

SAM4S

SAM4POS

for Android™

Training Guide

Program Creation & Exercises



CRS

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Introduction

SAM4POS Overview

SAM4POS from SAM4s is an Android based POS application solution designed to operate on the SAM4s: Sapphire A60 and A70, SAP-6600(II) & the retired SAP-4800II Android terminals, the SAP-630 & the retired SAP-530 terminals, and the Histone HM626 & Hisense HM616(retired) Android tablets.

The application is largely based upon the features found in the SPS-2000/SPS-500 proprietary ECR's from SAM4s. Resellers familiar with those terminals will note many similarities in the programming options as well as significant differences and improvements.

Unlike other ECR terminals, the Sam4POS Cash Register Application software does not require allocation of memory for specific features. Database items such as PLUs, groups and employees can be added and used virtually without limit, as the memory on the SAM4s Android terminal far exceeds memory available on ECR-style proprietary terminals. This also means that function keys & tender keys can be replicated virtually without limit, each function & tender key can be set with different option settings to accommodate the requirements of the installation.

SAM4POS is available to resellers only as a hardware/software bundle; SAM4POS is not available as a generic application and will not run on other Android devices.

The SAM4POS application will automatically boot on power-up, and other Android applications or desktop functions are not available to the user without authorization. The application is easily configured for your Quick Service Restaurants, Bar/Restaurant, Retail and other specialty opportunities and provides the functions and options to meet your customer's point of sale needs.

All of the Sam4POS terminals can be connected in a fast and reliable Ethernet-style network. Networking supports report data consolidation, ECR programming, plus printer and video requisition routing. Within a network, devices can have different settings and programs.

This training guide will help to familiarize you with the programming and operations of the Sam4POS application. The application firmware is the same regardless of which terminal you choose with the exception of the Real Keyboard programming which is specific to the SAP-630/530 terminal.

Resources

There are many resources and product information available on the CRS website for Sam4POS. <https://www.crs-usa.com/products/sam4pos-android-software-5-year-license->

- Operator & Programming manuals are available as well as many application guides explaining the set up and operation of various features of Sam44POS.

There are also many training\tutorial videos showing the setup and operation of these features. <https://www.youtube.com/playlist?list=PLtF-h-a37jHmbhGgLO3nB76hP-avFSW29>

Hardware

- ⇒ The Sam4s Sapphire A60 & A70 All-In-One Android touch screen terminals feature a True Flat Projected Capacitive Touchscreen LCD with LED Backlighting.
 - A60 = 15" (Resolution 1024 x 768) & A70 = 15.6" (Resolution 1366 x 768)
- ⇒ The Sam4s SAP-630 and the retired SAP-530 Series registers are ECR-Style all-in-one Android POS terminals featuring a hybrid design. Sam4s has combined a 9.7" touch display for operating the Sam4POS Cash Register Application by touch with a large keyboard to support frequently used items, plus a built-in printer, customer display, card reader and cash drawer.
- ⇒ The HiStone HM626 and the retired Hisense HM616 ruggedized tablets have a 10.1" bezel-free PCT multi-touch display. Add the optional Charging Dock or Smart Dock, with multiple communication ports to connect peripheral devices.
 - Serial Ports on the Smart Dock are USB to Serial Converted Ports (no power supplied on Serial ports)
 - You cannot use the smart dock integrated printer with Sam4POS.
 - To use cash drawer port, you need to check system option: Allow Hisense Docking Drawer Popup
 - You will need to reboot the tablet each time removed from dock & redocked to recognize ports.
 - Tablets must be docked to apply power to the USB ports.
- ⇒ The retired SAM4s SAP-6600(II) Android touch screen terminals have a 15" LCD with Projected Capacitive Touch (PCT) and LED Backlighting, making them a powerful and cost-effective solution that will effectively run the Sam4POS software application.
 - The retired Sam4s SAP-4800(II) Android touch screen terminals have a 15" LCD with 5-wire resistive touch screen with LED backlighting.

Sapphire A60 & A70

(Requires v2.0.161 or later.) The Sam4s Sapphire A60 & A70 All-In-One Android touch screen terminals is available in multiple configurations for use with the Sam4POS application software.

- Android 9 (Pie) Operating System.
- CPU: RK3399 (Dual-Core ARM Cortex - A72 1.8GHz + Quad-Core ARM Cortex - A53 1.4GHz)
- Memory: RAM 4GB LPDDR4; Device Storage: 64GB eMMC
- Touch Screen:
 - **A60 = 15"** True Flat LCD with LED Backlighting; Projected Capacitive Touchscreen. (Resolution 1024 x 768)
 - **A70 = 15.6"** Wide Screen True Flat LCD with LED Backlighting; Projected Capacitive Touchscreen. (Resolution 1366 x 768)
- 3 Serial Ports: COM1 / COM2 = DB9M With Pin 9 (None / +5V / +12V)
 - COM3 = RJ45 Pin 1 (0V+5V/+12V) Voltage Selectable By Android setting.
 - Optional COM4 = DB9M With Pin 9 (None / +5V / +12V)
- 6 USB Ports: Four V3.0 (Rear I/O) / Two V2.0 (Side I/O)
- 1 Cash Drawer Port: RJ11, 12V or 24V Selectable By Switch –
 - Maximum 2 Drawers – Supports Drawer Compulsion
- Ethernet LAN Port: RJ45 IEEE 802.3 10 / 100 / 1000
- Audio: One Port (Line-Out), and an Internal 2W Speaker.
- Display Port: One Display Port for optional rear LCD display:
- **Optional Hardware:**
 - Integrated USB Interface Triple Track MSR
 - Rear Display: 2-Line LCD (20-character per line) or Dual-Monitor 9.7", 10.1", 15", 15.6", LCD (Touch Option)
 - Optional WiFi / BT. Wi-Fi: IEEE 802.11 a / b / g / n / ac
 - Bluetooth: 5.0 - Backward Compatible with v1.1, v1.2 and v.2.1+EDR



SAP-6600(II)

The SAM4s SAP-6600(II) All-In-One Android touch screen terminal will efficiently run the Sam4POS application plus a variety of other Android software applications.

- Android 6.0 (Marshmallow) Operating System
- Intel Braswell Celeron N3160 Quad Core 2.24GHz Fanless Processor
- Energy Efficient and Low Heat Generation Architecture
 - Fanless Operation – No Problematic Ventilation Holes
 - Meets IP55 Standards for Exposure to Dust – Waterproof Front Panel
 - Superior Serviceability and Ease of Installation
- Stylish **15” LCD** with Projected Capacitive Touch (PCT) with LED Backlighting.
 - PCT is Inherently Faster, More Reliable and Robust
 - Vivid LED Backlight for Reliability and Energy Savings
 - Resolution 1024 x 768
- Integrated 1.5W Speaker
- Memory:
 - 2GB DDR3 RAM expandable to 8GB
 - 64GB M.2 SSD storage.
- Standard Integrated Triple Track USB interface MCR (Magnetic Card Reader)
- Standard Bluetooth v4.0+HS and Wi-Fi compatible with IEEE802.11b/g/n
- 4 Serial Ports, 6 USB Ports, Cash Drawer Port, LAN Port, and Audio Port



SAP-630

The SAM4s SAP-630 is an ECR style All-In-One Android POS terminals combine a 9.7” touch screen with a large ‘Real Keyboard’ to support frequently used items. The SAP-630 also has an integrated printer, 2-line\16-character rear customer display, and connected 5-Bill, 5 or 6-Coin cash drawer with drawer lock and 2-Media Slots.

- Android 6.0 (Marshmallow) Operating System.
- Intel Braswell Celeron N3160 Quad Core 2.24GHz Fanless Processor.
- Choice of Raised-Key (90 programable locations) or Flat spill resistant keyboard (160 programable locations).
- 7-Position Mode Switch\Key Lock.
- Four Serial COM ports:
 - COM1, COM2 = DB9 (+5V on pin 9)
 - COM3, COM4 = RJ45 (+5V on pin 1)
- Two USB V2.0 ports (1 Front, 1 Rear).
- One SD Port: SDHC compatible.
- One RJ45 10/100 Base-T Ethernet (TCP/IP) LAN Port.
- Three 24V Cash Drawer Ports (1 Internal, 2 RJ11 Rear).
 - Internal Standard cash drawer, 5-bill, 5 or 6-coin, drawer lock and two media slots.
- **9.7" TFT-LCD** Touch Screen operator display (5-Wire Resistive Touch),
 - Resolution 1024 x 768
- Customer Display: 2-Line x 16-character Pop-Up Turret display.
- Built in 80mm Thermal receipt printer with auto-cutter.
 - Single Ply Thermal Paper
 - 79.5mm ± 0.5mm (width) x 80mm or less.
- Memory:
 - 2GB DDR3 RAM
 - 8GB eMMC flash storage
- **Optional Hardware:**
 - Optional Integrated 3-Track MSR: CRS Item Number 520051
 - Optional WiFi / Bluetooth combo module is available: CRS P/N 501801



HiStone HM626

(Requires v2.0.106 or later.) The HiStone HM626 Android Ruggedized tablet is a reliable and space saving option for running the SAM4POS application. The 10.1", bezel-free and wide screen display is designed with Projected Capacitive (PCT) touch technology that helps to extend the operating life and allow multi-touch control.

- Android 7.1 (Nougat)
- Rockchip RK3288 Processor is an ARM architecture System on Chip (SoC)
- **10.1" TFT LCD (LED Back-Light) True-Flat, Bezel Free, Projected Capacitive Touch Panel**
 - Resolution 1280 x 800
- 4GB RAM / 64 GB Storage
- Front Camera: 2 Megapixel and Back Camera: 5 Megapixel
- Dual Band Wi-Fi (2.4G / 5G) and Integrated Bluetooth v5.0
- Standard Integrated Triple Track Card Reader
- Tablet I/O Interface: Audio Jack / Nano SIM / Micro SD / Micro USB / USB V2.0 / DC Jack / Micro HDMI
 - Optional Tablet/Charging Dock: 12V/4A External Power Adaptor 100-240V 50/60Hz.
- Charging Dock I/O: 12V Charging / Two USB V2.0
 - Optional Tablet/Smart Dock: 24V/3.75A External Power Adaptor 100-240V 50/60Hz
- Smart Dock I/O RJ11 Cash Drawer 24V Max. 1 COM3 COM4 DB9M RS232C RJ45 Ethernet (100Mbps LAN) Three USB V2.0
 - Optional 1D or 2D scanner



Software

The SAM4POS application has considerable flexibility and can be configured to effectively run a variety of applications, such as Retail Sales, Quick Service, Convenience Store applications or Fine Dining Table Service applications.

The Sam4POS application is largely based upon the features found in the SPS-2000/SPS-500 proprietary ECR's from SAM4s. Resellers familiar with those terminals will note many similarities in the programming options as well as significant differences and improvements.

The Sam4POS application can convert program files saved from the SPS-500/SPS-2000 series ECR's. You review this procedure from the video link below:

<https://www.youtube.com/watch?v=kM6bh3LJ3-o&list=PLtF-h-a37jHmbhGgLO3nB76hP-avFSW29&index=2&pp=iAQB>

Additional programming will still be required.

Sam4POS can also convert program files from the SPS-300 series and ER-900 series ECR's.

Memory Supported Features

SAM4POS application does not require allocation of memory for specific features. Database items such as PLU's, Groups and Employees can be added and used virtually without limit, as the memory on the SAM4s Android terminal far exceeds memory available on ECR-style proprietary terminals. This also means that certain functions can be replicated virtually without limit; for example: tenders and discounts.

Initial Installation

When you receive the Terminal or Tablet you will need to install the Sam4POS application. The Sam4POS application APK file is installed using the AP Installer utility loaded on the SAP-630/530/6600(II) terminal. The HM616 will install from the File Manager and the HM626 will install from the File Explorer. Refer to the separate document 'Installing Sam4POS for complete details for each specific model terminal. The information here shows the initial Sam4POS installation on the SAP-6600(II)/SAP-630 terminals.

A supplemental document 'Installing Sam4POS' is available on the CRS website. You can also view the installation procedure in this video:

<https://www.youtube.com/watch?v=Jhhum0Kp03E&list=PLtF-h-a37jHmbhGgLO3nB76hP-avFSW29&index=34&pp=iAQB>

The AKP files are specific to the type of terminal you have. Copy the Sam4pos_V#.#.###.apk for your model terminal to the root of your USB drive and follow the steps below to load the application file. When you download and unzip the file from the CRS web site, all APK files for all the different Sam4POS terminal models are included in the file download: **(a)**, **(b)**, **(c)**, **(d)**, **(e)**.

Version (a) – Installs on the Sam4s SAP-530 and SAP-4800(II) terminals.

(4800_530)Sam4pos_Vx.x.xx .a

Version (b) – Installs on the Sam4s SAP-6600(II) and SAP-630 terminals.

(6600_630)Sam4pos_Vx.x.xx .b

Version (c) – Installs on the Hisense HM616 Tablet.

(HM-616)Sam4pos_Vx.x.xx .c

Version (d) – Installs on the Hisense HM626 Tablet *(Requires v2.0.106 or later.)*

(HM-626)Sam4pos_Vx.x.xx .d

Version (e) – Installs on the Sam4s Sapphire A60 and A70 terminals. *(Requires v2.0.161 or later.)*

(Sapphire)Sam4pos_Vx.x.xxx .e

When installed, the Sam4POS application will automatically load when the device is powered-up, other Android applications or desktop functions are not available to the user without authorization.

The programming in the various devices is essentially the same except where noted. Many Sam4POS programming & operation Tutorial Videos are available on the CRS YouTube page:

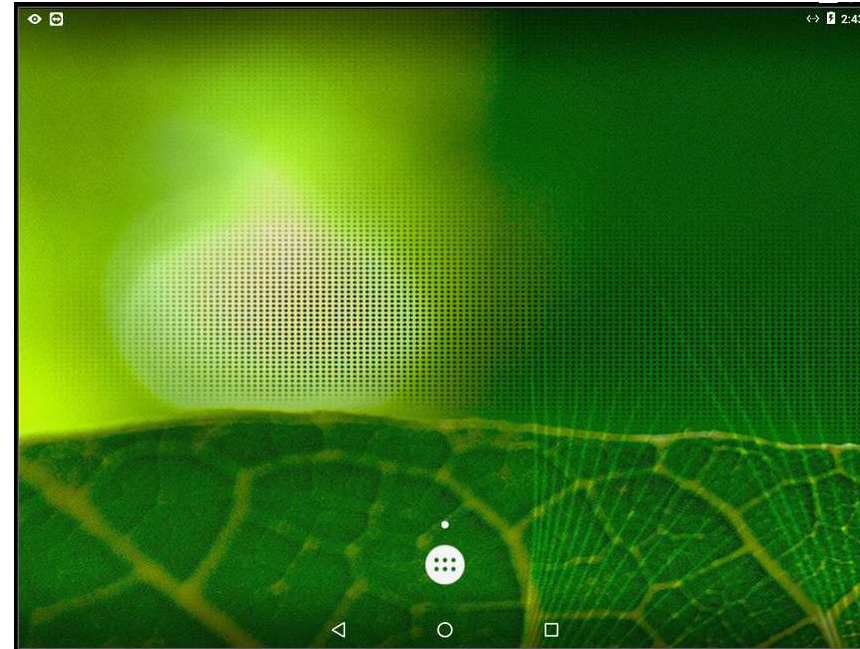
<https://www.youtube.com/playlist?list=PLtF-h-a37jHmbhGgLO3nB76hP-avFSW29>

Version “f” – Is a special firmware that installs on Hisense HM-626 tablet. *(Requires v2.0.184 or later.)*

The “f” version takes care of duplicated license code issues for the HM626. The “f” version uses the CPU serial number + Wi-Fi Mac address, so you need to connect the tablet to the WIFI before you install SAM4POS.

