

SAM4S

SAM4s NR-500E Series Electronic Cash Register

Operator and Programming Manual



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Sam4s NR-500E Series OP Manual v1.53

CRS, Inc.

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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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THIS APPARATUS COMPLIES WITH THE CLASS "A" LIMITS FOR RADIO INTERFERENCE AS SPECIFIED IN THE CANADIAN DEPARTMENT OF COMMUNICATIONS RADIO INTERFERENCE REGULATIONS.

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 SECR. 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 megaohm.
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.

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Introduction

About the NR-500E Series

Congratulations! You have selected a very flexible electronic cash register designed for years of reliable service. NR-500E Series will fit many shops and restaurants, providing fast transaction processing, security, and detailed sales information.

The NR-500E Series ECR changed to the NR-500E Series ECR in 2025. The “E” series ECR’s are essentially the same as the NR-510B/510RB ECR’s except that the NR-500E Series added the LAN Port (10 Base-T Ethernet) for the DC Direct integrated credit interface.

The NR-500E Series features a unique operator screen that allows you to view itemized transaction information, as well as providing on screen programming that is simple and easy to use.

The NR-500E Series **E**lectronic **C**ash **R**egisters (*ECRs*) are available with Raised Keyboard (NR-510RB-E) or Flat Keyboard (NR-510B-E) configurations. Flat keyboard models work well for restaurants, food service shops, or convenience stores and Raised Keyboard models for retail shops.

The keyboard and printer configuration define the model type. All other features are the same, unless otherwise noted. There are two keyboard configurations, NR-510RB-E Raised keyboard or NR-510B-E Flat keyboard. This manual includes instructions for all models.

NR-510B-E
Flat Keyboard (90-keys)
Receipt Printer



NR-510RB-E
Raised Keyboard (48-keys)
Receipt Printer



Basic Features and Functions

SAM4s NR-510B-E & NR-510RB-E series electronic cash registers are designed to fit into many different retail and restaurant environments. Standard features include:

- Supports Semi-Integrated electronic payment for Credit, debit, and gift card transactions.
- The NR-500E Series has an Ethernet Port for DC Direct integrated payment.
- Fast 15 LPS thermal printing with easy drop-and-print paper loading.
- Flat, Spill-Resistant keyboard or Raised-Key keyboard.
- Lockable Cash drawer with 5-bill and 5-coin compartments and media storage.
- A two-line 16-character backlit LCD display and a 9-character rotating rear display.
- 7-position Mode Switch and two sets of keys to access the Mode Switch positions.
- 24-hour real-time clock with automatic day and date change.
- Four tax rates available for Tax Table, value added tax (VAT), or Add-On Tax capability. Each tax rate is programmable for tax table look-ups and/or straight percentage tax programming. Tax rate 4 may be programmed to accommodate Canadian goods and services tax (GST).
- Memory Allocation System Supports:
 - Over 3,200 Price Look Ups (PLUs) are available
 - 8000 possible if SD Card is used for saving PLU's
 - Up to 99 clerks with separate report totals
 - Up to 99 PLU Group totals
 - Up to 2 Price levels for each PLU
 - Up to 100 Mix & Match discounts
 - Up to 7200 lines for Electronic Journal
 - 30,000 lines are possible if using the SD Card to save programming
 - Up to 500 Hard or Soft Guest Checks
 - Up to 100 Lines per Check
- A programmable keyboard allows customized placement of functions, as they are needed. The keyboard shift keys are used to access the 3 levels of keyboard PLU keys.
- Function keys for posting charges and payments to accounts or guest checks.
 - 24-character programmable descriptors for PLUs and functions.
- Check, Cash, and up to eight Charge keys.
- Currency conversion capability for up to 4 foreign currencies.
- Food stamp sorting and tendering for stores that accept food stamp payments.
- 6-line programmable preamble and postamble messages.
- Programmable descriptors for financial and clerk reports.
- Training Mode.
- Management X and Z reports.
- One standard RS-232C (DB9) communication ports for connection to optional POS peripherals, Two (RJ-45) RS232C ports, One USB Port and an optional Ethernet port.
 - The ECR series can connect to a scale, remote printer, scanner, coin dispenser, pole display, liquor interface, video surveillance system, Datatran integrated payment appliance, or a PC for programming and/or polling reports.

Using This Manual

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

- **“Getting Started”** on page 30, provides quick start steps to help you get up and running for basic applications.
- **“Operations”** on page 41, guides you through the basic operation sequences.
- **“Management Functions”** on page 93, explains manager controlled functions, along with reports and balancing information.
- **“Z-Mode”** on page 103 has the report reset operations and setup for the DC Direct integrated payment.
- **“Sample Reports”** on page 111 provides a sample of each register report.
- **“S-Mode Programming”** on page 131 provides instructions for secure programming – usually done by the installing dealer prior to installation.
- **“P-Mode Programming”** on page 160 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.
- **“Integrated Payment”** on page 228 provides important operation information for users where optional integrated electronic payments are done using a Datacap appliance.

The SAM4s NR-500E Series ECR’s allow 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 ECR, 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:

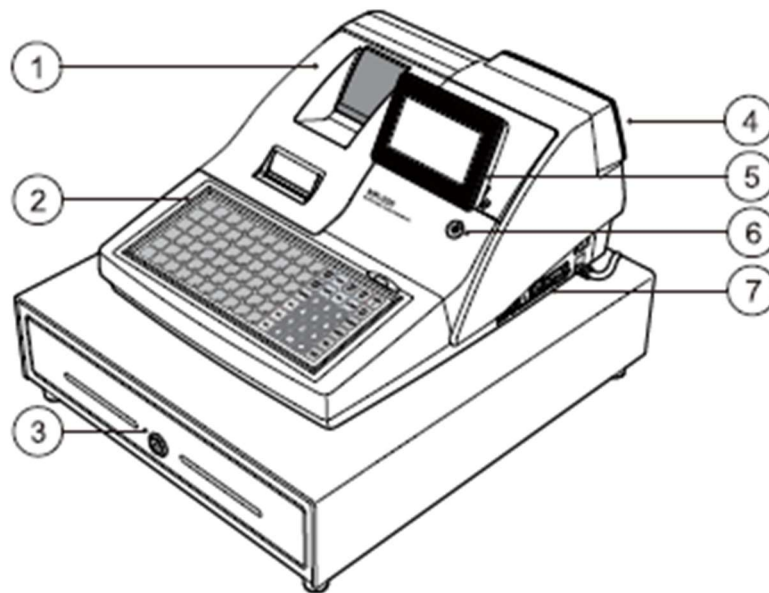
- Press numeric key 1.
- Press numeric key 0.
- Press numeric key 0.
- Press PLU #1.

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

Programmable Features

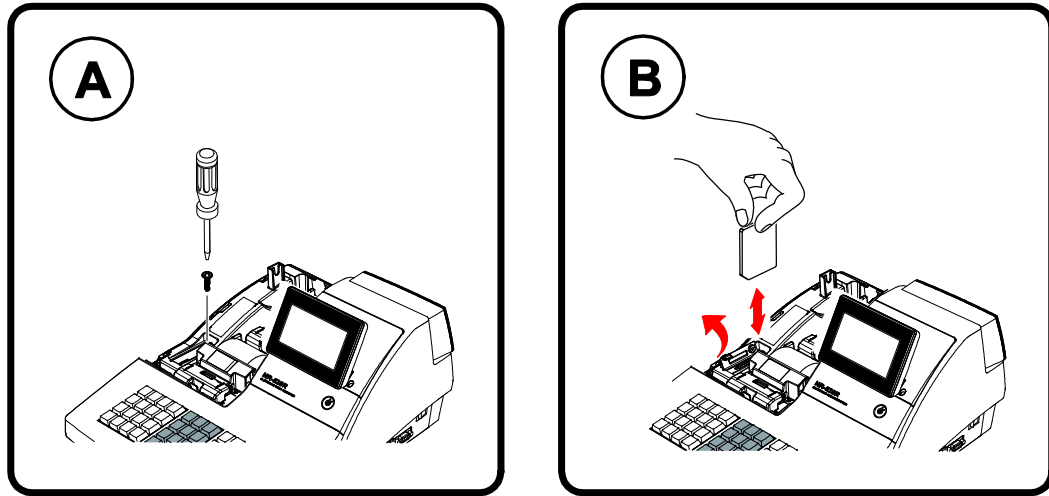
- Memory Allocation System supports maximums of:
 - Over 3,200 Price Look Ups (PLUs) are available
 - 8000 possible if SD Card is used for saving PLU's
 - Up to 99 clerks with separate report totals
 - Up to 99 PLU Group totals
 - Up to 2 Price levels for each PLU
 - Up to 100 Mix & Match discounts
 - Up to 7200 lines for Electronic Journal
 - 30,000 lines are possible if using the SD Card to save programming
 - Up to 500 Hard or Soft Guest Checks
 - Up to 100 Lines per Check
- Up to 5 PLU modifier keys (i.e. small, medium, and large)
- Three Keyboard Shift keys to access the 3 levels of keyboard PLU keys.
- 24-character programmable descriptors for PLU's and functions
- Four tax rates with ADD-ON capability, Tax-Table or Value Added Tax (VAT)
- 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 available to practice registrations without updating totals and counters
- Programmable discount/surcharge/coupon keys
- Guest Check Tracing to access an existing balance (hard check) or itemized bill (soft check)
- Error Correct, Void, and Cancel Transaction functions
- Macro, Price Inquiry, Promo and Waste functions
- Management X and Z reports
- 6-line programmable preamble and postamble messages
- Programmable descriptors for financial and clerk reports

Identifying Components & Connections



- 1 Printer Cover
(Shown with detail window access.)
- 2 Keyboard
(NR-510 Shown with flat keyboard; NR-51R available with raised keyboard.)
- 3 Lockable Cash Drawer with 5-bill and 5-coin compartments and media storage.
- 4 Customer Display (9-Digit LED)
- 5 Operator LCD Display (2-Line, 16-Character)
- 6 7-Position Mode Switch
- 7 RS-232 Serial I/F Connections
- 8 Power Switch
- 9 MSR *(Optional)*

Inserting External SD Card



- The SD slot is located in the printer compartment. Remove the printer cover.
- Remove the security screw to access the slot.
- Insert or Remove the SD card.

SD Card Specifications

The NR-500E Series ECR's can support up to 16GB SD cards. SD Cards must be formatted for FAT32.

Beginning at v4.0.44S you can elect to store PLU and EJ data to an SD card. Using the SD card allows the register memory allocation to be set to the maximum of 8000 PLUs and 30,000 EJ lines. When the SD card option is selected, the register must have an SD card installed before performing the Clear RAM Memory procedure and remain installed at all times during normal operations.

For installations using EMV integrated payment, an SD card must be placed in the SD card slot on the right side of the ECR. The SD card is used to store transaction records so they can be called up by invoice number for tip adjustment and/or voiding.

Connection Panel

The connection panel is located on the right side of the of the ECR by the power chord.



- The Serial ports can connect to a PC, Scanner, Kitchen Printer Scale and Pole display.
- The USB (Device and Host) port can connect to a PC, scanner, or memory device.
- If you want to know more details, See page 143 for USB specification.
- The LAN port (Ethernet Port) is an option.

Operator Display

The NR-500E Series comes with a 192 x 64 graphic blue backlit LCD operator display screen, providing up to 8 lines of information with up to 32-characters per line.

The multiple-line operator display 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 are displayed, when more than six items are registered, the display lists the last six items registered.
- When you are in the **X**, **Z**, **PGM**, or **S** Modes you can scroll through the option selections with the **↑CHARGE2** and **↓CHARGE1** keys.
- If you make an error, the screen specifies the type of error.

As items are registered, the item description will display on the first line; price and quantity information will display on the second line. Additional information and error messages will display as appropriate and may be accompanied by an error tone.

REGISTER MODE

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

See “Clerk Sign-On Instructions” on page 42.

```
R:ON  CLERK 00          K1 P1
REGISTER MODE
                           CLOSED
```

When a clerk is signed on the “CLOSED” message is removed.

```
R:ON  CLERK 01          K1 P1
REGISTER MODE
```

You can register a sale.

```
R:ON  CLERK 01          K1 P1
HAMBURGER
1                               6.98
TAX 0.55      SUBTOTAL      7.53
```

Register Mode Display Lines

The default register mode display configuration shows the current item registered in the transaction on one line and quantity and price on the next line.



If desired, you can set the system option to display 4 lines in register mode when entering a transaction.

Turn the Mode Switch to **PGM**: go to **4. Options > 1. System > 38. Display 4 Lines In REG Mode = [Y]**.

This setting allows for four items and prices to be displayed in register mode when entering a transaction.



When the transaction is finalized, the Tender and any Change Due is displayed.



VOID MODE

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

```
R:ON  CLERK 00          K1 P1
      VOID MODE
      CLOSED
```

When a clerk is signed on the “CLOSED” message is removed.

```
R:ON  CLERK 01          K1 P1
      VOID MODE
```

MANAGER MODE (X)

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

```
R:ON  CLERK 00          K1 P1
      MANAGER MODE
      CLOSED
```

- Press the **CASH** to display **X MODE** menu.

```
      X MODE
1.X REPORTS           ←
2.DECLARATION
3.FLASH REPORT
4.SET TRAIN MODE
5.STOCK ENTRY
6.SAVE RPT SD
      -PAGE 1/2-
```

```
      X MODE
7.SAVE RPT USB
8.RCPT ON/OFF        ←
9.LCD CONTRAST
      -PAGE 2/2-
```

- Press the (↑) key and the (↓) key to move the cursor to the next menu selection or previous menu selection; press the **CASH** key to open the menu selection.
- Press the (**Page**↑) and (**Page**↓) keys to navigate to the next menu page or previous menu page.

Z MODE (Z)

The **Z-Mode** keylock position is accessible even without a clerk signed on.

```
      Z MODE
1.Z REPORTS          ←
2.RESET E.J
3.RESET NOT FOUND PLU
4.CONNECT SERVER
5.DATATRAN FUNCTION
6.DATATRAN TRANSACTION
      -PAGE 1/2-
```

```
      Z MODE
7.DC DIRECT FUNCTION ←
      -PAGE 2/2-
```

- Press the (↑) key and the (↓) key to move the cursor to the next menu selection or previous menu selection; press the **CASH** key to open the menu selection.

PROGRAM MODE (PGM)

Note: The **PGM (Program Mode)** can be accessed even if a clerk is not signed on.

```
      PROGRAM MODE
1.PLU                ←
2.GROUP
3.FUNCTION KEY
4.OPTIONS
5.EMPLOYEE
6.TIME
      -PAGE 1/2-
```

```
      PROGRAM MODE
7.TAXES              ←
8.MESSAGES
9.MIX & MATCH
10.PGM SCAN
      -PAGE 2/2-
```

- Press the (↑) key and the (↓) key to move the cursor to the next menu selection or previous menu selection; press the **CASH** key to open the menu selection.
- Press the **(Page↑)** and **(Page↓)** keys to navigate to the next page or the previous page.

SERVICE MODE (S)

Note: The **Service Mode** can be accessed even if a clerk is not signed on. The S-Mode is the unmarked 6 o'clock position on the mode switch.

```
          SERVICE MODE
1.SELF TEST          ←
2.MEMORY CLEAR
3.ALLOCATION
4.KEY ASSIGN
5.DEFINE PORT
6.ECR SETUP
          -PAGE 1/2-
```

```
          SERVICE MODE
7.PROGRAM BACKUP    ←
8.HELP MENU

          -PAGE 2/2-
```

- Press the (↑) key and the (↓) key to move the cursor to the next menu selection or previous menu selection; press the **CASH** key to open the menu selection.
- Press the (**Page**↑) and (**Page**↓) keys to navigate to the next page or the previous page.

Using Display Menus

Manager (X), Z, Program and Service Modes use menus to allow access to additional functions. The menu system allows you to find specific reports or program settings without the need to consult a manual.

On the default keyboard, the (↓) and the (↑) arrows allow you to scroll up and down through available options on the menu one option at a time. The keys with (**Page ↓**) and the (**Page ↑**) allow you to scroll up and down through available options on the menu one page at a time.

For example: review the Program Mode menu:

1. Turn mode switch key to the **P** position.
The Program Mode menu displays.
2. Press (↓) to display the next option or press (↑) to return to previous option.
3. Press (**Page ↓**) to display the next page of options or press (**Page ↑**) to return to previous option page.
4. Alternatively, you can press the numeric digit, *i.e.* 4 as a shortcut to advance to the fourth item on the menu list.
5. After you select the appropriate category, press **CASH** to enter the selected function.

```
PROGRAM MODE
1 . PLU
2 . GROUP
3 . FUNCTION KEY
4 . OPTIONS
5 . EMPLOYEE
6 . TIME
-PAGE 1 / 2-
```

```
PROGRAM MODE
7 . TAXES
8 . MESSAGES
9 . MIX & MATCH
10 . PGM SCAN
-PAGE 2 / 2-
```

```
OPTIONS
1 . SYSTEM
2 . PRINT
3 . REPORT
4 . TAX
5 . CURRENCY
6 . ROUNDING
-PAGE 2 / 2-
```

Note: If you or your installer has customized the keyboard the original locations of the (↓) and (↑); (**Page ↓**) and (**Page ↑**) keys provide the scroll down and scroll up functions, without regard to any new function assigned to those locations.

Customer Display

The NR-500E Series ECR comes with a built-in two-line 16-character 2-line backlit LCD Turret display.



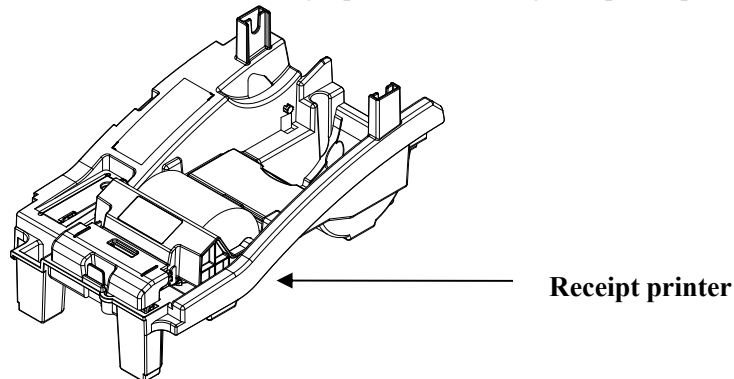
As items are registers, the item description will display on the first line; price and quantity information will display on the second line. Additional information and error messages will display as appropriate and may be accompanied by an error tone.

Printer

For information about loading paper into the printer, refer to the section “Installing the paper” which can be found on page 32.

NR-510 Series (1 Station)

NR-510B-E and NR-510RB-E Model ECR feature a single printer for issuing receipt and printing reports.



Printer Specifications

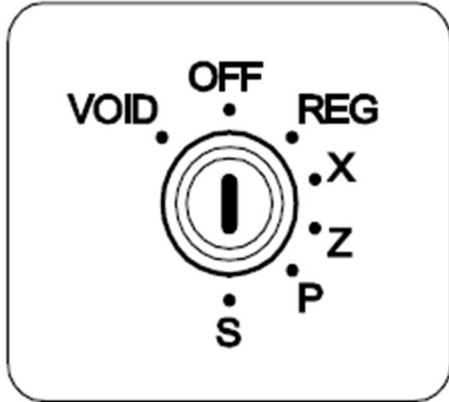
Paper	58mm Single-Ply Thermal Paper	
Paper Loading:	Drop-in Loading	
Paper Diameter:	70 Ø_max	
Print Speed:	Normal	50mm/s
	Max	70mm/s
Paper end sensor	YES	

If Desired, you can set the system option to use the receipt printer as a detail printer.

Turn the Mode Switch to **PGM**: go to **4. Options > 1. System > 46. Use Receipt As Detail = [Y]**.

Mode Switch

The Mode Switch Mode Switch has 7 positions which can be accessed with one of the 5 keys that come with the ECR. Each ECR is shipped with two full sets of keys.



VOID	Used to void transactions outside of a sale.
OFF	Turns the register OFF, register is inoperable.
REG	Use for normal registration of transactions.
X	Use to read register reports and perform **X-Mode Only** manager required operations.
Z	Use to read register reports and reset totals to zero, and access Datatran functions & operations.
P (PGM)	Use to access programming for the register.
S	Use for hardware tests and special settings. <i>(Not marked on the Mode Switch Mode Switch)</i>

Before performing any operations in Register Mode, a clerk must be signed on. See “Clerk Sign-On Instructions” on page 42.

Mode Switch Control Keys

The ECR includes two sets of keys that may be used to access the following Mode Switch positions.

<u>Key</u>	<u>Positions Accessible</u>
REG	OFF, REG
VD	VOID, OFF, REG, X
Z	VOID, OFF, REG, X, Z
P	VOID, OFF, REG, X, Z, PGM
C	ALL POSITIONS

Note: Keys may be removed from the Mode Switch in the OFF or REG positions.

Keyboards

NR-510RB-E Raised Keyboard Versions

The NR-500ER Series keyboard is shown below with the default legends and key assignments. This configuration has 12 keyboard NLU\PLU key locations. Shaded keys cannot be changed or reassigned.

RCPT FEED	RCPT ON/OFF C#	CLERK F ^	X/TIME I /	7	8	9	M] 4	Q : 8	U ; 12	PLU (PAGE↑) W ?	RECD ACCT (PAGE ↓) Z ■
% 1 SPACE	% 2 B @	% 3 E %	#/NS H *	4	5	6	L [3	P * 7	T , 11	CHARGE 1 V =	PAID OUT (↑) Y
TAX1 SHIFT DOUBLE	CANCEL A !	RETURN D \$	VOID G &	1	2	3	K) 2	Q + 6	S 10	SUB TOTAL SHIFT	CHECK (↓) X
MACRO 1 BACK	MACRO 2 CAPS	MACRO 3	CLEAR	0	00	.	J (1	N - 5	R 9	CASH / TEND ENTER	

Note: The **CHECK**, **PAID OUT**, **RECD ACCT** and **PLU** keys are used for navigating through the **X – Z – P** and **S-Mode** screens and *should not* be reassigned. These key locations revert to their navigation operations, Cursor ↓, Cursor ↑ & Page ↓, Page ↑ when used in the X – Z – P and S-Mode. Additionally, the receipt **FEED** key, **CLEAR** key and **NUMERIC** keypad keys cannot be changed or reassigned.

NR-510B-E Flat Keyboard Versions

The NR-500E Series keyboard is shown below with the default legends and key assignments. This configuration has 60 keyboard NLU\PLU key locations. Shaded keys cannot be changed or reassigned.

£ 1	€ 7	■ 13	19	25	31	37	43	49	55	RCPT FEED	#/NS	RECD ACCT	PAID OUT (PAGE↑)	CLERK# (PAGE ↓)
! 2	@ 8	# 14	\$ 20	% 26	^ 32	& 38	* 44	(50	) 56	RCPT ON/OFF	CLEAR	PLU	X/TIME	TAX1 SHIFT
Q 3	W 9	E 15	R 21	T 27	Y 33	U 39	I 45	O 51	P 57	CANCEL	7	8	9	CHARGE (↑)
A 4	S 10	D 16	F 22	G 28	H 34	J 40	K 46	L 52	; 58	% 1	4	5	6	CHECK (↓)
Z 5	X 11	C 17	V 23	B 29	N 35	M 41	' 47	. 53	/ 59	% 2	1	2	3	SUB TOTAL
+ 6	- 12	< 18	> 24	? 30	= 36	CAPS 42	DOUBLE 48	SPACE 54	BACK SPACE 60	% 3	0	00	.	CASH ENTER

Note: The **CHECK**, **PAID OUT**, **RECD ACCT** and **PLU** keys are used for navigating through the **X – Z – P** and **S-Mode** screens and *should not* be reassigned. These key locations revert to their navigation operations, Cursor ↓, Cursor ↑ & Page ↓, Page ↑ when used in the X – Z – P and S-Mode. Additionally, the receipt **FEED** key, **CLEAR** key and **NUMERIC** keypad keys cannot be changed or reassigned.

Getting Started

Quick Start Steps

Using Quick Start Instructions provided here you can configure your register for use in your retail store. Basic setup instructions include: programming prices, descriptors, and loading a tax percentage. Your ECR series ECR is now fully functional for many basic-use applications.

Detailed programming steps are found in the full Program section of this manual. A qualified dealer will survey your needs and deliver a more sophisticated program. Complex taxes can be programmed, security options set as needed. Coupons, receipt messages/logos and other commonly used features can be deployed. Dealers will normally charge a program/installation fee for this service.

Steps in this chapter:

- ◆ Unpacking
- ◆ Power Requirements
- ◆ Installing the Paper
- ◆ Clearing Memory
- ◆ Initial Clear

Unpacking

1. Unpack and unwrap the cash register.
2. Locate in the packing the following items:
 - 1 roll of paper
 - Two 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, insert a control key and turn the key to the REG Mode Switch position.

Power Requirements

Plug the Sam4s ECR into a grounded 3-prong outlet.

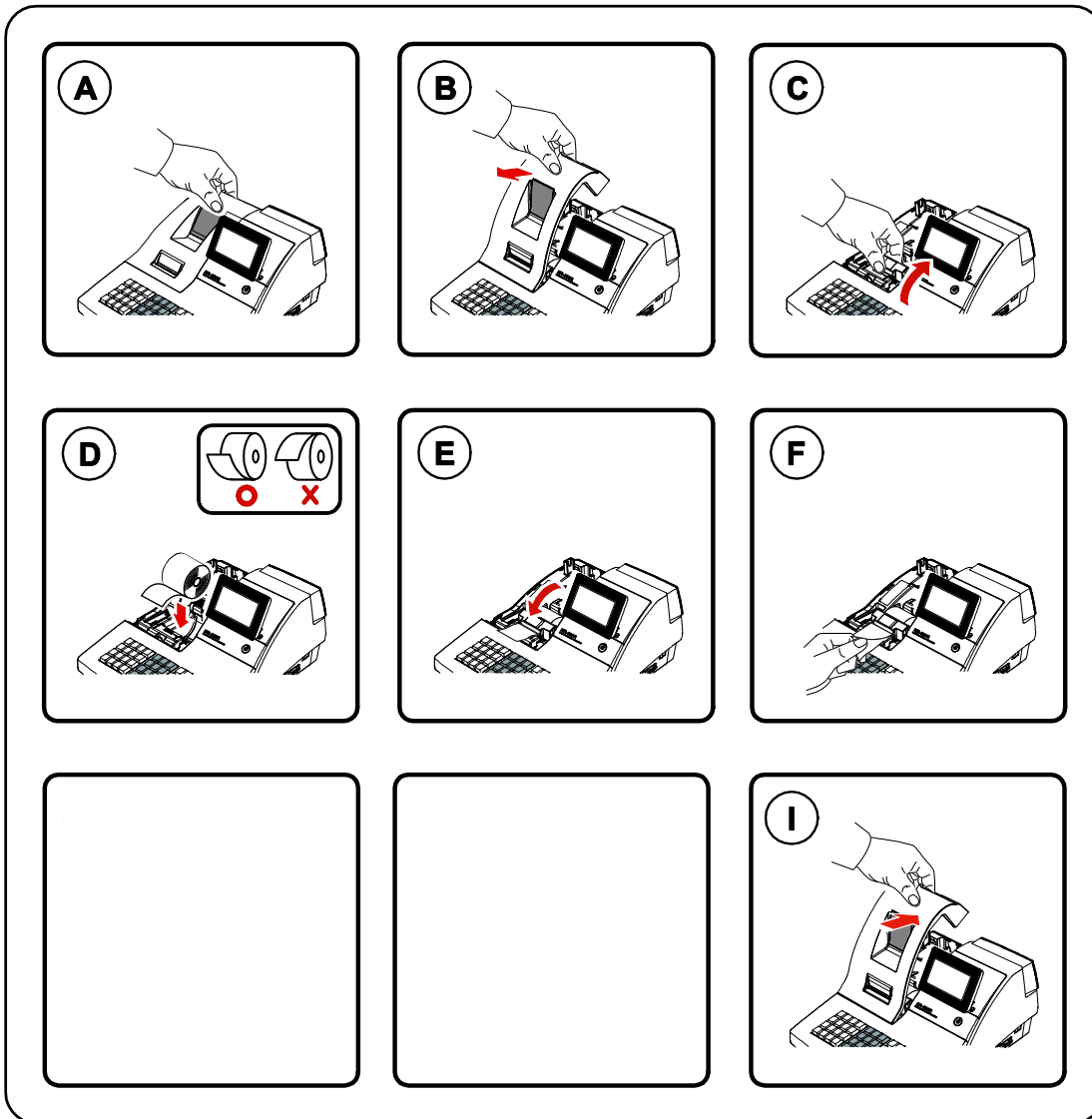
- Be aware that other electrical devices on the same circuit can cause your ECR to malfunction. Avoid plugging your ECR into outlets where other high-current devices are connected.
- Be aware that power quality issues, including voltage fluctuations, electrical noise, spikes, outages, interruptions, and other power viruses can disrupt or damage modern electronic equipment, including ECR's and PCs.
- When ECR's are connected to networks, connected to PCs or where communications cables connect peripherals, particular care must be taken with power sources and communication cable routing. Your authorized dealer can provide detailed power specifications for these applications. Failure to implement installation requirements for networked systems may cause system failures and/or poor system performance.
- The Sam4s ECRs are a modern computerized network device. As with all network systems, it requires appropriate electrical power wiring and proper routing of communication cabling for reliable operation and maximizing the life of the equipment.
- When installed in a merchant location, CRS recommends Isolated Grounding for all equipment within the Sam4s system such as with a PowerVAR, Power & Ground Guard conditioners. An uninterruptible power supply (UPS) is recommended where frequent power disruptions occur. Without a UPS, the SAM4S will shut down and reboot when power is disrupted. (The SAM4S reboots in less than one minute.)

Safe Operation

- Do not locate your Sam4s ECR in a damp or wet environment. Avoid high humidity, direct sunlight and temperature extremes.
- Always plug your Sam4s ECR into a grounded three-prong outlet. Never use two-prong Adapters or ungrounded outlets.
- Check to make sure the power outlet provides the correct voltage: (120V +/- 10%).
- Immediately disconnect the ECR from the power source in case of spilled liquid in the ECR, smoke, or strange smells. Call your authorized dealer for assistance.
- Do not operate the ECR with wet hands.
- Use a soft dry cloth to clean the ECR cabinet. Do not use wet towels or solvents.
- Do not open the ECR case to attempt repairs. Dangerous voltages can cause shock. Service attempts by untrained personnel can cause unnecessary damage to your ECR.

Installing the Paper

1. Remove the printer cover.
2. Lift up to open the 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 on the printer cover. Replace the printer cover. Tear off the excess paper.



Clearing RAM Memory

Before using your NR-500E Series ECR for the first time, you must perform the memory all clear procedure to ensure the ECR is ready for programming. The Ram Clear procedure clears all totals and counters and the default program is installed.

Beginning at v4.0.44 you can elect to store PLU and EJ data to an SD card inserted into the ECR. Using the SD card allows the register memory allocation to be set to the maximum of 8000 PLUs and 30,000 EJ lines.

When the SD card option is selected, the register must have an SD card installed **before performing** the Clearing RAM Memory procedure and remain installed at all times during normal operations.

When the ECR is set up to store the PLU/EJ on the SD the SD Card must be installed in the SD port on the terminal at all times!

Note: Beginning at v04.0.51 the version number will be printed as **USA 04.051** if the PLU and EJ data are saved in the register and **USA 04.051S** (*with an S*) if the PLU and EJ data are stored on the SD card.

CAUTION: The procedures described in this area are security sensitive. Clearing RAM Memory after the register is put into service will erase all programming as well as all totals and counters.

Do not share this information with unauthorized users and distribute the “SERVICE MODE” access key only to those you may want to perform these functions.

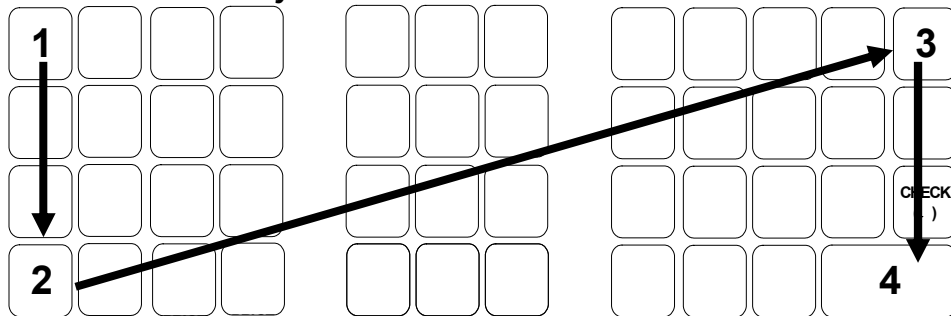
NOTE: NR-500E Series ECR’s are EMV Integrated Payment capable; An SD card is required for EMV. If you are not using Integrated Payment, and you are not saving the PLU and EJ data to the SD Card, you can press CLEAR to Bypass the ‘SD Required’ error message when clearing RAM memory.

After the memory has been cleared, you can set up the Memory Allocation settings; refer to the S-Mode Programming, Memory Allocation settings on page 136 for details.

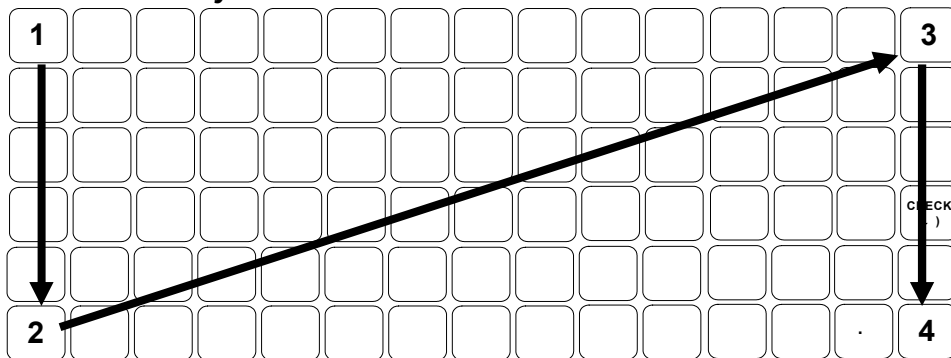
RAM All Clear Procedure

1. Move to the **SERVICE MODE**.
2. Turn the power switch located on the right side of the register to the **OFF** position.
3. Press and hold the key position where the **CHECK** 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.

<NR-500R Series Raised Keyboard>



<NR-500 Series Flat Keyboard>



6. The message “**SAVE PLU ON ECR? Y=CASH N=CLEAR**” displays.
 - Press **CASH** for normal operation (PLU file and EJ Data is stored on ECR)
 - Press **CLEAR** to use the SD card to store PLUs and EJ Data.
7. The **SERVICE MODE** menu displays. The RAM Clear procedure is complete and the **MEMORY ALL CLEAR** receipt prints.

Memory All Clear Printout

Beginning at v04.0.51 the version number will be printed as **USA 04.051** if the PLU and EJ data are saved in the register and **USA 04.051S** (*with an S*) if the PLU and EJ data are stored on the SD card.

The MEMORY ALL CLEAR receipt shows the version information, the PLU USED shows the total number of PLU's Programmed / Allocated.

PLU / EJ On ECR

```

                THANK-YOU
                CALL AGAIN
09/24/2018  MON                08:28

*****
                MEMORY ALL CLEAR OK
*****
MEMORY ALLOCATION
RAM 4MBITS
RAM 1 OK
RAM 2 NG
TTL AVAIL : 335872 BYTES
TTL USED  : 271125 BYTES
=====
                VERSION INFORMATION
=====
MODEL       : NR-500E
VERSION    : USA 04.051
CHECKSUM    : C729
BOOT/APP    : CFCA/F75F
PLU USED    : 60/1000
VER.DATE    : 2020.07.01
MAC ADDRESS : 8E.0E.16.BE.5C.55

CLERK 00          000001    00000
    
```

PLU / EJ On SD

```

                THANK-YOU
                CALL AGAIN
09/24/2018  MON                08:28

*****
                MEMORY ALL CLEAR OK
*****
MEMORY ALLOCATION
RAM 4MBITS
RAM 1 OK
RAM 2 NG
TTL AVAIL : 335872 BYTES
TTL USED  : 279237 BYTES
=====
                VERSION INFORMATION
=====
MODEL       : NR-500E
VERSION    : USA 04.051S
CHECKSUM    : C729
BOOT/APP    : CFCA/F75F
PLU USED    : 60/5000
VER.DATE    : 2020.07.01
=====
                SPECIAL INFORMATION
=====
MAX PLU     : 8000
MAX EJ LINE : 30000
MAC ADDRESS : 8E.0E.16.BE.5C.55

CLERK 00          000001    00000
    
```

Note: The **RAM 2 : NG** indication on is normal; the NR510 series ECR's have only RAM 1 installed – there is no RAM 2.

After the memory has been cleared, you can set up the Memory Allocation settings; refer to the S-Mode Programming, Memory Allocation settings on page 136 for details.

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, but the ECR program and existing report totals remain intact.

Here are some reasons you may want to perform the 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 ECR.

Initial Clear Procedure:

1. Move to the **PROGRAM MODE**.
2. Turn the power switch located on the right side of the register to the **OFF** 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" message displays release the **SUBTOTAL** key.

```
INITIAL CLEAR
ENTER CASH KEY
```

5. Press the **CASH** key.

```
ARE YOU SURE?
Y=CASH N=CLEAR
```

6. Press the **CASH** key. The message "INITIAL CLEAR OK!" prints to the register receipt when the initial clear is complete. To resume operations, you will need to sign on a clerk.

Initial Clear Receipt Example

```
THANK-YOU
CALL AGAIN
10/14/2024 MON 10:34
=====
INITIAL CLEAR OK
=====
CLERK 00 000002 00000
```

Function Key Descriptions

Keys are listed in alphabetical order. Many of the keys described below are not included on the default keyboard. See “Function Key Assignment Programming” on page 136 to add or change programmable keys.

Function Key	Description
00, 0 – 9, Decimal	Use to make numeric entries in REG, X, Z, VOID, PGM or S (<i>Service Mode</i>) positions.
#/NS	Use as a non-add key to print a numeric entry (up to 9-digits) on the receipt. This entry will not add to any sales totals. The #/NS key is also used to open the cash drawer without making 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.
ADD CHECK	Use to combine soft checks when check tracking is used.
ALPHA TEXT	Use to type a name or message that will be associated with a soft check. Touch the ALPHA TEXT key any time after a check has been opened, then type a message (up to 24 characters) using the alpha keyboard overlay and touch OK. Multiple message lines can be entered. The message is saved and printed/displayed with the order. A system option controls whether the message is printed on the guest check.
AUTO CASH (1-10)	These keys are used to automatically tender a sale with a preset cash amount. Auto Cash keys are speed tender keys in for a predetermined tender amount: For example: <i>\$10 CASH, \$20 CASH.</i>
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 the 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. A maximum of 184 items will print on the second receipt, if more items were registered in the sale, a buffered receipt is issued.
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.
CHARGE #	The charge # key allows you to tender with any of the charge keys without having to program each charge key on the keyboard. Enter the charge key number (1-8) and press the Charge # key to tender the sale.
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 CASH	Use to exchange a check for cash. Cash-in-drawer and check-in-drawer totals are adjusted.

Function Key	Description
CHECK ENDORSEMENT	Use to print a check endorsement message on an optional slip printer. A programmable message up to 10 lines can also be printed.
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.
CHECK SPLIT	The Check Split function provides a method of breaking down checks for payment. The "Check Split" key allows you to select items from one check# to split off/move to another check#. Refer to the "Check Split" operations on page 81 for operation details.
CLEAR	Use to clear entries made into the 10-key numeric pad or X/TIME key before they are printed. Clear is 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 sales made on the register will report to one of the 10 clerk totals. 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.
CLERK 1-10	Used to automatically sign on or sign off a clerks (1-10) if you have decided to use a clerk sales tracking system. When a clerk is signed on, all entries made on the register will update the signed-on clerk's totals until another clerk is 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	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. You can force the operator to press one of the keys before tendering. Separate totals will be maintained on the financial report to detail sales counts and amounts for each key.
ERROR CORR	Use to correct the last entry. The ERROR CORR key corrects the appropriate totals and counters.
EMV TIP	EMV TIP function key is used for entering Tip's in register mode. If your application is set for "Fine Dining" you can place this function on the keyboard to speed up the TIP entry.
FEED	<i>No Key Code</i> , FEED key is fixed on keyboard & cannot be moved/reassigned. Advances the receipt paper one line, or continuously until the key is released.
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.
GUEST #	Use to record the number of guests served by a transaction. The entry may be compulsory. The entry appears on receipts and the kitchen printer.

Function Key	Description								
HELP	<p>When assigned to the keyboard, the HELP function key can be used to print procedure information for various operations or print the default images.</p> <ol style="list-style-type: none"> 1. MAKING A SALE 2. VOIDING AN ITEM 3. PRINTING A REPORT 4. PROGRAM AN ITEM 5. PROGRAM LOGO 6. SAVE TO SD 7. IMAGE SAMPLE 								
KEY SHIFT (1-3)	<p>The keyboard shift keys are used to access the 3 levels of keyboard PLU keys. Keyboard Shift keys can be set as Pop-Up Item, Pop-Up Sale or Stay-Down in system option programming. PLUs accessed by each level are:</p> <table border="0"> <tr> <td>Raised Keyboard:</td> <td>Flat Keyboard:</td> </tr> <tr> <td>Key Shift 1 PLUs 1-12</td> <td>Key Shift 1 PLUs 1-60</td> </tr> <tr> <td>Key Shift 2 PLUs 13-24</td> <td>Key Shift 2 PLUs 61-120</td> </tr> <tr> <td>Key Shift 3 PLUs 25-36</td> <td>Key Shift 3 PLUs 121-180</td> </tr> </table>	Raised Keyboard:	Flat Keyboard:	Key Shift 1 PLUs 1-12	Key Shift 1 PLUs 1-60	Key Shift 2 PLUs 13-24	Key Shift 2 PLUs 61-120	Key Shift 3 PLUs 25-36	Key Shift 3 PLUs 121-180
Raised Keyboard:	Flat Keyboard:								
Key Shift 1 PLUs 1-12	Key Shift 1 PLUs 1-60								
Key Shift 2 PLUs 13-24	Key Shift 2 PLUs 61-120								
Key Shift 3 PLUs 25-36	Key Shift 3 PLUs 121-180								
LEVEL (1-2)	<p>Level 1 & 2 keys shift the price of the PLU that is being registered. Price Levels can be Stay-Down: Price Level stays on selected level until alternate Price level selected. Pop-Up: Price Level returns to previous Price Level after item is registered.</p>								
MACRO (1-10)	<p>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.</p>								
Macro #	<p>Macro keys must be on the keyboard to be able to program the keystrokes / operations you want the Macro to perform. However, Macros do not need to be on the keyboard to be able to run the macro. If assigned to the keyboard, the Macro # function key can be used to run any of the operations as programmed in the Macro 1 – Macro 10 function keys.</p>								
MODIFIER (1-5)	<p>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.)</p>								
P/BAL	<p>Enter an amount and then touch the Manual Previous Balance (P/BAL) key to use the simplest form of Charge Posting/Table Service. The P/BAL key may be used any time within a transaction. Transactions where the P/BAL key is used must be finalized or stored using the SERVICE key.</p>								
PO1 – PO3 (PAID OUT keys)	<p>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.</p>								
PLU	<p>The PLU key is used to register price lookups by number entry. PLUs can be programmed open or preset, and positive or negative.</p>								
PRICE CHANGE	<p>Use to change the price of a PLU in register mode.</p>								
PRICE INQUIRY	<p>Use to display the price of a PLU without registering the price. No option setting are available for this function key.</p>								
PRINT CHECK	<p>Prints the soft guest check (tracking file) that is currently displayed. The PRINT CHECK key may be programmed to store (service) the check automatically.</p>								
PROMO	<p>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 but will include the sale of the item in the item's sales counter.</p>								
RA1- RA3 (Received on Account keys)	<p>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.</p>								

Function Key	Description
RETURN	Used to return or refund merchandise. Returning an item will also return any tax that may have been applied.
RECEIPT ON/OFF	Used to toggle the receipt printing On or 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.) A maximum of 184 items will print on the second receipt, if more items were registered in the sale, a buffered receipt is issued.
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 manually enter the weight (using the decimal key for fractions). PLUs may be programmed to require an entry through the scale key.
SERVICE	The check tracking system can maintain only balances (hard check) or entire transactions (soft check) in the register memory. Use the SERVICE key 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.)
STOCK INQUIRY	Touch the STOCK INQ key and then enter (or scan) an item to view the Current & Minimum stock status of the item. (Item must be a stock item to use this function.)
SUBTOTAL	Displays subtotal of sale including tax. The SUBTOTAL key must be pressed prior to a sale discount or sale surcharge.
TABLE #	Use to enter the table number of the check. If a table number is entered, the TABLE # key can also be used to recall the check.
TARE	Tares are container weights. If you are using the scale function, you can preset up to 5 different tare weights. Tare weights are programmed in the system option programming, option #42. The tare weight can be entered up to 3 digits past the decimal: <i>i.e.</i> 1.235. The third digit can be used but it can only be a 0 or 5. The tare can be subtracted automatically when a specific PLU is registered, or the tare can be subtracted by manually inputting the tare number and pressing the TARE key. 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 SHIFT (1-4)	When pressed before a PLU entry, the tax shift keys reverse the tax status of the PLU, <i>i.e.</i> , a PLU with non-tax status would become taxable or a PLU with tax status would become non-taxable.
TIP	Use to enter a tip amount on a check.
VALIDATION	Press to initiate a single line validation. Note: An optional printer with validation capability must be attached to the NR500 and identified.
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 Transaction Void operations, voids outside of a sale, use the VOID MODE. The Financial report records separate totals for each type of void.
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 to be in the MANAGER MODE. The WASTE key is not allowed within a sale.
X/TIME	Use to multiply a quantity of items or calculate split pricing on PLU entries.

Operations

Overview

NR-500E is designed for easy sale operation. You just need to select numbers and PLUs for sales operation without any unnecessary work. The default raised keyboard models have 12 keyboard NLU\PLU key locations. The default flat keyboard models have 60 keyboard NLU\PLU key locations.

The following procedures are available from the Register Mode menu:

- ◆ Clerk Operations
- ◆ Receipt On/Off
- ◆ Item Registrations
- ◆ Shifting or Exempting Tax
- ◆ Percent Key Operations
- ◆ Merchandise Return
- ◆ Voids and Corrections
- ◆ No Sale Operations
- ◆ Received On Account Operations
- ◆ Paid Out Operations
- ◆ Stock Inquiry
- ◆ Subtotaling a Sale
- ◆ Eat in / Take Out / Drive-Thru Sales
- ◆ Totaling and Tendering
- ◆ Food Stamp Operations
- ◆ Scale Operations
- ◆ Check Tracking Operations
- ◆ Clerk Interrupt
- ◆ Charge Posting Operations
- ◆ Validation
- ◆ X/Time Key Operations
- ◆ Not Found PLU

Clerk Operations

The number of clerks available is determined by memory allocation. (The default configuration provides 10 clerks.) See "ALLOCATION" in the "S-Mode Programming" chapter to set the number of clerks as well as other memory variables.

You can choose a Direct sign-on or code entry clerk system:

- 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.

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.

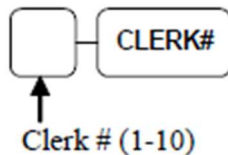
See "SYSTEM Options" of "Options Programming" in the "Program Mode Programming" chapter to set clerk options.

Clerk Sign On Instructions

When a clerk is not signed on, the message "CLOSED" is shown on the display. Note that the current clerk must be signed off before a new clerk can be signed on.

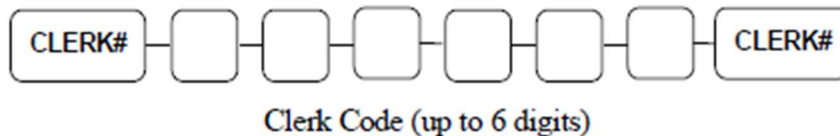
Direct Sign On

When the System Option: Clerk Entry is set for PUSH:



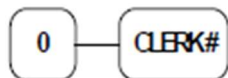
Code Entry

When the System Option: Clerk Entry is set for CODE:



Clerk Sign Off Instructions

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



Receipt On/Off and Receipt on Request

The RECEIPT ON/OFF function key (*key code 384*) may or may not be located on your keyboard. The RECEIPT ON/OFF key on the default keyboard is located next to the Receipt Feed key.

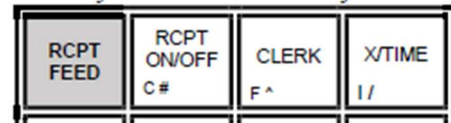
When the receipt is turned OFF, transactions will not be printed, but reports will continue to print when issued. If the receipt is off, you can still issue a receipt after the sale has been completed with the proper option settings.

Receipt On/Off Key on the Keyboard

When a receipt is not normally issued, you can turn the receipt function off by pressing the **RECEIPT ON/OFF** button on the keyboard. Pressing the key again will turn the Receipt On again.

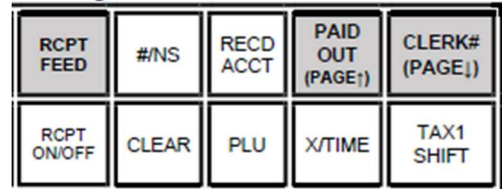
Raised Keyboard NR-510RB-E

Receipt On/Off is located to the right of the Receipt Feed key in the upper left on the default keyboard.



Flat keyboard NR-510B-E

Receipt On/Off is located below the Receipt Feed key on the default keyboard.

