CONTROL		N
SEND TO EFT		Y

2. Press **CASH** from the last field to return to the **FUNCTION KEY PROGRAM** screen or press **CLEAR** at any time to return to the **FUNCTION KEY PROGRAM** screen without saving changes.

Datatran Tip Function Options

Option	Entry	Description
DESC	Alphanumeric 12 character	You can program a unique descriptor for each foreign currency. The default descriptor is DTRAN TIP.
UNDER MGR CONTROL	Y or N	Select Y if you do not want the operator to use this function in REGISTER mode. When selected, the function is allowed only in the X mode switch position.
SEND TO EFT	Y or N	Select Y if the DataTran is connected; select N if not using integrated payment.

EAT-IN TAKE OUT DRIVE THRU

(Keycodes 342 & 390 & 341) Use to track different types of sales on reports.

1. Press the **EAT-IN**, **TAKE OUT**, or **DRIVE THRU** key to view the appropriate function key options:

EAT-IN PROGRAMMING		
DESC :	EATIN	←
EXEMPT TAX 1		N
EXEMPT TAX 2		N
EXEMPT TAX 3		N
EXEMPT TAX 4		N
COMPULSORY VALID		N

2. Press **CASH** from the last field to return to the **FUNCTION KEY PROGRAM** screen or press **CLEAR** at any time to return to the **FUNCTION KEY PROGRAM** screen without saving changes.

EAT-IN/TAKE OUT/DRIVE THRU Function Options

Option	Entry	Description
DESC	Alphanumeric 12 character	You can program a unique descriptor. The default descriptors are EATIN, TAKE OUT and DRIVE THRU.
EXEMPT TAX 1 EXEMPT TAX 2 EXEMPT TAX 3 EXEMPT TAX 4	Y or N	If you wish to automatically exempt the tax for a particular type of sale, select Y for the appropriate tax. For example, if items are non-taxable for Take-Out orders, but taxable for Eat-In orders, set this program to exempt tax on take-out sales.
COMPULSORY VALIDATION	Y or N	Choose Y to enforce validation if an optional printer with validation capability is connected to an RS-232C port.

ERROR CORRECT

(*Keycode 343*) Use this key to correct the last entry.

1. Press the **ERROR CORRECT** key to view the error correct function key options:

ERR CORRECT PROGRAMMING		
DESC :	ERRCORR	←
KEY HALO	0.00	
(0 : NO LIMIT)		
KEY DISABLE		N
UNDER MGR CONTROL		N

2. Press **CASH** from the last field to return to the **FUNCTION KEY PROGRAM** screen or press **CLEAR** at any time to return to the **FUNCTION KEY PROGRAM** screen without saving changes.

ERROR CORRECT Function Options

Option	Entry	Description
DESC	Alphanumeric 12 character	You can program a unique descriptor. The default descriptor is ERRCORR.
HALO	7-digit amount	You can limit errors by setting the maximum amount that can be used with this function. "0" means that there is no entry limit.
KEY DISABLE	Y or N	Select Y to disable this function.
UNDER MGR CONTROL	Y or N	Select Y if you do not want the operator to use this function in REGISTER mode. When selected, the function is allowed only in the X mode switch position.

FINALIZE

(*Keycode 443*) Press before closing a check to close the account.

1. Press the **FINALIZE** key to view the 'finalize' function key options:

ERR CORRECT PROGRAMMING		
DESC :	FINALIZE	←
CHARGE POSTING		N

2. Press **CASH** from the last field to return to the **FUNCTION KEY PROGRAM** screen or press **CLEAR** at any time to return to the **FUNCTION KEY PROGRAM** screen without saving changes.

FINALIZE Function Options

Option	Entry	Description
DESC	Alphanumeric 12 character	You can program a unique descriptor. The default descriptor is FINALIZE.
CHARGE POSTING	Y or N	Choose Y to enable charge posting functions.

F/S SUBTOTAL

(Keycode 345) Use to get the subtotal of all food stamp eligible items in a sale.

1. Press the **F/S SUB** key to view the F/S subtotal function key options:

FOOD SUBTOT PROGRAMMING		
DESC : F/S SUB		←
KEY DISABLE		N

2. Press **CASH** from the last field to return to the **FUNCTION KEY PROGRAM** screen or press **CLEAR** at any time to return to the **FUNCTION KEY PROGRAM** screen without saving changes.

F/S SUBTOTAL Function Options

Option	Entry	Description
DESC	Alphanumeric 12 character	You can program a unique descriptor. The default descriptor is F/S SUB.
KEY DISABLE	Y or N	Choose N to enable; F/S SUB is required for food stamp operations.

F/S TEND

(Keycode 346) Use to tender the food stamp eligible items in a sale using food stamps (EBT).

1. Press the **F/S TEND** key to view the food stamp tender function key options:

FOOD STAMP PROGRAMMING		↓
DESC : F/S TEND		←
HALO	0.00	
EXEMPT TAX 1		N
EXEMPT TAX 2		N
EXEMPT TAX 3		N
EXEMPT TAX 4		N
ALLOW DECIMAL		N

2. Press **CASH** from the last field or press **PAGE DOWN** to view the second page of food stamp tender function key options:

FOOD STAMP PROGRAMMING		↑
CHANGE IS ISSUED IN CASH		N ←
DOES DRAWER OPEN		Y
COMPULSORY VALID		N
ALLOW OVER TEND.		N
SEND TO EFT		N
SURCHARGE %	0.00	
MANUAL ENTRY?		N

3. Press **CASH** from the last field to return to the **FUNCTION KEY PROGRAM** screen or press **CLEAR** at any time to return to the **FUNCTION KEY PROGRAM** screen without saving changes.

F/S TEND Function Options

Option	Entry	Description
DESC	Alphanumeric 12 character	You can program a unique descriptor. The default descriptor is F/S TEND.
HALO	7-digit amount	You can limit errors by setting the maximum amount that can be used with this function. "0" means that there is no entry limit.
EXEMPT TAX 1-4	Y or N	If taxes are exempted automatically on food stamp sales (as is most often the case) select Y for each tax that is actively used and needs to be exempted.
ALLOW DECIMAL	Y or N	If N , food stamp tender must be in whole dollar amounts, i.e. \$1, \$5, or \$10. If Y , the tender is allowed in any amount.
CHANGE IS ISSUED IN CASH	Y or N	If Y , food stamp change of less than \$1 will be issued in cash.
DOES DRAWER OPEN	Y or N	Select N if you do not want the drawer to open with this key.
COMPULSORY VALIDATION	Y or N	Choose Y to enforce validation if an optional printer with validation capability is connected to an RS-232C port.
ALLOW OVER TEND	Y or N	Choose Y to allow tendering over the food stamp subtotal.
SENDTOEFT	Y or N	Option added at version 1.034. Select Y if you want this key to send to total to the connected DataTran device.
SURCHARGE %	DC Direct Only 0.00-4.00	<i>(Added at v02.000)</i> Allowable rate entries are from 0.00 to 4.00 percent. Default setting = 0.00 (No Surcharge). Surcharge will maintain a separate balance on the financial report and will update the drawer total.
MANUAL ENTRY	DC Direct Only Y or N	<i>(Added at v02.000)</i> Manual EBT card entry requires a separate food stamp key with this option selected. Check this option to allow manual card entry.

Beginning at v2.010 – When Manual Entry is enable on the Food Stamp Tender key, when the key is pressed the ECR will display PRESS CASH=SWIPE CLEAR=MANUAL.

FUNCTION LOOK UP (1-2)

(Keycodes 347~348) Two function lookup keys (**FUNCTION LOOKUP #1** and **FUNCTION LOOKUP #2**) are available to access up to eight functions each. You can use the function look up keys to locate functions that are necessary for your application, but may not fit on the keyboard layout, or to locate functions that are used only occasionally.

With this program, you can determine which functions are located on each function look up key, you can also access the status programming for each of the functions assigned to the function lookup from this area.

1. Press the **FUNCTION LOOK UP 1** or **FUNCTION LOOK UP 2** key to view the appropriate function program menu screen:

```
FUNC #1 PROGRAM
0. MENU ASSIGNMENT
1. STATUS PROGRAM
```

2. Press **0** to select the menu assignment on the function look-up key or press **1** to program the options for a function on the function look-up key. If you are programming function key options, refer to each function separately in this chapter to set function options. If you chose **0** to program menu assignment, the **FUNC. # MENU ASSIGN** screen displays:

```
FUNC #1 MENU ASSIGN.
PUSH MENU NUMBER TO
BE PROGRAMMED (1-8)
0 ←
```

3. Enter the number of the menu position (there are eight functions listed on each function look up menu) that you wish to edit, press **CASH**.

```
FUNC #1 MENU ASSIGN.
MENU NUMBER : 1
CURRENT ASSIGNMENT
CANCEL
ENTER NEW FUNC CODE,
PRESS CASH
0 ←
```

4. Type the code for the function you wish to place on the function look up key menu, press **CASH**. Refer to "Function Key Codes" in the "Service Mode Programming" chapter or press **PAGE DOWN** to view a list of functions and codes.
5. Go to step 2 above and continue to program menu numbers for the function look up key or press **CLEAR** to return to the **PROGRAM MODE** menu.

Removing a Function from a Function Look Up Key

Beginning at firmware version 1.071, the inactive code is listed when you press PAGE DOWN or PAGE UP to select a function from the list. (Press PAGE UP to view the end of the function key list where the INACTIVE function is located.) The INACTIVE function key code was not listed in previous firmware versions; but it was possible to enter the code “445”.

To eliminate a function from a function key, you can replace the key assignment on the function Look Up key with the INACTIVE key code (#445). Remove functions from the bottom of the list up, i.e. first remove the function at position #8, then #7, etc.

If you inactivate function #7 on a PLU Lookup, then attempt to inactivate function #8 you will receive the error: **Prev Keys Can No Inactive**.

The previous function in a Function Lookup cannot be inactive when inactivating the next function. When inactivating consecutive keys on a Function Lookup, you need to start with the highest number first, then proceed to then previous number.

For example, inactivate function #6, #5, #4 in this order from the same Function Lookup.

GUEST

(**Keycode 349**) Use to enter the number of guests served by a transaction.

1. Press the **GUEST** key to view the guest# function key options:

```

      GUEST # PROGRAMMING
DESC : GUEST                ←
COMPULSORY FOR
  GUEST CHECK                N
COMPULSORY FOR ALL SALES    N
PRINT AT REMOTE PRINTER     N
  
```

2. Press **CASH** from the last field to return to the **FUNCTION KEY PROGRAM** screen or press **CLEAR** at any time to return to the **FUNCTION KEY PROGRAM** screen without saving changes.

GUEST Function Options

Option	Entry	Description
DESC	Alphanumeric 12 character	You can program a unique descriptor. The default descriptor is GUEST.
COMPULSORY FOR GUEST CHECK	Y or N	Select Y to enforce an entry into the GUEST # key before a tracking number can be accessed for the first time.
COMPULSORY FOR ALL SALES	Y or N	Select Y to enforce an entry into the GUEST # key before an item can be registered on any sale.
PRINT AT REMOTE PRINTER	Y or N	Select N if you do not want GUEST # entry to print at the kitchen printer if items from the same transaction are sent to the KP.

LEVEL 1-5 (Price Level 1-5)

(*Keycodes 351~355*) Use to switch between Price Level 1 and Price Level 2.

(*Memory must be allocated for two price levels.*)

1. Press one of the **LEVEL** keys to view the level function key options:

LEVEL 1 PROG.	
DESC : LEVEL1	←
SEND DESCRIPTION TO KP	N
UNDER MGR CONTROL	N

2. Press **CASH** from the last field to return to the **FUNCTION KEY PROGRAM** screen or press **CLEAR** at any time to return to the **FUNCTION KEY PROGRAM** screen without saving changes.

LEVEL 1-5 Function Options

Option	Entry	Description
DESC	Alphanumeric 12 character	You can program a unique descriptor. The default descriptors are LEVEL1, LEVEL2, etc.
SEND DESCRIPTION TO KP	Y or N	Determines whether the level descriptor prints with the item at the KP.
UNDER MGR CONTROL	Y or N	Select Y if you do not want the operator to use this function in REGISTER mode. When selected, the function is allowed only in the X mode switch position.

MACRO 1-10

(*Keycodes 356~365*) MACRO keys are used to execute a series of keystrokes with one key. See page 271 for MACRO key sequence programming. Beginning at version 1.046 you can program a Macro descriptor.

1. Press the **MACRO** key to view the function key options for the selected MACRO key:

MACRO 1 PROGRAMMING	
DESC : MACRO 1	←

2. Press **CASH** from the last field to return to the **FUNCTION KEY PROGRAM** screen or press **CLEAR** at any time to return to the **FUNCTION KEY PROGRAM** screen without saving changes.

MACRO Function Options

Option	Entry	Description
DESC	Alphanumeric 12 character	You can program a unique descriptor for each Macro.

MDSE RETURN

(Keycode 366) Use the RETURN key to return merchandise (*MDSE RTRN*) previously purchased and provide a refund to the customer.

1. Press the **RETURN** key to view the merchandise return function key options:

```

      RETURN KEY PROGRAMMING
DESC  : MDSE RETURN          ←
KEY HALO                      0.00
  (0 : NO LIMIT)
KEY DISABLE                    N
UNDER MGR CONTROL             N
COMPULSORY VALID              N
  
```

2. Press **CASH** from the last field to return to the **FUNCTION KEY PROGRAM** screen or press **CLEAR** at any time to return to the **FUNCTION KEY PROGRAM** screen without saving changes.

RETURN Function Options

Option	Entry	Description
DESC	Alphanumeric 12 character	You can program a unique descriptor. The default descriptor is MDSE RETURN.
HALO	7-digit amount	You can limit errors by setting the maximum amount that can be used with this function. "0" means that there is no entry limit.
KEY DISABLE	Y or N	Select Y to disable this function.
UNDER MGR CONTROL	Y or N	Select Y if you do not want the operator to use this function in REGISTER mode. When selected, the function is allowed only in the X mode switch position.
COMPULSORY VALID	Y or N	Choose Y to enforce validation if an optional printer with validation capability is connected to an RS-232C port.

MODIFIER 1-5

(Keycodes 367~371) Use modifier keys to register different sizes (*Small, Medium, Large, etc.*) of the same item.

1. Press one of the **MODIFIER** keys to view the appropriate modifier function key options:

MOD 1 PROGRAMMING	↓
DESC : MOD1	←
UNDER MGR CONTROL	N
AFFECT PLU #	N
PRINT ON CHECK	N
PRINT ON RECEIPT	N
AFFECT DIGIT 1-14	
OF PLU#	0

2. Press **CASH** from the last field or press **PAGE DOWN** to view the second page of modifier function key options:

MOD 1 PROGRAMMING	↑
VALUE OF AFFECTED DIGIT (0-9)	0 ←
DISPLAY DESCRIPTOR ON LCD	N

3. Press **CASH** from the last field to return to the **FUNCTION KEY PROGRAM** screen or press **CLEAR** at any time to return to the **FUNCTION KEY PROGRAM** screen without saving changes.

MODIFIER 1-5 Function Options

Option	Entry	Description
DESC	Alphanumeric 12 character	You can program a unique descriptor. The default descriptors are MOD1 - MOD5.
UNDER MGR CONTROL	Y or N	Select Y if you do not want the operator to use this function in REGISTER mode. When selected, the function is allowed only in the X mode switch position.
AFFECT PLU #	Y or N	Select Y , for the modifier entry to modify the PLU and cause a different item/price to be registered. Select N to only add the modifier descriptor.
PRINT ON CHECK	Y or N	Select N to suppress printing of the modifier descriptor on the guest check.
PRINT ON RECEIPT	Y or N	Select N to suppress printing of the modifier descriptor on the receipt.
AFFECT DIGIT 1-14	1-14	Preceding a PLU entry with a Modifier key manipulates the PLU code assigned to the key causing a different PLU to be registered when the PLU key is pressed. Enter the digit of the PLU number you wish to change when using this key. (Digit #1 is the rightmost digit; digit #14 is the leftmost digit.)
VALUE OF AFFECTED DIGIT (0-9)	0-9	Enter the value you wish to be added in the digit position selected. For example, if you wish to affect PLU digit #4 with a value of 1, then pressing this modifier key prior to the registration of PLU #17 will result in the registration of PLU #1017.
SEND DESCRIPTION TO KP	Y or N	Determines whether the modifier descriptor prints with the item at the KP. (The modifier descriptor will print immediately above the item.)
DISPLAY DESCRIPTOR ON LCD	Y or N	The Option to display the modifier descriptor is available on version 1.046 or later.

PBAL

(Keycode 372) Use to enter a balance from a previous transaction into the current transaction.

1. Press the **PBAL** key to view the previous balance function key options:

PREVIOUS BAL. PROGRAMMING		
DESC : PBAL		←
ENTER ANY TIME		N
REQUIRE AT START OF SALE		N

2. Press **CASH** from the last field to return to the **FUNCTION KEY PROGRAM** screen or press **CLEAR** at any time to return to the **FUNCTION KEY PROGRAM** screen without saving changes.

PBAL Function Options

Option	Entry	Description
DESC	Alphanumeric 12 character	You can program a unique descriptor. The default descriptor is PBAL.
ENTER ANY TIME	Y or N	Select Y to allow the PBAL entry at any time. Select N to allow a PBAL entry only at the start of a sale.
REQUIRE AT START OF SALE	Y or N	Select Y to require an entry into the PBAL key at the start of every transaction.

PAID OUT 1-3

(*Keycodes 375~377*) The Paid-Out (P\O) keys are used to account for cash removed from the cash drawer, such as for Cash Drops.

1. Press one of the **PAID OUT** keys to view the paid out function key options:

PO #1 KEY PROGRAMMING		
DESC : PO1		←
KEY HALO	0.00	
(0 : NO LIMIT)		
KEY DISABLE		N
UNDER MGR CONTROL		N
COMPULSORY VALID		N
DISABLE TIP INPUT		N

2. Press **CASH** from the last field to return to the **FUNCTION KEY PROGRAM** screen or press **CLEAR** at any time to return to the **FUNCTION KEY PROGRAM** screen without saving changes.

PAID OUT 1-3 Function Options

Option	Entry	Description
DESC	Alphanumeric 12 character	You can program a unique descriptor. The default descriptors are PO 1-3.
HALO	7-digit amount	You can limit errors by setting the maximum amount that can be used with this function. "0" means that there is no entry limit.
KEY DISABLE	Y or N	Select Y to disable this function.
UNDER MGR CONTROL	Y or N	Select Y if you do not want the operator to use this function in REGISTER mode. When selected, the function is allowed only in the X mode switch position.
COMPULSORY VALIDATION	Y or N	Choose Y to enforce validation if an optional printer with validation capability is connected to an RS-232C port.
DISABLE TIP INPUT	Y or N	Option available at firmware version 1.038 or later.

PRICE CHANGE

(Keycode 417) The cashier can use this key to change the price of an item during a sale.

Beginning at version 1.081, the PRICE CHANGE key (function key code #417) is available. This version or later is required to use the quick price change function.

1. Press the **PRICE CHANGE** key to view the price change function key options:

PRICE CHANGE KEY PROGRAMMING	
DESC : PRICE CHANGE	←
PERMANENT CHANGE	1
0 : NEVER 1 : ALWAYS	
2 : PROMPT	
KEY DISABLE	N
UNDER MGR CONTROL	Y

2. Press **CASH** from the last field to return to the **FUNCTION KEY PROGRAM** screen or press **CLEAR** at any time to return to the **FUNCTION KEY PROGRAM** screen without saving changes.

PRICE CHANGE Function Options

Option	Entry	Description
DESC	Alphanumeric 12 character	You can program a unique descriptor. The default descriptor is PRICE CHANGE.
PERMANENT CHANGE	0-2	Select 0 to never change the price permanently, 1 to always change the price or 2 to prompt the operator.
KEY DISABLE	Y or N	Select Y to disable the function.
UNDER MGR CONTROL	Y or N	Select Y if you do not want the operator to use this function in REGISTER mode. When selected, the function is allowed only in the X mode switch position.

PRINT CHECK

(Keycode 380) Use to print the currently displayed soft check. Function key can also be set to service the check.

1. Press the **PRINT CHECK** key to view the print check function key options:

PRINT CHECK PROGRAMMING		
DESC :	PRINT CHECK	←
CHECK PRINT		
COM PORT # (0-4)		0
AUTO SERVICE CHECK		N
PRT CHECK ON RECEIPT		N
SKIP PRT OF CONSECUTIVE		
NUMBER ON CHECK		N

2. Press **CASH** from the last field to return to the **FUNCTION KEY PROGRAM** screen or press **CLEAR** at any time to return to the **FUNCTION KEY PROGRAM** screen without saving changes.

PRINT CHECK Function Options

Option	Entry	Description
DESC	Alphanumeric 12 character	You can program a unique descriptor. The default descriptor is PRINT CHECK.
CHECK PRINT COMM PORT # (0-4)	0-4	Select the port where the check print printer is attached. If 0 is selected, the check will print on the receipt printer.
AUTO SERVICE CHK	Y or N	Select Y if you want the Check Print function to automatically service the check.
PRT CHECK ON RECEIPT	Y or N	Select Y if you want the Check Print function to print on the receipt printer.
SKIP PRT OF CONSECUTIVE NUMBER ON CHECK	Y or N	Select Y if you wish to delete the printing of the consecutive # on the guest check.

PROMO

(Keycode 381) Use to remove the cost of an item registered in the current sale.

1. Press the **PROMO** key to view the promotion function key options:

PROMO PROGRAMMING	
DESC : PROMO	←
KEY DISABLE	N
UNDER MGR CONTROL	N
TAXABLE BY TAX1	N
TAXABLE BY TAX2	N
TAXABLE BY TAX3	N
TAXABLE BY TAX4	N

2. Press **CASH** from the last field to return to the **FUNCTION KEY PROGRAM** screen or press **CLEAR** at any time to return to the **FUNCTION KEY PROGRAM** screen without saving changes.

PROMO Function Options

Option	Entry	Description
DESC	Alphanumeric 12 character	You can program a unique descriptor. The default descriptor is PROMO .
KEY DISABLE	Y or N	Select Y to disable this function.
UNDER MGR CONTROL	Y or N	Select Y if you do not want the operator to use this function in REGISTER mode. When selected, the function is allowed only in the X mode switch position.
TAXABLE BY TAX1 TAXABLE BY TAX2 TAXABLE BY TAX3 TAXABLE BY TAX4	Y or N	If an item is taxable, and you wish to remove taxes and an item's cost when using the PROMO key, set the taxable status for the appropriate tax to Y .

RECD ON ACCT 1-3

(*Keycodes 382~384*) Received on Account (R\A) keys are used to account for cash added to the drawer. For example, entering the beginning cash amount.