Android OS

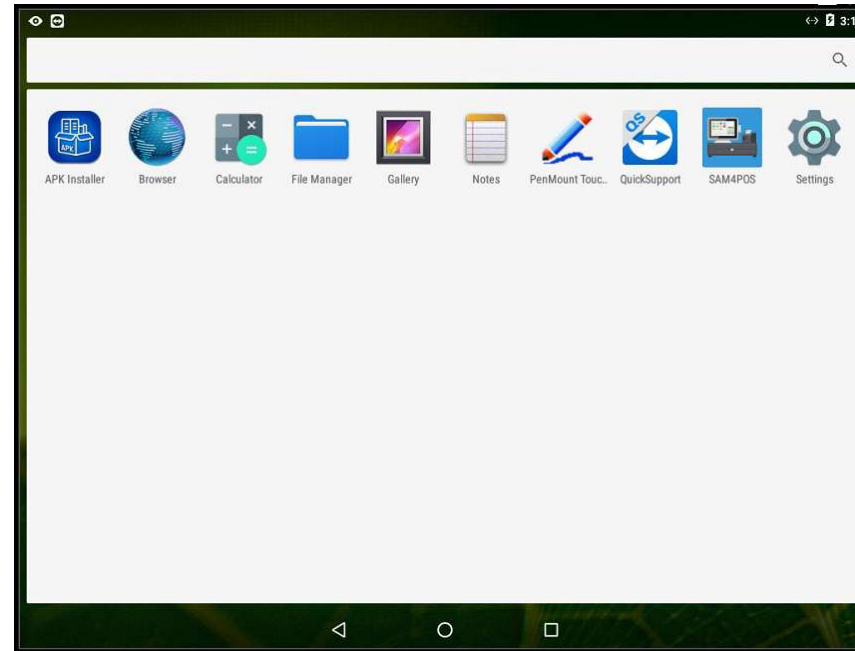
1. When the SAP-630/6600(II) terminal is powered on, the main Android OS screen is displayed:



2. Tap the “**Android Applications Icon**” to view the installed Apps:



3. Select the “APK Installer” from the available application selections:



APK Installer

1. Copy the *Sam4POS_.apk* file to the root of your USB drive.
2. Connect the USB drive to any available USB port on your terminal.
3. Select the “APK Installer” to view the files loaded on your USB drive:
4. Tap on the desired *Sam4pos_.apk* from the list:

- The AKP files are specific to the type of terminal you have. When you download and unzip the file from the CRS web site, all APK files for all the different Sam4POS terminal models are included in the file download: **(a), (b), (c), (d), (e)**.

Version (a) – Installs on the Sam4s SAP-530 and SAP-4800(II) terminals.

(4800_530)Sam4pos_Vx.x.xx .a

Version (b) – Installs on the Sam4s SAP-6600(II) and SAP-630 terminals.

(6600_630)Sam4pos_Vx.x.xx .b

Version (c) – Installs on the Hisense HM616 Tablet.

(HM-616)Sam4pos_Vx.x.xx .c

Version (d) – Installs on the Hisense HM626 Tablet *(Requires v2.0.106 or later.)*

(HM-626)Sam4pos_Vx.x.xx .d

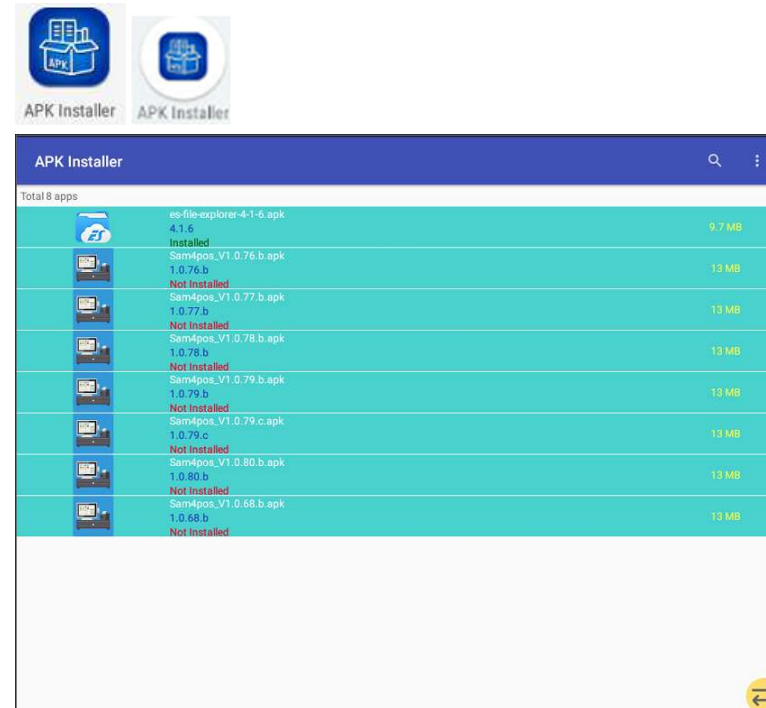
Version (f) – Installs on Hisense HM-626 tablets. *(Requires v2.0.184.)*

(HM-626)Sam4pos_Vx.x.xx .f

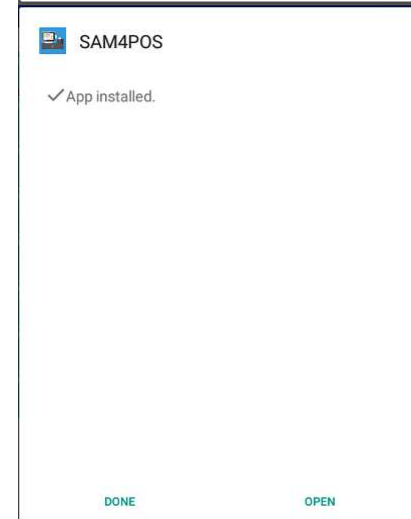
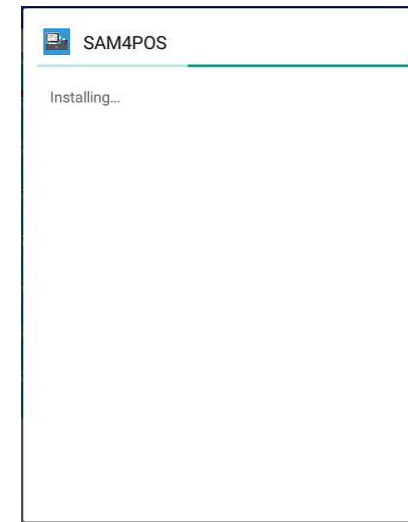
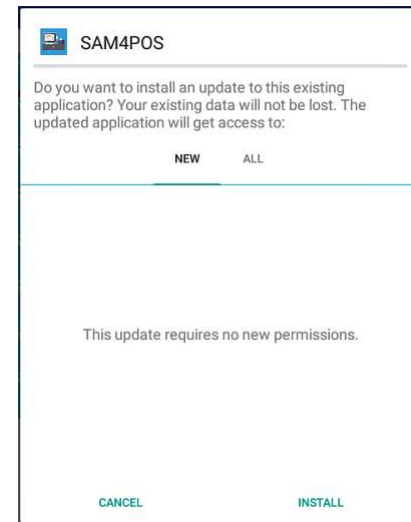
- * This (f) firmware version takes care of duplicated license code issues for the HM626. The (f) version uses the CPU serial number + Wi-Fi Mac address, so you need to **connect the tablet to the WI-FI before you install SAM4POS.**

Version (e) – Installs on the Sam4s Sapphire A60 and A70 terminals. *(Requires v2.0.161 or later.)*

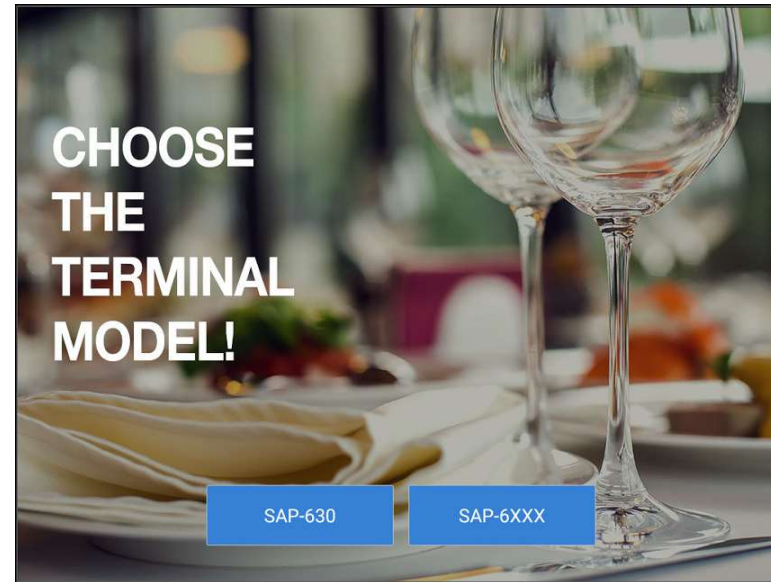
(Sapphire)Sam4pos_Vx.x.xxx .e



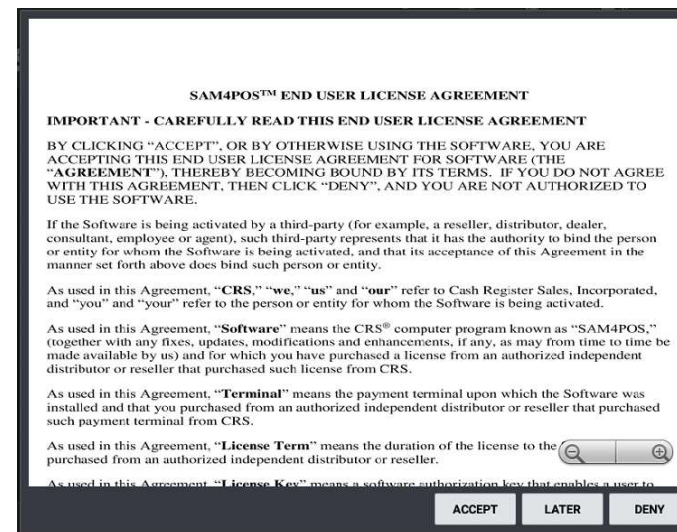
5. The installation dialog is displayed:
6. Tap **“INSTALL”** to load the file
7. When complete, tap **“OPEN”** to open the Sam4POS application:



8. Choose The Terminal Model:



9. Tap “ACCEPT” on the End User License Agreement (EULA):



10. The Sam4POS Application **Main Sign-On Screen** displays:

- The Sam4POS Application firmware version is shown at the bottom right of the display.



11. Main Sign On Screen Icons:

- Team Viewer
- License Info
- Connection
- Exit Sam4POS
- Date & Time

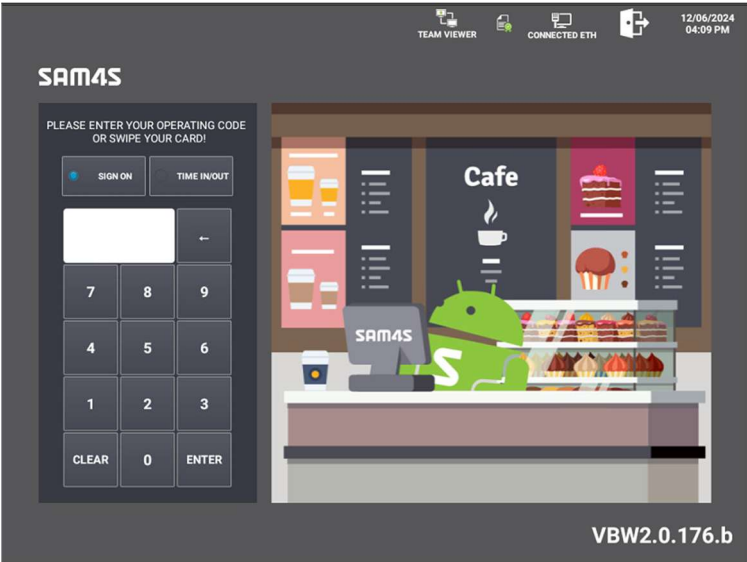
Opens Team Viewer	Displays License Info	Current Connection Method	Exits to the main Android screen	Current Date/Time
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Navigating SAM4POS

Default Screens

Log On Screen

Upon boot up, the Main Log On screen displays. You can sign on or clock in. Use the default password “1” and touch “enter” to log in for the first time.



Main Sign On Screen Icons

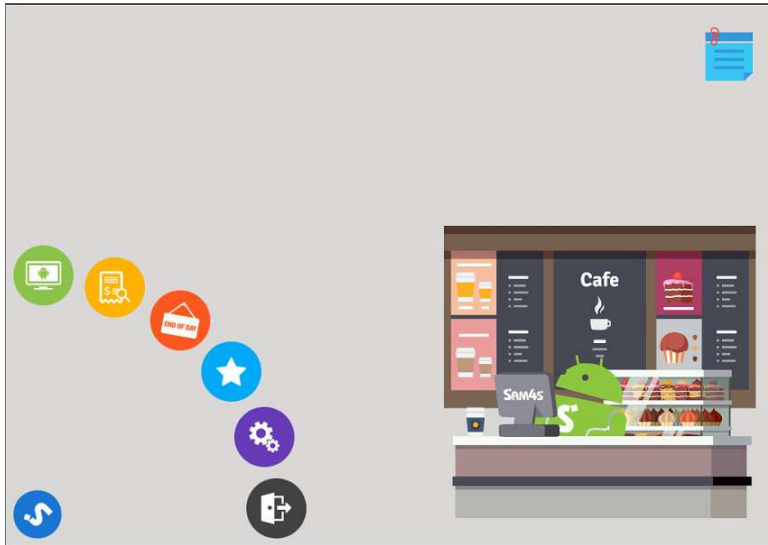
- Opens Team Viewer
- Displays License Info
- Current Connection Method
- Exits to the main Android screen
- Current Date/Time

The version information is shown on the lower right of the main sign on screen. You can 'Initial Clear' the station by tapping the version 3-times.

VBW2.0.176.b

Main Menu Screen

After a successful log-on, the Main Menu screen displays:



Main Menu Icons



Register Mode icon opens the Operator's sales entry screen.



Report Mode icon to access & generate system reports.



End Of Day icon accesses EOD mode to clear current totals.



Favorites icon can be program to display various areas within the application such as a specific report or program screen.



Program Mode is used to access the various program categories to allow making additions or changes.



Exit is used to close\exit the SAM4POS application and access the main android apps & settings.



Use this icon to Hide or display the Mode selection icons.