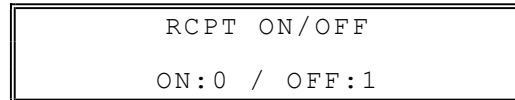


Receipt On/Off Key not on the Keyboard

If there is no Receipt On/Off key on the keyboard you can still turn Off/On the receipt in the Manager Mode (X position) See "Receipt On/Off" operation on page 101 in the "Manager Mode (X-Mode)" chapter.

If there is no Receipt On/Off function on the register keyboard, you can set the register receipt printer to an *on* or *off* condition from the X-Mode.

1. Turn the Mode Switch to the **X** position; Press **CASH** to display the X-MODE.
2. From the **X-MODE** menu, press **8** and **CASH** to display the RCPT ON/OFF selections.



3. The **RCPT ON/OFF** screen displays. Press **0** to turn **ON** receipt printing or press **1** to turn **OFF** receipt printing.

Printing a Receipt after the Sale

Receipt on request and printing a second receipt operations are allowed with the proper option settings. See option #14 in "System Option Programming" and option #11 in "Print Option Programming". A maximum of 184 items will print on the second receipt, if more items were registered in the sale, a buffered receipt is issued.

1. If a customer requests a receipt after the sale has been totaled, but before the next transaction is started, press the **CASH** key to issue a complete buffered receipt.



2. If an additional receipt is requested, before the next transaction is started, pressing the **CASH** again will issue another complete buffered receipt.



Item Registrations

All regular sales registrations are performed with the mode switch in the REG position (*Register Mode*). The item registrations are accumulated into PLUs. Keyboard PLUs are fixed keys on the keyboard (like traditional department keys) that access specific PLUs. By default up to 184 items can be registered into a single sale, more can be allowed through system option programming.

- Traditional code-entry PLUs 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.

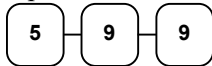
As you make item registrations, you can follow your entries by viewing the display. Remember that the sale and tax totals are updated automatically with each entry. In the following examples:

- Tax 1 is programmed at 6% Add-On Tax; Tax 2 is programmed as a 6% VAT Tax.
- PLU1 is programmed with a preset price of \$1.99 and is taxable by Tax 1.
- PLU2 is programmed for open entries.
- PLU3 is programmed with a preset price of \$2.99 and is taxable by Tax 1.
- PLU5 is programmed with a preset price of \$1.29 and is taxable by Tax 1.
- PLU6 is programmed with a single item of \$6.00.

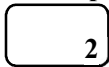
Open Keyboard PLU Entry

Open PLU entries require you to enter the price before registration of the item.

1. Enter an amount (*up to 7-digits*) on the numeric ten-key pad. *Do not use the decimal key.* For example, for \$5.99, enter:



2. Press an **Open PLU** key. Example: press **PLU2**:

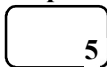


THANK-YOU CALL AGAIN		
09/24/2018 MON		08:33
PLU2 T1		\$5.99
TAX1		\$0.36
TOTAL		\$6.35
CASH		\$6.35
CLERK 01	000011	00001

Preset Price Keyboard PLU

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

1. Press a **preset PLU** key. Example, press **PLU5**:



THANK-YOU CALL AGAIN		
09/24/2018 MON		08:33
PLU5		\$1.29
TOTAL		\$1.29
CASH		\$1.29
CLERK 01	000011	00001

Gallonage PLU Entry

Gallonage PLU entries require an amount entry. The amount entered is calculated into the Gallons Count (CNT) and Gallons Amount (AMT).

Gallonage PLU Entry with Add-On Tax

With the Add-On Tax, the tax amount is added to the total purchase amount.

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

2 0 0 0

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

7

THANK-YOU CALL AGAIN		
09/24/2018 MON		08:33
GAL CNT		#5.26
GAL AMT	@	3.799
PLU7 T1		\$20.00
TAX1		\$1.20
TOTAL		\$21.20
CASH		\$21.20
CLERK 01	000011	00001

Gallonage PLU Entry with VAT Tax

With the VAT Tax, the tax amount is included as a part of the total purchase amount.

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

2 0 0 0

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

7

THANK-YOU CALL AGAIN		
09/24/2018 MON		08:33
GAL CNT		#5.26
GAL AMT	@	3.799
PLU7 T2		\$20.00
TAX2		\$1.13
TOTAL		\$20.00
CASH		\$20.00
CLERK 01	000011	00001

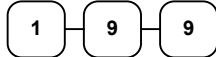
Keyboard PLU Multiplication

When several of the same items are to be entered into 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 PLUs.

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, for \$1.99, enter:



3. Press a **PLU** key. For example: press **PLU1**:

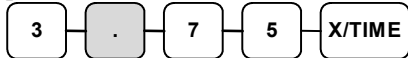


THANK-YOU CALL AGAIN		
09/24/2018 MON		08:33
4X	@1.99	
PLU1 T1		\$7.96
TAX1		\$0.48
TOTAL		\$8.44
CASH		\$8.44
SUNNY	000011	00001

Keyboard PLU Multiplication with Decimal Point

If you are selling items by weight, or if you are selling yard goods, you can use the **X/Time** key to multiply a fraction of a unit (*decimal amount*).

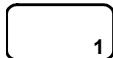
1. Enter the amount with the decimal point; press the **X/TIME** key. For example, for \$3.75 of produce, enter:



2. Enter an amount on the ten-key pad. *Do not use the decimal key.* For example, if the price is \$0.99 per pound, enter:



3. Press a **PLU** key. For Example: press **PLU1**:



THANK-YOU CALL AGAIN		
09/24/2018 MON		08:33
3.75X	@0.99	
PLU1 T1		\$3.71
TAX1		\$0.22
TOTAL		\$3.93
CASH		\$3.93
CLERK 01	000011	00001

Keyboard PLU Repeat Entry

Open or preset price PLUs 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 9 9

2. Press a **PLU** key. Example: press **PLU1**:

1

3. To register a second item exactly as the first, press the same PLU key a second time. For example, press **PLU1**:

1

THANK-YOU CALL AGAIN		
09/24/2018 MON		08:33
PLU1 T1		\$2.99
PLU1 T1		\$2.99
TAX1		\$0.36
TOTAL		\$6.34
CASH		\$6.34
SUNNY	000011	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 X/TIME

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

3 X/TIME

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

1 0 0

4. Press the keyboard **PLU** key. For example: press **PLU1**:

1

THANK-YOU CALL AGAIN		
09/24/2018 MON		08:33
2@3FOR	@1.00	
PLU1 T1		\$0.67
TAX1		\$0.04
TOTAL		\$0.71
CASH		\$0.71
CLERK 01	000011	00001

Single Item Keyboard PLU

Single item PLUs automatically total as a cash sale immediately after registration. Use a single item PLUs 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. See "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**:



2. The item is registered and the sale is tendered to **CASH**.

THANK-YOU CALL AGAIN		
09/24/2018 MON		08:33
PLU6		\$6.00
TOTAL		\$6.00
CASH		\$6.00
CLERK 01	000122	00001

PLU Code Entry Registrations

Open Code Entry PLU

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

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



2. The display will prompt "ENTER PRICE". Enter an amount (*up to 7-digits*) on the numeric ten-key pad. *Do not use the decimal key*. For example, for \$2.99, enter:



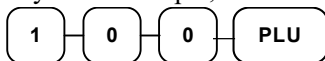
3. Press the **PLU** function key again.



THANK-YOU CALL AGAIN		
09/24/2018 MON		08:33
PLU2 T1		\$2.99
TAX1		\$0.18
TOTAL		\$3.17
CASH		\$3.17
CLERK 01	000123	00001

Preset Price Code Entry PLU

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



THANK-YOU CALL AGAIN		
09/24/2018 MON		08:33
PLU100 T1		\$11.23
TAX1		\$0.67
TOTAL		\$11.90
CASH		\$11.90
CLERK 01	000126	00001

Code Entry PLU Multiplication

When several of the same items are to be entered into 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 PLUs.

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

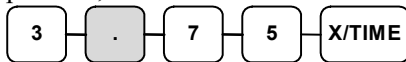


THANK-YOU CALL AGAIN		
09/24/2018 MON		08:33
4X	@1.99	
PLU1 T1		\$7.96
TAX1		\$0.48
TOTAL		\$8.44
CASH		\$8.44
CLERK 01	000011	00001

Code Entry PLU Multiplication with Decimal Point

If you are selling items by weight, or if you are selling yard goods, you can use the X/Time key to multiply a fraction of a unit.

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



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

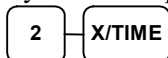


THANK-YOU CALL AGAIN		
09/24/2018 MON		08:33
3.75X	@2.99	
PLU3 T1		\$11.21
TAX1		\$0.67
TOTAL		\$11.88
CASH		\$11.88
CLERK 01	000011	00001

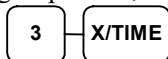
Split Pricing Code Entry PLU

When items are priced in groups, i.e. 3 for \$2.99, 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 sold in groups of 3, enter:



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



THANK-YOU CALL AGAIN		
09/24/2018 MON		08:33
2 @ 3FOR	@2.99	
PLU3 T1		\$1.99
TAX1		\$0.12
TOTAL		\$2.11
CASH		\$2.11
CLERK 01	000131	00001

PLU Price Inquiry

You can check the price of a PLU without registering the PLU by placing a price inquiry function key on the keyboard.

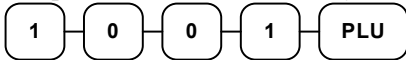
1. Press the **PRICE INQ** key. The message "**PRICEINQ**" displays.



SCREEN EXAMPLE:

R:On	CLERK 02	K1 P1
PRICE INQ		
TAX 0.00	SUBTOTAL	0.00

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



SCREEN EXAMPLE:

R:On	CLERK 02	K1 P1
PLU1001		
1 :	11.99	
2 :	12.99	
TAX 0.00	SUBTOTAL	0.00

3. 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.
4. Press **CLEAR** to remove the price information from the screen or enter the PLU again to register the item.

Price Change

Prices on items can be performed in the register mode using the Price Change function key.

NOTES:

- The Price change function key must be set to allow price change. Refer to the "Function Key Programming" chapter "Price Change Key Program Notes" on page 189 for option settings on the price change function key.
- The PLU must be programmed to allow price change. Refer to the chapter "PLU Programming" \ "Add/Change PLU" on page 167 for PLU programming details.

Price Change – 1 Price Level Allocated

1. Press the **PRICE CHANGE** key.
The "**PRICE CHG**" screen displays.
2. Enter a PLU number and press the PLU function key, or press a PLU on the keyboard:
3. The PLU descriptor and current price display on the screen. The ENTER PRICE field for the new price entry also displays. Type in the desired price.
4. Press **CASH**. The PLU is registered into the sale with the new price.



SCREEN EXAMPLE:

PRICE CHG	
ENTER	
PLU# - PLU KEY	0

PRICE CHG	
PLU46	0.00
ENTER PRICE	4.60

Price Change – 2 Price Levels Allocated

1. Press the **PRICE CHANGE** key.
The "**PRICE CHG**" screen displays.

**PRICE
CHANGE**
2. Enter a PLU number and press the PLU function key, or press a PLU on the keyboard:
3. The PLU descriptor and current prices for both price levels display on the screen. When set up for two price levels, the price level selection screen displays.
 - **SELECT LEVEL** by entering in 1 or 2 to choose the desired price level. Press **CASH**.
4. The **ENTER PRICE** field displays.
 - Enter the desired price (*without the decimal*) for the selected price level, then press **CASH**.
5. The option "Permanent Price" to make the price change permanent displays.
 - Press **0** if you want to make the price permanent.
 - Press **1** if the price is just for this one transaction.
 - Press **CASH**. The PLU is registered into the sale with the new price.

SCREEN EXAMPLES:

PRICE CHG	
ENTER	
PLU# - PLU KEY	0

PRICE CHG	
PLU25	
1:	0.00
2:	0.00
SELECT LEVEL	1/2
	0

PRICE CHG	
PLU25	
1:	0.00
2:	0.00
ENTER PRICE	
LEVEL 1:	11.11

PRICE CHG	
PLU25	
1:	11.11
2:	0.00
PERMANENT PRICE	
SURE? 0:YES 1:NO	

Price Level 1 & 2 Keys

If you choose to use the price level feature, you must allocate memory for each level. Refer to “Edit Memory Allocation” on page 137 in the "S-Mode Programming".

Note: The default program selects one price level. You must also place price level keys on the keyboard.

See “Function Key Assignment” on page 138 in the "S-Mode Programming".

If you use this feature, the same PLU can be programmed with 2 different preset prices. Price Level keys shift the price of the PLU being registered to the alternate, selected Price level. Price Levels can be programmed as Pop-Up Item, Pop-Up Sale or Stay-Down in system option programming.:

- **Stay Down** – Registrations will stay in the selected level until another level is selected.
- **Pop-Up after each item** – Returns to previous level after item registered.
- **Pop-Up after each transaction** – Stays on selected level until the transaction is finalized.

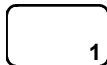
See “System Options” of “Options Programming” in the "Program Mode Programming" chapter to set how the price level keys operate.

In the following examples:

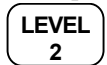
- PLU1 is programmed with a preset price of \$1.99 for price level 1 and \$2.75 for price level 2.
- PLU3 is programmed with a preset price of \$2.99 for price level 1 and \$3.25 for price level 2.

Pop-Up Price Level Keys

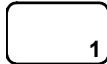
1. Press a preset PLU key. For example, press **PLU1** programmed with a price of \$1.99 for price level 1.



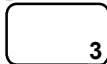
2. Press the **LEVEL 2** key. The message "LEVEL 2" displays.



3. Press the same **PLU1** key again. In this example the PLU1 key is programmed with a price of \$2.75 for price level 2.



4. Pressing another PLU key will register the item at price level 1. In this example press **PLU3**



Note that the level 1 price is registered.

THANK-YOU CALL AGAIN		
09/24/2018 MON		08:33
PLU1 T1		\$1.99
PLU1 T1		\$2.75
PLU3 T1		\$2.99
TAX1		\$0.46
TOTAL		\$8.19
CASH		\$8.19
CLERK 01	000111	00001

Keyboard Shift 1-3 Keys

The keyboard shift keys are used to access the 3 levels of keyboard PLU keys. Keyboard Shift keys can be set as Pop-Up Item, Pop-Up Sale or Stay-Down in system option programming.

- **Stay Down** – Registrations will stay in the selected level until another level is selected.
- **Pop-Up after each item** – Returns to previous level after item registered, for example large, medium or small soft drink.
- **Pop-Up after each transaction** – Stays on selected level until the transaction is finalized.

PLUs accessed by each level are:

Raised Keyboard:

Keyboard Shift 1 PLUs 1-12
 Keyboard Shift 2 PLUs 13-24
 Keyboard Shift 3 PLUs 25-36

Flat Keyboard:

Keyboard Shift 1 PLUs 1-60
 Keyboard Shift 2 PLUs 61-120
 Keyboard Shift 3 PLUs 121-180

Modifier Entries


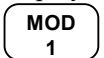
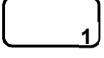
Pressing a modifier key alters the next PLU registered, either by changing the code number of the PLU so that a different item is registered, or by just adding the modifier descriptor and registering the same PLU. Refer to the “MODIFIER 1-5” programming in the "Program Mode Programming" chapter in order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

Modifiers can be set as Pop-Up Item, Pop-Up Sale or Stay-Down in system option programming.

- **Stay Down** – Registrations will be modified by the same modifier until another modifier is selected,
- **Pop-Up after each item** – to register, for example large, medium or small soft drink, or
- **Pop-Up after each transaction** – to register the same modification for the item until the transaction is finalized.

See the “System Options” settings in “Options Programming” in the "Program Mode Programming" chapter to select stay down/pop-up status.

Pop-Up Modifier Key Affecting PLU Code

1. Press a **preset PLU** key.
 For example, press **PLU 9** with a price of \$1.25.

2. Press the **MOD 1** key. The message "MOD1" displays.

3. Press the **same PLU 9** key. In this example the modifier 1 will add the digit 1 to the fourth PLU # position resulting in the registration of **PLU 1009**.

4. Press another **PLU** key.
 In this example press **PLU 2** with a price of \$1.50.

THANK-YOU CALL AGAIN		
09/24/2018 MON		08:30
PLU9		\$1.25
MOD1		
PLU1009		\$2.25
PLU2		\$1.50
TAX 1		\$0.30
TOTAL		\$5.30
CASH		\$5.30
CLERK 01	000610	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 price from the sale and the promo item amount 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 stock (inventory).

1. Register an item. For example, press **PLU1** programmed with a price of \$1.99.

2. Press the **PROMO** key.

The message "PROMO" displays.

3. Enter the item you want to promo **PLU1**. You cannot enter an item that has not been registered in this transaction.

THANK-YOU CALL AGAIN		
09/24/2018 MON		08:33
PLU1 T1		\$1.99
PROMO		
PLU1 T1		-1.99
TOTAL		\$0.00
CASH		\$0.00
CLERK 01	000611	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 to be in the **MANAGER MODE**. 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		
09/24/2018 MON		08:35
WASTE		
PLU1 T1		\$1.99
PLU2 T1		\$2.99
WASTE		
TOTAL		\$4.98
CLERK 01	000612	00001

Shifting or Exempting Tax

PLUs can be programmed to automatically add the appropriate tax or taxes. Occasionally, you may need to sell a normally taxable item without tax, or a normally non-taxable item with tax. You can perform this tax shifting with one 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

When tax shift operations are performed, the appropriate tax will display before the entry.

1. Press the **TAX SHIFT** key for the tax you wish to shift. For example, to shift the tax for TAX 1 Press **TAX SHIFT 1**:

**TAX 1
SHIFT**

2. 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. For example, press **PLU3**. If PLU3 is normally taxable by tax 1, the registration will be entered as non-taxable.

3

THANK-YOU CALL AGAIN		
09/24/2018 MON		08:33
PLU3		\$2.99
TOTAL		\$2.99
CASH		\$2.99
CLERK 01	000011	00001

Shifting Tax – Entire Sale

1. Register items into a sale, then press the **SUBTOTAL** key. The sale total including tax is displayed.

**SUB
TOTAL**

2. Press the **TAX SHIFT** key for the tax you want to shift. For example, to exempt tax 1 press **TAX SHIFT 1**,

**TAX 1
SHIFT**

3. Press the **SUBTOTAL** key:

**SUB
TOTAL**

5. The display reflects the transaction without added taxes; Total the sale with **CASH**, **CHECK**, or **CHARGE**. The sale will not include Tax1. The receipt shows the PLU2 is taxable but the tax is not applied to the sale (*exempted*).

THANK-YOU CALL AGAIN		
09/24/2018 MON		08:33
PLU1 T1		\$1.99
PLU2 T1		\$2.99
PLU3 T1		\$3.99
TOTAL		\$8.97
CHECK		\$8.97
CLERK 01	000011	00001

Exempting Tax

Occasionally, you may need to exempt tax from an entire sale. For example, you might remove all state and local taxes when you sell merchandise to a church or charitable institution.

You can exempt tax by using the tax shift keys and the **SUBTOTAL** key, or you can use the **TAX EXMT** (tax exempt) function key.

Exempting Tax with the Tax Exempt Key

You can program the **TAX EXEMPT** function to remove all taxes (1-4) or selected taxes.

1. Register items into a sale, then press the **SUBTOTAL** key. The sale total including tax is displayed.

**SUB
TOTAL**

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

**TAX
EXMT**

3. The display reflects the transaction without added taxes. Total the sale with **CASH**, **CHECK**, or the **CHARGE** function. The sale will not include tax1. The receipt shows the PLU's are taxable but the tax is not applied to the sale (*exempted*).

THANK-YOU CALL AGAIN		
09/24/2018 MON		08:33
PLU1 T1		\$1.99
PLU2 T1		\$2.99
PLU3 T1		\$3.99
TOTAL		\$8.97
CHECK		\$8.97
CLERK 01	000811	00001

Other Tax Exempt Function Keys

Different types of sales may be set to exempt tax via the function keys programming. The operation is the same as using the Tax Exempt key, you will simply press the appropriate Function key instead of the Tax Exempt key. Additional Function keys that have the settings to exempt Tax 1~4 are the:

- Eat-In, Take-Out, Drive-Thru Keys
- Add Check Key
- CASH Key
- CHARGE 1~8 Keys
- CHECK Key
- Food Stamp Tender

Percent Key (%) Operations

A total of five % function keys are available, (%1) is located on the default keyboard of the NR-500E Series. Each % function key is individually programmable to add or subtract from an individual item or from a sale total, amounts (coupons) or percentages. You can also program the percentage key taxable or non-taxable, so that sales taxes are calculated on the net, or the gross amount of the item or sale. You can also program preset prices or percentages.

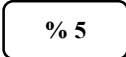
The operation examples in this section show the percentage key in a variety of configurations. Refer to "Function Key Programming" in the "Program Mode Programming" chapter to assign a specific function to each percentage key.

Item Discounts

Item discounts apply to a specific item withing a sale, the Item Discount key must be pressed immediately after registering the item you want the discount applied to.

Preset Percent Item Discount

In this example the %1 function is preset with a rate of 10 %.

1. Register the item.
2. Press the %1 key:

3. The coupon is automatically applied and subtracted from the last item registered.

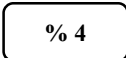
THANK-YOU CALL AGAIN		
09/24/2018 MON		08:23
PLU2		\$10.00
% 5		-10.000%
AMOUNT		-1.00
TOTAL		\$9.00
CASH		\$9.00
CLERK 01	000911	00001

Open Percent Item Discount

You can also operate the percentage functions by entering the percentage of the discount or surcharge. If necessary, 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. Enter the percentage rate for the discount. If you are entering a fraction of a percent, you must use the decimal key. For example, for one third off enter:



3. Press the %1 key:

4. The coupon is automatically applied and subtracted from the last item registered.

THANK-YOU CALL AGAIN		
09/24/2018 MON		08:25
PLU2		\$10.00
% 4		-33.333%
AMOUNT		-3.33
TOTAL		\$6.67
CASH		\$6.67
CLERK 01	000912	00001

Coupon on Item (Store Coupon)

When programmed as "amount", "item", "open" and "negative", a % key will perform a coupon against an item (or store coupon.) In this case, you must press the PLU (or enter the PLU number) of the PLU you wish the coupon to be subtracted from.

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

2	0	0	%1
---	---	---	----
3. Press the PLU key you wish to subtract the coupon from (or enter the PLU number of the PLU you wish to subtract the coupon from and press **PLU**.)

1

4. The coupon is automatically applied and subtracted from the last item registered.

THANK-YOU CALL AGAIN		
09/24/2018 MON		08:47
PLU1		\$10.00
PLU1 C		-2.00
TOTAL		\$8.00
CASH		\$8.00
CLERK 01	000928	00001

Sale Discount or Surcharge

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.

Preset Sale Discount

In this example the %1 function is preset with a rate of 10 %.

1. Register the items you wish to sell. Press **SUBTOTAL**.

SUB TOTAL

2. Press the %5 key:

% 5

3. The coupon is automatically applied and subtracted from the last item registered.

THANK-YOU CALL AGAIN		
09/24/2018 MON		08:23
PLU2		\$10.00
% 5		-10.000%
AMOUNT		-1.00
TOTAL		\$9.00
CASH		\$9.00
CLERK 01	000911	00001

Open Percent Sale Surcharge

In this example an open percentage surcharge of 15% is applied to the sale.

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

SUB TOTAL

3. Enter the percentage rate for the surcharge, press the appropriate % key. For example, for 15% enter:

1	5	%1
---	---	----
4. The surcharge is automatically added.

THANK-YOU CALL AGAIN		
09/24/2018 MON		08:43
PLU2		\$10.00
% 1		15.000%
AMOUNT		\$1.50
TOTAL		\$11.50
CASH		\$11.50
CLERK 01	000926	00001

Open Percent Sale Discount

You can also operate the percentage functions by entering the percentage of the discount or surcharge. If necessary, 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 Subtotal.

SUB
TOTAL

3. Enter the percentage rate for the discount. 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 %3 key:

% 3

5. The discount is automatically subtracted.

THANK-YOU CALL AGAIN		
09/24/2018 MON	08:25	
PLU2	\$10.00	
% 3	-33.333%	
AMOUNT	-3.33	
TOTAL	\$6.67	
CASH	\$6.67	
CLERK 01	000912	00001

Coupon on Sale (Vendor Coupon)

When programmed as "amount", "sale", "open" and "negative", a % key will perform a coupon against a sale (or vendor coupon.) Also, depending upon programming:

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

In this example, a coupon may be entered only once, and you must first press **SUBTOTAL**.

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

SUB
TOTAL

3. Enter the amount of the coupon, press the appropriate % key. For example:

2 0 0 %1

4. The coupon is subtracted.

THANK-YOU CALL AGAIN		
09/24/2018 MON	08:45	
PLU2	\$10.00	
%1	-2.00	
TOTAL	\$8.00	
CASH	\$8.00	
CLERK 01	000927	00001

Return Merchandise Registrations

If you wish to return or refund an item, press **MDSE RETURN**, then re-enter any item. You can return merchandise as part of a sale, or you can return merchandise as a separate transaction and return cash to the customer.

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



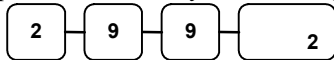
Note: If the RETURN key is under Manager Control, the error message below appears:

****WARNING ****

X-MODE ONLY

You will need to turn the mode switch to the **X** position, then press the RETURN key.

2. Enter the price of the item you wish to return, then press the PLU key that was registered originally.



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

THANK-YOU CALL AGAIN		
09/24/2018 MON		09:33
***** RETURN *****		
PLU2 T1		-2.99
TAX1 AMT		-0.18
TOTAL		-3.17
CASH		-3.17
CLERK 01	001011	00001

Voids & Corrections

Error Correction (Void Last Item)

This function corrects (*Voids*) the last item entered.

1. Register the items you wish to sell. For example: PLU1 and PLU2.
2. Press the **ERROR CORR** key:



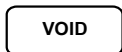
The last item registered (*PLU2*) is removed from the sale.

THANK-YOU CALL AGAIN		
09/24/2018 MON		09:43
PLU1 T1		\$2.29
PLU2		\$1.29
ERR CORR	-----	
PLU2		-1.29
TAX1 AMT		\$0.14
TOTAL		\$2.43
CASH		\$2.43
CLERK 01	001012	00001

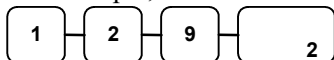
Void Item (Previous Item Void)

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

1. Register the items you wish to sell. For Example: **PLU3, PLU2, PLU1.**
2. To correct the first item, press the **VOID** key:



3. Enter the price of the item you want to Void; then press the **PLU** key that was registered originally. For example, to Void PLU2:



THANK-YOU CALL AGAIN		
09/24/2018 MON		09:53
PLU3 T1		\$3.99
PLU2 T1		\$1.29
PLU1 T1		\$1.29
VOID	-----	
PLU2 T1		-1.29
TAX1 AMT		\$0.30
TOTAL		\$5.28
CASH		\$5.28
CLERK 01	001021	00001

Cancel

The CANCEL key is used to stop (Cancel) any transaction (this is not a tender key). Press the **CANCEL** key anytime during a transaction to cancel the current sale. The only total affected is the Cancel total, to which the total of all positive entries is added.

The **CANCEL** key can be inactivated through programming, see "Function Key Programming" in the "Program Mode Programming" chapter, or the key can be programmed to require manager control.

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

CANCEL

```
THANK-YOU
CALL AGAIN

09/24/2018 MON           08:33

PLU1 T1                  $1.99
PLU2 T1                  $1.50
CANCEL *****
CLERK 01                000011 00001
```

VOID MODE Operations

Most operations that can be performed with the Mode Switch in the REG position can also be done with the Mode Switch in the VOID position. You can use the **VOID MODE (Transaction Void)** to correct any complete transaction. VOID position operations will adjust all sale totals, and the VOID MODE position carries its own total on the Financial report.

Transaction Void

1. Move to the mode key to the **VOID** position.
2. Enter the transaction you wish to correct exactly as it was entered originally. You can enter discounts, voids, returns, tax exemptions or any other function.
3. Finalize the transaction with the same tender key as when originally entered.
4. All totals and counters are corrected as if the original transaction did not take place.

```
THANK-YOU
CALL AGAIN

09/24/2018 MON           10:33

***** VOID MODE *****
PLU1 T1                  -1.99
PLU2 T1                  -1.00
TAX1 AMT                 -0.18
TOTAL                  -3.17
CASH                  -3.17
CLERK 01                001031 00001
```

#/NO SALE Operations

The #/NO SALE key is a dual operation function key. It can be 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.

NO 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, see "Function Key Programming" in the "Program Mode Programming" chapter.

1. When not in a transaction, Press #/NS:



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

THANK-YOU CALL AGAIN		
09/24/2018 MON		11:23
NO SALE -----		
CLERK 01	001211	00001

Non Add Number

You can also use the #/NO SALE key to print any number (up to 9 digits) on the printer paper. 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; Press #/NS.

For example enter:



3. Press CHECK tender:



THANK-YOU CALL AGAIN		
09/24/2018 MON		11:33
PLU3 T1		\$2.99
NON-ADD#	123456789	
TAX1 AMT		\$0.18
TOTAL		\$3.17
CHECK		\$3.17
CLERK 01	001212	00001

Received On Account Operations (RA)

When outside of a transaction, you can use the received on account function keys (**RA1-RA3**) to accept cash or checks into the cash drawer. For example, use received on account to accept payments for previously sold merchandise or record loans to the cash drawer.

1. To begin the operation, Press one of the received on account keys (**RA1-RA3**).

RA1

2. Enter the amount of cash received, press **CASH**.

1 0 0 0 CASH

3. Enter the check amount received, press **CHECK**.

1 0 0 0 CHECK

4. Enter the charge amount received, press **CHARGE**.

1 0 0 0 CHARGE

5. You can continue to itemize receipts, or you can finalize by pressing or selecting the same received on account key (**RA1-RA3**).

RA1

THANK-YOU CALL AGAIN		
09/24/2018 MON	08:33	
RA1		
CASH		\$10.00
CHECK		\$10.00
CHARGE		\$10.00
RA1		\$30.00
CLERK 01	000011	00001

Paid Out Operations (PO)

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

1. Press one of the paid out keys (**PO1-PO3**).

PO1

2. Enter the amount of cash paid out, press **CASH**.

1 0 0 0 CASH

3. Enter the check amount paid out, press **CHECK**.

1 0 0 0 CHECK

6. Enter the charge amount paid out, press **CHARGE**.

1 0 0 0 CHARGE

4. You can continue to enter paid outs, or you can finalize by pressing or selecting the same paid out key (**PO1-PO3**).

PO1

THANK-YOU CALL AGAIN		
09/24/2018 MON	08:33	
PO1		
CASH		-10.00
CHECK		-10.00
CHARGE		-10.00
PO1		-30.00
CLERK 01	000011	00001

Stock Inquiry

PLU's programmed with the option "Inventory Item" set to "Y" allow for Stock quantities to be set and tracked. Refer to "PLU Programming" on page 166 for details.

We can view the current available stock and the minimum stock setting on inventory item PLU's from the register mode using the "Stock Inquiry" function key (*key code 410*). PLU Stock quantities cannot be edited using the Stock Inquiry function key; stock quantities may be edited using the X-Mode Stock Entry or the Program Mode PLU Stock programming.

- » For PLU Stock entry operation refer to the chapter "PLU Stock" on page 172 for details.
- » Stock Entries may also be entered from the X-Mode. Refer to the "Stock Entry" chapter on 99 for details.

1. In the Register Mode, press the **STOCK INQ** key.

```
STOCK INQ

ENTER NLU or
      x-PLU KEY

EXIT : [CLEAR] 0
```

2. Enter the PLU # and press the PLU function key, press a PLU on the keyboard, or scan an item to display the **Current & Minimum** stock for the selected Stock PLU:

```
STOCK INQ

CIGARETTE PACKS
Current   50.00
Minimum   0.00
          0
EXIT : [CLEAR]
```

3. Press **CLEAR** to exit and display the default Register Mode screen.

Subtotaling Operations

Subtotal a Sale

1. Register the items you wish to sell.
2. Press **SUBTOTAL**. The subtotal of the sale (including tax) will display with the message "SUBTOTAL" indicated on the rear display.

SUB
TOTAL

NOTE: The subtotal can be printed when the Subtotal key is pressed if the print option is set. The Subtotal can be printed without tax as well. See "PRINT Options" on page 204 in the "Program Mode: Options Programming" chapter.

Display Remaining EJ Lines

Note: Pressing the **SUBTOTAL** key while in the REG Mode but outside of a sale will display the remaining number of EJ lines.

```
R:On  CLERK      01 K1 P1
      *REMAINING EJ*
      EJ  LINE   29958
```

Add Check (Tray Subtotal)

In a cafeteria or buffet application, use the **ADD CHECK** key to add multiple trays that are to be paid by a single individual. For Example: Dad pays for all the trays for the family.

Press the **ADD CHECK** key after each order (tray) and press **SBTL** for the total of all orders (trays). Finalize with **CASH**, **CHECK**, or a **CHARGE** tender key as you would a normal sale.

Eat-In, Take Out and Drive-Thru


Different types of sales such as "Eat In", "Take Out" and "Drive-Thru" can be categorized by placing the separate destination keys on the keyboard. **Eat-In, Take Out and Drive-Thru** keys function as subtotal keys. 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 keys 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. Depending upon how your register is programmed you might find charge keys as individual function keys on the keyboard.

Totaling a Cash Sale

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

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

THANK-YOU CALL AGAIN		
09/24/2018 MON		15:59
PLU2 T1		\$7.96
TAX1		\$0.48
TOTAL		\$8.44
CASH		\$8.44
CLERK 01	000511	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:

3. Press **CASH**:

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

THANK-YOU CALL AGAIN		
09/24/2018 MON		08:33
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 01	000011	00001

Totaling a Check Sale

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

CHECK

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

THANK-YOU CALL AGAIN		
09/24/2018 MON		18:33
PLU2 T1		\$7.96
TAX1		\$0.48
TOTAL		\$8.44
CASH		\$8.44
CLERK 01	000521	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 the **CHECK** tender key:

CHECK

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

THANK-YOU CALL AGAIN		
09/24/2018 MON		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 01	000011	00001

Totaling a Charge Sale

Use the charge keys to track charge or credit card sales. See "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 screen 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.

1. Register the items you wish to sell.
2. Press one of the charge keys (**CHARGE 1 ~ CHARGE 8**) if it is located on the keyboard:

CHARGE

THANK-YOU CALL AGAIN		
09/24/2018 MON		08:33
PLU1 T1		\$2.99
PLU1 T1		\$2.99
4X	@1.99	
PLU2		\$7.96
TAX1		\$0.36
TOTAL		\$14.30
CHARGE		\$14.30
CLERK 01	000011	00001

Totaling a Sale Using CHARGE

Instead of having multiple Charge keys on the keyboard, we can use the Charge # key to tender charge sales. The operation for totaling a sale using the Charge # key is similar the 8 individual charge keys.

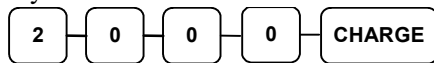
1. Register the items you wish to sell.
2. Enter the number for the Charge Key (1-8) you wish to use to tender the sale; #5 for Charge 5 for example.
3. Press the **CHARGE #** key on the keyboard:



Tendering a Charge Sale

Tendering a charge sale may or may not be allowed. "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 if it is located on the keyboard:



THANK-YOU		
CALL AGAIN		
09/24/2018 MON		08:33
PLU1 T1		\$2.99
PLU1 T1		\$2.99
4X	@1.99	
PLU2		\$7.96
TAX1		\$0.36
TOTAL		\$14.30
CHARGE		\$20.00
CHANGE		\$5.70
CLERK 01	000011	00001

Integrated Credit Card Payment Operations



For integrated credit card payment operation information using Datacap equipment, not using EMV integrated credit, see the "EMV Integrated Payment Appendix" on page 228 for details.

A separate supplement for EMV integrated payment is available on the CRS web site.

Currency Conversion

If you normally accept currency from a neighboring nation, you can program the *SAM4s ECR* to convert the subtotal of a sale to the equivalent cost in the foreign currency. Four foreign currency conversion keys are available. See "Function Key Assignment Programming" on page 136 to place currency conversion keys on the keyboard. You also 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. See "Instructions for Currency Conversion Rate – Program 90" on page 185 to set a conversion rate.

Note: The change due is computed in home currency!



1. Register the items you wish to sell.
2. Press the **CONV1** key if it is located on the keyboard:

3. The amount due in foreign currency is displayed.
4. Enter the amount of the foreign currency tender, Press **CASH**:

5. The display will indicate the amount of foreign currency tendered and display \$5.17 change due. The change due is computed in home currency!

THANK-YOU CALL AGAIN		
09/24/2018 MON		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 01	000011	00001

The currency symbol you programmed will display here.
See "OPTIONS → PRINT" in the "Program Mode Programming" chapter.

Check Cashing

Check cashing means exchanging cash for a check. If you wish to cash checks, you must place a **CHKCASH** key on the keyboard. See "Function Key Assignment" in the "S-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		
09/24/2018 MON		08:33
CHKCASH		
CHECK		\$20.00
CASH		-20.00
CLERK 01	000011	00001

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, under tendering is allowed on the CASH and/or CHECK keys. This functionality can be disabled through function key programming. Refer to “Function Key Programming” on page 176 for details.

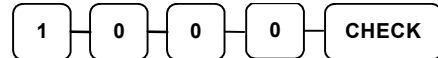
1. Register the items you wish to sell.
2. Enter the amount of cash tendered by the customer. For example, enter \$10.00 and press

CASH:



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:



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

THANK-YOU CALL AGAIN		
09/24/2018 MON		08:33
PLU2		\$20 00
TOTAL		\$20.00
CASH		\$10.00
TOTAL		\$10.00
CHECK		\$10.00
CLERK 01	000011	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 options program. See “System Options” of “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:**



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



5. The display will indicate the change due.

THANK-YOU CALL AGAIN		
09/24/2018 MON		08:33
PLU1 T1		\$2.00
TAX1		\$0.12
TOTAL		\$2.12
CASH		\$2.12
CLERK 01	000011	00001

Food Stamp Operations

The *SAM4s NR-500E Series* can be set up to sort food stamp eligible & non-food stamp eligible merchandise. If a customer chooses to pay with food stamps, the eligible food stamp total can be subtotaled and food stamp payments accepted.

To use this feature you must:

- Place the necessary function keys (**F/S SHIFT**, **F/S SUB**, **F/S TEND**) on the keyboard. See “Function Key Assignment” programming on page 136.
- Determine items that are food stamp eligible and set food stamp eligibility status for each open or preset PLU. See “PLU Programming” on page 166.)

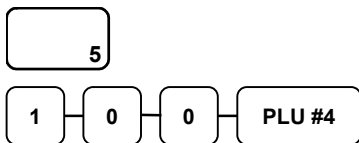
If necessary, you can use the **F/S SHIFT** key to shift the pre-programmed eligibility status for any item as it is entered.

For example, while produce is normally food stamp eligible, certain produce department items, such as Birdseed, cannot be paid for with food stamps. In this case, the produce PLU is programmed as food stamp eligible. To register, press **F/S SHIFT** before registering a non-eligible produce item (Birdseed).

If a customer chooses to pay with food stamps (EBT), press the **F/S SUB** key to display a total of food stamp eligible merchandise.

Tender food stamp payments into the **F/S TEND** key. Since all food stamp payments are now made by EBT, always tender the exact amount.

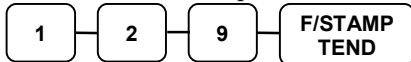
1. Register the items you wish to sell. For example, **PLU5** and **PLU4**.



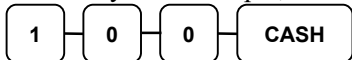
2. Press **F/S SBTL**



3. Enter the Food Stamp SBTL amount; Press **F/S TEND**:



4. Tender the remaining balance using the appropriate tender key. For example, for \$1.00 Cash enter:



DATE	06/14/2011	SUN	TIME	03:15
PLU5	FT1			\$1.29
PLU4				\$1.00
TAX1				\$0.10
TOTAL				\$2.29
F/S	TOTAL			\$1.29
F/D	TEND			\$1.29
F/S	E-TAX 1			-0.10
CASH				\$1.00
CLERK 1		000001	00001	

Food Stamp Payment Transaction

Scale Operations

The NR-500E Series can be interfaced to an optional load-cell scale. The scale interface allows direct entry of an item's weight using the **SCALE** function. You can also choose manual scale entry operation if you are working with a standalone scale that is not interfaced to the cash register.

- PLUs must be set to "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" will display.
- PLUs 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.
- PLUs can be set to "Auto Tare" status to automatically subtract one of the preprogrammed tare weights when the PLU is registered.

A tare is the amount of weight accounted for by 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. By entering the tare number (1-5) the operator can automatically subtract the predetermined container weight when a product is on the scale.

Tare Weights are programmed in system option programming, option #42. The tare weight can be entered to 3 places past the decimal: *i.e.* 1.235. The third digit can be used but it can only be a 0 or 5.

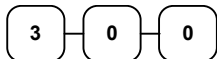
Refer to the "*S-Mode Programming*" and "*Program Mode Programming*" chapters to set your scale options for the following program areas:

- "**Define Port**" to attach a scale to one of the ports.
- "**Function Key Assignment**" to place SCALE and TARE keys on the keyboard.
- "**Function Key Programming**" to set options for the SCALE and TARE keys.
- "**PLU Programming**" to set scalable, auto scale, or auto tare status.
- "**System Options**" to program the weight for the Tare if tare weights are used.

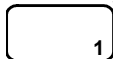
Direct Scale Entry

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

1. Place an item on the scale.
2. Press the **SCALE** function 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 **PLU1**:

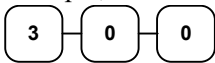


THANK-YOU CALL AGAIN		
09/24/2018 MON		08:33
1.50 lb	@3.00/lb	
PLU1		\$4.50
TAX1		\$0.27
TOTAL		\$4.77
CASH		\$4.77
CLERK 01	000011	00001

Automatic Scale Entry

Place a product on the scale and make the appropriate PLU entry. The PLU must have the “Scalable” and the “Auto Scale” in the PLU status settings.

1. Place an item on the scale.
2. Press a **Scalable\Auto-Scale PLU** key, if the item is a preset item, or enter the price per pound on the ten-key pad. *Do not use the decimal key.* For example, for \$3.00, enter:



3. Press a **Scalable\Auto-Scale PLU** key. For example, press **PLU1**:



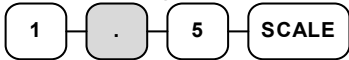
THANK-YOU CALL AGAIN		
09/24/2018 MON		08:33
1.50 lb	@3.00/lb	
PLU1		\$4.50
TAX1		\$0.27
TOTAL		\$4.77
CASH		\$4.77
CLERK 01	000011	00001

Manual Weight Entry

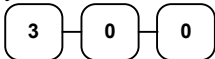
Note: Manual weight entry is allowed only when a scale is not connected, and the Serial port is not set to the scale function. Manual Weight is also used when voiding or returning a scale item without using the scale.

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 using the decimal key for fractional weights. Press the **SCALE** key:



3. Enter the price per pound on the ten-key pad. *Do not use the decimal key.* For example, for \$3.00 you would enter 3 0 0:



4. Press a **PLU** key. For example, press **PLU1**:



THANK-YOU CALL AGAIN		
09/24/2018 MON		08:33
1.500 lb	MANUAL WT. @3.00/lb	
PLU1		\$4.50
TAX1		\$0.27
TOTAL		\$4.77
CASH		\$4.77
CLERK 01	000011	00001

Tare weight Entry

A tare is the amount of weight representing the container, or package used in measuring out items that are sold by weight. By entering the tare number (1-5) the operator can automatically subtract the predetermined container weight when a product is on the scale.

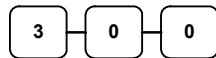
1. Place an item on the scale.
2. Enter the tare number (1-5). Press the **TARE** key.



3. Press the **SCALE** key.



4. Note that the weight, less than 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 **PLU** key. For example, press **PLU1**:



THANK-YOU CALL AGAIN		
09/24/2018 MON		08:33
1.50 lb	@3.00/lb	
PLU1		\$4.50
TAX1		\$0.27
TOTAL		\$4.77
CASH		\$4.77
CLERK 01	000011	00001

Manual Tare Weight Entry

If the container weight is variable, we can use **Tare #5** to enter a tare weight manually.

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



3. Enter the container weight of the tare. (*Use the decimal key to enter weights up to 2-digits before the decimal and 3-digits after the decimal.*) For example, enter .01 and press the tare key:

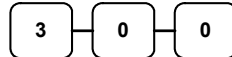


4. Press the **SCALE** key.



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

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



6. Press a **PLU** key. For example, press **PLU1**:



THANK-YOU CALL AGAIN		
09/24/2018 MON		08:33
1.50 lb	@3.00/lb	
PLU1		\$4.50
TAX1		\$0.27
TOTAL		\$4.77
CASH		\$4.77
CLERK 01	000011	00001

Check Tracking Operations

Overview

The NR-500E Series can employ a manual previous balance, hard check, or soft check system. The Check Type selection is set in the memory allocation programming - the default selection is set for soft check.

- If **manual previous balance** is selected, the check balance is input manually by the operator using the **PBAL** key, this balance is not saved in memory.
- If a **hard check** system is selected, only the previous balance for the check is maintained in memory.
- If a **soft check** system is selected, all of the check detail is kept in memory until the check is paid.
(The maximum number of checks and the number of lines per soft check is set in memory allocation.)

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 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.

Open Table Report

A list of open tables may be printed by running the Open Table Report in the X-Mode. Refer to page 128 for details and report example.

Check Tracking Function Keys

Although none of the functions necessary for check tracking operations appear on the default keyboard, any or all of the check tracking function keys can be assigned to the keyboard.

See "Function Key Assignment Programming" on page 136 if it is necessary to locate these keys on your keyboard.

Function Key	Description
CHECK #	<p>The CHECK # key is used to begin a new check or access\recall an existing check balance (hard check) or itemized bill (soft check.).</p> <p>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 check #1. Existing checks are accessed by entering the check track number and pressing the CHECK# key. In a drive-thru system, simply pressing the P/BAL key will recall the oldest open balance (lowest check track#).</p>
GUEST	<p>Use to enter the count of guests served as part of a guest check. The entry of a guest count can be enforced when opening a guest check, or for all transactions.</p>
P/BAL	<p>Use to enter the amount of an outstanding balance. The P/BAL key will take the recall function if the drive-thru feature is enabled in CHECK # key programming.</p>
SERVICE	<p>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.)</p>
TABLE	<p>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.</p>
PRINT CHECK	<p>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.</p>
TIP	<p>The TIP key allows a gratuity to be added to a guest check before payment. The tip amount is deducted from the Cash-in-Drawer amount for the Clerk/Cashier closing the guest check.</p> <p>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.</p>
ADD CHECK	<p>Use ADD CHECK to combine soft checks when check tracking is used.</p>
CHECK SPLIT	<p>The Check Split function provides another method of breaking down checks for payment. The "Check Split" key allows you to select items from one check# to split off/move to another check#. Refer to the "Check Split" operations on page 81 for operation details.</p>

Posting Balances Manually

Opening a Check

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

0 PBAL

2. Register the items you wish to sell.
 3. To total the posting, press **SERVICE**:
- SERVICE
4. Place a slip in an optional slip printer, press the **PRINT CHECK** key.

THANK-YOU CALL AGAIN		
09/24/2018 MON		08:33
PBAL		\$0.00
PLU2		\$1.00
SERVICE		\$1.00
BFWD		\$1.00
CLERK 01	000011	00001

Adding to a Check

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

1 0 0 PBAL

2. Register the next items you wish to sell.
 3. To total the posting, press **SERVICE**:
- SERVICE
4. Place a slip in an optional slip printer, press the **PRINT CHECK** key.

THANK-YOU CALL AGAIN		
09/24/2018 MON		08:33
PBAL		\$1.00
PLU3		\$2.00
SERVICE		\$2.00
BFWD		\$3.00
CLERK 01	000011	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 **SUBTOTAL**, then enter the tip amount and press the **TIP** key:

SUB
TOTAL

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. Place a slip in an optional slip printer, press the **PRINT CHECK** key.

PRINT
CHECK

THANK-YOU CALL AGAIN		
09/24/2018 MON		08:33
PBAL		\$3.00
TIP		\$0.50
CHECKS PAID		\$3.50
CASH		\$10.00
CHANGE		\$6.50
CLERK 01	000011	00001

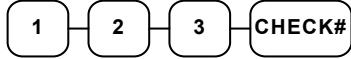
Soft Check

In a *soft check* system, all of the check detail is kept in memory until the check is paid.

Opening a Soft Check

1. Enter the number of the guest check, press the

CHECK # key:



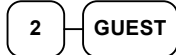
Alternately, press the **CHECK #** key to automatically assign a check:



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:

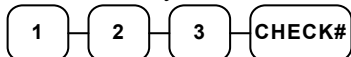
THANK-YOU CALL AGAIN		
09/24/2018 MON		08:33
CHECK #		#123
TABLE		#3
GUEST		#2
CHICKEN		\$7.00
STEAK		\$10.00
SERVICE		\$17.00
BFWD		\$17.00
CLERK 01	000011	00001

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:



Alternatively, 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 the **SERVICE** key.

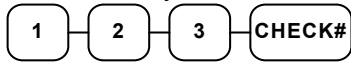


Receipt Example:

THANK-YOU CALL AGAIN		
09/24/2018 MON		08:33
CHECK #		#123
TABLE		#3
GARLIC BREAD		\$2.00
SERVICE		\$2.00
BFWD		\$19.00
CLERK 01	000011	00001

Printing a Soft Check

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



Alternatively, 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:



Sample of soft check printed on an optional printer:

THANK-YOU CALL AGAIN	
09/24/2018 MON	08:33
CHECK #	#123
TABLE	#3
CHICKEN	\$7.00
STEAK	\$10.00
GARLIC BREAD	\$2.00
SERVICE	\$0.00
BFWD	\$19.00
CLERK 01	CHK # : 1 000011 00001

The number of times each check has been printed is counted and printed on the check.