1. Press one of the **RECD ON ACCT** keys to view the received on account function key options:

RA #1 KEY PROGRAMMING		
DESC : RA1		←
KEY HALO	0.00	
(0 : NO LIMIT)		
KEY DISABLE		N
UNDER MGR CONTROL		N
COMPULSORY VALID		N

2. Press **CASH** from the last field to return to the **FUNCTION KEY PROGRAM** screen or press **CLEAR** at any time to return to the **FUNCTION KEY PROGRAM** screen without saving changes.

RECD ON ACCT 1-3 Function Options

Option	Entry	Description
DESC	Alphanumeric 12 character	You can program a unique descriptor. The default descriptors are RA 1-3.
HALO	7-digit amount	You can limit errors by setting the maximum amount that can be used with this function. "0" means that there is no entry limit.
KEY DISABLE	Y or N	Select Y to disable this function.
UNDER MGR CONTROL	Y or N	Select Y if you do not want the operator to use this function in REGISTER mode. When selected, the function is allowed only in the X mode switch position.
COMPULSORY VALIDATION	Y or N	Choose Y to enforce validation if an optional printer with validation capability is connected to an RS-232C port.

SCALE

(Keycode 386) Use to make weight entries (*maximum entry = 99.999*) for scalable items.

1. Press the **SCALE** key to view the scale function key options:

SCALE KEY PROGRAMMING	↓
DESC : SCALE	←
KEY DISABLE	N
UNDER MGR CONTROL	N
KEY IS MAN. ENTRY	N
TARE-WEIGHT COMP.	N
WEIGHT SYM FOR MAN. (0:LB 1:KG 2:OZ)	0

2. Press **CASH** from the last field or press **PAGE DOWN** to view the second page of scale function key options:

SCALE KEY PROG.	↑
ALLOW DOLLAR ENTRY W/O SCALE ON SCALEABLE ITEM	N←
PRINT '\$' ON SCALE PRICE	Y

3. Press **CASH** from the last field to return to the **FUNCTION KEY PROGRAM** screen or press **CLEAR** at any time to return to the **FUNCTION KEY PROGRAM** screen without saving changes.

SCALE Function Options

Option	Entry	Description
DESC	Alphanumeric 12 character	You can program a unique descriptor. The default descriptor is SCALE.
KEY DISABLE	Y or N	Select Y to disable this function.
UNDER MGR CONTROL	Y or N	Select Y to not allow use of this function in REGISTER mode, the function will only be allowed in the "X" mode switch position.
KEY IS MAN. ENTRY	Y or N	Select Y for the scale key to require manual entry of the weight. Select N to automatically recall the weight from the attached scale.
TARE-WEIGHT COMP.	Y or N	Select Y if you wish to enforce the subtraction of a tare weight on the scale entry.
WEIGHT SYMBOL FOR MAN	Y or N	Select Y if you wish to use the weight symbol Kg (kilogram) for weights entered manually or OZ for ounce measurements.
ALLOW DOLLAR ENTRY W/O SCALE ON SCALEABLE ITEM	Y or N	If N , you must use the scale to register scalable PLU items. If Y , you can either register scalable items by weight extension, or by price entry.
PRINT '\$' ON SCALE PRICE	Y or N	When set to Y , the price per unit measure will include the \$ sign.

SERVICE

(Keycode 387) Use to store the current guest check when using guest check tracking.

1. Press the **SERVICE** key to view the service function key options:

SERVICE KEY PROGRAMMING	↓
DESC : SERVICE	←
NON-ADD # COMP	N
PRINT ON RECEIPT	Y
NEGATIVE BALANCE	
IN MGR CONTROL	N
CALCULATE TAX1	Y
CALCULATE TAX2	Y

2. Press **CASH** from the last field or press **PAGE DOWN** to view the second page of service function key options:

SERVICE KEY PROGRAMMING	↑
CALCULATE TAX3	Y ←
CALCULATE TAX4	Y
COMPULSORY VALID	N
HARD CHECK PRINTER	
PORT (0-4)	0

3. Press **CASH** from the last field to return to the **FUNCTION KEY PROGRAM** screen or press **CLEAR** at any time to return to the **FUNCTION KEY PROGRAM** screen without saving changes.

SERVICE Function Options

Option	Entry	Description
DESC	Alphanumeric 12 character	You can program a unique descriptor. The default descriptor is SERVICE.
NON-ADD # COMP	Y or N	Select Y if you wish to force the entry of a non-add number (i.e. a tax exempt #) before the key is used
PRINT ON RECEIPT	Y or N	Select N to not print on the receipt.
NEGATIVE BALANCE IN MGR CONTROL	Y or N	Select Y if you do not want the operator to use this function in REGISTER mode. When selected, the function is allowed only in the X mode switch position.
CALCULATE TAX1~ TAX4	Y or N	Select Y to calculate and add the appropriate tax automatically when finalized with this key.
COMPULSORY VALIDATION	Y or N	Choose Y to enforce validation if an optional printer with validation capability is connected to an RS-232C port.
HARD CHECK PRINTER PORT (0-4)	0-4	If you are using a hard check system, enter the RS232C port number where the optional guest check printer is attached.

SUBTOTAL

(Keycode 385) Use to display the subtotal for the current sale.

Use to get the subtotal of the current sale for the customer or to apply a sale discount.

1. Press the **SUBTOTAL** key to view the subtotal function key options:

SUBTOTAL PROGRAMMING	
DESC : SUBTOTAL	←
KEY DISABLE	N

2. Press **CASH** from the last field to return to the **FUNCTION KEY PROGRAM** screen or press **CLEAR** at any time to return to the **FUNCTION KEY PROGRAM** screen without saving changes.

SUBTOTAL Function Options

Option	Entry	Description
DESC	Alphanumeric 12 character	You can program a unique descriptor. The default descriptor is SCALE.
KEY DISABLE	Y or N	Select Y to disable this function.

TABLE

(Keycode 388) Use to enter a table number on the currently open guest check.

1. Press the **TABLE** key to view the table # function key options:

TABLE # PROGRAMMING		
DESC : TABLE		←
ENFORCE ON CHECK TRACK	N	
ENFORCE ON ALL SALES	N	
PRINT AT REMOTE PRINTER	N	

2. Press **CASH** from the last field to return to the **FUNCTION KEY PROGRAM** screen or press **CLEAR** at any time to return to the **FUNCTION KEY PROGRAM** screen without saving changes.

TABLE Function Options

Option	Entry	Description
DESC	Alphanumeric 12 character	You can program a unique descriptor. The default descriptor is TABLE.
ENFORCE ON CHECK TRACK	Y or N	If Y , you must enter the table number before opening a new check track #.
ENFORCE ON ALL SALES	Y or N	If Y , you must enter the table number before beginning any transaction.
PRINT AT REMOTE PRINTER	Y or N	Choose Y to print the table number at the remote printer.

TARE

(Keycode 389) Used to subtract the weight of the container or packaging on Scale items.

1. Press the **TARE** key to view the tare weight function key options:

```

      TARE KEY PROGRAMMING
DESC  : TARE                ←
KEY DISABLE                 N
UNDER MGR CONTROL          N
#5 IS MANUAL TARE          N
  
```

2. Press **CASH** from the last field to return to the **FUNCTION KEY PROGRAM** screen or press **CLEAR** at any time to return to the **FUNCTION KEY PROGRAM** screen without saving changes.

TARE Function Options

Option	Entry	Description
DESC	Alphanumeric 12 character	You can program a unique descriptor. The default descriptor is TARE.
KEY DISABLE	Y or N	Select Y to disable this function.
UNDER MGR CONTROL	Y or N	Select Y if you do not want the operator to use this function in REGISTER mode. When selected, the function is allowed only in the X mode switch position.
#5 IS MANUAL TARE	Y or N	Choose Y to use tare number five to manually enter a tare weight.

TAX EXEMPT

(Keycode 391) Used to remove taxes (*Exempt*) from the current sale.

1. Press the **TAX EXEMPT** key to view the tax exempt function key options:

TAX EXEMPT PROGRAMMING	
DESC : TAXEXMT	←
EXEMPT TAX 1	N
EXEMPT TAX 2	N
EXEMPT TAX 3	N
EXEMPT TAX 4	N
NON-ADD# COMP	N
COMPULSORY VALID	N

2. Press **CASH** from the last field to return to the **FUNCTION KEY PROGRAM** screen or press **CLEAR** at any time to return to the **FUNCTION KEY PROGRAM** screen without saving changes.

TAX EXEMPT Function Options

Option	Entry	Description
DESC	Alphanumeric 12 character	You can program a unique descriptor, the default is TAXEXMT.
EXEMPT TAX 1 EXEMPT TAX 2 EXEMPT TAX 3 EXEMPT TAX 4	Y or N	Select Y or N for each tax to determine which tax or taxes are exempted when this key is used.
NON-ADD # COMP	Y or N	Select Y if you wish to force the entry of a non-add number (i.e. a tax exempt #) before the key is used.
COMPULSORY VALIDATION	Y or N	Choose Y to enforce validation if an optional printer with validation capability is connected to an RS-232C port.

TIME IN/OUT

(*Keycode 396*) Used to make time entries when time keeping is used.

1. Press the **TIME IN/OUT** key to view the time in/out function key options:

TIME IN/OUT PROGRAMMING		
DESC : TIME IN/OUT		←
KEY DISABLE		N
UNDER MGR CONTROL		N
COMPULSORY VALID		N

2. Press **CASH** from the last field to return to the **FUNCTION KEY PROGRAM** screen or press **CLEAR** at any time to return to the **FUNCTION KEY PROGRAM** screen without saving changes.

TIME IN/OUT Function Options

Option	Entry	Description
DESC	Alphanumeric 12 character	You can program a unique descriptor. The default descriptor is TIME IN/OUT.
KEY DISABLE	Y or N	Select Y to disable this function.
UNDER MGR CONTROL	Y or N	Select Y if you do not want the operator to use this function in REGISTER mode. When selected, the function is allowed only in the X mode switch position.
COMPULSORY VALIDATION	Y or N	Choose Y to enforce validation if an optional printer with validation capability is connected to an RS-232C port.

TIP

(Keycode 397) Only used with Guest Check Tracking to add a Tip amount to the currently open guest check.

The TIP function key is used to add a Tip to an open guest check only.

1. Press the **TIP** key to view the tip function key options:

```

          TIP KEY PROGRAMMING      ↓
DESC : TIP                        ←
KEY DISABLE                        N
UNDER MGR CONTROL                 N
TYPE IS                           0
  %:1 AMOUNT:0
ADD TAX RATE 1                    N
ADD TAX RATE 2                    N
    
```

2. Press **CASH** from the last field or press **PAGE DOWN** to view the second page of tip function key options:

```

          TIP KEY PROG.           ↑
ADD TAX RATE 3                   N ←
ADD TAX RATE 4                   N
AMT ADDED TO
  NET & GROSS TOT                N
    
```

3. Press **CASH** from the last field to return to the **FUNCTION KEY PROGRAM** screen or press **CLEAR** at any time to return to the **FUNCTION KEY PROGRAM** screen without saving changes.

TIP Function Options

Option	Entry	Description
DESC	Alphanumeric 12 character	You can program a unique descriptor. The default descriptor is TIP.
KEY DISABLE	Y or N	Select Y to disable this function.
TYPE IS %:1 AMOUNT:0	0 or 1	Select 0 if the tip is to be a calculated percentage based on a percentage entry. Select 1 if the TIP is to be an amount entry.
ADD TAX RATE 1 ADD TAX RATE 2 ADD TAX RATE 3 ADD TAX RATE 4	Y or N	Choose Y to if tax is calculated and added on the tip amount.
AMT ADDED TO NET AND GROSS TOT	Y or N	Choose Y if you wish to add the TIP TOTAL to the NET and GROSS sales totals on the financial report.

VALIDATION

(Keycode 401) Use to print a single line validation for an item or sale. Requires an optional slip printer connected to the ECR for this feature.

1. Press the **VALIDATION** key to view the validation function key options:

VALID KEY PROGRAMMING		
DESC : VALIDATION		←
SLIP OUTPUT		
COM PORT # (0-4)		0
KEY DISABLE		N
ALLOW MULTIPLE VALIDATION		N

2. Press **CASH** from the last field to return to the **FUNCTION KEY PROGRAM** screen or press **CLEAR** at any time to return to the **FUNCTION KEY PROGRAM** screen without saving changes.

VALIDATION Function Options

Option	Entry	Description
DESC	Alphanumeric 12 character	You can program a unique descriptor. The default descriptor is VALIDATION.
SLIP OUTPUT COMM PORT # (0-4)	0-4	If validation is used, identify the communications port (1-4) where the validating printer is attached. Enter 0 if validation is not used.
KEY DISABLE	Y or N	Select Y to disable this function.
ALLOW MULTIPLE VALIDATION	Y or N	Select Y to allow multiple validations of the same transaction.

VOID ITEM

(Keycode 398) Use to remove any previously entered item from the current sale.

1. Press the **VOID ITEM** key to view the void item function key options:

VOID KEY PROGRAMMING		
DESC :	VOID	←
KEY HALO		0.00
	(0 : NO LIMIT)	
KEY DISABLE		N
UNDER MGR CONTROL		N

2. Press **CASH** from the last field to return to the **FUNCTION KEY PROGRAM** screen or press **CLEAR** at any time to return to the **FUNCTION KEY PROGRAM** screen without saving changes.

VOID ITEM Function Options

Option	Entry	Description
DESC	Alphanumeric 12 character	You can program a unique descriptor. The default descriptor is VOID.
HALO	7-digit amount	You can limit errors by setting the maximum amount that can be used with this function. "0" means that there is no entry limit.
KEY DISABLE	Y or N	Select Y to disable this function.
UNDER MGR CONTROL	Y or N	Select Y if you do not want the operator to use this function in REGISTER mode. When selected, the function is allowed only in the X mode switch position.

WASTE

(Key Code 399) Used outside of a sale to allow control of inventory items that must be removed from stock due to spoilage, breakage or mistakes.

1. Press the **WASTE** key to view the waste function key options:

WASTE PROGRAMMING	
DESC : WASTE	←
KEY HALO	0.00
(0 : NO LIMIT)	
KEY DISABLE	N
UNDER MGR CONTROL	N
COMPULSORY VALID	N

2. Press **CASH** from the last field to return to the **FUNCTION KEY PROGRAM** screen or press **CLEAR** at any time to return to the **FUNCTION KEY PROGRAM** screen without saving changes.

WASTE Function Options

Option	Entry	Description
DESC	Alphanumeric 12 character	You can program a unique descriptor. The default descriptor is WASTE.
HALO	7-digit amount	You can limit errors by setting the maximum amount that can be used with this function. "0" means that there is no entry limit.
KEY DISABLE	Y or N	Select Y to disable this function.
UNDER MGR CONTROL	Y or N	Select Y if you do not want the operator to use this function in REGISTER mode. When selected, the function is allowed only in the X mode switch position.
COMPULSORY VALIDATION	Y or N	Choose Y to enforce validation if an optional printer with validation capability is connected to an RS-232C port.

Function Key Descriptions

Keys are listed in alphabetical order. Many of the keys described below are not included on the default keyboard. Refer to “Function Key Assignment” on page 142 to add or change programmable keys on the keyboard.

<u>Function Key</u>	<u>Description</u>
#/NS	Non-Add Number / No-Sale: Use as a non-add number key to print a numeric entry (up to 9-digits) on the receipt and journal. This entry will not add to any sales totals. The #/NS key is also used to open the cash drawer without making a sale.
X/TIME	Use to multiply a quantity of items or calculate split pricing on PLU entries. When X/Time is pressed in REG mode when the ECR is idle, the Date & Time are displayed on the operator display.
00, 0-9, Decimal	Use to make numeric entries in REG, X, Z, VOID, or PGM positions. The decimal key is used for decimal or scale multiplication, when setting or entering fractional percentage discounts, or when programming fractional tax rates. Do not use the decimal key when making amount entries into PLUs.
ADD CHECK	Use to combine individual trays (such as in a cafeteria situation). Each tray subtotal can advance the consecutive number, depending on programming.
CANCEL	Cancels a transaction without updating PLU, or function key totals. The Cancel function may only be used prior to tendering. Once tendering begins, the Cancel function may no longer be used. The CANCEL key corrects the appropriate totals and counters and the Financial report records total of transactions canceled.
CASH	Use to finalize cash sales. Calculates the sale total including tax and opens the cash drawer. Change computation is allowed by entering an amount before pressing the CASH key. The cash drawer opens only if the amount tendered is equal to or greater than the total amount of the sale. Post tendering is also available should a second change calculation be necessary. Re-enter the tendered amount and press the CASH key to show the new change computation. Press the CASH key a second time to issue a buffered receipt when the receipt on/off function is OFF.
CHECK	Use to finalize check sales. Calculates the sale total including tax, finalizes the sale, and opens the cash drawer. Change computation is allowed by entering an amount before pressing the CHECK key. The cash drawer opens only if the amount tendered is equal to or greater than the total amount of the sale. Change issued will be subtracted from the cash-in-drawer total.
CHECK CASHING	Use to exchange a check for cash. Cash-in-drawer and check-in-drawer totals are adjusted.
CHECK ENDORSEMENT	Use to print a check endorsement message on an optional slip printer after a check has been tendered. Refer to “Endorsement Message” programming on page 257 to program an endorsement message.
CHARGE (1-8)	Use to finalize charge sales. Calculates the sale total including tax, finalizes the sale, and opens the cash drawer. Change computation is allowed by entering an amount before pressing the CHARGE key. The cash drawer opens only if the amount tendered is equal to or greater than the total amount of the sale. Change issued will be subtracted from the cash-in-drawer total.

<u>Function Key</u>	<u>Description</u>
CHECK #	The CHECK # key is used to begin new or access existing guest check balances (hard check) or itemized bill (soft check). Check track numbers that are entered manually may be set at a fixed length of one to nine digits. Check track numbers that are assigned automatically will begin with #1. Existing checks are accessed by entering the check track number and pressing the CHECK # function key.
CLEAR	Use to clear entries made into the 10-key numeric pad or X/TIME key before they are printed. Also used to clear error conditions.
CLERK	The register will not operate in register mode unless a clerk has been signed on. Direct or secret code sign on procedures accomplishes clerk sign-on. All entries made on the register will report to one of the 10 clerk totals. When a clerk is signed on, all entries following will add to that clerk's total until another clerk is signed on. To sign a clerk off, enter 0 (zero) and then press the CLERK key. The "CLOSED" message displays. The register cannot be operated until another clerk is signed on. The current clerk must first be signed off before another clerk may be signed on.
CONV (1-4)	The currency conversion function, allowed after subtotal, converts and displays the new subtotal at a preprogrammed exchange rate. Tendering is allowed after using the currency conversion function. Change is calculated and issued in home currency. The amount of foreign currency tendered is stored in a separate total on the Financial report but not added to the drawer total.
EAT-IN TAKE OUT DRIVE THRU	Eat-In, Take Out and Drive Thru are subtotal functions. In areas that have different tax rules for eat-in and take out sales, the EAT-IN, TAKE OUT and DRIVE THRU keys can be programmed to automatically charge or exempt taxes. Sales may not be split between Eat-In, Take Out and Drive Thru. The EAT-IN, TAKE OUT and DRIVE THRU keys maintain separate totals on the Financial report.
ERROR CORR	Use to correct the last entry. The ERROR CORR key corrects the appropriate totals and counters.
F/S SHIFT	When pressed before a PLU entry, the F/S SHIFT key reverses the preprogrammed food stamp status of the PLU. For example, an item that is not food stamp eligible can be made food stamp eligible.
F/S SUB	Displays the amount of the sale that is food stamp eligible.
F/S TEND	Use to tender food stamps for eligible sales.
FINALIZE	Pressing before closing a check will close the account and the account number will no longer be reported on the open check report. The system option for charge posting must be set to "Y" in order to use this function.
GUEST #	Use to enter the count of guests served.
LEVEL 1-5	When allocated for more than one price levels, use to switch between the price levels.
JOURNAL FEED	Advances the journal paper one line, or continuously until the key is released.
MACRO (1-10)	Macro keys may be programmed to record, and then later perform, up to 50 keystrokes. For example, a macro key could be set to tender (preset tender) a common currency, such as \$5 into the cash key.
MDSE RETURN	Used to return or refund merchandise. Returning an item will also return any tax that may have been applied.
MODIFIER (1-5)	A modifier key alters the next PLU registered, either by changing the code number of the PLU so that a different item is registered, or by adding the modifier descriptor (and not changing the code of the subsequent PLU.)

<u>Function Key</u>	<u>Description</u>
P/BAL	Use to enter the amount of an outstanding balance.
PAID OUT (1-3)	Use to record money taken from the register to pay invoices, etc. The paid out amount subtracts from the cash-in-drawer total. Paid outs are allowed outside of a sale only.
PRICE CHANGE	The cashier can use this key to change the price of an item during a sale.
% 1 - % 5	Up to five % keys may be placed on the keyboard. Each % key is set with a specific function, such as item discount or surcharge, or sale discount or surcharge. The percent rate may be entered or preprogrammed, or the percent keys can be programmed with a negative open or preset price, thus acting as coupon keys.
PLU	The PLU key is used to register price lookups by number entry. PLUs can be programmed open or preset, and positive or negative.
PAYMENT	Press to make a payment, partial payment, or pre-payment while posting to a check (account). If the payment amount exceeds the check balance, a credit balance will be maintained. The system option for charge posting must be set to "Y" in order to use this function.
PAY TENDER	The Pay Tender functions like the Payment key. However, if the payment amount exceeds the check balance, the overpayment will be issued as change and the account balance will be zero. The system option for charge posting must be set to "Y" in order to use this function.
PRINT CHECK	Use to print a guest check. The check can be printed on an optional (RS-232C) printer or can be printed on the receipt printer. The PRINT CHECK key can be set to automatically service the check.
PROMO	The PROMO key allows you to account for promotional items, as in "buy two, get one free". Pressing this key will remove an item's cost from the sale but will include the sale of the item in the item's sales counter.
RCPT FEED	Advances the receipt paper one line, or continuously until the key is released.
RCPT ON/OFF	When 'OFF' no receipt will print during a sale. (If the receipt is off, a buffered receipt is available by pressing the CASH key a second time.)
RECD ACCT (1-3)	The RA (received on account) key is used to record media loaned to the cash drawer, or payments received outside of a sale. The cash drawer will open. The amount received adds to the cash-in-drawer total.
SCALE	Use to make weight entries. When a scale is attached, press the scale key to show the weight in the display, then press (or enter) a PLU to multiply the weight times the price. When a scale is not attached, you can enter the weight (using the decimal key for fractions). PLUs may be programmed to require an entry through the scale key.
SERVICE	Use to store Previous Balance or Check/Table tracking transactions.
SBTL	Displays subtotal of sale including tax. Must be pressed prior to a sale discount or sale surcharge.
TABLE #	Tracks the current balance for a guest check or table.
TARE	Tares are container weights. If you are using the scale function, you can preset up to 5 different tare weights. The tare can be subtracted automatically when a specific PLU is registered, or manually inputting the tare number and pressing the TARE key can subtract the tare. Tare #5 can be programmed for entering tare weights manually.
TAX EXEMPT	Press the TAX EXEMPT key to exempt tax 1, tax 2, tax 3, and/or tax 4 from the entire sale.
TAX (1-4) SHIFT	When pressed before a PLU entry, the tax shift keys reverse the tax status of the PLU, i.e., a PLU with non-tax status would become taxable or a PLU with tax status would become non-taxable.
TIME IN/OUT	Used to make time entries when time keeping is used.