Memo icon is available on the SAP-6600(II) & SAP-4800(II) and the HM616 & HM626 Tablets. Memos and Reminders can be accessed or added from the main menu screen by tapping the memo icon. Memos/Reminders can be accessed from the register mode as well.

























When displayed you can use the Return icons to go back to the previous screen/selection.

Navigation Tips

Navigating the various screens within the SAM4POS application is very intuitive. Screens are set up with easily identifiable icons to quickly access and select the various program areas and options. Many of these icons are utilized on the various programming screens.


Common Icons

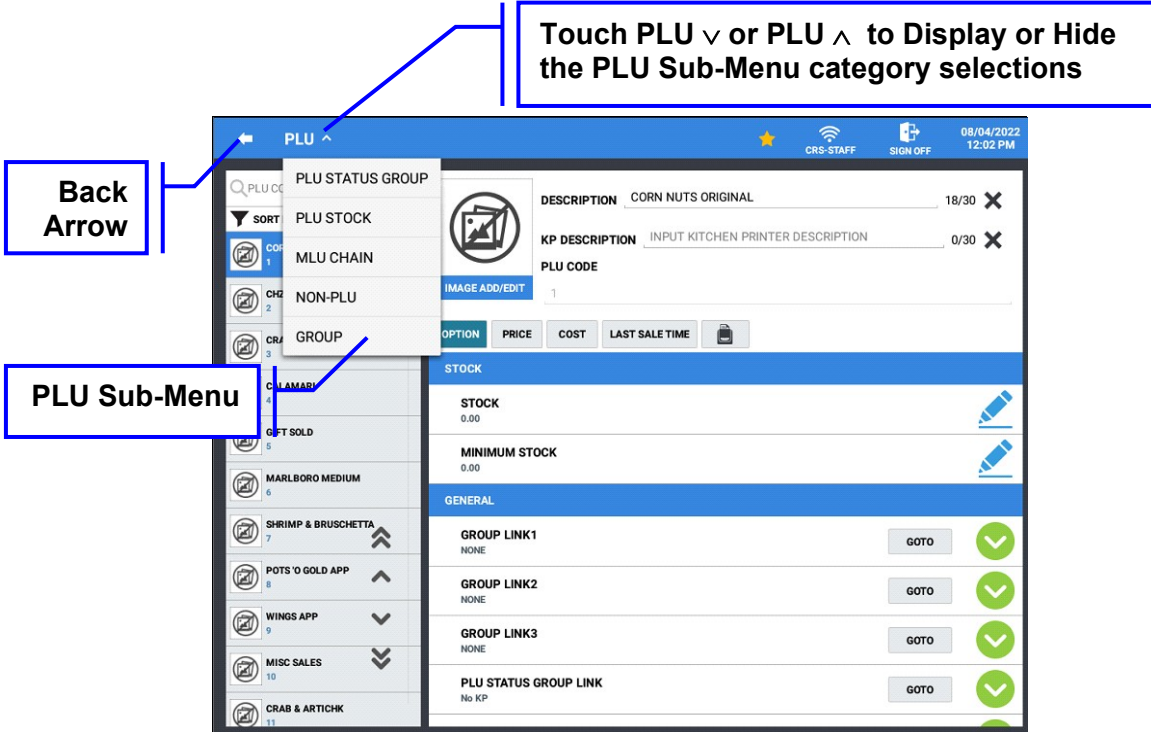
Icon	Description	Icon	Description
	Back Arrow, used to exit the current Mode selection.		Exit
	Mode Sub Menu icons, used to display/hide the sub menu for the current mode.		Copy Icon
	Add Record, used to add a new record in the current		Refresh
	Edit / Sort Menu		Show or magnify selection
	GOTO allows you to go to the programming options for that program area, group, recipe or MLU etcetera, from within the current program area.		Print – Used for printing reports and labels.
	Drop down button opens a list of selections for the current program option.		Export file to CSV
	The pencil icon allows you to open a window to enter a value for the current program selection.		Scroll keys, the single arrow keys scroll Up/Down one page at a time, the double arrow scroll keys go to the Beginning/End of the list.
	Option check box with option not selected.		Favorites icon, white is not added to favorites, gold indicates selection is added to favorites.
	Option checkbox with option selected.		Table Map icon.
	Note pad; Edit current list.		Connection method indicator: pressing this icon will bring you to the Wireless & Network settings in the main Android settings. (Manager Password is required to access.)
	The Trash can icon is used to delete records.		
	Inactivate		

Category Sub-Menus

If you are inside a program category or report area, you can take a shortcut to a related program area without having to back out to the main program screen and reselect program category and following the menu to a different area for the category. As an example, we will use the PLU programming category screen.

Touch PLU category title **PLU** in the upper left to display a list of related PLU category programs. Select a category from the list to go to directly to the programming for your selection.

Press the back arrow  to return to the previous category programming screen.



License Requests

About Licenses

Each Sam4POS terminal in a system will require its own license for proper operation or to restore a program. If the terminal has no license, no Database will be allowed to be loaded/restored. Licenses are issued for each station using the unique 8-digit license ID code for the station, for example, 12345678.crt. Site Licenses and Database Maintenance Licenses are available as 1-year and 5-year licenses, there is also a DEALER Temporary License available.

Live-Site Licenses or **Database Maintenance Licenses** (*1-year and 5-year*) can be loaded manually to the station or directly (*Pushed*) to each station. Each station must be connected to an active internet connection for the license to be ‘Pushed’ to the station.

- When the license is “Pushed” to the station, the merchant \ end-user will need to accept the on-screen EULA (*End User License Agreement*) & enter the Manager Password.
- Afterward, the station should be rebooted to complete the load.

You can view the process for manually registering the terminal license on the CRS YouTube page:

<https://www.youtube.com/watch?v=PLXp3GN9diQ&list=PLtF-h-a37jHmbhGgLO3nB76hP-avFSW29&index=32>

Dealer Temporary Licenses – (*15-Day term*) Temporary License for dealers to use for demonstrations or to program the terminal prior to installation. This license is generated by the dealer on the terminal and is loaded manually. A site license must be loaded when ready to install the terminal.

When the Sam4POS application is installed the License Code needed for the license request forms is found in:

Program Mode → *System* → *Register License*: Use the large **RED Number** on the screen for the license request forms.

Important! Dealers need to maintain a list of their customers, and what terminals & license ID's each site has.

Every effort will be made to issue licenses the same day they are received, but please allow 24 hours.

License Types

There are separate license request forms for each license type: Site Licenses, Dealer License, Database Maintenance License, and the Mobile APP License.

15-DAY TEMPORARY LICENSE

Beginning in August 2024 the Dealer Demo license was changed to a 15-Day Temporary License for dealers to use for demonstrations or to program the terminal prior to installation. This license is generated by the dealer on the terminal. Refer to the separate Sam4POS 15-Day Temporary License supplement for details.

See the “15-Day Temporary License” chapter on page 29 for details. A site license must be loaded when ready to install the terminal.

LIVE SITE LICENSES

Live Site Licenses are available for 1-year, & 5-year terms, the license must be Renewed at the end of the license period.

DATABASE MAINTENANCE LICENSE

Allows Program Mode access only for Inventory Maintenance. 1-year, & 5-year Licenses are available, must be Renewed at the end of the license period.

MOBILE APP LICENSE

Required for using the optional Sam4POS Mobile Report APP. 1-year, & 5-year Licenses are available, must be Renewed at the end of the license period. The term period must match the terminal license for the site.

Online License Request Forms

To request a license for your terminal you will need to log on to the CRS web site at: <https://www.crs-usa.com/sam4pos/sam4pos-license-request-forms>

A video showing how to fill out the Online Sam4POS License Request form can be viewed here: [Live Site and Service Swap License Requests for Sam4POS - YouTube](#)

Important: Every effort will be made to immediately issue licenses but please allow 24 hours.

INFORMATION REQUIRED

- Your Name & Company Name & eMail Address
- CRS Customer # & Purchase Order #
- Site Name, Address, Phone # – Installation Type & Expected “Go Live” date – Time Zone
- License Term – Stations License Code – Terminal Description & Terminal Type

LICENSE CODE

The License Code for each station is found in: Program Mode\ System\ Register License: Large Red Number

TERMINAL DESCRIPTION & STORE NAME

The Terminal Descriptor & Store Name is found in: *Program Mode\ Network & Revenue\ Terminal & Network*

NOTES

Add additional information pertinent this license request. Example, for service swap license requests include: Original terminal type & license ID you are swapping the license from.

SEPARATE LICENSE REQUEST ARE AVAILABLE FOR:

- **Live Site Licenses**
 - New Site & Renewal Licenses
 - Adding a Terminal to an Existing Site
 - Evo Subsidized Software Program (Select 1-year license term)
- **Service Swap**
 - Need Original License Code & New Terminal License Code
- **Mobile App Only License**
 - Must match the license term as the terminals for the site

SUBMIT REQUEST

When the form is completed press the **SUBMIT** button, it will be sent automatically to the appropriate personnel.

License Request forms must be filled out completely before a license can be issued. Once issued, Site Licenses can be “Pushed” automatically to the terminal (*The terminal must be connected to an active internet connection*). If the terminal is not online the license can be manually loaded and registered at each terminal.

Dealer Demo Licenses will be emailed to you and must be installed manually.

15-Day Temporary License

Beginning in August 2024 the Dealer Demo license was changed to a 15-Day Temporary License for dealers to use for demonstrations or to program the terminal prior to installation. This license is generated by the dealer on the terminal. A site license must be loaded when ready to install the terminal.

Additionally, if you have an installation with a terminal where the Sam4POS license has expired and you need an immediate license issued but you are not able to get a license issued from CRS because it is a weekend or after hours. You can create a Temporary 15-Day license for the terminal.

You will need to request a Site License before the end of the 15-Day term using the license request forms on the CRS website. All receipts will indicate * TEMPORARY LICENSE * on them until a valid Site License is installed.

One temporary license is allowed to be generated per APK; the temporary license term is limited to 15-Days. If you do not install a new Site License for the terminal within the 15-Day term, you could create another temporary 15-day license. You will need to uninstall the SAM4POS E-License Tool, then reinstall the SAM4POS E-License Tool before you can create a new 15-Day temporary license.

Requirements

- Active internet connection.
- SAM4POS E-License Tool
- USB Flash Drive

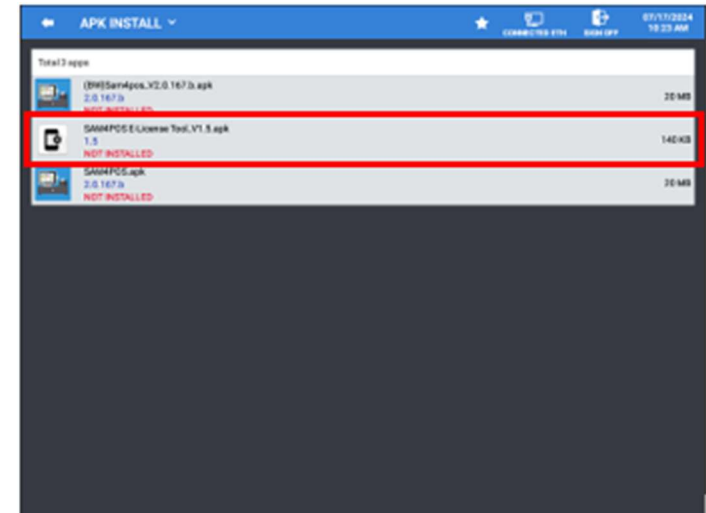
Generating a 15-Day Temporary License

Download the SAM4POS E-License Tool APK file from link below:

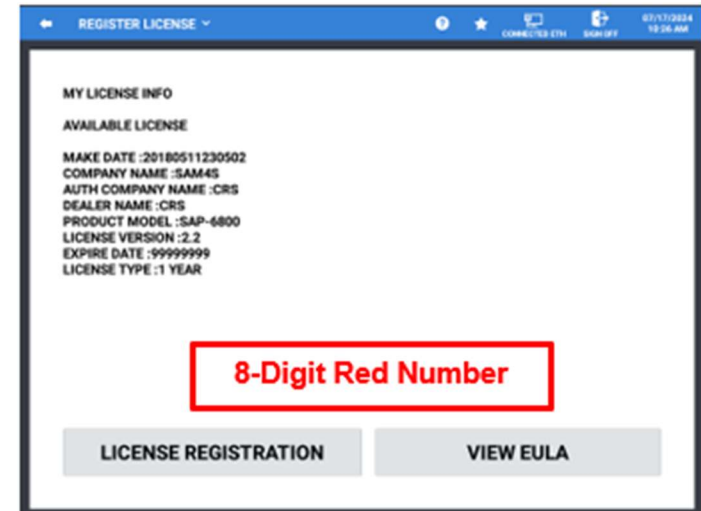
https://mega.nz/file/qlZQmKDK#usoEXAg2S4po5W14q0JphvjDqPme1q_aTbsrJ8mj4GI


Unzip the file and copy the **SAM4POS E-License Tool_V1.5.APK** to your USB flash drive.

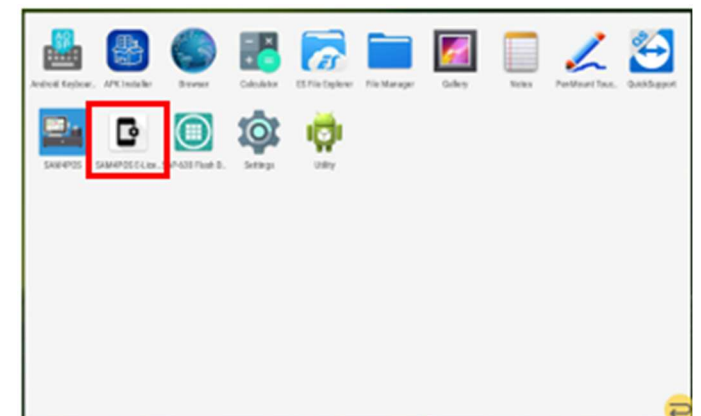
1. Plug the USB flash drive into an available USB port on the terminal that needs this license.
2. Go to: **Program Mode > System > APK Install.**
3. Using the **APK Installer**, install the **SAM4POS Temporary License Tool.**



4. Get the **8-Digit Terminal License Code**. This is the large red number from the **Program Mode > System > Register License** screen.



5. From the main sign-on screen, press the **EXIT** icon  to exit out of the Sam4POS application to access the main Android screen.
6. From the Android APPs screen launch the **SAM4POS E-License Tool**.



7. The SAM4POS E-License Tool screen displays.

The screenshot shows the SAM4POS E-License Tool interface. At the top, it says "SAM4POS E-License Tool" and "License tool for only Emergency. (V1.5)". Below that, it instructs the user to "Please input values on the below step and then click the generate button. License file will be save in internal storage (Path : SAM4POS)".

The main section is titled "Input the HASH CODE." and contains an input field with the placeholder text "8-Digit Code from SAM4POS > Program Mode > System > Register License".

Below that is the "Input Dealer/Reseller name (obtained from CRS)" section with an input field and an example "Ex) ABC POS Sales".

Next is the "Input Dealer/Reseller password (obtained from CRS)" section with a note: "Note: License code can be generated with invalid username/password, but you cannot restore DB." and an empty input field.