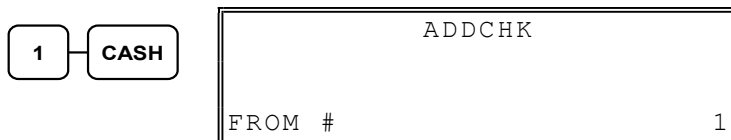
Add Check#

The Add Check key is used to combine one SOFT check with another SOFT check.

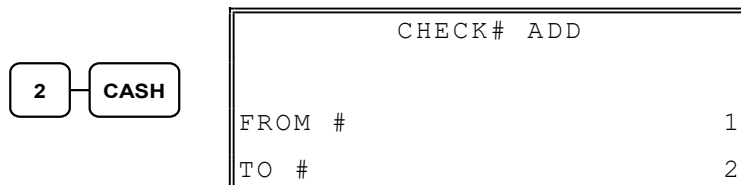
Note: This operation does not work with a hard check.

Sequence :

1. Open Check#1: register items and Service the check.
2. Open Check#2: register items and Service the check.
3. Press **ADD CHECK** key to display the “ADDCHK” screen. The **FROM #** is the number of the check you want to add to another check: *i.e.* enter **1** then press **CASH**.



4. The **TO #** appears on the display. This is the number of the check you want to add the previous check to: *i.e.* enter **2** then press **CASH**.



- Result: The items from Check# 1 will be added to Check#2 and Check#1 will be erased.

Check Split

Check Split allows you to move items from one check# to another check#.

- You can only select PLUs on the screen.
- Discount/surcharge items cannot be selected.
- After the % sale operation, you cannot use the Check Split.

For Example:

To split off two of the PLU1 items from Check #1 and add them to Check #10.

1. **Open or Recall** a check, register items and **Service**.
2. Enter the **Check #** you want to split items from; press the **“CHECK SPLIT”** key.

[DISPLAY]

```

SPLIT TABLE
SPLIT CHK#           1
PLU1                 5X
ENTER CNT            0
SELECT ITEM : UP/DOWN KEY
  
```

The selected PLU and the quantity of the selected PLU available on the check.

3. The first item and count in the check is displayed.
 - If this is the item you want to split items from proceed to the next step.
 - If you want to select a different item to split, press the Page Up or Page down key to go to the desired item.
4. **ENTER CNT**; Enter the number of items for the selected PLU you want to split from the current check and press the **X/TIME** key. Pressing **CASH** will exit without splitting.

[DISPLAY]

```

SPLIT TABLE
SPLIT CHK#           1
PLU1                 5X
ENTER CNT            2
ENTER SAVE CHK#     10
  
```

Quantity of the selected PLU to be split off to another check#

Check# to split items to.

5. **ENTER SAVE CHK #**; Enter the number of the check you want to split the selected item to and press **“CHECK SPLIT”** key. The split check operation will be printed.

[DISPLAY]

```

SPLIT TABLE
SPLIT CHK#           1
PLU1                 3X
ENTER CNT            0
SELECT ITEM : UP/DOWN KEY
  
```

[PRINT]

```

2018/01/26 FRI      13:40
-----
                SPLIT TABLE
-----
#1                →    #10
PLU1                2X
  
```

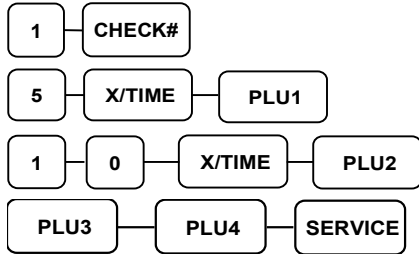
6. If you want to split other items, Press **UP** (↑) or **DOWN** (↓) key to move display. And repeat step (3) and step (4).
7. Press **CASH** to finish the check split operation.

Check Split Multiple Items

For Example : Split PLU1 and PLU2 from Check #1 and add to Check #10.

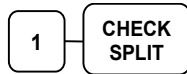
1. Open check #1, register items and service. **Operation:**

1 CHECK# → 5 X/TIME → PLU1 → 10 X/TIME → PLU 2 → PLU 3 → PLU 4 → SERVICE



2. Enter the **Check #** you want to split items from; press the “**CHECK SPLIT**” key.

Press: 1 CHECK SPLIT



[DISPLAY]

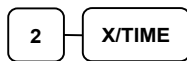
```

SPLIT TABLE
SPLIT CHK#           1
PLU1                 5X
ENTER CNT           0

SELECT ITEM : UP/DOWN KEY
    
```

3. **ENTER CNT**; Enter the number of items for the selected PLU you want to split from the current check and press the **X/TIME** key.

Press: 2 X/TIME



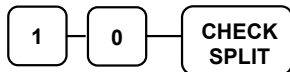
[DISPLAY]

```

SPLIT TABLE
SPLIT CHK#           1
PLU1                 5X
ENTER CNT           2X
ENTER SAVE CHK#     0
    
```

4. **ENTER SAVE CHK#**; Enter the number for the check you want to split the selected item to and press “**CHECK SPLIT**” key.

Press: 10 CHECK SPLIT



[DISPLAY]

```

SPLIT TABLE
SPLIT CHK#           1
PLU1                 3X
ENTER CNT           0

SELECT ITEM : UP/DOWN KEY
    
```

[PRINT]

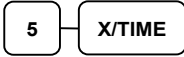
```

2018/01/26 FRI      13:40
-----
                        SPLIT TABLE
-----
#1           →       #10
PLU1                2X
    
```

5. Press the **DOWN (↓)** key to advance to **PLU2** . . .

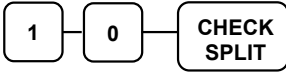
6. . . . **ENTER CNT**; Enter the number of items for the selected PLU you want to split from the current check and press the **X/TIME** key.

Press: 5 X/TIME



7. **ENTER SAVE CHK#**; Enter the number of the check you want to split the selected item to and press “**CHECK SPLIT**” key.

Press: 10 CHECK SPLIT



[DISPLAY]

```

      SPLIT TABLE
SPLIT CHK#           1
PLU2                 5X
ENTER CNT
                               0

SELECT ITEM : UP/DOWN KEY
  
```

[PRINT]

```

2018/01/26 FRI      13:40
-----
                SPLIT TABLE
-----
#1      →      #10
PLU1                                2X

#1      →      #10
PLU2                                5X
  
```

8. Press **CASH** to finish the check split operation.



[DISPLAY]

```

R:ON CLERK 01      K1 P1

      REGISTER MODE
  
```

[PRINT]

```

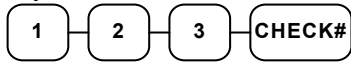
2018/01/26 FRI      13:40
-----
                SPLIT TABLE
-----
#1      →      #10
PLU1                                2X

#1      →      #10
PLU2                                5X

CLERK 01      000018  00000
  
```

Paying a Soft Check

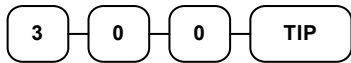
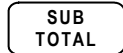
1. Enter the number of the guest check, press the **CHECK #** key:



Alternately, 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 **SUBTOTAL**, 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:

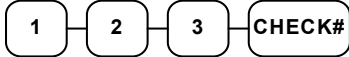
THANK-YOU CALL AGAIN		
09/24/2018 MON	08:33	
CHECK #	# 123	
TABLE	#3	
TIP	\$3.00	
CHECKS PAID	\$22.00	
TOTAL	\$22.00	
CASH	\$25.00	
CHANGE	\$3.00	
CLERK 01	000011	00001

Hard Check

In a *hard check* system, only the previous balance for the check is maintained in memory.

Opening a Hard Check

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



Alternately, press the **CHECK #** key to automatically assign a check number:



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**:

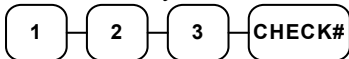


Hard Check Example:

	THANK-YOU CALL AGAIN	
DATE	09/24/2018	MON
CHECK #		#123
PBAL		\$0.00
TABLE		#3
GUEST		#2
CHICKEN		\$7.00
STEAK		\$10.00
SERVICE		\$17.00
BFWD		\$17.00
CLERK 01	000011	00001

Adding to a Hard Check

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



Alternately, 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**:



Hard Check Example:

	THANK-YOU CALL AGAIN	
DATE	09/24/2018	MON
CHECK #		#123
PBAL		\$0.00
TABLE		#3
GUEST		#2
CHICKEN		\$7.00
STEAK		\$10.00
SERVICE		\$17.00
BFWD		\$17.00
CLERK 01	000011	00001
DATE	09/24/2018	MON
CHECK #		#123
PBAL		\$17.00
TABLE		#3
GARLIC BREAD		\$2.00
SERVICE		\$2.00
BFWD		\$19.00
CLERK 01	000011	00001

Paying a Hard Check

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

1 — 2 — 3 — **CHECK#**

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

3 — **TABLE**

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

**SUB
TOTAL**

3 — 0 — 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.

2 — 5 — 0 — 0 — **CASH**

Sample of Hard Check postings printed on an optional slip printer:

DATE	09/24/2018	MON
CHECK #		#123
PBAL		\$0.00
CHICKEN		\$7.00
STEAK		\$10.00
SERVICE		\$17.00
BFWD		\$17.00
No.000011	CLERK 01	TIME 09:15
DATE	09/24/2018	MON
PBAL		\$17.00
GARLIC BREAD		\$2.00
SERVICE		\$2.00
BFWD		\$19.00
No.000012	CLERK 01	TIME 10:15
DATE	09/24/2018	MON
PBAL		\$19.00
TIP		\$3.00
CHECKS PAID		\$22.00
TOTAL		\$22.00
CASH		\$25.00
CHANGE		\$3.00
No.000013	CLERK 01	TIME 11:15

Fast Food Drive Thru

For fast food Drive-Thru windows, the NR-500E Series 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 the **SERVICE** key. (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:

CHECK#

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

SERVICE

Receipt Example:

THANK-YOU CALL AGAIN		
09/24/2018 MON		08:33
HAMBURGER		\$2.00
FRIES		\$1.00
CHECK #		# 3
PBAL		\$0.00
SERVICE		\$3.00
BFWD		\$3.00
CLERK 01	000011	00001

Paying a Drive-Thru Order

1. Press the **PBAL** key:

PBAL

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** (1-8) functions. If the tender is greater than the balance due, change is displayed.

5 0 0 CASH

Receipt Example:

THANK-YOU CALL AGAIN		
09/24/2018 MON		08:33
CHECK #		# 3
PBAL		\$3.00
CHECKS PAID		\$3.00
TOTAL		\$3.00
CASH		\$5.00
CHANGE		\$2.00
CLERK 01	000011	00001

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.

You must use the code entry method for the clerk sign on; Program the 'Password' for each employee. See "Employee Programming" in the "Program Mode Programming" chapter.

Set the options: 'Clerk Entry' as 'CODE' and 'Clerk Interrupt' as 'Y'. See "System Options" of "Options Programming" in the "Program Mode Programming" chapter.

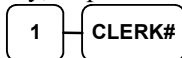
NOTE: Using the clerk interrupt feature requires memory allocation for at least one guest check for each clerk and sufficient soft check lines to support the interrupted transaction (i.e. if 20 soft check lines are allocated, a transaction with up to 20 lines can be interrupted.)

Enable Clerk Interrupt

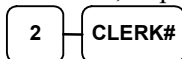
1. Program Clerk Secret Code. See "Options Programming: System Option" on page 200.
 - Set system option #2 to a value of 1.
 - Set system option #26 to a value of 1.

Clerk Interrupt Operation

1. Enter the number of the Clerk and press the **CLERK#** key, or press the CLERK1, 2, 3 keys.



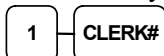
2. Register the items you wish to sell.
3. To total the posting and save for further items.
4. Enter the number of the next Clerk and press the **CLERK#**, or press the CLERK1,2,3 keys.



5. Register the items you wish to sell as above until all items have been sold.
6. To accept payment press **CASH**, CHECK or another payment function.



7. Enter the number of the first Clerk (#1) and press the **CLERK#** key.



8. The order for the Clerk #1 is reopened. Continue adding items as necessary. Then to accept payment press **CASH**, CHECK or another payment function.



Receipt Example:

THANK-YOU CALL AGAIN		
09/24/2018 MON		08:33
PLU1		\$1.00
** CLERK INTERRUPT **		
CASH		\$1.00
CLERK 01	000011	00001

Not Found PLU

The “Not Found PLU” feature is available for use when an optional scanner is used to input PLUs. If an item is scanned in the register mode 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.

Managers will typically use the “Not Found PLU” report as a tool for updating the registers PLU file. This provides a simple mechanism for quickly building an item file for a simple scanning installation. Up to 50 not found PLU items can be retained in the report. You will need to clear the Not Found PLU Report before you can add additional items using this method. See the ‘Reset Not Found PLU’ procedure on page 106 for details.

Note: The program mode *Options* → *System: Option #22* → *Enable Not Found PLU* must be set to “Y” to allow this function.

1. Scan an item or input a **PLU number**. If the item is not in the PLU file an error will sound.

Press **CLEAR**. The **NOT FOUND PLU** screen will display:

```
NOT FOUND PLU
STOP:0  SAVE:1
```

2. Press the numeric “**1**” key to save the item as a new PLU and allow the registration of the PLU. The screen will display: **ENTER PRICE + CASH** field.

```
NOT FOUND PLU
ENTER PRICE+CASH
0.00
```

3. Enter the **PLU PRICE** for the new item and press the **CASH** key. The screen will display: **Not Found PLU** and prompt to **SELECT COPY PLU**.

```
NOT FOUND PLU
SELECT COPY PLU
0
```

4. Press a **PLU** on the keyboard or enter a PLU number and press the **PLU** function key. The new PLU will register at the price entered and the item will be added to the PLU file using the same descriptor, tax status and option settings of the copied PLU.

Note: The Not Found PLU will assume the same attributes of the SELECT COPY PLU. For example, if the item scanned is a “liquor” item, then press another PLU in the liquor group. If you copy an open PLU, the item added using the Not Found PLU will also be an open PLU requiring you to enter a price each time the PLU is registered.

Not Found PLU Report

Managers will typically use the “Not Found PLU” report as a tool for updating the registers PLU file. Up to 50 not found PLU items can be retained in the report. Two report selections are available for printing the Not Found PLU items, PLU report option selections are:

- SALES
 - PROGRAM
1. To access the Not Found PLU reports, turn the Mode-Key to the **X** position and press **CASH** to view the X-Mode selections.
 2. Choose **1. X REPORTS** → **3. PLU** → **3. NOT FOUND PLU** from the menu selections.
 3. The Not Found PLU Report selections are displayed.
 - a. Choose **1** – to print the Not Found PLU **Sales Report**
 - b. Choose **2** – to print the Not Found PLU **Program Report**

Not Found PLU Sales Report

Selecting **SALES** from the Not Found PLU report in the X-Mode will print out the Not-Found-PLU’s that were added in a sale. PLU’s on the Not Found PLU Sales Report are sorted by Group #.

1. X REPORTS → **3. PLU** → **3. NOT FOUND PLU** → **1. SALES**

Not Found PLU – Sales Report Example:

THANK-YOU CALL AGAIN		
10/14/2020	WED	16:53
x1 REPORT		

NOT FOUND PLU REPORT		
#1: GROUP 01		
PLU12		
CNT 3		\$48.48
PLU6		
CNT 1		\$18.99

TOTAL 4		\$67.47
#3: Group 03		
PLU14		
CNT 1		\$14.55

Total 1		\$14.55

TOTAL CNT		5
TOTAL AMT		\$82.02
CLERK 01 00047 00000		

Not Found PLU Program Report

Selecting **PROGRAM** from the Not Found PLU report in the X-Mode will print out the programming for each of the PLUs added using the Not-Found-PLU method. This makes a good reference for verifying the programming for new items added using the Not Found PLU feature.

1. Move to the “**X**” Mode Switch position to display the **MANAGER MODE** screen: Press **CASH** to display the **X-MODE** menu.
2. From the **X-MODE** menu press **1 CASH** to view the **X Reports** menu selections.
3. Press **3 CASH** to access the **PLU Reports**; Press **3 CASH** again for the **Not Found PLU Report**.
4. Press **2 CASH** to run the **Not Found PLU - Program** report.
5. The programming for all PLU’s added using the Not Found PLU method will be printed.

Not Found PLU Reset Report

Up to 50 “Not Found PLU” entries can be recorded, when this capacity is reached the memory must be cleared by running the “**RESET NOT FOUND PLU**” in the Z-Mode. See Reset Not Found PLU operation on page 106 in the Z-Mode\Z-Reports chapter.

To print & clear the Not Found PLUs list –

1. Turn the Mode-Key to the **Z** position to view the Z-Mode selections.
2. Choose **3. RESET NOT FOUND PLU** from the menu selections: press **CASH**. The “**ARE YOU SURE?**” dialog displays.
3. Press **CASH** to confirm or press **CLEAR** to exit without clearing. The Not Found PLU Reset Report shows the item that was added using this feature and the Copy PLU.

Sample Not Found PLU Reset Report

```
          THANK-YOU
          CALL AGAIN
10/14/2020  WED           16:53
-----
          NOT FOUND PLU REPORT
-----
PLU#753                                PLU11
PLU#987                                PLU22
PLU#357                                PLU33
CLERK 01           00047  00011
```

Validation

Validation is possible if an optional slip printer is connected to one of the available RS-232C ports. Use VALIDATION key (key code #382) to print a three-line validation on a separate form or piece of paper. Any item registration, discount or payment may be validated. Validation can be done after virtually any operation, and validation can be set to be compulsory after selected functions, including:

- Add Check
- Cancel
- Cash
- Charge
- Check
- Check Cash
- Error Correct
- Food Stamp Tender
- Merchandise Return
- Paid Out
- Received on Account
- Check Endorse
- Tax Exempt
- Void
- Waste
- % Key Functions
- Return
- Service

Validation Notes:

See “Function Key Programming” on page 176 to set compulsory validation on the functions\operations you want to require validation.

When validating a payment, the system option ‘Tender Validation’ determines whether the sale amount tendered or the amount of sale is validated.

X/Time Key Operations

- ⇒ **Multiplication** – Used to multiply a quantity of items or calculate split pricing on PLU entries as described in the “Keyboard PLU Multiplication” section on page 46.
- ⇒ **Print Screen** – When you are in the program mode, you can press the X/Time key to print the current programming screen. This operation will work in the S-Mode as well.
- ⇒ **Date & Time** – When the ECR is idle in the REG-Mode (*not in a transaction or other operation*) pressing X/Time will display the Date & Time.

10/21/2022
16:22:27

- Press the **Clear** Key to return Reg Mode operation.

Manager Mode (X-Mode)

Overview

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 operations. Some register operations may be programmed to be under manager control which requires the mode key to be in the **MANAGER MODE** in order to operate.

All reports require a control key that will access either the **MANAGER MODE** (“X” Mode Switch position) or the **CLOSING MODE** (Z Mode Switch position).

Further protection may be enabled to require a password for access to the Manager Mode. See System Options programming on page 200 (system options 35 & 44) for details.

The following procedures are available from the **Manager Mode (X-Mode)** Operations menu.

- ◆ Manager Mode / X Mode
- ◆ X Reports
- ◆ Cash Declaration
- ◆ Flash Report
- ◆ Set Training Mode
- ◆ Stock Entry
- ◆ Save Report to SD or USB Memory Device
- ◆ Receipt On or Off
- ◆ LCD Contrast Adjustment

Note: The **CHARGE**, **CHECK**, **CLERK#** and **PAID OUT** keys are used for navigating through the **X – Z – P** and **S-Mode** screens and *should not* be reassigned. These key locations revert to their navigation operations, Cursor ↓ ↑ ← when used in the X – Z – P and S-Mode.

Manager Mode / X-Mode

Manager Mode

The Manager Mode (“X” position) is used to perform operations that are programmed to be under manager control.

1. When registering transactions in the register mode, if an operation prompts ****WARNING X MODE ONLY****, press **CLEAR**.
2. Turn the mode key to the “X” position.
3. Perform the desired operation, then return the mode key to the “REG” position to complete the transaction.

X-Mode

1. When not in an active sale, move to mode key the “X” position to display the **MANAGER MODE** screen.

```
R:ON  CLERK 01      K1 P1
  
MANAGER MODE
```

2. Press **CASH** to display the **X-MODE** menu.

```
          X-MODE
1.X REPORTS      ←
2.DECLARATION
3.FLASH REPORT
4.SET TRAIN MODE
5.STOCK ENTRY
6.SAVE RPT SD
          -PAGE 1 / 2-
```

```
          X-MODE
7.SAVE RPT USB
8.RCT ON/OFF    ←
9.LCD CONTRAST
  
          -PAGE 2 / 2-
```

3. Press the (↑) key and the (↓) key to navigate to the desired report from the menu. You can also use the **(Page↑)** key and **(Page↓)** key to navigate between the X MODE menu screens. Press the **CASH** key to select the operation. Alternately, you can enter the number representing the operation selection and press **CASH** to access.

X Reports

Running X reports allows you to print and read sales totals and counters within a report without resetting the totals. Sample Reports can be found on page 111 in this manual.

1. Move to the “X” Mode Switch position to display the **MANAGER MODE** screen: Press **CASH** to display the **X-MODE** menu.
2. From the **X-MODE** menu press **1** and **CASH** to view the **X Reports** menu selections.
 - 1 . FINANCIAL
 - 2 . TIME
 - 3 . PLU
 - 4 . CLERK
 - 5 . GROUP
 - 6 . MIX & MATCH
 - 7 . STOCK
 - 8 . OPEN TABLE
 - 9 . EJ
 - Press the (↑) key and the (↓) key to select a report from the menu, press the **CASH** key to confirm. You can also select the menu by (**Page**↑) key and (**Page**↓) key.
 - When a report is selected, the options for the report class are displayed. In some cases, further options are displayed.
 - Use the (↑) key and the (↓) key to scroll up and down through the options displayed; Press the **CASH** key to select the option.
3. Select the report level (**DAILY** or **PERIOD**) then press **CASH**, the report will print.

```
      FINANCIAL
1 . DAILY (X1)      ←
2 . PERIOD (X2)

      - PAGE 1 / 1 -
```

4. Refer to the ‘**X Reports Table**’ on the following page to view the menu selections for each report type.

X Reports Table

Sample Reports can be found on page 111 in this manual.

Report Number/ Report Type	Report Selections	Daily/ Period	Range
1. FINANCIAL	1. FINANCIAL	1. DAILY(X1)	
		2. PERIOD(X2)	
	2. DRAWER TOTALS	1. DAILY(X1)	
	3. DAY	2. PERIOD(X2)	
	4. VOID	1. DAILY(X1)	
2. PERIOD(X2)			
5. TRAIN FINANCIAL	1. DAILY(X1)		
	2. PERIOD(X2)		
2. TIME		1. DAILY(X1)	
		2. PERIOD(X2)	
3. PLU	1. PLU SALE	1. DAILY(X1)	
		2. PERIOD(X2)	
	2. PLU BY Group		1. ALL
			2. SELECT BY GROUP
	3. NOT FOUND PLU		1. SALES
			2. PROGRAM
	4. BEST PLU SALE	1. DAILY(X1)	
		2. PERIOD(X2)	
5. BEST PLU QTY	1. DAILY(X1)		
	2. PERIOD(X2)		
6. WORST PLU SALE	1. DAILY(X1)		
	2. PERIOD(X2)		
7. WORST PLU QTY	1. DAILY(X1)		
	2. PERIOD(X2)		
8. LAST SOLD			1. BY PLU NO.
			2. BY GROUP
			3. BY DATE
4. CLERK		1. DAILY(X1)	1. ALL
			2. RANGE
		2. PERIOD(X2)	1. ALL
			2. RANGE
5. GROUP		1. DAILY(X1)	
		2. PERIOD(X2)	
6. MIX & MATCH		1. DAILY(X1)	
		2. PERIOD(X2)	
7. STOCK	1. STOCK	1. DAILY(X1)	1. ALL
			2. RANGE
	2. STOCK BY GRP		1. ALL
			2. SELECT BY GRP
	3. MINIMUM STOCK		1. ALL
		2. SELECT BY GRP	
8. OPEN TABLE	1. DAILY (X1)		
9. EJ	See "EJ - Electronic Journal" operations on page 129.		

Cash 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 ensure accurate reporting, even in the case of an overage. You can enforce declaration by setting the appropriate options program. See REPORT options in "Options Programming" in the "Program Mode Programming" chapter.

1. Move to the "X" Mode Switch position; Press **CASH** to display the X-MODE menu screen.
2. From the X-MODE menu press **2 CASH** to display the **DECLARATION** screen. The cash drawer opens.

DECLARATION	
CASH	0.00
CHECK	0.00
CHARGE #	0.00
TOTAL	0.00

3. At the DECLARATION screen, enter the totals for CASH, CHECK, and CHARGE amounts.
 - Enter cash amounts, press the **CASH** key. You can make as many entries as you wish, the screen will keep a running total of your entries. 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**, then press **CASH**. The result is added to the declared CASH running total on the screen.
 - You can enter a total for all checks combined or enter amounts for each check individually, press the **CHECK** key after each entry.
 - Enter charges in the drawer, press the appropriate **CHARGE** key after each entry.
4. When you have completed declaration entries, press **CASH** again to finalize and total your declaration.

Flash Report

The Flash report provides a quick view of the current sales and drawer totals.

1. Move to the "X" Mode Switch position; Press **CASH** to display the X-MODE menu screen.
2. From the X-MODE menu press **3 CASH** to display the **FLASH REPORT, REPORT TOTALS** screen.

REPORT TOTALS	
GROSS SALES	375.00
NET SALES	375.00
CASH-IN-D	75.00
CHECK-IN-D	100.00
FD/S-IN-D	0.00
CHG1-IN-D	200.00

3. At the **REPORT TOTALS** screen, the totals for **GROSS SALES** and **NET SALES** are displayed. The drawer totals for **CASH, CHECK, FOOD STAMP** and **CHARGE 1 ~ 8** is also displayed. Press the (↑) key and the (↓) keys to navigate through the totals list.

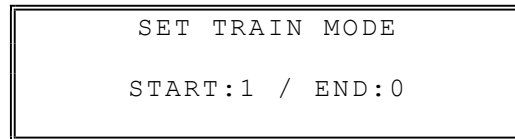
Set Training Mode

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 (see "TRAIN MODE" of the "Options Programming" in the "Program Mode Programming" chapter.)

- "TRAINING MODE START" will print on the receipt and journal when training mode is activated.
- "TRAINING MODE END" will print on the receipt and journal when training mode is exited.
- The message ** TRAINING MODE ** prints on each receipt printed while training mode is active.
- The journal does not print during training mode.
- The total and counter on the financial report labeled "TRAIN TTL" is updated with the net amount of each training transaction.

Note: If you make registrations to check tracking numbers in training mode, remember that the check tracking total will be updated. Remember to pay or clear the check file (CLOSING MODE menu/Z REPORT/TABLE) before resuming normal operations. You must close all open checks prior to entering training mode.

1. Move to the "X" Mode Switch position; Press **CASH** to display the X-MODE menu.
2. From the X-MODE menu press **4 CASH** to enter or exit training mode. The **SET TRAIN MODE** screen displays.



```
SET TRAIN MODE  
START:1 / END:0
```

3. Enter **1** to start training mode, (if you have selected a training password, type your password when prompted) or enter **0** and press **CASH** to end training mode. A chit will print indicating you are starting or ending training mode.

Stock Entry

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 stock level or print a scan of current stock quantities. You can choose to Add, Subtract, or Replace the current stock level.

PLU Stock can also be added from the Program Mode > PLU Programming > PLU Stock programming. Refer to page 172 for details.

Inventory is kept in decimal units two digits beyond the decimal. you must enter stock adjustments to two digits beyond the decimal. For example, for ten units of inventory type 1 0 0 0 (*without pressing the decimal*).

1. Turn the Mode Switch to the **X** position; Press **CASH** to display the **X-MODE** menu selections.
2. From the X-MODE menu, press **5** and **CASH**; the **STOCK ENTRY** screen is displayed.
 - **1. PROGRAM:** to program Stock.
 - **2. SCAN:** to print a scan of all current stock PLU items\stock information.
3. Press **1** and then press the **CASH** key to program stock quantities for PLU's that are set as Inventory Item. The **PROGRAM** screen displays.

```

      STOCK ENTRY
1 . PROGRAM      ←
2 . SCAN
  
```

```

      PROGRAM
1 . ONE          ←
2 . RANGE
  
```

Program Stock

ONE PLU

1. From the **PROGRAM** screen, press **1** and **CASH** to add stock to **ONE** (*individual*) PLU. The **STOCK ENTRY** screen is displayed.
2. On the **STOCK ENTRY** screen, the **FROM PLU #** entry displays. Enter the PLU number of the Inventory Item (*or press a PLU on the keyboard*) you wish to add stock to, then press **CASH**.
3. Use the (↑) and (↓) keys to select the operation you want to perform: ADD (+), SUB (-) or REPLACE. When you have made the appropriate selection, Press **CASH**.
4. On the **ENTER CNT** line, enter the **Stock Quantity** you wish to ADD/SUB/REPLACE, then press **CASH**. For example: ten units would be entered as 1 0 0 0 (*without pressing the decimal*).
5. You are returned to the **STOCK ENTRY** screen.
6. Continue entering stock quantities for Inventory Item PLUs or press **CLEAR** to exit the screen.

```

      PROGRAM
1 . ONE          ←
2 . RANGE
  
```

```

      STOCK ENTRY
FROM PLU #
                                     0
  
```

```

      STOCK ENTRY
OPERATOR : ADD (+)
ADD (+)                               ←
  
```

```

      STOCK ENTRY
PLU25
CURRENT                0.00
MINIMUM                0.00
ENTER CNT              10.00
  
```

```

      STOCK ENTRY
ENTER PLU #
                                     0
  
```

RANGE PLU

- To program stock on a **RANGE** of PLU's; Press **2** and then press the **CASH** key on the PROGRAM screen.
- The **STOCK ENTRY** screen is displayed with the entry field **ENTER FROM PLU #**. Enter the number for the first Inventory Item PLU in the range; Press **CASH**.
- The entry field for **ENTER TO PLU #** displays after each entry. Enter the number for the last Inventory Item PLU in the range; Press **CASH**.
- Use the (↑) and (↓) keys to select the operation you want to perform: **ADD**, **SUB** or **REPLACE** stock; Press **CASH**.
- On the **ENTER CNT** line, enter the **Stock Quantity** you wish to **ADD/SUBTRACT/REPLACE**, then press **CASH**. For example: ten units would be entered as 1 0 0 0 (*without pressing the decimal*).
- You are returned to the **STOCK ENTRY** screen for a range of PLU's. Continue entering stock quantities for PLU ranges or press **CLEAR** to exit the screen.

```

      STOCK ENTRY
ENTER FROM PLU #
                                                    0
    
```

```

      STOCK ENTRY
ENTER FROM PLU#
                                                    1
ENTER TO PLU#
                                                    20
    
```

```

      STOCK ENTRY
OPERATOR : ADD(+)
      ADD(+)
                                                    ←
    
```

```

      STOCK ENTRY
OPERATOR : ADD(+)
      ADD(+)
ENTER CNT
                                                    10.00
    
```

```

      STOCK ENTRY
ENTER FROM PLU #
                                                    0
    
```

SCAN STOCK

Current PLU stock values for all inventory PLUs can be printed from the PLU Stock Scan.

- Turn the Mode Switch to the **X** position; Press **CASH** to display the **X-MODE**.
- From the **X-MODE** menu, press **5** and **CASH**; the **STOCK ENTRY** screen is displayed:

```

      STOCK ENTRY
1 . PROGRAM
2 . SCAN
                                                    ←
    
```

- Press **2** and **CASH** to print the **STOCK SCAN**.

Sample PLU STOCK SCAN

```

-----
*****  PLU STOCK SCAN  *****
-----
PLU1
MINIMUM CNT                0
STOCK CNT                   25
PLU2
MINIMUM CNT                0
STOCK CNT                   25

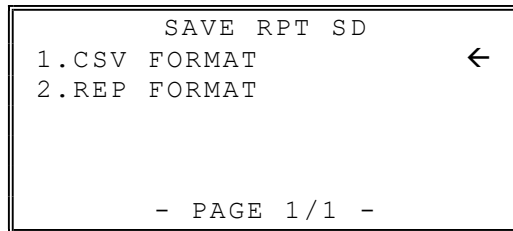
CLERK 01                000006  00000
    
```

Save Report to SD or USB

The Daily (X1) Report files can be saved to an SD or USB memory device. The report file can be saved as a CSV file format (Comma Separated Value spreadsheet format) or as a REP file format (Report File Format), for viewing with the eSpesso utility software.

Also see: ‘Saving Reports’ on page 151 in the ‘Program Backup and Restore’ chapter of Service Mode Programming.

1. Turn the Mode Switch to the **X** position; Press **CASH** to display the X-MODE.
2. From the **X-MODE** menu, press **6 CASH** to save the Daily (X1) Report files to an SD card or press **7 CASH** to save the Daily (X1) Report files to a USB memory stick.
3. The **SAVE RPT SD** or **SAVE RPT USB** screen is displayed.



```
SAVE RPT SD
1.CSV FORMAT ←
2.REP FORMAT

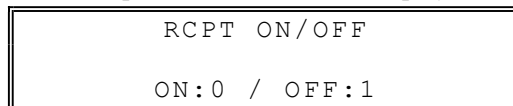
- PAGE 1/1 -
```

4. Select the desired format for the saved report file; Press **1 CASH** to save as a **CSV FORMAT** file or Press **2 CASH** to save as a **REP FORMAT** file.

Receipt On / Off

If there is no Receipt On/Off function on the register keyboard, you can set the register receipt printer to an *on* or *off* condition. When turned *OFF*, transactions will not be printed, but reports will continue to print, if requested.

1. Turn the Mode Switch to the **X** position; Press **CASH** to display the X-MODE.
2. From the **X-MODE** menu, press **8** and **CASH** to display the RCPT ON/OFF selections.



```
RCPT ON/OFF

ON:0 / OFF:1
```

3. The **RCPT ON/OFF** screen displays. Press **0** to turn **ON** receipt printing or press **1** to turn **OFF** receipt printing.

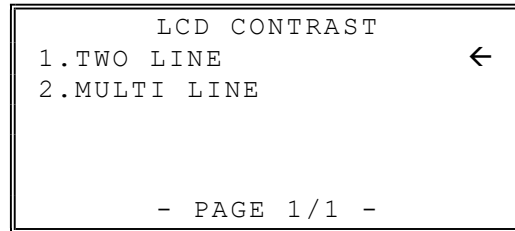
Note: When the receipt is OFF, a receipt may be printed after the sale has been completed by pressing the CASH key.

Receipt on request and printing a second receipt operations are allowed with the proper option settings. See “System Option Programming” option #14 and “Print Option Programming” option #11. A maximum of 184 items will print on the second receipt, if more items were registered in the sale, a buffered receipt is issued.

LCD Contrast

The operator display screen contrast may be adjusted using the X-Mode operation.

1. Move to mode key to the “X” Mode Switch position; Press **CASH** to display the X-MODE menu screen.
2. From the X-MODE menu press **9 CASH** to display the **LCD CONTRAST** screen.



- Press **1** to adjust the contrast on the rear **TWO LINE** customer display
 - Press **2** to adjust the contrast on the **MULTI LINE** operator display
3. Use the **CHARGE**(↑) key to make Lighter and **CHECK**(↓) key to make Darker.
 4. When the display appears as desired, press the **CASH** to save changes. Pressing **CLEAR** will exit without saving any changes.

Note: The LCD Contrast may also be adjusted from the S-Mode: ECR Setup – LCD Contrast.

Z-Mode

Overview

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 either the **MANAGER MODE** (X Mode Switch position) or the **CLOSING MODE** (Z Mode Switch position). Sample Reports can be found on page 111 in this manual.

Further protection may be enabled by requiring a password for access to the Z-Mode reports & operations.

See System Options programming on page 200 (see system options 35 & 44) for details.

The following procedures are available from the **Z-Mode** Operations menu:

- ◆ Z Reports
- ◆ Reset Electronic Journal
- ◆ Reset Not Found PLU List
- ◆ Connect Server
- ◆ Datatran Function
- ◆ Datatran Transaction
- ◆ DC Direct Function

Note: The CHARGE, CHECK, CLERK# and PAID OUT keys are used for navigating through the X – Z – P and S-Mode screens and *should not* be reassigned. These key locations revert to their navigation operations, Cursor ↓ ↑ ← when used in the X – Z – P and S-Mode.

Accessing Z-Mode Functions

1. Move the Mode Switch to the **Z** position to display the **Z-MODE** menu.

```
      Z-MODE
1.Z REPORTS           ←
2.RESET E.J.
3.RESET NOT FOUND PLU
4.CONNECT SERVER
5.DATATRAN FUNCTION
6.DATARTRAN TRANSACTION
7.DC DIRECT FUNCTIONS
```

2. Press the (↑) key and the (↓) key to desired menu selection or you can enter the digit (1-7) directly. Press the **CASH** key to confirm you selection.

Z Reports

Running Z reports will read, print and reset sales totals and counters for the selected daily and/or period report. Sample Reports can be found on page 111 in this manual.

General Instructions for Z Reports

1. From the **Z-MODE** menu press **1** and **CASH** to select Z Reports.

```
      Z REPORTS
1 . FINANCIAL      ←
2 . TIME
3 . PLU
4 . CLERK
5 . GROUP
6 . MIX & MATCH
      -PAGE 1 / 2-
```

2. Press the (↑) key and the (↓) key to select the desired report from the menu and press the **CASH** key to confirm. Alternatively, you can enter the number for the desired report and press the **CASH** key to confirm. The **(Page↑)** key and **(Page↓)** key may be used to go to the previous and next page.

```
      Z REPORTS
7 . STOCK          ←
8 . OPEN TABLE
      -PAGE 2 / 2-
```

3. When a report is selected, the report screen displays, For Example, the **FINANCIAL** report.

```
      FINANCIAL
1 . FINANCIAL      ←
2 . DAY
3 . VOID
4 . TRAIN FINANCIAL
      -PAGE 1 / 1-
```

4. Select the REPORT LEVEL **DAILY (Z1)** or **PERIOD (Z2)**.
After the making the selection, the report will print.

```
      FINANCIAL
1 . DAILY (Z1)     ←
2 . PERIOD (Z2)
      -PAGE 1 / 1-
```

Z Reports Table

Sample Reports can be found on page 111 in this manual.

Report Number & Report Type	Report Selections	Daily/Period
1. FINANCIAL	1. FINANCIAL	1. DAILY (Z1)
		2. PERIOD (Z2)
	2. DAY	2. PERIOD (Z2)
		3. VOID	1. DAILY (Z1)
	2. PERIOD (Z2)	
	4. TRAIN FINANCIAL	1. DAILY (Z1)
		2. PERIOD (Z2)
	2. TIME		1. DAILY (Z1)
2. PERIOD (Z2)		
3. PLU		1. DAILY (Z1)
		2. PERIOD (Z2)
4. CLERK		1. DAILY (Z1)
		2. PERIOD (Z2)
5. GROUP		1. DAILY (Z1)
		2. PERIOD (Z2)
6. MIX & MATCH		1. DAILY (Z1)
		2. PERIOD (Z2)
7. STOCK		1. DAILY (Z1)
8. OPEN TABLE		1. DAILY (Z1)

Note: Running the Open Table report in the “Z” position will clear the check tracking file. All open checks that have not been paid will be deleted. Sample Reports can be found on page 111 in this manual.

Reset Electronic Journal

An electronic journal feature is available on the NR-500E Series. The electronic journal captures the sales journal in the register memory. If you intend to use the electronic journal, you must allocate sufficient memory (see ALLOCATION in the "S-Mode programming" chapter) and activate the journal and set related journal capture options (see "EJ" of "Options 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 E.J., see "Electronic Journal Operation" on page 129 in the "Manager Mode (X-Mode)" chapter.

- From the **Z-MODE** menu press **2** and **CASH** to clear the electronic journal:

RESET E.J. ARE YOU SURE? Y=CASH N=CLEAR

- The screen asks: **ARE YOU SURE?** Press the **CASH** key for **YES** or **CLEAR** key for **NO** to clear the report.

Reset Not Found PLU

Managers will typically use the Not Found PLU list as a tool for updating the PLU file. Up to 50 “Not Found PLU” entries can be recorded, when this capacity is reached the memory must be cleared by running the “RESET NOT FOUND PLU” in the Z-Mode.

The System Option #22 “Enable Not Found PLU” must be set to **Y** before the Not Found PLU feature can be utilized.

1. From the **Z-MODE** menu press **3** and **CASH** to clear the Not Found PLUs report file.

NOT FOUND PLU
ARE YOU SURE?
Y=CASH N=CLEAR

2. The screen asks: **ARE YOU SURE? Y=CASH N=CLEAR.**
3. Press the **CASH** key for **YES** to proceed with clearing the report file. Pressing **CLEAR** key for **NO** will exit without clearing the report.
4. The **Not Found PLU Reset Report** shows the **PLU#** that was added using this feature and the PLU used for the **Copy PLU**.

Sample Not Found PLU Reset Report

THANK-YOU
CALL AGAIN

10/14/2020 WED 16:53

NOT FOUND PLU REPORT

PLU#753	PLU11
PLU#987	PLU22
PLU#357	PLU33
CLERK 01	00047 00011

Connect Server

Not Used

Datatan Function

Datatan Functions are provided if using integrated credit card processing with the NR510 Series ECR utilizing a Datacap EMV compatible device. Please refer to the Integrated Payment Appendix or the separate NR-510 EMV-Datacap Supplement for complete details about the Datatan Function operations.

1. From the **Z MODE** menu press **5 CASH** to display the **DATATRAN FUNCTION** menu screen.

```

          DATATRAN FUNCTION
1. INITIALIZE EFT
2. CLOSE CURR. BATCH
3. PARAMETER DOWNLOAD
4. EMV EBT VOUCHER
5. ISSUE TRANSACTION
6. ISSUE BATCH STATUS
7. DIAL IN LOAD
8. DIAGNOSTIC
    
```

2. From the **DATATRAN FUNCTION** menu, **press the number** for the desired operation you wish to perform, Press **CASH** to initiate the operation.
3. Please refer to the NR-510 EMV-Datacap Supplement for complete details about these operations.

Datatan Function: Menu Operations

EMV related operations are shown in **Bold** below; Follow the summary table for details for each of these processes.

Menu #	Item	Operation
1	Initialize EFT	Use this operation to initialize the PIN-Pad device.
2	Close Curr. Batch	Use this operation to close the current batch; a new batch is automatically opened.
3	Parameter Download	Use to load the EMV parameters into the PIN-Pad.
4	EMV EBT Voucher	Used to Manually enter EBT transactions.
5	Issue Transaction	Currently, if a Local Transaction Report is run, we print the information from the approvals. However, this data should only be used for troubleshooting and should not be relied upon as accurate reporting data.
6	Issue Batch Status	Print the status for the current batch.
7	Dial In Load	This procedure must be done at each new installation to load the Datatan device parameters.
8	Diagnostic	Use to perform various diagnostics. Use only as requested by Datacap support.

Datatran Transaction

Datatran Transactions are provided if using integrated credit card processing with the NR510 Series ECR utilizing a Datacap EMV compatible device. Please refer to the Integrated Payment Appendix or the separate NR-510 EMV-Datacap Supplement for details about Datatran Transaction operations.

1. From the **Z MODE** menu press **6 CASH** to display the **DATATRAN TRANSACTION** menu screen.


```

        DATATRAN TRANSACTION
        1.VD SALE BY REC NO.
        2.VD REFUND BY REC NO.
        3.VOICE AUTH
        4.ZERO AUTHORIZATION
        5.DELETE SD EMV
      
```
2. From the **DATATRAN TRANSACTION** menu **press the number** for the desired operation you wish to perform, Press **CASH** to initiate the operation.
3. Please refer to the NR-510 EMV-Datacap Supplement for complete details about the Datatran Transaction operations.

Datatran Transaction: Menu Operations

EMV related operations are shown in Bold below; Follow the summary table for details for each of these processes.

Menu #	Item	Operation
1	Void Sale by Record Number	Use these operations to void transactions when the card is not present. CAUTION: These voids will not correct ECR sales totals (i.e. PLU sales) but will maintain a total on the Financial Report. The processor must allow “By Record” operations (Enable Tokenization) for Void by Record Number operations.
2	Void Refund by Record Number	Use the VOID Mode operation at the ECR to perform transaction voids that will correct the appropriate ECR sales totals.
3	Voice Authorization	Use to enter a voice authorized sale into the batch.
4	Zero Authorization	Use this operation to verify a card is valid, activated, not reported as lost/stolen.
5	Delete SD EMV File	This Operation will clear the EMVBACK.txt file stored on the SD Card.

DC Direct Functions

Added at v05.000, DC Direct Functions are only used when integrating DC Direct PAX device with the ECR for integrated payment operations. Use these settings to set up and utilize the DC Direct device with the ECR.

It is recommended that dealers use the new registers with the “E” designation for DC Direct installations rather than attempting to replace the parts in older registers.

1. Move the mode switch key to the **Z** position to display the **Z-MODE** menu.
2. You can use the **↓CHARGE1** and the **↑CHARGE2** keys to scroll up and down through the **Z-Mode** menu to select the **DC DIRECT FUNCTION** menu selections (or press **7** and **CASH**). The option selections available are:
 - 1 . SETTINGS
 - 2 . TRANSACTIONS
 - 3 . ADMIN FUNCTIONS

DC Direct Function: Operations

The Datatran Function operation definitions are shown below.

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.

SETTINGS Operations & Definitions

The DC Direct Functions\Settings are required to connect and utilize the DC Direct device with the ECR.

1. From the **Z** position, press **7** and **CASH**, then press **1** and **CASH** to access the DC Direct **SETTINGS** menu. The Settings operations definitions are shown below.
 - 1 . ENABLE DC DIRECT
 - 2 . SET IP
 - 3 . SET MERCHANT ID
 - 4 . SET GIFT MERCHANT ID
 - 5 . EMVPAD RESET
 - 6 . GRATUITY SUGGESTIONS

Menu #	Operation	Definition
1.	Enable DC Direct	Select Y when using DC Direct integrated payment equipment.
2.	Set IP	Enter the IP ADDRESS that is assigned to the DC-Direct Device.
3.	Set Merchant ID	Enter the Merchant ID from Datacap for DC-Direct Credit Card processing. (MID from Datacap.) <i>(For Raised Keyboard model ECRs you must use the 3-digit character code entry method.)</i>
4.	Set Gift Merchant ID	Enter the Merchant ID from Datacap for DC-Direct Gift Card processing. This is a separate Merchant ID for Gift Card operations and processing. <i>(Gift MID from Datacap.) (For Raised Keyboard model ECRs you must use the 3-digit character code entry method.)</i>
5.	EMVPAD Reset	Use this operation to Reset/Initialize the DC Direct PIN-Pad device.
6.	Gratuity Suggestions	Optional, This setting is used when the System Option 54: 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.

TRANSACTIONS Operations & Definitions

The Transactions menu operations shown below are operations, these operations are not required for setting up the DC Direct with the ECR.

- From the **Z** position, press **7** and **CASH**, then press **2** and **CASH** to access the DC Direct **TRANSACTIONS** menu. The Transactions operations definitions are shown below.

- VOID SALE BY REC NO
- VOID REFUND BY REC NO
- VOICE AUTH
- ZERO AUTHORIZATION
- EMV EBT VOUCHER
- GIFT CARD CASH OUT
- GIFT VOID ISSUE
- RETURN BY REC NO

Menu #	Operation	Definition
1.	VD Sale By REC NO	Use these operations to void transactions when the card is not present.
2.	VD Refund By REC NO	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. Use the VOID mode operation at the ECR to perform transaction voids that will correct the appropriate ECR sales totals.
3.	Voice Auth	Use to enter a voice authorized sale into the current batch.
4.	Zero Authorization	Used to verify if a card is valid, activated, not reported as lost or stolen.
5.	EMV EBT Voucher	Use EMV EBT Voucher 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	After issuing a new Gift Card this operation can be used to nullify the issuance but this 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.

ADMIN FUNCTIONS Operations & Definitions

Shown below are the Admin Functions operations and definitions. After setting up the DC Direct\Settings perform the EMVPAD Download operation.

- From the **Z** position, press **7** and **CASH**, then press **3** and **CASH** to access the DC Direct **ADMIN FUNCTIONS** menu.

- EMVPAD DOWNLOAD
- BATCH SUMMARY
- BATCH CLOSE
- DELETE SD EMV FILE

Menu #	Operation	Definition
1.	EMVPAD 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 will open 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.

Sample Reports

Financial

The Financial report is available in X or Z mode, **Daily (X1 or Z1)** or **Period (X2 or Z2)** Reporting.

	11/20/2024 WED	13:32	
	X 1 REPORT	00001	

	FINANCIAL		
Total and count of all positive PLUs.	+PLU TTL	179.56	
Total and count of all Negative PLUs.	-PLU TTL	\$288.60	
Total of +PLU and -PLU sales.	ADJST TTL	10	
		-20.00	
		189.56	
		\$268.60	

	NONTAX	\$30.47	Total of Non-Taxable sales.
Total of tax eligible sales for each sale tax.	TAX1 SALES	\$153.60	
	TAX2 SALES	\$11.92	
	TAX3 SALES	\$16.77	
	TAX4 SALES	\$31.89	
Total of each tax amount collected for each tax.	TAX1	\$10.00	
	TAX2	\$1.21	
	TAX3	\$1.18	
	TAX4	\$2.18	
Total exempted sales for each tax.	XMPT1 SALES	\$7.00	
	XMPT2 SALES	\$1.50	
	XMPT3 SALES	\$7.95	
	XMPT4 SALES	\$7.50	
	EATIN TTL	1	
		\$10.12	Total sales for each type of destination
	TAKEOUT TTL	2	
		\$40.77	
	DRTHRU TTL	1	
Total and count for each % function key (i.e. discounts & coupons).		\$3.04	
	continued . . .		