Function Key**Description****TIP**

The TIP key allows a gratuity to be added to a guest check before payment. The TIP key may be programmed as either a percentage or amount. If programmed as a percentage, tax programming defines whether the percentage is calculated on the net amount, or the amount after taxes.

VOID

Use to correct an item entered earlier within a sale. The VOID key corrects the appropriate totals and counters. To correct the last item, use the ERROR CORR key. For void operations outside of a sale (Transaction Void), use the VOID position on the mode switch. The Financial report records totals for each type of void separately.

VALIDATION

If you are using an optional slip printer, you can press the VALIDATION key to print a three-line validation on a separate form or piece of paper. Any item registration, discount or payment may be validated

WASTE

Allows control of inventory by accounting for items that must be removed from stock due to spoilage, breakage or mistakes. Press the WASTE key before entering wasted items, and then press the WASTE key again to finalize. The WASTE key may be under manager control, requiring the mode switch to be in the "X" position. The WASTE key is not allowed within a sale.

Clerk Programming

- At the **PGM** mode switch position menu, press **6** for **CLERK**. The **CLERK NUMBER** screen displays:

```

      CLERK NUMBER

CLERK NO? (1-99)           0 ←
  
```

- Enter the clerk number 1-99, **(the actual number of clerks is set in memory allocation)**. Press the **CASH** key to display the **CLERK # programming** screen:

```

CLERK #1PROGRAMMING
NAME : CLERK 1           ←
PASSWORD                 0
DRAWER ASSIGN (0-2)     1
  
```

- Refer to "Clerk Programming - Reference Information" to make choices or changes on the screens provided.
- After making new entries or changes for a function key, press the **CLEAR** key to finalize and return to the **PROGRAM MODE** screen.

Clerk Programming - Reference Information

Option	Entry	Description
NAME	Alphanumeric 12 character	You can program a descriptor for each clerk. The name you program will print on the receipt in place of the default CLERK #1-99. Type the descriptor using the Program Overlay or by using the descriptor code method (see page 167.) The overlay is automatically activated when the cursor is on the DESC field.
PASSWORD	10-digit number	If you are using a direct or code entry clerk system. The number you set here is the number you must use to sign on or clock in/out. If you use an optional card reader, you must swipe the employee card at this field.
DRAWER	0-2	Enter 0 to allow check track operations only. (No cash sales.) Enter 1 or 2 (with the multiple drawer option) to select which drawer the clerk will open.

Logo Descriptor

1. From the **PGM** mode switch position menu, press **7** for **LOGO DESCRIPTOR**. The **LOGO DESCRIPTOR PROGRAM** screen displays:

```
LOGO DESCRIPTOR PROGRAM
0.PREAMBLE
1.POSTAMBLE
2.ENDORSEMENT MESSAGE
3.FINANCIAL REPORT
4.CLERK REPORT
5.MIX & MATCH NAME
6.DATATRAN
```

Preamble

The preamble is a programming message of up to six lines of 32 characters that appears at the top of each receipt and/or guest check.

1. From the **LOGO DESCRIPTOR PROGRAM** screen, press **0** to display the **PREAMBLE** screen:

```
PREAMBLE ↓
LINE 1 : ←
LINE 2 :
LINE 3 :
```

2. Using the Alphanumeric keyboard overlay (SPS-320/SPS-340, type the descriptor. For the SPS-345 use the descriptor code method (see page 167.) Each line can be up to 32 characters. If you make a mistake, press the **BACKSPACE** key (on the alpha overlay or enter the backspace code 97 if you are using the descriptor code method) to erase the previous character. After you have completed typing the first line, press **CASH** to accept the new line and advance to the second line, or press **CLEAR** to return to the **LOGO DESCRIPTOR PROGRAM** screen without making any changes.
3. Using the same procedure, continue programming each line as necessary. Press **CLEAR** at any time to exit. After programming the third line, the fourth, fifth, and sixth lines display:

```
PREAMBLE ↑
LINE 4 : ←
LINE 5 :
LINE 6 :
```

4. When the last line has been entered, press **CASH** to accept the line and return to the **LOGO DESCRIPTOR PROGRAM** screen.

Postamble

The postamble is a programming message of up to six lines of 32 characters that appears at the bottom of each receipt and/or guest check.

1. From the **LOGO DESCRIPTOR PROGRAM** screen, press **0** to display the **POSTAMBLE** screen:

POSTAMBLE		↓
LINE 1 :		←
LINE 2 :		
LINE 3 :		

2. Using the Alphanumeric keyboard overlay (SPS-320/SPS-340, type the descriptor. For the SPS-345 use the descriptor code method (see page 167.) Each line can be up to 32 characters. If you make a mistake, press the **BACKSPACE** key (on the alpha overlay or enter the backspace code 97 if you are using the descriptor code method) to erase the previous character. After you have completed typing the first line, press **CASH** to accept and advance to the second line, or press **CLEAR** to return to the **LOGO DESCRIPTOR PROGRAM** screen without making any changes.
3. Using the same procedure, continue programming each line as necessary. Press **CLEAR** at any time to exit. After programming the third line, the fourth, fifth and sixth lines display:

POSTAMBLE		↑
LINE 4 :		←
LINE 5 :		
LINE 6 :		

4. When the last line has been entered, press **CASH** to accept the line and return to the **LOGO DESCRIPTOR PROGRAM** screen.

Endorsement Message

The Endorsement Message is a programming message of up to ten lines of 32 characters that prints when a check is endorsed on an optional slip printer.

1. From the **LOGO DESCRIPTOR PROGRAM** screen, press **2** to display the **ENDORSEMENT MESSAGE** Screen:

```
                ENDORSEMENT MESSAGE          ↓
LINE 1  :
                                     ←
LINE 2  :
LINE 3  :
```

2. Using the Alphanumeric keyboard overlay (SPS-320/SPS-340, type the descriptor. For the SPS-345 use the descriptor code method (see page 167.) Each line can be up to 32 characters. If you make a mistake, press the **BACKSPACE** key (on the alpha overlay or enter the backspace code 97 if you are using the descriptor code method) to erase the previous character. After you have completed typing the first line, press **CASH** to accept the new message and advance to the second line, or press **CLEAR** to return to the **LOGO DESCRIPTOR PROGRAM** screen without making any changes.
3. Using the same procedure, continue programming each line as necessary. Press **CLEAR** at any time to exit. After programming the third line, the next three lines display:

```
                ENDORSEMENT MESSAGE          ↑
LINE 4  :
                                     ←
LINE 5  :
LINE 6  :
```

4. Continue programming all ten lines if necessary. When the last line has been entered, press **CASH** to accept the message and return to the **LOGO DESCRIPTOR PROGRAM** screen.

Financial Report

The Financial Report selection allows you to reprogram the descriptors that appear with the Financial Report totals and counters. For example, the first total on the financial report "+PLU TTL" represents the total of all positive PLU entries. You might wish to re-label this total to say, "FOOD SALES". You can reprogram any of the Financial Report totals listed here with any 12-character descriptor.

1. From the **LOGO DESCRIPTOR PROGRAM** screen, press **3** to display the **FINANCIAL REP MESSAGE** Screen:

```
      FINANCIAL REP MESSAGE      ↓
TTL 1  :
+PLU TTL      ←
TTL 2  :
-PLU TTL
TTL 3  :
ADJST TTL
```

2. The first 3 report descriptors (TTLs 1-3) display with the cursor arrow pointing at the first descriptor. Each descriptor can be up to 12 characters.
3. Using the Alphanumeric keyboard overlay (SPS-320/SPS-340, type the descriptor.
4. For the SPS-345 use the descriptor code method (see page 167.)
5. If you make a mistake, press the **BACKSPACE** key (on the alpha overlay or enter the backspace code 97 if you are using the descriptor code method) to erase the previous character.
6. After you have completed typing the first descriptor, press **CASH** to accept the new message and advance to the next descriptor or press **CLEAR** to return to the **LOGO DESCRIPTOR PROGRAM** screen without making any changes.
7. Press **CASH** repeatedly or press **PAGE UP** and/or **PAGE DOWN** to locate the descriptor you wish to program.
8. After the last item on each screen, the screen shifts to display the next 3 descriptors. (There are 87 Financial Report descriptor lines that you may program.)
9. Using the same procedure, continue programming each line as necessary.
10. Press **CLEAR** at any time to exit and return to the **LOGO DESCRIPTOR PROGRAM** screen.

Financial Report Messages

Line #	Message
1	+PLU TTL
2	-PLU TTL
3	ADJST TTL
4	NONTAX
5	TAX1 SALES
6	TAX2 SALES
7	TAX3 SALES
8	TAX4 SALES
9	TAX1
10	TAX2
11	TAX3
12	TAX4
13	XMPT1 SALES
14	XMPT2 SALES
15	XMPT3 SALES
16	XMPT4 SALES
17	EATIN TTL
18	TAKEOUT TTL
19	DRTHRU TTL
20	% 1
21	% 2
22	% 3
23	% 4
24	% 5
25	NET SALE
26	CREDIT TAX1
27	CREDIT TAX2
28	CREDIT TAX3
29	CREDIT TAX4

Line #	Message
30	FD/S CREDIT
31	RETURN
32	ERROR CORR
33	PREVIOUS VD
34	VOID MODE
35	CANCEL
36	GROSS SALES
37	CASH SALES
38	CHECK SALES
39	R/A 1
40	R/A 2
41	R/A 3
42	P/O 1
43	P/O 2
44	P/O 3
45	HASH TTL
46	AUDACTION
47	NOSALE
48	CASH-IN-D
49	CHECK-IN-D
50	FD/S-IN-D
51	CHG1-IN-D
52	CHG2-IN-D
53	CHG3-IN-D
54	CHG4-IN-D
55	CHG5-IN-D
56	CHG6-IN-D
57	CHG7-IN-D
58	CHG8-IN-D

Line #	Message
59	CHG1 SALES
60	CHG2 SALES
61	CHG3 SALES
62	CHG4 SALES
63	CHG5 SALES
64	CHG6 SALES
65	CHG7 SALES
66	CHG8 SALES
67	FOREIGN 1
68	FOREIGN 2
69	FOREIGN 3
70	FOREIGN 4
71	DRWR TTL
72	MIX & MATCH
73	PROMO
74	WASTE
75	TIP
76	TRAIN TTL
77	BAL FORWARD
78	GUESTS
79	P/BAL
80	CHECKS PAID
81	SERVICE
82	PAYMENT
83	ROUND EFFECT
84	[BLANK] <i>Not Used</i>
85	[BLANK] <i>Not Used</i>
86	[BLANK] <i>Not Used</i>
87	[BLANK] <i>Not Used</i>

Clerk Report

The Clerk Report selection allows you to reprogram the descriptors that appear with the Clerk Report totals and counters. For example, the first total on the clerk report "NET SALES" might be re-labeled to say, "GROSS SALES". You can reprogram any of the Financial Report totals listed here with any 12-character descriptor.

1. From the **LOGO DESCRIPTOR PROGRAM** screen, press **4** to display the **CLERK REP MESSAGE** Screen:

```
CLERK REP MESSAGE      ↓
TTL 1 :
NET SALE                ←
TTL 2 :
NONTAX
TTL 3 :
TAX1 SALES
```

2. The first 3 report descriptors (TTLs 1-3) display with the cursor arrow pointing at the first descriptor. Each descriptor can be up to 12 characters.
3. Using the Alphanumeric keyboard overlay (SPS-320/SPS-340, type the descriptor.
4. For the SPS-345 use the descriptor code method (see page 167.)
5. If you make a mistake, to erase the previous character press the **BACKSPACE** key on the alpha overlay or enter the backspace code 97 if you are using the descriptor code method.
6. After you have completed typing the first descriptor, press **CASH** to accept the new message and advance to the next descriptor or press **CLEAR** to return to the **LOGO DESCRIPTOR PROGRAM** screen without making any changes.
7. Press **CASH** repeatedly or press **PAGE UP** and/or **PAGE DOWN** to locate the descriptor you wish to program.
8. After the last item on each screen, the screen shifts to display the next 3 descriptors. (There are 71 Clerk Report descriptors that you can program.)
9. Using the same procedure, continue programming each descriptor as necessary.
10. Press **CLEAR** at any time to exit and return to the **LOGO DESCRIPTOR PROGRAM** screen.

Clerk Report Messages

Line #	Message
1	NET SALE
2	NONTAX
3	TAX1 SALES
4	TAX2 SALES
5	TAX3 SALES
6	TAX4 SALES
7	TAX1
8	TAX2
9	TAX3
10	TAX4
11	XMPT1 SALES
12	XMPT2 SALES
13	XMPT3 SALES
14	XMPT4 SALES
15	EATIN TTL
16	TAKEOUT TTL
17	DRTHRU TTL
18	% 1
19	% 2
20	% 3
21	% 4
22	% 5
23	CREDIT TAX1
24	CREDIT TAX2

Line #	Message
25	CREDIT TAX3
26	CREDIT TAX4
27	FD/S CREDIT
28	RETURN
29	ERROR CORR
30	PREVIOUS VD
31	VOID MODE
32	CANCEL
33	GROSS SALES
34	CASH SALES
35	CHECK SALES
36	R/A 1
37	R/A 2
38	R/A 3
39	P/O 1
40	P/O 2
41	P/O 3
42	HASH TTL
43	CASH-IN-D
44	CHECK-IN-D
45	FD/S-IN-D
46	CHG1 SALES
47	CHG2 SALES
48	CHG3 SALES

Line #	Message
49	CHG4 SALES
50	CHG5 SALES
51	CHG6 SALES
52	CHG7 SALES
53	CHG8 SALES
54	FOREIGN 1
55	FOREIGN 2
56	FOREIGN 3
57	FOREIGN 4
58	DRWR TTL
59	PROMO
60	WASTE
61	TIP
62	TRAIN TTL
63	BAL FORWARD
64	GUESTS
65	P/BAL
66	CHECKS PAID
67	SERVICE
68	NOSALE
69	ROUND EFFECT
70	VD SALE REC#
71	VD RETN REC#

Mix & Match Name

Each Mix & Match discount function can be programmed with a unique 12-character descriptor. The number of Mix & Match discounts is set in memory allocation. Refer to “Mix & Match Program” on page 112 for more information.

1. From the **LOGO DESCRIPTOR PROGRAM** screen, press **5** to display the **MIX & MATCH DESC.** Screen:

	MIX & MATCH DESC.	↓
M & M 1 :		
M & M 1		←
M & M 2 :		
M & M 2		
M & M 3 :		
M & M 3		

2. Using the Alphanumeric keyboard overlay (SPS-320/SPS-340, type the descriptor. For the SPS-345 use the descriptor code method (see page 167.) Each descriptor can be up to 12 characters. If you make a mistake, press the **BACKSPACE** key (on the alpha overlay or enter the backspace code 97 if you are using the descriptor code method) to erase the previous character. After you have completed typing the first descriptor, press **CASH** to accept the new message and advance to the next descriptor or press **CLEAR** to return to the **LOGO DESCRIPTOR PROGRAM** screen without making any changes.
3. Press **CASH** repeatedly or press **PAGE UP** and/or **PAGE DOWN** to locate the next mix & match descriptor you wish to program. After the last item on each screen, the screen shifts to display the next 3 mix & match descriptors. Using the same procedure, continue programming each line as necessary. Press **CLEAR** at any time to exit and return to the **LOGO DESCRIPTOR PROGRAM** screen.

DataTran Message

When a Non-EMV DataTran integrated payment appliance is connected, you can print a custom message with up to four lines on the electronic payment draft receipt. The DataTran Message programming is not available in current EMV compatible firmware versions.

1. From the **LOGO DESCRIPTOR PROGRAM** screen, press **6** to display the **DATATRAN MESSAGE** screen:

DATATRAN MESSAGE		↓
LINE 1 :		
LINE 2 :		←
LINE 3 :		

2. Using the Alphanumeric keyboard overlay (SPS-320/SPS-340, type the descriptor. For the SPS-345 use the descriptor code method (see page 167). Each line can contain up to 32 characters. If you make a mistake, press the **BACKSPACE** key (on the alpha overlay or enter the backspace code 97 if you are using the descriptor code method) to erase the previous character. After you have completed typing the first line, press **CASH** to accept the new message and advance to the next line, or press **CLEAR** to return to the **LOGO DESCRIPTOR PROGRAM** screen without making any changes.
3. Press **CASH** repeatedly or press **PAGE UP** and/or **PAGE DOWN** to locate the next line of the message you wish to program. After the last line on the first page, the screen shifts to display line #4 of the message. Using the same procedure, continue programming each line as necessary. Press **CLEAR** at any time to exit and return to the **LOGO DESCRIPTOR PROGRAM** screen.

NLU Code Number

NLU's are fixed keys on the keyboard (like traditional department keys) that access specific PLU's.

On the default keyboard the PLU# assigned to the NLU key is the same, i.e. NLU key number one is PLU #1. However, with this program, you can assign any PLU number you wish to any one of the NLU keys.

1. From the **PGM** mode switch position menu, press **8** for **NLU CODE# PROGRAM**. The **NLU CODE PROGRAM** screen displays:

```
      NLU CODE PROGRAM

PRESS THE NLU KEY ON
THE KEYBOARD YOU
WISH TO PROGRAM

PRESS CLEAR TO EXIT
```

2. Press the **NLU** key on the keyboard you wish to program or press **CLEAR** to exit.

```
      NLU CODE PROGRAM

CURRENT PLU CODE#                1
ENTER
NEW PLU CODE#                    0 ←
```

3. The current PLU code number displays. Type the new PLU code number you wish to use for this NLU key, press **CASH**.
4. The **NLU CODE PROGRAM** screen returns. Continue from step 2 to program additional NLU keys or press **CLEAR** to exit.

Download Programs

When multiple registers are connected in an IRC network, any new items added or other program changes made do not automatically download. Any programming changes need to be downloaded to the other registers in an IRC system. At the register where the changes were made, use the Program Down feature to send the changes to ALL the other ECR's in the IRC or select specific register to download to.

1. From the **PGM** mode switch position menu, press **9** for **DOWNLOAD PROGRAMS**. The **PROGRAM DOWN** screen displays:

```
PROGRAM DOWN
0 . IRC ALL
1 . IRC SELECT
```

2. From the **PROGRAM DOWN** screen, press **0** if you want to download programs to all of the registers, then go to step 4. If you wish to download only to selected registers, press **1**:

```
PROGRAM DOWN
0 . IRC ALL
1 . IRC SELECT

# 1Y←2N 3N 4N 5N 6N 7N 8N
```

3. If you pressed **1** to download to selected registers, the **PROGRAM DOWN** screen now displays **Y** or **N** for each of the eight possible registers in an IRC system.

For example, if your IRC system consists of 3 registers, the default **Y** will display for registers:

1Y, 2Y, and 3Y. The cursor arrow points at the first register.

Press the **YES/NO** key to toggle the selection for register #1 to **Y** or **N**. Press **CASH**. The cursor arrow moves to #2. Select **Y** or **N** for second register.

In this manner you can determine which registers you wish to download programs to. When you have selected **Y** or **N** for the last register, the **PROGRAM DOWN** screen appears.

```
PROGRAM DOWN
0 . PLU
1 . GROUP
2 . SALES TAX
3 . SYSTEM OPTION
4 . PRINT OPTION
5 . FUNCTION KEYS
6 . CLERK ↓
```

4. From the **PROGRAM DOWN** screen, program areas are separated into individual selections.
5. Press **PAGE DOWN** to view the second page of the **PROGRAM DOWN** selections.

Note that **00** downloads **ALL** program areas.

```
PROGRAM DOWN
7.LOGO DESC.          ↑
8.NLU CODE# PGM.
9.TIME & DATE/MISC
00.ALL
```

6. **Press the digit** on the ECR key-pad that represents the program area you want to download.
7. This display will indicate the number of the machine that the program is downloading to.
8. The printer at the receiving register will indicate "PROGRAM DOWN" and "PASS" or "FAIL" to indicate if the download is successful.

NOTES:

- Program files cannot be downloaded to registers that are busy (inside a transaction) or powered "OFF". If there is any failure in IRC communication, the register that programs are being sent from will display "**IRC NOT READY(3)**" indicating no communication is possible and the register number.
- If one or more of the registers selected for the IRC download is not available (*or is still on the program down page from a previous IRC download and another download is attempted from another register*) the error "**Not ready(0)**" will display. Be sure to press **[CLEAR]** to exit to the main program mode screen at all ECR's in the system before initiating a new program download operation.

Clerk In/Out

The Clerk In/Out program allows you to edit actual punch in/out times for the day.

1. From the **PGM** mode switch position menu, press **00** for **MORE**. The **PROGRAM MODE page 1** screen displays.
2. From the **PROGRAM MODE page 1** screen, press **0** for **CLERK I/O**. The **CLERK NUMBER** screen displays:

```
CLERK NUMBER
CLERK NO? (1-10)          0 ←
```

3. Type the number of the clerk you wish to edit and press **CASH** to display the **CLERK I/O PROG.** screen:

```
CLERK I/O PROG.
IN  00.00.00 ←  00:00
OUT 00.00.00   00:00
IN  00.00.00   00:00
OUT 00.00.00   00:00
IN  00.00.00   00:00
OUT 00.00.00   00:00
TIME WORKED:  00:00
```

4. The cursor will point at the date for the first time-in punch. Press **CASH** until the cursor points at the field you wish to edit. Note that you can edit the last 20 time punches, although only 6 dates/times display on the screen at one time. When you leave the last field displayed on the current screen, your view will shift to the next 6 dates/times
5. If you wish to edit a date, type a new date and press **CASH**. Be sure to enter the date in a six-digit format. Example: July 8th 2012 would be entered as **070812**.
6. If you wish to edit a time field, type the new time in a 24-hour (military) format. Example: 7:00 PM would be entered as **1900**.
7. Note that when you edit time information, the **TIME WORKED** field is updated with a new total. When you have completed editing, press **CLEAR** to return to the **CLERK NUMBER** selection screen.