The "Expiration Date (15-days)" section has an input field containing "20240731".

At the bottom, there are three buttons: "Generate", "Init", and "Show License". A yellow circular arrow icon is in the bottom right corner.

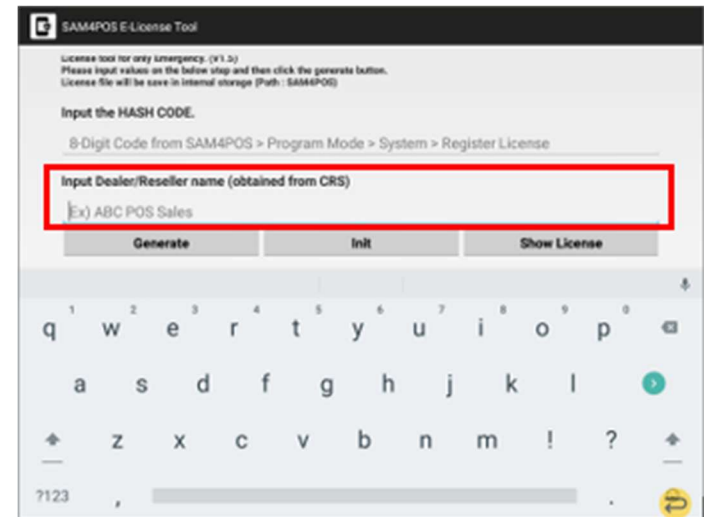
8. **Input the HASH CODE.** Then press  to continue.

This is the 8-Digit Code from **SAM4POS > Program Mode > System > Register License** (*Terminal License Code*).

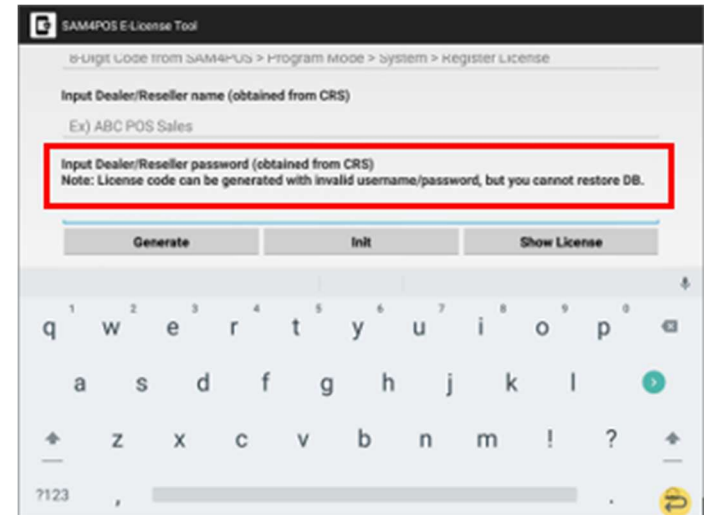
This screenshot is similar to the one above, but with a numeric keypad overlay at the bottom. The keypad has buttons for "-", "+", ".", "1", "2", "3", "4", "5", "6", "7", "8", "9", "0", "#", and a green arrow button. A red rectangle highlights the "Input the HASH CODE." input field, which contains the text "8-Digit Code from SAM4POS > Program Mode > System > Register License".

The "Generate", "Init", and "Show License" buttons are visible above the keypad. The yellow circular arrow icon is also present in the bottom right corner.

9. **Input Dealer/Reseller name (obtained from CRS)** Then press  to continue.



10. **Input Dealer/Reseller password (obtained from CRS)** Then press  to continue.



11. Then press the **Generate** button.

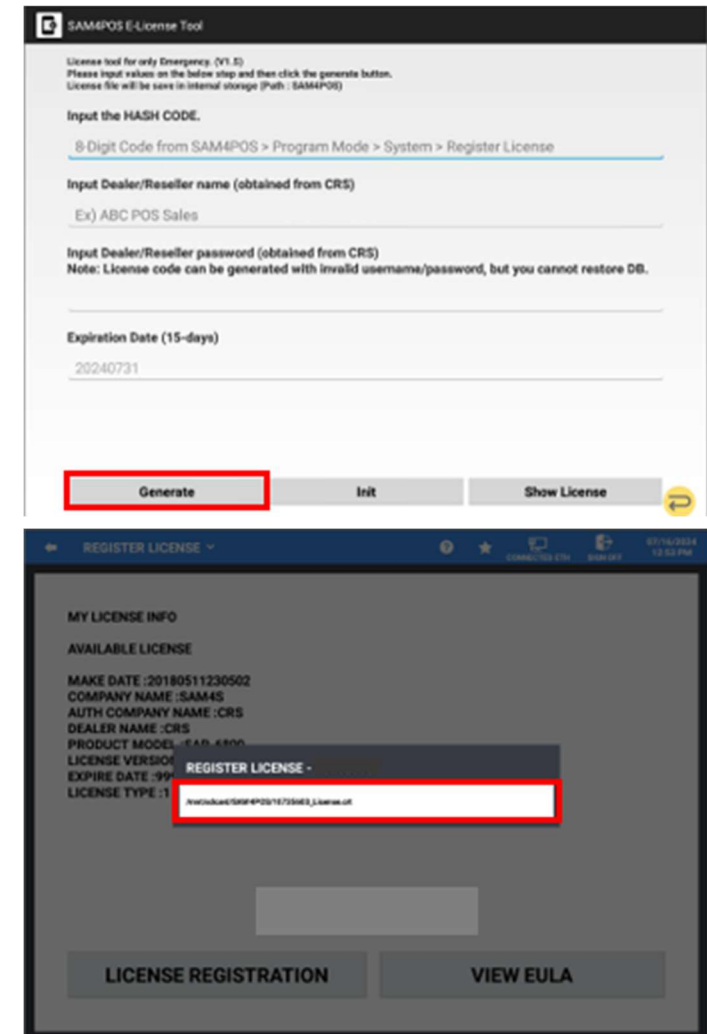
Note: The terminal must have internet access!

12. Exit the SAM4POS E-License Tool and launch the Sam4POS application.

13. Sign on to the station to register the newly obtained license. Go to: **Program Mode > System > Register License.**

14. Press the **License Registration** button.

15. Choose the newly issued Temporary **License.crt** file.



Should you need to extend the license for another additional 15 days, you will need to Uninstall the Sam4POS E-License Tool App, Reinstall the Sam4POS E-License Tool App and follow the Steps above.

TEMPORARY LICENSE RECEIPT EXAMPLE

*** TEMPORARY LICENSE ***

Sam4POS
4851 White Bear Parkw
ay
St. Paul, MN 55110
651-294-2700

2024-07-02 14:57 TUE
ORDER# POS-MAIN_008

PRODUCT		TOTAL
Burger	T1F	\$9.95
Cheeseburger	T1F	\$10.89
Bacon Cheeseburger	T1F	\$10.95

TOTAL \$34.97

SUBTOTAL \$34.97
CASH \$34.97

NO. 00000008 REG: POS-MAIN Madison

Thank You!
*** TEMPORARY LICENSE ***

License Registration

Each terminal in a system will require its own license for proper operation. Live site licenses can be loaded directly (*Pushed*) to each station. Each station must be connected to an active internet connection for this operation. The dealer or merchant must accept the EULA (*End User License Agreement*). The station should be rebooted after the license has been registered.

Dealer licenses cannot be ‘Pushed’ to the station, they must be installed manually. This same manual installation must be performed for live site licenses where the terminals are not connected to the internet.

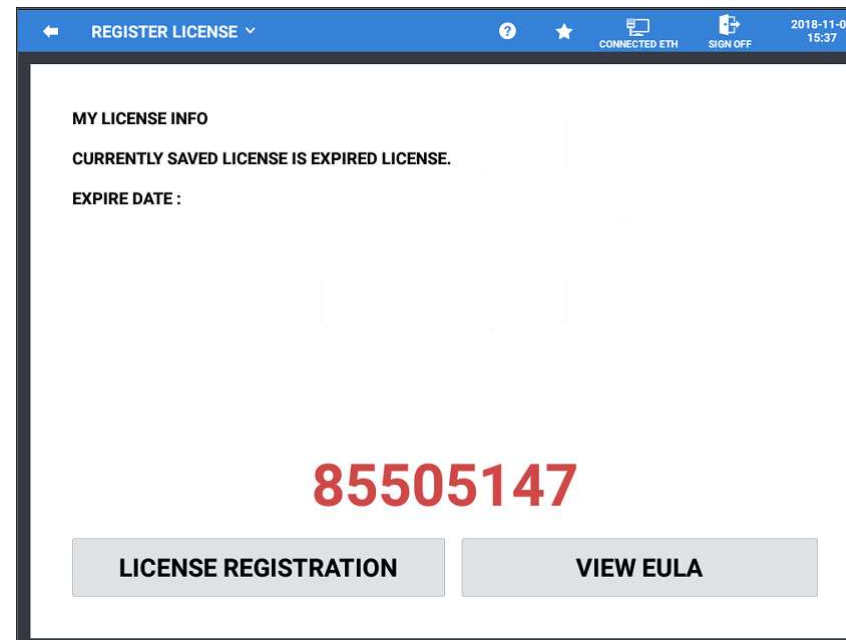
You can view the process for manually registering the terminal license here:

<https://www.youtube.com/watch?v=PLXp3GN9diQ&list=PLtF-h-a37jHmbhGgLO3nB76hP-avFSW29&index=22&t=1s>

Beginning in August 2024 the Dealer Demo license was changed to a 15-Day Temporary License for dealers to use for demonstrations or to program the terminal prior to installation. This license is generated by the dealer on the terminal. Refer to the separate Sam4POS 15-Day Temporary License supplement for details. A site license must be loaded when ready to install the terminal.

Manual Register License

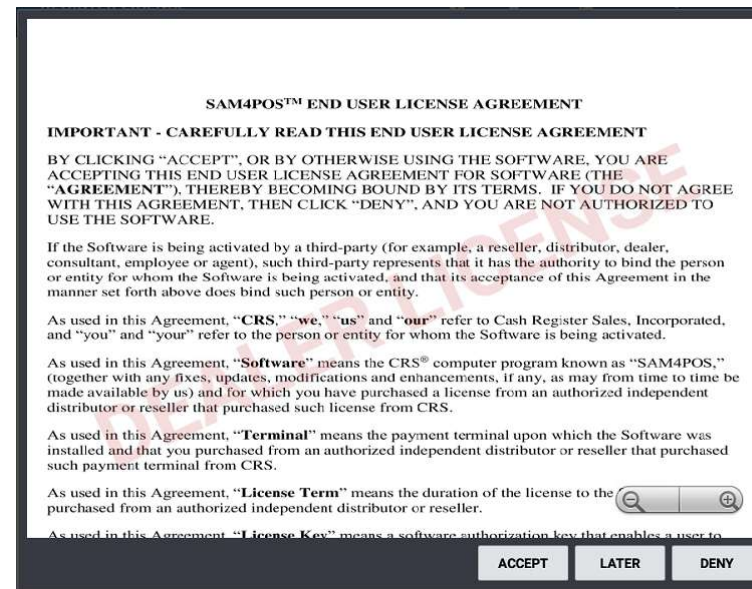
1. Unzip and Save the license file you received to a USB stick.
2. Insert the USB stick into SAM4POS terminal the license was issued for.
3. Sign on to the SAM4POS; default sign on is: [1] [ENTER]
4. From the **Program Mode** menu: Tap the **System** icon:
5. On the **SYSTEM** menu: Tap the **REGISTER LICENSE** icon:
6. The terminal's **Register License** info is displayed; Press the **LICENSE REGISTRATION** button:



7. The license files loaded on the USB are displayed; Be sure to select the correct license for the terminal:



8. License Agreement dialog displays: Tap ACCEPT to proceed



9. Enter **MANAGER PASSWORD**, default password is 9999



A screenshot of a mobile application screen titled "MANAGER REQUIRED" with a close button (X) in the top right corner. Below the title is a label "MANAGER PASSWORD" and an empty text input field. Underneath the input field is a numeric keypad with buttons for digits 7, 8, 9, 4, 5, 6, 1, 2, 3, 0, 00, and a decimal point (.). At the bottom of the keypad are three buttons: "CLEAR", a left arrow, and "ENTER".

10. **Reboot** the station; You will need to complete this operation at each Sam4POS station in the system.

11. Terminal is now Licensed:



A screenshot of a mobile application screen titled "REGISTER LICENSE" with a dropdown arrow. The top status bar shows "2018-11-02 15:40" and icons for "CONNECTED ETH" and "SIGN OFF". The main content area is titled "MY LICENSE INFO" and "AVAILABLE LICENSE". It displays the following license details:

- MAKE DATE :20181102100251
- COMPANY NAME :SAM4S
- AUTH COMPANY NAME :CRS
- DEALER NAME :CRS
- PRODUCT MODEL :SAP-630
- LICENSE VERSION :2.0
- EXPIRE DATE :20191130

A large, semi-transparent red watermark "DEALER LICENSE" is overlaid diagonally across the screen. Below the license information, the number "85505147" is displayed in large red font. At the bottom, there are two buttons: "LICENSE REGISTRATION" and "VIEW EULA".

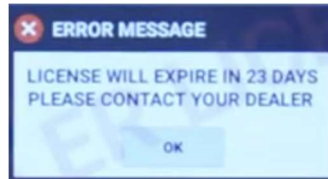
License Expiration Notes

The video link below, available from the CRS YouTube page, shows the operations after the license has expired:

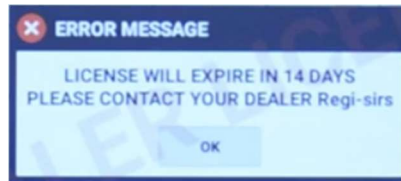
<https://www.youtube.com/watch?v=yERedyOretg&list=PLtF-h-a37jHmbhGgLO3nB76hP-avFSW29&index=1>

* 1-YEAR LICENSE

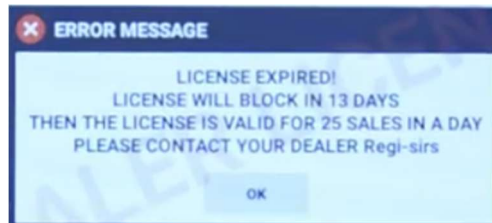
30 to 15 days before expiration – At end of day it will give a License Will Expire In **xx** Days warning and prompt the merchant to contact their local dealer.



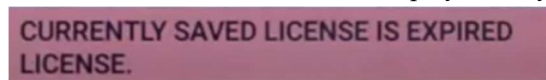
14 to 0 days before expiration – At End Of Day it will give a License Will Expire In **xx** Days warning plus the same warning in every 10 transactions.



1 to 14 days after expiration – At End Of Day it will give a License Expired! License Will Block In **xx** Days warning plus the same warning in every transaction.



Press **OK** and the notification below displays briefly on the register mode screen.



15 or more days after expiration – Only allowed 25 transactions per day & all printed documents will have “Demo Version” on them

* 5-YEAR LICENSES

30 to 15 days before expiration – At End Of Day the notification message “License Will Expire In **xx** Days” displays and prompts the merchant to contact their local dealer.