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	ITEM DISC.	3
		-0.48
	SALE DISC.	2
		-5.22
Total and count for each % function key (i.e. discounts, coupons & surcharges).	SALE SURCH.	3
		\$3.23
	% 4	0
		\$0.00
	% 5	0
		\$0.00
Net Sales	NET SALE	26
		\$281.18
Credited tax for each tax. (Tax is credited for negative taxable sales, i.e. merchandise return transactions.)	CREDIT TAX1	4
		-1.11
	CREDIT TAX2	1
		-0.23
	CREDIT TAX3	2
		-0.89
	CREDIT TAX4	1
		-0.39
Food stamp change credited to sales	FD/S CREDIT	0
		\$0.23
	RETURN	33
		-59.73
Total and count for each type of transaction correction.	ERROR CORR	2
		-4.00
	PREVIOUS VD	1
		-1.50
	VOID MODE	-2
		-6.40
	CANCEL	2
		\$16.00
Gross Sales	GROSS SALES	\$375.63
	CASH SALES	13
		\$133.49
Totals and counters for CASH and CHECK sales	CHECK SALES	1
		\$23.05
	R/A 1	1
		\$145.00
	R/A 2	0
		\$0.00
	R/A 3	0
		\$0.00
Total and count for each type R/A (received on account) and P/O (paid out) key.	P/O 1	1
		-140.00
	P/O 2	0
		\$0.00
	P/O 3	0
		\$0.00

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Total and count of items sold with HASH status.	HASH TTL	0	
		\$0.00	
	NOSALE	4	Count of NO SALES
Total of numbers entered into the NON ADD # key	NON ADD #	547	
	CASH-IN-D	14	
		\$269.99	Total and count of expected CASH, CHECK, FOOD STAMP in drawer
	CHECK-IN-D	3	
		-108.45	
	FD/S-IN-D	2	
		\$21.00	
	CHG1-IN-D	0	
		\$0.00	
	CHG2-IN-D	1	
		\$8.43	
Total and count for each CHARGE in drawer.	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	
		\$0.00	
	CHG1 SALES	0	
		\$0.00	
	CHG2 SALES	1	
		\$8.43	
Total and count for each CHARGE keys.	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	
Total for each Foreign currency in drawer.	FOREIGN 1	0.00	
	FOREIGN 2	0.00	
	FOREIGN 3	0.00	
	FOREIGN 4	0.00	

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Total of CASH, CHECKS and CHARGES in drawer.	DRWR TTL	\$216.69	
	ROUND EFFECT	\$.09	Net effect of rounding on cash transactions, if implemented. Added at v1.036
	PROMO	1	
Total and count for PROMO, WASTE and TIPS.	WASTE	\$1.50	
	TIPS	8	
	TIPS	\$12.50	
Number of transactions and total activity in Training Mode	TRAIN TTL	0	
	TRAIN TTL	\$0.00	
	BAL FORWARD	5	
Total and count of all balances serviced	BAL FORWARD	\$62.59	
	GUESTS	4	
	P/BAL	\$88.13	
Total number of guests served	GUESTS	5	
	P/BAL	4	
	CHECKS PAID	\$0.00	Total and count of Checks Paid balances.
	CHECKS PAID	2	
	SERVICE	\$18.64	
Total and count of balances entered into PBAL key	SERVICE	4	
	MIX&MATCH	\$88.13	
	MIX&MATCH	0	
	PAYMENT	\$0.00	
Total and count of Mix & Match disc.	PAYMENT	0	
	PAYMENT	\$0.00	Average number of items per customer, and average dollar sales per customer
	AVG ITEM/CUST	7.29	
	AVG \$/CUST	\$10.81	

Total and count of Payments to house accounts.	GRAND	\$375.63	
	KELLY	000209 00000	Grand total

Drawer Totals

The Drawer Totals report prints out the In-Drawer totals for each tender. This report is only available in the X-Mode, Daily (X1) Reporting.

	11/20/2024	WED	13:32
	X 1	REPORT	00001

	IN-DRAWER		
Cash in drawer	CASH-IN-D		\$0.00
Check in drawer	CHECK-IN-D		\$0.00
	CHG1-IN-D		\$0.00
	CHG2-IN-D		\$0.00
	CHG3-IN-D		\$0.00
Charge (1-8) in drawer totals	CHG4-IN-D		\$0.00
	CHG5-IN-D		\$0.00
	CHG6-IN-D		\$0.00
	CHG7-IN-D		\$0.00
	CHG8-IN-D		\$0.00
	CLERK 01	000209	00000

Day

The Day (*Daily Sales*) report lists net sales for each day of the month and is available in X or Z Mode, Period (X2 or Z2) Reporting.

	11/20/2024	WED	13:34
	X 2	REPORT	00001

	DAY		
	DAY : 12		
Count	CNT		2
Net Sales	SALES AMT		\$6.00
Percentage of total.	SALES RATE		50.00%
	DAY : 13		
	CNT		2
	SALES AMT		\$6.00
	SALES RATE		50.00%

	TOTAL CNT		4
	TOTAL AMT		\$12.00
	CLERK 01	000209	00000

VOID

The VOID report shows the number of sales and amount of sales registered in the Void Mode. This report is available in X or Z Mode, Daily (X1 or Z1) or Period (X2 or Z2) Reporting.

11/20/2024	WED	13:32
X 1	REPORT	00001

VOID		
VOID MODE		-2
		\$11.00

CLERK 03	000013	00000

Train Financial

Financial report for sales performed in Training Mode. This report is available in X or Z Mode, Daily (X1 or Z1) or Period (X2 or Z2) Reporting.

11/20/2024	WED	13:34
X 1	REPORT	00001

TRAIN FINANCIAL		
+PLU TTL		2
		\$11.00
ADJST TTL		2
		\$11.00

NONTAX		\$11.00
NET SALE		2
		\$11.00
GROSS SALES		\$11.00
CASH SALES		1
		\$11.00
CASH-IN-D		1
		\$11.00
DRWR TTL		\$11.00
PLU LWVWL1 TTL		2
		\$11.00
AVG ITEM/CUST		2
AVG \$/CUST		\$11.00

GRAND		\$11.00
CLERK 03	000014	00000

Time

The TIME Report breaks sales down by hour. This report is available in **X** or **Z** mode, **Daily (X1 or Z1)** or **Period (X2 or Z2)** Reporting.

	11/20/2024 WED	15:48	
	X 1 REPORT	00001	

	TIME		
	6:00-7:00		
Time Period.	CNT	1	Sales Amount Total for the hour.
CNT = Number of Transactions.	SALES AMT	\$8.98	
	SALES RATE	4.85%	Sales Rate percentage for the hour.
	7:00-8:00		
	CNT	2	
Net sales in this period.	SALES AMT	\$45.00	
Percentage of total sales.	SALES RATE	24.28%	
	8:00-9:00		
	CNT	1	
	SALES AMT	\$47.56	
	SALES RATE	25.67%	
	9:00-10:00		
	CNT	1	
	SALES AMT	\$13.05	
	SALES RATE	7.04%	
	10:00-11:00		
	CNT	1	
	SALES AMT	\$18.00	
	SALES RATE	9.71%	
	11:00-12:00		
	CNT	4	
	SALES AMT	\$40.60	
	SALES RATE	21.91%	
	12:00-13:00		
	CNT	1	
	SALES AMT	\$12.12	
	SALES RATE	6.54%	

Number of Transactions all periods.	TOTAL CNT	13	
Net sales in all periods.	TOTAL AMT	\$185.31	
	KELLY	000236	00000

PLU

The PLU report is available in **X** or **Z** mode, **Daily (X1 or Z1)** or **Period (X2 or Z2)** Reporting.

	11/20/2024	WED	15:33
	X 1	REPORT	00001

PLU number	ALL	PLU	
PLU Descriptor	PLU#1	HAMBURGER	
Count and sales total.	CNT 28		\$42.00
Percentage of total sales (optional).	SALES RATE		15.64%
	PLU#2	DBL BURGER	
	CNT 40		\$99.75
	SALES RATE		37.14%
	PLU#4	COKE	
	CNT 26		\$38.85
	SALES RATE		14.46%
	PLU#5	SPRITE	
	CNT 18		\$13.42
	SALES RATE		5.00%
	PLU#7	ROAST	
	CNT 19.16		\$30.47
	SALES RATE		11.34%
	PLU#28	UNLEADED	
	CNT 32.85		\$39.39
	SALES RATE		14.66%
	PLU#29	RETURNS	
	CNT 10		-20.00
	SALES RATE		-7.44%
	PLU#33	NAILS	
	CNT 15.55		\$24.72
	SALES RATE		9.20%
Total activity for all PLUs	*****		
Total sales for all PLUs.	TOTAL CNT		189.56
	TOTAL AMT		\$268.60
	KELLY	000213	00000

PLU By Group

ALL PLU's are separated by the Group that they are assigned to. You could also select a specific group.

Note: In this X1 Report, PLU4 is listed in both GROUP 01, in GROUP 04, and in GROUP 07 in the report shown below. The totals for each group are all added together.

Group # and Group Descriptor.	<pre> 11/19/2024 TUE 13:10 X1 REPORT ----- PLU BY GROUP #1: GROUP 01 PLU1 CNT 2 \$3.98 PLU3 CNT 1 \$2.99 PLU4 CNT 2 \$4.00 PLU7 CNT 4.10 \$15.54 PLU20 CNT 50 \$1.00 PLU21 CNT 40 \$2.10 ----- TOTAL 99.10 \$29.61 #4: GROUP 04 PLU4 CNT 2 \$4.00 ----- TOTAL 2 \$4.00 #7: GROUP 07 PLU4 CNT 2 \$4.00 PLU40 CNT 6 \$20.00 ----- TOTAL 6 \$24.00 ***** TOTAL CNT 107.10 TOTAL AMT \$57.61 CLERK 02 000069 00000 </pre>
Total activity, count & amount, for all PLUs in this Group.	
Total activity, count & amount, for ALL PLUs in ALL Groups.	

Not Found PLU

For items added using the Not-Found-PLU feature, by choosing the SALES selection, the report is listed here. The descriptor for the new item (*as copied from the link PLU*) is used. You could also generate the PROGRAM for this report. You can reset this report in the Z-Mode #3. RESET NOT FOUND PLU (*outside of the Z Reports*).

```
11/19/2024  TUE                13:15

X1 REPORT
-----
NOT FOUND PLU REPORT

#1: GROUP 01
PLU6
  CNT 1                      $1.11
-----
TOTAL 1                      $1.11

*****
TOTAL CNT                    1
TOTAL AMT                    $1.11

CLERK 02                000074    00000
```

Best PLU Sale

```
11/19/2024  TUE                13:17

X1 REPORT
-----
BEST PLU SALES

PLU40
  CNT 6                      $20.00
PLU7
  CNT 4.10                  $15.54
PLU1
  CNT 2                      $3.98
PLU3
  CNT 1                      $2.99
PLU21
  CNT 40                    $2.10
PLU6
  CNT 1                      $1.11
PLU20
  CNT 50                    $1.00

CLERK 02                000071    00000
```

Best PLU QTY

11/19/2024	TUE	13:17
X1 REPORT		

BEST PLU SALES (QTY)		
PLU20		
CNT 50		\$1.00
PLU21		
CNT 40		\$2.10
PLU40		
CNT 6		\$20.00
PLU7		
CNT 4.10		\$15.54
PLU1		
CNT 2		\$3.98
PLU6		
CNT 1		\$1.11
PLU3		
CNT 1		\$2.99
CLERK 02	000072	00000

Worst PLU Sale

11/19/2024	TUE	13:17
X1 REPORT		

WORST PLU SALES		
PLU20		
CNT 50		\$1.00
PLU6		
CNT 1		\$1.11
PLU21		
CNT 40		\$2.10
PLU3		
CNT 1		\$2.99
PLU1		
CNT 2		\$3.98
PLU7		
CNT 4.10		\$15.54
PLU40		
CNT 6		\$20.00
CLERK 02	000073	00000

Worst PLU QTY

11/19/2024	TUE	13:17
X1 REPORT		

WORST PLU SALES (QTY)		
PLU3		
CNT 1		\$2.99
PLU6		
CNT 1		\$1.11
PLU1		
CNT 2		\$3.98
PLU7		
CNT 4.10		\$15.54
PLU40		
CNT 6		\$20.00
PLU21		
CNT 40		\$2.10
PLU20		
CNT 50		\$1.00
CLERK 02	000075	00000

Last Sold

The Last Sold Report breaks down sales by when they were last sold. This report is only available in the X-Mode, Daily (X1) Reporting.

By PLU Number

11/19/2024	TUE	13:17

LAST SOLD REPORT		

REPORT BY PLU No.		
CODE # :		1
		2

GARBANZO BEANS		
LAST SOLD :		11/07/2024
CORN MEAL		
LAST SOLD :		11/05/2024
CLERK 01	000032	00001

By Group

```
11/19/2024  TUE                13:17

*****
                LAST SOLD REPORT
*****
REPORT BY GROUP #1
-----
GARBANZO BEANS
LAST SOLD :  11/07/2024
CORN MEAL
LAST SOLD :  11/05/2024
LIMP BIZQIT
LAST SOLD :  11/05/2024
BANSHEE BITES
LAST SOLD :  11/05/2024

CLERK 01                000033  00001
```

By Date

You will need to enter the Date for the report, such as: 110524.

```
11/19/2024  TUE                13:17

*****
                LAST SOLD REPORT
*****
REPORT BY GROUP #1
-----
CORN MEAL
LAST SOLD :  11/05/2024
LIMP BIZQIT
LAST SOLD :  11/05/2024
BANSHEE BITES
LAST SOLD :  11/05/2024

CLERK 01                000034  00001
```

Clerk

The Clerk report provides the net sales for all clerks in the system and is available in **X** or **Z** mode, **Daily (X1 or Z1)** or **Period (X2 or Z2)** Reporting for **ALL Clerks** or by a **RANGE of Clerks**.

All Clerk

Note: Media totals can be printed for each clerk, if selected in Print Option Programming.

11/20/2024	WED	12:36
X 1	REPORT	00001

ALL CLERK		
KELLY		
NET SALE	10	
	\$155.23	

CLERK 03		

CLERK 04		

PEGGY		

CLERK 06		

CLERK 07		

CLERK 08		

CLERK 09		

CLERK 10		

KELLY	000201	00000

Clerk Name

Number of Transactions.

Net sales for this clerk.

RANGE – Individual Clerk

	11/20/2024 WED	17:36
	X 1 REPORT	00001

	INDIVIDUAL CLERK	
Clerk Name.	KELLY	
Number of Transactions.	NET SALE	10
		\$155.23
	DRWR TTL	\$109.81

	KELLY	000202 00000

Net sales for this clerk.

Drawer total for this clerk.

Groups

The Group report provides the net sales for all groups in the system and is available in **X** or **Z** mode, **Daily (X1 or Z1)** or **Period (X2 or Z2)** Reporting.

	11/20/2024 WED	15:34
	X 1 REPORT	00001

	GROUP	
Group Descriptor.	GROUP : 1 FOOD	
Number of items sold in this group.	CNT	68
	SALES AMT	\$141.75
Net sales for this group.	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	000237 00000

Mix & Match

The Mix & Match report is available in **X** or **Z** mode, **Daily (X1 or Z1)** or **Period (X2 or Z2)** Reporting.

Mix & Match Descriptor.	11/19/2024 TUE 11:17
	X1 REPORT 00001

	MIX & MATCH
	DISCOUNT 01
	CNT 2
Number of items sold for all Mix & Match.	SALES AMT -4.00

Total discounts applied using Mix & Match.	TOTAL CNT 2
	TOTAL AMT -4.00
	CLERK 02 000061 00000

Annotations:

- Mix & Match Descriptor. points to the date and time.
- Number of items sold for all Mix & Match. points to the 'CNT' value of 2.
- Total discounts applied using Mix & Match. points to the 'TOTAL AMT' value of -4.00.
- Count. points to the 'CNT' value of 2.
- Discount Amount. points to the 'SALES AMT' value of -4.00.

Stock

The Stock report is available in **X** or **Z** mode, **Daily (X1 or Z1)** Reporting.

	11/19/2024 TUE 15:47
	X1 REPORT 00001

	ALL PLU STOCK
PLU number.	PLU#1
PLU Descriptor.	HAMBURGER
Current Stock count.	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 000228 00000

Annotations:

- PLU number. points to 'PLU#1'.
- PLU Descriptor. points to 'HAMBURGER'.
- Current Stock count. points to 'CNT 26'.

Stock By Group

This report is available in the X-Mode only.

11/19/2024	TUE	15:57
X1 REPORT		

STOCK BY GROUP		
#1: GROUP 01		
PLU20		
CNT		-25
PLU21		
CNT		-15
PLU30		
CNT		

TOTAL		-40
CLERK 02	000062	00000

Minimum Stock

This report is available in the X-Mode only.

11/19/2024	TUE	15:57
X1 REPORT		

MINIMUM STOCK		
#1: GROUP 01		
PLU20		
CNT		-25
PLU21		
CNT		-15

TOTAL		50
CLERK 02	000062	00000

Open Table

This operation allows access to the check file (*if used*) that is located in the register. This report is available in the **X** mode or **Z** mode, **Daily (X1 or Z1)** Reporting.

Issuing the open table report in the X-Mode will print a list of any open checks stored in the register. This is helpful for determining which checks are still open in the ECR so they can be recalled and finalized in the REG mode.

Issuing the open table report in the Z-Mode will print and clear the list of any open checks stored in the register.

1. Turn the Mode Switch to the **X** position; Press **CASH** to display the X-MODE.
2. From the **X-MODE** menu, press **8** and **CASH**; the OPEN TABLE report selection screen is displayed:
3. Press **1** and **CASH** to initiate (*print*) the report.

```
OPEN TABLE
1 . DAILY (X1)
- PAGE 1 / 1 -
```

Open check number and balance.

Clerk responsible for the check.

```
11/20/2024 WED 11:29
X1 REPORT 00002
-----
OPEN TABLE
CHECK : 3 $24.07
MOLLY
CHECK : 4 $45.42
KELLY
CHECK : 5 $24.50
RICHARD
CHECK : 6 $28.33
DANIEL
CLERK 01 000026 00000
```

EJ – (Electronic Journal)

An electronic journal feature is available on the NR-500E Series. 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 "S-Mode Programming" chapter on page 136) and activate the journal and set related journal capture options (see page 210 for “EJ” options) in the “Program Mode Programming”, “Options Programming” chapter. Use this program to print all or selected parts of the journal memory.

Note: This program will not clear the electronic journal, to reset the EJ see “RESET E.J” in the “Z-MODE” on page 105 for details.

1. Move to the “X” Mode Switch position; Press **CASH** to display the X-MODE menu screen. Press **1** and **CASH** to access the **X REPORTS**.
2. From the **X REPORTS** menu, press **9** and **CASH** to display the electronic journal menu:

```
      EJ
1 . ALL           ←
2 . CASH
3 . CHECK
4 . CHARGE
5 . PERCENT
6 . RA / PO
      - PAGE 1 / 3 -
```

```
      EJ
7 . RETURN       ←
8 . ERR CORR . / VOID
9 . NOSALE
10 . CANCEL
11 . NEGATIVE
12 . RESET REPORT
      - PAGE - 2 / 3
```

```
      EJ
13 . VOID MODE   ←
14 . TRAINING
15 . BY CLERK
16 . BY DATE
17 . BY RCPT NO .
18 . BY LINE
      - PAGE - 3 / 3
```

3. Press the (↑) key and the (↓) key to select menu category and press the **CASH** key to confirm. You can also use the (**Page**↑) key and (**Page**↓) key to go to the next page or previous page.

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

Overview

Use the Service Mode (S-Mode) to perform secure operations. The **S** position (*Service Mode*) is not labeled on the mode switch; it is one position clockwise from the **PGM** position. The key marked with a “**C**” allows access to this position.

Further protection may be enabled by requiring a password for access to the Service Mode (S position). See System Options programming on page 200 (system options 35 & 44) for details.

The service mode on the NR-500E series provides self-test operations, back-up functions of all reports and PGMS, port device settings, and key assignment. Moreover, you could initialize the memory to factory default and reallocate memory.

The following procedures are available from the **Service Mode** Operations menu.

- ◆ **Self-Tests** – Includes test for Batch Tests, Printer, Display, Keyboard, I/O devices, RTC (**R**ea**T**-**T**ime-**C**lock).
- ◆ **Memory Clear** – For clearing all or specified totals, the entire PLU file, or PLUs with no activity (Clear Non-Mover).
- ◆ **Allocation** – Set parameter for memory fields.
- ◆ **Function Key Assignment** – Assigns function and PLUs to the keyboard.
- ◆ **Define Port** – Use to define peripheral devices connected to the serial port and USB.
- ◆ **ECR Setup** – View the Flash ROM information, adjust the printing density for the internal printer, adjust the contrast for the LCD display, and define the network settings if utilized.
- ◆ **Program Backup** – Use to back up programming, reports, loading images and updating the Flash ROM for the ECR.
- ◆ **Help Menu** – The help menu prints out Menu Operation keys (*function keys used for program navigation*). The Function key list and the character code table can also be printed from this menu.

Note: The **CHARGE**, **CHECK**, **CLERK#** and **PAID OUT** keys are used for navigating through the **X – Z – P** and **S-Mode** screens and *should not* be reassigned. These key locations revert to their navigation operations, Cursor ↓ ↑ ← when used in the X – Z – P and S-Mode.

Accessing Service Mode Functions

To access the service mode functions you will need to have the “C” key in the Mode Switch.

1. Turn the mode key to the **SERVICE MODE** to display the **SERVICE MODE** menu.

```
SERVICE MODE
1.SELF TEST      ←
2.MEMORY CLEAR
3.ALLOCATION
4.KEY ASSIGN
5.DEFINE PORT
6.ECR SETUP
  -PAGE 1/2-
```

```
SERVICE MODE
7.PROGRAM BACKUP ←
8.HELP MENU
  -PAGE 2/2-
```

2. Press the (↑) key and the (↓) key to navigate to the desired menu selection and press the **CASH** key to confirm and access your selection. You can also use the (**Page**↑) key to go to the next page and use the (**Page**↓) key to go back to the previous page.

Self Test

Various components of the NR-500E Series are tested by using this program. An explanation of each test is described in the “Self-Test Operations” chart on page 133.

1. From **SERVICE MODE** menu press **1** and **CASH** to display the SELF TEST menu selections.

```
SELF TEST
1.BATCH TEST    ←
2.PRINTER
3.DISPLAY
4.KEYBOARD
5.INTERFACE
6.RTC
  -PAGE 1/1-
```

2. Press the (↑) key and the (↓) key to navigate to your desire operation, press the **CASH** key to confirm. Alternatively, you can Press the digit representing the test you wish to perform, then press **CASH**.

Self-Test Operations

Operation	Selections	Description
1. Batch Test		Runs a series of hardware tests; Some tests require additional equipment or inputs from operator.
2. Printer	1. Print Test	Prints the printer test pattern. After printing, The drawer is opened. Then the printer test is finished. Press the 'CLEAR' key to return to SELF TEST menu.
	2. Reverse Image	Prints a test receipt image in reverse.
	3. Endless Print	Prints a test transaction continuously, press clear to exit the test.
	4. Barcode Test	Prints a Test Barcode.
	5. Make Barcode	Print a barcode for numeric entry up to 13 digits.
3. Display	1. LCD Test	Runs the LCD Tests. Press the 'CASH' key 2 times to finish LCD TEST. Press the 'CLEAR' key to return to SELF TEST menu.
	2. Contrast Test	Performs the Contrast Test.
4. Keyboard	1. Keyboard Test	Allows keyboard test – Press any key you want on the keyboard. The key name of the key pressed will be shown on the LCD. Press the 'CLEAR' key to return to SELF TEST menu.
	2. Mode Key Test	Mode test – turn mode Turn the mode switch to any position. The corresponding Mode name will be shown on the LCD. Press the 'CLEAR' key to return to SELF TEST menu.
5. Interface	1. Port 1	Port tests require a Loop-Back connector be attached to the port for testing. Press '1' and 'CASH' to select SERIAL 1. Press '2' and 'CASH' to select SERIAL 2. Press '3' and 'CASH' to select SERIAL 3. If an error occurs, the message “ ** NG ** ” is displayed on LCD and the Buzzer beep. Press the 'CLEAR' key to return to SELF TEST menu.
	2. Port 2	
	3. Port 3	
	4. Drawer	Press 'CASH' to Kick the drawer, close the drawer to repeat test; press 'CLEAR' to exit the test and return to SELF TEST menu.
	5. USB Host	Insert USB drive to run test. If USB is OK, “ ** OK ** ” message will be displayed. Press the 'CLEAR' key to return to SELF TEST menu.
	6. External SD	Insert SD Card to run test. If EXTERNAL SD card is OK, “ ** OK ** ” message will be displayed. Press the 'CLEAR' key to return to SELF TEST menu.
	7. Micro SD	Insert Micro SD to run test. If MICRO SD card is OK, “ ** OK ** ” message will be displayed. Press the 'CLEAR' key to return to SELF TEST menu.
	8. Ethernet	Requires Ethernet connection to run test.
6. RTC	1. RTC Set	<i>Real Time Clock</i> Set – to set the Date & Time on the ECR.
	2. RTC View	<i>Real Time Clock</i> View – view the current Date & Time setting.

Memory Clear

Before you use your NR-500E Series 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. Go to “Clearing RAM Memory” on page 33 to complete this procedure.

From the Service Mode menu, you can clear selected areas of memory without Clearing RAM Memory entirely.

1. From **SERVICE MODE** menu press **2** and **CASH** to display the **MEMORY CLEAR** screen.

```
MEMORY CLEAR
1 . CLEAR TOTAL  ←
2 . CLEAR GRAND
3 . CLEAR PLU
4 . CLEAR PRICE=0
5 . EDIT COUNTERS
6 . NON MOVER CLR
- PAGE 1/1 -
```

2. Press the (↑) key and the (↓) key to navigate to the operation you want to perform, press the **CASH** key to confirm.
3. For Example, To **CLEAR TOTAL**, press **1** the **CASH**. The screen asks: ARE YOU SURE?

```
CLEAR TOTAL
ARE YOU SURE?
Y=CASH N=CLEAR
```

4. Press the **CASH** key for **YES**; pressing the **CLEAR** key for **NO** will exit without clearing.
5. The message "ALL TOTAL CLEAR" is printed and the screen returns to the **SERVICE MODE** menu.

Clear Totals

This selection clears all totals and counters, including the grand total.

Clear Grand Total

This selection clears only the grand total.

Clear PLU File

This selection clears the entire PLU file, including totals, counters and programming.

Clear Price=0

This selection clears the PLUs programmed with zero price.

Edit Counters

This selection allows for editing of some of the ECR counters and totals.

1. From the **SERVICE MODE** menu press **2** and **CASH** to display the **MEMORY CLEAR** screen.
2. Press the (↑) or (↓) keys to navigate to the **EDIT COUNTERS** selection or simply press the number **5** key and press the **CASH** key. The confirmation dialog displays.

```
EDIT COUNTERS
ARE YOU SURE?
Y=CASH N=CLEAR
```

3. Press the **CASH** for **YES**; pressing **CLEAR** will exit the Edit Counters area.
4. Each counter category will display sequentially beginning with the Z Counter. The current Z Counter value is displayed.
 - Enter a new **Z COUNTER** value; Press **CASH** to advance to the next entry.
 - Enter a new value for the **RECEIPT #**; Press **CASH** to advance to the next entry.
 - Enter a new value for the **GRAND TOTAL**; Press **CASH** to advance to the next entry.

```
EDIT COUNTERS
Z COUNTER          11
RECEIPT #          23

GRAND TOTAL
                   100.00
TRAIN GRAND TTL
                   0.00
```

- Enter a new value for the **TRAIN GRAND TTL**, Press **CASH**. You are returned to the main Memory Clear screen.
5. Press **CLEAR** to return to the main S-Mode Selections.

Clear Non Mover

This selection searches the entire PLU file for items that have no activity, including totals, counters and programming.

1. From the **SERVICE MODE** menu press **2** and **CASH** to display the **MEMORY CLEAR** screen.
2. Press the (↑) or (↓) keys to navigate to the **NON MOVER CLR** selection or simply press the number **6** key and press the **CASH** key. The confirmation dialog displays.

```
NON MOVER CLR
ARE YOU SURE?
Y=CASH N=CLEAR
```

3. Press the **CASH** for **YES**; pressing **CLEAR** will exit without clearing.

Memory Clear Receipt Example

```

THANK-YOU
CALL AGAIN
12/04/2025  THU                17:37
*****
      MEMORY ALL CLEAR OK
*****
MEMORY ALLOCATION
  RAM 4Mbits
RAM  1 OK
RAM  2 NG
TTL AVAIL : 327680 Bytes
TTL USED  : 186782 Bytes
=====
      VERSION INFORMATION
=====
MODEL      : NR-500
VERSION    : USA 05.001
CHECKSUM   : 7FFB
BOOT/APP   : CFCA/B031
PLU USED   : 60/1000
VER. DATE  : 2025.08.14
MAC ADDRESS : 01.99.9A.11.68.32

CLERK 00          000001    00000
```

Memory Allocation

The memory allocation program determines how memory is divided to support each category. The NR 500 series ECR's now have the capability to use an SD card to store PLU and EJ data (*requires firmware v4.044S or later*). When the register is RAM Cleared, the option will display "SAVE PLU ON ECR?"

Y=CASH (normal operation) N=CLEAR (will use the SD card to store PLUs and EJ data). Using the SD card allows the registers memory allocation to be set to the maximum of 8000 PLUs and 30,000 EJ lines.

If the SD options is selected, the register will need an SD card installed even to perform the Clearing RAM Memory procedure discussed on page 33 in the Getting Started chapter.

Edit Memory Allocation

When editing the allocation settings for a live installation, be sure to backup up your program before editing the memory allocation. You may also want to run all Z reports before editing or save reports to SD. Changing allocation settings will lose all current programming & reports data.

Note: As a best practice, **Clear RAM Memory** before changing allocation settings. You must step through each memory allocation field to implement new memory allocation. If you press CLEAR at any entry field, the editing of the memory allocation processes will be aborted without applying any changes to the current allocation settings.

1. From **the SERVICE MODE** menu press **3** then press **CASH** to display the ALLOCATION screen. The first memory allocation option PLU # displays.

```
ALLOCATION
PLU #
(60-8000)
1000
BYTES REMAINING 64747 BYTES
```

2. Starting at the PLU # field, enter the quantity for each memory allocation field.
 - The Minimum/Maximum values are indicated for each allocation setting.
 - After each entry, the Bytes Remaining is updated & displayed.
 - Press **CASH** to enter/set the value for the allocation field and to advance to the next field.
 - Continue filling each allocation field until completion.

```
PLU #
(60-8000)
CLERK #
(1-99)
GROUP #
(1-99)
PRICE LEVEL #
(1-2)
MIX & MATCH #
(1-100)
EJ LINE #
(1-30000)
CHECK #
(1-500)
CHECK LINE #
(1-100)
CHECK TYPE
SOFT (0) / HARD (1)
```

3. Press **CASH** after setting the last field, "CHECK TYPE" The screen will display "ARE YOU SURE ?".

```

ALLOCATION
ARE YOU SURE?
Y=CASH N=CLEAR
BYTES REMAINING 64747 BYTES

```

4. Press the **CASH** for **YES**. The memory allocation will be rewritten; any previous programming will be lost and the new allocation settings will be printed at the receipt. Pressing **CLEAR** for **NO** will exit without reallocating memory.
5. If the allocation settings fit within the available memory, the memory allocation will print with the message **MEMORY ALLOCATION OK**. If the allocation settings are too large for the available memory, the receipt will print.

```

= AFTER =
TTL AVAIL : ##### Bytes
TTL USED : ##### Bytes
MEMORY ALLOCATION SIZE OVER

```

Memory Allocation Specifications

ALLOCATION ITEM	DEFAULT	MAXIMUM
PLU	1000	3200 (8000 using SD storage.) (Each PLU uses 30 bytes.)
CLERK	10	99 (Each clerk uses 8446 bytes.)
GROUP	10	99 (Each group uses 55 bytes.)
PRICE LEVEL	1	2 (Choosing 2 price levels uses 7204 bytes.)
MIX AND MATCH	20	100 (Each M&M uses 55 bytes.)
EJ LINE	1000	15000 (30000 using SD storage.) (Each line uses 7200 bytes.)
CHECKS	10	50 (soft check) 225 (hard check) (Each soft check uses 6301 bytes.) (Each hard check uses 1405 bytes.)
SOFT CHECK LINES	50	100 (Each check line uses 7200 bytes.)
CHECK TYPE SOFT(0) / HARD(1)	0 (Soft Check)	1 (Hard Check) (Note: Selecting Soft Check uses 239904 bytes.)

Note: Maximum settings indicates the maximum possible allocation setting for the category. The actual values allowed will depend on all other allocation settings.

You cannot set all of the allocation areas to the Maximum setting all at the same time, doing so will result in the error "Memory Allocation Size Over".

Memory Allocation Receipt Example

```

THANK-YOU
CALL AGAIN
10/24/2024  THU           12:37

=====
      MEMORY ALLOCATION
=====
- ALLOCATED PLU IS       : 1000
- ALLOCATED CLERK IS    : 10
- ALLOCATED GROUP IS   : 10
- ALLOCATED LEVEL IS   : 1
- ALLOCATED M&M IS     : 20
- ALLOCATED EJ LINE IS : 1000
- ALLOCATED CHECK IS   : 5
- ALLOCATED CHECK LINE IS: 50
- CHECK IS :SOFT (0), Hard (1):0
TTL AVAIL : 327680 Bytes
TTL USED  : 298585 Bytes
      MEMORY ALLOCATION OK

CLERK 00           000001  00001
```

Function Key Assignment

Any programmable key location may be reprogrammed with a function from the list of available functions on page 141 of this manual. The default program installs the functions as they are shown with the standard key legends.

To see the default keyboard layout, refer to the “Keyboards” chapter on page 29.

-
- **When in the key assignment program pressing SUBTOTAL will print the Function Key Code list.**
 - **The Function Key Code list can also be printed from the S-Mode Help Menu.**
-

To change the function key assigned on a specific key location.

1. At the **SERVICE MODE**, press **4** and **CASH** to access Key Assignment programming.
The **KEY ASSIGNMENT** screen displays.

```
KEY ASSIGN                                000
[HELP]
■ENTER FUNCTION KEY CODE
■PRESS FUNCTION KEY TO
SAVE
■REPEAT OR [CASH] TO END
■[SUBT] : CODES
[CASH] : END
```

2. Enter the **Key Code** from “*Function Key Codes*” on page 141, then press the **Key Location** where you want the key assigned.
3. Press **CASH** to save the changes you have made and to return to **SERVICE MODE**.
4. The printer will print out a receipt showing all the changes made to the keyboard.

Notes:

-
- **NUMERIC KEYS (0-9, 00), CLEAR, and CASH** cannot be removed from the keyboard unless they have been assigned to a new keyboard location. This protects the programmer from accidentally removing keys that are required for register programming and operations.
 - **CHARGE(↑)** and **CHECK (↓)** keys are used for navigation throughout the **X – Z – P** and **S-Mode** operations and *should not* be reassigned. These key locations revert to their navigation operations, (↑) and (↓) when used in the **X – Z – P** and **S-Modes**.
 - 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.
-

Function Key Codes

Code	Function
001~300	NLU 1~NLU 300
301~309	Numeric 1~9
310	ZERO
311	DOUBLE ZERO
312	DECIMAL
313	#/NS
314	%1
315	%2
316	%3
317	%4
318	%5
319	X/TIME (Print Screen)
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
332	CHECK CASH
333	CHECK ENDORSE
334	CLEAR
335	CLERK#
336	CONV. 1
337	CONV. 2
338	CONV. 3
339	CONV. 4
340	ERR CORRECT
341	F/S SHIFT
342	F/S SUBTOTAL
343	F/S TEND
344	PLU #

Code	Function
345	PRICE LEVEL 1
346	PRICE LEVEL 2
347~356	MACRO1 ~ MACRO10
357	MDSE RETURN
358	MODIFIER 1
359	MODIFIER 2
360	MODIFIER 3
361	MODIFIER 4
362	MODIFIER 5
364	PO 1
365	PO 2
366	PO 3
367	PAPER FEED
368	PROMO
369	RA 1
370	RA 2
371	RA 3
372	SUBTOTAL
373	SCALE
374	TARE
375	TAX EXEMPT
376	TAX SHIFT 1
377	TAX SHIFT 2
378	TAX SHIFT 3
379	TAX SHIFT 4
380	VOID ITEM
381	WASTE
382	VALIDATION
383	PRICE INQUIRY
384	RECEIPT ON/OFF
386	ALPHA TEXT
387	AUTO CASH 1
388	AUTO CASH 2
389	AUTO CASH 3
390	AUTO CASH 4
391	AUTO CASH 5
392	AUTO CASH 6
393	AUTO CASH 7

Code	Function
394	AUTO CASH 8
395	AUTO CASH 9
396	CLERK 1
397	CLERK 2
398	CLERK 3
399	CLERK 4
400	CLERK 5
401	CLERK 6
402	CLERK 7
403	CLERK 8
404	CLERK 9
405	CLERK 10
406	CHARGE #
407	HELP
408	MACRO #
409	PRICE CHANGE
410	STOCK INQUIRY
411	KEY SHIFT 1
412	KEY SHIFT 2
413	KEY SHIFT 3
414~415	RESERVED
416	EMV TIP
417~443	RESERVED
444	EAT IN
445	TAKE OUT
446	DRIVE-THRU
447	CHECK #
448	GUEST #
449	P\BAL
450	PRINT CHECK
451	SERVICE
452	TABLE #
453	TIP
454	CHECK SPLIT
455~457	Reserved
458	INACTIVE

Define Port

There are three RS-232C serial ports available: one DB9 and two RJ45 serial ports. There is also one USB A-Type v2.0 Full-Speed port. The port option settings here are used define the device and communication protocol settings for peripheral devices connected to each port. You can also print a port scan from the Define Port programming.

1. At the **SERVICE MODE**, press **5** and **CASH** to access the Define Port programming. The port selection screen displays.

```
      DEFINE PORT
1 . PORT 1      ←
2 . PORT 2
3 . PORT 3
4 . USB TYPE
5 . SCAN
```

- PAGE 1 / 1 -

2. Press the (↑) key and the (↓) key to navigate to your selection or enter the number value for your selection. Press **CASH** to confirm and access the selection.

Serial Port 1~3 Settings

Three RS-232C serial ports are available for connecting peripheral devices.

- Port 1 is a DB9F connection.
- Port 2 & Port 3 are RJ45 serial connections.

1. At the **SERVICE MODE**, press **5** and **CASH** to access DEFINE PORT.
2. At the **DEFINE PORT** screen, Enter the digit (1-3) corresponding to the serial port you wish to program. The appropriate **PORT PROGRAM** screen displays.

```
      PORT 1
1 . BAUD RATE      [ 9600 ]
2 . PARITY         [ NONE ]
3 . DATA BITS     [ 8BITS ]
4 . STOP BITS     [ 1BIT ]
5 . DEVICE         [ NONE ]
6 . PRINTER       [ NONE ]
7 . DISPLAY       [ EPSON ]
8 . SCALE         [ NCI ]
9 . KP START LINE [ 0 ]
10 . KP END LINE  [ 7 ]
11 . SLIP START LINE [ 0 ]
```

3. Press the (↑) key and the (↓) to navigate to the parameter you want to edit or enter the number value for parameter setting. Press **CASH** to confirm and access the parameter setting.
4. Enter the desired option value and Press **CASH** to enter the value and return menu. Continue editing additional parameter settings as necessary.
5. Press the **CLEAR** key to finalize and return to the DEFINE PORT screen.

Serial Port Program Notes

Option	Description
BAUD RATE	Select 1200, 2400, 4800, 9600, 19200, 38,400, 57,600, or 115,200 from the screen. (9600 is default.)
PARITY	Select NONE, EVEN or ODD. (NONE is default.)
DATA BITS	Select 8 or 7 from the screen. (8 is default.)
STOP BITS	Select 1 or 2 from the screen. (1 is default.)
DEVICE FUNCTION	Select NONE, PC, PRINTER, *SCANNER, POLE, SCALE, EFT, DATATRAN, REMOTE JOURNAL, LIQUOR. (NONE is default.)
PRINTER TYPE	If Device Function = Printer; Select the printer type connected to this port: NONE, SAM4s 3 INCH, SAM4s 2 INCH, CITIZEN 3550, CITIZEN 810SLIP, EPSON TM-T88II, EPSON TM-U295SLIP, STAR SP-200, STAR SP-298SLIP, TM-U200/U300. (Default is NONE.)
DISPLAY	If Device Function = Display; Select the pole display type connected to this port: EPSON, ICD, SAM4s. (Default is EPSON.)
SCALE	If Device Function = Scale; Select the scale type connected to this port: NCI, CAS, OZ. (Default is NCI.)
KP START LINE (0-20)	Enter the number of KP START LINE.
KP END LINE (0-20)	Enter the number of KP END LINE.
SLIP START LINE (0-20)	Enter the number of SLIP START LINE.

*The register will work with lower power USB scanners, but not the Metrologic/Honeywell. The Metrologic/Honeywell scanners can be used with the serial connection, they will require the DB9 to RJ45 adaptor and the power supply.

USB Type Setting

- At the **SERVICE MODE**, press **5** and **CASH** to access **DEFINE PORT**. From the **DEFINE PORT** screen, press **4** and **CASH** for **USB TYPE**.
- Press the (↑) key and the (↓) key to select USB type and press the **CASH** key to confirm.

```

      USB TYPE
    DEVICE:  MEMORY
      MEMORY ←
  
```

Note: If you select other types, Your NR-500E series will be rebooted by itself.

USB Selections

USB TYPE		USB VERSION	SPEED
PC-COM	For connecting PC	-	-
SCANNER	For using USB scanner	USB 2.0 (only HID type)	FULL SPEED only
MEMORY	For backup & restore	USB 2.0	FULL SPEED

Port SCAN

The Port Scan will print out the current settings for each of the three RS-232C serial ports and the current USB Type selection.

- At the **SERVICE MODE**, press **5** and **CASH** to access **DEFINE PORT**. From the **DEFINE PORT** screen. Press the **5** and **CASH** to print the current settings for **Ports 1-3** and the **USB TYPE DEVICE**.

ECR Setup

The ECR Setup programming allows you to view the current version information, adjust printing density and the LCD display contrast and configure the network settings.

1. From **SERVICE MODE**, press **6** and **CASH**; the ECR SETUP screen displays.

```
ECR SETUP
1.ROM INFO      ←
2.PRINT DENSITY
3.LCD CONTRAST
4.SET NETWORK

- PAGE 1 / 1 -
```

2. Press the (↑) key and the (↓) key to navigate to the operation you wish to perform. Press **CASH** to confirm and access your selection.

ROM INFO

This selection displays the version information, check sum and date of the Flash ROM. You may be asked to check your Flash ROM version if you contact your dealer for assistance.

1. From the **ECR SETUP** menu, press **1** and **CASH** key for **ROM INFO**.
2. The version information is printed, press **CLEAR** key to return to the **SERVICE MODE** menu.

```
          To Thank-You
          Call Again
02/02/2022  WED                13:48
=====
          VERSION INFORMATION
=====
MODEL      : NR-500E
VERSION   : USA 04.055
CHECKSUM  : A868
BOOT/APP  : CFCA/D8A1
PLU USED  : 111/1000
VER DATE  : 2021.10.06
MAC ADDRESS : 01.99.9A.11.68.32

CLERK 02                000134  00000
```

Print Density

To adjust the darkness of the print on receipts and reports.

1. From **ECR SETUP** menu, press **2** and **CASH** to access the '**PRINT DENSITY**' screen:

```
          PRINT DENSITY

(DENSITY LEVEL : 1-3) : 2

UP      : CURSOR UP
DOWN    : CURSOR DOWN
END     : CASH
```

2. Press the (↑) key and the (↓) key to increase or decrease the **Print Density Level**. Press **CASH** to confirm the density level and return to the **ECR SETUP** menu.

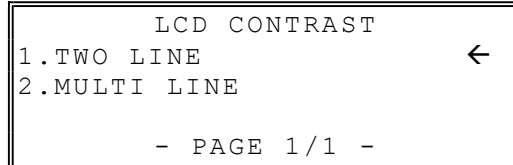
LCD Contrast

The NR510 Series ECR has an adjustable 192 x 64 graphic blue backlit LCD operator screen, and a two Line x 16 Character Backlit LCD Customer Turret Display. The contrast for both displays may be adjusted. There are separate contrast adjustments for the operator display and for the customer's display.

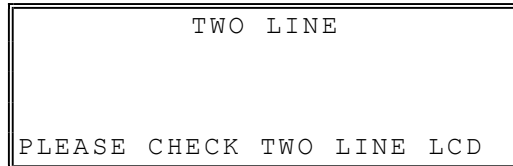
Customer LCD Contrast

To adjust the contrast on the rear Two-Line 16-Character LCD (Customer Display).

1. From **ECR SETUP** menu, press **3** and **CASH** to access the 'LCD CONTRAST' selection screen.



2. Press **1 CASH** to select the **TWO LINE** Customer Rear Display.

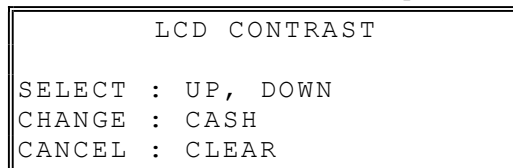


3. With the message Please Check Two Line LCD displayed, press the **CHARGE** (↑) key to make the Customer LCD Brighter and the **CHECK** (↓) key to make the Customer LCD Darker.
4. Press **CASH** to save changes and return to the **ECR SETUP** menu. Pressing **CLEAR** will exit without saving.

Operator LCD Contrast

To adjust the contrast on the Multi Line LCD (Operator's Display).

1. From **ECR SETUP** menu, press **3** and **CASH** to program 'LCD CONTRAST' screen.
2. Press **2 CASH** to select the **MULTI LINE** LCD (Operator's Display).



3. On the LCD Contrast screen press the **CHARGE** (↑) key to make the Operator's LCD Brighter and the **CHECK** (↓) key to make the Operator's LCD Darker.
4. Press **CASH** to save changes and return to the **ECR SETUP** menu. Pressing **CLEAR** will cancel and exit without saving the adjustment settings.

Note: The LCD Contrast may also be adjusted from the X-Mode: LCD Contrast

Set Network

Used only when setting up DC Direct Integrated Payment. Refer to the DC Direct supplement for details. There is a knockout access for the LAN port on the case but no LAN Port on the Main Board.

1. From the **ECR SETUP** menu, press **4** and **CASH** to access the **SET NETWORK** selections.

```
SET NETWORK
1.USE DHCP
2.ECR IP
3.ECR SUBNET
4.ECR GATEWAY
5.SERVER IP
6.SERVER PORT
7.ETHERNET USE
  • MANUALLY OFF
  • MANUALLY ON
  • ALWAYS ON
```

2. Enter the Network settings for the ECR.

```
SET NETWORK
1. USE DHCP
  ⇒ [Y] (When using DHCP, the ECR IP, SUBNET, and
    GATEWAY come from the router.)
2. ECR IP
  ⇒ [ ] (If not using DHCP, Enter the ECR IP address.)
3. ECR SUBNET
  ⇒ [ ] (If not using DHCP, Enter the SUBNET MASK IP for the ECR)
4. ECR GATEWAY
  ⇒ [ ] (If not using DHCP, Enter the GATEWAY IP for the ECR.)
5. SERVER IP
  ⇒ [ ] (This is NOT USED.)
6. SERVER PORT
  ⇒ [8080] (For connecting to PAX Devices)
  ⇒ [80] (For connecting to Ingenico Devices)
7. ETHERNET USE
  ⇒ [MANUAL OFF] (Additional selections are MANUALLY ON and ALWAYS ON.
```

Program Backup & Restore

Use this operation to back up and load (restore) program files, image files or save report data using an SD or USB memory device. Flash ROM updates may also be performed by SD card or through a serial connection to a connected PC.

NOTE: The SD Card port is located in the printer compartment. Remove the security screw to access the SD port. See “Inserting External SD Card” on page 20 for detail. SD Cards must be formatted for FAT32. The NR-500E Series ECR’s can support up to 16GB SD cards.

USB Port is located on the connection panel on the right-hand side of the ECR. The USB port must be assigned for the “Memory” function to be used for backup utilities. See “USB Setting” on page 143.

1. From **SERVICE MODE**, press **7** and **CASH** the PROGRAM BACKUP screen displays.

```
PROGRAM BACKUP
1.SD          ←
2.USB
- PAGE 1 / 1 -
```

2. Press the (↑) key and the (↓) key to select SD or USB (or press #1 or #2 key). Press **CASH** to confirm your backup device selection.