PLU Stock

If you designate a PLU as an inventory item (see PLU programming) then a special PLU stock counter keeps a running inventory count. This program is where you can set the current inventory level.

- Refer to "System Option Programming" on page 183 to determine whether the quantity of inventory you enter in this program adds to existing inventory quantity, or whether it replaces the current inventory quantity.
- Inventory is kept in decimal units two digits beyond the decimal. For example, if 1.75 pounds are multiplied times the PLU with the preset price per pound of apples, 1.75 is subtracted from the PLU representing apples.

Entering Stock Quantities

1. From the **PGM** mode switch position menu, press **00** for **MORE**. The **PROGRAM MODE page 1** screen displays.
2. From the **PROGRAM MODE page 2** screen, press **1** for **PLU STOCK**. The **PLU NUMBER** screen displays:

```
          PLU NUMBER
* ENTER PLU NUMBER
AND PUSH PLU, OR
* PRESS A PLU KEY ON
THE KEYBOARD

                                0 ←
```

3. Enter the PLU number and press the PLU key or press a PLU key on the keyboard. The stock quantity for the selected PLU displays:

```
PLU#                1 P1
STOCK QUANTITY

                                0.00 ←
```

4. Type the new or additional stock quantity and press **CASH**. Note that stock is kept in decimal units and you must enter new or additional stock to two digits beyond the decimal. For example, type **1 0 0 0** to enter ten units of inventory.
5. Return to step 2 to continue recording inventory or press **CLEAR** to return to the **PROGRAM MODE** menu.

Drawer Limit

You can set a limit for the drawer total. When cash in drawer exceeds the limit you program here, a warning will display on the screen. You must press **CLEAR** to remove the warning and continue operations. The warning will continue to appear at the completion of every transaction with the limit exceeded, until you use the **PAID OUT** function to remove cash from the drawer.

Set the drawer limit to **0** to disable the drawer limit warning.

1. From the **PGM** mode switch position menu, press **00** for **MORE**. The **PROGRAM MODE page 1** screen displays.
2. From the **PROGRAM MODE page 1** screen, press **2** for **DRAWER LIMIT**. The **LIMIT PROGRAM** screen displays:

LIMIT PROGRAM	
DRAWER LIMIT	0.00←

3. Type the amount you wish to use for a limit (or type 0 for no limit.) Press **CASH**.

Check Change Limit

Use this program to set the maximum amount of cash that can be returned when a check is tendered for an amount greater than the amount of the sale. For example, if the check change limit is \$10.00 the maximum amount that can be tendered into the check key on a \$5.00 sale is \$15.00.

1. From the **PGM** mode switch position menu, press **00** for **MORE**. The **PROGRAM MODE page 1** screen displays.
2. From the **PROGRAM MODE page 1** screen, press **3** for **CHECK CHANGE LIMIT**. The **CHECK LIMIT PGM** screen displays:

CHECK LIMIT PROGRAM	
CHECK CHANGE LIMIT	0.00←

3. Type the amount for the check change limit. Press **CASH**.

Time & Date

Use this program to set the clock and calendar on your *SPS-300*. The date changes automatically. After initial setting, time changing will probably be required only for beginning and ending daylight savings time.

1. From the **PGM** mode switch position menu, press **00** for **MORE**. The **PROGRAM MODE page 1** screen displays.
2. From the **PROGRAM MODE page 1** screen, press **4** for **TIME & DATE**. The **SET DATE & TIME** screen displays:

```
          SET DATE & TIME

SET TIME :           HH:MM
(MILITARY)          09:01 ←

SET DATE :           MM.DD.YY
                    09.21.11
```

3. Type the current time in 24-hour format (i.e. military time, where 13:00 is 1:00 PM.) Press **CASH**.
4. Type the current date in MM (month) DD (day) and YY (year) format. Press **CASH**.

Tare Weight

A tare is the amount of weight representing the container, or package when items are sold by weight. You can pre-program five tare weights, representing the weight of different containers. When you place an item and a container on an optional scale, you can enter the tare number to automatically subtract the pre-programmed tare weight.

- If your scale is reading pounds, enter the tare in pounds; if your scale is reading ounces, enter the tare in ounces.
- The last digit entered for tare must be a zero or five. The ECR reads the scale weight to 2 decimal places (*X.xx*) so the Tare Weight can only be entered to 2 decimal places (*X.xx*). The third digit is entered for rounding purposes. For example, if the tare is 1.15 lbs, enter 1150; if the tare is .095 lbs, enter 0095.)

If you choose to use tare #5 for manual tare weight entry, do not enter a weight for tare #5.

(See TARE on page 243.)

1. From the **PGM** mode switch position menu, press **00** for **MORE**. The **PROGRAM MODE page 1** screen displays.
2. From the **PROGRAM MODE page 1** screen, press **5** for **TARE WEIGHT**. The **TARE WEIGHT PROG.** screen displays the cursor arrow pointed at the weight for TARE 1 :

```
          TARE WEIGHT PROGRAM

TARE 1 :           0.000 ←
TARE 2 :           0.000
TARE 3 :           0.000
TARE 4 :           0.000
TARE 5 :           0.000
```

3. Type the weight for the first tare, press **CASH**. The cursor advances to TARE 2. Type the weight for the second tare and press **CASH**. Continue until all 5 tares are programmed or press **CLEAR** to exit. (Remember, the last digit must be a zero or five.)

Macro

Macro keys may be programmed to perform up to 50 keystrokes with a single key. For example, a macro key could be set to tender (preset tender) a common currency, such as \$5 into the cash key. Use this program to record keystrokes for each of the 10 possible macro keys.

Note: You can also program macro descriptor in function key programming, see page 229.

1. From the **PGM** mode switch position menu, press **00** for **MORE**. The **PROGRAM MODE page 1** screen displays.
2. From the **PROGRAM MODE page 1** screen, press **6** for **MACRO**. The **MACRO PROGRAM** screen displays:

```
MACRO PROGRAM
0 . MACRO #1
1 . MACRO #2
2 . MACRO #3
3 . MACRO #4
4 . MACRO #5
5 . MACRO #6
6 . MACRO #7
```

3. Press **PAGE DOWN** to view the remainder of the list:

```
MACRO PROGRAM
7 . MACRO #8
8 . MACRO #9
9 . MACRO #10
```

4. Enter the digit that represents the **MACRO #** key you wish to program.

Programming a New Macro

1. After selecting a macro to program, the screen displays with the arrow pointing at the first macro line:

```
1 . ←
2 .
3 .
4 .
5 .
6 .
7 .
8 .
```

2. Press the **first key** of the macro sequence, for example, press **1** (numeric one):

```

1 . ONE
2 .
3 .
4 .
5 .
6 .
7 .
8 .

```

3. The keystroke is recorded on the screen and the cursor moves to the next keystroke.
4. Continue to enter keystrokes until the macro is complete.
5. If you wish to add a function to a macro that is not located on the keyboard, or if you wish to include the **CLEAR, Y/N, PAGE UP, or PAGE DOWN** function to a macro string (these keys are used for editing purposes inside this program), press **PAGE DOWN** to display a key code list:

FUNCTION	KEYCODE

NLU#1 - NLU#150 (1-150)	
ONE	301
TWO	302
THREE	303
FOUR	304
FIVE	305

6. With the key code list displayed, press **PAGE DOWN** and **PAGE UP** to find the function you wish to add to the macro. Type the numeric code number for the function key, then press **CASH**. The function is added to the macro.
7. Press **CLEAR** to end the macro recording and return to the **PROGRAM MODE** screen.

Edit an Existing Macro

1. After selecting a macro to edit, the screen displays the keystrokes currently programmed.

```

1 . ONE
2 . TWO
3 . THREE
4 . FOUR
5 .
6 .
7 .
8 .

```

2. Press the **YES/NO** key to advance the cursor to the line you wish to edit.
3. With the cursor pointing at a line, press (or select) the new function you wish to place in the macro sequence.
4. If you wish to remove a key stroke from a macro, replace the current function with the **INACTIVE** function by pressing the **PAGE DOWN** to display a key code list, then enter **4 4 5**: press **CASH**.
5. Press **CLEAR** to end the macro recording and return to the **PROGRAM MODE** screen.

Machine No.

The machine number is printed on the register receipt. Program a machine number so that any receipt can be identified with the store or register where the transaction took place. The machine number may be a different number than the IRC register number programmed in IRC programming (Refer to "IRC Options" in the "Service Mode Programming" chapter.)

1. From the **PGM** mode switch position menu, press **00** for **MORE**. The **PROGRAM MODE page 2** screen displays. Press **PAGE DOWN** to view the remainder of the page 2 program options.
2. From the **PROGRAM MODE page 2** screen, press **7** for **MACHINE NO.** The **MACHINE # PROG.** screen displays:

MACHINE # PROGRAM	
MACHINE #	0 ←

3. Type the machine number, up to 5 digits, press **CASH**.

Sample Receipt with Machine Number

THANK-YOU CALL AGAIN		
DATE 06/05/2011 SUN	TIME 08:33	
PLU5		\$1.29
TOTAL		\$1.29
CASH		\$1.29
CLERK 1	NO.000011	00011

00011 = Machine Number

PC Schedule Time

To be polled by a PC, the register must be in PC ONLINE MODE. This typically occurs when the PC Utility or polling software initiates the session.

If desired, you can place the PC in ONLINE MODE manually by selecting the PC COMMUNICATION function from the RESET REPORT MODE menu. If you wish to do unattended polling, you can program the register to automatically enter the PC ONLINE MODE at a scheduled time.

You must also configure one of the RS232C ports for PC communications. See the "Service Mode Programming" chapter in this manual.

1. From the **PGM** mode switch position menu, press **00** for **MORE**. The **PROGRAM MODE page 2** screen displays. Press **PAGE DOWN** to view the remainder of the page 2 program options.
2. From the **PROGRAM MODE** page 2 screen, press 8 for PC SCHEDULE TIME. The PC SCHEDULE PROG. screen displays:

PC SCHEDULE PROGRAM	
SET TIME :	HH : MM
(MILITARY)	99 : 99 ←

3. Type in the time (*in Military 24-hour time*) you wish to activate PC Communication Mode. Press **Enter**. For example: 2:00 PM is entered as 1400.

Training Mode Password

If you wish to use training mode, you must program a password that you will use to enter training mode. The password may be up to 4 digits long, however, if you choose to use a password less than 4 digits, you must enter preceding zeros to complete a 4-digit entry. For example, if you program the password to be "77", you must type "0077" when entering training.

1. From the **PGM** mode switch position menu, press **00** for **MORE**. The **PROGRAM MODE** page 2 screen displays. Press **PAGE DOWN** to view the remainder of the page 2 program options.
2. From the **PROGRAM MODE** page 2 screen, press 9 for **TRAINING MODE P/W**. The **TRAINING MODE P/W** screen displays:

TRAINING MODE PASSWORD	
PASSWORD :	0 ←

3. Type the password, up to 4 digits, press **CASH**.

Level Activate Time

Price levels can be automatically activated at specific times. (This function was added at version 1.050.) Use this program to select the time for each level to activate. Set the time in 24-hour format (i.e. 1300 = 1pm). You must also set the System Option “Price Level is” to “Stay Down”. This option is found on the 13th page of System Options.

1. From the **PGM** mode switch position menu, press **00** for **MORE**. The **PROGRAM MODE** page 2 screen displays. Press **PAGE DOWN** to view the remainder of the page 2 program options.
2. From the **PROGRAM MODE** page 2 screen, press **DEC** (the decimal point key) for **LEVEL ACTIVATE TIME**. The **LEVEL ACTIVATE TIME PROGRAM** screen displays:

LEVEL ACTIVATE TIME PROGRAM			
(MILITARY	FROM	TO	USE
LEVEL1	00:00 ←	00:00	N
LEVEL2	00:00	00:00	N
LEVEL3	00:00	00:00	N
LEVEL4	00:00	00:00	N
LEVEL5	00:00	00:00	N

3. Set the active times for each level and set to **Y**(yes) if the level is used.

Program Scans

Since much time and energy has been invested in the planning and programming of your ER-900, it is advisable to print a hard copy of the final program for future reference. This copy should be kept in a safe place. You can also save your program electronically, on an SD card. Go to “Program Backup and Load” on page 154 to use this method.

1. From the **PGM** Mode menu screen, press **00** for **MORE**. The **PROGRAM MODE** page 2 screen displays. Press **PAGE DOWN** to view the remainder of the page 2 program options.
2. From the **PROGRAM MODE** page 2 screen, press **00** for **SCAN**. The **PROGRAM SCAN** screen displays:

PROGRAM SCAN	
0.	PROGRAM SCAN
1.	ALL PROGRAM SCAN

3. Press **1** to initiate a printout of all programs.

4. Press **0** to select the program you wish to print from the **PROGRAM SCAN** screen.

```
PROGRAM SCAN P1 ↓
0 . PLU
1 . GROUP
2 . SALES TAX
3 . SYSTEM OPTION
4 . PRINT OPTION
5 . FUNCTION KEYS
6 . CLERK
```

5. Press **PAGE DOWN** to view **page 2**, the remainder of the program scan selections. If you see the program you wish to print, press the digit representing that program.

```
PROGRAM SCAN P2 ↑
7 . LOGO DESC .
8 . NLU CODE# PROGRAM

00 . MORE SCAN
```

6. Press **00** to view the **MORE PROGRAM SCAN** screen:

```
PROGRAM SCAN P1 ↓
0 . CLERK I/O
1 . PLU STOCK
2 . DRAWER LIMIT
3 . CHECK CHANGE LIMIT
4 . TIME & DATE
5 . TARE WEIGHT
6 . MACRO
```

7. Press **PAGE DOWN** to view the remainder of the program scan selections. When you see the program you wish to print, press the digit representing that program.

```
PROGRAM MODE P2 ↑
7 . MACHINE NO .
8 . PC SCHEDULE
9 . TRAINING MODE P/W
DEC . LEVEL ACTIVATE TIME
```

Appendix

P-Mode Password

SAM4s SPS-300 versions v1.059 and later, can be set to provide password control for access to the P-Mode Menu. This provides more control over employee access to the programming mode. With the Entry Password set up, employees will need the proper key and know the correct P-Mode Password to access the PGM mode.

Elements of the feature include:

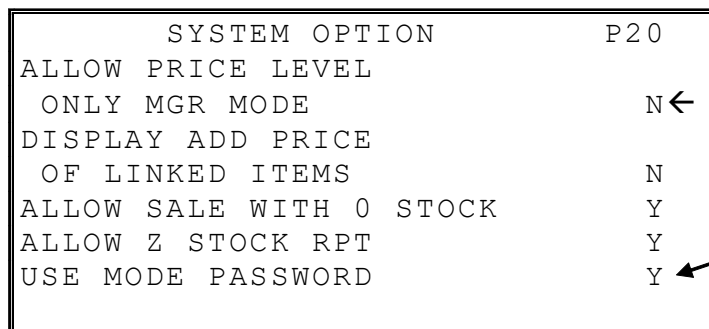
- **System Option: Use Mode Password** to enable password control of P-Mode. You must first set this option to **Y (yes)** to force password entry at P-Mode.
- **Service Mode: DEC. ENTRY PASSWORD** to set a four-digit numeric password.
- **ENTER MODE P/W** to access the **PGM** mode switch position settings (P-Mode Screen).

System Option – Password Setting

You must first set the System Option Use Mode Password to **Y (yes)** to force password entry at P-Mode.

1. Turn the mode switch to the **PGM** position. The first page of the **PROGRAM MODE** menu displays.
2. Select 3. SYSTEM OPTION. Press PAGE DOWN until SYSTEM OPTION page P20 displays:

Press
PAGE DOWN to
view System Option
screen P20.



SYSTEM OPTION		P20
ALLOW PRICE LEVEL		
ONLY MGR MODE		N ←
DISPLAY ADD PRICE		
OF LINKED ITEMS		N
ALLOW SALE WITH 0 STOCK		Y
ALLOW Z STOCK RPT		Y
USE MODE PASSWORD		Y ←

3. Press the **CASH** key to advance to the option **USE MODE PASSWORD**.
4. Press the **YES/NO** key to toggle this setting to **Y (yes)**.
5. Press **CASH** after making this change. Press **CLEAR** to exit the system option program.

Entry Password

1. Turn the mode switch to the **Service Mode** position. The first page of the **SERVICE MODE** menu displays. Press **PAGE DOWN** to view the 2nd screen of the **SERVICE MODE** menu.

```
                SERVICE MODE                ↑
7. IRC OPTIONS
8. RS232C PORT
9. SD CARD OPERATION
DEC.ENTRY PASSWORD
00.CLEAR CURR.BATCH
```

2. Press the **Decimal** key to enter the password:

```
                PMODE PASSWORD ENTRY
1. PASSWORD                                0000

*SET PASSWORD TO 0 FOR DISABLE
```

3. Type in a **4-digit password** or enter 0 to disable the P-Mode password entry. Press **CASH** to exit.

Entry Password Operation

1. Turn the mode switch to the **PGM** position. If a Password is required the **PROGRAM MODE** screen will prompt for the password entry.

```
                PROGRAM MODE                ↓
0. PLU
1. GROUP
      ████████████████████████████████████
      ENTER MODE P/W
      ████████████████████████████████████
5. FUNCTION KEYS
6. CLERK
```

2. Press **CLERK**
 - Enter the 4-digit password
 - Press **CLERK**
3. If the correct password is entered, the **PROGRAM MODE** screen opens:

```
                PROGRAM MODE                ↓
0. PLU
1. GROUP
2. SALES TAX
3. SYSTEM OPTION
4. PRINT OPTION
5. FUNCTION KEYS
6. CLERK
```

IRC (Inter-Register Communications)

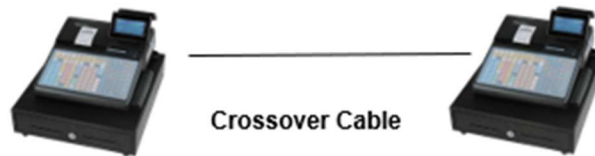
IRC is a standard feature for the SPS-300 series registers. Each register is equipped with a standard Ethernet style network connection. Up to eight registers can be connected to an Ethernet switch in a simple “star topology” configuration.

IRC Configurations

Important! When DC Direct or Dejavoo is enabled, the ECR will only operate as a Standalone register. This means no IRC Program Downloads, Reporting or printer sharing.

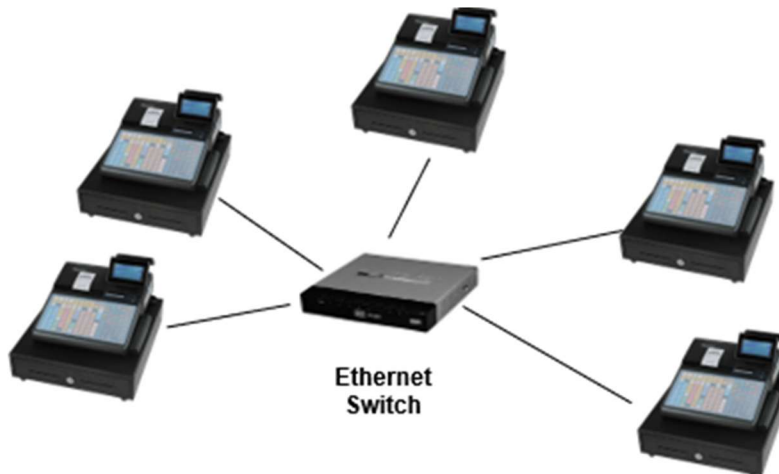
Two ECR

- In a two ECR station installation (as shown below), ECR’s can be connected using a crossover cable, eliminating the need for the Ethernet switch.



Multiple ECR

- To connect more than two ECR’s in a system, an Ethernet Switch is required.



IRC Functions

Important! When DC Direct or Dejavoo is enabled, the ECR will operate as a Standalone register. This means no IRC Program Downloads, Reporting or printer sharing.

Reports

Using IRC, you can generate consolidated X (read) or Z (reset) reports from any register in the system. The individual report option screens allow you to select “All” registers or specify individual register(s) for consolidation.

Refer to “X Reports” on page 98 or “Z Reports” on page 107 for detailed report-taking instructions.

Busy Registers

Reports cannot be taken from registers that are busy (inside a transaction) or powered “OFF”. The message “IRC NOT READY” will display if an attempt is made to communicate with a register that is not available. The register number of the unavailable register will also display.

Best Practice: In IRC systems, it is recommended to use only the mode switch to turn the register to “OFF”. You may wish to leave the power switch in the “ON” position and use the Power Switch cover (see page 17) to prevent the register from being powered off inadvertently (and therefore not available for IRC functions.) With the power switch “ON” you can turn the key to “OFF” so that reports and polling function will remain available.

Programming

When adding new items or making other program changes, the changes made do not automatically download. Any programming changes need to be downloaded to the other registers in an IRC system. At the register where the changes were made, use the Program Down feature to send the changes to ALL the other ECR’s in the IRC or select specific register to download to. Refer to the “Download Programs” chapter on page 265 for details.

Device Sharing

Limited device sharing is available for remote printers and Datatran integrated payment appliances and polling. Through IRC, traffic from satellite registers is sent to the Datatran or printer that is attached to one of the registers in the network. In the case of polling, the PC can access satellite registers through the connection to one of the registers.

Notes:

Caution: The register where the shared device is connected will be momentarily busy when traffic from a satellite register is communicated. The message “WORKING” will display momentarily on the register that is connected to the shared device until the communication is complete.

Best Practice: In an IRC System where both a Datatran and remote printers are shared; it is recommended that both devices be connected to the same register to reduce the amount of cross-traffic between registers.

Other Peripheral Devices: Other optional RS-232 devices, such as scales, scanners, pole displays, and coin dispensers operate exclusively with the register to which they are connected and cannot be shared.

Guest Check Feature Notes: The Tracking File (Check File) cannot be shared through IRC. If check tracking is used, each register will maintain its own file. However, separate check files on individual registers can be polled through IRC.

IRC Programming & Setup

The only IRC settings are made by selecting IRC OPTIONS from the S-Mode menu. Refer to the “IRC Settings” on page 145 to make these settings. If a kitchen printer or Datatran is used as a shared device, you must identify the register where the device is connected at the program.

Note: If a new register is added to an existing IRC network, you must power On/Off all registers so the new register will be recognized.

Important! When DC Direct or Dejavoo is enabled, the ECR will operate as a Standalone register. This means no IRC Program Downloads, Reporting or printer sharing.