14 to 0 days before expiration – At End Of Day and after every 10 transactions, the notification message “License Will Expire In **xx** Days” displays and prompts the merchant to contact their local dealer.

1 to 14 days after expiration – At End Of Day and after every transaction the notification message “License Expired! License Will Block In **xx** Days” “Then License Is Valid For 25 Sales In A Day” warning and prompt the merchant to contact their local dealer.

After expiration with older firmware up to v1.1.30 – When the license expires, Only 25 transactions per day are allowed. All printed documents will have “Demo Version” printed on them and the notification “LICENSE EXPIRED” displays on every transaction.

After expiration with firmware v1.1.31 ~ 2.0.130 – An expired popup displays on *every transaction* for 2 weeks (no limitation), after two weeks the terminal operates normally.

After expiration with firmware v2.0.131 or later – Sam4POS will continue operating even after the license expires. You will still receive the “License Will Expire in **xx** days” notifications until the end of the license term. The notifications you do not receive are the “License Expired” notifications after the license has expired. When the license has expired, the notification “License Expired” is only displayed when starting Sam4POS, the user must close this notification message to operate the station.

Warning: Firmware updates are no longer available until a new license is purchased. If the *license has expired* and the firmware is updated, Sam4POS will go into *Demo Mode* until a new license is purchased. Only 25 transactions per day are allowed and the notification “LICENSE EXPIRED” is displayed on every transaction.

The video link below, available from the CRS YouTube page, shows the operations after the license has expired:

<https://www.youtube.com/watch?v=yERedyOretg&list=PLtF-h-a37jHmbhGgLO3nB76hP-avFSW29&index=1>

TERMINAL REPLACEMENT

Should a terminal require replacement – Service Swaps are allowed on terminals with expired 5-year licenses. However, the terminal must keep the same firmware version as installed at the time the license expired. Firmware upgrades are not allowed until a new license is purchased. A “License Expired” notification will display when starting Sam4POS, the user must close the message to operate the terminal.

MOBILE APP



Sam4POS Mobile Report APP – If the merchant is using the Sam4POS Mobile Report APP (Item #: 951065) and wants to continue using the Mobile Report APP, there would be a single order for 5 more years of continued service.

5-Year License Extension

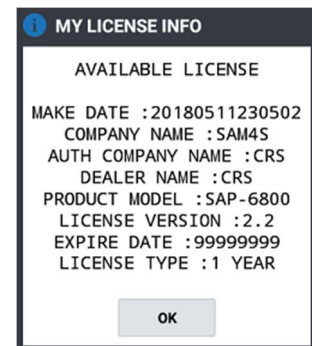
Sam4POS Software versions prior to v2.0.131 – If the dealer has installations with 5-year licenses that are currently running fine with older firmware versions (*any version prior to v2.0.131*), rather than upgrading these sites dealers can elect to have the 5-year license on the terminals extended for another 5 years (*at no charge*). This allows sites that are running fine on older firmware to keep the currently installed version, whereas upgrading might have changes that may affect the store’s operation.

- The dealer will need to **fill out the 5-Year Renewal License Request form**. The CRS salesperson will enter a sales order for the 5-year license extension (951055-EXT) after receiving the completed 5-Year License Renewal Request form.
- The dealer must have also **read, understand, and agreed to the Terms of the Sam4POS 5-year License Renewal Program Terms and Conditions** which clearly stipulates that if the Sam4POS software on the terminal is upgraded, the dealer\merchant will be responsible for paying the 5-Year Sam4POS license fee.
- If the site that is being extended (*or if they have updated to version 2.0.131 or higher*) is using the Sam4POS Mobile Report APP and the merchant wants to continue to use the Mobile Report APP, the merchant must purchase a 5-Year Extended Mobile Report APP License. **CRS Item Number: 951066**.

License Icon Notes

The License Information icon  is displayed on the main sign on Screen, the License Information icon  also appears on the header bar on the Register Mode screen. Touch the License Information icon to display the ‘My License Info’ information dialog. Press **OK** to close the dialog.

- **Green Checkmark:** Normal license is active.
- **Yellow Checkmark:** License Expiring Soon (within 30 days)
- **Red Checkmark:** Expired or No License. Will also display red when the terminal is not online.
- **DEMO:** After 31 days of the station not being online, this icon will display **“DEMO”**. This is normal and does not affect operations.



This video shows the SAM4POS behavior on license expiration:

<https://www.youtube.com/watch?v=yERedyOretg&list=PLtF-h-a37jHmbhGgLO3nB76hP-avFSW29&index=1&pp=iAQB>

Program Creation

Equipment Preparation & Program Creation Sequence

1. Install the Sam4POS application
2. License the Sam4POS
 - * Site License
 - * 15-Day Temporary License
3. Upgrade to latest version Sam4POS APK if not already on latest
4. Ram Clear
 - * Load Default Program
 - * Load Empty Program
5. Employee Programming
 - * Create Authority Levels
 - * Create Job Codes & Pay Rates
 - * Create Employees
6. Taxes Programming
 - * Taxes
 - * Tax Groups
7. PLU Programming
 - * Group Programming
 - * PLU Status Group Programming
 - * PLU Programming
8. Device Programming
 - * Device Setting
 - * Device Mapping
9. Screen Edit Programming
 - * MLU
 - * FLU
10. MLU Chain Programming
11. Receipt & Message Programming
 - * Receipt
 - * Message
12. Additional Programming
 - * Options
 - * Function Key
 - * Promotion
 - * Product & Ingredient
 - * Network & Revenue
 - * Time Schedule
 - * System
 - * ETC
 - * Customer

Software Update

After the First Installation of the Sam4POS application software, subsequent updates can be performed from within the software program.

Software updates can easily be loaded from a USB drive via the APK Install operation, It is also possible to update terminals remotely using Team Viewer. The APK files are specific to the type of terminal you have. When you download and unzip the file from the CRS web site, all APK files for all the different Sam4POS terminal models are included in the file download: **(a), (b), (c), (d), (e)**.

Version (a) – Installs on the Sam4s SAP-530 and SAP-4800(II) terminals.

(4800_530)Sam4pos_Vx.x.xx .a

Version (b) – Installs on the Sam4s SAP-6600(II) and SAP-630 terminals.

(6600_630)Sam4pos_Vx.x.xx .b

Version (c) – Installs on the Hisense HM616 Tablet.

(HM-616)Sam4pos_Vx.x.xx .c

Version (d) – Installs on the Hisense HM626 Tablet *(Requires v2.0.106 or later.)*

(HM-626)Sam4pos_Vx.x.xx .d

Version (f) – Installs on Hisense HM-626 tablets. *(Requires v2.0.184.)*

(HM-626)Sam4pos_Vx.x.xx .f

* This (f) firmware version takes care of duplicated license code issues for the HM626. The (f) version uses the CPU serial number + Wi-Fi Mac address, so you need to **connect the tablet to the WI-FI before you install SAM4POS**.

Version (e) – Installs on the Sam4s Sapphire A60 and A70 terminals. *(Requires v2.0.161 or later.)*

(Sapphire)Sam4pos_Vx.x.xxx .e

Note: Only update the Sam4POS application if a newer firmware version resolves a specific issue that you may be having at a particular site.

The most current SAM4POS Application files can be obtained from the CRS Website at: <https://www.crs-usa.com/products/software/sam4pos>

Log on to the CRS website using your dealer credentials; Select any of the Sam4POS Software License selections to access the current application files and documentation.

Instructions for updating the Sam4POS application are available on the CRS website, they Sam4POS application update instructions are typically included with the updated APK update file as well as the Modification History so you can see the changes from version to version.

APK Install

The APK Install selection on the System menu selection screen provides an easy means to update the SAM4POS application without having to exit out of the Sam4POS application.

Updating the Sam4POS application file does not clear any current programming or affect report totals. However, as a best practice, it is recommended to Generate the EOD and back up the current program before performing the application update or any program changes.

The Database Backup will save all current programming data as well as all Sales Data.

Program Mode > System > Database > Database Backup

APK Install – USB

1. Copy the newest **SAM4POS APK** file to a USB flash drive.
2. Insert the USB drive into any available USB port on the SAM4POS terminal.
3. From the **Program Mode** select **SYSTEM**; on the SYSTEM menu selection screen, press **APK INSTALL**. The APK Installer screen appears.
4. Select the appropriate **SAM4POS APK** file you want to load. (It's possible to have multiple update files on the same drive.)

Note: The AKP files are specific to the type of terminal you have. When you download and unzip the file from the CRS web site, all APK files for all the different Sam4POS terminal models are included in the file download: **(a), (b), (c), (d), (e)**.

Version (a) – Installs on the Sam4s SAP-530 and SAP-4800(II) terminals.

(4800_530)Sam4pos_Vx.x.xx .a

Version (b) – Installs on the Sam4s SAP-6600(II) and SAP-630 terminals.

(6600_630)Sam4pos_Vx.x.xx .b

Version (c) – Installs on the Hisense HM616 Tablet.

(HM-616)Sam4pos_Vx.x.xx .c

Version (d) – Installs on the Hisense HM626 Tablet *(Requires v2.0.106 or later.)*

(HM-626)Sam4pos_Vx.x.xx .d

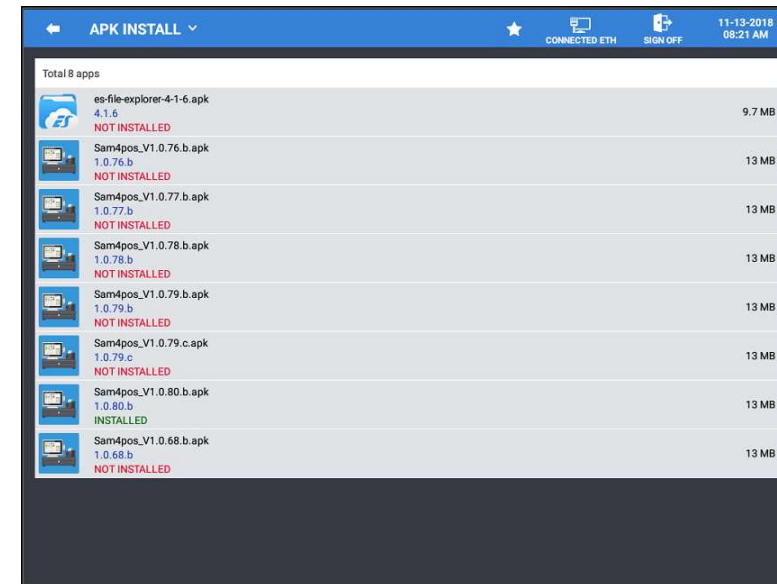
Version (f) – Installs on Hisense HM-626 tablets. *(Requires v2.0.184.)*

(HM-626)Sam4pos_Vx.x.xx .f

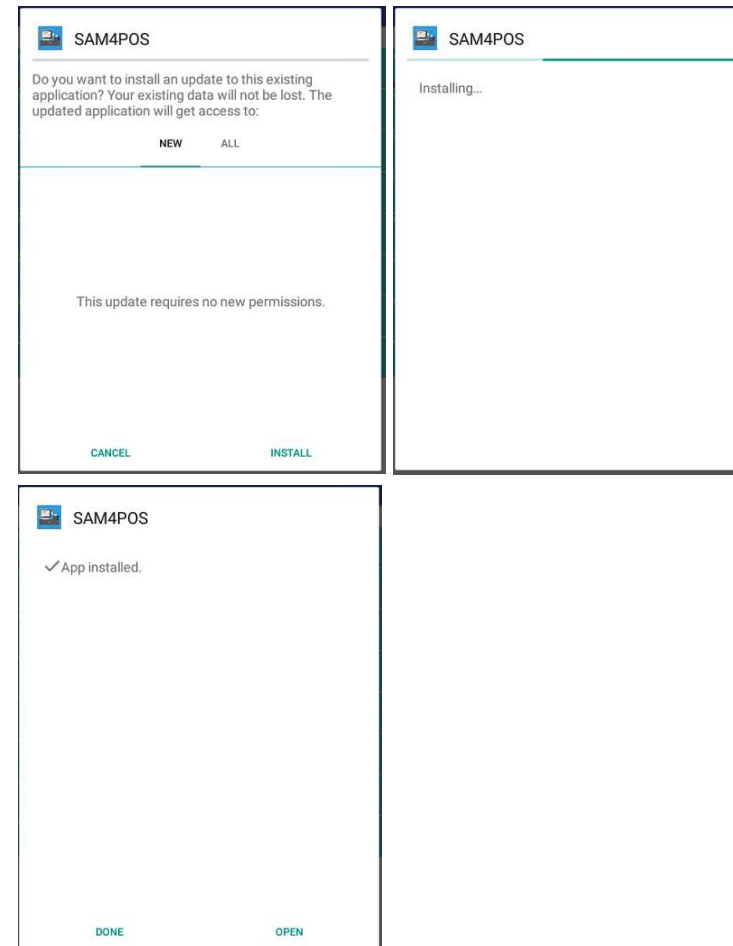
- * This (f) firmware version takes care of duplicated license code issues for the HM626. The (f) version uses the CPU serial number + Wi-Fi Mac address, so you need to **connect the tablet to the WI-FI before you install SAM4POS**.

Version (e) – Installs on the Sam4s Sapphire A60 and A70 terminals. *(Requires v2.0.161 or later.)*

(Sapphire)Sam4pos_Vx.x.xxx .e

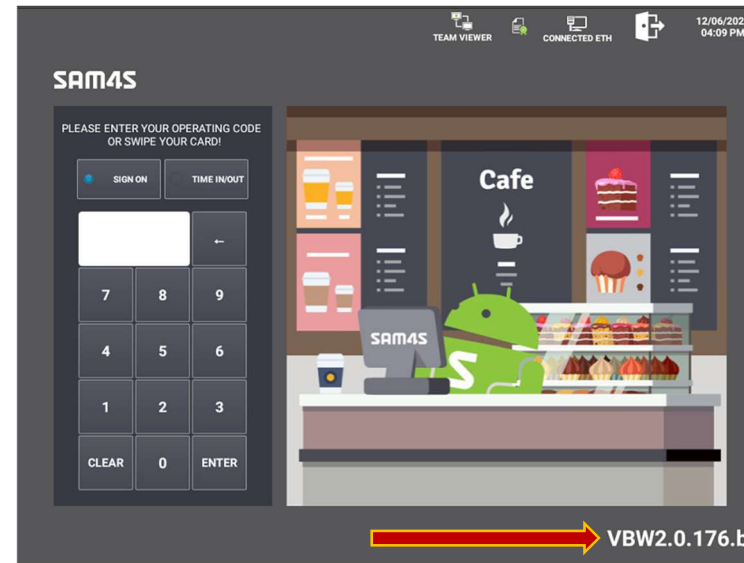


5. Press **Install** to load the selected SAM4POS update.
6. The **'Installing...'** dialog displays while the new application files are loaded. When it is finished, the **'APP Installed'** dialog screen is displayed:



7. After APK file installation is complete, Press **"Open"**.

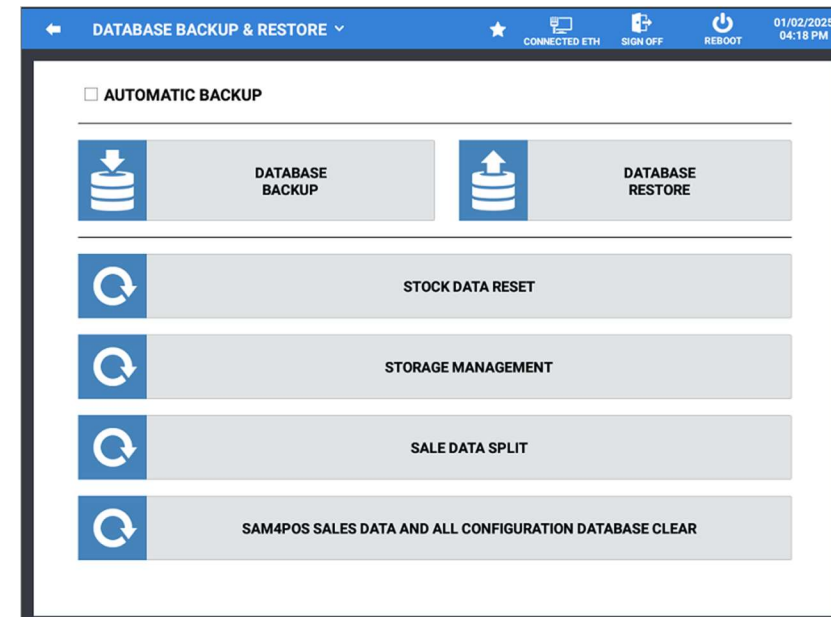
8. The SAM4POS application restarts and the main sign on screen appears. Verify the version in the lower left corner on the sign on screen.
9. It is a good practice to **Reboot** the terminal after the update.