SD

The following SD Backup and Restore functions are available.

```
SD
1.PGM BACKUP
2.PGM RESTORE
3.REPORT SAVE
4.IMAGE SAVE
5.IMAGE LOAD
6.BOOT UP SD (AVAILABLE ON SD ONLY)
7.BOOT UP COM (AVAILABLE ON SD ONLY)
```

USB

The following USB Backup and Restore functions are available.

```
USB
1.PGM BACKUP
2.PGM RESTORE
3.REPORT SAVE
4.IMAGE SAVE
5.IMAGE LOAD
```

Read Carefully: Store Name Notes

The store name you set on “Store name” in the “System Options” is used to identify program and report data on the SD card. Note that the default store name is “STORE001”. The Store Name field is 8-characters in length, when changing the Store Name, always use an 8-character store name.

If you are using the SD Card to move information to a PC or use the program or report data with the PC Utility, you must pay close attention to the store name. Do not use characters such as “-” or “/” that cannot be used in naming a folder on your PC. If you use such a character in your store name, you will not be able to read the files on your PC.

Note: Using an SD Card or USB Memory for the First Time . . .

SD Card Notes: SD cards/USB memory must be formatted as FAT32.

You Must use SD or SDSC memory cards.

SD or SDSC (Secure Digital Standard Capacity): maximum storage of 2 GB

We cannot use SD Cards:

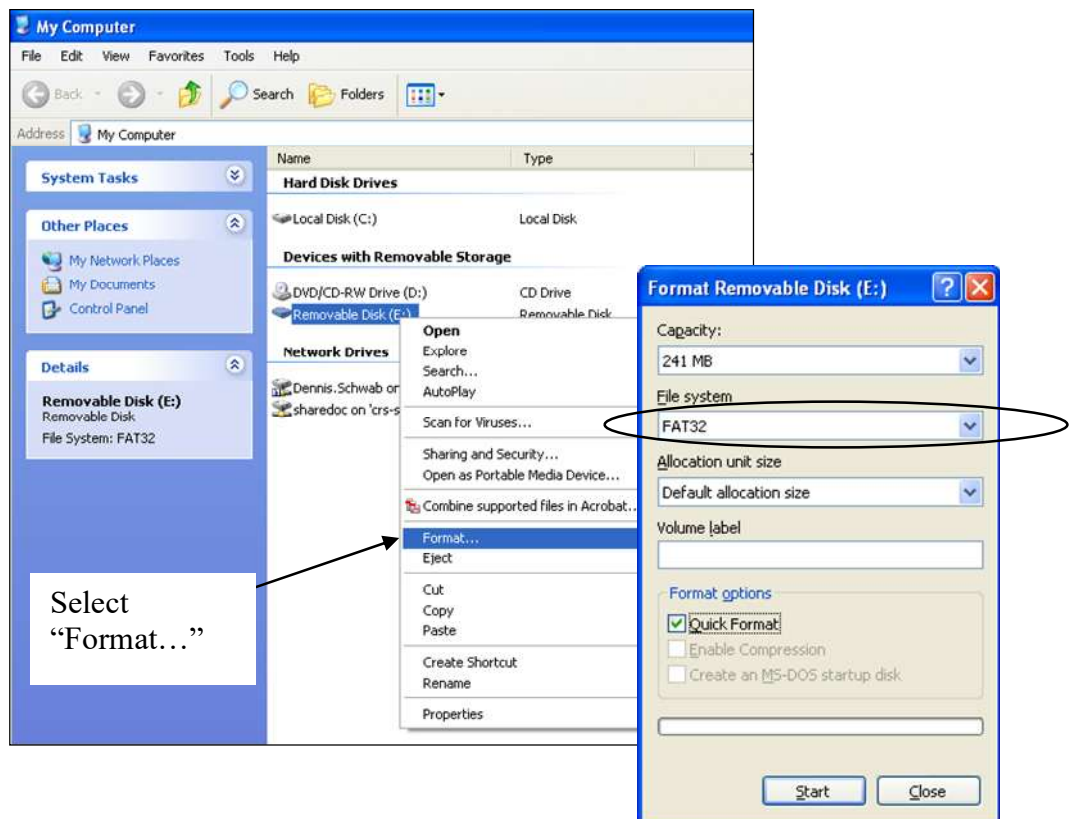
SDHC (Secure Digital High Capacity): More than 2 to 32 GB of storage

SDXC (Secure Digital Extended Capacity): More than 32 GB to 2 TB of storage

SDUC (Secure Digital Ultra Capacity): More than 2 to 128 TB of storage

CAUTION: Formatting the SD card will clear all data on the SD card and prepare it for use.

1. Start Windows Explorer.
2. Select the SD card drive, right click and select **Format**. (Win XP screen shown; slightly different procedures are used with different operating systems.)
3. From the **Format** dialog you must select the **File System: FAT32**.



Program Backup

It is a good practice to make note of the memory allocation settings when backing up a program file so that it can be re-entered before restoring the program.

Enter an **8-character store name** in **System Option #39** for the store you want to create on your memory device.

1. Insert an **SD card** in the register's **SD slot** (located in the printer compartment) or connect a **USB drive** in the **USB port** (located on the right side connection panel).
2. Move the mode switch key to the **SERVICE MODE**.
3. From the Service Mode menu, select “**7. PROGRAM BACKUP**”. Press **CASH**.
4. The **PROGRAM BACKUP** menu displays.

```
PROGRAM BACKUP
1 . SD          ←
2 . USB
```

5. From the PROGRAM BACKUP menu select “**1.SD**” or **2. USB**. Press **CASH** to display the menu.

- The following functions are available:

```
1 . PGM BACKUP
2 . PGM RESTORE
3 . REPORT SAVE
4 . IMAGE SAVE
5 . IMAGE LOAD
6 . BOOT UP SD (AVAILABLE ON SD ONLY)
7 . BOOT UP COM (AVAILABLE ON SD ONLY)
```

6. From the USB or SD menu select “**1. PGM BACKUP**”.

- The NR-500E Series will write the program files to the folder.
NR-500E\STORENAME\PGMBACK

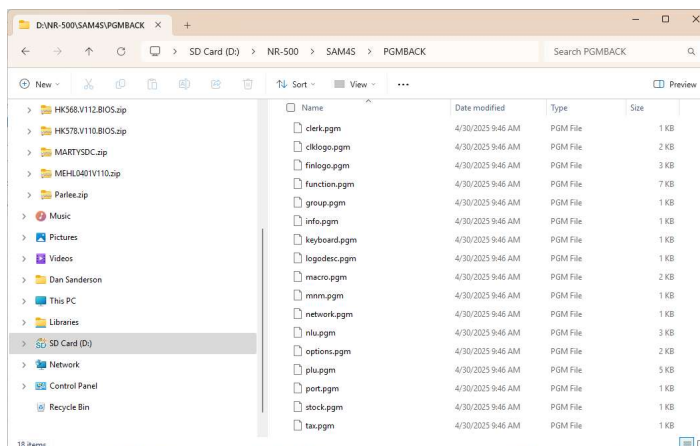
7. After a short pause, the register will display confirmation of the successful backup with the message “SUCCESS !”. Below is an Explorer view of the backed-up files.

Example Program Backup File

The NR-510 will write the backed-up program files to the selected removeable memory device to the folder:
SD:\NR-510\STORENAME\PGMBACK

Below is a File Explorer view of the backed-up files. In the example below, the store name is “SAM4S”.

Note: You can edit this store name as desired. See System Options programming page 200 for more information about the store name.



Restore Program

Programs saved to an SD Card can be restored to the same ECR or to 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 firmware version of 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.
 - **The memory allocation on the register must be set the same or higher as the memory allocation settings in the saved program. Be sure to print out the memory allocation when backing up a program so that it can be re-entered before restoring the program.**
-

1. Enter the **Store Name** in System Option: #39, to match the store folder on your USB or SD Card that you wish to restore.
2. Insert the SD card in the register's SD slot (*located in the printer compartment*) or connect a USB drive on the USB port (*located on the back, connection panel*).
3. Move the mode switch key to the **SERVICE MODE**.
4. From the Service Mode menu, select **"7.PROGRAM BACKUP"**. Press **CASH**.
5. The "PROGRAM BACKUP" menu displays.

```
PROGRAM BACKUP
1 .SD          ←
2 .USB
```

6. From the PROGRAM BACKUP menu select **"1.SD"** or **"2.USB"**. Press **CASH**.
7. From the USB or SD menu select **"2.PGM RESTORE"**.

```
PGM RESTORE
1 .ALL
2 .SELECT
```

8. From the **PGM RESTORE** menu select.
 - Press **1 CASH** to restore **ALL** program files.
 - Press **2 CASH** to **SELECT** individual\specific program files to restore.

```
1 .PLU
2 .GROUP
3 .TAX
4 .OPTIONS
5 .TIME OPN
6 .FUNCTION KEY
7 .CLERK
8 .DESCRIPTION
9 .FIN RPT LOGO
10 .CLK RPT LOGO
11 .STOCK
12 .MACRO
13 .MIX&MATCH
14 .NLU
15 .PORT
16 .KBD LAYOUT
```

9. After you make you selection, the ECR displays PLEASE WAIT... Then the register will display confirmation of the successful restoration with the message "SUCCESS !".
 - If the restore is unsuccessful, the register will print a "FAIL !" error message.
10. Press **CLEAR** until you return to the main Service Mode menu.

Saving Reports

You can choose to save the current X1 report data from the NR-510 to a USB or SD memory device by selecting the REPORT SAVE selection. Reports can be saved as ‘.CSV’ (*spreadsheet format*) or ‘.REP’ report format (*to view with the eSpresso PC utility*).

Report Backup Notes

- When backing up and restoring data, the store name must be programmed in the “System Options” of “Option Programming”. The default store name is: “STORE001”.
- The NR-500E Series will write the report files to a folder. For example:
SD:\NR-500E\ STORENAME\ SALEBACK\ CSVBACK\ DATE\ TIME
– *or* – SD:\NR-500E\ STORENAME\ SALEBACK\ REPBACK\ DATE\ TIME
- The date folder depends on the date format option. See “P-Mode Programming \ Options Programming \ System Options” to set the DATE FORMAT.

<u>DATE FORMAT</u>	<u>DATE FOLDER NAME</u>
YYMMDD	20140403
DDMMYY	03042014
MMDDYY	04032014

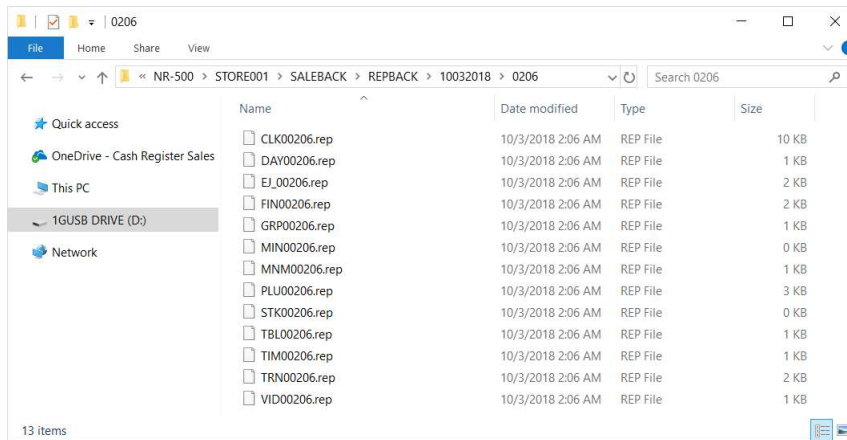
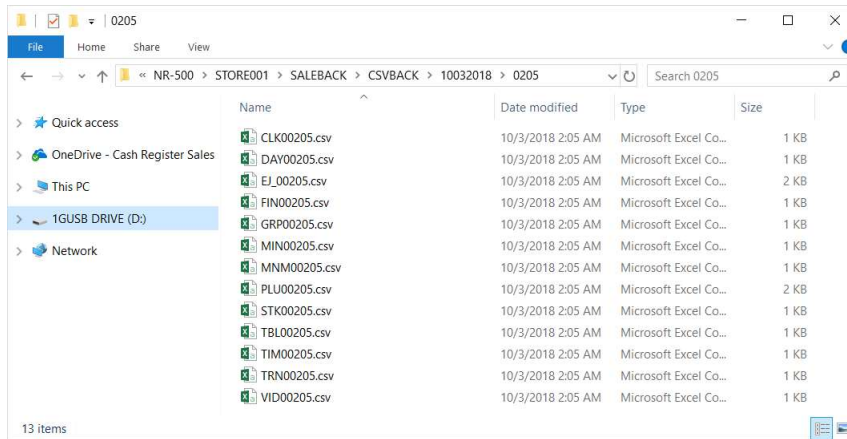
- Each individual report is named with the time the report was taken. For example, “CLK02332” represents a Clerk report taken at 23:32 (in a 24-hour time format.) In this manner, multiple reports backed up at different times in the same day will collect in the same “date” folder.

To Save Reports

1. Set an **8-character Store Name** in System Option: option #39, to identify the store folder on your memory device.
2. **Insert an SD card** in the register’s SD slot (*located in the printer compartment*) or connect a USB drive on the USB port (*located on the back connection panel*).
3. Move the mode switch key to the **SERVICE MODE**.
4. From the Service Mode menu, select “**7.PROGRAM BACKUP**”; Press **CASH**.
5. From the PROGRAM BACKUP menu select “**1.SD**” or “**2.USB**”; Press **CASH**.
6. From the SD or USB menu select “**3.REPORT SAVE**”; Press **CASH**.
7. Select type **1.CSV FORMAT** (Spreadsheet format) or **2.REP FORMAT** (for SAM4s eSpresso PC Utility format), Press **CASH**.
8. The register will display confirmation of the successful restoration with the message “SUCCESS !”. If the save is unsuccessful, the register will print an error message.

Saved Report Examples

Below is an Explorer view of the backed-up files save as a CSV file and as a REP file.




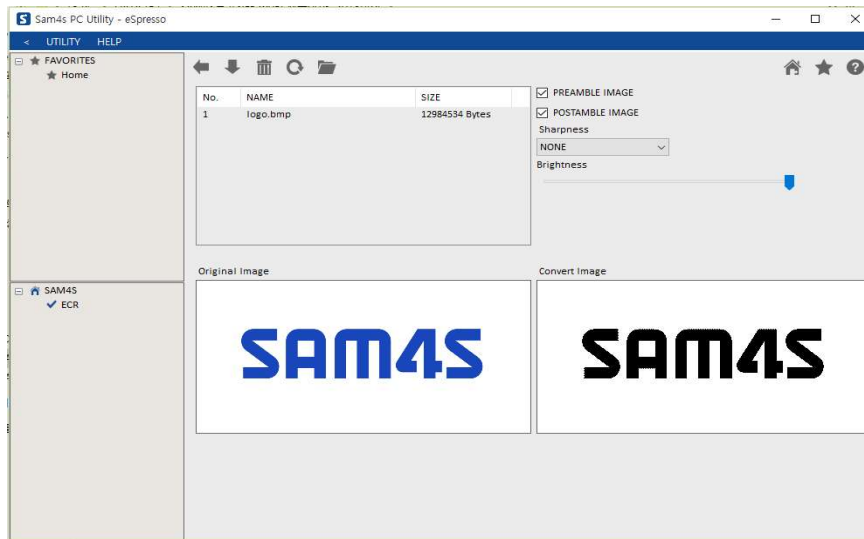
Save/Load Receipt Images



You can load a preamble and postamble image on your receipt or soft guest check. Before loading, the images must be converted by the SAM4s PC Utility to .img format. After conversion, they can be loaded directly by connecting a PC to the NR-500E Series 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 register, you must set the “LOGO Option” (Print preamble image / Print postamble image) of the “Options Programming” in the “Program Mode Programming” to activate the image printing.

Use the SAM4s PC Utility(eSprresso) to Convert the Image

1. Install the *eSprresso* on your PC and run it.
2. If you start the *eSprresso* for the first time, you must define the store and register, or if the store and register is already defined, you can select the store from the register list. The *eSprresso* program starts.
3. At the *eSprresso*, choose Image Logo from the Edit Program menu.
4. Click the **FILE OPEN**  button. Select the image file that you wish to use from the Open dialog and click the Open command button.
 - You can view the original and the converted image of a selected image.
 - You can change the properties of the image. (Sharpness and Brightness)
 - You can select the PREAMBLE IMAGE or POSTAMBLE IMAGE.



5. Click the **DOWN** () button. “Download completed” message is displayed.
6. If you want to save the converted image, Click the **SAVE** () button.
(Saved images are stored in the My Documents folder.)

Copy Images to an SD Card

The PC Utility will create two image files.

- USERPRE.IMG
- USERPOST.IMG

They will be located in your PC at:

C:\Users\[Computer name]\Documents\eSpresso\[Store name]\[Register name]

Copy the images to the following path on your SD card.

SD:\NR-500E\[Store Name]\IMAGE

Important: In the path C:\MyDocuments\eSpresso\StoreName\register name\IMAGE, the store name is the name you have defined as the store in the PC Utility.

You must use the same “StoreName” as programmed in the NR-510 Series ECR in Program-Mode\Options\System: “Store Name”. The default store name is “STORE001”.

Saving Images

1. Set the store name in System Option: #39, to match the name of the store folder on your memory device you wish to restore.
2. Insert an **SD card** in the register’s SD slot (*located in the printer compartment*) or connect a USB drive on the USB port (*located on the back connection panel*).
3. Move the mode switch key to the **SERVICE MODE**.
4. From the Service Mode menu, select “**7.PROGRAM BACKUP**”; Press **CASH**.
5. From the PROGRAM BACKUP menu select “**1.SD**” or “**2.USB**”; Press **CASH**.
6. From the USB or SD menu select “**4.IMAGE SAVE**”; Press **CASH**.
7. The message “SUCCESS !” will display on the LCD.

Loading Images

1. Insert an **SD card** in the register’s SD slot (*located in the printer compartment*) or connect a USB drive on the USB port (*located on the back connection panel*).
2. Move the mode switch key to the **SERVICE MODE**.
3. From the Service Mode menu, select “**7.PROGRAM BACKUP**”; Press **CASH**.
4. From the PROGRAM BACKUP menu select “**1.SD**” or “**2.USB**”; Press **CASH**.
5. From the SD menu select “**5.IMAGE LOAD**”; Press **CASH**.
6. The message “SUCCESS !” will display on the LCD.

Flash ROM Updates

The NR-500E 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 through a PC or by SD card.

CAUTION: Flash ROM update by either method must be done by a qualified, trained technician. DO NOT POWER OFF OR ABORT any program loading once it 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 NR-500E Series Flash ROM program is contained in a binary file. This file contains both the Boot program area and the Application program area.

1. At your **PC**, format the SD Card for **FAT32**. Then **Create a folder** on the root of the SD named **update**.
2. Copy the **NR_ROM.bin** binary file to the **update** folder of the SD card: SD:\update**NR_ROM.bin**
3. 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\feel it click into place.)

Boot Area Update

4. At the NR-510 Series ECR, turn the mode key to the **SERVICE MODE**.
5. Press the (↑) key and the (↓) key to select the **7.PROGRAM BACKUP** menu and press the **CASH** key to confirm. Select the menu. (*Alternately, you can just press 7 then CASH to access the 7.PROGRAM BACKUP menu directly.*)
6. Then select “**1.SD**” press **CASH**. Then select **6.BOOT UP SD**: press **CASH**.
7. After a short pause, the register will display confirmation of the successful download with the message “**DOWNLOAD 100 % FINISHED! !**” flashes on the display.
8. Turn the ECR power switch **OFF** and proceed directly to the next step: Application Update.

Program Area Update

9. With the mode key turned to the **SERVICE MODE**: Press both the **upper right** key (CLERK) and the **lower right** key (CASH) and Power **ON** the ECR. A rapid beep-beep-beep sound will be heard. Release the keys.
10. The display shows ‘**SELECT DOWN MODE**’.
 1. **SERIAL 1**
 2. **SD CARD**
11. Select the **2. SD CARD**. The Display will indicate ↑ **READY** ↑, after a short pause the firmware update will begin loading.
12. 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 firmware update is complete, the display will flash and indicate “**DOWNLOADING 100% FINISHED! !**”.
13. The FLASH ROM update is complete. Power the register **OFF**. You **must** perform a memory all clear to complete the update procedure. Refer to the ‘*Clearing RAM Memory*’ procedure on page 33.
14. After the memory clear is complete, the ECR will be ready to program or to load a previously saved customer program.

Flash ROM Update by PC

To complete the firmware update via PC, you will need a serial PC cable, the Flash ROM update file and the utility to load the file. The Flash ROM firmware program must be transferred from the PC to the NR-510 through the register's RS-232 Serial Port #1.

Update Files

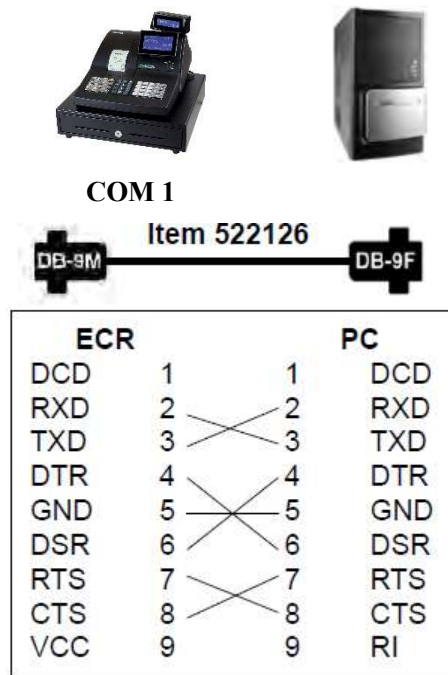
To complete the firmware update, you will be supplied with the following files:

- Download.exe (The update utility program)
- Binary file : NR_ROM.bin

PC Connection Cable

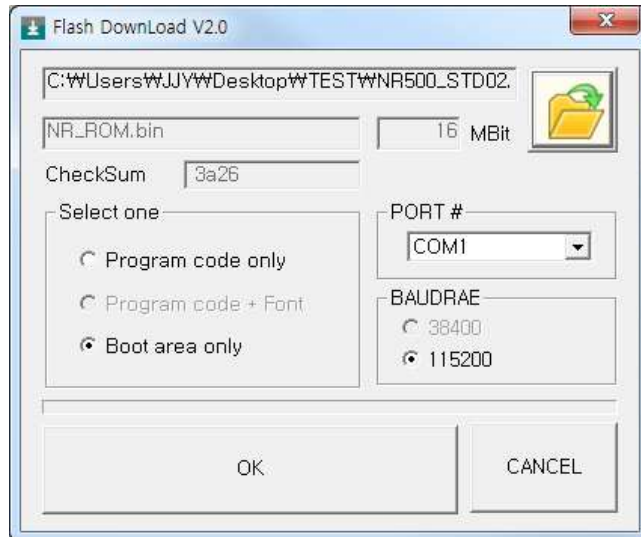
YOU MUST USE Serial Port #1 on the NR-510. Use the following cable.


- CRS Part # **522126** (Register DB9M COM 1 to PC DB-9F)




Boot Area Update

1. Connect the Serial Cable from Serial Port #1 on the ECR to a serial port on the PC.
2. At the register, move the mode switch key to the **SERVICE MODE**.
3. Press the (↓) key and the (↑) key to select “**7.PROGRAM BACKUP**” menu; Press **CASH**.
4. Then select “**1.SD**”; Press **CASH**.
5. Select the **7.BOOT UP COM** menu; Press **CASH**.
6. At the PC, execute the program “DownLoad.exe”. The Download dialog box displays.



7. Select the appropriate com port connection at your PC at the PORT# option buttons.
8. Click  find the folder where the update files are located and select binary file.
9. Select **Boot Area Only** in the Select One option buttons.
10. Press the **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 blue color indicating the update is complete.
12. Turn the power switch to the **OFF** and proceed directly to the next step, **Program Area Update**.

Program Area Update

1. Connect the Serial Cable from Serial Port #1 on the ECR to a serial port on the PC.
2. At the register, move the mode switch key to the **SERVICE MODE**.
3. Turn the power switch to the **OFF** position.
4. Press and hold the **Upper Right** key and the **Lower Right** key (The **CLERK** and **CASH** keys on the default keyboard). While continuing to hold the **CLERK** and **CASH** keys, power **ON** the ECR. A rapid beep-beep-beep sound will be heard. Release the keys.
5. The display shows '**SELECT DOWN MODE**'.
 1. **SERIAL 1**
 2. **SD CARD**
6. Press **1** to Select **1.SERIAL1**. The ECR displays "**DOWNLOAD MODE SERIAL1**".
7. At the PC, execute the program "**Download.exe**". The Download dialog box displays.
8. Select the appropriate com port connection at your PC at the **PORT#** option buttons.
9. Click  find the folder where the update files are located and select binary file.
10. Select **Program code only** in the Select One option button menu.
11. Press the **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.
12. 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.
13. Turn the power switch to **OFF**. After loading the update firmware on your NR-510 ECR, you **must** perform a memory all clear to complete the update procedure. Perform a **memory all clear** on the ECR (See 'Clearing RAM Memory' procedure on page 33).
14. The ECR is now ready to program or to load a previously saved end-user program.
15. Disconnect the PC cable.

Help Menu

The help menu prints out Menu Operation keys (*function keys used for program navigation*). The Function key list and the character code table can also be printed from this menu.

Menu Usage

1. Move the mode switch key to the **SERVICE MODE**.
2. From the Service Mode menu, select “**8.HELP MENU**”; Press **CASH**.
3. From the Help Menu, select “**1.MENU USAGE**”; Press **CASH**.
4. The “**MENU OPERATION**” list prints.

```
03/16/2023  THU           13:13
-----
                MENU OPERATION
-----
CLEAR   : EXIT or CANCEL
↑       : CURSOR UP MENU or
        SELECT 'YES'
↓       : CURSOR DOWN MENU or
        SELECT 'NO'
CASH    : CONFIRM
CLERK 00      000002  00000
```

Function Key Code

1. Move the Mode Switch to the **SERVICE MODE**.
2. From the Service Mode menu, select “**8.HELP MENU**”; Press **CASH**.
3. From the Help Menu, select “**2.FUNC. KEY CODE**”; Press **CASH**.
4. The complete “**FUNCTION KEY CODE**” list prints. See Function Key Codes on page 141.

Character Code

1. Move the Mode Switch to the **SERVICE MODE**.
2. From the Service Mode menu, select “**8.HELP MENU**”; Press **CASH**.
3. From the Help Menu, select “**3.CHAR CODE**”; Press **CASH**.
4. The complete “**CHAR. CODE TABLE**” list prints. See Character Code Table on page 165.

Program Mode Programming

Overview

Most register programming and program maintenance takes place in program mode (*Mode Switch is turned to the PGM position*). The key marked with a “P” allows access to this position.

Further protection may be enabled by requiring a password for access to the Program Mode (PGM position). See System Options programming on page 200 (system options 35 & 44) for details.

- ◆ **Descriptor Programming Methods** – Two Descriptor programming methods are available: keyboard overlay and code entry methods.

The following procedures are available from the **Program Mode** Operations menu.

- ◆ **PLU** – Set PLU prices, descriptors and options. Also, assign PLUs to groups, link to other PLUs, assign to mix and match groups, set stock levels and set additional options
- ◆ **Group** – Groups collect sales from sets of items (PLUs) Set descriptors and options for groups here.
- ◆ **Function Key** – Set descriptors, entry limits, and options related to each function key you may be using.
 - **MACRO Key** – Macro keys can be programmed perform a series of keystrokes making the operations quicker.
- ◆ **Options** – Set options related to the operation of your register.
- ◆ **Employee (Clerk)** – Set names, codes and mode selections for each clerk.
- ◆ **Time** – Set the register date and time.
- ◆ **Taxes** – Set tax rates or tables can be set for each of four possible taxes. Value added taxes and GST (Canada) can be set.
- ◆ **Messages** – Set receipt messages and report descriptors
- ◆ **Mix & Match** – Set up promotion discounts such as “buy 2 and get \$1 off”.
- ◆ **Program Scans** – Print a record of you register programming.







Default Programming

Each SAM4s ECR is ready to use after un-boxing, loading the paper and completing the memory all clear procedure (see “Clearing RAM Memory” on page 33.)





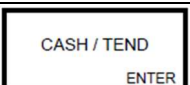

- ◆ All keyboard PLUs are nontaxable and preset, with a “0” price.
- ◆ All system options are set to default. Change only the options that will deviate from default programming.
- ◆ All programming (unless otherwise noted) is done with the Mode Switch in the PGM position. Each section details a specific area of register programming.

Note: The **CHARGE**, **CHECK**, **CLERK#** and **PAID OUT** keys are used for navigating through the **X – Z – P** and **S-Mode** screens and *should not* be reassigned. These key locations revert to their navigation operations, Cursor ↓ ↑ ← when used in the X – Z – P and S-Mode.

Flat Keyboard Programming Keys

	(Page ↑) Go back one page to the previous page.
	(Page ↓) Advance one page to the next page.
	(↑) Back Up one line to previous option; also used for Yes selections.
	(↓) Advance Down one line to next option; also used for No selections.
	Used to ENTER the option setting; also used to set the new selection.
	Used to EXIT the current setting without changing the selection; also used to back out of the programming filed.

Raised Keyboard Programming Keys

	(Page ↑) Go back one page to the previous page.
	(Page ↓) Advance one page to the next page.
	(↑) Back Up one line to previous option; also used for Yes selections.
	(↓) Advance Down one line to next option; also used for No selections.
	Used to ENTER the option setting; also used to set the new selection.
	Used to EXIT the current setting without changing the selection; also used to back out of the programming filed.

Descriptor Programming Methods

Descriptors can be programmed for PLUs, function keys, groups, clerks and the logo/messages. Two methods are available to program descriptors, the Program Overlay Method and the Character Code Method. This chapter describes both methods. Refer to each program area for specific steps for programming PLUs, groups, function keys, etc.

Descriptor Overlay Method

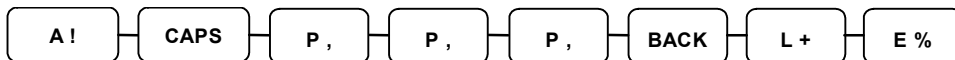
This method is the default descriptor program method. When the descriptor field is selected on the program screen, you can simply type the descriptor placing a copy of the overlay over the keyboard. Press **CASH** to finalize your descriptor.

Program Example

To program the descriptor "20%" type:



To use **BACK** and program the descriptor "Apple" type:



To program the descriptor "Apple" type:



NOTE: Use the CAPS key to toggle between upper and lower-case descriptor options.

To program the descriptor "APPLE" with **DOUBLE** (wide) characters type:



NOTE: DOUBLE is used to toggle between double size and normal size descriptor options.

Raised Keyboard Overlay

		CLEAR	CAPS	7	8	9	M]	Q:	U;	W?	Z■
SPACE	C#	F^	I/	4	5	6	L[	P*	T,	V=	Y
DOUBLE	B@	E%	H*	1	2	3	K)	O+	S€	SHIFT	X
BACK	A!	D\$	G&	0	00	.	J(	N-	R£	ENTER	

Flat Keyboard Overlay

€	£	■	:											
!	@	#	\$	%	^	&	*	(	)		EXIT			
Q	W	E	R	T	Y	U	I	O	P		7	8	9	
A	S	D	F	G	H	J	K	L	;		4	5	6	
Z	X	C	V	B	N	M	,	.	/		1	2	3	
+	-	<	>	?	=	CAPS	DOUBLE	SPACE	BACK SPACE		0	00	.	ENTER

Character 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 Character Code method. You must set System Option: DESC. PGM METHOD to CODE to be able to use the alpha code entry method. See “SYSTEM Options” programming on page 200.

The character code table is available on the next page (*page #165*).

Program Sequence

1. With the cursor pointed at a descriptor field, refer to the Character Code Table below and type the 3-digit code for the first character.
2. Continue typing the 3-digit codes for each additional character. 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:

```
[065] [080] [080] [076] [069] [CASH]  
  A   P   P   L   E
```

For **DOUBLE** (wide) characters enter 999 after the Character Code . For example:

```
APPLE = [999] [065] [080] [080] [076] [069] [CASH]
```

- *The Character Code Table is shown on the following page.*
- *The Character Code Table can also be printed from the S-Mode Help Menu.*

Character Code Table

Char.	Ç	ü	é	â	ä	à	å	ç	ê	ë
Code	001	002	003	004	005	006	007	008	009	010
Char.	è	ï	î	ì	Ä	Å	É	æ	Æ	ô
Code	011	012	013	014	015	016	017	018	019	020
Char.	ö	ò	û	ù	ÿ	Ö	Ü	■	£	¥
Code	021	022	023	024	025	026	027	028	029	030
Char.	€	SPACE	!	"	#	\$	%	&	'	(
Code	031	032	033	034	035	036	037	038	039	040
Char.	)	*	+	,	-	.	/	0	1	2
Code	041	042	043	044	045	046	047	048	049	050
Char.	3	4	5	6	7	8	9	:	;	<
Code	051	052	053	054	055	056	057	058	059	060
Char.	=	>	?	@	A	B	C	D	E	F
Code	061	062	063	064	065	066	067	068	069	070
Char.	G	H	I	J	K	L	M	N	O	P
Code	071	072	073	074	075	076	077	078	079	080
Char.	Q	R	S	T	U	V	W	X	Y	Z
Code	081	082	083	084	085	086	087	088	089	090
Char.	Ø	å	ä	ö	æ	ø	a	b	c	d
Code	091	092	093	094	095	096	097	098	099	100
Char.	e	f	g	h	i	j	k	l	m	n
Code	101	102	103	104	105	106	107	108	109	110
Char.	o	p	q	r	s	t	u	v	w	x
Code	111	112	113	114	115	116	117	118	119	120
Char.	y	z	BACK SPACE			DOUBLE				
Code	121	122	123			999				
Char.	Á	á	Ñ	ñ	Ã	ã				
Code	125	126	127	128	129	130				

Program Mode Menu

There are ten programming category selections in the Program Mode.

1. Turn the mode switch to the **PGM** position (Program Mode). The **PROGRAM MODE** menu displays.

```
PROGRAM MODE
1 . PLU
2 . GROUP
3 . FUNCTION KEY
4 . OPTIONS
5 . EMPLOYEE
6 . TIME
-PAGE 1 / 2-
```

2. Press the (↑) key and the (↓) key to navigate through the category selection menu. Press the **CASH** key to access the selected category.
 - a. You can also use the (**Page**↑) key and (**Page**↓) key to navigate the next or previous page.
 - b. If you already know the menu number of the category you want to access, you can enter the digit (1-10) directly.

```
PROGRAM MODE
7 . TAXES
8 . MESSAGES
9 . MIX & MATCH
10 . PGM SCAN
-PAGE 2 / 2-
```

PLU Programming

To accommodate UPC barcode scanning, each PLU can be given an identifying number up to 14 digits in length.

1. At the **PROGRAM MODE**, press **1** and **CASH** for PLU Programming. The **PLU PROGRAMMING** screen displays.

```
PLU
1 . ADD/CHANGE
2 . DELETE
3 . PLU STOCK
4 . NLU CODE# PGM
-PAGE 1 / 1-
```

2. Use the ↓ and the ↑ keys to scroll up and down through the menu selections. Alternatively you can enter the digit (1-4) directly. Press **CASH** to enter the programming area.

Note: You can program PLU descriptors up to 24 characters, all 24 characters will print on the register receipt. However, only the first 16 characters will appear on the ECR display when the PLU is registered and only 12 characters will show on the E-Pad video (*if used*).

Add/Change PLU

Add/Change One PLU

1. From the **PLU Programming** screen, Press **1** and **CASH** to view the **ADD/CHANGE** programming selections.

ADD/CHANGE	
1. ONE PLU	←
2. RANGE PLU	

2. Press **1** and **CASH** to select an individual PLU. The **ADD/CHANGE** screen displays, **ENTER PLU #**.

ADD/CHANGE	
ENTER PLU #	0

3. Enter the desired PLU number and **CASH** to select individual PLU or press a PLU on the keyboard to edit. The **ONE PLU** programming screen displays.
4. There are 7 pages of PLU option settings. Refer to “PLU Options – Reference Information” on page 168 to make program entries or changes, press the **CLEAR** key to finalize and return to the previous screen.

Add/Change Range PLU

1. From the **PLU Programming** screen, press **1 CASH** to view the **ADD/CHANGE** programming selections. Press **2 CASH** to go directly to the **RANGE PLU** programming.

ADD/CHANGE	
ENTER FROM PLU #	0

2. Enter **FROM PLU #** number and **CASH** to display **TO PLU#** screen.

ADD/CHANGE	
ENTER FROM PLU #	1
ENTER TO PLU#	20

3. Enter **TO PLU #** number and **CASH** to display **RANGE PLU** programming screen.
4. There are 7 pages of PLU option settings. Refer to “PLU Options - Reference Information” on page 168 to make program entries or changes, press the **CLEAR** key to finalize and return to the previous screen.

PLU Options – Reference Information

#	Option	Entry	Description
1	DESC	Alphanumeric 24 character	You can program a descriptor for each PLU. Type the descriptor using the Program Overlay, or by using the Character Code method (see page 164.) The overlay is automatically activated when the cursor is pointing at the DESC field. The default descriptors are PLU1, PLU2, etc.
2 3	PRICE/HALO1 PRICE/HALO2 <i>(Price/HALO 2 will only show if allocated for 2 price levels.)</i>	7-digit amount	Two price levels are available with up to a 7-digit entry allowed. (Note that price level field 02 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.
4	PRESET	Y or N	Choose Y for a preset PLU. Choose N for an open PLU. Open PLUs accept amount entries. Use open PLUs to enter different priced items into the same PLU. Preset PLUs automatically register a preprogrammed price when the PLU is entered. Use preset PLUs to register an individual item quickly and accurately. For example, cigarette packs can be assigned to PLUs.
5	PRESET OVERRIDE	Y or N	If Y , you can enter a price to override the preset price.
6	TAXable BY TAX1	Y or N	Select N for non-taxable items. Select Y to apply the appropriate tax automatically for this PLU.
7	TAXable BY TAX2		
8	TAXable BY TAX3		
9	TAXable BY TAX4		
10	Food Stamp Eligible	Y or N	Select Y here if the item can be paid with food stamps or EBT.
11	GROUP #1	0-99	For each of three group assignments, enter a group where this PLUs sales will accumulate. The number of groups available is determined by memory allocation.
12	GROUP #2		
13	GROUP #3		
14	NEGATIVE ITEM	Y or N	Select Y to register items that subtract, rather than add to the sale total.
15	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 Options” of “Options Programming” in the “Program Mode Programming” chapter. Use hash for lottery sales or bottle deposits.
16	SINGLE ITEM	Y or N	Select Y for a single item PLU. Single item PLUs automatically total as a cash sale immediately after the PLU entry. Single item PLUs are used to speed up one item sales.
17	NON-ADD # COMP	Y or N	Select Y to enforce the entry of a non-add number before a registration can be made.
18	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.
19	INVENTORY ITEM	Y or N	Select Y to track the number of items remaining in inventory using the Stock report.

#	Option	Entry	Description
20	DISABLE	Y or N	Select Y to disable the PLU. Entries cannot be made into disabled PLUs.
21	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.)
22	AUTO SCALE	Y or N	Select Y for entries into this PLU to be automatically multiplied by the weight on the optional scale.
23	CONDIMENT	Y or N	Select Y , item will act like a condiment on the kitchen printer. Items with this status will satisfy the requirements of items with compulsory condiment status.
24	COMP. CONDIMENT ENTRY	Y or N	Select Y to force the entry of a condiment after this item is entered.
25	PRINT ON RECEIPT	Y or N	Select N to suppress printing of the item on the receipt.
26	DISPLAY PLU	Y or N	Select Y the PLU to show on the display. Selecting N will only display the amount of the item being registered.
27	PRINT ON CHECK	Y or N	Select N to suppress printing of the item on the check.
28	PRT PRICE ON RECEIPT	Y or N	Select N to suppress printing of the item's price on the receipt.
29	PRT PRICE ON CHECK	Y or N	Select N to suppress printing of the item's price on the check.
30	DISABLE PROMO	Y or N	Select Y to block the PROMO function on this PLU.
31	COUNTER NOT RESET	Y or N	Select Y to not reset the PLU item counter on the Z PLU report.
32	PRESET OVERRIDE IN MGR CONTROL	Y or N	If Y , preset override is allowed for this item only in the MANAGER MODE.
33	DISABLE RETURN & VOID	Y or N	If Y , you cannot correct this PLU through void operations (Void Item/ Error Correct/VOID Mode) or perform a merchandise return of this PLU item. The Y value is recommended when using liquor control systems.
34	PRICE CHANGE ITEM	Y or N	Select Y to allow changing the price on this PLU using the price change function key in register mode.
35	ALLOW DISCOUNTS	Y or N	Select Y to allow Discounts on this PLU.
36	AUTO TARE	0-5	The auto-tare number indicated here (1–5) will automatically subtract from the weight from the optional scale. (0 = disabled, no auto-tare.)
37	MIX & MATCH	0-99	Enter a value (1–99) to indicate the number of the preprogrammed MIX & MATCH TABLE. Enter 0 to disable.
38	LINK PLU:	14-digits maximum	If you wish the registration of this PLU to automatically register another PLU, enter the PLU # you wish to link. (0 = no link.)

#	Option	Entry	Description
39 40	QTY/MODIFIER1 QTY/MODIFIER2 (QTY/Modifier2 will only show when memory is allocated for two price levels.)	0-99.99	Enter quantity modifier count. When a PLU is sold this is the number of units to be reported to the PLU sales report. If the Inventory flag is set, this is also the quantity of stock to deduct from the stock count. There is a separate entry field for each price level. If the QTY/MODIFIER value = 2.00 for PLU1, and PLU1 is registered in a sale, the sales quantity on the PLU report and the Stock report will be 2. If you register press 10 X/TIME PLU1 in a sale, this records 20 for the sales quantity on the PLU report and the Stock report.
41	MINIMUM STOCK	0-9999.99	You can enter minimum stock levels for PLUs with the Inventory Item option set. When the level of a stock item falls below the minimum inventory level set here, the item will appear on the PLU MINIMUM STOCK report.

Delete PLU

Note: Before a PLU can be deleted, all report information must be cleared. It may be necessary to run a Z1 and Z2 PLU Report, and if the PLU is an inventory item, you must change the stock to zero. If PLUs had been added using the NOT FOUND PLU function, RESET N.F. PLU must be issued. See page 90 for details.

Delete One PLU

1. From the **PLU PROGRAMMING** screen, press **2** and **CASH** to display the **DELETE PLU** screen.

DELETE	
1. ONE PLU	←
2. RANGE PLU	

2. Press **1** and **CASH** to delete an individual PLU. The **PLU NUMBER** screen displays.

DELETE	
ENTER PLU #	0

3. Enter the number of the PLU you wish to delete and press **CASH**. The **DELETE** message will print.

Delete PLU Range

1. From the **PLU PROGRAMMING** screen, press **2** and **CASH** for to display the **DELETE PLU** screen.

DELETE	
1. ONE PLU	←
2. RANGE PLU	

2. Press **2** and **CASH** to delete a range of PLUs. The **PLU NUMBER** screen displays. Enter the number of **FROM PLU#** in the range you wish to delete. Press **CASH**.

DELETE	
ENTER FROM PLU#	0

3. Enter the number of **TO PLU#** in the range you wish to delete.

DELETE	
ENTER FROM PLU #	1
ENTER TO PLU #	20

4. Press **CASH** to delete the PLU. The **DELETE** message will print.
5. Continue to delete other PLUS or press **CLEAR** key until you are returned to the **PROGRAM MODE** menu.

PLU STOCK

If you designate a PLU as an Inventory Item, then a special PLU stock counter keeps a running inventory count. The PLU Stock program is where you can set the current stock level for Inventory item PLU's. You can choose to Add, Subtract, or Replace the current stock level as necessary.

Inventory is kept in decimal units to two digits beyond the decimal, therefore you must enter stock adjustments to two digits beyond the decimal. For example, for ten units of inventory type 1 0 0 0 (*without pressing the decimal*).

Note: PLU Stock can also be added from the "X" Mode > Stock Entry Program. Refer to page 99 for details.

- At the **PROGRAM MODE**, press **1** and **CASH** for PLU Programming. On the **PLU PROGRAMMING** screen, press **3** and **CASH** to display the **PLU STOCK** screen.

PLU STOCK
1. ONE PLU
2. RANGE PLU

- Select to enter stock quantities for **ONE PLU** or a **RANGE PLU** (*for a range of consecutive PLU's*).

ONE PLU

- From the **PLU STOCK** screen, press **1** and **CASH** to add stock to **ONE** (*individual*) PLU. The **STOCK ENTRY** screen is displayed.
- On the **STOCK ENTRY** screen, the **FROM PLU #** entry displays. Enter the PLU number of the Inventory Item (*or press a PLU on the keyboard*) you wish to add stock to, then press **CASH**.
- Use the (↑) and (↓) keys to select the operation you want to perform: **ADD (+)**, **SUB (-)** or **REPLACE**. When you have made the appropriate selection, Press **CASH**.
- The Current and Minimum Stock values are displayed. Enter the **Stock Quantity** (*without pressing the decimal*) you wish to **ADD/SUB/REPLACE**. The **ENTER CNT** shows the value entered; then press **CASH**.
- For example, ten units would be entered as 1 0 0 0 (*without pressing the decimal*).
- You are returned to the Stock Entry screen.
- Continue entering stock quantities for Inventory Item PLUs or press **CLEAR** to exit the screen.

PLU STOCK	
1. ONE PLU	←
2. RANGE PLU	

STOCK ENTRY
FROM PLU #
0

STOCK ENTRY	
OPERATOR : ADD (+)	
ADD (+)	←

STOCK ENTRY	
PLU29	
CURRENT	0.00
MINIMUM	0.00
ENTER CNT	0.00

STOCK ENTRY
ENTER PLU #
0

RANGE PLU

1. From the **PLU STOCK** screen, press **2** and **CASH** to select **RANGE PLU** to enter the same stock value for a range of consecutive PLU's. The **STOCK ENTRY** screen is displayed.
2. The **STOCK ENTRY** screen is displayed with the entry field **ENTER FROM PLU #**. Enter the number for the first Inventory Item PLU in the range; Press **CASH**.
3. The entry field for **ENTER TO PLU #** displays. after each entry. Enter the number for the last Inventory Item PLU in the range; Press **CASH**.
4. Use the (↑) and (↓) keys to select the operation you want to perform: **ADD**, **SUB** or **REPLACE** stock; Press **CASH**.
5. When the **ENTER CNT** displays, enter the **Stock Quantity** (without pressing the decimal) you wish to **ADD/SUBTRACT/REPLACE**, then press **CASH**. For example, ten units would be entered as 1 0 0 0 (without pressing the decimal).
6. You are returned to the Stock Entry screen for a range of PLU's. Continue entering stock quantities for PLU ranges or press **CLEAR** to exit the screen.

```

      PLU STOCK
1.ONE PLU          ←
2.RANGE PLU
  
```

```

      STOCK ENTRY
ENTER FROM PLU #
                                     0
  
```

```

      STOCK ENTRY
ENTER FROM PLU#
                                     1
ENTER TO PLU#
                                     20
  
```

```

      STOCK ENTRY
OPERATOR : ADD(+)
      ADD(+)          ←
  
```

```

      STOCK ENTRY
OPERATOR : ADD(+)
      ADD(+)
ENTER CNT
                                     0.00
  
```

```

      STOCK ENTRY
ENTER FROM PLU #
                                     0
  
```

NLU Code# Program

NLU's are fixed keys on the keyboard (like traditional department keys) that access specific PLUs. 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 **PLU PROGRAMMING** menu, press **4** and **CASH** for **NLU CODE# PGM**. The **NLU CODE PROGRAM** screen displays.
2. Press the **NLU key** on the keyboard you wish to program or press **CLEAR** to exit.
3. The selected **NLU #** is displayed. Type in the new **PLU #** you wish to use for this NLU key, press **CASH**.

```

      NLU CODE# PGM
ENTER NLU KEY
  
```

```

      NLU CODE# PGM
NLU# 25
ENTER NEW PLU #
                                     700
  
```

4. The **NLU CODE PROGRAM** screen returns. Continue from step 1 to reassign PLU #'s to NLU# keys as desired or press **CLEAR** to exit.

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.
- 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.

To Program Groups

1. At the **PROGRAM MODE**, press **2** and **CASH** for **GROUP**. The **ENTER GROUP #** screen displays. (The maximum group number is set by memory allocation.)

GROUP

ENTER GROUP #
(1-99) 0

2. Enter the number of the group to be programmed, press the **CASH**. The **GROUP** programming screen displays. There are nine group options that can be set.

```
GROUP
1.DESC : [GROUP 01] ←
2.ADD TO GROUP TOTAL [Y]
3.SEND TO KP [N]
4.KP PORT#: RCPT [N]
5.KP PORT#: 1 [N]
6.KP PORT#: 2 [N]
-PAGE 1/2-
```

```
GROUP
7.KP PORT# 3 [N] ←
8.PRINT RED ON KP [N]
9.GIFT CARD [N]
```

-PAGE 2/2-

3. Use the ↓ and the ↑ keys to scroll up and down through the menu selections or enter the digit (1-9) to go directly to the Group option you wish to program. You can also use the (**Page**↑)key and (**Page**↓) keys to go to the next page or previous page.
4. To edit or change an option setting, Press the (↑) key for **YES** and the (↓) key for **NO**. Press **CLEAR** to return to the ENTER GROUP # selection screen. Continue to program groups as necessary.
5. Press **CLEAR** to return to the PROGRAM MODE screen.