IRC Cable Specifications

At minimum, CRS recommends Shielded Category 5e STP, 4-wire twisted pair cable, for use as communication wiring for SPS-300 series IRC systems.

NOTE: Higher rated cables, such as Cat 6 cables, are also acceptable.

CAT 5e STP (Shielded Twisted Pair) cable is a high quality general purpose data communications cable that supports standard transmission protocols such as 232, 422, 485, and 10/100 Base-T Ethernet communications. CAT 5e STP cable consists of 4 pairs of stranded, twisted pair wire, with an overall shield foil.

Note: CRS supplies different modular connectors for use with stranded or solid cable. Use P/N 202896 with stranded cable; use P/N 202994 with solid cable.

Do not use unshielded CAT 5e, unless you run the cable alone inside of conduit.



Shielded CAT5e Cable

Communication Conduit Size

Table 1-3 is a guide to the conduit size needed to fit certain numbers of communication cables:

Table 1-3: Cable/Conduit Size

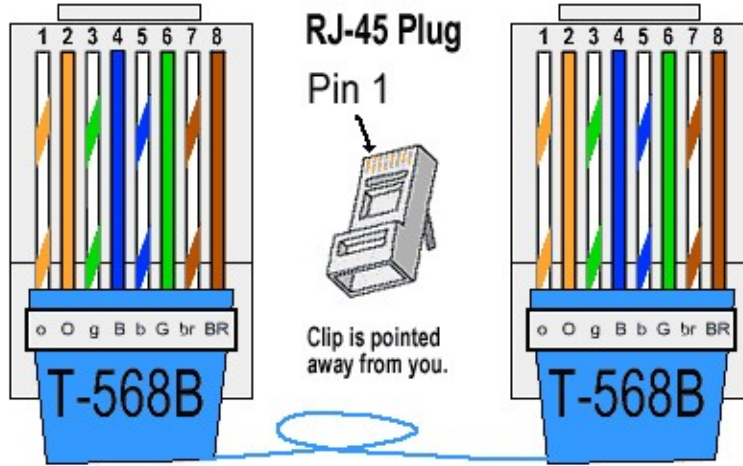
Number of Category 5 Cables	Conduit Size (Inside Diameter)
1	0.5”
2	0.75”
4	1.0”
6	1.25”
12	1.5”

The communications cable contractors should ensure that the Communication cable is pulled and the Termination Block mounted as close as possible to the ECR. If it is not their responsibility to terminate the cable, then they must ensure that there is 3 feet (1m) of cable left for this purpose. If the CAT 5 communications cabling system is to be terminated by a cabling specialist, then the cabling companies must conform to the EIA/TIA 568B termination standard.

Communication Cable Termination

Straight Thru Cable - Color Coding and Terminal Connection

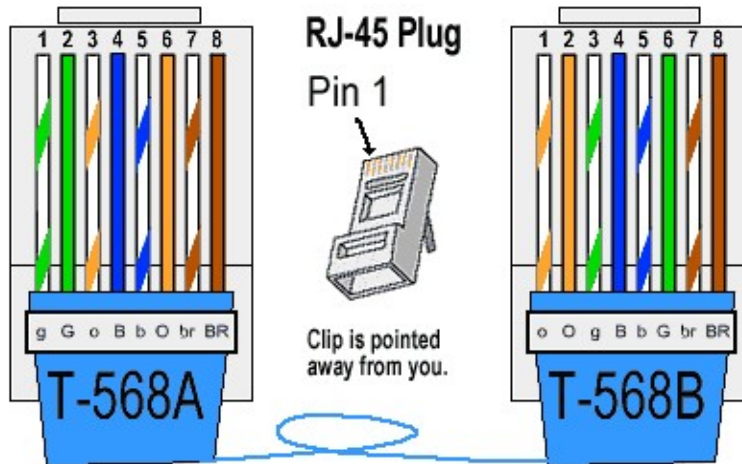
- ◆ For connecting multiple ECRs to a switch for IRC.



Pin #	Color		Pin #	Color
1	Orange/White	↔	1	Orange/White
2	Orange	↔	2	Orange
3	Green/White	↔	3	Green/White
4	Blue	↔	4	Blue
5	Blue/White	↔	5	Blue/White
6	Green	↔	6	Green
7	Brown/White	↔	7	Brown/White
8	Brown	↔	8	Brown

Crossover Cable - Color Coding and Terminal Connection

- ◆ For connecting two ECR's together from LAN port to LAN port for IRC.



Pin #	Color		Pin #	Color
1	Green/White	↔	3	Green/White
2	Green	↔	6	Green
3	Orange/White	↔	1	Orange/White
4	Blue	↔	4	Blue
5	Blue/White	↔	5	Blue/White
6	Orange	↔	2	Orange
7	Brown/White	↔	7	Brown/White
8	Brown	↔	8	Brown

Ethernet Cable Termination Instructions

1. Pull the cable off the reel to the desired length and cut. If you are pulling cables through holes, it is easier to attach the RJ-45 plugs after the cable is pulled. The total length of wire segments between SPS-300 series registers and a switch or between two ECR's cannot exceed 100 Meters (328 feet).
2. Start on one end and strip the cable jacket off (about 1") using a stripper or a knife. Be extra careful not to nick the wires, otherwise you will need to start over.
3. Spread, untwist the pairs, and arrange the wires in the order of the desired cable end. Flatten the end between your thumb and forefinger. Trim the ends of the wires so they are even with one another, leaving only 1/2" in wire length. If it is longer than 1/2" it will be out-of-spec and susceptible to crosstalk. Flatten and insure there are no spaces between wires.
4. Hold the RJ-45 plug with the clip facing down or away from you. Push the wires firmly into the plug. Inspect each wire is flat even at the front of the plug. Check the order of the wires. Double check again. Check that the jacket is fitted right against the stop of the plug. Carefully hold the wire and firmly crimp the RJ-45 with the crimper.
5. Check the color orientation. Check that the crimped connection is not about to come apart and check to see if the wires are flat against the front of the plug. If even one of these is incorrect, you will have to start over. Test the Ethernet cable.

Ethernet Cable Tips

- A crossover is used to connect two Ethernet devices without a switch.
- A crossover has one end with the Orange set of wires switched with the Green set.
- Odd numbered pins are always striped, even numbered pins are always solid colored.
- Looking at the RJ-45 with the clip facing away from you, Brown (*pin 8*) is always on the right, and pin 1 is on the left.
- No more than 1/2" of the Ethernet cable should be untwisted otherwise it will be susceptible to crosstalk.
- Do not deform, do not bend, do not stretch, do not staple, do not run parallel with power cables, and do not run Ethernet cables near noise inducing components.

Routing Communication Cable



NOTE

Communication cable must be kept a minimum of one (1) foot away from AC wiring or fluorescent lighting and at least five (5) feet away from large transformers or motors. If the communication cable must cross AC wiring, it must cross at a 90° angle to the AC wiring.



NOTE

Metal Conduit should be used wherever there is a chance of damage to the wire including telephone rooms and basements (where rodents could pose a problem). This conduit should be attached to the building ground not the isolated ground.



NOTE

Communications cable must NOT be placed alongside or in the same conduit as AC power or telephone signals.



NOTE

The bending radius on CAT 5e UTP or STP cable is to be a minimum of 1 inch.

Plenum Ceilings

The Plenum rated Category 5 cable has a durable Teflon coating and is safety rated for air plenums. Conduit is only needed when the communication cable is exposed in areas of high traffic or harsh conditions (exterior mounted cables, Terminal and Printer locations in kitchen and bar areas etc.).

Direct Burial Cable

For exterior use, Category 5 direct burial cable is specially designed for direct burial with a durable covering for protection.

Integrated Payment

Datacap-EMV Tran Series

The SPS-300 Series ECR's can support EMV or Non-EMV enabled devices for integrated payment transactions. There are several different EFT devices that will integrate with SPS-300 Series ECR's, each device will setup differently. This guide describes integrated payment applications utilizing Datacap-EMV Tran Series equipment.

For all integrated credit installations, refer the separate supplement available on the CRS website.

<https://www.crs-usa.com/products/electronic-cash-registers/current-ecr-models/sam4s-sps-345-ecr-series>

To implement the Datacap-EMV Tran Series application, the following is required:

- An active internet connection is required for the IPTran-LT to process credit card transactions. The Tran devices will need to obtain an IP address via DHCP, they are not able to be assigned a Static IP address. A serial connection is required at the SPS-300 Series ECR for the Datacap equipment interface.
- Update your SPS-300 firmware to the latest EMV compatible version. EMV installation require different hardware and options settings. Use this document, rather than non-EMV integrated payment instructions when programming and operating your SPS-300/EMV application.
- For EMV applications, each register in the system must have an SD card installed in the SD card slot. The SPS-300 Series ECR's can support SD cards up to **2GB** according to specifications and the SD Cards must be formatted for **FAT32**.
- **Caution:** A 4GB SD card worked when tested, but we cannot 100% recommend using a 4GB SD. Some report that 4GB SD cards work well, some report a 4GB SD does not work.
- The SD card slot is located inside the printer compartment. On the SPS-320, the SD slot is located to the right of the printer mechanism; on the SPS-340/345 the SD slot is located to the rear of the receipt printer. Remove the security screw to access the slot. The SD card is used to store the EMVBACK.txt token file so transaction records can easily be called up by invoice number for tip adjustment and voiding operations.
- Deploy your application with the latest Datatran equipment, using either the IPTran LT, Tran Server with PDC's (**P**eripheral **D**evice **C**ontroller) or NETePay Hosted. Refer to the configuration diagrams that follow. For PIN-Pad/EMV chip readers, use any compatible pin-pad approved by Datacap, refer to the Datacap portal for a complete listing of compatible devices:
- <https://www.DatacapSystems.com/compatible-devices>.
- When your configuration is completed and connected to an active internet connection, the Datatran device will automatically receive any new software load from the server by turning off and turning on the device.
- After the Datatran device is powered on and loaded, load the PIN-Pad parameters by performing the **"EMV Parameter Download"** procedure as explained on page 308 in this guide. This operation tells the Pin-Pad to get new parameters from Datacap.
- Backup the program to the SD. Many of the Datatran operations require the folder to facilitate the procedure.

Important EMV Notes:

- **“Close Batch” or “Clear EMV File”** operation needs to be performed every day at the register even when the site is set for auto batch with their processor. This is how Sam4s clears the EMV token file. The EMV token file is used to allow for “By Record” transactions (such as Void and Gratuity entry).
- **PIN-Pad is customer facing....** There is no indication to cashier what the end-user is doing (or not doing).
- **Suppress the Signature Line** (v1.157 and later) System Option: Print Signature Line On Customer Copy.
 - * 0 = Print the signature line on both copies
 - * 1 = Print the signature line on the Merchant copy only
 - * 2 = Do not print the signature line on either copy.
- **EMV Quick Chip** is an enhancement to EMV processing that speeds up EMV transactions to about 2 seconds or less. EMV Quick Chip is available for all processors that support Ingenico Pin-Pads, installations that expect fast processing times should use Processors that support Quick Chip. Look here for the latest information: <https://www.datacapystems.com/tran-series-supportedfeatures>.
- **Debit cards with EMV chip** - Since Datacap \ mercury do not currently support EMV Debit, all EMV Debit cards are forced to be inserted and are then processed as regular credit cards. This usually means a higher rate for the merchant on transactions over \$25.
 - * **Please Note:** Debit Transactions are processed in Real-Time; The Debit Tender amount is deducted from the account when the approval is received.
- **Pin-Pad Timeout settings cannot be configured at the register.** Some say they are too short, other say they are too long... cannot configure at register.
- **Consolidated Reports** – If an end-user wants consolidated reporting, they must use the configuration with TranServer (even if only two registers in their system) or NETePay Hosted. If you have an IRC installation with IPTran LT units, all stations will have a separate batch and work independent of each other (separate batching, separate reporting).
- **IPTran-LT devices need to obtain an IP address via DHCP.** They cannot be assigned a Static IP address.
 - * It is recommended to set the DHCP lease time for 7 days if possible.
- **Surcharge on Credit Card Transactions** – Merchants in the U.S. and U.S. territories may add a surcharge to credit card transactions, subject to certain limitations. Merchants who choose to surcharge must follow consumer disclosure and other requirements.
 - * Currently, several states have laws that prohibit or limit surcharging, including Colorado (prohibition effective through 30 June2022), Connecticut, Maine, Massachusetts, and Oklahoma.
 - * Surcharging is only allowed for credit card transactions and is not allowed for debit card transactions or prepaid gift card transactions.
 - * A merchant surcharge can be between 1% and 4% but cannot be higher than the cost of your card processing. Surcharges can only be applied to certain payment amounts. The payment or transaction amount must be at least \$1.00.



Substantial fines can be assessed to merchants for adding a surcharge to Debit Card and Pre-Paid Gift Card transactions!

Payment Application Best Practice Notes

Password Security: The SPS-300 features a clerk sign-on system. Operations are not allowed until a clerk is signed on and the receipt indicates the clerk who performed each operation. Best practices include:

- Each employee should be set up as a unique employee.
- Employee codes should be changed from the default setting.
- When there is employee turnover, employee codes should be changed.

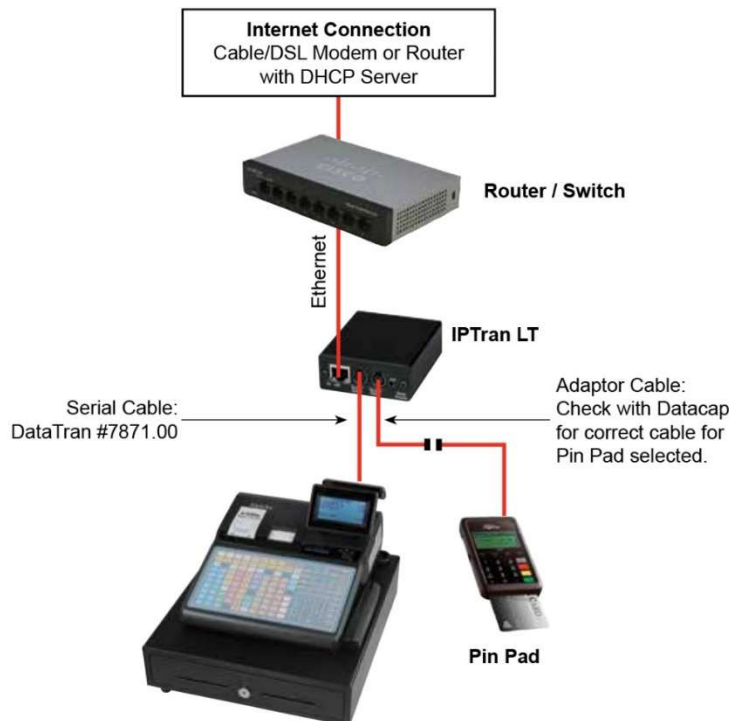
Key Security: The SPS-300 features a mode switch with different levels of key security. Refer to “mode switch” information on page 23 to see Keys that access the “Z” mode switch position (where DataTran payment functions can be performed) should be distributed only to managers or employees authorized to perform those functions.

Datacap-EMV \ ECR Configurations

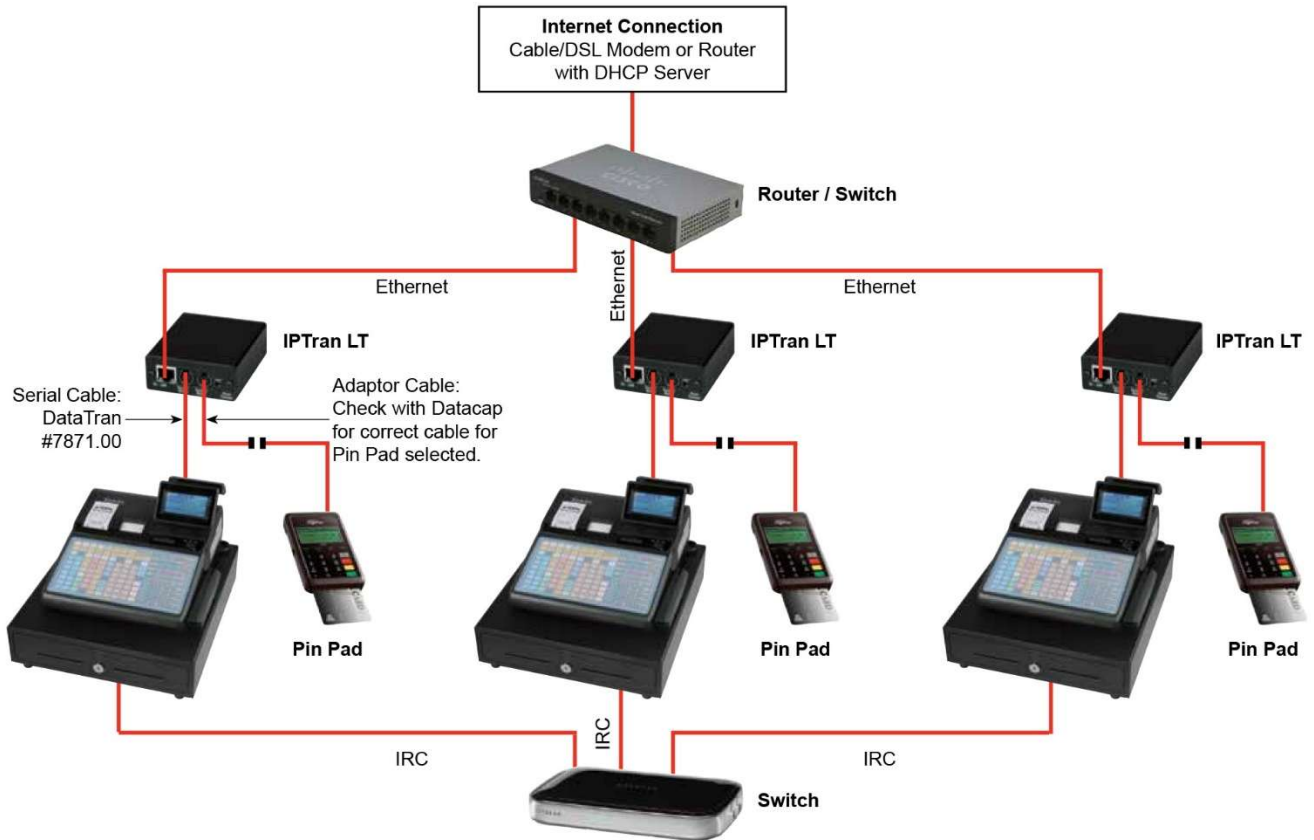
These configuration diagrams show the connections when installing the latest generation EMV-Ready Datatran hardware (IPTran-LT) utilized for EMV integrated payment installations.

Verify the part numbers with Datacap.

IPTran LT – Single ECR

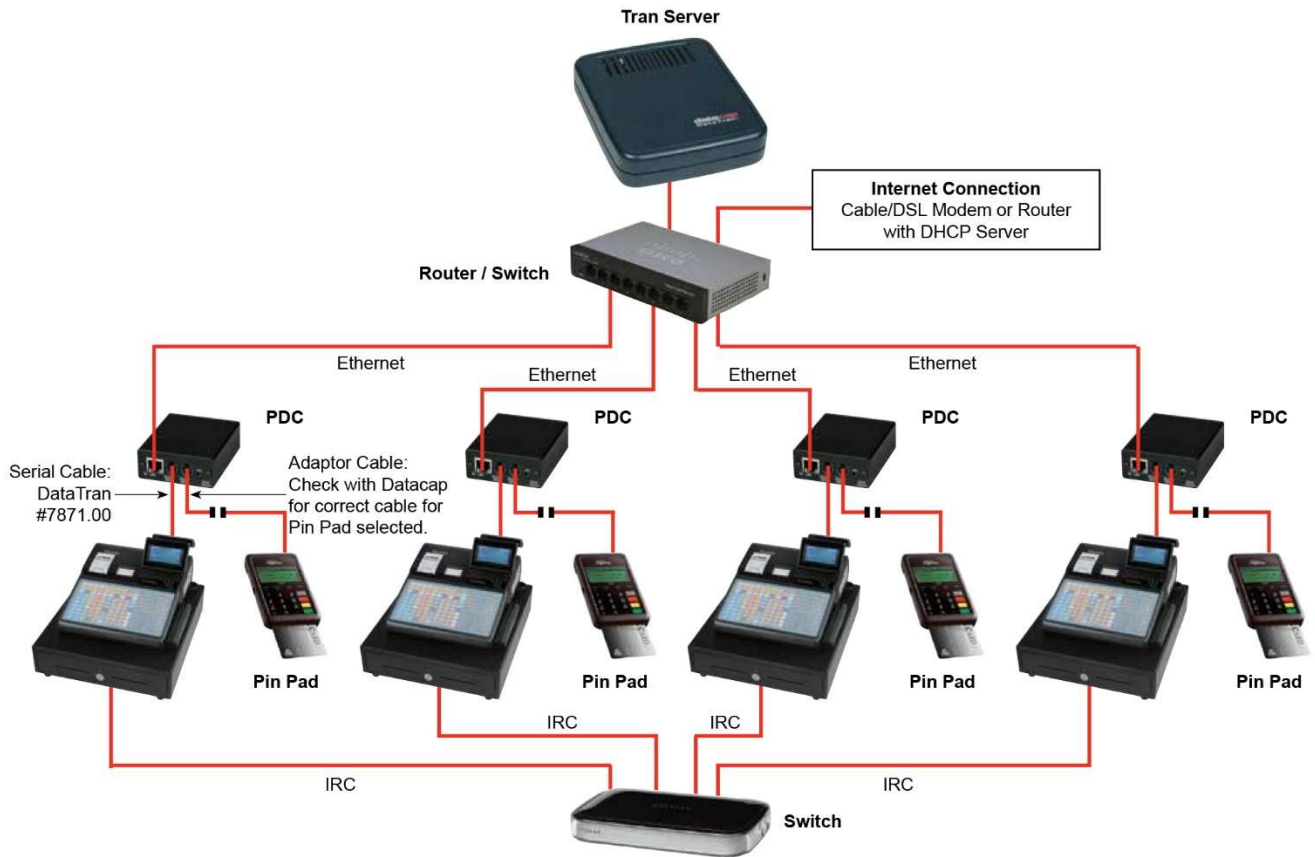


IPTran LT – Multi-ECR (3 or Less)



NOTE: If you have an installation with 3 IPTran LT units, all three will have a separate batch and work independent of each other (separate batching, separate reporting, separate TIP entry).