Ram Clear

Before programming Sam4POS you may want to perform a Ram Clear on the terminal to ensure the totals and counters are cleared. When the terminal is Ram Cleared, we have the option to load “A Basic Program” or load “An Empty Program”. To perform the Ram Clear procedure, you must sign on as the System Admin.

1. On the main sign on screen enter: **4 5 6 8 5 2 7 5 3 9 5 1** <ENTER> the Main Menu screen displays.
2. From the main menu screen, select the **Program Mode**  then tap the **SYSTEM** icon: 
3. On the **SYSTEM** selection menu, tap **DATABASE**: 
4. The **DATABASE BACKUP & RESTORE** menu is displayed:



5. Tap the **SAM4POS SALES DATA AND ALL CONFIGURATION DATABASE CLEAR** button:



6. Next, the **APP FACTORY RESET** dialog is displayed; Select the operation type you wish to perform:

A BASIC PROGRAM – LOADS A SIMPLE PROGRAM YOU CAN USE FOR DEMONSTRATIONS.

- 60 PLU's
- 1 PLU Status Group
- 4 Groups
- 1 Employee
- 2 MLU Groups & MLU screens
- 3 FLU's

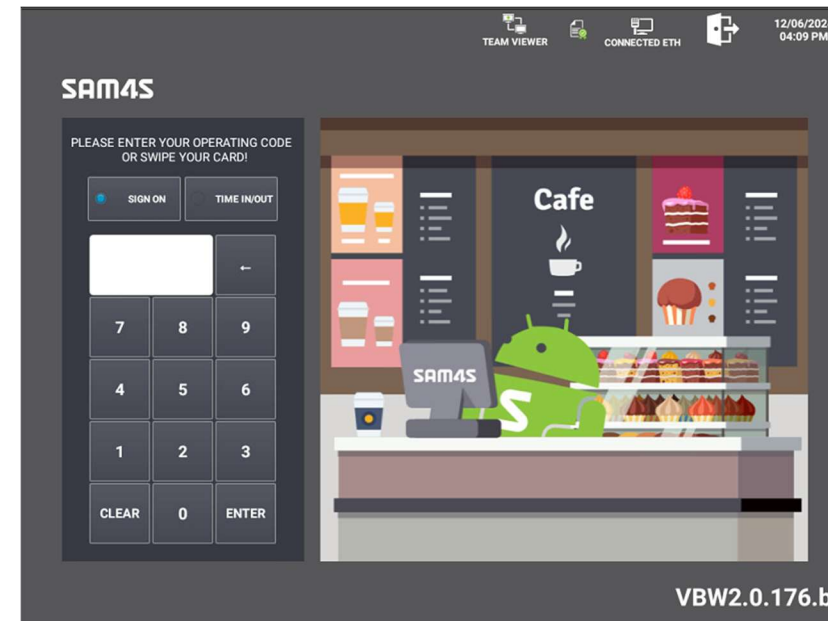
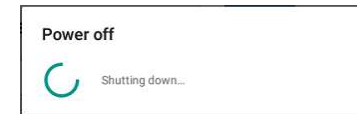
AN EMPTY PROGRAM – CLEARS ALL PROGRAMMING AND LOADS A COMPLETELY BLANK PROGRAM.

No PLU's, Groups, Employee's, MLU/FLU screens.

DATABASE BACKUP – WILL BACK UP THE CURRENT DATABASE TO USB

The Sam4POS terminal will clear all programming and reboot. All current program and sales data will be backed up.

7. After rebooting you are returned to the Main Sign On screen.
8. Sign On using **1 <ENTER>**



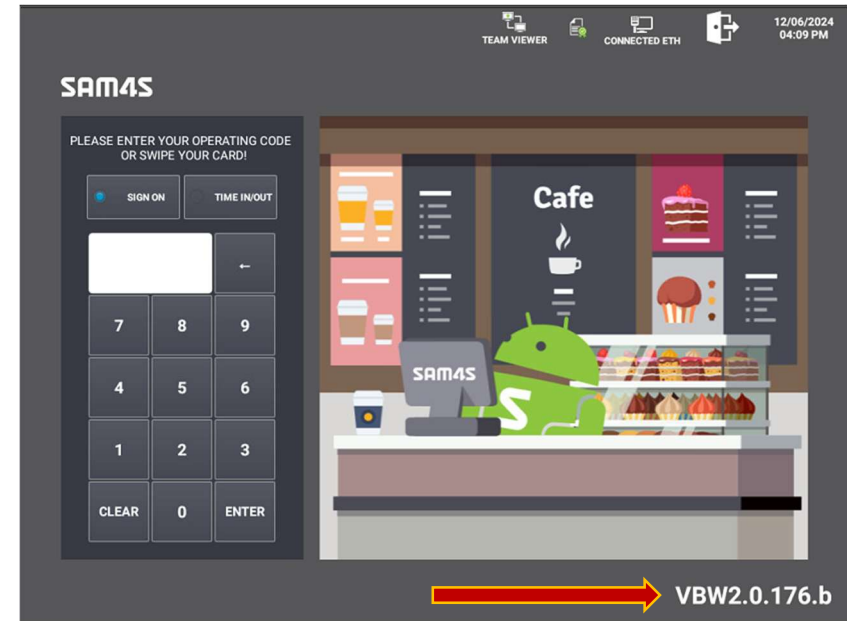
Initial Clear

The initial clear function allows you to exit any register activity and return to a beginning or cleared state. No data is lost by performing this operation.

1. Tap the **Version** info displayed on the main sign on screen three times to Initial Clear the Sam4POS terminal.
2. The Notification dialog displays:



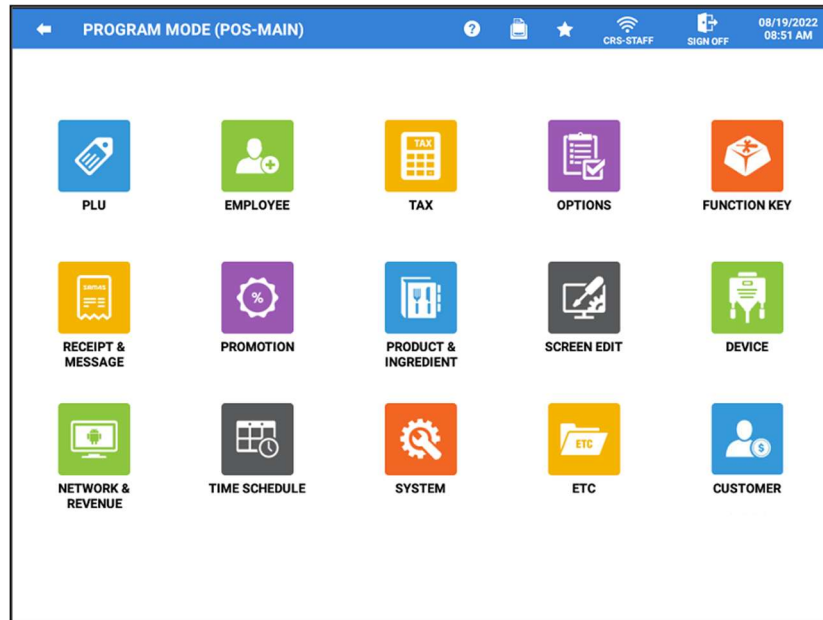
3. Press **YES** to proceed with the initial clear; or press **NO** to exit without the initial clear.
4. Sign on to Sam4POS as normally.



Program Mode

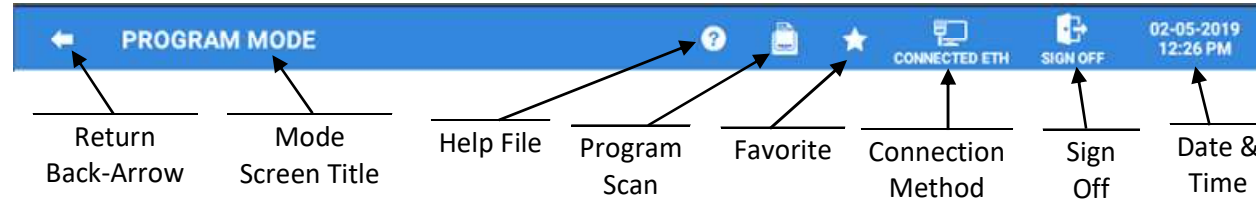
All database programming and maintenance is performed in Program Mode. The Program Mode is separated into 15 categories to make finding and programming specific areas easier. Touch any of the categories shown to enter the programming selections for that category. Not all program categories are discussed here in this training guide. For complete details of all program categories, sub-categories and related options, please refer to the “Sam4POS Programming Manual” available on the CRS website.

1. From the main menu screen, press the ‘**PROGRAM MODE**’ icon. (P-Position on the SAP-630/SAP-530); the default Program Mode screen displays:








2. The **Program Mode Title Bar** provides access to the **Help File** and **Program Scans**.
3. Below the Title bar the individual Program Categories are shown. Each category has related sub-category selections.











Program Mode Title Bar



- ⇒ **Help File** – Provides a list of common programming topics. When you select a topic from the list you will be linked to a YouTube video showing how to use the selected topic.
- ⇒ **Program Scans** – Allows you to view and print the current program mode settings for all program categories.
- ⇒ **Favorites** – The favorite icon appears on all the category and subcategory screen title bars. Press the icon to add or remove the main program mode menu to the favorite list. The favorite list may be accessed by pressing and holding on the favorite icon on the title bar. On the SAP-6600(II)/4800(II), the favorite list also may be accessed by selecting the Favorite List icon on main menu selections.

Program Mode Category Selections

Menu Selection	Icon Definition
 PLU	Set PLUs and related functions: PLU programming, PLU Status Groups, PLU Stock, MLU Chains, Set Menu, Group programming, Non-PLU and Quick PLU.
 EMPLOYEE	Set up Employees, Employee Authority Levels, Job Codes & Pay Rates, and Station programming.
 TAX	Set tax rates for up to 10 different taxes and/or enter tax table information for one or more state or local taxes and set up Tax Groups to assign in the PLU status group programming.
 OPTIONS	Set various system options, options are organized in sub-categories General, TAX, Drawer, Training, Level Option, Guest Check, KP/KV Option, Print, Report, Time Keeping, HASH, and System Options. Programming for Rounding if used and Tare Weight programming.
 FUNCTION KEY	Identify and set specific options for function keys, tender keys, and MACRO keys.

 RECEIPT & MESSAGE	Customize receipt formats, select information to be printed on the sales receipt, guest check receipts, kitchen receipts, and label printer. Receipt & Message categories include: Receipt, Message, Error Message, Report Message, Label Print, Gratuity, Receipt Message and Text Inserter Message.
 PROMOTION	Retailers often offer discounts when multiples of items are purchased. Here you can choose different promotion formats such as discounts for specific combinations of specific items or items from specific groups. The PROMOTION category selection are: Promotion, Promotion Group, and Promotion Customer Group.
 PRODUCT & INGREDIENT	Set up ingredients and recipes for ingredient inventory and define product mix groups.
 SCREEN EDIT	Add, design and edit Table Map, Menu Lookups (MLU), Function Lookups (FLU), Rear Display (<i>SAP-6600II & Sapphire terminals only</i>), KIOSK, and Real Keyboard (<i>SAP-630 only</i>).
 DEVICE	Identify peripheral devices and port settings, set up kitchen printer groups, define card swipe data for employee cards and age verification, map devices to each station and perform EFT operations.
 NETWORK & REVENUE	Use to define Terminal & Network information. Revenue Center is not used and can be disabled.
 TIME SCHEDULE	Set time activated options: Price Level, Screen Level, KP Time Period, Auto Reboot, Auto End Of Day, Time Schedule Promotion and Auto Backup to FTP.
 SYSTEM	Access system utilities: Register License, Database Backup/Restore and Reset, Log Backup, secure System Settings, review Super Macro data, Program Backup & Restore, APK Installation, launch Team Viewer, and open the screen Calibrator.
 ETC	Allows you to link SAM4POS to a website.
 CUSTOMER	Used with the Customer Delivery feature. This program category must be enabled before it will be accessible and available on the category list.

Employee

The employee file contains information for register operators as well as employees who use the register only to clock in or out (employee time keeping.) Specific functions that are allowed or disallowed for each employee are determined by assigning the employee to an authority level.



Two 10-digit code numbers may be assigned for each employee. A clock-in code is used to clock in or out and a separate sign on code is used to operate the register. The social security number is for reference only and does not appear only on reports.