Group Options – Reference Information

#	Option	Entry	Description
1	DESC	Alphanumeric 24 character	You can program a descriptor for each group. Type the descriptor using the Program Overlay or by using the Character Code method (see page 164.). The overlay is automatically activated when the cursor is pointing at the DESC field. The default descriptors are GROUP 01, GROUP 02, etc.
2	ADD TO GROUP TOTAL	Y or N	If N, this groups total will be added to the total of all groups on the Group report.
3	SEND TO KP	Y or N	Select Y to send PLUs reporting to this group to a kitchen printer.
4	KP PORT #: RECEIPT	Y or N	Select Y to print a kitchen requisition at the register.
5	KP PORT #: 1	Y or N	Select Y to print a kitchen requisition at the Port# 1.
6	KP PORT #: 2	Y or N	Select Y to print a kitchen requisition at the Port# 2.
7	KP PORT #: 3	Y or N	Select Y to print a kitchen requisition at the Port# 3.
8	PRINT RED ON KP	Y or N	If Y, this group will print in red on the kitchen printer. (Note, the kitchen printer must have red/black printing capability, and this option does not apply to the register receipt printer.)
9	GIFT CARD	NONE ACTIVATE ADD	For normal PLU registrations use the default “NONE”. If a PLU in this group is used to register a new gift card select “ACTIVATE”. If a PLU is this group is sued to add a value to an existing gift card, “ADD”.

Function Key Programming

Use to set specific options for function keys. Because of the differences inherent in function keys, individual options will be different. See the specific instructions for each key in this chapter to find the options for each key.

1. From the **PROGRAM MODE**, press **3** and **CASH** for **FUNCTION KEY**. The **FUNCTION KEY** Program screen displays.

```
FUNCTION KEY
1.FUNCTION KEY
2.MACRO KEY

-PAGE 1/1-
```

2. Press **1** and **CASH** to select **FUNCTION KEY** menu.

```
FUNCTION KEY
ENTER FUNC.KEY
TO BE PROGRAMMED
```

3. Press the function key on the keyboard you wish to program.
 - For example, Press the **#/NS** key to view the **#/NS** Function Options.
4. Use the **↓** and the **↑** keys to scroll up and down through the menu selections or enter the numeric digit for the option to go directly to the option you wish to program. Press the **CASH** to access the option.
 - For function keys that have multiple pages of options, Press the **(PAGE↓)** key to view the next page. Press the **(PAGE↑)** key to view the previous page.
5. For **YES/NO** option settings, Press the **(↑)** key for **YES** and the **(↓)** key for **NO**. Press the **CASH** to confirm the option value.
6. Press **CLEAR** at any time to return to the **FUNCTION KEY** menu.

#/NS Key Function Options

(Key code 313)

#	Option	Entry	Description
1	DESC1	Alphanumeric 24 character	You can program a unique descriptor for the no sale function. The default descriptor is NOSALE.
2	DESC2	Alphanumeric 24 character	You can program a unique descriptor for the Non Add # function. The default descriptor is NON ADD #.
3	#/NS DISABLE	Y or N	Select Y to disable the no sale function (non-add entries are allowed).
4	UNDER MANAGER CONTROL	Y or N	Select Y to allow operation only in manager operation mode.
5	INHIBIT NO SALE AFTER NON-ADD #	Y or N	Select Y to disable the NO SALE function after a non-add number is entered.
6	COMP. # AT START OF SALE	Y or N	Select Y to enforce the entry of a non-add number at the beginning of each transaction. (Example, to track the number of customers in each sale or to identify a customer number with each sale.)
7	PRINT ON #/NS	Y or N	Select N to stop printing when a NO SALE is performed.
8	NON-ADD # PROHIBIT	Y or N	Select Y to disable the non-add # function.
9	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.
10	MAX DIGIT	0-8	Enter the maximum number of digits for non-add number entry. Zero (0) means no limit.

%1 -%5 Function Options

(Key codes 314-318)

#	Option	Entry	Description
1	DESC	Alphanumeric 24 character	You can program a unique descriptor. The default descriptors are % 1 - % 4.
2	AMOUNT: Y %:N	Y or N	Select Y if you wish for this key to apply an amount (as in a coupon). Select N if you wish for this key to apply the percentage (as in a discount or surcharge).
3	AMOUNT / RATE	5 digits	If the function is an amount, enter the 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.
4	KEY DISABLE	Y or N	Select Y to disable this function.
5	UNDER MANAGER CONTROL	Y or N	Select Y to allow operation only in manager operation mode.
6	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.
7	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.
8	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.
9	POS.: Y NEG.:N	Y or N	Select Y if you wish for the amount or percentage to add to the sale total. Select N if you wish for the amount or percentage to subtract from the sale.
10	TAXABLE BY TAX1	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 is included in the Tax Sales amount.
11	TAXABLE BY TAX2		
12	TAXABLE BY TAX3		
13	TAXABLE BY TAX4		
14	F/S ELIGIBLE	Y or N	Select Y to reduce (or increase) the food stamp subtotal by the amount of % key value.
15	ALLOW ONLY ONE TIME SUBTOTAL ENTRY	Y or N	If Y , you can enter only a single coupon and you must press the SUBTOTAL key before the coupon entry.
16	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 SUBTOTAL key to be pressed prior to each subsequent coupon entry.
17	PRESET OVERRIDE IN MGR ONLY	Y or N	Select Y to allow preset override only in manager operation mode.
18	COMPULSORY VALIDATION	Y or N	Choose Y to enforce validation if an optional printer with validation capability is connected to a Serial port.

ADD CHECK Function Options

(Key code 320)

#	Option	Entry	Description
1	DESC	Alphanumeric 24 character	You can program a unique descriptor. The default descriptor is ADD CHECK.
2	KEY DISABLE	Y or N	Select Y to disable this function.
3	COMPULSORY BEFORE TENDERING	Y or N	Select Y to force the operator to use the ADD CHECK function before tendering.
4	ADVANCE THE CONSECUTIVE #	Y or N	Select Y to advance the consecutive number each time the ADD CHECK key is used.
5	DELETE THE PRE/POSTAMBLE	Y or N	Select Y to delete the preamble and postamble each time the ADD CHECK key is used.
6	EXEMPT TAX 1	Y or N	Select N to apply the appropriate tax any normally taxable item when this key is used. Select Y to exempt the appropriate tax automatically when this key is used.
7	EXEMPT TAX 2		
8	EXEMPT TAX 3		
9	EXEMPT TAX 4		
10	COMPULSORY VALIDATION	Y or N	Choose Y to enforce validation if an optional printer with validation capability is connected to an RS-232C port.

ALPHA TEXT Function Options

(Key code 386)

#	Option	Entry	Description
1	DESC	Alphanumeric 24 character	You can program a unique descriptor. The default descriptor is ALPHA TEXT.
2	PRINT ON KP	Y or N	Select Y to print text on Kitchen Printer.
3	PRINT ON RECEIPT	Y or N	Select Y to print text on register.
4	PRINT ON GUEST CHECKS	Y or N	Select Y to print text on Guest Check.
5	PRINT DOUBLE SIZE	Y or N	Select Y to print text with double size font.

AUTO CASH 1-9 Function Options

(Key codes 387~395)

#	Option	Entry	Description
1	DESC	Alphanumeric 24 character	You can program a unique descriptor. The default descriptor is CANCEL.
2	HALO	7-digits (amount)	Enter the amount to apply for this Auto-Cash key.

CANCEL Function Options

(Key code 321)

#	Option	Entry	Description
3	DESC	Alphanumeric 24 character	You can program a unique descriptor. The default descriptor is CANCEL.
4	HALO	7-digits (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.
5	KEY DISABLE	Y or N	Select Y to disable this function.
6	UNDER MANAGER CONTROL	Y or N	If Y , the operator cannot use this function in REGISTER MODE. The function is allowed only in the MANAGER MODE.
7	COMPULSORY VALIDATION	Y or N	Choose Y to enforce validation if an optional printer with validation capability is connected to an RS-232C port.

CASH Function Options

(Key code 322)

#	Option	Entry	Description
1	DESC	Alphanumeric 24 Character	You can program a unique descriptor; The default descriptor is CASH.
2	HALO	7-digit amount	You can limit errors by setting the maximum amount that can be tendered. "0" means that there is no entry limit.
3	AMOUNT TEND COMP.	Y or N	Select Y to force the operator to enter the tendered amount and let the register calculate the change.
4	OVER/UNDER TENDER IN MGR CONTROL	Y or N	If Y , the operator cannot tender more than the amount of the sales and issues to be changed. Over and under tendering is allowed only in the MANAGER MODE.
5	DISABLE UNDER TEND.	Y or N	If Y , the operator cannot tender less than the amount of the sale.
6	DOES DRAWER OPEN	Y or N	If N , the drawer will not be opened with this key.
7	EXEMPT TAX 1	Y or N	Select N to apply the appropriate tax any normally taxable item when finalized with this key. Select Y to exempt the appropriate tax automatically when finalized with this key.
8	EXEMPT TAX 2		
9	EXEMPT TAX 3		
10	EXEMPT TAX 4		
11	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 # Key

(Key code 406)

There is no programming on the Charge# function Key. The Charge# key allows you to tender with any of the charge keys without having to program each individual charge key on the keyboard. Enter the charge key number and press the Charge # key to tender the sale.

CHARGE 1-8 Function Options

(Key codes 323-330)

#	Option	Entry	Description
1	DESC	Alphanumeric 24 characters	You can program a unique descriptor; the default descriptors are CHARGE 1-8.
2	HALO	7-digit amount	You can limit errors by setting the maximum amount that can be tendered. "0" means that there is no entry limit.
3	AMOUNT TEND COMP.	Y or N	Select Y to force the operator to enter the tendered amount and let the register calculate the change.
4	OVER/UNDER TENDER IN MGR CONTROL	Y or N	If Y , the operator cannot tender more than the amount of the sale and issue change. Over tender and under tender is allowed only in the MANAGER MODE.
5	DISABLE UNDER TEND.	Y or N	If Y , the operator cannot tender less than the amount of the sale.
6	DOES DRAWER OPEN	Y or N	Select Y if you want the drawer to be opened with this key.
7	ALLOW OVER TEND.	Y or N	Select Y to allow tender greater than the amount of the sale.
8	NON-ADD # ENTRY COMPULSORY	Y or N	Select Y to enforce the entry of a non-add number prior to tendering.
9	EXEMPT TAX 1	Y or N	Select N to apply the appropriate tax any normally taxable item when finalized with this key. Select Y to exempt the appropriate tax automatically when finalized with this key.
10	EXEMPT TAX 2		
11	EXEMPT TAX 3		
12	EXEMPT TAX 4		
13	COMPULSORY VALIDATION	Y or N	Choose Y to enforce validation if an optional printer with validation capability is connected to an RS-232C port.
14	SEND TO EFT	Y or N	Select Y if an IPTran LT is connected for integrated credit.
15	EFT PORT (0-3)	Available Range [0-3]	Enter the port number where the EFT IPTran is connected.
16	ALLOW ROUNDING	Y or N	Select Y if you wish to allow rounding when pressing the CHARGE1~CHARGE8 keys.
17	SELECT CARD TYPE	[Selection]	If integrated credit is used, select the appropriate card type for this tender key. None, Credit, Debit, Gift, Gift No NSF, Cash Benefit.
18	SHOW TIP ON	[Selection]	REG – Will prompt for TIP at the ECR operator display. PINPAD – Will prompt the customer to enter a TIP at the Pin-Pad. PRINT TIP LINE ONLY – No Prompt at ECR or Pin-Pad, will print a blank TIP Line on theft receipt.
19	SURCHARGE %	0.00 ~ 4.00 <i>DC Direct Only</i>	<i>(Added at v05.000 for DC Direct.)</i> Allowable % rate entries are from 0.00 to 4.00 percent; Default setting = 0.00 <i>(No Surcharge)</i> . Surcharge will maintain a separate balance on the financial report and will update the drawer total.
20	MULTI-PRICING %	0.00 ~ 4.00 <i>DC Direct Only</i>	<i>(Added at v05.000 for DC Direct.)</i> 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.
21	MANUAL ENTRY	Y or N <i>DC Direct Only</i>	<i>(Added at v05.000 for DC Direct.)</i> Manual credit card entry requires a separate charge key. Set this option to Y if you want this card to be for manual credit card entry.

CHECK Function Options

(Key code 331)

#	Option	Entry	Description
1	DESC	Alphanumeric 24 character	You can program a unique descriptor. The default descriptor is CHECK.
2	HALO	7-digit amount	You can limit errors by setting the maximum amount that can be tendered. "0" means that there is no entry limit.
3	AMOUNT TEND COMP.	Y or N	Select Y to force the operator to enter the tendered amount and let the register calculate the change.
4	OVER/UNDER TENDER IN MGR CONTROL	Y or N	Select Y to not allow the operator to tender more than the amount of the sale and issue change. Over tender and under tender is allowed only in the MANAGER MODE.
5	DISABLE UNDER TEND.	Y or N	Select Y to not allow the operator to tender less than the amount of the sale.
6	DOES DRAWER OPEN	Y or N	If N , the drawer will not be opened with this key.
7	EXEMPT TAX 1	Y or N	Select N to apply the appropriate tax any normally taxable item when finalized with this key. Select Y to exempt the appropriate tax automatically when finalized with this key.
8	EXEMPT TAX 2		
9	EXEMPT TAX 3		
10	EXEMPT TAX 4		
11	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.
12	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 CASH Function Options

(Key code 332)

#	Option	Entry	Description
1	DESC	Alphanumeric 24 character	You can program a unique descriptor. The default descriptor is CHKCASH.
2	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.
3	KEY DISABLE	Y or N	Select Y to disable this function.
4	UNDER MANAGER CONTROL	Y or N	If Y , the operator cannot use this function in the REGISTER MODE. The function is allowed only in the MANAGER MODE.
5	COMPULSORY VALIDATION	Y or N	Choose Y to enforce validation if an optional printer with validation capability is connected to an RS-232C port.
6	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 Function Options

(Key code 333)

#	Option	Entry	Description
1	DESC	Alphanumeric 24 character	You can program a unique descriptor. The default descriptor is CHKENDOR.
2	KEY DISABLE	Y or N	Select Y to disable this function.
3	UNDER MANAGER CONTROL	Y or N	If Y, the operator cannot use this function in REGISTER MODE. The function is allowed only in the MANAGER MODE.
4	PRINT CHECK AMT IN THE ENDORSEMENT	Y or N	Choose Y to print the amount of check as well as the endorsement message. Choose N to print only the endorsement message. Note: A 10-line check endorsement message may be programmed. See "Endorsement" programming on page 222 for more information.
5	PRINT DATE	Y or N	Select N to suppress printing Date on the check endorsement.
6	PRINT TIME	Y or N	Select N to suppress printing Time on the check endorsement.
7	PRINT CLERK	Y or N	Select N to suppress printing the Clerk name on the check endorsement.
8	PRINT CONSECUTIVE No	Y or N	Select N to suppress printing the Consecutive number on the check endorsement.
9	SLIP OUTPUT PORT	0-2	If validation is used, identify the communications port (1 or 2) where the validating printer is attached. Enter 0 if validation is not used.

CHECK # Function Options

(Key code 447)

#	Option	Entry	Description
1	DESC	Alphanumeric 24 character	The default descriptor is CHKTRACK; You can program a unique descriptor.
2	KEY DISABLE	Y or N	Select Y to disable this function.
3	COMPULSORY FOR ALL SALES	Y or N	If Y , you must begin a new or recall an existing tracking number before registering items.
4	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.
5	PRINT ON RECEIPT	Y or N	If N , the check track number and balance will not print on the receipt printer.
6	PRINT CHECK ON RP	Y or N	If N , the check track number and balance will not print on the remote printer.
7	ALLOW ONLY ONE CHK PER TABLE	Y or N	If Y , you can begin only one check with the same table #.
8	CHECK # ASSIGNED BY REGISTER	Y or N	If Y , press the CHECK. # key automatically assigns 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 from #1 again.
9	PBAL IS USED D/THRU RECALL	Y or N	Select Y 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.
10	LENGTH OF CHECK	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 to only check numbers input by the operator, not to check numbers assigned by the register.

CHECK SPLIT Function Key

(Key code 454)

There is no programming available on the Check Split function key, the “Check Split” key allows you to select items from one check# to split off \ move to another check#.

CLERK 1-10 Keys

(Key codes 396~405)

Use to sign on clerks 1 through 10 without using the Clerk# key. No programming available.

CLERK # Key

(Key code 335)

Use to sign on clerks using their clerk # or clerk code – no programming available.

Enter a Clerk # then press the Clerk# key to sign on the clerk.

CURRENCY CONVERSION 1-4 Keys

(Key codes 336-339)

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.: 4

The US dollar (home currency) is worth 110.24 Japanese Yen (foreign currency).

RATE: 11024 NUMBER OF DEC.: 2

CURRENCY CONVERSION 1-4 Function Options

(Key codes 336-339)

#	Option	Entry	Description
1	DESC	Alphanumeric 24 character	You can program a unique descriptor for each foreign currency. The default descriptors are CONV 1-4.
2	EXCHANGE RATE	7 digits	Enter the exchange rate of up to 7 digits (do not enter the decimal point). See the examples.
3	DECIMAL PLACE	0 - 4	Enter a number from 0 to 4 to indicate the decimal position of the exchange rate. Count the decimal position from the right. See the examples below.

EAT-IN, TAKE OUT, DRIVE-THRU Function Options

(Key codes 444-446)

#	Option	Entry	Description
1	DESC	Alphanumeric 24 character	You can program a unique descriptor. The default descriptors are EATIN, TAKE OUT and DRIVE-THRU.
2	EXEMPT TAX 1	Y or N	If you wish to automatically exempt the tax for a particular type of sale, select Y for the appropriate tax(s) to exempt. For example, if items are non-taxable for take-out, but taxable for eat-in, set this program to exempt tax on take-out sales.
3	EXEMPT TAX 2	Y or N	
4	EXEMPT TAX 3	Y or N	
5	EXEMPT TAX 4	Y or N	
6	COMPULSORY VALIDATION	Y or N	Choose Y to enforce validation if an optional printer with validation capability is connected to an RS-232C port.

EMV TIP Function Options

(Key code 416)

#	Option	Entry	Description
1.	DESC	Alphanumeric 24 character	You can program a unique descriptor. The default = EMV
2.	UNDER MANAGER CONTROL	Y or N	Select Y to allow operation only in manager operation mode.
3.	SEND TO EFT	Y or N	Must be Y for integrated payment applications.

ERROR CORRECT Function Options

(Key code 340)

#	Option	Entry	Description
1	DESC	Alphanumeric 24 character	You can program a unique descriptor. The default descriptor is ERRCORR.
2	HALO	7-digit amount	You can limit errors by setting the maximum amount that can be tendered. "0" means that there is no entry limit.
3	KEY DISABLE	Y or N	Select Y to disable this function.
4	UNDER MANAGER CONTROL	Y or N	Select Y to allow operation only in manager operation mode.
5	COMPULSORY VALIDATION	Y or N	Choose Y to enforce validation if an optional printer with validation capability is connected to an RS-232C port.

FOOD STAMP SHIFT Function Options

(Key code 341)

There is no programming on the F/S SHIFT key, it is used to shift the Food/Stamp status for an item when pressed prior to registering the item in a sale.

FOOD STAMP SUBTOTAL Function Options

(Key code 342)

Use this key to get the subtotal of all food stamp eligible items in the sale.

#	Option	Entry	Description
1	DESC	Alphanumeric 24 character	You can program a unique descriptor. The default descriptor is F/S SUB.
2	KEY DISABLE	Y or N	Select Y to disable this function.

FOOD STAMP TENDER Function Options

(Key code 343)

Is used to tender the food stamp portion of a sale.

#	Option	Entry	Description
1	DESC	Alphanumeric 24 character	You can program a unique descriptor. The default descriptor is F/S TEND.
2	HALO	7-digit amount	You can limit errors by setting the maximum amount that can be tendered. "0" means that there is no entry limit.
3 4 5 6	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.
7	ALLOW DECIMAL	Y or N	Select Y to allow entry other than whole dollar amounts. i.e. 3.25
8	CHANGE IS ISSUED IN CASH	Y or N	If you want change less than one dollar from food stamp tender is applied to non-food stamp eligible items, Select N . If you want change less than one dollar issued in cash change, Select Y .
9	DOES DRAWER OPEN	Y or N	Select N if you do not want the drawer to be opened with this key.
10	COMPULSORY VALIDATION	Y or N	Choose Y to enforce validation if an optional printer with validation capability is connected to a Serial port.
11	ALLOW OVER TEND.	Y or N	Select Y to allow tender greater than the amount of the sale.
12	SEND TO EFT	Y or N	Select Y if IPTran LT is connected for integrated credit.
13	EFT PORT (0-3)	Y or N	Enter the number for the port where the EFT IPTran is connected.
14	SURCHARGE %	0.00 ~ 4.00 <i>DC Direct Only</i>	<i>(Requires v5.000)</i> Allowable % rate entries are from 0.00 to 4.00 percent. The Default setting = 0.00 (No Surcharge). Surcharge will maintain a separate balance on the financial report and will update the drawer total.
15	MANUAL ENTRY	Y or N <i>DC Direct Only</i>	<i>(Requires v5.000)</i> Set this option to Y if you want this card to be for manual credit card entry.

Beginning at v5.001 – When Manual Entry = Y (*enabled*) on the Food Stamp Tender key, when the F/S TEND key is pressed the ECR will display PRESS CASH=SWIPE CLEAR=MANUAL.

GUEST # Function Options

(Key code 448)

#	Option	Entry	Description
1	DESC	Alphanumeric 24 character	You can program a unique descriptor. The default descriptor is GUEST.
2	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.
3	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.
4	PRINT AT REMOTE PRINTER	Y or N	Select Y to print the GUEST # at the kitchen printer when items in the transaction are sent to the KP.

INACTIVE Function Key

(Key code 458)

There is no programming available on the Inactive function key. This key is used to eliminate a function key by replacing the current key assignment with the INACTIVE function key.

HELP Function Key

(Key code 407)

When assigned to the keyboard, the HELP function key can be used to print procedure information for various operations or print the default images.

1. Press the **HELP** key.

```
[HELP] - ENTER NUMBER TO PRINT
1. MAKING A SALE
2. VOIDING AN ITEM
3. PRINTING A REPORT
4. PROGRAM AN ITEM
5. PROGRAM LOGO
6. SAVE TO SD
7. IMAGE SAMPLE
```

2. Enter the number associated to the procedure you wish to view.
3. The procedure for your selection will be printed to the receipt printer.

KEY SHIFT 1-3 Keys

(Key codes 411-413)

The keyboard shift keys are used to access the 3 levels of keyboard PLU keys. Keyboard Shift keys can be set as Pop-Up Item, Pop-Up Sale or Stay-Down in system option programming. The PLUs accessed by each level are:

Raised Keyboard:

Key Shift 1 PLUs 1-12
Key Shift 2 PLUs 13-24
Key Shift 3 PLUs 25-36

Flat Keyboard:

Key Shift 1 PLUs 1-60
Key Shift 2 PLUs 61-120
Key Shift 3 PLUs 121-180

MODIFIER 1-5 Function Options

(Key codes 358-362)

#	Option	Entry	Description
1	DESC	Alphanumeric 24 character	You can program a unique descriptor. The default descriptors are MOD1 - MOD5.
2	UNDER MANAGER CONTROL	Y or N	If Y , the operator cannot use this function in REGISTER MODE. The function is allowed only in the MANAGER MODE.
3	AFFECT PLU #	Y or N	Select Y to modify the PLU and cause a different item/price to be registered. Select N to only add the modifier descriptor.
4	PRINT ON RECEIPT	Y or N	Select N to suppress printing of the modifier descriptor on the receipt.
5	AFFECT DIGIT OF PLU #	1-14	Preceding a PLU with a Size and/or Modifier key manipulates the PLU code assigned to the PLU key, causing a different PLU to be registered when the PLU key is pressed. Enter the digit of the PLU number you wish to be changed when using this key. (Digit #1 is the rightmost digit; digit #14 is the leftmost digit.)
6	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.

PRICE CHANGE Function Options

(Key code 409)

#	Option	Entry	Description
1	DESC	Alphanumeric 24 character	You can program a unique descriptor. The default descriptor is PRICE CHG.
2	PRICE CHANGE	NONE YES PROMPT	Choose NONE if you want to disable the function. Select YES if you want to save the price. PROMPT will display a message before saving the new price.
3	KEY DISABLE	Y or N	Select Y to disable this function.
4	UNDER MANAGER CONTROL	Y or N	If Y , the operator cannot use this function in REGISTER MODE. The function is allowed only in the MANAGER MODE.

PRICE LEVEL 1-2 Function Options

(Key codes 345-346)

#	Option	Entry	Description
1	DESC	Alphanumeric 24 character	You can program a unique descriptor. The default descriptors are LEVEL1, LEVEL2, etc.
2	SEND DESCRIPTION TO KP	Y or N	Determines whether the level descriptor will be printed with the item at the KP.
3	KEY DISABLE	Y or N	Select Y to disable this function.
4	UNDER MANAGER CONTROL	Y or N	Select Y to allow operation only in manager operation mode.
5	PRINT ON GUEST CHECKS	Y or N	Select Y to print level descriptor on Guest Check.
6	PRINT ON RECEIPT	Y or N	Select Y to print level descriptor on receipt.
7	PREVENT ZERO PRICE SALE	Y or N	Select Y to prevent registering of zero price items.
8	ALTERNATIVE ZERO PRICE LEVEL	0-2	Choose price level to use if PLU price is zero.

PRICE INQUIRY Key

(Key code 383)

No option settings are available for this function. The Price Inquiry key is used to check the price of a PLU in the register mode without registering the PLU in the sale.

P/BAL Function Options

(Key code 449)

#	Option	Entry	Description
1	DESC	Alphanumeric 24 character	You can program a unique descriptor. The default descriptor is PBAL.
2	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.
3	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 Function Options

(Key codes 364-366)

#	Option	Entry	Description
1	DESC	Alphanumeric 24 character	You can program a unique descriptor. The default descriptors are PO 1-3.
2	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.
3	KEY DISABLE	Y or N	Select Y to disable this function.
4	UNDER MANAGER CONTROL	Y or N	Select Y to allow operation only in manager operation mode.
5	COMPULSORY VALIDATION	Y or N	Choose Y to enforce validation if an optional printer with validation capability is connected to an RS-232C port.

PRINT CHECK Function Options

(Key code 450)

#	Option	Entry	Description
1	DESC	Alphanumeric 24 character	You can program a unique descriptor. The default descriptor is PRINT CHECK.
2	CHECK PRINT COMM PORT # (0-2)	0-2	Select the port (1 or 2) where the check print printer is attached. If 0 is selected, the check will print on the receipt printer.
3	AUTO SERVICE CHK	Y or N	Select Y if you want the Check Print function to automatically service the check.
4	PRT CHECK ON RECEIPT	Y or N	Select Y if you want the Check Print function to print on the receipt printer.
5	SKIP PRT OF CONSEC# ON CHECK	Y or N	Select Y if you wish to delete the printing of the consecutive # on the guest check.

PROMO Function Options

(Key code 368)

#	Option	Entry	Description
1	DESC	Alphanumeric 24 character	You can program a unique descriptor. The default descriptor is PROMO.
2	KEY DISABLE	Y or N	Select Y to disable this function.
3	UNDER MANAGER CONTROL	Y or N	Select Y to allow operation only in manager operation mode.
4 5 6 7	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 a cost of the item when using the PROMO key, set the taxable status for the appropriate tax to Y .

RECEIPT ON/OFF Key

(Key code 384)

No option settings are available in this key. This key is used to turn the receipt on or off.

When the receipt is OFF no receipt will print during a sale. A buffered receipt may be issued by pressing the CASH key a second time.

RECD ON ACCT 1-3 Function Options

(Key codes 369-371)

#	Option	Entry	Description
1	DESC	Alphanumeric 24 character	You can program a unique descriptor. The default descriptors are RA 1-3.
2	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.
3	KEY DISABLE	Y or N	Select Y to disable this function.
4	UNDER MANAGER CONTROL	Y or N	Select Y to allow operation only in manager operation mode.
5	COMPULSORY VALIDATION	Y or N	Choose Y to enforce validation if an optional printer with validation capability is connected to an RS-232C port.

RETURN Function Options

(Key code 357)

#	Option	Entry	Description
1	DESC	Alphanumeric 24 character	You can program a unique descriptor. The default descriptor is MDSE RETURN.
2	HALO	7-digit amount	You can limit errors by setting the maximum amount that can be used with this function. "0" indicates there is no entry limit.
3	KEY DISABLE	Y or N	Select Y to disable this function.
4	UNDER MANAGER CONTROL	Y or N	Select Y to allow operation only in manager operation mode.
5	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 Function Options

(Key code 373)

#	Option	Entry	Description
1	DESC	Alphanumeric 24 character	You can program a unique descriptor. The default descriptor is SCALE.
2	KEY DISABLE	Y or N	Select Y to disable this function.
3	UNDER MANAGER CONTROL	Y or N	Select Y to allow operation only in manager operation mode.
4	KEY IS MAN. ENTRY	Y or N	Select Y if you wish to scale key to enter a manual weight. Select N if you wish to automatically recall the weight from the attached scale.
5	TARE-WEIGHT COMP.	Y or N	Select Y if you wish to enforce the subtraction of a tare weight on the scale entry.
6	Allow Dollar Entry On Scalable Item	Y or N	Select Y to allow open price entry on scalable items. (<i>Not auto-scale</i>)
7	MANUAL SYMBOL	LB, KG, OZ	Select the weight symbol to be used. Select LB for pounds / KG for kilogram / OZ for ounce measurements.

SERVICE Function Options

(Key code 451)

#	Option	Entry	Description
1	DESC	Alphanumeric 24 character	You can program a unique descriptor. The default descriptor is SERVICE.
2	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
3	PRINT ON RECEIPT	Y or N	Select N to not print on the receipt.
4	NEGATIVE BALANCE IN MGR CONTROL	Y or N	Select Y if you do not want the operator to use this function in REGISTER MODE. The function is allowed only in the MANAGER MODE.
5	CALCULATE TAX1	Y or N	Select Y to calculate and add the appropriate tax automatically when finalized with this key.
6	CALCULATE TAX2		
7	CALCULATE TAX3		
8	CALCULATE TAX4		
9	COMPULSORY VALIDATION	Y or N	Choose Y to enforce validation if an optional printer with validation capability is connected to an RS-232C port.
10	HARD CHECK PRINTER PORT	0-2	If you are using a hard check system, enter the RS232C port number (1 or 2) where the optional guest check printer is attached.

STOCK INQUIRY Key

(Key code 410)

Use to view the Current & Minimum stock status of the item. No programable settings are available.

SUBTOTAL Function Options

(Key code 372)

#	Option	Entry	Description
1	DESC	Alphanumeric 24 character	You can program a unique descriptor. The default descriptor is SUBTOTAL.
2	KEY DISABLE	Y or N	Select Y to disable this function.

TABLE # Function Options

(Key code 452)

#	Option	Entry	Description
1	DESC	Alphanumeric 24 character	You can program a unique descriptor. The default descriptor is TABLE.
2	ENFORCE ON CHECK TRACK	Y or N	If Y, you must enter the table number before opening a new check.
3	ENFORCE ON ALL SALES	Y or N	If Y, you must enter the table number before beginning any transaction.
4	PRINT AT REMOTE PRINTER	Y or N	Choose Y to print the table number at the remote printer.

TARE Function Options

(Key code 374)

Tare Weights are programmed in system option programming, option #42. The tare weight can be entered up to 3 digits past the decimal, *i.e.* 1.235. The third digit can be used but it can only be a 0 or 5.

#	Option	Entry	Description
1	DESC	Alphanumeric 24 character	You can program a unique descriptor. The default descriptor is TARE.
2	KEY DISABLE	Y or N	Select Y to disable this function.
3	UNDER MANAGER CONTROL	Y or N	Select Y to allow operation only in manager operation mode.
4	TARE #5 IS MANUAL TARE	Y or N	Choose Y to use tare number five to manually enter a tare weight.

TAX EXEMPT Function Options

(Key code 375)

#	Option	Entry	Description
1	DESC	Alphanumeric 24 character	You can program a unique descriptor. The default descriptor is TAXEXMT.
2 3 4 5	EXEMPT TAX 1 EXEMPT TAX 2 EXEMPT TAX 3 EXEMPT TAX 4	Y or N	Select Y for each tax to be exempted when this key is used.
6	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.
7	COMPULSORY VALIDATION	Y or N	Choose Y to enforce validation if an optional printer with validation capability is connected to an RS-232C port.

TAX SHIFT 1-4

(Key codes 376-379)

There are no option settings on the TAX SHIFT 1-4 keys, they are used to shift the TAX status for an item when pressed prior to registering the item in a sale. 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.

TIP Function Options

(Key code 453)

#	Option	Entry	Description
1	DESC	Alphanumeric 24 character	You can program a unique descriptor. The default descriptor is TIP.
2	KEY DISABLE	Y or N	Select Y to disable this function.
3	UNDER MANAGER CONTROL	Y or N	If Y , the operator cannot use this function in REGISTER MODE. The function is allowed only in the MANAGER MODE.
4	AMOUNT : Y / % : N	Y or N	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.
5 6 7 8	ADD TAX RATE1 ADD TAX RATE2 ADD TAX RATE3 ADD TAX RATE4	Y or N	Choose Y for the applicable Tax Rate if tax is to be calculated and added on the tip amount.
9	TIP ADDED TO NET & GROSS	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 Function Options

(Key code 382)

#	Option	Entry	Description
1	DESC	Alphanumeric 24 character	You can program a unique descriptor. The default descriptor is PRICE CHG.
2	SLIP OUTPUT PORT	0-2	If validation is used, identify the communications port (1-2) where the validating printer is attached. Enter 0 if validation is not used.
3	KEY DISABLE	Y or N	Select Y to disable this function.
4	ALLOW MULTIPLE RECEIPT	Y or N	Select Y to allow multiple validations of the same transaction.

VOID Function Options

(Key code 380)

#	Option	Entry	Description
1	DESC	Alphanumeric 24 character	You can program a unique descriptor. The default descriptor is VOID.
2	HALO	7-digit amount	You can limit errors by setting the maximum amount that can be tendered. " 0 " means that there is no entry limit.
3	KEY DISABLE	Y or N	Select Y to disable this function.
4	UNDER MANAGER CONTROL	Y or N	If Y , the operator cannot use this function in REGISTER MODE. The function is allowed only in the MANAGER MODE.
5	COMPULSORY VALIDATION	Y or N	Choose Y to enforce validation if an optional printer with validation capability is connected to an RS-232C port.

WASTE Function Options

(Key code 381)

#	Option	Entry	Description
1	DESC	Alphanumeric 24 character	You can program a unique descriptor. The default descriptor is WASTE.
2	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.
3	KEY DISABLE	Y or N	Select Y to disable this function.
4	UNDER MANAGER CONTROL	Y or N	If Y , the operator cannot use this function in REGISTER MODE. The function is allowed only in the MANAGER MODE.
5	COMPULSORY VALIDATION	Y or N	Choose Y to enforce validation if an optional printer with validation capability is connected to an RS-232C port.

Macro Key Programming

(Key codes 347-356)

Macro1~Macro10 keys may be programmed to 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. Use this program to record keystrokes for each of the 10 possible macro keys.

NOTE: The (PAGE↑), (PAGE↓), (↑), (↓) keys are used for navigating through menu selections and settings when in the **X, Z, P, S-Mode** so, the Macro Key must be assigned to different locations than where these navigation functions reside [(PAGE↑), (PAGE↓), (↑), (↓)].

Program New Macro

Macro keys may be programmed to perform up to 50 keystrokes with a single key. The MACRO key(s) must be assigned to the keyboard before you can program the operation keystrokes.

1. From the **PROGRAM MODE**, press **3** and **CASH** for **FUNCTION KEY**. The **FUNCTION KEY** Program screen displays.

```
FUNCTION KEY
1 . FUNCTION KEY
2 . MACRO KEY
```

2. From the **FUNCTION KEY** screen, press **2** and **CASH** for **MACRO KEY**. The **MACRO KEY** program screen displays.

```
MACRO KEY
ENTER MACRO KEY
TO BE PROGRAMMED
```

3. Press the macro key on the keyboard (**MACRO1 – MACRO10**) you wish to program. The Macro descriptor screen displays.

```
MACRO KEY
DESC :                               MACRO10
```

4. Type in a new descriptor if desired. Press the **CASH** key to proceed to the Macro key sequence programming. (Pressing **CLEAR** will return to the Macro selection screen.)
5. The screen displays the first macro line.

```
MACRO1
ENTER FUNC . KEY
1 :
[HELP] ENTER SAME MACRO
KEY
TO FINISH
PROGRAM
```

Key Lock Mode Information: When in Macro programming, turning the Mode Key to another position will program that operation into the Macro (**Z, X, or REG**). Example: If you wish a **Z-Report** macro to operate in **REG** mode, first turn the key lock to **Z** before recording keystrokes. You can turn the key lock again to another key position during the recording of the macro if necessary. You must return the key lock to the **PGM** mode to finalize the macro recording.

6. Press the first keystroke of the macro sequence; continue entering all keystrokes. You can enter up to **50 keystrokes** including the **Keylock Mode Information** into a Macro.

```

MACRO1
ENTER FUNC.KEY
3: ONE
SUBTOTAL
[HELP]ENTER SAME MACRO KEY
      TO FINISH PROGRAM

```

7. Return Mode Key to the “**P**” position if it had been turned. Press the same **MACRO** key to end the programming sequence. You are returned to the Macro key selection screen.
8. Continue to program additional MACRO keys or press the **CLEAR** key to return to **PROGRAM MODE** screen.

Edit Macro Program

We do not have the ability on the NR-510B-E/NR-510RB-E to scroll to a specific keystroke to edit. To edit the operation of an existing MACRO you would simply reprogram the Macro with the desired keystrokes.

If there are extra keystrokes at the end of the MACRO that need to be removed, assign the Inactive function (*key code 458*) to those locations.

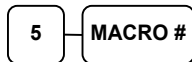
NOTE: (**PAGE**↑), (**PAGE**↓), (↑), (↓) keys are used for navigating through menu selections and settings when in the **X, Z, P, S-Mode** so, the Macro Key must be assigned to different locations than where these navigation function keys reside (**PAGE**↑), (**PAGE**↓), (↑), (↓).

Macro # Function Key

(Key Code #408)

Macro keys must be on the keyboard to be able to program the keystrokes / operations you want the Macro to perform. However, Macros do not need to be on the keyboard to be able to run the macro. If the Macro # function key is assigned to the keyboard it can be used to run any of the Macro’s (*Macro 1 ~ 10 function keys*).

1. From the **REG** Mode enter the number of the MACRO (*1-10*) you wish to run; press the **Macro #** key. For example:



The operations programmed on MACRO # 5 will execute.

Options Programming

Options are organized into different categories, i.e. System, Print, Report, etc. to make it easier for the programmer to find and set options.

1. At the **PROGRAM MODE**, press **4** and **CASH** for **OPTIONS Programming**. The **OPTIONS** screen displays.
2. Navigating through the menu screens: Press the (↑) key and the (↓) key to navigate up & down the current menu sections; press the **CASH** key to access the selection. You may also simply enter the number for the menu selection you wish to access and press **CASH** to access the menu selection.

Use the (**Page**↑) and (**Page**↓) keys to advance to the next or previous menu page.

```
1 . SYSTEM
2 . PRINT
3 . REPORT
4 . TAX
5 . CURRENCY
6 . ROUNDING
7 . LOGO
8 . KITCHEN PRN
9 . BARCODE
10 . EJ
11 . TRAIN MODE
12 . TABLE
13 . DETAIL PRINT
```

3. For Example, press **2 CASH** to access the **PRINT** options. The **PRINT** options screen is displayed.

```
          PRINT
1 . PRINT DATE           [Y] ←
2 . PRINT TIME           [Y]
3 . PRINT MACHINE NO     [Y]
4 . PRINT CLERK NAME     [Y]
5 . PRINT CONSECUTIVE NO [Y]
6 . PRINT SALE ITEM NO   [N]
          -PAGE 1/4-
```

4. To select the **PRINT DATE** option, press **CASH**.

```
PRINT
PRINT DATE                Y

SELECT : UP, DOWN
CHANGE : CASH
CANCEL : CLEAR
```

5. To edit the option setting, Press the (↑) key for **YES** and the (↓) key for **NO**. Press **CASH** to confirm & set the option value and return option screen.

SYSTEM Options

#	System Option	Entry	Description
1.	BEEPER ACTIVE	Y or N	Select N for a silent keyboard.
2.	CLERK ENTRY	PUSH CODE	Select PUSH for a push button clerk or select CODE for a code entry clerk system. (Number – clerk key or clerk - number – clerk.)
3.	CLERK IS	STAY DOWN POP-UP	Select Y for pop-up clerks, with pop-up clerks you must sign on for each transaction. Select N for stay down clerks, with stay down clerks the same clerk remains signed on until they sign off.
4.	CLERK INTERRUPT	Y or N	If allowed, a new clerk can be signed on in the middle of an active transaction. In this circumstance, the initial transaction is suspended. When the interrupt transaction is completed, the suspended transaction can be continued.
5.	DECIMAL PLACE	0-3	Enter the number of decimal positions the system will use.
6.	DATE FORMAT IS	MMDDYY DDMMYY YYMMDD	Select date printing format.
7.	DESC. PGM METHOD	OVERLAY CODE	When OVERLAY is selected, program descriptors by pressing the appropriate key on the keyboard overlay. When CODE is selected, program descriptors by typing the code for each descriptor character.
8.	DRAWER MUST BE SHUT TO SALE	Y or N	Select Y to enforce closed drawer for register operations.
9.	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.
10.	DRAWER OPEN TIME	0-99	If you enable the open drawer alarm above, you can set the length of time (1-99 seconds) before the alarm sounds.
11.	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.
12.	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.
13.	GLOBAL ENTRY LIMIT	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.
14.	ALLOW MULTIPLE RECEIPT	Y or N	Set to Y to issue more than one copy of a transaction receipt. If the receipt is turned OFF, this option must be set to Y to issue a receipt on demand.
15.	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.
16.	ALLOW DIRECT MULTIPLY	Y or N	If Y , you can multiply preset items by simply entering the quantity, then pressing the preset PLU key.
17.	DIRECT MULTIPLY OVER ONE DIGIT	Y or N	If you allow direct multiplication of a preset PLU, select N to allow only single digit multiplication or select Y to allow multiplication by more than one digit.
18.	TRIPLE MULTIPLICATION	Y or N	Y allows multiple multiplication, for example, 2 X/TIME, 3 X/TIME, ITEM. Note that multiple multiplication overrides split pricing.

#	System Option	Entry	Description
19.	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.
20.	PROMPT FOR PRICE IF PRICE = 0.00	Y or N	Select Y to allow the operator to enter PLU price of zero price.
21.	COMPULSORY SUBT. BEFORE TENDER	Y or N	Select Y if you want to force the operator to use the SUBTOTAL function before tendering.
22.	ENABLE NOT FOUND PLU	Y or N	Select Y to allow the operator to enter PLU prices and other data when the entered PLU number is not found in the PLU file.
23.	NEGATIVE SALE MGR ONLY	Y or N	Select Y to control negative transactions (when cash is removed from the drawer). When selected mode position must be in the Manager mode to finalize the transaction.
24.	ZERO SALE MGR ONLY	Y or N	Select Y to control zero transactions (when cash is removed from the drawer). When selected mode position must be in the Manager mode to finalize the transaction.
25.	MODIFIER:	Pop-Up Item Pop-Up Sale Stay Down	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 adding the modifier descriptor and not changing the code of the subsequent PLU. Pop-Up-Item: When you press a modifier key, the modifier applies to the next item only. Pop-Up-Sale: The same modifier applies to any subsequent items registered in the same transaction. Stay-Down: The modifier applies to all subsequent items on all subsequent transactions.
26.	PRICE LEVEL IS	Pop-Up Item Pop-Up Sale Stay Down	Pop-Up-Item: The price level key applies only to the next item registered in the transaction. Pop-Up-Sale: The same price level key applies to any subsequent items registered in the same transaction. Stay-Down: The same price level key applies to all subsequent items on all subsequent transactions.
27.	KEYBOARD SHIFT	Pop-Up Item Pop-Up Sale Stay Down	Pop-Up-Item: The keyboard shift key applies only to the next item registered in the transaction. Pop-Up-Sale: The keyboard shift key applies to any subsequent items registered in the same transaction. Stay-Down: The keyboard shift key applies to all subsequent items on all subsequent transactions.
28.	HASH IS	NORMAL NON-ADD	NORMAL: Hash adds to all totals except the gross and net sales totals on the financial report. NON-ADD: Hash does not add to any totals, except the HASH total on the financial report.
29.	% IS NOT AFFECT TO NET SALE	Y or N	Select Y not to affect net sale amount.
30.	TENDER VALID AMOUNT	AMT OF SALE AMT TENDERED	Single Line Validation is allowed if an appropriate optional printer is connected to an RS-232C port. Choose the content of single line validation.
31.	DISABLE CASH DECLARATION	Y or N	Select Y to block the cash declaration function.

#	System Option	Entry	Description
32.	ALLOW SALE WITH ZERO STOCK	Y or N	When N, inventory PLUs cannot be sold when the stock count reaches "0".
33.	WARNING BELOW MINIMUM STOCK	Y or N	Select Y to display warning message if current stock value is less than minimum stock value.
34.	STOCK PROGRAM BY PC/SD/USB	ADD(+) SUB(-) REPLACE	Choose ADD(+) , SUB(-) , or REPLACE 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.
35.	USE X/Z/P/S-MODE PASSWORD	Y or N	Warning! Before enabling this option, you MUST enter the passwords for X/Z/P/S-Modes in system option 44 . Select Y to require a 6-digit password for access to the X, Z, P, and S-Modes to restrict access to these modes.
36.	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.
37.	RS-232C PORT POWER ON	Y or N	Select Y to turn ON the RS-232C port power.
38.	DISPLAY 4 LINE IN REG MODE	Y or N	Select Y to display 4 lines for items when in the register mode. Beginning at v4.0.49 the operator can scroll to the top of the order; press the decimal (.) key, then use PAGE-UP AND PAGE-DOWN function keys to scroll through the order. Press the CLEAR key to put the register back into sale entry mode. Select No to display 1 item in Register mode. (Graphic Multi-Line LCD only.)
39.	STORE NAME	8 Character	Stored files will be saved on SD/USB under a folder with the store name. Do not enter spaces in the store name.
40.	DRAWER LIMIT	8 DIGITS	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.
41.	CHECK CHANGE LIMIT	8 DIGITS	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.
42.	TARE WEIGHT TARE 1 : TARE 2 : TARE 3 : TARE 4 : TARE 5 :	4 DIGITS	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. Tare weights can be entered to 3 places past the decimal, <i>i.e.</i> 1.235. 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 you choose to use tare #5 for manual tare weight entry, do not enter a weight for tare #5.
43.	MACHINE NO.	5 DIGITS	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.

#	System Option	Entry	Description
44.	MODE P/W: X Mode P/W Z Mode P/W PGM Mode P/W S Mode P/W	6 DIGITS	Used when System Option 35 = Yes. To use mode passwords, you must program passwords for each Mode. X-Mode, Z-Mode, PGM-Mode and S-Mode. The password may be up to 6 digits. <i>(Beginning at v4.051, the Default P/W is 999999.)</i>
45.	LANGUAGE SELECT	ENGLISH SPANISH FRENCH	Descriptors of menu, system and option can be converted to the selected language automatically. But Descriptors of Report, PLU, Group and etc. cannot be converted to the selected language. Those descriptors can be changed only by user programming.
46.	USE RECEIPT AS DETAIL	Y or N	Select N for normal receipt printing. Select Y to print sale receipt as detail printer (journal printer). If Y , you can program DETAIL PRINT Options. Additional parts are required for the optional Take-Up Spool.
47.	NOT INCREASE RCPT# AT CLK IN/OUT	Y or N	Select Y if you do not wish to increase a receipt number when signing on or off a clerk.
48.	EFT DRAFT	DATATRAN FINE DINING	<i>(Used with Integrated Payment only.)</i> Select Fine Dining to print a tip line on EFT draft. Select Datatran to not print tip line.
49.	MSR CONNECT	DATATRAN PDC	<i>(Used with Integrated Payment only.)</i> Select the device where the card reader is connected; For EMV installations always select PDC <i>(NR-510 is EMV only)</i> .
50.	PIN PAD TYPE	DUKPT ROTATE	<i>(Used with Integrated Payment only.)</i> Always select DUKPT .
51.	PIN PAD PORT	0-3	<i>(Used with Integrated Payment only.)</i> The Pin-Pad connects to the Datacap Device; Select the port# (1-3) where Datacap Device is connected.
52.	COPY OF DATATRAN RECEIPT	0-99	<i>(Used with Integrated Payment only.)</i> Set the desired number of EFT receipts to print (default = 1).
53.	MARK CARD No ON ALL EFT DRAFT	Y or N	<i>(Used with Integrated Payment only.)</i> Select N to NOT print the card number on EFT receipts.
54.	“test” CLERK ID?	Y or N	Always set to N .
55.	CARDHOLDER NAME?	Y or N	<i>(Used with Integrated Payment only.)</i> Set to Y if you want the cardholder’s name printed on EFT receipts.
56.	DISABLE EFT AMNT CONFIRMATION	Y or N	<i>(Requires v4.031 or later. Used with Integrated Payment only.)</i> If Y , the amount confirmation on the Pin-Pad is disabled.
57.	PROMPT SUGGESTIVE TIP	Y or N <i>DC Direct Only</i>	This option is only used with Datacap DC Direct. Will prompt at the PIN-Pad for the programmed suggested gratuity percentages as set in the Z position. DC Direct Functions > Settings: Gratuity Suggestions.
58.	ALLOW MULTI- PRICING	Y or N <i>DC Direct Only</i>	This option is only used with Datacap DC Direct together with the Charge 1~8 keys & F/S Tend key Multi-Pricing rate setting. This allows for separate Cash, Credit, Debit and Food Stamp amounts to show on the Pin-Pad.
59.	SHOW TIP AMOUNTS	Y or N <i>DC Direct Only</i>	This option is used with System Option 57 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.