Tran Server - Multi-ECR (4 or More)

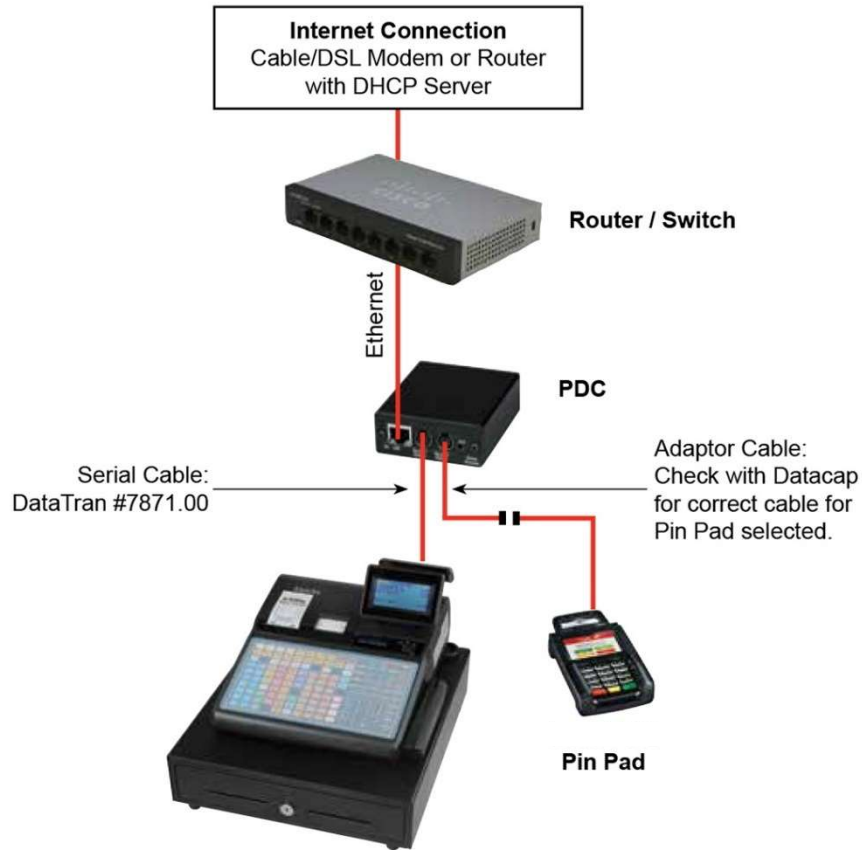


NOTE: If you have multiple PDC's and a Tran Server there is only one batch and it can be controlled at any of the registers in the system. PDC's must have a connection to the internet.

Also Note: PDC's are paired to a specific Tran Server. The PDC from one site will not work with the Tran Server at a different site.

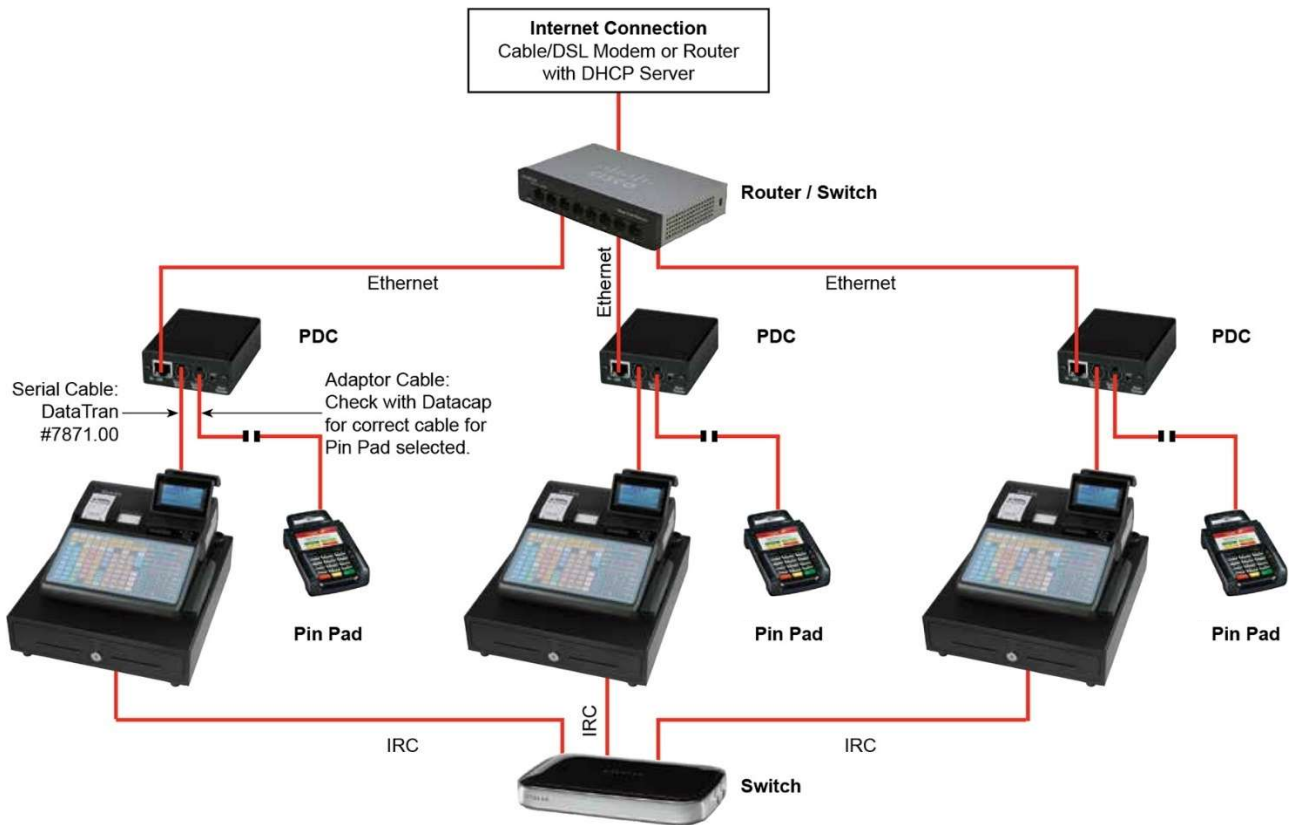
NETePay Hosted – Single ECR

Any Pin-Pad recommended & approved by Datacap may be used.



NETePay Hosted – Multi ECR

Any Pin-Pad recommended & approved by Datacap may be used.



Note: By default the PDC's will all be set up to talk to each other (single batch \ Tip entry at any terminal). If for some reason the merchant wanted them separate (separate batches \ tip entry only at the terminal that the original transaction occurred) It could be set up that way.

Required ECR Programming

The information provided here refers specifically to the Non-EMV integrated payment solution using Datacap integrated payment equipment.

1. **“RS232 Port Options”** on page 146. You must set the EFT status for the port you are using. Set device function to “EFT Device” and set BAUD to 19200, Parity = None, Data Bits = 8, Stop Bits = 1, and set the Device Function = EFT for EMV-Datacap integrated payment devices.
 2. **“System Option Programming”** on page 183. Go to System Option pages **P18, P21, P23** to make the following settings:
 - **(P18)** Optional Setting **DISABLE EFT AMOUNT CONFIRMATION**; set to **Y** if you want to skip the amount conformation on the Pin-Pad.
 - **(P21)** Select **EFT DRAFT** to **Y (DATATRAN)** for a normal draft; Set EFT DRAFT to **N (FINE DINING)** for a draft with a tip entry line.
 - **(P21)** Set **MSR CONNECTED** to **1 (PDC)** for all configurations. Use this setting if the MSR is connected to the IPTran LT or the new style PDC.
 - **(P21)** Set **PIN PAD (0-4)** to the port # where the Datatran device is connected.
 - **(P22) PRINT SIGNATURE LINE ON CUSTOMER COPY** was added to the System Option at v1.157:
 - * 0 = Print Signature Line On Both Copies.
 - * 1 = Do Not Print Signature Line On Customer Copy.
 - * 2 = Do Not Print Signature Line On Either Copy.

(v1.156 and earlier) This option was: NO SIGN IF TRANSACTION TTL LESS THAN 0.00
Is Not used with EMV Installations.
 - **(P23)** Set EFT SUPPORT NEW EMV PROTOCOL to **Y**.
 - **(P23)** Select **COLLECT CARDHOLDER NAME**; set to **Y** if you want to print the cardholder’s name below signature line.
 - **(P23)** USE ‘test’ AS CLERK ID; always set to **N**.
- Optionally, If you are integrating Gift Card sales through the integrated payment device, you may want to set up the Gift Card Sales PLU as a HASH item and set this HASH option in system options as Non-Add.
- **(P8) HASH IS = Y:NORMAL; N:NON-ADD**
 - * Y: Hash adds to all totals except the gross and net sales totals on the financial report.
 - * N: Hash does not add to any totals, except for the HASH total on the financial report.
3. **“Print Option Programming”** on page 196. Press PAGE DOWN until PRINT OPTION P16 displays.
 - Set **“COPY OF DATATRAN RECPT. (0-99)”** to the desired number of EFT receipt copies.
 - Set **“PRINT WHOLE CARD NO.”** to **N**.
 - Set **“PRINT EXP. DATE”** to **N**.
 4. **“Function Key Programming”** Assign and Set up Charge Tender keys to use with integrated credit.
 - **CHARGE 1-8** function keys on page 212 to set the options for integrated payment charge functions.
 - **DATATRAN TIP** function key and the Food Stamp keys: **F/S SBTL, F/S TEND, F/S SHIFT**. As necessary for your installation.
 5. **** Group Programming **** – If you are integrating gift card sales through the integrated payment device, you will need to set up two separate groups, one for Gift Card Activate and one for Gift Card Add.
 6. **** PLU Programming **** – If you are integrating gift card sales through the integrated payment device, you will need to set up two separate PLUs to Activate new Gift Cards and Add to existing Gift Cards.
 7. **Load the device parameters** – When connected to the internet the Datacap device will automatically receive any new software/load from the server by turning the Datacap device off and on.

Daily Procedures

Close Batch (*Open Batch*)

You must close the batch daily as this procedure clears the SD EMV file stored on the SD card and will automatically open a new batch for the next day. You can perform this operation at the close of business or at the beginning of the day before registering sales.

If the processor performs an 'Auto Batch', this close batch operation is already performed but you will need to perform the 'Delete SD EMV File' operation each day at the register.

NOTE: *With the system option "EFT Support New EMV Protocol" enabled, after a batch is closed a new batch is automatically opened for the next day.*

1. Turn the mode switch to the **Z** position to display the **RESET REPORT MODE** menu:
2. Press **00** to display the **DATATRAN OPERATION** menu:
3. Press **"2. CLOSE THE CURRENT BATCH"**.
 - * The message "WAITING RESP" displays.
4. When communication is complete, the 'LOCAL BATCH STATUS' and the 'CLOSE CURRENT BATCH' receipt prints; the batch is closed and a new batch is opened automatically.

```
DATE 05/16/2017 MON   TIME 10:29

**** LOCAL BATCH STATUS ****

BATCH STATUS      :      OPEN
BATCH NUMBER      :      0080
TRANSACTION CNT   :      7
ITEM COUNT        :      7
BALANCE AMNT     :     16.00
FWD ITEM COUNT    :      *
FWD BALANCE AMNT :      *

CLERK 1           000065 00000

DATE 5/05/2017 THU   TIME 10:34

*** CLOSE CURRENT BATCH ***

BATCH NUMBER      :      0080
NET AMNT SETTLED :     16.00
ITEM COUNT        :      7

BATCH WAS CLOSED SUCCESSFULLY
CLERK 1           000097 00000
```

Delete SD EMV File

Use this operation to clear the EMVBACK.txt file stored on the SD Card. This is the internally stored data file that stores the Authorization Response messages that allows “By Record Number” transactions. Specifically, the ‘Void Transaction by Record Number’ and ‘Gratuity Entry’.

This file should be cleared each day as we have a limited amount of space to hold the file and most likely, “By Record Transactions” will take place on the same day as the original transaction. The EMV File is cleared automatically when the CLOSE CURRENT BATCH command is performed. Some sites are set to Auto Batch and some processors only allow Auto Batch. If Auto Batch is utilized, this operation should be executed every day.

Beginning at v02.034, if the SD EMV File becomes full, the popup message “EMV SD FULL” will display.

1. Turn the mode switch to the **Z** position to display the **RESET REPORT MODE** menu; Press **9 DATATRAN (DEBIT)** to display the **DATATRAN (DEBIT) OPERATION** menu.
2. From the **Datatran Operation** menu: chose “**6. DELETE SD EMV FILE**”.

The register displays “Are you sure?”.

- Press the **[YES/NO]** function key so the display indicates “**YES**”.
 - Press the **[CASH]** key to continue.
 - ECR displays “**SUCCESS**”.
3. Press **[CLEAR]** to return to the Datatran Operation menu scree.
 4. Press **[CLEAR]** again to return to the main **Z - RESET REPORT MODE**.

Register Transactions

When the batch for the previous day is closed a new batch is automatically opened for the next sales day.

Sample Transaction

1. Register a normal transaction. Press the appropriate **CHARGE** key.
 - * The message “**SLIDE CARD**” displays.
2. Swipe the card. The message “**WORKING**” displays until the card verification is complete.
3. When verification is complete, the draft is printed.

Note: If multiple documents are to be printed, the message “**PRESS CASH TO CONTINUE**” displays. Tear off the receipt from the printer and press **CASH** to resume printing.

Sample Draft

```
5/26/04  10:10          00001
SALE                               $2.00
*****6301
APP: VITAL8
REF: 41415013334
REC NO : 1

X _____
  I AGREE TO PAY ABOVE
  TOTAL AMOUNT ACCORDING
  TO CARD ISSUER AGREEMENT
```

Sample Draft – With Gratuity

To print the tip entry line, set System Option: “EFT DRAFT IS” (on P21) to “N” (Fine Dining).

```
5/26/04  10:10          00001
SALE                               $2.00
*****6301
APP: VITAL8
REF: 41415013334
REC NO : 1

TIP _____
TOTAL _____

X _____
  I AGREE TO PAY ABOVE
  TOTAL AMOUNT ACCORDING
  TO CARD ISSUER AGREEMENT
```

Manual Card Entry

PIN Debit payments must be processed as card-present transactions, card data must be read by the card reader and cannot be manually entered. This is a card requirement, not a function of the point of sale equipment. Manual card entry is allowed on Credit, Gift and EBT transactions if the reader is unable to read the card.

Visa or Mastercard branded Debit cards used for PIN Debit may also be used like credit cards, with just a signature. If a Debit card presented for a PIN Debit transaction fails to read, at the CARD ERROR message press CLEAR. You can now choose an alternative payment method. Press the CREDIT function. Slide the same Debit card, if it fails to read again, select CLEAR. The message “Enter Acct No” displays. You can manually enter the account number and complete the transaction. The merchant may pay different card fees for PIN Debit and signature Debit transactions.

1. Register a normal transaction. Press the appropriate **CHARGE** key. The message “**SLIDE CARD**” displays:
2. If card will not read, press **CLEAR** once, the message “**ENTER ACCT NO**” displays.
3. Enter the account number and press **CASH** (or press **CLEAR** twice) to abort the transaction.
4. When verification is complete, the draft is printed.

Note: If multiple documents are to be printed, the message “PRESS CASH TO CONTINUE” displays. Tear off the printer paper and press CASH to resume printing.

Merchandise Return

Complete the merchandise return transaction as you would a normal transaction. Press MDSE RTRN prior to entering each returned item.

1. Register a normal transaction. Press the appropriate **CHARGE** key. The message “**SLIDE CARD**” displays:
2. Swipe the card. The message “**WAITING RESP.**” displays until the card verification is complete.
3. When verification is complete, the draft is printed.

Note: If multiple documents are to be printed, the message “PRESS CASH TO CONTINUE” displays. Tear off the printer paper and press CASH to resume printing.

Sample Draft

5/26/04 10:42	1
SALE	-2.00
*****6301	
APP: *7	
REF: 00003	
REC NO : 3	
X _____	
I AGREE TO PAY ABOVE TOTAL AMOUNT ACCORDING TO CARD ISSUER AGREEMENT	

Void Transaction

The Transaction Void operation allows a transaction to be removed from the current batch and not be reported to the cardholder statement.

With Non-EMV – *Void Sale By Record No. & Void Return By Record No.* are *NOT* available.

With Non-EMV – Use the *Transaction Void* operation:

1. Turn the mode switch to the **VOID** mode switch position.
2. Register a normal transaction.
3. Press the appropriate **CHARGE** key.
 - * The message “**SLIDE CARD**” displays.
4. Swipe the card.
5. The message “**ENTER APP CODE**” displays:
6. Enter the authorization code printed for the transaction to be voided, press **CASH**.
 - * The message “**ENTER REF NO**” displays:
7. Using the numeric keypad, enter the Reference number from the transaction to be voided, press **CASH**.
 - * The message “**WAITING RESP.**” displays until the transaction is found and removed.

NOTE: The approval code is an alphanumeric entry. On raised key models, you must use the descriptor code chart to determine the numeric entries. For example: the approval code “VITAL8” would be entered as “086 073 084 065 076 056”. If you are using the alpha overlay, type the code on the overlay.

Cancel EFT

Once tender is selected you cannot press Cancel at ECR. You would need to accept the amount on Pin-Pad then you should be able to press RED button at Pin-Pad to cancel. (Only if the processor allows.)

1. Register a normal transaction. Press the appropriate **CHARGE** key.
 - The message “**WAITING FOR EFT**” displays.
2. At the PIN-Pad the ‘SALE Amount’ confirmation message displays:
SALE
\$2.00 – OK?
3. Press the **RED** button on the PIN-Pad keypad to **CANCEL** the operation.
4. Press **CLEAR** on the ECR; at the Manual Card Entry prompt; press **CLEAR** again.
 - After a pause the original transaction is displayed.
5. Press **CANCEL** to cancel the sale or tender the sale with other media.

Local Total Report

Run an Issue Local Total report to confirm that credit totals match the financial report before closing the batch.

Tip (Gratuity) Entry

Gratuities (tips) indicated by the customer on the payment draft must be entered into the ECR before the batch is closed.

1. Turn the mode switch to the Clear Totals position to display the **RESET REPORT MODE** menu.
2. Press **00** to display the DataTran Operation menu.
3. Press **Page Down** to view the second page of the DataTran Operation menu
4. Press **00** (Tip Operation) to enter tips.

TIP OPERATION	
ENTER REC NO.	
ORIG TRAN AMOUNT	←
TIP AMOUNT	

5. Enter the record number of the transaction and press **CASH**.
6. Enter the original transaction amount and press **CASH**.
7. Enter the tip amount and press **CASH**.
8. If the record number and transaction number are valid, the tip amount is entered in the batch and a tip entry chit prints as shown below.

Sample Tip Chit

DATE 09/27/2011 MON	TIME 10:41
SALE AMOUNT: \$426	
TIP AMOUNT: \$1.50	
REF: *	
REC: 2	
EMPLOYEE1	NO.000023 REG 01

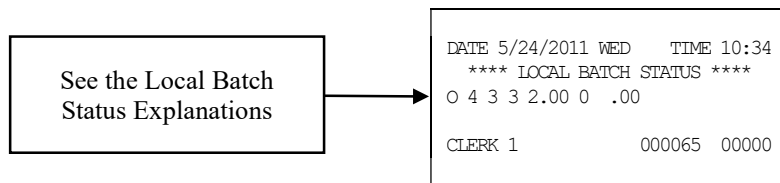
Close Batch

NOTE: For Non-EMV installations, to present things in a logical order, the OPEN BATCH is shown at the *beginning* of the day. In a practical day-to-day operation it is recommended to open a new batch *right after* closing today's current batch, so it is ready to go for the next day.

For EMV installations: A new batch is automatically opened when the Close Batch operation is performed.

1. Turn the mode switch to the **Z** position to display the **RESET REPORT MODE** menu:
2. Press **PAGE DOWN** to view the next page of the **RESET REPORT MENU**.
3. Press **00** to display the **DATATRAN OPERATION** menu, or if the application is using debit, press **9**.
4. Press **2** to **CLOSE CURRENT BATCH**. The message “**ARE YOU SURE?**” displays.
5. Press the **YES/NO** key to answer **YES**, then press the **CASH** key.
6. The message “**WAITING RESP**” displays. When communication is complete, the ‘LOCAL BATCH STATUS’ and the ‘CLOSE CURRENT BATCH’ acknowledgement prints; the batch is closed and a new batch is opened automatically.

Close Batch



Local Batch Status Explanations:

(From Left to Right)

- O Batch Status C=Closed/O=Open/X=Incomplete
- 4 Batch Number
- 3 Batch Transaction Count
- 3 Batch Item Count
- 2.00 Batch Balance
- 0 Batch Forwarded Transaction Count
- .00 Batch Forwarded Balance

Datatan(Debit) Menu

The Datatan(Debit) Operation menu provides Credit Card (EFT) maintenance operations that can be performed at the SPS-300 Series ECR. When selected the Datatan Operation menu displays. Not all of the menu selections are used when EMV is not enabled, refer to the definitions table below.

1. Turn the mode switch to the **Z** position to display the **RESET REPORT MODE** menu; Press **9**. **DATATRAN(DEBIT)** to display the **DATATRAN OPERATION.** menu:
2. Review the explanations that follow and select the appropriate operation. For Non-EMV installations, only the selections below are used:

```

DATATRAN OPERATION.
0. PIN PAD INITIALIZE
1. CLOSE BATCH (DEBIT)
2. EMV VOID SALE BY REC NO.
3. EMV VOID RETN BY REC NO.
4. EMV VOICE AUTH
5. EMV ZERO AUTH
6. DELETE SD EMV FILE
    
```

Datatan(Debit) Menu – Definitions

When Datatan(Debit) is selected the Datatan Operation menu screen is displayed. The EMV related operations are shown in **Bold** on the following chart: the other operations are not used with EMV. Follow the summary table for details for each of these processes.

*(EMV related operations are shown in **Bold** type.)*

Menu #	Item	Operation
0	PIN-PAD Initialize	<i><u>Not used with EMV</u></i> <i>(Non-EMV applications). Used to initialize the PIN-Pad device.</i>
1	Close Batch(Debit)	<i><u>Not used with EMV</u></i> <i>Used to close the current batch in Non-EMV installations.</i> <i>Afterward, you will need to Open a new Batch in the Datatan Menu.</i>
2	EMV Void Sale By Record No.	Use these operations to void transactions when the card is not present. CAUTION: These void operations will not correct ECR sales totals (i.e. PLU sales) but will maintain a total on the Financial Report. Use the VOID mode operation at the ECR to perform transaction voids that will correct the appropriate ECR sales totals.
3	EMV Void Return By Record No.	
4	EMV Voice Auth	Use to enter a voice authorized sale into the current batch.
5	EMV Zero Auth	Use to verify if a card is valid, activated, not reported as lost or stolen.
6	Delete SD EMV File	This operation will clear the EMVBACK.txt file stored on the SD Card. <i>(This operation should be performed Daily.)</i>

Pin-Pad Initialize

Not used with EMV installations.