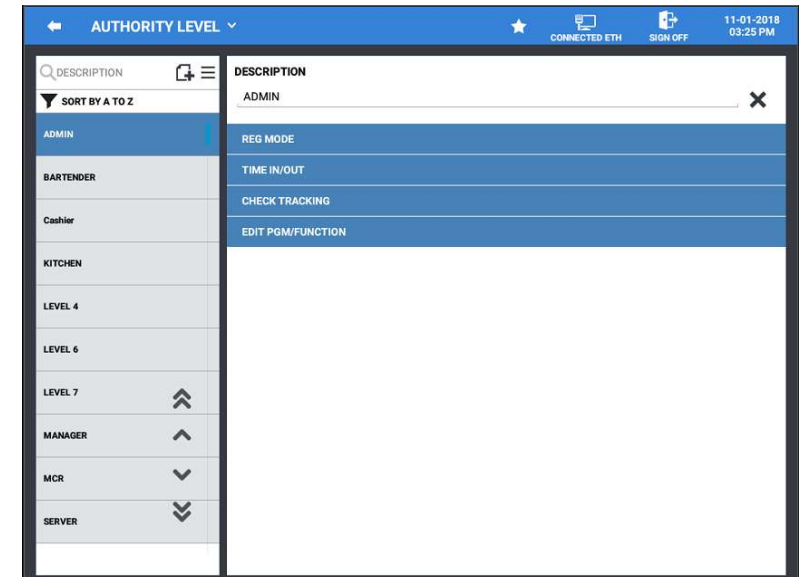
1. From the **PROGRAM MODE** touch **EMPLOYEE** to view the EMPLOYEE category selection window.
2. Touch the **EMPLOYEE** program category you wish to edit. Employee programming is broken down into five programming categories:
 - ⇒ **Employee** – Employee programming allows you to Create your Employee file for cashiers, wait staff, managers, etc. and assign the appropriate Passwords, Authority Level, Station, Pay Rate & Job Code for each employee.
 - ⇒ **Authority Level** – The selections made here for each authority level determine the operations that will be allowed for each employee.
 - ⇒ **Job Code & Pay Rate** – Job Code & Pay Rate must be set up to utilize the Time Keeping feature.
 - ⇒ **Station** – Create stations to be assigned to employees. For example you may have a Bar Station and a Server Station with different MLU/FLU assignments.
 - ⇒ **Option Category** – Option Category allows managers to be able to Hide selected categories from view when employees access the program mode screen.

Authority Level

Each employee must be assigned to an authority level; create authorities here to assign each employee. There are four main categories in the authority level programming; REG MODE, TIME IN/OUT, CHECK TRACKING and EDIT PGM/FUNCTION. The selections made here for each authority level determine the operations that will be allowed for each employee.

For example, in a restaurant application, an authority level with the descriptor Kitchen Help could be set to allow only clocking in/out, or an authority level with the descriptor Manager could be set up to allow all functions. Other authority levels could be defined for servers, cashiers and bussers that allow only the appropriate operations.

1. From the **PROGRAM MODE** touch **EMPLOYEE** then touch **AUTHORITY LEVEL**.
2. Press the **NEW Record** icon  to add new employee **Authority Levels** to the database or you can select an existing employee to edit as necessary.
3. Select a category to edit the authority options for each of your authority levels.
 - REG Mode, Time In/Out, Check Tracking, Edit PGM/Function, End of Day
4. Press the  icon to access the **EDIT MODE** to select and delete Authority Levels from the list or select **SORT** to sort the Authority Levels alphabetically.



Authority Level Definitions

DESCRIPTION

Type in a descriptor (*up to 30 characters*) for the authority level, you can tap the X at the end of the description field to clear the current descriptor.

REG MODE

SIGN IN USING MCR

This option forces the employee to use the Mag Card Reader for signing in and out of the ECR. See “Device/Card Read Format/Employee Card” programming for details.

ALLOW DESTINATION CHANGE

If selected, the operator has the option of selecting a destination (*i.e.* eat-in, take out, drive thru) other than the default.

CAN PLU PRICE/HALO OVERRIDE

If checked, the employee can override the preset price or HALO on items set to allow price change.

ALLOW PRICE LEVEL CHANGE

Select this option if the employee is allowed to change price levels.

ALLOW CASH DECLARATION

If cash declaration is used, select this option to allow cash declaration operations.

ALLOW NOSALE

Allows the No Sale operation outside a transaction.

COMPULSORY TIP ENTRY

If selected, the employee is prompted to declare tips when clocking out.

REG MODE ONLY

Select this option if you want to allow sales operations only for these employees.

CAN EDIT PLU FROM PLU INFO

Check this option to allow employee to use the PLU Info key in the Register Mode to edit the PLUs.

VOIDING OF SERVICED ITEMS

Allows voiding items off a check after the check has been services and recalled.

SHOW THE MENU OF EMPLOYEE REPORT IN REG MODE

With this option checked, tapping the Employee Name in the register mode will display the selections for :

Employee Report – Generates the employee report for today for the signed on employee.

Employee Report (Current Data) – Generates the Employee Report with current data only (*before the EOD is generated*) for the signed on employee.

TIP Report – Generates the TIP report for today for the signed on employee.

TIP Report (Current Data) – Generates the TIP Report with current data only (*before the EOD is generated*) for the signed on employee.

ALLOW DISCOUNT

When selected, this employee is allowed to enter discounts in a transaction.

ALLOW TEAMVIEWER

When selected, this employee is allowed to use the TeamViewer application.

ALLOW END OF DAY IN REG MODE (Added in v1.1.8)

When checked, the End Of Day report icon appears in the Utility Information menu on the register mode title bar.

ALLOW VOID ITEM (Added in v1.1.54)

When this option is not checked, the Cashier\Server cannot **Press & Hold** an item while in REG mode to VOID the item or use the **Void Item** function.


ALLOW ASSIGN DIFFERENT EMPLOYEE WITH LIST PAID TIP ENTRY (Added in v2.0.8)

Select this option if you want to allow ADMIN employees to be able to assign Tip's received to any employee in register mode using the TIP Entry on the List Paid function.


ALLOW ANY EMPLOYEE REPORT IN REPORT MODE

The setting will allow Managers or Supervisors to run the employee report for any employee instead of only being able to run your own report.

SHOW LICENSE ICON (Added in v2.0.21)

Check this option to display the License Icon  in the register mode. (*Also see System Option: 'Show License Icon' to turn on this option.*)

SHOW UTILITY INFORMATION ICON (Added in v2.0.21)

Check this option to display the Utility Information Icon  in the register mode.

NEED MANAGER FOR RECEIPT ON / OFF CONTROL

When checked, manager password is required to toggle the receipt On/Off.

SHOW RECEIPT ON / OFF ICON (Added in v2.0.21)

Select this option to see the receipt On/Off icon in the register mode (*displays on the title bar*).

TIME IN/OUT

TIME-IN/OUT ENTRY ONLY

When checked, employees are not able to run sales transaction, they are allowed Time-In/Out Only.

TIME IN/OUT USING MCR

This option forces the employee to use the Mag Card Reader for clocking in and out.

ALLOW TIME CLOCK EDIT

Select this option to allow employee to edit the time keeping reports.

NEED MANAGER FOR TIME IN/OUT

When selected, manager password is required to be able to clock-in/out.

TIME IN BEFORE SALE

Select this option to require employees to clock in before they can register sales.

PAID BREAK

Allows for clocking out for breaks and still being paid. Also see Time Keeping Option: Allow Breaks.

CHECK TRACKING

PAYMENT OF OWN GUEST CHECK

Employees are allowed to apply payment & tender to their own checks.

PAYMENT OF ANY GUEST CHECK

This allows the employee to apply payment & tender their own checks and other employees checks.

TRANSFER OF GUEST CHECK

Allows employees to transfer checks from one employee to another employee.

CAN COMBINE/SPLIT GUEST CHECK

Selections are: Not Allow – Own - All

ALLOW EDIT ANY CHECK

This allows the employee to edit any checks for any employee.

Note: This also allows employees to view all employees transactions on the List Paid function key.

CAN CLOCK-OUT WITH OPEN CHECK

When using the time keeping feature, this option allows employees to clock out even if they have open checks.

GUEST CHECK ENTRIES ONLY

If selected, employee must begin a check before registering transaction.

ALLOW CANCEL AFTER RECALL

When selected, when an employee recalls a check and adds new items, the employee is allowed to press cancel to remove the currently added items – Pressing Cancel will remove the currently added item then store the check. This does NOT allow canceling of the entire check.

ALLOW DELETE CHECK (Added in v2.0.5)

When selected, this employee is allowed to delete checks without entering a manager password.

ALLOW TABLE MOVE (ADDED IN V2.0.194)

Uncheck this option to not allow this employee to move an order from one table to another table on the Table Map.

EDIT PGM/FUNCTION

ALLOW PLU EDIT

Allow All – Employee can make any changes to any PLU

Allow Only PLU Price – Employee can only change prices on PLUs

Do Not Allow – Employee will not be able to make changes to PLUs

ALLOW EMPLOYEE EDIT

ALLOW AUTHORITY LEVEL EDIT

ALLOW JOB/PAY EDIT

ALLOW STOCK EDIT

ALLOW MLU EDIT

ALLOW FLU EDIT

CAN ALL MEMO DELETE

ALLOW OPTION CATEGORY EDIT (Added in v2.0.10)

If selected this employee can edit the settings in the Option Category programming.

These settings are used to define specific program categories the employee is allowed to edit. For example: allow managers to edit these setting but not allow other employees access.

END OF DAY

ALLOW EOD EDIT (Added in v1.1.8)

If this option is checked, the employee is allowed to change the settings on the EOD screen.

ALLOW EOD MODE ACCESS (Added in v2.0.22)

When selected, this employee will have access to the EOD reporting without entering the manager password (Z-Mode reporting on the SAP-630/530 even if employee has the Z key).

EJ REPORT





ALLOW EJ DELETE (Added in v2.0.172)

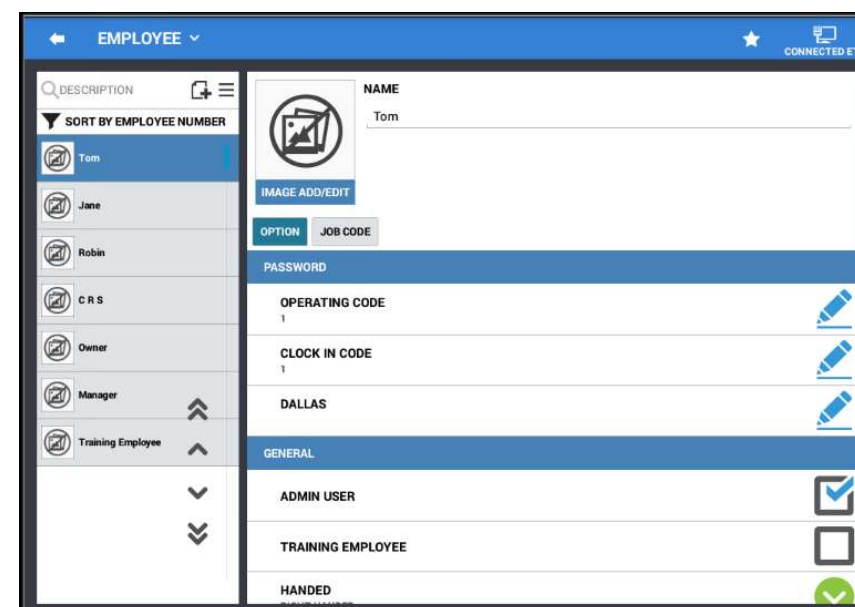
Check this option to allow the employee to use the delete button on the EJ Report.


Employee Programming

Employee programming allows you to program the employee name and add an image for each employee.

Create your Employee file and assign the appropriate Passwords, Authority Level, Station, Pay Rate & Job Code for each employee.

1. From the **PROGRAM MODE** touch **EMPLOYEE** to view the employee program selection window.
2. Touch **EMPLOYEE** on the selection window to view all employees and the employee programming options. Here you can add, edit or delete employees as necessary.
3. All existing employees are listed. You can edit an existing employee by scrolling through the employee list to the specific employee you wish to edit.
4. Press the add **NEW Record** icon  to add new employees to the database or you can select an existing employee to edit as necessary.
5. If you have a large employee file, you can sort the employee list alphabetically or by employee number. You can also **Search** for a specific employee by name   .



6. Pressing the **Menu** icon  on the employee programming screen accesses the Edit Mode and Sort operations.
 - Select **SORT** from the available selections. Choose to sort from A TO Z, Z TO A, or EMPLOYEE NUMBER.
 - The **EDIT MODE** selection on the allows you to select multiple employees in the database and Delete them all in one operation.
7. By pressing and holding the selected employee you can choose to:
 - **Delete** – to remove the selected employee from the database.
 - **Copy To New Item** – to copy the selected employee to a new employee.
 - **Copy to Existing Items** – to copy the setting and options from the selected employee to other employees already in the database.
 - **Favorite Copy To Other Employee** – to set the selected employee as the favorite. This will copy the settings and options of the selected employee to newly added employees.

Employee Option Definitions

IMAGE ADD/EDIT

If desired, an image can be loaded for each individual Employee; Press to choose the desired image/photo.

NAME

Type in a name for the Employee (*up to 30 characters*), you can use the **X** at the end of the name field to clear the current name for the selected employee. You can also add an Image for the employee is desired.

OPTION BUTTON

The Option Button within the Employee Options programming breaks down into two program sections; a Password section and General section as defined below.

PASSWORD

OPERATING CODE

Enter a number (up to 10 digits in length) that will be used by this employee to sign in and/or out.

CLOCK IN CODE

Enter the secret code number (up to 10 digits in length) that can be used to clock in/out.

DALLAS

Not used in the USA.

GENERAL

ADMIN USER

If selected, this employee will be allowed to perform manager functions without entering a manager password.

TRAINING EMPLOYEE

If selected, this employee will be in training, regardless of the training mode status of the entire register. When a Training employee is signed on, the Register Mode title bar will indicate Training Mode. We can also set the Training Option “Use Yellow Title In Training” to more easily see when a training employee is signed on.

KIOSK

Check this option if employee is to be KIOSK employee. When the KIOSK employee signs on, Sam4POS will show the KIOSK Register screen.

HANDED

Select *LEFT HANDED* or *RIGHT HANDED*; Controls display position in the sales mode.

LINKED DRAWER NUMBER

Enhanced drawer assignment allows employees to be assigned to a specific drawer as desired:

Drawer By Terminal - When selected, the drawer assignment will follow the ‘Linked Drawer Number’ setting as set in the Terminal & Network.

No Drawer - If ‘No Drawer’ is assigned, the employee can only perform check track postings (not payments).

Popup Drawer Assignment – When selected, this employees drawer assignment will need to be reset as per the option ‘Reset Drawer Assignment At’ setting. (*See next option below.*)

Sam4s Cash Drawer, Sam4s Cash Drawer II – Kicks drawer connected to Sam4pos Drawer port.

Printer Drawer – Kicks the drawer on a connected printer.

RESET DRAWER ASSIGNMENT AT (ADDED IN V2.0.15)

NONE – Drawer assignment does not change.

CLOCK OUT – Drawer assignment for this employee will need to be reassigned after the employee clocks out. When they clock in again the Linked Drawer Number selection dialog will display.

END OF DAY – Drawer assignments for this employee will need to be reassigned after running the EOD report.

ALL – Drawer assignments for this employee will need to be reassigned after every transaction.

EMPLOYEE AUTHORITY LEVEL

Operations and programs that can be accessed by this employee are determined by selecting an authority level; see Authority Level programming on page 55 for details.

EMPLOYEE AUTHORITY LEVEL OPTION CATEGORY

Choose the Option Category to limit access to the available program categories for the selected employee as set in the Option Category Programming.

STATION

Select the station the employee will be assigned to.

If set to STATION BY TERMINAL, assignment follows STATION setting in Terminal & Network.

If setting is for a specific station, it will follow the STATION assigned for EMPLOYEE.

Priority, STATION of EMPLOYEE is first, STATION of TERMINAL is next. (Also see ‘Network & Terminal’ - ‘My Terminal Info’ programming on page 115.)