#	System Option	Entry	Description
60.	SAVE EFT LOG TO SD	Y or N <i>DC Direct Only</i>	<i>(Added at v05.009)</i> Default setting = N. Set to Y only for troubleshooting purposes to save the EFT Log to the installed SD card.
61.	SURCHARGE INCLUDE TAX	Y or N <i>DC Direct Only</i>	<i>(Added at v05.010)</i> Select Y to include TAX when calculating the SURCHARGE amount.
62.	MULTI PRICE INCLUDE TAX	Y or N <i>DC Direct Only</i>	<i>(Added at v05.010)</i> Select Y to include TAX when calculating the MULTI-PRICE amount.
63.	MIX & MATCH IS TAXABLE	Y or N	<i>(Requires v4.049 or later.)</i> Select N to tax any taxable items before the M&M discount is applied (tax the gross amount). Select Y to tax any taxable items after the M&M discount is applied (tax the net amount).
64.	USE BUFFER MORE THAN 200 LINE	Y or N	<i>(Requires v4.050 or later.)</i> When N, a maximum of 200 lines may be entered per transaction. When Y, Entry of more than 200 Lines is allowed, a buffered receipt is not itemized.

PRINT Options

#	Print Option	Entry	Description
1.	PRINT DATE	Y or N	Select N to delete the printing of the date.
2.	PRINT TIME	Y or N	Select N to delete the printing of the time.
3.	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 to print the register number on the receipt.
4.	PRINT CLERK NAME	Y or N	Select N to delete the printing of the clerk name on the receipt.
5.	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.
6.	PRINT SALE ITEM No	Y or N	Select Y to print a count of the number of items on each receipt.
7.	PRINT PLU # ON RECEIPT	Y or N	If Y, the PLU number and descriptor will print. If N, only the PLU number will print.
8.	USE THOUSAND SEPARATOR	Y or N	Select Y to use Thousandths Separator.
9.	SEPARATOR TYPE	, SPACE .	Choose the thousandths separator character (i.e. 1,000.00). Comma (,) (Space) or Decimal (.)
10.	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.
11.	ALLOW SECOND RECEIPT	Y or N	Set to N to issue only one copy of a transaction receipt. Select Y to issue a 2 nd receipt of the same transaction when the receipt is ON. Note: A maximum of 184 items will print on second receipt; if more items were registered in the sale, a buffered receipt is issued.
12.	PRINT SUBTOTAL WHEN PRESSED	Y or N	Select Y the subtotal to print when the SUBTOTAL key is pressed.
13.	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 to print the subtotal without tax on the receipt.

#	Print Option	Entry	Description
14.	PRT GROUP TOTAL AFTER TENDER	Y or N	Choose Y to print group total after tender.
15.	VOLUME UNIT	GAL LTR	If gallonage is selected in PLU programming, choose gallons or liters here.
16.	SUPPRESS BITMAP IN PGM/X/Z	Y or N	Select Y to not print Image logo in Program, X and Z-Modes.
17.	PRE-FEED LINE# RECEIPT (0-5)	0-5	Enter the number of lines to feed before beginning receipt printer print.
18.	POST-FEED LINE# RECEIPT (0-5)	0-5	Enter the number of lines to feed after beginning receipt printer print.
19.	PRT DOUBLE HIGH ALL TOTAL AMT	Y or N	Select Y to print total amount as double size on the receipt.
20.	CURRENCY LOGO: HOME CURRENCY CONV#1 LOGO CONV#2 LOGO CONV#3 LOGO CONV#4 LOGO	5 Character s \$ ■ ■ ■ ■	Users can designate a different home currency symbol. To select a different home currency symbol, press the symbol to use on the Alpha Keyboard Overlay. 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 to use on the Alpha Keyboard Overlay.
21.	SCAN PLU NAME & PRICE	Y or N	Select Y to scan only PLU name and price.
22.	BOLD DESC. FOR TOTAL/PAYMENT	Y or N	Select Y to print TOTAL descriptor and payment (CASH, CHECK, and MISC TEND) descriptor as double size on the receipt.
23.	PRINT QUANTITY ON RECEIPT	Y or N	Select Y to print a quantity before each item on the receipt. For Example: 1X @5.99 Burger \$5.99
24.	USE TAXABLE DESC OF FIN ON RCPT	Y or N	Select Y to use the taxable descriptor of financial on the receipt.

REPORT Options

#	Report Option	Entry	Description
1.	CASH DECLARATION REQ BEFORE REPORTS	Y or N	Select Y to enforce a cash declaration function before a financial, clerk, or cash in drawer report can be generated.
2.	ONLY ONE X RPT BEF. CASH DECLA	Y or N	Select Y to allow X report only one time before Cash Declaration.
3.	DISABLE X REPORT	Y or N	Select Y to disable X reports.
4.	OPEN DRAWER WHEN REPORTS RUN	Y or N	Select N to stop the drawer from opening when reports are run.
5.	SUPPRESS PRT OF LAST REPT DATE	Y or N	Select Y to not print the Last Report date a Z report was issued on Z reports.
6.	RESET RECEIPT No AFTER 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.
7.	RESET GRAND TOTAL AFTER Z REPORT	Y or N	Select Y to reset the grand total to zero after the financial report is reset.

#	Report Option	Entry	Description
8.	RESET Z COUNTER AFTER Z1 FINANCIAL REPORT	Y or N	Choose Y to reset the Z counter after a Z1 financial report.
9.	RESET Z COUNTER AFTER Z1 TIME REPORT	Y or N	Choose Y to reset the Z counter after a Z1 time report.
10.	RESET Z COUNTER AFTER Z1 PLU REPORT	Y or N	Choose Y to reset the Z counter after a Z1 PLU report.
11.	RESET Z COUNTER AFTER Z1 CLERK REPORT	Y or N	Choose Y to reset the Z counter after a Z1 clerk report.
12.	RESET Z COUNTER AFTER Z1 GROUP REPORT	Y or N	Choose Y to reset the Z counter after a Z1 group report.
13.	RESET Z COUNTER AFTER Z2 DAILY RPT	Y or N	Choose Y to reset the Z counter after a Z2 of the daily sales report.
14.	RESET ORDER No. AFTER Z1 REPORT	Y or N	Choose Y to reset the Order number after a Z1 of the financial report.
15.	PRINT Z COUNTER ON REPORT	Y or N	Select N to delete the printing of the reset counter on Z reports.
16.	SKIP ZERO TOTALS ON FINANCIAL REPORT	Y or N	By default, the register prints only totals with information other than zero. Select N to print the contents of all the financial report totals, even if the total is zero.
17.	PRINT NEGATIVE ITEM ON REPORT	Y or N	Select N if you want to remove the VOID MODE, RETURN, ERROR CORR and VOID totals from the financial and clerk reports.
18.	PRINT AUDACTION ON FINANCIAL REPORT	Y or N	Select N to remove the AUDACTION total from the financial and clerk reports.
19.	PRINT ON FIN RPT AVG ITEM/CUST	Y or N	Select Y to print the average items per customer (PLU sales counter/Net sales counter).
20.	PRINT ON FIN RPT AVG \$/CUST	Y or N	Select Y to print the average sales per customer (Net Sales/Net Sales counter).
21.	PRINT CLERK REPORT AFTER FINANCIAL REPORT	Y or N	When selected, the clerk report information will print at the end of the financial report. You will also still be able to issue the clerk reports alone if desired.
22.	PRINT DOUBLE FINANCIAL REPORT	Y or N	Select Y to print 2 copy financial reports.
23.	PRINT GROSS TOTAL ON X REPORT	Y or N	Select N to delete the printing of the gross sales total on the X financial report.
24.	PRINT GROSS TOTAL ON Z REPORT	Y or N	Select N to delete the printing of the gross sales total on the Z financial report.
25.	PRINT GRAND TOTAL ON X REPORT	Y or N	Select N to delete the printing of the grand total on the X financial report.
26.	PRINT GRAND TOTAL ON Z REPORT	Y or N	Select N to delete the printing of the grand total on the Z financial report.
27.	GRAND TOTAL IS	GROSS NET	Choose GROSS to accumulate the grand total in daily gross sales totals. Choose NET to accumulate the grand total in daily net sales totals.
28.	SKIP ZERO TOTALS ON CLERK REPORT	Y or N	By default, the register prints only totals with information other than zero. Select N to print the contents of all the clerk report totals, even if the total is zero.

#	Report Option	Entry	Description
29.	PRINT MEDIA TOTALS ON CLERK REPORT	Y or N	Select Y to print media totals for each clerk, thus allowing clerk cash drawer accountability.
30.	SKIP ZERO TOTALS ON PLU REPORT	Y or N	By default, the register prints only totals with information other than zero. Select N to print the contents of all the PLUs, even if the total is zero.
31.	PRINT PLU # ON PLU REPORT	Y or N	Select Y if you want the PLU# to print with the descriptor on the PLU report.
32.	PRINT % OF SALES ON PLU REPORT	Y or N	The register can calculate the percentage of sales represented by each PLU. Select Y to print this percentage on the PLU report.
33.	PRT PLU BY PRICE LEVEL REPORT	Y or N	Select Y to print PLU by price level on PLU reports.
34.	ALLOW Z STOCK REPORT	Y or N	When N the operator is not allowed to clear (Z) stock.
35.	PRINT WHEN POLLING REPORTS	Y or N	Choose N to suppress register printing when reports are polled.
36.	PRINT TRAIN TOTAL IN FINANCIAL REPORT	Y or N	Select Y to print train total on Financial Report.
37.	PRINT VAT BREAKDOWN ON FINANCIAL REPORT	Y or N	If Y a breakdown of the VAT eligible sale (the net amount) will print on Financial Report.
38.	PRINT VAT BREAKDOWN ON CLERK REPORT	Y or N	If Y a breakdown of the VAT eligible sale (the net amount) will print on Clerk Report.
39.	PRINT GROUP ON FINANCIAL REPORT	Y or N	When selected, the group report will print at the top of the financial report. The group report will not be allowed to be issued alone. (Will result in 'Sequence Error'.)

TAX Options

#	Tax Option	Entry	Description
1.	PRINT TAX SYMBOL	Y or N	Select N to remove the tax symbol (i.e."T1") from the print and display.
2.	PRINT TAX AMOUNT	Y or N	Select Y to delete the printing of the tax amount on the receipt.
3.	PRINT TAXABLE TOTAL	Y or N	Select Y to print the total of merchandise eligible for each tax on the receipt.
4.	PRINT TAX RATE	Y or N	If you are calculating a tax percentage (add-on tax or VAT tax) select Y to print the tax rate on each receipt.
5.	PRINT VAT BREAKDOWN	Y or N	If Y , a breakdown of the VAT eligible sale will print the net amount and the VAT amount.
6.	TAX AMOUNT IS	ITEM COMBINE	Select COMBINE if you are calculating and reporting more than one sales tax rate separately and to print just the total of multiple taxes rather than itemize each tax on the receipt.

CURRENCY Options

#	Currency Option	Entry	Description
1.	PRINT CURRENCY CONVERSION TOTAL	Y or N	Choose Y to print the currency conversion total on receipts.

ROUNDING Options

#	Rounding Option	Entry	Description																
1.	ROUND TABLE TYPE	ROUND TABLE SWEDISH CANADIAN	Select ROUND TABLE to enter a custom rounding system or choose the predefined SWEDISH or CANADIAN method to implement the rounding system that you enter on this option.																
2.	ROUND TABLE	2 DIGITS	To use the Round Table system you must program a Rounding table. The SWEDISH/CANADIAN rounding table is as below. <table style="margin-left: 40px;"> <thead> <tr> <th>#</th> <th>START</th> <th>END</th> <th>VALUE</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>.00</td> <td>.02</td> <td>.00</td> </tr> <tr> <td>2</td> <td>.03</td> <td>.07</td> <td>.05</td> </tr> <tr> <td>3</td> <td>.08</td> <td>.09</td> <td>.10</td> </tr> </tbody> </table>	#	START	END	VALUE	1	.00	.02	.00	2	.03	.07	.05	3	.08	.09	.10
#	START	END	VALUE																
1	.00	.02	.00																
2	.03	.07	.05																
3	.08	.09	.10																
3.	ALLOW ROUND ON SUBT	Y or N	Select Y to allow rounding when the SUBTOTAL key is pressed.																
4.	ALLOW ROUND ON CASH	Y or N	Select Y to allow rounding when press CASH key.																
5.	% AND TAX ROUNDING	ROUND UP 0.005, ROUND UP, ROUND DOWN	Select the digit that represents the appropriate rounding method for tax and discount calculations. Round up at 0.005 (half of a penny), always Round Up or always Round Down.																
6.	SPLIT PRICE ROUNDING	ROUND UP 0.005, ROUND UP, ROUND DOWN	Select the digit that represents the appropriate rounding method for split pricing (i.e. 2 at 3 for \$1.00) calculations. Round up at 0.005 (half of a penny), always Round Up or always Round Down.																

LOGO Options

#	Logo Option	Entry	Description
1.	PRINT PREAMBLE MESSAGE IN RCPT	Y or N	Choose Y to print the PREAMBLE message on the receipt.
2.	PRINT POSTAMBLE MESSAGE IN RCPT	Y or N	Choose Y to print the POSTAMBLE message on the receipt.
3.	PRINT PREAMBLE MESSAGE IN GUEST	Y or N	Choose Y to print the PREAMBLE message on the guest check.
4.	PRINT POSTAMBLE MESSAGE IN GUEST	Y or N	Choose Y to print the POSTAMBLE on the guest check.
5.	PRINT PREAMBLE IMG IN RCPT	Y or N	Choose Y to print the PRE-GRAPHIC LOGO on the receipt.
6.	PRINT POSTAMBLE IMG IN RCPT	Y or N	Choose Y to print the POST-GRAPHIC LOGO on the receipt.
7.	PRINT PREAMBLE IMG IN GUEST	Y or N	Choose Y to print the PRE-GRAPHIC LOGO on the guest check.
8.	PRINT POSTAMBLE IMG IN GUEST	Y or N	Choose Y to print the POST-GRAPHIC LOGO on the guest check.
9.	PREAMBLE IMAGE NO. ON RCPT	0-20	Choose the predefined image number to print on the top of the receipt.
10.	POSTAMBLE IMAGE NO. ON RCPT	0-20	Choose the predefined image number to print on the bottom of the receipt.

#	Logo Option	Entry	Description
11.	PREAMBLE IMAGE NO. ON GUEST	0-20	Choose the predefined image number to print on the top of the guest check.
12.	POSTAMBLE IMAGE NO. ON GUEST	0-20	Choose the predefined image number to print on the bottom of the guest check.
13.	PRINT PRE MESSAGE ON ORDER IN RCPT	Y or N	Choose whether to print the PREAMBLE on the internal order receipt.
14.	PRINT PRE IMG ON ORDER IN RCPT	Y or N	Choose whether to print the PREAMBLE LOGO on the internal order receipt.
15.	PRINT MSG ON REMOTE JOURNAL	Y or N	Choose Y to print the Message on the remote journal.
16.	PRINT MSG ON EJ	Y or N	Choose Y to print the Message on the electronic journal.

KITCHEN PRINTER Options

#	Kitchen Printer Option	Entry	Description
1.	PRINT KP ORDER # ON RECEIPT	Y or N	A system wide counter creates an order number for each kitchen requisition. Choose Y to print the order number on the kitchen printer requisition.
2.	PRINT PRICE ON KP	Y or N	Choose Y to print the item with or without its' price on the kitchen requisition.
3.	SEND TO KP IN VOID MODE	Y or N	Choose Y to print or not print registrations in void mode on kitchen requisitions.
4.	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.
5.	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".
6.	PRIORITY PRINT BY GROUP ON KP	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.
7.	PRT GROUP DETAIL ON KP	Y or N	Select Y to print Group detail on the order receipt.
8.	TWO LINE PRINT ON KP	Y or N	Choose Y to print two lines on Kitchen printer.
9.	PRINT PLU NUMBER ON KP	Y or N	Select Y to print PLU number on the order receipt.
10.	PRINT TOTAL AMT OF PLU ON KP	Y or N	Select Y to print total amount of PLU on kitchen printer.
11.	KP START NO.	6 DIGITS	A custom KP start number up to 6 digits can be programed.

BARCODE Options

#	Barcode Option	Entry	Description
1.	BARCODE TYPE	NONE PRICE WEIGHT	Select the type of content for embedded bar codes, Price or Weight.
2.	LENGTH OF FIELD1 PLU CODE	4-6	Select length of PLU product code field.
3.	LENGTH OF PRICE OR WEIGHT	4-6	If Barcode Type selected is weight; Select length of price or weight (number of digits for the price or weight field).
4.	DECIMAL NUM. FOR WEIGHT	0-3	If the Barcode Type selected is weight; Select decimal position for weight embedded barcodes.
5.	BAR WEIGHT TYPE	LB KG OZ	If Barcode Type selected is weight; Choose the weight unit measurement type.

EJ Options

#	EJ Option	Entry	Description
1.	ELECTRONIC JOURNAL ENABLE	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 printed in the REPORT MODE reset in the Z-MODE.
2.	PROMPT WHEN E.J. BUFFER IS FULL	Y or N	If the electronic journal is enabled above, select Y to display a message to notify the operator when the journal memory is full.
3.	STOP OPERATIONS WHEN E.J. BUFFER IS FULL	Y or N	If the electronic journal is enabled above, select Y to stop operations when the journal memory is full.
4.	SEND ONLY NEGATIVE ENTRIES TO E.J.	Y or N	If the electronic journal is enabled above, select Y to capture only transactions with negative entries.
5.	SEND RESET REPORT TO E.J.	Y or N	If the electronic journal is enabled above, select Y to capture reset reports.
6.	E.J. PRINTING	NEW OLD	NEW: Prints electronic journal from lowest consecutive number to highest. OLD: Prints electronic journal from highest consecutive number to lowest.
7.	E.J. PORT	0-2	Choose the port number for a remote printer to print electronic journal reports instead of the register printer.
8.	PRINT SMALL FONT EJ REPORT	Y or N	Select Y to print small font on EJ report.
9.	SAVE EJ TO SD	NONE Every Time Once After Z Report	Select NONE if you don't want to store electronic journal data to the SD card. Select EVERY TIME to store at every sale. Select ONCE AFTER Z REPORT to store only after Z report. The EJ is saved in a date stamped text format on the root of the SD: <i>20201009.txt</i>

TRAIN MODE Options

#	Training Mode Option	Entry	Description
1.	OPEN DRAWER IN TRAIN MODE	Y or N	Select N if you do not want the cash drawer to open during training mode operations.
2.	PRINT TRAIN MODE TITLE	Y or N	When in training mode the message "TRAIN MODE" normally prints on each receipt. Select N to not print the "Training Mode".
3.	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.
4.	TRAIN P/W	6 DIGITS	To use the training mode you must program a password (up to 6 digits) that you will use to enter training mode.
5.	PRT TRAIN CLERK START/END MESSAGE	Y or N	Select N to not print Training Clerk" at start or end.

TABLE Options

#	Table Option	Entry	Description
1.	REQ X-MODE TO OPEN/CLOSE CHECK	Y or N	Select Y to open new checks or to close checks only in X-Mode.
2.	CONSOLIDATION ON CHECK TRACK	Y or N	Select Y to Consolidate like items for soft guest check printing. For example, if three "Tap Beers" are served, the check will print "3 TAP BEER" rather than "1 TAP BEER" three times.
3.	PRINT VOID AND RETURN ON CHECK BILL	Y or N	Select Y to print Void and Return on guest checks.
4.	PRINT GUEST CHECK AT FINALIZED	Y or N	Select Y to print guest check when check is finalized.
5.	PRINT DATE ON SERV(HARD CHK)	Y or N	Select Y to print date on hard checks receipts when serviced.
6.	SUPPRESS NEW BALANCE RECEIPT	Y or N	Select Y to not print the new balance receipt.
7.	PRINT TABLE SERVICE IN REPORT	Y or N	Select Y to print table service in financial report.
8.	COMPULSORY EAT-IN, TAKE OUT, DRIVE-THRU BEFORE TENDER	Y or N	Choose Y to enforce entry of the destination keys (EAT-IN, TAKE OUT, or DRIVE-THRU) before the sale is finalized.

DETAIL PRINT Options

The NR-510 does not provide a dedicated detail (journal) printer, the internal receipt printer can be used as a detail printer. You must set the System Option #46: "Use Receipt as Detail" before you can edit Detail Print Options.

An optional Take-Up Spool and Spool Motor Assembly are available. Contact your sales representative for details.

#	Detail Printing Option	Entry	Description
1.	CONDENSE JOURNAL PRINT	Y or N	Select Y to print small font on detail printer.
2.	NOT PRINT MSG ON JOURNAL	Y or N	Select Y if you do not wish to print the preamble/postamble message on the detail receipt.
3.	SPOOL USE	Y or N	Select N to disable the spool.
4.	PRINT PREAMBLE IMG ON JOURNAL	Y or N	Select Y to print the PRE-GRAPHIC LOGO on the detail receipt.
5.	PRINT POSTAMBLE IMG ON JOURNAL	Y or N	Select Y to print the POST-GRAPHIC LOGO on the detail receipt.

Employee Programming

1. From the **PROGRAM MODE** menu, press **5** and **CASH** for **EMPLOYEE**. The **CLERK NUMBER** screen displays.

EMPLOYEE
ENTER CLERK #
(1-10) 0

2. Press the clerk number and **CASH**.
3. Use the ↓ and the ↑ keys to scroll up and down through the menu selections or enter the digit (1-9) to go directly to the setting you wish to program. You can also use the **(Page↑)** key and **(Page↓)** keys to go to the next page or previous page.
4. Press the **(↑)** key for **YES** and the **(↓)** key for **NO**. Press the **CASH** to confirm the option value and return the previous screen.
5. Press the **CLEAR** key to finalize and return to the **ENTER CLERK#** screen.

Clerk Programming – Reference Information

#	Option	Entry	Description
1.	NAME	Alphanumeric 16 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 Character Code method (<i>see page 164</i>) or use the Alpha Keyboard Overlay. The overlay is automatically activated when the cursor is pointing at the DESC field.
2.	PASSWORD	6-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 are using an optional card reader for signing on employee's, you must swipe the employee card at this field.
3.	TRAIN CLERK	Y or N	Set to Y if this clerk is to be a training clerk.
4.	ALLOW X REPORTS	Y or N	If Y , this clerk can use X Reports menu.
5.	ALLOW Z MODE	Y or N	If Y , this clerk can use Z-Mode.
6.	ALLOW P MODE	Y or N	If Y , this clerk can use P mode.
7.	ALLOW S MODE	Y or N	If Y , this clerk can use S-Mode.
8.	ALLOW VOID MODE	Y or N	If Y , this clerk can use VOID mode.

Time

Time & Date

Use this program to set the clock and calendar on your NR-500E Series. The date changes automatically. After the initial time setting, time changing will probably be required only for beginning and ending daylight savings time.

1. From the **PROGRAM MODE** menu, press **6** and **CASH** for **TIME**. Press **1** and **CASH** for **TIME & DATE**. The **TIME & DATE** screen displays.

TIME & DATE	
TIME :	HH:MM
(24:00)	16:42

2. Type the current time in 24-hour format. (i.e. military time, where 13:00 is 1:00 PM.) Press the **CASH**.

TIME & DATE	
TIME :	HH:MM
(24:00)	16:42
DATE :	MM.DD.YY
	10.22.20

3. Type the current **DATE** in MM (month) DD (day) and YY (year) format. Press the **CASH**.
4. The **Date & Time** is displayed.

10/22/2020
16:42:27

5. Press **CASH** to return to the **TIME** programming selection screen.

Time Schedule

Certain functions can be set to automatically initiate at a specified time and date. When the time setting ends, the register will revert to the default. The Time Schedule functions include:

- Price Level 2: To accommodate 'Happy Hour' pricing for example.
- Keyboard Shift 1-3: You may have different keyboards for 'Breakfast, Lunch, Dinner'.
- Program Backup to SD: To automatically back up the program files at the specified time & date. This is useful when program changes are made frequently.
- Report Backup to SD: To automatically back up the X Report data at the specified time & date. This report information can then be loaded into the eSpresso PC Utility for easy viewing.

Each time schedule function has the same programming options.

1. From the **PROGRAM MODE** menu, press **6** and **CASH** for **TIME**. Press **2** and **CASH** for **TIME SCHEDULE**. The **TIME SCHEDULE** screen displays.

```

TIME SCHEDULE
1.PRICE LEVEL2          ←
2.KBD SHIFT1
3.KBD SHIFT2
4.KBD SHIFT3
5.SD PGM BACKUP
6.SD REP BACKUP
-PAGE 1/1-
  
```

2. Select a TIME SCHEDULE function from the menu to program. For example, press **1** and **CASH** for **PRICE LEVEL2**. Time schedule program screen displays.

```

PRICE LEVEL2
1.START TIME          [99:99] ←
2.END TIME           [99.99]
3.SUN                [N]
4.MON                [N]
5.TUE                [N]
6.WED                [N]
-PAGE 1/2-
  
```

```

PRICE LEVEL2
7.THU                [N] ←
8.FRI                [N]
9.SAT                [N]
10.EVERY DAY        [N]
-PAGE 2/2-
  
```

3. Set the **START TIME** (in 24 hour format); Press **CASH**.
4. Set the **END TIME** (in 24 hour format); Press **CASH**.
5. Press the (↑) key and the (↓) key to select specific DAY selections for the time schedule and press the **CASH** key to confirm. You can also use the (Page↑) key and (Page↓) key to go to the next page or previous page.
6. From the **YES/NO** option screen, Press the (↑) key for YES and the (↓) key for NO for the individual DAY selections or press EVERY DAY for all days of the week. Press the **CASH** to confirm the option value.
7. To exit the current Time Schedule program, press the **CLEAR** key.
8. Continue programming additional Time Schedules as desired, press **CLEAR** to return to the Program Mode.

Taxes Programming

The ECR has the capability to support up to four separate tax rates. Taxes can be calculated as a straight percentage rate of between .001% and 99.999%, or as a tax table with up to 60 break points.

The NR-500E Series allows three TAX 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.
The TAX is added to the cost of taxable items.
- **VAT** – **V**alue **A**dded **T**ax (VAT), where the tax is included in the cost of the item.
- **Tax Table** – If a tax entered as an add-on tax percentage does not follow the tax chart that applies in your area, tax table programming can be used to match the tax collected to the break points of your tax table.

Tax rate 4 may be set to function as the Canadian Goods & Services Tax (GST). If Tax 4 is designated as GST, table programming for the rate is not allowed.

Important Note: After you have entered your tax program(s), 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 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, contact your dealer for assistance.

Add-On Tax Programming

When tax requirements can be met using a straight percentage rate, use the following method to program a tax as a straight percentage. Enter the descriptor, tax type and tax rate. Tax rates can be entered with up to 3 decimal places.

1. From the **PROGRAM MODE** menu, press **7** and **CASH** to view the **TAXES** screen.

TAXES	
ENTER TAX#	
(1-4)	0

2. Enter the number for the **Tax Rate (1-4)** you want to program and press the **CASH** key to confirm.

TAXES	
1 . DESC :	[TAX1] ←
2 . TYPE	[ADD-ON]
3 . RATE	[0 . 0 0 0]

3. Press **CASH** if you want to edit/change the **DESCRIPTOR**. Enter the desired descriptor; Press **CASH** to confirm the descriptor entry.
4. At the **TYPE** field, press **CASH** to access the Tax Type selections. Use the (↑) and (↓) keys to navigate to the **ADD-ON** selection; press the **CASH** key to confirm.
5. At the **RATE** field, press **CASH** to access the Tax **RATE** entry field; Input the **TAX RATE**; For example, if the tax is 6.725 percent, enter 6725 (*do not enter the decimal point*). Press **CASH** to set the tax rate.
6. Continue to program additional taxes or press **CLEAR** to return to the **PROGRAM MODE** screen.

VAT Tax (Value Added Tax) Programming

When a tax is included in the cost of the item, you can use the value added tax (VAT) program to calculate the tax share of each sale. Enter the descriptor, tax type and tax rate. Tax rates can be entered with up to 3 decimal places.

1. From the **PROGRAM MODE** menu, press **7** and **CASH** to view the **TAXES** screen.

```
TAXES
ENTER TAX #
(1-4)                                0
```

2. Enter the number for the **Tax Rate (1-4)** you want to program and press the **CASH** key to confirm.

```
TAXES
1 .DESC : [TAX2] ←
2 .TYPE [VAT]
3 .RATE [0.000]
```

3. Press **CASH** if you want to edit/change the **DESCRIPTOR**. Enter the desired descriptor; Press **CASH** to confirm the descriptor entry.
4. At the **TYPE** field, press **CASH** to access the Tax Type selections. Use the (↑) key and the (↓) key to select **VAT** and press the **CASH** key to confirm.
5. At the **RATE** field, press **CASH** to access the Tax **RATE** entry field; Input the **TAX RATE**. For example, if the tax is 7.75 percent, enter 7750 (*do not enter decimal point*). Press **CASH** to set the rate.
6. 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). If GST is to be taxable, you have the option for taxing the GST by other applicable tax rates (tax on tax). Enter the descriptor, tax type and tax rate, then select if the GST is taxable by tax 1, 2, 3. Tax rates can be entered with up to 3 decimal places.

Canadian Goods & Services Tax (GST) Programming

1. From the **PROGRAM MODE** menu, press **7** and **CASH** to view the **TAXES** screen.

```
TAXES
ENTER TAX#
(1-4)                                4
```

2. Enter **4** to access **TAX 4** programming and press the **CASH** key to confirm.

```
TAXES
1.DESC : [TAX4] ←
2.TYPE [ADD-ON]
3.RATE [0.000]
4.GST IS BY TAX RATE1 [N]
5.GST IS BY TAX RATE2 [N]
6.GST IS BY TAX RATE3 [N]
-PAGE 1/1-
```

3. Press **CASH** if you want to edit/change the **DESCRIPTOR**. Enter the desired descriptor; Press **CASH** to confirm the descriptor entry.
4. At the **TYPE** field, press **CASH** to access the Tax Type selections. Use the **↓CHARGE1** and the **↑CHARGE2** keys to select **ADD-ON**, **VAT**, or **TAX TABLE**. Press the **CASH** key to confirm.
5. At the **RATE** field, input the **GST** rate (*no need to press decimal*); For example, if the tax is 4 percent, enter 4000. Press **CASH** to set the rate.
6. At the entry filed **GST IS BY TAX1, 2, 3**, if the GST is taxable by the selected Tax Rate (*tax on tax*), press the **(↑)** key for **YES** and press the **(↓)** key for **NO**. Press the **CASH** to confirm.
7. Continue to program additional taxes or press **CLEAR** to return to the **PROGRAM MODE** screen.

Tax Table Programming

In some cases, a tax that is entered as an Add-On 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 the printed tax table if you wish to determine the break point entries yourself. The "Tax Table Programming Chart Example: 6% Tax Table" shown below is used as an example in the steps that follow.

Note: You can enter up to 60 break points.

Determining Break Point Entries

1. Examine the printed tax table for the tax you are programming.
2. Refer to the "Tax Table Programming Chart Example: 6% Tax Table" to help with this exercise.
3. Calculate the break point differences by subtracting the high side of the previous range from the high side of the dollar range.
4. 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."

Tax Table Programming Chart Example: 6% Tax Table

TAX Charged	Sale Dollar Range	Break Point Differences	
\$0.00	\$0.00 - \$0.10		
\$0.01	\$0.11 - \$0.21	11	Non-Repeat
\$0.02	\$0.22 - \$0.38	17	
\$0.03	\$0.39 - \$0.56	18	
\$0.04	\$0.57 - \$0.73	17	
\$0.05	\$0.74 - \$0.91	18	
\$0.06	\$0.92 - \$1.08	17	Repeat
\$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	

To enter the example 6% tax table in tax 1

Programming a Tax Table

When tax requirements cannot be met using a straight percentage rate, use the Tax Table method to program the tax. Enter the descriptor, tax type and tax rate. Tax rates can be entered with up to 3 decimal places.

1. From the **PROGRAM MODE** menu, press **7** and **CASH** to view the **TAXES** screen.

TAXES	
ENTER TAX#	
(1-4)	0

2. Enter the number for the **Tax Rate (1-4)** you want to program and press the **CASH** key to confirm.

TAXES	
1. DESC :	[TAX1] ←
2. TYPE	[TAX-TABLE]
3. RATE	[0.000]

3. Press **CASH** if you want to edit/change the **DESCRIPTOR**. Enter the desired descriptor; Press **CASH** to confirm the descriptor entry.
4. At the **TYPE** field, press **CASH** to access the Tax Type selections. Use the (↑) and (↓) keys to navigate to the **TAX TABLE** selection and press the **CASH** key to confirm.
5. Press **CASH** to view the maximum '**NONTAX AMOUNT**' entry field.

TAX TABLE3	
NONTAX AMT	0.10

6. Enter maximum **Non-Taxable Amount** then Press **CASH**; The '**1ST TAX AMOUNT**' field displays.

TAX TABLE3	
NONTAX AMT	0.10
1 ST TAX AM	0.01

7. Enter the amount for the **1ST Tax Amount** that will be charged (typically 0.01¢) then Press **CASH**; The '**NON-REPEAT BREAK**' entry field displays.

TAX TABLE3	
NONTAX AMT	0.10
1 ST TAX AM	0.01
NON-REPEAT BREAK	
[1]	0.21

8. Enter the first **Non-Repeat Break** point and press **CASH**.
9. Continue entering all the **Non-Repeat Breaks**, when you have entered the last **Non-Repeat Break** press **CASH**; at the next field don't enter a value, just press **CASH** again. The '**REPEAT BREAK**' entry field displays.

TAX TABLE3	
NONTAX AMT	0.10
1 ST TAX AM	0.01
NON-REPEAT BREAK [3]	
REPEAT BREAK	1.41

10. Enter the first **REPEAT BREAK** point and press **CASH**.
11. Continue entering all the **Repeat Breaks**, when you have entered the last **Repeat Break** press **CASH**; at the next field don't enter a value, just press **CASH**.
12. Continue to program additional taxes or press **CLEAR** to return to the **PROGRAM MODE** screen.

Messages

Message programming is where the messages you want printed on receipts and check endorsements are programmed. If you are using the Datacap integrated payment system with the ECR, the Datatran message can be set up from this program area. You can also edit the financial & clerk report message lines from this program area. Use the alpha keyboard overlay to type the message; refer to the “Descriptor Programming Methods” chapter on page 162 for examples.

1. From the **PROGRAM MODE**, press **8** and the **CASH** key for **MESSAGES**. The **MESSAGES** screen displays.

```
          MESSAGES
1 . PREAMBLE           ←
2 . POSTAMBLE
3 . ENDORSEMENT
4 . FINANCIAL RPT
5 . CLERK RPT
```

Preamble

The preamble message appears at the top of each receipt and/or guest check. You can program up to six preamble message lines with up to 32 characters per line.

1. From the **MESSAGES** screen, press **1** and **CASH** to display the **PREAMBLE** screen.

```
          PREAMBLE
1 . YOUR STORE NAME   ←
2 . STORE ADDRESS
3 . PHONE NUMBER
4 . WWW.WEB-SITE.BIZ
5 . NO DATA
6 . NO DATA
```

2. Press the (↑) key and the (↓) key to select line you wish to program (*or enter the number for the line*) and press the **CASH** key to access the programming for the selected line.
3. Using the keyboard overlay, type in the desired message for the selected line. Press **CASH** to finalize.
4. Continue to program additional lines or press **CLEAR** to return to the **PROGRAM MODE** screen.

Postamble

The postamble message appears at the bottom of each receipt and/or guest check. You can program up to six message lines with up to 32 characters per line.

1. From the **MESSAGES** screen, press **2** and **CASH** to display the **POSTAMBLE** screen.

```
          POSTAMBLE
1 . THANK-YOU
2 . PLEASE CALL AGAIN
3 . HAVE A GREAT DAY!
4 . NO DATA           ←
5 . NO DATA
6 . NO DATA
```

2. Press the (↑) key and the (↓) key to select line you wish to program (*or enter the number for the line*) and press the **CASH** key to access the programming for the selected line.
3. Using the keyboard overlay, type in the desired message for the selected line. Press **CASH** to finalize.
4. Continue to program additional lines or press **CLEAR** to return to the **PROGRAM MODE** screen.

Endorsement

The Endorsement Message is a programming message of up to ten lines/32 characters per line that prints when a check is endorsed on an optional slip printer.

1. From the **MESSAGES** screen, press **3** and **CASH** to display the **ENDORSEMENT** screen.

```
ENDORSEMENT
1.NO DATA
2.NO DATA
3.NO DATA
4.NO DATA
5.NO DATA
6.NO DATA
-PAGE 1/2-
```

```
ENDORSEMENT
7.NO DATA
8.NO DATA
9.NO DATA
10.NO DATA
-PAGE 2/2-
```

2. Press the (↑) key and the (↓) key to select the Endorsement line you wish to program (*or enter the number for the line*) and press the **CASH** key to access the programming for the selected line.
3. Using the keyboard overlay, type in the desired endorsement message for the selected line; Press **CASH** to accept the entry and continue to the next line.
4. Continue to program additional Endorsement Lines as necessary or press **CLEAR** to return to the **PROGRAM MODE** screen.

Financial Report

The Financial Report selection allows you to reprogram the descriptors that appear with the Financial Report totals and counters. For example, you may decide to edit the TAX1 SALES, TAX1, and EXMPT TAX1 lines to reflect STATE TAXABLE SALES, STATE TAX COLLECTED, and EXEMPT STATE TAX. You can reprogram any of the Financial Report totals listed here with any 24-character descriptor.

1. From the **MESSAGES** screen, press **4** and **CASH** to display the **FINANCIAL RPT** message screen. There are 92 descriptors, corresponding to the order information that appears on the Financial Report. (Go to “Financial” on page 111 to see a sample report.)
2. Press the (↑) key and the (↓) key to select the Financial Report line you wish to program (*or enter the number for the line*) and press the **CASH** key to access the programming for the selected line. You can use the (**Page**↑) key and (**Page**↓) keys to go to the next page or previous page.
3. Using the keyboard overlay, type in the desired description message for the selected line, Press **CASH** to accept the entry and continue to the next line.
4. Continue to program additional Financial Report message lines as necessary or press **CLEAR** to return to the **PROGRAM MODE** screen.

Default Financial Report Messages

NO	DESCRIPTION
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.	XPMT1 SALES
14.	XPMT2 SALES
15.	XPMT3 SALES
16.	XPMT4 SALES
17.	%1
18.	%2
19.	%3
20.	%4
21.	%5
22.	NET SALE
23.	CREDIT TAX1
24.	CREDIT TAX2
25.	CREDIT TAX3
26.	CREDIT TAX4
27.	FD/S CREDIT
28.	RETURN
29.	ERROR CORR
30.	PREVIOUS VD
31.	VOID MODE

NO	DESCRIPTION
32.	CANCEL
33.	GROSS SALE
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.	AUDACTION
44.	NOSALE
45.	CASH-IN-D
46.	CHECK-IN-D
47.	FD/S-IN-D
48.	CHG1-IN-D
49.	CHG2-IN-D
50.	CHG3-IN-D
51.	CHG4-IN-D
52.	CHG5-IN-D
53.	CHG6-IN-D
54.	CHG7-IN-D
55.	CHG8-IN-D
56.	CHG1 SALES
57.	CHG2 SALES
58.	CHG3 SALES
59.	CHG4 SALES
60.	CHG5 SALES
61.	CHG6 SALES
62.	CHG7 SALES

NO	DESCRIPTION
63.	CHG8 SALES
64.	FOREIGN 1
65.	FOREIGN 2
66.	FOREIGN 3
67.	FOREIGN 4
68.	DRWR TTL
69.	PROMO
70.	WASTE
71.	TRAIN TTL
72.	MIX&MATCH
73.	PLU LEVEL1 TTL
74.	PLU LEVEL2 TTL
75.	MOD1
76.	MOD2
77.	MOD3
78.	MOD4
79.	MOD5
80.	ROUND
81.	EATIN TTL
82.	TAKEOUT TTL
83.	DRTHRU TTL
84.	TIP
85.	BAL FORWARD
86.	GUESTS
87.	P/BAL
88.	CHECKS PAID
89.	SERVICE
90.	V.DINHEIRO
91.	VD SALES REC#
92.	VD RETN REC#

Financial Report message # 92 was removed at v5.000

Clerk Report

The Clerk Report selection allows you to reprogram the descriptors that appear with the Clerk Report totals and counters. For example, you may decide to edit the TAX1 SALES, TAX1, and EXMPT TAX1 lines to reflect STATE TAXABLE SALES, STATE TAX COLLECTED, and EXEMPT STATE TAX. You can reprogram any of the Clerk Report totals listed here with any 24-character descriptor.

1. From the **MESSAGES** screen, press **5** and **CASH** to display the **CLERK RPT** message screen.
2. There are 75 descriptors, corresponding to the order information that appears on the Clerk Report.
(Go to "Clerk" on page 124 to see a sample report.)
3. Press the (↑) key and the (↓) key to select Clerk Report line you wish to program (*or enter the number for the line*) and press the **CASH** key to access the programming for the selected line. You can use the (**Page**↑) key and (**Page**↓) keys to go to the next page or previous page.
4. Using the keyboard overlay, type in the desired description message for the selected line, Press **CASH** to accept the entry and continue to the next line.
5. Continue to program additional Clerk Report message lines as necessary or press **CLEAR** to return to the **PROGRAM MODE** screen.

Default Clerk Report Messages

NO	Description
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.	XPMT1 SALES
12.	XPMT2 SALES
13.	XPMT3 SALES
14.	XPMT4 SALES
15.	%1
16.	%2
17.	%3
18.	%4
19.	%5
20.	CREDIT TAX1
21.	CREDIT TAX2
22.	CREDIT TAX3
23.	CREDIT TAX4
24.	FD/S CREDIT
25.	RETURN

NO	Description
26.	ERROR CORR
27.	PREVIOUS VD
28.	VOID MODE
29.	CANCEL
30.	GROSS SALE
31.	CASH SALES
32.	CHECK SALES
33.	R/A 1
34.	R/A 2
35.	R/A 3
36.	P/O 1
37.	P/O 2
38.	P/O 3
39.	HASH TTL
40.	CASH-IN-D
41.	CHECK-IN-D
42.	FD/S-IN-D
43.	CHG1 SALES
44.	CHG2 SALES
45.	CHG3 SALES
46.	CHG4 SALES
47.	CHG5 SALES
48.	CHG6 SALES
49.	CHG7 SALES
50.	CHG8 SALES

NO	Description
51.	FOREIGN 1
52.	FOREIGN 2
53.	FOREIGN 3
54.	FOREIGN 4
55.	DRWR TTL
56.	PROMO
57.	WASTE
58.	TRAIN TTL
59.	NOSALE
60.	MIX&MATCH
61.	PLU LEVEL1 TTL
62.	PLU LEVEL2 TTL
63.	ROUND
64.	EATIN TTL
65.	TAKEOUT TTL
66.	DRTHRU TTL
67.	TIP
68.	BAL FORWARD
69.	GUESTS
70.	P/BAL
71.	CHECKS PAID
72.	SERVICE
73.	V.DINHEIRO
74.	VD SALES REC#
75.	VD RETN REC#

Clerk Report message #75 was removed at v5.000

Mix & Match Program

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 NR-500E Series can accommodate up to 99 (the exact number is determined by memory allocation) different mix and match discounts.

This program sets the number of items that must be purchased to receive the discount and the amount of the discount. You must also set the following additional Mix & Match Table options that are set through separate programs.

- You must link eligible items to the appropriate mix and match table; Refer to “PLU Programming” on page 166 for complete details.

Mix & Match Settings

Each Mix & Match discount function can be programmed with a unique 24-character descriptor. The number of Mix & Match discounts is set in memory allocation.

1. From the **PROGRAM MODE** screen, press **9** and **CASH** to display the **MIX & MATCH** programming screen.

```
MIX & MATCH
ENTER MIX&MATCH#
(1-20)                                0
```

2. Enter the number (1-20) for mix and match discount you wish to program; Press **CASH** to confirm.

```
MIX & MATCH
1.DESC:      [DISCOUNT 01] ←
2.QUANTITY   [0]
3.AMOUNT     [0.00]

-PAGE 1/1-
```

3. The descriptor of Mix and match can be up to 24 characters. Press **CASH** to access. Using the alpha keyboard overlay, type in the desired descriptor; Press **CASH** to confirm.
4. Press the (↓) key to select the **QUANTITY** field; Press **CASH** to access. Enter the number of items that need to be purchased to qualify for the discount; Press **CASH** to confirm.
5. Press the (↓) key to select the **AMOUNT** field, Press **CASH** to access.
 - Enter the amount of the discount; Press **CASH** to confirm.
6. Press the **CLEAR** key to return to the MIX & MATCH PGM screen. Select another Mix & Match table to program or press the **CLEAR** to exit.

Program Scans

Since much time and energy has been invested in the planning and programming of your NR-500E, it is advisable to print a hard copy of the final program for future reference. You can printout programming from the program scan. This copy should be kept in a safe place. Each program category scan has selections specific to that category. You may select to print the scan for all sections or select specific areas to scan.

You can also save your program electronically, on an SD card. Go to “Program Backup and Restore” on page 147 to use this method. The program may also be backed up to the eSpreso PC Utility.

1. From the **PROGRAM MODE** menu, press **10** and **CASH** for **PGM SCAN**. The **PROGRAM SCAN** screen displays.

```
PGM SCAN
1 . PLU
2 . GROUP
3 . FUNCTION KEY
4 . OPTIONS
5 . EMPLOYEE
6 . TIME SCHEDULE
-PAGE 1 / 2-
```

```
PGM SCAN
7 . TAX
8 . MESSAGES
9 . MIX & MATCH
10 . NLU CODE#
11 . MACRO
-PAGE 2 / 2-
```

2. Press the (↑) and (↓) keys or the (Page↑) and (Page↓) keys to navigate to the Program Scan category (or press the number for the category) and press the **CASH** key to access that category program scan.

Program Scan Categories

Each program scan category has selections specific to that category. You may select to print the scan for all sections or select specific areas to scan. The related program scan categories and selections are listed below.

PLU

1. ALL PLU
2. RANGE PLU
3. ALL STOCK
4. RANGE STOCK

GROUP

1. ALL GROUP
2. RANGE GROUP

FUNCTION KEY

1. ALL
2. INDIVIDUAL

OPTIONS

- | | | | | |
|----------------|-----------|------------------|------------|-------------|
| 1. SYSTEM | 2. PRINT | 3. REPORT | 4. TAX | 5. CURRENCY |
| 6. ROUNDING | 7. LOGO | 8. KITCHEN PRINT | 9. BARCODE | 10. EJ |
| 11. TRAIN MODE | 12. TABLE | 13. DETAIL PRINT | | |

EMPLOYEE

1. ALL CLERK
2. RANGE CLERK

TIME SCHEDULE

1. PRICE LEVEL2
2. KBD SHIFT1
3. KBD SHIFT2
4. KBD SHIFT3
5. SD PGM BACKUP
6. SD REP BACKUP

TAX

No selections, when TAX is chosen, the current tax rate settings are printed.

MESSAGES

1. PREAMBLE
2. POSTAMBLE
3. ENDORSEMENT
4. FINANCIAL
5. CLERK

MIX & MATCH

No selections, when MIX & MATCH is chosen, the current Mix & Match settings are printed.

NLU CODE #

No selections, when NLU CODE # is chosen, all 300 current NLU# PLU assignment settings are printed.

MACRO

No selections, when MACRO is chosen, all 10 current MACRO settings are printed.

Integrated Payment

Datacap-EMV Tran Series

The Sam4s NR-510 Series ECR's only support EMV enabled devices for integrated payment transactions. There are several different EFT devices that will integrate with the NR-510, 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-nr-510b-e-ecr-flat-keyboard>

To implement the Datacap-EMV Tran Series integration, the following is required.

1. For installations that will be using integrated payment, an SD card must be placed in the SD card slot located in the ECR printer compartment during all EMV operations. (The SD card is used to store transaction records so they can easily be called up by invoice number for tip adjustment and/or voiding.)
2. Deploy your application with the latest EMV capable DataTran equipment, such as the IPTran-LT or the Tran Server with PDC's. Refer to the configuration diagrams that follow.
(**Note:** It may be more cost effective to use the Tran server and PDC configuration when your network includes four or more NR-500E ECR's.)
3. For PIN-Pad/EMV readers, check with Datacap or your provider for compatible devices.
4. When your configuration is completed and connected to an active Ethernet line, perform the "Initialize EFT" as shown on page 238 to verify the connection between the ECR & the Datacap device, then perform the "Parameter Download" as described on page 238.

Payment Application Best Practices

Password Security: The ECR 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 ECR features a Mode Switch with different levels of key security. Refer to "Mode Switch" on page 28. Keys that access the "Z" key lock position (where DataTran payment functions can be performed) should be distributed only to managers or employees authorized to perform those functions.

What To Order

Datatron Equipment Part Numbers

1900.20 – IPTran™ LT (applications with up to 3 ECRs)

1715.20 – New Style PDC (applications with 4 or more ECRs)

1900.50 – Tran Server (applications with 4 or more ECRs)

7871.01 – Serial Interface Cable DB9-M connection (Included)

7877.30 – Peripheral Adapter Cable (For PIN-Pad connection)

} *Included as required depending on
the ECR serial port used.*

PIN-Pad

For EMV Installations, use a Pin-Pad recommended & approved by your provider. For example: the Verifone Vx805 may be used with the certified version of XPI (8.42B).