Used in Non-EMV applications to load the parameters for the Pin-Pad. This operation Pairs the Pin-Pad with the Datatran\PDC. Verify setting for System Option: Pin-Pad Connected to Device on Port#.

Close Batch(Debit)

Not used with EMV installations.

Used in Non-EMV applications to close the current batch; this operation must be performed every day. If you are accepting debit payments, always use the Close Batch with Debit function, regardless of whether debit transactions take place that day.

EMV Void Sale By Record No.

The processor must allow “By Record” operations (*Enable Tokenization*) for Void by Record Number operations. You can void (*remove from the batch*) any sales transaction that resides in the current batch.

Note: This operation does not adjust any other cash register totals or counters.

1. Turn the mode switch to the **Z** position to display the **RESET REPORT MODE** menu; Press **9** **DATATRAN (DEBIT)** to display the **DATATRAN (DEBIT) OPERATION** menu.
2. From the DATATRAN OPERATION menu, chose “2. EMV VOID SALE BY REC NO”.
3. Enter the “INVOICE NUMBER” at the prompt, press **CASH**.
4. Enter the original transaction amount at the prompt: “ENTER AMOUNT”; press **CASH**.
5. The Message “WAITING FOR EFT” displays. When the “COMPLETED” message displays press **CLEAR**.
6. The ECR will print a receipt:

```
DATE 12/20/2017 WED  TIME 10:34
VOID SALE                -10.00
TIP                      $ _____
TOTAL                    $ _____
                        *****
INVOICE   : 5
REFERENCE : 630018902085
AUTH CODE : _____
CLERK 1   000096 00000
```

EMV Void Return By Record No.

The processor must allow “By Record” operations (*Enable Tokenization*) for Void by Record Number operations. You can void (*remove from the batch*) any returned (*negative*) transaction.

Note: This operation does not adjust any other cash register totals or counters.

1. Turn the mode switch to the **Z** position to display the **RESET REPORT MODE** menu; Press **9 DATATRAN (DEBIT)** to display the **DATATRAN (DEBIT) OPERATION** menu.
2. From the DATATRAN OPERATION menu, chose “3. EMV VOID RETN BY REC NO”.
3. Enter the original transaction amount, press **CASH**.
4. Enter the record number, press **CASH**.
5. The Message “WAITING FOR EFT” displays. When the “COMPLETED” message displays; press **CLEAR**.

```
DATE 12/20/2017 WED TIME 10:34
VOID RETURN                -10.00
TIP                        $ _____
TOTAL                      $ _____
*****
INVOICE   : 5
REFERENCE : 630018902085
AUTH CODE : _____
CLERK 1   000096 00000
```

EMV Voice Auth

If electronic authorization is not approved, the merchant can call the processor and receive a voice authorization. The transaction can then be entered into the batch with this operation.

Note: This operation does not adjust any other cash register totals or counters.

1. Turn the mode switch to the **Z** position to display the **RESET REPORT MODE** menu; Press **9 DATATRAN (DEBIT)** to display the **DATATRAN (DEBIT) OPERATION** menu.
2. From the DATATRAN OPERATION menu, chose “4. EMV VOICE AUTH”.
3. Enter the original transaction amount at the prompt “ENTER AMOUNT”, press **CASH**.
4. The display on the ECR shows “ENTER AUTH CODE”, enter the authorization code, press **CASH**.
5. At the prompt, “ENTER REF NO” the number, enter the reference number then press **CASH**.
6. The ECR displays: “WAITING EFT”; at the PIN-Pad the message: “SALE \$XX.xx - OK?” Displays; press the **GREEN** button on the PIN-Pad.
7. Insert the card into the PIN-Pad; the PIN-Pad displays the messages: “PLEASE WAIT” then “PROCESSING”.
8. When the “APPROVED” message appears, remove the card and the receipt prints.

```
DATE 12/22/2017 THU TIME 10:34
SALE                        $0.00
VISA      *****0010
TOTAL                      $ _____
INVOICE   : 5
REFERENCE : 5001
AUTH CODE : 825654
CLERK 1   000096 00000
```

EMV Zero Auth

Use this operation to verify if a credit card is active or not reported as stolen. To use this feature, you must have a charge key setup to connect to the EFT and type set for credit. You must also have an SD card installed in each register in the system.

1. Turn the mode switch to the **Z** position to display the **RESET REPORT MODE** menu; Press **9 DATATRAN (DEBIT)** to display the **DATATRAN (DEBIT) OPERATION** menu.
2. From the **DATATRAN OPERATION** menu: chose “**5. EMV ZERO AUTH**”. The register displays “**PRESS CHARGE KEY**”; press the **Credit Card** tender key.
 - * ECR displays “**WAITING FOR EFT**”.
3. Insert the card into PIN-Pad reader; press the **GREEN** button.
4. When verification is complete, a receipt will print on ECR.

```
MERCHANT ID: 19497801
CLERK ID: TEST

VERIFY CARD

VISA *****0010
ENTRY METHOD: CHIP
DATE 12/22/2017 TIME: 11:12:12

INVOICE : 16
REFERENCE : 15
AUTH CODE : 44277A

AMOUNT USD$ 0.00
TOTAL USD$ 0.00

APPROVED - THANK YOU

I AGREE TO PAY THE ABOVE TOTAL
AMOUNT ACCORDING TO CARD ISSUER
AGREEMENT (MERCHANT AGREEMENT
IF CREDIT VOUCHER)

X _____
CARD 01 TEST

APPLICATION LABEL: VISA CREDIT
AID: A0000000031010
TVR: 000008000
IAD: 06010A03602000
TSI: F800
ARD; 00
CVM; SIGN

MERCHANT COPY
```

Delete SD EMV File

Use this operation to clear the EMVBACK.txt file stored on the SD Card. This is the internally stored data file that stores the Authorization Response messages that allows “By Record Number” transactions. Specifically, the ‘Void Transaction by Record Number’ and ‘Gratuity Entry’.

This file should be cleared each day as we have a limited amount of space to hold the file and most likely, “By Record Transactions” will take place on the same day as the original transaction. The EMV File is cleared automatically when the CLOSE CURRENT BATCH command is performed. Some sites are set to Auto Batch and some processors only allow Auto Batch. If Auto Batch is utilized, this operation should be executed every day.

Beginning at v02.034, if the SD EMV File becomes full, the popup message “EMV SD FULL” will display.

1. Turn the mode switch to the **Z** position to display the **RESET REPORT MODE** menu; Press **9 DATATRAN (DEBIT)** to display the **DATATRAN (DEBIT) OPERATION** menu.
2. From the Datatran Operation menu: chose “**6. DELETE SD EMV FILE**”.
 - * The register displays “Are you sure?”.
3. Press the **[YES/NO]** function key so the display indicates “**YES**”.
4. Press the **[CASH]** key to continue. The ECR displays “**SUCCESS**”.
5. Press **[CLEAR]** to return to the Datatran Operation menu scree.
6. Press **[CLEAR]** again to return to the main **Z - RESET REPORT MODE**.

Datatran Menu

The Datatran Menu provides Credit Card (EFT) maintenance operations that can be performed at the SPS-300 Series ECR. When selected the Datatran Operation menu screen is displayed. Not all of the menu selections are used when EMV is enabled, refer to the definitions table below.

1. Turn the mode switch to the **Z** position to display the **RESET REPORT MODE** menu; Press **00. DATATRAN** to display the **DATATRAN OPERATION** menu:

```
          DATATRAN OPERATION          ↓
0. INITIALIZE EFT
1. OPEN BATCH
2. CLOSE CURR. BATCH
3. EMV PARAMETER DOWNLOAD
4. CHG. BATCH NUM/EMV EBT VOUCHER
5. ISSUE LOCAL TOTAL
6. ISSUE TRANSACTION
```

2. Press **PAGE DOWN** to view the remaining **DATATRAN OPERATION** options:

```
          DATATRAN OPERATION          ↑
7. ISSUE BATCH STATUS
8. DIAL IN LOAD
9. DIAL OUT LOAD
DEC. DIAGNOSTIC
```

3. Select the appropriate operation as described in the **Datatran Operation** shown on page 305.

Datatrán Menu – Definitions

When Datatrán is selected the Datatrán Operation menu screen is displayed. The EMV related operations are shown in **Bold** on the following chart: the other operations are not used with EMV. Follow the summary table for details for each of these processes.

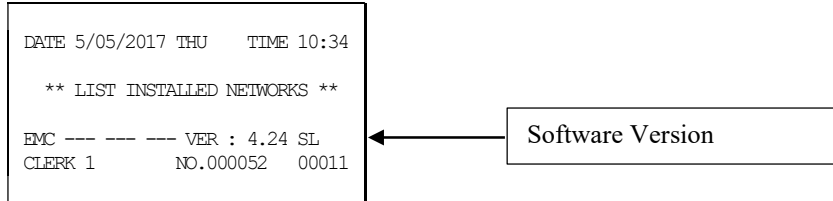
*(EMV related operations are in **Bold** type.)*

Menu #	Operation	Description
0	Initialize EFT	Use to check the connection and initialize the Datatrán EFT device.
1	<i>Open Batch</i>	<i>Not Used with EMV.</i> When used with Non-EMV, a new Batch will be opened.
2	Close Current Batch	Typical EMV processing is setup to Auto-Batch. You may be able to use this operation to manually close the current batch. When the batch is closed a new batch is automatically opened.
3	EMV Parameter Download	This operation tells the Pin-Pad to get new EMV Parameters from Datacap.
4	CHG. Batch NUM / EMV EBT Voucher	Use change batch number only as instruction by Datacap or your processor. EMV EBT Voucher is used to manually enter EBT transactions.
5	<i>Issue Local Total</i>	<i>Not Used with EMV.</i> Merchant will need to log on to their account on their processors portal.
6	Issue Transaction	Lists the transaction summary stored in the SD EMV File on the SD card. <i>(Only used for troubleshooting . . . Not for reporting.)</i>
7	Issue Batch Status	Prints the current batch status.
8	<i>Dial In Load</i>	<i>Not Used with EMV.</i> When connected to the internet, the IPTrán-LT will automatically receive any new software\load from the server by turning off and turning on the IPTrán-LT. <i>In older Equipment (before the IPTrán-LT had the 'call home' feature) Dial-In-Load was used to manually load the Datatrán device parameters.</i>
9	<i>Dial Out Load</i>	<i>Not Used with EMV.</i> When the IPTrán-LT is connected to the internet, it will automatically receive any new software\load updates from the server by turning off and turning on the IPTrán-LT.
DEC (decimal)	Diagnostic	Use to perform various diagnostics. Use as requested by Datacap support.

Initialize EFT

Select Initialize EFT to verify communications, software versions and installed networks.

Initialize EFT Sample Chit



Open Batch

Not used with EMV.

The Open Batch operation is not necessary with EMV. When the Current Batch has been Closed a new batch is automatically opened.

Close Current Batch

You must close the batch daily as this procedure clears the EMV file stored on the SD card. If the processor performs an 'Auto Batch' you will need to perform the 'Delete SD EMV File' operation at the register.

NOTE: *With the system option "EFT Support New EMV Protocol" is enabled, after a batch is closed a new batch is automatically opened for the next day.*

1. Turn the mode switch to the **Z** position to display the **RESET REPORT MODE** menu. Press **00** to display the **DATATRAN OPERATION** menu.
2. Press "2. CLOSE THE CURRENT BATCH". The message "WAITING RESP" displays.
3. When communication is complete, the '**LOCAL BATCH STATUS**' and the '**CLOSE CURRENT BATCH**' acknowledgement prints. The batch is closed and a new batch is opened automatically.

Local Batch Status Report

Close Current Batch Receipt

```
DATE 05/16/2017 MON   TIME 10:29
**** LOCAL BATCH STATUS ****
BATCH STATUS      :      OPEN
BATCH NUMBER     :      0080
TRANSACTION CNT  :          7
ITEM COUNT       :          7
BALANCE AMNT    :      16.00
FWD ITEM COUNT  :          *
FWD BALANCE AMNT:          *
CLERK 1         :      000065 00000

DATE 5/05/2017 THU   TIME 10:34
*** CLOSE CURRENT BATCH ***
BATCH NUMBER     :      0080
NET AMNT SETTLED:      16.00
ITEM COUNT       :          7
BATCH WAS CLOSED SUCCESSFULLY
CLERK 1         :      000097 00000
```

EMV Parameter Download

This operation tells the Pin-Pad to get new parameters from Datacap.

1. Turn the mode switch to the **Z** position to display the **RESET REPORT MODE** menu. Press **00** to display the **DATATRAN OPERATION** menu.
2. With the Datatran device connected to the register and an active Ethernet line choose the option **“3. EMV PARAMETER DOWNLOAD”**.
3. The message: **“ARE YOU SURE”** displays. Press the **YES/NO** key to select **YES** and then press **CASH**.
4. At the register, the message: **“WAITING FOR EFT”** displays. At the PIN-Pad, the message **“LOADING”** displays.
5. When complete the message: **“LOAD SUCCESS”** will display and print. The PIN-Pad will be initialized.
6. At the register, press **CLEAR** to complete the procedure.

Change Batch Number / EMV EBT Voucher

The change batch number command is used to assign a new batch number to an existing batch. It is used with certain credit card processors to rectify settlement problems. It is used infrequently. (Attempting to change the batch number will be denied if the processing bank does not allow the feature.)

When the EBT/Tran equipment is not able to connect to the processing center and the customer is not able to process EBT via the integrated system they will use this operation to manually enter the EBT transaction.

The customer would need to call the processing center to get an approval for the transaction.

1. Turn the mode switch to the **Z** position to display the **RESET REPORT MODE** menu. Press **00** to display the **DATATRAN OPERATION** menu.
2. With the Datatran device connected to the register and an active Ethernet line choose the option **“4. EMV EBT VOUCHER”**.
 - * At the prompt, Enter Amount on ECR and press **CASH** (i.e. 500 CASH)
 - * Enter the Auth. Code; enter the code on the ECR and press **CASH**.
 - * Enter Voucher Number; enter the voucher number at the ECR and press **CASH**.
 - * The PIN-Pad will display \$5.00 OK? Press the **GREEN** button to confirm.
3. At the prompt: Tap, or Swipe the Card, insert the chip card into the Pin-Pad.

Note: When entering the Auth. Code, the keyboard overlay can be used if your ECR has the flat keyboard. For Raised keyboards use the alpha code entry method.

Issue Transaction

The Issue Transaction report prints the current information stored in the EMVBACK.txt file stored on the SD Card. The information in the EMVBACK.txt file is used to facilitate 'By Record' operations only, such as TIP operations. This information should not be used for balancing.

1. Turn the mode switch to the **Z** position to display the **RESET REPORT MODE** menu. Press **00** to display the **DATATRAN OPERATION** menu.
2. With the Datatran device connected to the register and an active Ethernet line choose the option "**6. ISSUE TRANSACTION**".
3. The transactions stored on the SD 'EMVBACK.txt' file is printed.

Local Transaction Report Sample

```
DATE 12/18/2017 MON   TIME 10:29

*** LOCAL TRANSACTION REPORT ***

INVOICE   : 1
REFERENCE : 1043
AUTH CODE : 45820A
AMOUNT    : 2.00
VISA      *****0010
-----
INVOICE   : 2
REFERENCE : 1044
AUTH CODE : 45987A
AMOUNT    : 1.00
VISA      *****0010
-----
INVOICE   : 3
REFERENCE : 1045
AUTH CODE : 45988A
AMOUNT    : 5.00
VISA      *****0010
-----

CLERK 1           000025  00000
```

Issue Batch Status

The Local Batch Status Report also prints when a batch is closed.

1. Turn the mode switch to the **Z** position to display the **RESET REPORT MODE** menu. Press **00** to display the **DATATRAN OPERATION** menu.
2. With the Datatran device connected to the register and an active Ethernet line choose the option **“7. ISSUE BATCH STATUS”**.

Local Batch Status Report Sample

```
DATE 12/18/2016 MON   TIME 10:29

**** LOCAL BATCH STATUS ****

BATCH STATUS      :      OPEN
BATCH NUMBER     :      0024
TRANSACTION CNT  :          7
ITEM COUNT       :          7
BALANCE AMNT    :      16.00
FWD ITEM COUNT  :          *
FWD BALANCE AMNT:          *

CLERK 1          000065 00000
```

Dial In Load \ Dial Out Load

Not used with EMV.

When connected to the internet, the Datatran device will automatically receive any new software\load from the server by turning off and turning on the Datatran device.

In older Equipment (before the IPTran-LT had the ‘call home’ feature) The Dial-In-Load procedure was used to load the Datatran device parameters.

Note: After the Datacap device is loaded, you must load the PIN-Pad parameters.
(See “EMV Parameter Download” on page 308 for details).

Diagnostics

Work with Datacap Support, if necessary, to troubleshoot Datatran issues.

1. Turn the mode switch to the **Z** position to display the **RESET REPORT MODE** menu. Press **00** to display the **DATATRAN OPERATION** menu.
2. With the Datatran device connected to the register and an active Ethernet line press the *decimal key* to choose **“DEC. DIAGNOSTIC”**. The message **“DIAG NUMBER”** will display.
3. Press the **0** key and then **CASH** to print a list of diagnostic options.

```
DATE 5/05/2016 THU    TIME 10:34

*** DATATRAN SELF TESTS ***

1 - IPTRAN VERSION
4 - CREDIT MID SETTINGS
10- IP ADDRESS
11- DNS TEST
15- PARAM LOAD
40- EEPROM DATA
41- RESET SEQUENCE NUMBER

CLERK 1              000096 00000
```

4. Reselect the Diagnostic option. The message **“DIAG NUMBER”** will again display.
5. Enter the number of the diagnostic test you wish to perform and press **CASH**. The selected report will print.

Clear Current Batch

The clear batch command erases all the current batch transactions from the Datatran memory *even if they have not been settled*. A LOCAL TRANSACTION INQUIRY should be printed prior to clearing the batch. This will ensure that the operator has the transaction detail to re-enter if required.

Note: This operation cannot be undone and should only be done under the direction of Datacap.

1. Turn the mode switch to the **S-Mode**: to display the Service Mode operations. Press **00**. The display shows the message:

ARE YOU SURE?

YES : CASH NO : CLEAR

2. Press **CASH** to Clear Current Batch.

* This operation cannot be undone and should only be done under the direction of **DATA CAP**.

Local Transaction Report Key

A B C D E F G H I J K H I J K L M N O P Q R S T [U V W X Y Z AA BB]

Field	Description	Min	Max	Type
A	Transaction Sequence Number	1	5	Numeric
B	Transaction Status	1	1	Alphanumeric
C	Network Transaction Code	1	3	Alphanumeric
D	Credit Card Account number	1	38	Alphanumeric
E	Expiration Date	4	4	Numeric
F	Card Reader Flag	1	1	Numeric
G	Approval Code	1	16	Alphanumeric
H	Reference Number	1	16	Alphanumeric
I	Transaction Amount	3	11	Numeric
J	Operator ID	1	10	Alphanumeric
K	AMEX Category or Product Code	1	10	Alphanumeric
L	Arrival Date	3	6	Numeric
M	Departure Date	3	6	Numeric
N	Gratuuity Amount	3	11	Numeric
O	Media Type	1	2	Numeric
P	Special Program Code	1	1	Numeric
Q	Transaction Date	3	6	Numeric
R	Transaction Time	4	4	Numeric
S	Authorization Source Code	1	1	Numeric
T	Card Holder ID	1	1	Numeric
U	PS2000 or MIC Payment Service Indicator	1	1	Alphanumeric
V	PS2000 Transaction ID or	15	15	Alphanumeric
	MIC Banknet Reference Number	9	9	Alphanumeric
	MIC Banknet Authorization Date	4	4	Numeric
	MIC POS Entry Mode	1	1	Alphanumeric
	MIC Mag Stripe Error Code	1	1	Alphanumeric
W	PS2000 Validation Code	4	4	Alphanumeric
X	Authorization Response Code	2	2	Alphanumeric
Y	PS2000 Authorization Currency Code or	3	3	Alphanumeric
	MIC Entry Mode Change Indicator	1	1	Alphanumeric
	MIC Track Data – CVC Error	1	1	Alphanumeric
	MIC Track Data – Error Code	1	1	Alphanumeric
Z	Merchant Category Code	2	2	Alphanumeric
AA	Entry Mode	2	2	Alphanumeric
BB	Original Authorized Amount	3	11	Numeric

Local Transaction Report Field Definitions

- A. Transaction Sequence Number: The DataTran will use this field to return the internal sequence number assigned to each accessed transaction.
- B. Transaction Status: The DataTran will use this field to return the current status of each accessed transaction.
Allowed values: “A” = Authorized but not captured, “C” = Captured, “F” = Forced Entry, or “V” = Void.
- C. Network Transaction Code: When available, the DataTran will use this field to return the service provider’s code assigned to each accessed transaction.
- D. Credit Card Account Number: The DataTran will use this field to return the card account number used in each accessed transaction.
- E. Expiration Date: The DataTran will use this field to return the expiration date of the credit card used in each accessed transaction.
Format: “YYMM” or “MMYY” (“YY” = year and “MM” = month).
- F. Card Reader Flag: The DataTran will use this field to return the type of account number entry used in each accessed transaction.
Allowed values: 0 = Hand entered account number, or 1 = Entered by card reader.
- G. Approval Code: The DataTran will use this field to return the approval code of each accessed transaction.
- H. Reference Number: When available, the DataTran will use this field to return the reference number of each accessed transaction.
- I. Transaction Amount: The DataTran will use this field to return the sales amount of each accessed transaction.
Format: -9999999.99 (decimal point required).
- J. Operator ID: When available, the DataTran will use this field to return the cashier or operator ID number entered in each accessed transaction.
- K. AMEX Category or Product Code: When available, the DataTran will use this field to return the American Express product or category code of each accessed transaction.
- L. Arrival Date: When available, the DataTran will use this field to return the customer’s arrival date entered in each accessed transaction.
Formats: “MMDDYY” (“MM” = month, “DD” = day, and “YY” = year).
- M. Departure Date: When available, the DataTran will use this field to return the customer’s departure date entered in each accessed transaction.
Formats: “MMDDYY” (“MM” = month, “DD” = day, and “YY” = year).
- N. Gratuity Amount: When available, the DataTran will use this field to return the gratuity amount entered in each accessed transaction.
Format: -9999999.99 (decimal point required).
- O. Media Type: The DataTran will use this field to return the media type used in each accessed transaction:
 - 2 = American Express 6 = Private Label
 - 3 = Visa 7 = Diner’s Club or Carte Blanche
 - 4 = MasterCard 8 = JCB
 - 5 = Discover 9 = Debit
- P. Special Program Code: When available, the DataTran will use this field to return the special program code entered for each accessed transaction.
- Q. Transaction Date: The DataTran will use this field to return the date of each accessed transaction.
Formats: “MMDDYY” (“MM” = month, “DD” = day, and “YY” = year).
- R. Transaction Time: The DataTran will use this field to return the time of each accessed transaction.
Format: “HHMM” (“HH” = military hours and “MM” minutes).
- S. Authorization Source Code: When available, the DataTran will use this field to return the Authorization Source Code of each accessed transaction.