VeriFone Part Numbers

M280-703-A3-WWA-3 –VeriFone Vx805

PWR282-001-01-A – Power Cable

CBL282-031-02-A – Serial Interface Cable

Load XPI Application (Version 8.42B)

Processor Encryption (Specific to merchant installation)

Configuration Examples

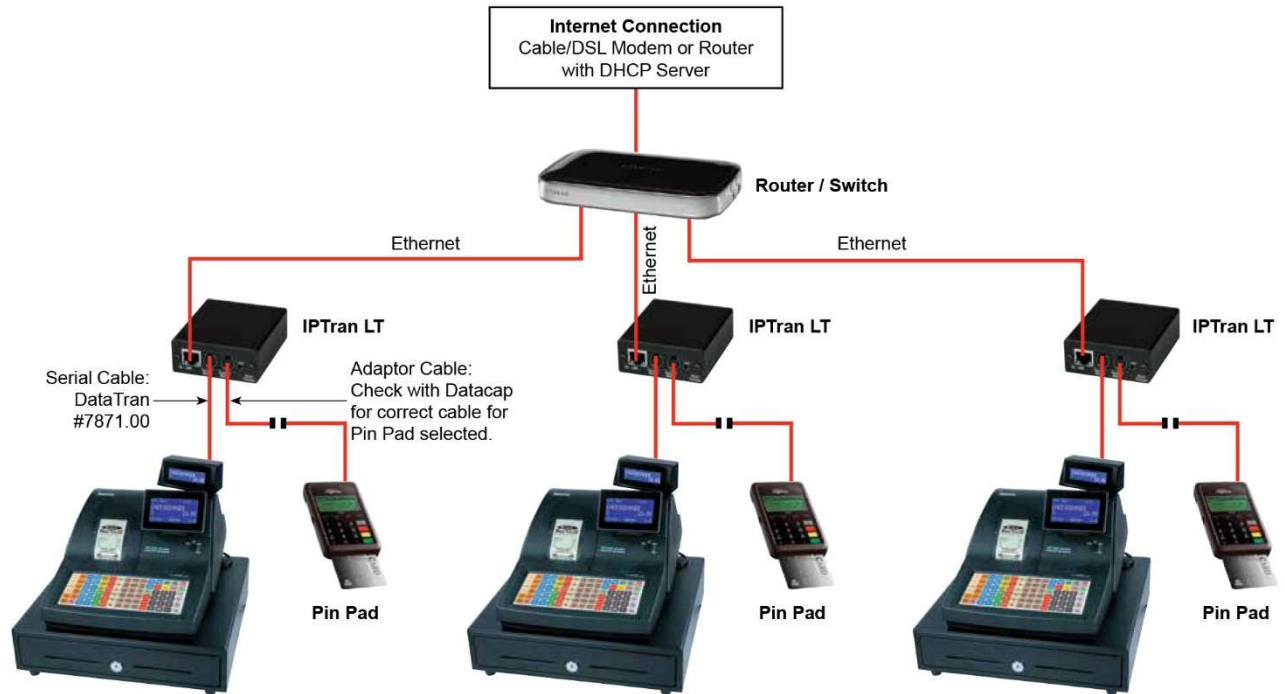
IPTran LT – Single ECR

SAM4s NR-510 / Datacap ECR Configuration Single ECR



IPTran LT – Multi-ECR (3 or Less)

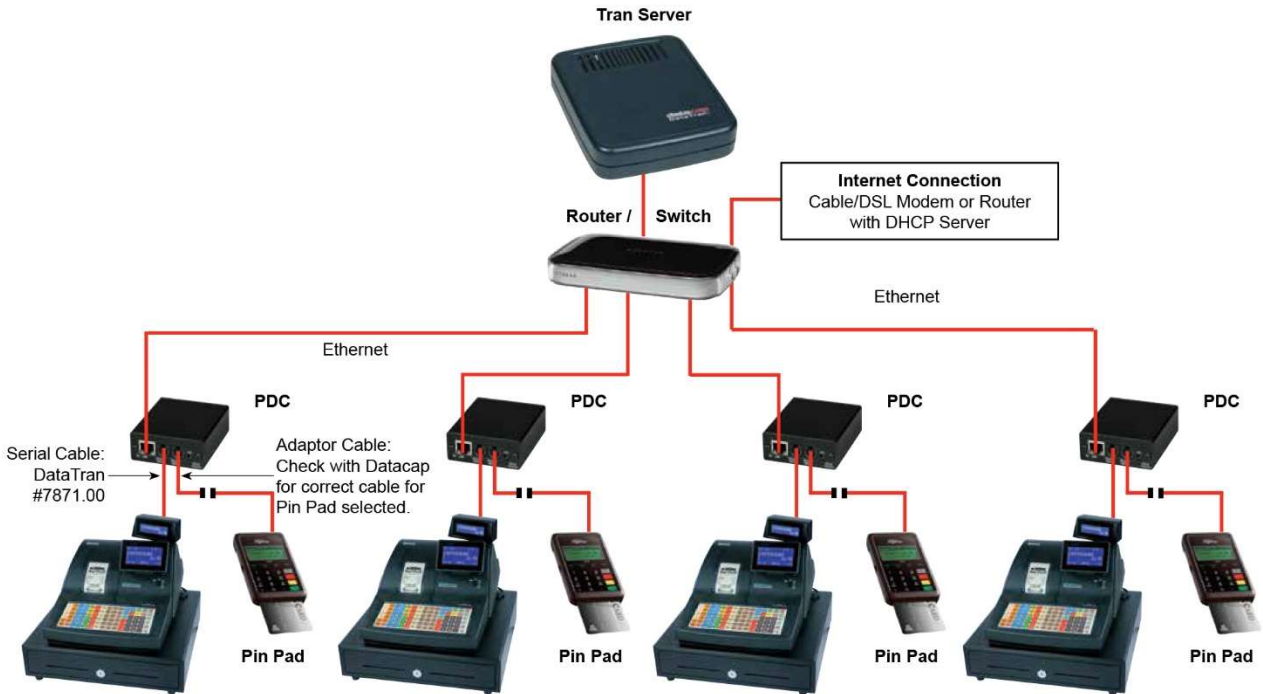
SAM4s NR-510 / Datacap ECR Configuration Multi-ECR (3 or Less)



Note: If you have an installation using 3 IPTran LT units as shown above, all three devices will have separate batches, separate reporting and work independent of each other.

IPTran LT – Multi-ECR (4 or More)

SAM4s NR-510 / Datacap ECR Configuration Multi-ECR (4 or More)

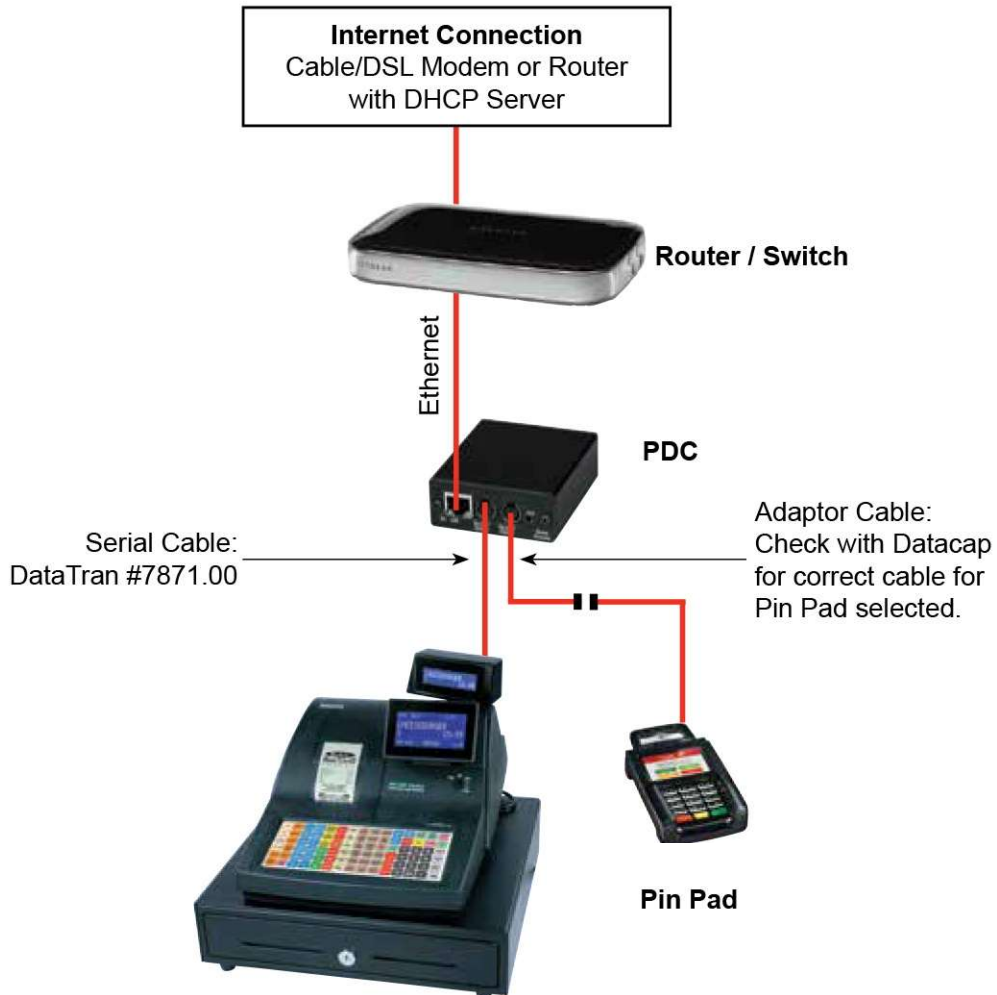


Notes: If you have multiple PDC's and a Tran Server as shown here, there is only one batch and it can be controlled at any of the registers. PDC's must have a connection to the internet.

Also Note: PDC's are paired to a specific Tran Server. A PDC from one site will not work with the Tran Server from a different site.

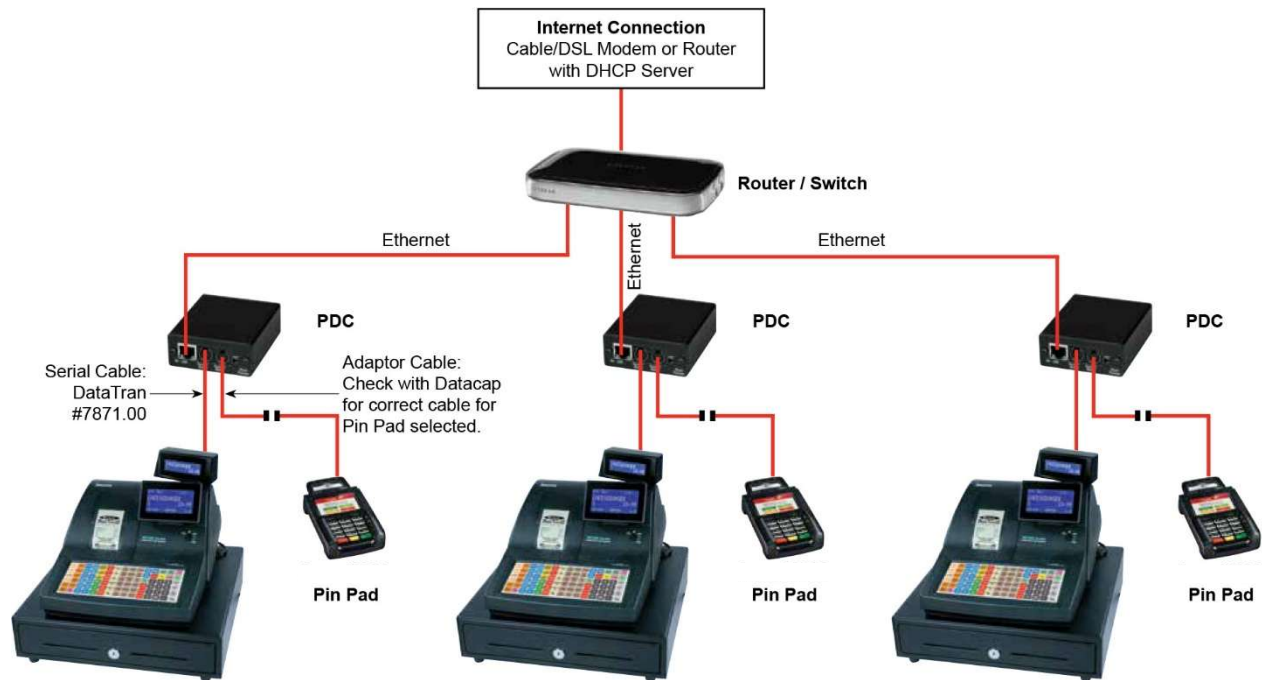
NETePay Hosted – Single ECR

This configuration uses a Datacap PDC with NETePay Hosted loaded. Any Pin-Pad recommended & approved by Datacap may be used.



NETePay Hosted – Multi ECR

This configuration uses a Datacap PDC with NETePay Hosted loaded at each ECR in the system. 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 Program Settings

This chapter outlines the programming necessary for integrated payment integration with the Sam4s NR-510 & NR-510R Series ECR's utilizing the latest EMV enabled Datacap devices.

Note: An SD card must be installed in the SD card slot located in the ECR printer compartment during all EMV operations.

- **Service Mode**
 - Define Port (Serial Port Setting)
 - Function Key Assignment (As necessary for your application)
- **Program Mode**
 - System Options (EMV Related Settings)
 - Function Key Programming (As necessary for your application)
- **Z-Mode**
 - Datatran Function (Initialize EFT, Parameter Download)

SERVICE MODE Programming

Define Port (Serial Port Options)

You must define one of the three serial communication ports for the Datacap device you will be using for EMV.

“Define Port” (Serial Port 1, Port 2, or Port 3) Refer to page 142 for details.

- Set the **BAUD RATE** setting to **“19200”**, **Parity = NONE**, **Data Bits = 8**, **Stop Bits = 1**.
 - Set the **DEVICE** selection for **“DATATRAN”**.
1. Turn mode key to the **SERVICE MODE**, press **5** and **CASH** for RS232C programming.
 2. Enter the digit (1-4) corresponding to the port you wish to program. Press the **5** and **CASH** to print Port 1, Port 2, PORT 3 settings.
 3. Use the (↑) key and the (↓) key to scroll up and down through the eleven serial port options. Make settings or changes as needed.
 4. Press the **CLEAR** key to finalize and return to the DEFINE PORT screen.

Serial Port Settings Screen Program Notes

#	Option	Description
1	BAUD RATE	Select 19200 for EMV enabled Datacap devices
2	PARITY	Select NONE
3	DATA BITS	Select 8
4	STOP BITS	Select 1
5	DEVICE FUNCTION	Select EMV → then select DATATRAN

Key Assignment

“**Key Assignment**” Assign the function keys to be used with integrated credit. Refer to page 138 for “Function Key Assignment” details. See the full list of “Function Key Codes” on page 141.

Required Function Keys

- **Charge Keys** – (*Key codes 323-330*) Assign the appropriate Charge (1-8) function keys that will be used to finalize electronic payment transactions. You will need individual Charge Keys for Credit, Debit, Gift, Gift No NSF or Cash Benefit keys as necessary. The Charge 1 key (*key code 323*) is already located on the default keyboard.

Optional Function Keys

- **EMV TIP** – (*Key code 416*) If the merchant will be accepting Tips on credit transactions, the EMV TIP key must also be assigned.
- **Food Stamp keys** – (*F/S SBTL, F/S TEND, F/S SHIFT – Key codes 341-343*) If your application accepts Food Stamp (EBT).

Any programmable key location may be reprogrammed with a function from the list of available functions on page 141 of this manual. The default program installs the functions as they are shown with the standard key legends. The Charge 1 key (*key code 323*) is already located on the default keyboard.

To change the function key assigned on a specific key.

1. At the **SERVICE MODE**, press **4** and **CASH** for Key Assignment programming. The **KEY ASSIGNMENT** screen displays.
2. Enter the key code for any additional Charge Tender keys (*key codes 323~330*) to be used with integrated credit, then press the key location where you want the key assigned.
 - Repeat this process for EMV TIP key (*key code 416*) if necessary.
3. Press **CASH** to save the changes you have made and to return to SERVICE MODE.
4. The printer will print out a receipt showing all the changes made to the keyboard.

Tech Note: While in the key assignment programming, you can Press the SUBTOTAL key to print the function key code list.

Notes:

- **NUMERIC KEYS (0-9, 00), CLEAR,** and **CASH** cannot be removed from the keyboard unless they have been assigned to a new keyboard location. This protects the programmer from accidentally removing keys that are required for register programming and operations.
 - **CHARGE(↑)** and **CHECK(↓)** keys are used for navigation throughout the **X – Z – P** and **S-Mode** operations and *should not* be reassigned. These key locations revert to their navigation operations, (↑) and (↓) when used in the X – Z – P and S-Modes.
 - 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.
-

Program Mode Programming

System Options

“System” Options Programming Refer to page 200.

- Set address #48 **EFT DRAFT** for **DATATRAN** for normal EFT drafts.
 - Set for FINE DINING to print the EFT draft with a tip line.
- Set address #49 **MSR CONNECT** to **PDC** for all EMV installations.
- Set address #50 **PIN-PAD TYPE** for **DUKPT** for all integrated credit interfaces.
- Set Address #51 **PIN-PAD PORT** to define the Port where the MSR is connected.
 - This is the same port where the PDC is connected on the ECR.
- Set address #52 **COPY OF DATATRAN RECEIPT** for the number of Datatran receipt copies you wish to print (0-99).

Function Key Programming

“Function Key Programming” – Refer to page 176. Program the function keys that will be used with electronic payment transactions.

CHARGE 1-8 – (Key codes 323~330) Refer to the “Charge Key Program Notes” on page 181 for all charge key settings. You will need individual Charge Keys for Credit, Debit, Gift, Gift No NSF or Cash Benefit keys as necessary.

- Set option #14.**SEND TO EFT = Y.**
- Set option #15.**EFT PORT (0-3)** for the port where the Datacap Tran Series device is connected.
- Set option #17.**SELECT CARD TYPE** for the appropriate card type. Credit \ Debit \ Gift.
- Set option #18.**SHOW TIPS ON =** scroll through the options until the desired option is displayed.

EMV TIP – (Key code 416) For entering Tip’s in register mode. If your application is set for “Fine Dining” you can place this function on the keyboard for entering Tip’s in register mode. The key can be programmable for manager control if desired.

“EMV TIP Programming” – Refer to the “EMV TIP” programming on page 185 for option settings.

FOOD STAMP KEYS – (F/S SHIFT, F/S SBTL, F/S TEND – Key codes 341-343) See page 187. If your application accepts Food Stamp (EBT).

FOOD STAMP TENDER – (Key code 343) Refer to page 187 for all F/S TEND key option settings.

- Set option #12.**SEND TO EFT = Y.**
- Set option #13.**EFT PORT (0-3)** for the port where the Datacap Tran Series device is connected.

Group Programming

“Group Programming” Refer to page 174. If you are integrating the sale of gift cards through the integrated payment device, you will need to set up a group with Gift Card Activate and one with Gift Card ADD selected.

- Set option #9.**GIFT CARD =** Select **ACTIVATE** or **ADD**.

PLU Programming

“PLU Programming” – Refer to page 166. If you are integrating the sale of gift cards through the integrated payment device, you will need to create two Gift Card PLU’s to facilitate the sale of Gift Cards. One PLU will be assigned to the Activate new Gift Card Group (to activate new gift cards sold) and one assigned to the Gift Card Add Value Group (to add funds to existing/activated Gift Cards).

- Set option #11.**GROUP #1 =** Select the group number for the appropriate Gift Card Group.

Refer to the “PLU Options – Reference Information” chapter on page 168 for all PLU Option settings.

Initialize EFT

After connecting the Datacap Tran series device and PIN-Pad to the ECR and all the required programming is completed, use this operation to verify the connection from the ECR to the Datacap device.

1. Turn the Mode Switch to the **Z** position.
2. Press **5** and **CASH** to select the Datatran Function menu.
3. Press **1** and **CASH** to initialize the EFT Device.

Parameter Download

After connecting the Datacap Tran series device and PIN-Pad to the ECR and all the required programming is completed, you must load the parameters for the devices. This operation tells the Pin-Pad to get new parameters from Datacap. The Datacap Tran series device must be connected to the internet to load the parameters.

1. Turn the Mode Switch to the **Z** position.
2. Press **5** and **CASH** to select the Datatran Function menu.
3. Press **3** and **CASH** to initiate the Parameter Download.
4. At the confirmation prompt, Press the **CASH** key to select **YES**.
At the register, the message: “WAITING FOR EFT” displays. At the PIN-Pad, the message “LOADING” displays.
When complete the message: “LOAD SUCCESS” will display and print.
The PIN-Pad will reinitialize.
5. At the register, press **CLEAR** to complete the procedure.

Sample Transactions

Before registering new credit card transactions for the day, be sure the batch for the previous day has been closed and the SD EMV File has been deleted.

Credit Card & Cash Benefit

Close the previous day's batch before beginning a new sales day. A new batch is opened automatically when the previous batch is closed.

The procedure below applies to Charge Tender keys set to connect to EFT and card type for Credit or Cash Benefit.

1. Register a normal transaction.
2. Press the appropriate **CHARGE** key. The message "WAITING FOR EFT" displays.
3. At the PIN-Pad the message displays.
SALE
\$2.00 – OK?
4. Press the **GREEN** button on the PIN-Pad keypad. The PIN-Pad will display "PLEASE WAIT" briefly then "TAP, INSERT OR SWIPE".
 - * *Pressing the RED button will CANCEL the operation.*
5. Insert the EMV card into the PIN-Pad.
The PIN-Pad will display "PLEASE WAIT", then "DO NOT REMOVE CARD", and then "PROCESSING". When Complete, the "APPROVED" message will display.
6. Remove the card from the PIN-Pad.
At the register, the message "PRESS CASH TO CONTINUE" will display.
7. Press the **CASH** key. The receipt and card draft are printed.
8. 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.

Manual Transaction

If a credit card is not able to be read, we can manually enter the card information. Manual card entry is allowed on Credit, Gift and EBT transactions if the reader is unable to read the card or for card not present sales.

PIN Debit payments must be processed as card-present transactions – the 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.

1. Register a normal transaction.
2. Press the appropriate **CHARGE** key. The message “WAITING FOR EFT” displays.
3. If the card will not read:
 - At the PIN-Pad, press the **Red** button.
 - At the ECR press **CLEAR** once, the message “PRESS CASH FOR MANUAL ENTRY” displays.
4. At the ECR, press **CASH** and go to the PIN-Pad to complete the sequence of card entries. At the message:
SALE
\$2.00 – OK?
5. Press the **GREEN** button on the PIN-Pad keypad.
 - * The message “ACCOUNT NUMBER” displays.
Enter the card number and press the **GREEN** button on the PIN-Pad keypad.
 - * The message “ENTER EXPIRY, DATE MMY” displays.
Enter the 4-digit card expiration date in MMY format and press the **GREEN** button on the PIN-Pad keypad.
 - **The message “ENTER CVV” displays. Enter the CVV (card verification value as shown on the reverse of the card) and press the **GREEN** button on the PIN-Pad keypad.
 - **The message “ZIP CODE” displays. Enter the 5-digit zip code of the card holder and press the **GREEN** button on the PIN-Pad keypad.

****Note:** The option to require **CCV** number or **Zip Code** entry are set by the processor. Your installation may not require this entry.

- The message “CHIP CARD YES=OK?” displays.
 - * If the card is a chip card, press the **GREEN** button on the PIN-Pad keypad
 - * If the card is not a chip card, press the **RED** button.
6. When verification is complete, the PIN-Pad displays “APPROVED” and the draft is printed at the ECR.
 7. 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.

Debit Transaction

1. Register a normal transaction.
2. Touch the charge key set for **DEBIT**. At the register, the message “**WAITING FOR EFT**” displays.
3. After several seconds, the PIN-Pad displays the message:
SALE
\$2.00 OK?
4. Press the **GREEN** button on the PIN-Pad keypad to accept. The PIN-Pad will display “**PLEASE WAIT**” briefly then “**TAP, INSERT OR SWIPE**”.
** Pressing the RED button will CANCEL the operation.*
5. Insert the EMV card into the PIN-Pad. The PIN-Pad will display “**PLEASE WAIT**”, then “**DO NOT REMOVE CARD**”, and then “**ENTER PIN & OK**”.
6. At the PIN-Pad, enter the **4-digit PIN** and press the **GREEN** button. The PIN-Pad will display “**DO NOT REMOVE CARD**” and then “**PROCESSING**”.
7. When the processing is complete, the Pin-Pad displays “**REMOVE CARD**” then “**APPROVED**” message will display.
8. Remove the card from the PIN-Pad. At the register, the receipt and customer EFT draft are printed.
9. Press **CASH/TEND** to print the merchant copy of the EFT draft for the customer to sign.

Manual Debit Card Entry Notes:

Typically, Debit Cards are set up to require a PIN number entry and are not able to be entered manually. However, 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, when the **CARD ERROR** message appears, press **CLEAR**. You can now choose an alternative payment method.
- Press the **CREDIT CARD** function key. Slide the same Debit Card, if it fails to read again, press **CLEAR**. The message “Enter Acct No” displays.
- You can manually enter the account number and complete the transaction. Be aware that the merchant may pay different card fees for PIN Debit and signature Debit transactions.

To allow Manual Entry for Debit Cards without a PIN Entry, the IPTran-LT option setting to require a signature line for all transactions must be checked. This allows Debit Cards to process as Credit Cards. A Debit Card that is manually entered is always processed as credit.

Gift Card Operations

If you are using integrated Gift Card sales with the Datacap equipment, to activate a new gift card or add value to an already active gift card, follow the procedure below. With EMV enabled Datacap equipment, only one PLU and Group is used for gift card activation and adding value to an already active gift card.

For Gift Card Sales, you will need a PLU setup for Selling Gift Cards. The Gift Card PLU must be assigned to a specific Group for Gift Card Sale with the option: **GIFT CARD = [ADD]**

- See Group Programming on page 174 for details.
- See PLU Programming on page 166 for details.

Selling Gift Cards

When selling gift cards value is being returned/refunded to the card, this is true whether adding value to an existing gift card or activating a new gift card. When processed, the amount being added to the card will show as a Refund to the card.

1. Up to 5 separate gift cards can be sold in a single transaction. Each gift card must be loaded individually. **Register the amount** to be loaded on to the gift card (*to Add or Activate*) into a PLU linked to a unique Group with the Gift Card option set as Add.
2. Immediately after the PLU is registered, the message “**WAITING FOR EFT**” displays on the ECR.
3. At the PIN-Pad the message “**PLEASE WAIT**” displays briefly then:
REFUND
\$10.00 OK?
4. Press the **GREEN** button on the PIN-Pad keypad to accept the amount.
5. The Pin-Pad will then prompt to “**TAP or SWIPE**”. At the Pin-Pad, Swipe, Tap, or insert the gift card to be loaded with the amount. The PIN-Pad will display “**PLEASE WAIT**” briefly, then “**PROCESSING**”.
6. When the processing is complete, the “**APPROVED**” message will display.
7. Tender the transaction with the appropriate **CASH, CHECK, or MISC** tender key.

Get Gift Card Balance

If you are using integrated Gift Card with the Datacap equipment, you can get the current gift card balance at the ECR.

1. In the **REG Mode** (*Outside of a sale*) Press the **Gift Tender** Key. The ECR displays “**WAITING FOR EFT**”.
2. The Amount confirmation displays ON THE Pin-Pad; Press the **Green** button to accept. You will be prompted to Tap or Swipe the card.
3. Swipe the **Gift Card**, the balance will print to the receipt.

Gift Card Notes:

Support for partial authorizations is a card brand mandate which eases acceptance of major card branded open loop gift cards by allowing their remaining to be depleted without a decline and call to the issuer to find out what the balance is. Merchants who opt not to support partial authorizations may be charged fees/fines for not doing so.

Because of the above, we document support for partial authorizations as a requirement of our EMV interfaces. However, it is still possible to send a request where partial auth support is not indicated and this would be honored by most processors, with TSYS Summit being the big exception. If you do not indicate support for partials to TSYS you will get an error.

Insufficient Gift Card Balance

1. With the Mode Switch in the **REG** position, Register item into a sale.
2. Press the appropriate **EMV Gift Tender** key.
3. At the prompt to **Swipe / Insert / Tap / Key**.
 - Swipe the gift card in the Pin-Pad card reader. Processing time is approximately 8-10 seconds.
4. The card will be processed for the remaining card balance, then the **APPROVED** message displays.
 - The **CUSTOMER COPY** of the EFT receipt prints.
 - Press **CASH** when prompted to issue the **MERCHAN COPY** of the EFT Receipt.
5. If you had inserted a chip card and do not remove the card when approved, the prompt: **“Please Remove Your Card”** will display.
 - The card must be removed to send to the ECR.
 - Failure to remove the card will cause the Pin-Pad to time out.
6. The ECR will begin to start beeping after several seconds, Tender the remaining sale as desired.

EBT (Food Stamp) Transaction

Electronic Benefits Transfer (EBT) is a system provided by various governmental agencies throughout the United States to provide food stamp and/or cash benefits to American citizens who use EBT cards, which are similar to debit cards.

This system works in a slightly different manner from state to state, depending on the particulars of local law but follows the same basic pattern wherever used. EBT goes by different names in different states.

When integrated EBT is utilized, the food stamp portion of the sale is tendered using the Food Stamp Tender key with the option set to Connect To EFT. When using an EBT card to tender, a PIN number entry is required.

1. Register a normal transaction.
2. Touch the **F/S TEND** key. At the register, the message **“WAITING FOR EFT”** displays.
3. At the PIN-Pad the message displays.
SALE
\$2.00 – OK?
4. Press the **GREEN** button on the PIN-Pad keypad.
5. Swipe the EBT card at the PIN-Pad. The PIN-Pad will display **“PLEASE WAIT”**, then **“DO NOT REMOVE CARD”**, and then **“ENTER PIN & OK”**.
6. At the PIN-Pad, enter the **4-digit PIN** and press the **GREEN** button.
7. The PIN-Pad will display **“PROCESSING”**.
8. When the processing is complete, the **“APPROVED”** message will display.
9. At the register, the receipt and card draft are printed.

Note: EBT refunds/returns are performed as a Merchandise Return operation.

EBT balance will print on both the merchant copy and the customer copy of the EBT receipt as received from the Datacap device.

EBT Cash Benefit

The EBT Cash Benefit operation is essentially the same as the F/S tender operation. The main difference being the tender key utilized. EBT Cash Benefit uses a Charge Key set for CASH BENEFIT.

1. Register a normal transaction.
2. Enter the tender amount; Touch the **CASH BENEFIT** key. At the register, the message “**WAITING FOR EFT**” displays.
3. At the PIN-Pad the message displays.

SALE

\$2.00 – OK?

4. Press the **GREEN** button on the PIN-Pad keypad.
5. At the PIN-Pad, **enter the 4-digit PIN** and press the **GREEN** button.
6. The PIN-Pad will display “**PROCESSING**”.
7. When the processing is complete, the “**APPROVED**” message will display.
8. At the register, the receipt and card draft are printed.

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.
2. Press the appropriate **CHARGE** key. The message “**WAITING FOR EFT**” displays on the register:
3. At the PIN-Pad the message displays.

Refund

\$10.00 – OK?

4. Press the **GREEN** button on the PIN-Pad keypad.
5. Insert the EMV card into the PIN-Pad. The PIN-Pad will display “**PLEASE WAIT**”, then “**DO NOT REMOVE CARD**”, and then “**PROCESSING**”. When Complete, the “**APPROVED**” message will display.
6. Remove the card from the PIN-Pad.
7. At the register, the message “**PRESS CASH TO CONTINUE**” will display.
8. Press **CASH**. The receipt and card draft are printed.
9. 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.

Void Transaction

Transaction Void allows a transaction to be removed from the current batch and not reported to the cardholder statement.

1. Turn the Mode Switch to the **VOID** position.
2. Register a normal transaction.
3. Press the appropriate **CHARGE** key. The message “SLIDE CARD” displays.
4. Swipe the card. The message “ENTER INVOICE NUMBER” displays.
5. Enter the invoice code printed for the transaction to be voided, press **CASH**. The message “ORIG TRAN AMOUNT” displays.
6. Enter the total amount of the original transaction, press **CASH**. The message “WAITING FOR EFT” will display on the ECR. The “VOID SALE” message will display on the PIN-Pad:
7. Press the **GREEN** button on the PIN-Pad keypad.
8. Insert the EMV card into the PIN-Pad. The PIN-Pad will display “PROCESSING”. When Complete, the “APPROVED” message will display.
9. Remove the card from the PIN-Pad.
10. At the register, the message “PRESS CASH TO CONTINUE” will display.
11. Press **CASH**. The receipt and card draft are printed.
12. 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.

Cancel EFT

Once tender is selected cannot press Cancel at ECR. You would need to accept the amount on Pin-Pad then should be able to press **RED** button to cancel at Pin-pad. (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 “PRESS CASH FOR MANUAL ENTRY” prompt; press **CLEAR** again. After a pause the original transaction is displayed.
5. Press **CANCEL** to cancel the sale or, if a partial tender has already been entered, complete the sale with other tender.

TIP (Gratuity) Entry

The processor must allow “By Record” operations (*Enable Tokenization*) for Gratuity Entry operations.

EMV TIP

When the Charge key option is set to “Print Tip Line Only”, Gratuities (tips) indicated by the customer on the payment draft must be entered into the ECR before the batch is closed using the EMV TIP key. Tip’s entered using the Datatran Tip key will replace any previous TIP entry for the same transaction.

The processor must support “By Record” operations (*Tokenization*) to be able to use the EMV TIP (Gratuity) Entry.

- * If the EMV Tip key is set for manager control, turn the key to X and select MANAGER OPERATION.
- * If the EMV Tip key does not require manager control, turn to the REGISTER MODE.

-
- **Tips cannot be edited/added to Debit transactions after the sale.**
 - **No TIP entry is allowed for Gift Card transactions. Tips must be entered using a PLU prior to finalization with a *Gift Card*.**
 - **When using IPTran-LT terminals at each register, tips must be entered at the terminal where the transaction was registered on.**
-

Settings for the EMV TIP key can be found on page 185. Tips entered here replace any previous tip entered.

1. From the **REGISTER MODE**, Press the **EMV TIP** function key.
The prompt “ENTER INVOICE NUMBER” displays.
2. Enter the **Invoice Number** of the transaction and press **CASH**.
The message now displays. “ORIG TRAN AMOUNT”.
3. Enter the **Original Transaction Amount** then press **CASH**.
The message now displays. “TIP AMOUNT”.
4. Enter the **TIP Amount** and press **CASH**.
The message displays. “WAITING FOR EFT”.
5. 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.

TIP Entry at Time of Sale

If the charge key used to tender the sale is set to SHOW TIP ON: PINPAD; the customer will be prompted on the Pin-Pad to choose to enter a TIP at the time of the sale.

1. Register a transaction; Press the appropriate **CHARGE** key. The message “WAITING FOR EFT” displays.
2. At the PIN-Pad the SALE confirmation message displays.
SALE
\$2.00 – OK?
3. Press the **GREEN** button on the PIN-Pad keypad.
** Pressing the RED button will CANCEL the operation.*
4. At the PIN-Pad the message “ADD TIP?” displays.
ADD TIP?
YES
NO
5. Select **YES** to add a TIP; the message “ENTER TIP + OK \$ 0.00” appears.
6. Enter the **TIP Amount** and press the **GREEN** button on the PIN-Pad.
ENTER TIP + OK
\$1.00
7. The sale amount confirmation displays; press the **GREEN** button on the PIN-Pad to accept. The PIN-Pad will display “PLEASE WAIT” briefly then “TAP, INSERT OR SWIPE”.
SALE
\$3.00 – OK?
8. Insert the EMV card into the PIN-Pad. The PIN-Pad will display “PLEASE WAIT”, then “DO NOT REMOVE CARD”, and then “PROCESSING”.
9. When Complete, the message “REMOVE CARD” displays then the “APPROVED” message will display.
REMOVE CARD
APPROVED
10. The receipt and the customer copy of the EFT draft will print on the ECR. Remove the card from the PIN-Pad. At the register the message “PRESS CASH TO CONTINUE” will display.
11. Press **CASH**; the merchant copy of the EFT draft will print for the customer to sign. If multiple documents are to be printed, the message “PRESS CASH TO CONTINUE” displays.
12. Tear off the merchant copy of the EFT draft, then press **CASH**.

Reset Mode (Z) Procedures

All EMV related Datatran management functions take place with the Mode Switch in the **Z** position. In this way, only those with the correct key will have access to these operations.

The following **Z-Mode** menu selections are used in EMV related operations:

- Datatran Function
- Datatran Transaction

In the Pre-EMV environment Datacap stored some information at the Datatran device that allowed the registers to run some reports, such as the local transaction report.

In the EMV environment, Datacap is no longer storing information at the Datatran device so there are no batch reports available at the ECR.

On the NR-510 we are storing some information on the approvals on the SD card in the register (EMVBACK.txt file). This is required to be able to perform “By Record” transactions. No credit card or customer information is stored at the ECR.

Sample EMVBACK.txt file:

File	Edit	View				
1	1.00	41323A	0005	1.00	*	b317446855#20#20#20#20
|00|510100501000				p3fQAGZsPHFi4qtPFv/1hmbpuCzxyZJ/xLbxJcmOfPwiIeQQFyIQBpYD		☒*0076SIGN
2	6.10	41492A	0008	9.01	*	b317450752#20#20#20#20e10k3057840C00000000901
|00|510100501000				xP6W+2B/kvVQ4Bnz1rHgoyXD6FVtvWuTduM/dxYk1JiIiIgQQFyIQBpYX		☒*0076SIGN
3	6.10	62317A	0002	9.59	*	b359027754#20#20#20#20e10k3057840C00000000959
|00|510100501000				z50xClJDATtYW674/Xrr1n7m3QKijFmCqw/w696wFkUiIgQQICIQGpCQ		☒*0076SIGN
4	1.00	51215A	0001	1.00	*	b359703635#20#20#20#20e00
|00|510100501000				AGosw7JRFBmWYDR+7UQ2aObxIeKjX2U423XnE+MhetUiIgQQICIQHaCy		☒*0076SIGN
5	5.00	61854A	0001	5.00	*	b410588002#20#20#20#20e00
|00|510100501000				4LL1Z10cp6f1FbAwtsxEhLr1RsFhQZWZ8yUgZgVxw3kiIgQQJ5IQEdah		☒*0076SIGN
6	10.00	61938A	0002	10.00	*	b410588732#20#20#20#20e00
|00|510100501000				+Ly2XqkNbc0/0e9SB8tGE07CQz+HAJgHGa2sLcm56L4iIgQQJ5IQEcip		☒*0076SIGN

Currently, if a Local Transaction Report is run, we print the information from the approvals in the EMVBACK.txt file. However, this data should only be used for troubleshooting and should not be relied upon as accurate reporting data.

For example, if you perform a sale for \$1.00 and then perform a Void by Record Number of the same transaction, you will have two transactions. The register is only printing the information from the approvals.

Accessing Datatran Menus

1. Move the Mode Switch key to the **Z** position to display the **Z-Mode** menu.
2. You can now use the ↓ and the ↑ keys to scroll up and down through the **Z-Mode** menu. Or, if you already know the menu number of the X-Mode function you wish to perform, you can enter the digit (1-6) directly.

The following **Z-Mode** functions are available.

```

Z MODE
1.Z REPORTS
2.RESET E.J
3.RESET NOT FOUND PLU
4.CONNECT SERVER
5.DATATRAN FUNCTION ←
6.DATATRAN TRANSACTION
-PAGE 1/1-

7.DC DIRECT FUNCTIONS
  
```

Datatran Function

1. Move the key to the **Z** lock position to display the **Z-Mode** menu.
2. You can now use the ↓ and the ↑ keys to scroll up and down through the **Z-Mode** menu to select the **DATATRAN FUNCTION** menu (or press **5** and **CASH**) with the first option displayed.

```

DATATRAN FUNCTION
1.INITIALIZE EFT
2.CLOSE CURR. BATCH
3.PARAMETER DOWNLOAD
4.EMV EBT VOUCHER
5.ISSUE TRANSACTION
6.ISSUE BATCH STATUS
-PAGE 1/2-
  
```

```

DATATRAN FUNCTION
7.DIAL IN LOAD
8.DIAGNOSTIC
  
```

-PAGE 2/2-

Datatran Function: Menu Operations

Datatran EMV related function operations are shown below; Follow the summary table for details for each of these processes. Refer to the separate EMV Datatran supplement for examples of the operations described below.

Menu #	Operation	Definition
1.	Initialize EFT	Use this operation to verify the connection from the ECR to the Datacap device.
2.	Close Curr. Batch	Use this operation to close the current batch, a new batch is automatically opened.
3.	Parameter Download	This operation tells the Pin-Pad to get new parameters from Datacap.
4.	EMV EBT Voucher	Used to Manually enter EBT transactions.
5.	Issue Transaction	Currently, if a Local Transaction Report is run, we print the information from the approvals. However, this data should only be used for troubleshooting and should not be relied upon as accurate reporting data.
6.	Issue Batch Status	Print the status for the current batch.
7.	Dial In Load	<i>Not used with EMV installations.</i> When connected to the internet, the Datacap device will automatically receive any new software/load from the server by turning off and turning on the Datacap device. In older Equipment (<i>before the IPTran-LT had the 'call home' feature</i>) the "Dial In Load" procedure was used to manually load the parameters.
8.	Diagnostic	Use to perform various diagnostics. Use only as requested by Datacap support.

Datatran Transaction

1. Move the control key to the **Z** position to display the **Z-Mode** menu.
2. You can now use the ↓ and the ↑ keys to scroll up and down through the **Z-Mode** menu (or press **6** and **CASH**) to select the Datatran Transaction menu with the first option displayed.

```
DATATRAN TRANSACTION
1.VOID SALE BY REC NO
2.VOID REFUND BY REC NO
3.VOICE AUTH
4.ZERO AUTHORIZATION
5.DELETE SD EMV FILE
```

- PAGE 1 / 1 -

Datatran Transaction: Menu Operations

Datatran EMV related transaction operations are shown below; Follow the summary table for details for each of these processes. Refer to the separate EMV Datatran supplement for examples of the operations described below.

Menu #	Operation	Definition
1	Void Sale by Record Number	Use these operations to void transactions when the card is not present. CAUTION: These voids 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.
2	Void Refund by Record Number	
3	Voice Authorization	Use to enter a voice authorized sale in to the batch.
4	Zero Authorization	Use this operation to verify a card is valid, activated, not reported as lost/stolen.
5	Delete SD EMV File	This Operation will clear the EMVBACK.txt file stored on the SD Card.

Important EMV Notes

- **Close Batch or Delete SD 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 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 the cashier what the end-user is doing (or not doing).
- **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.
- **Time outs cannot be configured at the VeriFone vx805.** 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 Tran server (even if only two registers in their system).
- **PDC’s are paired to a specific Tran Server** – The PDC from one site will not work with a Tran server from a different site.

Note: Cannot suppress the signature line. In the Non-EMV environment a flag was added to the registers: “NO SIGNATURE IF TRANSACTION IS UNDER \$xx”. When this flag was set, the register would not print the signature line if the transaction was under the configured amount (*usually set at \$25*).

With the EMV integration, the register receives the receipt data from the Datacap device and the signature line is included in the receipt data ... therefore, it cannot be controlled at the register.

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 that 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 default program is installed after Clearing RAM Memory. The register has a default program which makes it operational after a memory clear. Nearly all option, rate, and status programs are set to zero as the default condition.

Department

Note: The ECR Series uses price look-ups (PLUs) to perform the function of traditional cash register departments. PLUs 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 ECR and ECR do not provide a journal printer; the ECR/ECR and ECR 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 ECR 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. Beginning at software version 1.030, the ECR Series is capable of accepting EBT electronic payments. Consult your SAM4s dealer for more information.

Merchants who accept food stamp payments have the responsibility of accepting food stamps only for food stamp eligible merchandise.

The SAM4s ECR 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, PLUs 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 the 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 PLUs 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 PLUs 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 PLUs if you wish the registration a PLU to automatically cause the registration of another PLU (for example to automatically add a bottle deposit.) Linked PLUs 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, PLUs, 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 ECR Series can accommodate up to 10 different mix and match discounts, the total can be increased to a maximum of 100 through memory allocation.

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 PLUs

As you program PLUs, you will find a setting to make them negative (normally they are positive). Positive PLUs are used for items that add to the sale. Negative PLUs 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 ECR 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 PLUs 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 pickups from the cash drawer.

PLUs

Price lookups (PLUs) are accessed by indexing a code number and pressing the PLU key, or by pressing a keyboard PLU key. PLUs can be programmed with a preset or open price. PLUs 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 a 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 ECR 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 pre-set 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 on the register, or to record loans to the cash drawer.

Register Number

The number of the register (Machine Number) 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-item operation will remove a previous item entry. It must be used inside of a sale only.

X & Z Reports

X reports read (*eXamine*) reports without resetting totals and Z reports read and reset (*Zero-Out*) your sales totals.

Manual Revision Record

Edition	Date Published	Revision Contents:
v0.1	07-20-2018	Initial Publication
v1.0	4/26/2018	Updated content; added Integrated Payment Appendix
v1.1	5/3/2018	Corrected page/table errors; Added Self-Test Operations, Function Key Codes
v1.2	8/14/2018	Updated Stock Entry
v1.3	9/25/2018	Corrected Endorsement Message programming
v1.4	9/26/2018	Updated Integrated Payment information
v1.5	10/2/2018	Corrected System Option Table. Edited Program Backup & Restore. Added: S-Mode Help Menu information; Removed duplicate LCD Display information
v1.6	11/1/2018	Updated X REPORTS (removed Flash report; added Open Table) Added: report message tables, Datatran message program
v1.7	1/7/2019	Updated Logo
v1.8	2/27/2019	Updated Keyboards; added notes for optional Spooler, Datatran Message
v1.9	6/4/2019	Updated Scale Key: Allow Dollar Entry on Scalable Item
v1.10	6/7/2019	Corrected keyboards; updated system options #53: Disable EFT Amount Confirmation
v1.11	7/3/2019	Corrected screen errors
v1.12	9/27/2019	Added F/S operation and function keys, Macro# key, Auto Cash 1-10, HELP key
v1.13	10/1/2019	Function key definitions: added Add Check# and Check Split operations,
v1.14	10/9/2019	Edited Character Code method example
v1.15	11/6/2019	Updated Tare Weight notes
v1.16	11/8/2019	Corrected keyboard shift keys information
v1.17	11/15/2019	Added Liquor dispenser to serial port devices
v1.18	11/26/2019	Corrected language selections: ENGLISH, SPANISH, FRENCH
v1.19	12/3/2019	PLU Programming, Group Programming, X Report Table
v1.20	2/12/2020	EJ Options, Barcode Options, System Options
v1.21	2/18/2020	Updated integrated payment appendix-system options
v1.22	2/20/2020	Corrected EJ Options. Updated Ram Clear procedure for Store PLU & EJ data to SD (<i>requires v4.0.44 & later</i>)
v1.23	7/9/2020	Updated System Options: M&M Is Taxable; Added X-Mode: LCD Contrast (<i>Requires v4.0.49 or later</i>)
v1.24	3/22/2021	Added System option 61 Receipt Buffer Use (<i>Requires v4.0.50 or later.</i>)
v1.25	3/24/2021	Updated System Option 44 (<i>default password</i>); Added version Note: Beginning at v4.0.51 the version number will be printed as 4.051 if PLUs/EJ are saved in the register and 4.051S if stored on the SD card.
v1.26	4/9/2021	Updated PLU Option Definitions
v1.27	4/30/2021	Updated the Firmware Update procedure

Edition	Date Published	Revision Contents:
v1.28	9/28/2021	Updated Z-Mode operations; S-Mode Self-Test Operations; Integrated Payment Configurations
v1.29	10/14/2021	Corrected X-Mode menu selection list. Added Flash Report, Save Report to SD or USB
v1.30	12/10/2021	Keyboard non-programmable keys
v1.31	2/2/2022	LCD Contrast adjustment, Added Not Found PLU Reset Report
v1.32	3/16/2022	Memory Allocation
v1.33	5/10/2022	Display remaining EJ Lines, Memory Allocation Specifications
v1.34	7/7/2022	Edit Macro; Validation Note and X/Time Operation
v1.35	12/01/2022	SD Card Specifications
v1.36	12/28/2022	Price Level Keys Program Notes; updated Void by Record Number & Tip (Gratuity) Entry
v1.37	3/27/2023	Added Help Menu, Price Change, Stock Inquiry, Key Shift operations
v1.38	5/17/2023	Clarified Message programming, Program Scans, Report Options; Added (Page ↑) (Page ↓) (↑) (↓) programming info
v1.39	4/10/2024	Stock Entry and PLU Stock operation; Added Gallonage VAT Tax
v1.40	4/25/2024	Mode Switch; Price Change
v1.41	7/23/2024	Updated: Register Mode Display Lines, System Options, Set Network
v1.42	10/31/2024	Added: Customer Display, Updated Receipt On/Off, Sample Reports
v1.43	1/2/2025	Function keys, Open Table Report
v1.44	1/15/2025	Messages: Financial & Clerk Report, Operator Display
v1.45	5/1/2025	Added: Z-Mode DC Functions. Updated: Program Backup/Restore, Saving Reports, System Options, LOGO Options, EJ Options, Detail Print Options
v1.46	6/30/2025	Options, Save/Load Receipt Images
v1.47	8/7/2025	Integrated Payment
v1.48	8/20/2025	Flashrom Information; FS/TEND key; Z-Mode Functions
v1.49	10/24/2025	F/S TEND key; Print Option; Receipt On Request
v1.50	1/12/2026	Rounding Options
v1.51	2/6/2026	System Options
v1.52	2/27/2026	System Options
v1.53	4/15/2026	Function Key Programming, Descriptor Programming

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