- T. Card Holder ID: When available, the DataTran will use this field to return the Card Holder ID type of each accessed transaction.
- U. Payment Service Indicator: When available, the DataTran will use this field to return the Payment Service Indicator (also referred to as the ACI field) of each accessed transaction.
- V. Transaction ID: When available, the DataTran will use this field to return either the PS2000 Transaction ID number or MIC data of each accessed transaction.
- W. Validation Code: When available, the DataTran will use this field (also known as the ACI field) to return the validation code of each accessed transaction.
- X. Authorization Response Code: When available, the DataTran will use this field to return the authorization response code of each accessed transaction.
- Y. Authorization Currency Code: When available, the DataTran will use this field to return the authorization currency code of each accessed transaction.
- Z. Merchant Category Code: When available, the DataTran will use this field to return the merchant category code of each accessed transaction.
- AA. Entry Mode: When available, the DataTran will use this field to return the entry mode of each accessed transaction.
- BB. Original Authorization Amount: When available, the DataTran will use this field to return the original authorization amount of each accessed transaction.
Format: -9999999.99 (decimal point required).

Glossary Of Terms

Activity Count

The activity counter increments each time an entry is made on a particular PLU, or function key. The counter prints on the appropriate reports.

Cancel

Press the CANCEL function to abort a transaction in progress. All current items are removed (voided).

Cash Declaration

This option forces the operator to count the cash drawer and input the results before the financial report can be taken. Absentee owners may want clerks or managers to declare the drawer counts to ensure all cash is deposited, regardless of overages, or shortages. As an added benefit, the overage or shortage amount is calculated and printed on the financial report.

Clerk

Sales clerks are individuals who are responsible for selling the merchandise to the customer. Typically, management wants to know merchandise sales levels for each clerk, in order to monitor productivity, account for cash and other media, and/or pay commissions. The default program provides operation for 15 clerks, however up to 99 different clerks can be used by changing the default memory allocation.

Compulsory

When an operation is programmed compulsory, the appropriate entry must be performed in order to complete the operation.

Compulsory Amount Tendering

This forces the operator to input the tender, rather than pressing a payment key directly. The change will always be computed by the register when a customer tenders an amount greater than the total due. Compulsory tendering will reduce cashier change errors.

Compulsory Condiment

When a kitchen printer, or requisition system is used, the merchant may wish to force the entry of a condiment or instruction for specific items. If compulsory condiment status is set for a specific PLU, then a condiment PLU must follow the entry of the item.

Compulsory Drawer

With compulsory drawer enabled, the clerk cannot begin a new transaction until the drawer is closed. This simple feature was designed to teach cashiers the habit of closing the cash drawer after each transaction. You'll reduce potential errors, theft and fraud that can take place when your cashier works out of an open drawer.

Compulsory Number Entry

This option forces the operator to enter a reference number (using the #/NS key) before a PLU entry can be made or a transaction finalized with a Charge key. The number could represent an SKU number that would be tracked manually, or other data such as a customer count.

Consecutive Number

A sequential number is printed on each receipt issued. This is not a “customer count” as this number is incremented for non-sales activity such as no-sales and reports. A count of revenue generating transactions (true customer count) is printed with the Net Sales total on the financial report.

Currency Conversion

Use the currency conversion function to convert and display the value of the transaction in foreign currency. Only cash tender is allowed after pressing the currency conversion function. Change is calculated and issued in home currency.

Decimal Multiplication

If you sell weighed goods, yard goods, or any merchandise sold in fractions of a unit, the decimal multiplication feature calculates each transaction quickly and accurately. For example, if your customer selects 4.75 pounds of an item sold at \$1.59 per pound, you enter 4.75 on the numeric keypad; press the X/TIME (multiplication) key, then enter the price per pound and press the appropriate PLU key.

Default Program

The original program that is installed on the SPS-300 Series. The register has a default program which makes it operational after the memory clear procedure. Nearly all option, rate, and status programs are set to zero as the default condition.

Department

There are NO Departments, the SPS-300 Series uses price look-ups (PLU's) to perform the function of traditional cash register departments. PLU's may be registered directly on the keyboard (like traditional departments) or indirectly by entering the item or PLU number and then pressing the PLU key.

Electronic Journal

The SPS-320 does not provide a journal printer; the SPS-340 and SPS-345 provide a traditional journal printer. Today many systems, even expensive PC-based systems do not print a traditional sales journal. For business records, a copy of daily financial summaries is usually all that is needed. Like some of the more expensive POS systems, the SAM4s SPS-300 Series has the capability of storing a sales journal in memory. The electronic journal can be reviewed and discarded, saved to an SD card or polled by a PC for archival. When ECR memory reserved for electronic journal is full, current records are saved and old data is discarded.

Error Condition

An error condition signals that mis-operation has occurred. It is identified by an audible tone and an error descriptor appearing on the display.

Error Correct

An error correct operation voids the last item entered; it must be used within a sale.

Flash ROM

Flash ROM is used by the manufacturer to contain the program that runs the register. Flash ROMs maintain memory when power is off, allowing the register to be especially stable and reliable. In the case that the register's program is improved, or updated, the Flash ROM can be updated by a qualified service technician through a utility in the register.

Food Stamp

Note: Many areas now administer food stamp payments through EBT cards, rather than traditional food stamp coupons. Merchants who accept food stamp payments have the responsibility of accepting food stamps only for food stamp eligible merchandise.

The SAM4s SPS-300 Series offers a sophisticated routine to separate food stamp eligible items and accept the appropriate payments. First, each PLU is pre-programmed with food stamp eligibility status. If the customer is paying by food stamps, the operator can then recall and display the food stamp eligible total. Depending upon local rules, sales tax can be forgiven on any taxable food stamp eligible item. Change less than one dollar from food stamp tender is applied to non-food stamp eligible items or issued in cash change. If both cash and food stamp change is due, the register displays both types of change due.

Using this system, all food stamp items are automatically sorted, with change and tax calculated by the register. Thus, a potentially confusing transaction can be handled quickly with little risk for errors.

Gallonage

To simplify gasoline transactions, PLU's can be designated to calculate gallons sold on fuel purchases. The price of the fuel sold is entered as it would be in a normal "open" PLU. However, the price per gallon of fuel is entered where the PLU preset price is normally maintained. When fuel is sold, the register will refer to the programmed price per gallon and calculate the number of gallons sold. Both the gallons pumped and dollar amount of the gas purchase are conveniently printed on the customer receipt and sales journal. This provides all the necessary information for a customer that needs a receipt for gas purchases. The total of gallons sold is also maintained on the appropriate PLU report, in the place of the PLU item counter. Several gallonage PLU's could be placed on the keyboard to maintain records for different pumps, or types of fuel. Thus, the dollar and gallon totals can provide a useful security check against separate pump totals.

Groups (PLU Groups)

Groups are used to organize sets of items. For example, in a restaurant Grill Items, Drinks, and Ice Cream items might be separated into different groups. Up to 99 group totals are available. Group reporting is available on the group report.

HALO

The high amount lock-out (HALO) limits the amount allowed to be entered in a PLU, or function key.

HASH

Merchants often sell non-merchandise items, such as lottery tickets, or bottle deposits, that they do not wish to account for as reportable revenue. HASH PLU's are useful to account for non-revenue income. They will add to the appropriate totals on the PLU report, they will add to the transaction totals, and they will be accountable for in drawer totals, but they will not affect the merchants, NET SALES, GROSS SALES or NON-RESETTABLE GRAND TOTAL. As a system option, HASH can be defined to not add to the transaction (NON-ADD).

Link (PLU Link)

Use linked PLU's if you wish the registration a PLU to automatically cause the registration of another PLU (for example to automatically add a bottle deposit.) Linked PLU's are set with Program 350, PLU Link programming.

Macro

Macro keys may be programmed to record, and then later perform, up to 50 keystrokes.

For example, a macro key could be set to tender (preset tender) a common currency, such as \$5 into the cash key.

Memory Allocation

Memory allocation is a program that determines how the system memory is divided to provide the correct features for your application. For example, you may require more or less clerk memory, PLU's, or electronic journal memory. Memory allocation allows you to maximize the features you need while minimizing the features you do not need.

Mix & Match

Retailers often offer discounts when multiples of different items are purchased. For example, the offer: "save \$5 on any three bottles of wine" can be handled by a mix and match discount. The default SPS-300 Series can accommodate up to 99 different mix and match discounts.

Multiple Receipts

In some cases, for example where a mail-in rebate is offered, an extra copy of a receipt is needed. If allowed, the receipt must be re-printed immediately, before another transaction is started.

Negative PLU's

As you program PLU's, you will find a setting to make them negative (normally they are positive). Positive PLU's are used for items that add to the sale. Negative PLU's are used for items that subtract from a sale, like individual store coupons or bottle deposit credits.

NLU

Number Look-Up (NLU) refers to PLU code that is accessed when a Keyboard PLU is used. In the default program each Keyboard PLU will look up the appropriate numeric PLU, beginning with PLU #1 for Keyboard PLU key #1 and continuing sequentially through the keyboard.

However, this numbering sequence may be impractical for some applications. For example, Keyboard PLU #1 may represent a can of *Diet Pepsi*. The merchant may wish to have the Keyboard PLU look up the UPC code number for *Diet Pepsi*, which is "120500". Using this program, you can change the Number Look-Up (NLU) for the keyboard PLU to any 15-digit number you choose.

No Sale

No sale is an operation to simply open the cash drawer. No sales are counted and reported on the financial report.

Not Found PLU

For small merchants, the SPS-300 Series can build a PLU file "on the fly". Each time an item is scanned (or entered by PLU number) that is not in the PLU file, the operator is prompted to enter the price and other options for the item. At the end of the day, the "Not Found PLU Report" will allow the manager to verify the prices and update the PLU file as needed.

Open (PLU)

Open PLU's accept price entries, rather than register a preset price. To prevent errors, you may set a high limit (HALO) for open entries.

Override

Override is an operation used to bypass a programmed price or entry limit (HALO).

Over-Tendering/Under-Tendering

When a payment is made less than the amount due, it is called an under-tender. After an under-tender, the register calculates and displays the remaining balance for the sale. Additional payments must be made until the total due is satisfied. When the sale is fully paid, the cash drawer will then open and the receipt is completed. When a payment is made more than the amount due, it is called an over-tender. The register will compute and display the change due and the receipt will be completed. Note that register options can be set to allow or disallow over-tendering for check and charge payments.

Paid Out

The Paid Out key is used to track cash paid out of the cash drawer or to record pick-ups from the cash drawer.

PLU's

Price look-ups (PLU's) are accessed by indexing a code number and pressing the PLU key, or by pressing a keyboard PLU key. PLU's can be programmed with a preset or open price. PLU's record an activity count and dollar total on the PLU report. PLU sales may also report to a group.

Post Tender

Post tendering is available to help prevent cashier confusion when a customer decides to change the tender amount. When Post Tendering is allowed, the operator can re-enter a cash tender and the register will re-calculate the change.

To post tender after finalizing the sale, enter the cash amount presented by the customer and then press CASH. The amount of change due to the customer is then displayed. This is a calculation function only, and no totals or counters are updated by the use of this feature.

Preamble/Postamble Message

Programmable messages allow each merchant to customize his receipt with the store name, address, phone number, website or other critical identification information or advertising messages. The SAM4s SPS-300 Series allows a preamble message of up to six lines, each with up to 24-characters, to be printed at the top of each receipt. A postamble of up to 6-lines of 24-characters can also be printed at the bottom of the receipt.

Preset (PLU)

When a PLU is pre-programmed or preset with a fixed amount, the preset amount will automatically register when the PLU is pressed or entered.

Preset Override

When a PLU is preset, it is possible to override the preset price with a different price. If the override function is set to be allowed in the PLU program, you can simply enter a new price and press the PLU key.

Receipt

A receipt is a printed tape given to a customer as a record of the sale transaction.

Received on Account

The Received on Account key is used to track cash received into the cash drawer or to record loans to the cash drawer.

Register Number

The number of the register can be set and printed on each receipt. If the merchant uses more than one register, or has more than one location, the register where a transaction took place or report was taken is easily identified.

Single Item

The transaction is finalized automatically when a single item PLU is registered as the first item in a sale. Single item status is used to speed transaction entry when an item is normally sold in a one-item sale, for example, a pack of cigarettes, a newspaper or an admission ticket.

Split Pricing

Often merchants price items in multiples, for example 3 for \$1. The register will compute the price of items when the exact quantity is not purchased. If the customer chooses to buy 2 items at 3 for \$1, enter 2, press the X/TIME key, enter 3, press the X/TIME key and then enter the price and the PLU. The register will compute the price for the items purchased.

Stock (PLU Stock)

Each PLU reports an activity counter. Normally the activity counter increments (adds) and is reset when a PLU Z-report is taken. You can choose to use the PLU activity counter as a stock counter. If used as a stock counter, each PLU activity will reduce the count. A separate program allows you to add to the stock count or enter a new stock count. Stock counts are not reset when PLU Z-reports are taken.

Surcharge (Item)

An item percent surcharge adds a percentage to the price of an item. This addition nets the PLU total.

Surcharge (Sale)

A sale percent surcharge adds a percentage to the entire sale.

Tare

Tares are container weights. If you are using the scale function, you can preset up to 5 different tare weights. The tare can be subtracted automatically when a specific PLU is registered, or manually inputting the tare number and pressing the TARE key can subtract the tare. Tare #5 can be programmed for entering tare weights manually.

Tax Computation by Rate/Tax Computation by Table

In the simplest method of tax calculation, the register is set with a tax rate (or rates) and the taxes are computed by a percentage calculation. In some cases, a tax that is entered as a percentage does not follow exactly the tax charts that apply in your area (even if the tax chart is based on a percentage). In these cases, we recommend that you enter your tax using tax table programming. This method will match tax collection exactly to the break points of your tax table.

Tax Exempt

Tax exempt is used to exclude the tax from an entire sale.

Tax Shift

Tax shift keys are used to reverse the tax status of a PLU entry.

Tender

A tender is the register operation in which the amount of the payment is entered. If the tender exceeds the amount due, the sale is finalized and change due is displayed.

Training Operation

Training operations do not add to PLU or function key totals. This allows an operator to practice making entries without updating sales totals. If you wish to perform training operations, designate one of the clerks for training. You must clear (Z) the register before the training clerk can be used. When that clerk is signed on, the register is in "training mode".

Transaction Number

See consecutive number.

VAT

Value-Added Tax (VAT) is a tax collection system where a portion of the item's sale price is tax. VAT is different than most sales taxes where tax amounts are calculated and added-on to the sale. Value added taxes are included in the item price. Most locales in the USA do not use a VAT system, which is used in Canada and other nations.

Void

A void operation will erase a previous item entry. It must be used inside of a sale only.

X & Z Reports

X (eXamine) reads reports without resetting and Z (Zero) reads and resets your sales totals.

Manual Revision Record

Edition	Date Published	Revision Contents
v1.0	01-31-2012	Initial Publication
v1.1	02-20-2012	Update Basic features functions; Power switch cover options described, added charge posting operations & function key programs. Updated FLASH update procedures. Default store name is "STORE-A".
v1.2	04-26-2012	IRC Appendix information added.
v1.3	05-15-2012	<i>Version 1.027</i> ; Puerto Rico System Option added.
v1.4	05-16-2012	Not Found PLU operation updated. Store Name notes added.
v1.5	06-21-2012	Updated Flash ROM Update by PC Utility Instructions. Added System Option "Allow Z Clerk Time Report If Employees Are Clocked In". (<i>requires v1.031 or later</i>)
v1.6	07-23-2012	Clarified Group Program options to print requisition on receipt.
v1.7	08-1-2012	Balancing formula updated
v1.8	9-17-2012	Tip function clarified.
v1.9	11-20-2012	Disable Tip flag added to Paid Out Function key options. Selective program loading from SD card added. System Option added: Manager required to add new checks.
v1.10	12-19-2012	Clarified IRC maximum of 8 registers.
v1.11	01-24-2013	Added rounding on cash for Canadian transactions. See System Option P16 & P23.
v1.12	02-06-2013	Z Report List item "00" corrected to read "PLU ZERO SALE". Integrated EBT support added at Version 1.034.
v1.13	02-27-2013	Function key program updates for MACRO, Modifier and Charge keys (v1.046) added.
v1.14	05-01-2013	Cash Benefit function added to Charge function keys at version 1.034.
v1.15	05-09-2013	Time activated price levels and Level Activate Program Scan was added.
v1.16	05-13-2013	Added explanation for manual card entry: Credit, gift EBT allowed, PIN debit not allowed. Clarified Tare Weight program entries.
v1.17	5-29-2013	Memory Allocation: Must allocate at least one line of electronic journal (EJ).
v1.18	6-06-2013	Reset Report Mode screens updated in the Integrated Payment Appendix.
v1.19	8-12-2013	Function key code #446 corrected. Cash Declaration definition updated.
v1.20	10-31-2013	Report Table. Level Activate Time added to Program Scans.
v1.21	12/13/2013	Integrated Payment Void Transaction instructions updated.
v1.22	3/10/2014	(<i>beginning at v1.071</i>) The INACTIVE function key code is now listed when selecting functions for Function Look Up keys. You can now generate an X-Mode-Standalone EJ report to an SD card.
v1.23	5/23/2014	Food Stamp/EBT listing in Glossary corrected.
v1.24	8/15/2014	Not Found PLU Procedure updated. Clear function required after PLU error.
v1.25	11/3/2014	Added Group Entry for Not Found PLU detailed entry.
v1.26	12/3/2014	Updated S-Mode IRC Options: Share KP & Share Datatran entries can be a value of "0".

Edition	Date Published	Revision Contents
v1.27	2/26/2015	Corrected Tare Weight field—final digit can be 0 or 5.
v1.28	3/4/2015	PRICE CHANGE (#417) function key added at version 1.081 or later.
v1.29	9/3/2015	Updated P Mode Print Options.
v1.30	1/20/2016	Updated System Option page (P24) ‘PLU Lookup Key Is’ N: Pop-Up / Y:Stay-Down
v1.31	3/23/2017	Add Check operation added; Report SD Backup information added.
v1.32	07/14/2017	Corrected integrated payment information.
v1.33	8/31/2017	Updated manual P/Bal operations.
v1.34	10/19/2017	Updated Print Options to include Disable Line Find on Slip Printer (<i>v0.1.130 & later</i>)
v1.35	6/8/2018	Financial Report Messages, Clerk Report messages, PGM Mode Password
v1.36	6/15/2018	Removed blank pages
v1.37	6/25/2018	Corrected tax table programming
v1.38	12/4/2018	Updated Print Options, System Options Reference Information, Scale key
v1.39	1/7/2019	Updated Logo
v1.40	2/22/2019	Defined “Datatran Wait Value On Remote Register”
v1.41	6/6/2019	System Option: Disable EFT Amount Confirmation on Pin-Pad (<i>requires v1.140 or later</i>)
v1.42	3/20/2020	Updated X-report/Z-report; Firmware Update; MCR Sign on
v1.43	4/24/2020	Updated Flash ROM Updates
v1.44	9/29/2020	Scale Type selections: removed CAS & added DLS for Datalogic Scale\Scanner combo (<i>requires v1.154 or later</i>)
v1.45	5/3/2021	Updated; System Option, Print Options
v1.46	9/28/2021	Updated Non-EMV Integrated Payment Configuration Diagrams
v1.47	11/19/2021	(<i>At v1.157</i>) System Options: ‘No Sign If Transaction TTL Less Than specified amount’ was replaced with ‘Print Signature Line On Customer Copy’
v1.48	12/20/2021	Added: Function Lookup & PLU Lookup function key operations,
v1.49	3/30/2022	(<i>At v1.158</i>) Charge Key 1-8 type 3: GIFT selection changed to 3: NP Credit
v1.50	4/1/2022	Added Validation information
v1.51	6/10/2022	Added details for saving Reports to SD; Successful\Unsuccessful reports backup to SD receipt samples
v1.52	8/15/2022	Each Program Load instructions; Shifting tax on sale
v1.53	10/6/2022	Shifting Tax on Sale; RA/PO operation
v1.54	10/21/2022	Validation Notes and X/Time operation
v1.55	11/18/2022	PLU Descriptor
v1.56	12/01/2022	SD Card Operation
v1.57	12/15/2022	KP Starting Number, KP Port # Notes
v1.58	4/13/2023	Memory Allocation Notes, Check Endorsement
v1.59	5/12/2023	Discount & Coupons, Mix & Match, X/Time operations; Modifier Entries, Function Keys, Validation Sample
v1.60	7/24/2023	IRC Download Programs Notes; Report Table & Report Samples Notes; SD Card Operation; Charge 1-8 function key In v1.158 card type SELECT for (3: GIFT) was changed to 3: NP Credit.
v1.61	6/25/2024	Mix & Match; MACRO programming;
v1.62	8/20/2024	Keyboard Expansion, Integrated Payment Programming, Group Programming: KP Port# Notes
v1.63	1/2/2025	EMV-Datacap Integrated Payment, System Options, Function keys.

Edition	Date Published	Revision Contents
v1.64	2/27/2025	Added: S-Mode Port Setting: Ethernet, Update System Options, F/S TEND and Charge keys, DC Direct Functions. Updated: Function Lookup programming
v1.65	5/5/2025	Updated: Function Keys. Financial Report Messages
v1.66	5/12/2025	Updated: Charge Keys
v1.67	6/30/2025	Updated: Report SD Backup
v1.68	7/22/2025	System Option: Save DSC Log to SD
v1.69	8/20/2025	Integrated Payment, FS/TENDER
v1.70	9/5/2025	Flashrom Information, DC Direct Timeout
v1.71	12/23/2025	System Options; Z-Mode New EFT Functions: 1 = DC Direct, 2 = Dejavoo; S-Mode Port Setting Options: Ethernet
v1.72	1/12/2026	Modified Charge 1-8 keys: NP Credit
v1.73	2/26/2026	Updated Dejavoo Functions; System Options
v1.74	3/18/2026	Dejavoo Transactions Definitions
v1.75	6/1/2026	Delete SD EMV File