BIRTHDAY	CITY	ADDRESS		
PROVINCE/STATE	TELEPHONE	SOCIAL SEC #	ZIP CODE	

Job Code & Pay Rate

The Sam4POS provides a basic time-keeping system for daily reporting and weekly payroll. To use the Time Clock feature in Sam4POS you must setup each employee in the Employee programming. You must also create Job Codes to be used when employees clock In\Out. Refer to the separate Time Keeping Supplement for complete details about this feature.

An employee might have more than one job, possibly with a different pay rate for each job. For example, in a restaurant, an employee might work as a server one day, and on a different day or shift, work as a cashier. Here you can create these different job codes and pay rates to be used for your employees. By assigning separate job codes and pay rates for each employee, the built-in time clock can track and report hours and wage costs appropriately.

The job codes & pay rates to be used by all employees are set up here. Each job code you create must be given a descriptor (up to 30 characters). Pay Rate values up to 999999.99 are allowed. You can create as many job codes & pay rates as are needed for your application needs. Job codes & pay rates can be sorted alphabetically/lowest to highest by pressing the column heading.

1. From the **PROGRAM MODE**, select **EMPLOYEE**, then select **JOB CODE & PAY RATE**.

NO	JOB CODE	NO	PAY RATE
<input type="checkbox"/>	1 WAIT STAFF	<input type="checkbox"/>	1 7.00
<input type="checkbox"/>	2 BARTENDER	<input type="checkbox"/>	2 7.25
<input type="checkbox"/>	3 MANAGER	<input type="checkbox"/>	3 7.50
<input type="checkbox"/>	4 CASHIER	<input type="checkbox"/>	4 7.75
<input type="checkbox"/>	5 DISHWASHER	<input type="checkbox"/>	5 8.00
<input type="checkbox"/>	6 CHEF	<input type="checkbox"/>	6 8.25
<input type="checkbox"/>	7 COOK	<input type="checkbox"/>	7 8.50
<input type="checkbox"/>	8 ADMIN	<input type="checkbox"/>	8 8.75
<input type="checkbox"/>	9 TRAINING	<input type="checkbox"/>	9 9.00
		<input type="checkbox"/>	10 10.00
		<input type="checkbox"/>	11 11.00
		<input type="checkbox"/>	12 12.00
		<input type="checkbox"/>	13 13.00
		<input type="checkbox"/>	14 14.00
		<input type="checkbox"/>	15 15.00

Add \ Edit Job Codes

Job codes are used to break down the hours worked for all employees into different categories (See "Labor Groups" report in the Operation Manual.) A breakdown of hours by job is also reported for each employee.

The job codes to be used by all employees are set up here. Each job code you create must be given a descriptor here. You can create as many JOB CODES as are needed for your application needs.

1. From the **PROGRAM MODE**, select **EMPLOYEE**, then select **JOB CODE & PAY RATE**.
2. Select **NEW**, **EDIT** or **DELETE** as needed to maintain the job codes.
3. Add a NEW Job Codes for:

MANAGER
CASHIER
TRAINING

<input type="checkbox"/>	NO	JOB CODE *
<input type="checkbox"/>	1	WAIT STAFF
<input type="checkbox"/>	2	BARTENDER
<input type="checkbox"/>	3	MANAGER
<input type="checkbox"/>	4	CASHIER
<input type="checkbox"/>	5	DISHWASHER
<input type="checkbox"/>	6	CHEF
<input type="checkbox"/>	7	COOK
<input type="checkbox"/>	8	ADMIN
<input type="checkbox"/>	9	TRAINING

Add \ Edit Pay Rates

Similar to the job code programming, all employees' Pay Rates are set here; you can create as many pay rates as are needed for your application.

1. From the **PROGRAM MODE**, select **EMPLOYEE**, then select **JOB CODE & PAY RATE**.
2. Select **NEW**, **EDIT** or **DELETE** as needed to create and maintain the pay rates.

NO	PAY RATE :
<input type="checkbox"/> 1	7.00
<input type="checkbox"/> 2	7.25
<input type="checkbox"/> 3	7.50
<input type="checkbox"/> 4	7.75
<input type="checkbox"/> 5	8.00
<input type="checkbox"/> 6	8.25
<input type="checkbox"/> 7	8.50
<input type="checkbox"/> 8	8.75
<input type="checkbox"/> 9	9.00
<input type="checkbox"/> 10	10.00
<input type="checkbox"/> 11	11.00
<input type="checkbox"/> 12	12.00
<input type="checkbox"/> 13	13.00
<input type="checkbox"/> 14	14.00
<input type="checkbox"/> 15	15.00

Employee Programming Chart Example

Employee	Admin User (General)	Training Employee (General)	Handed (General)	Linked Drawer Number (General)	Link to Authority Level (General)	Station	Job Code # (JOB Code page)	Pay Rate # (JOB Code page)
Tom	NO	NO	Right Handed	Sam4s Cash Drawer	Cashier	Default	Cashier	15.00
Bart	NO	NO	Left Handed	Sam4s Cash Drawer II	Employee	Default	Bar Tender	20.00
Mary	YES	NO	Right Handed	Sam4s Cash Drawer	Manager	Default	Manager	25.00
Training	NO	YES	Left Handed	Sam4s Cash Drawer II	Training	Default	Training	10.00

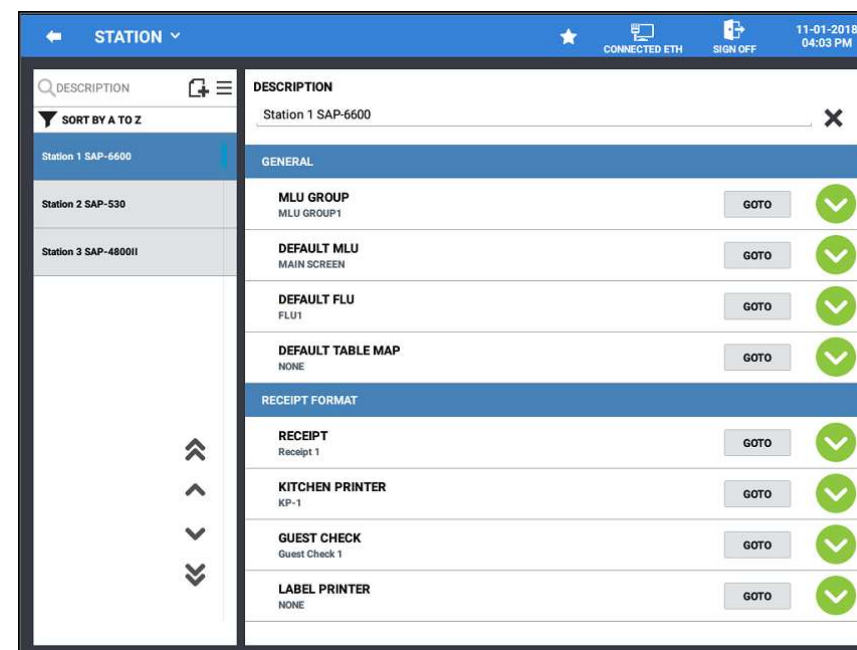
Station

Create stations to be assigned to employees. For example you may have a Bar Station and a Server Station. Stations can be assigned to default MLU/MLU GROUP, FLU and Printers. Stations can also have different Receipt, Guest Check, and Kitchen Printer assignments.

1. From the **PROGRAM MODE** touch **EMPLOYEE** to view the employee program selection window.
2. Touch **STATION** on the Employee selection window to view the station programming options. Here you can add, edit or delete stations as necessary.
3. Use the **Add New Station** icon at the top of the Station list to add new stations to the system.
4. If you have many MLU Chains programmed the **↕** double arrow keys allow you to go to the top & bottom of the MLU Chain list. The **↑ ↓** single arrow keys allow you to go up & down a single page at a time.
5. Add New Stations:
 - BAR AREA**
 - CARRY OUT**
 - DINING AREA**
6. Assign the default MLU Group\MLU\FLU & Table map for your stations.
7. Choose the proper receipt message in the Receipt Format for each station.

Note: The menu icon **☰** accesses the **EDIT MODE** and **SORT** functions for Stations list.

- **EDIT MODE** – Select stations from the list to delete as necessary.
- **SORT** – Sort stations alphabetically.



Station Option Definitions

DESCRIPTION

Type in a descriptor (*up to 30 character*) for the selected station, you can use the **X** at the end of the description field to clear the current descriptor.

GENERAL

The general section assigns the default MLU Group, Default MLU and FLU used for the selected station.

MLU GROUP

Select the MLU Group you want to be displayed in the register mode.

DEFAULT MLU

Choose the default MLU from the selected MLU Group to display in the register mode screen. All other MLU's will be available from the MLU selections in the right column of the screen.

DEFAULT FLU

Select the FLU you want displayed on the register mode screen. All other FLU's are available via the navigation buttons.

DEFAULT TABLE MAP

If the table map is utilized and more than one table map is configured, you can select which table map is displayed by default.

RECEIPT FORMAT

Receipt format is used to assign the receipt message to be used for the selected stations printers. When more than one message is configured, you can choose which receipt to use as the default for each device.

RECEIPT \ KITCHEN PRINTER \ GUEST CHECK \ LABEL PRINTER

The **GOTO** buttons are used to directly access the programming for the option selection.

Option Category

The Employee – Option Category allows employees with the proper authority setting to be able to Hide selected categories from view when employees are in the program mode screen. This allows managers to have another level of control over what employees can access. Option categories created here are then assigned to individual employees in the employee programming.

Different option categories can be set up for different employees or employee job types as desired.

DESCRIPTION

Type in a descriptor (*up to 30 characters*) for the option category, you can tap the **X** at the end of the description field to clear the current descriptor.

PGM MENU

Check the categories you wish to hide from view when in the employee programming.

HIDE PLU OPTION CATEGORY

HIDE EMPLOYEE OPTION CATEGORY

HIDE TAX OPTION CATEGORY

HIDE OPTIONS OPTION CATEGORY

HIDE FUNCTION KEY OPTION CATEGORY

HIDE RECEIPT & MESSAGE OPTION CATEGORY

HIDE PROMOTION OPTION CATEGORY

HIDE PRODUCT & INGREDIENT OPTION CATEGORY

HIDE SCREEN EDIT OPTION CATEGORY

HIDE DEVICE OPTION CATEGORY

HIDE NETWORK & REVENUE OPTION CATEGORY

HIDE TIME SCHEDULE OPTION CATEGORY

HIDE SYSTEM OPTION CATEGORY

HIDE ETC OPTION CATEGORY

Tax

The SAM4POS provides tax calculation for up to ten different tax rates to accommodate State, County, Municipal and Local taxes.

Tax Groups are used to assign taxes to specific PLUs. The Tax Groups are assigned to items through the PLU Status Group programming. A tax Group can have a single tax assigned or multiple taxes can be assigned to the Tax Group to accommodate city, county, state, and federal taxes that may apply.

Tax 10 also has provisions for the Canadian Goods and Services tax (GST). If GST is to be taxable, you have the option to tax the GST by other applicable tax rates (tax on tax).

1. From the main **PROGRAM MODE** menu select **TAX**.
2. Select the **TAX** category you wish to edit. Tax programming is broken down into two programming categories:
 - ⇒ **TAX** – The Sam4POS provides calculation for up to ten taxes. Tax rate calculations can be set as ADD ON (*straight percentage tax*), TAX TABLE (*utilizing break points*), or VAT (*Value-Added Tax*).
 - ⇒ **TAX GROUP** – Tax groups are used to assign tax rates applicable to taxable PLU's via the PLU Status Group programming. PLU's may have different tax rates or a combination of different taxes. Tax groups can be assigned a single tax rate or multiple tax rates depending on the application needs.

PROGRAMMING SEQUENCE:

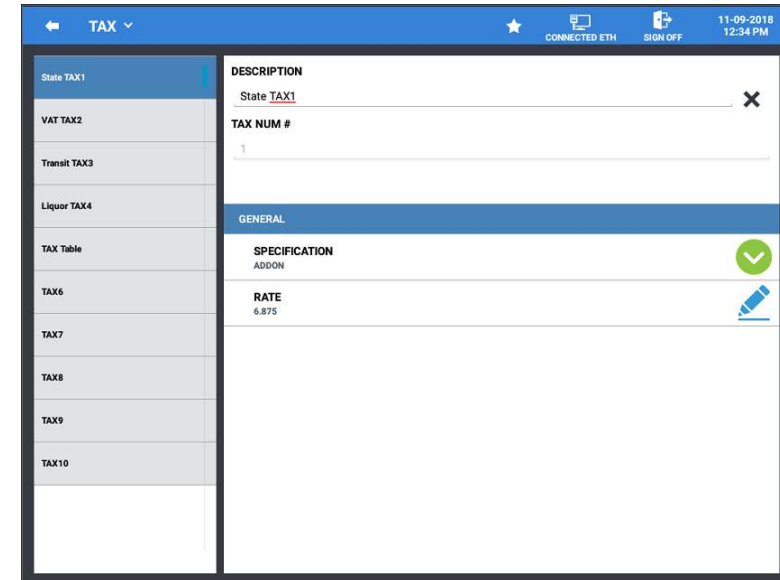
- ⇒ Tax (Rates)
- ⇒ Tax Groups
- ⇒ Assign Tax Group to PLU Status Groups

Tax Programming

There are three tax calculation options for each of the ten possible taxes. TAX 10 has the additional GST selection.

- **ADD ON** – Most sales taxes can be programmed by entering an *add-on* tax percentage rate. The appropriate tax is applied as per the total of taxable items within a sale.
- **VAT** – Value Added Tax. Essentially, this is a type of consumption tax that is applied to the purchase of certain goods & services. The tax is included in the cost of the item, you can use value added tax (*VAT*) to calculate the tax share of each sale.
- **TAX TABLE** – If a tax entered as an add-on tax percentage does not exactly follow the tax chart for your area, you can enter the tax using the *tax table* programming to match tax collection exactly to the break points of your state or county provided tax table. (Tax table programming allows up to 99 Non-Repeat break points and 99 Repeat Break points.)
- **GST** – Goods & Services Tax (available on TAX10 only). The goods and services tax (GST) is a type of value-added tax (VAT) levied on certain goods and services sold for domestic consumption. The GST is paid by consumers, but it is remitted to the government by the businesses selling the goods and services.

1. From the **Program Mode** menu, touch **TAX** to view the TAX program selection menu and select **TAX**.
2. The **TAX NUM #** field displays the current tax 1-10 that is selected.
3. Enter a **DESCRIPTION** for each of the 10 tax rates as needed. This will be the descriptors printed on receipts and reports.
4. Specify the tax type:
 - Tax1 = 6.875 Add On,
 - Tax2 = 6.875 VAT,
 - Tax3 = 6.875 Table.
5. Enter the Rate; accordingly, *Add-On* and *VAT* tax rates are entered to 3 decimal places.
6. When all necessary tax rates are entered; Set up your Tax Groups.



Tax Programming Option Definitions

GENERAL

SPECIFICATION

Press the dropdown to select the tax type; *VAT*, *ADDON*, or *TAX TABLE*.

RATE

Refer to the notes that follow for programming the rate for each tax type:

GST(TAX10) IS TAXABLE BY RATE

TAX #1 ~ TAX #9

Select each Tax Rate (#1 ~ #10) the GST is taxable by.

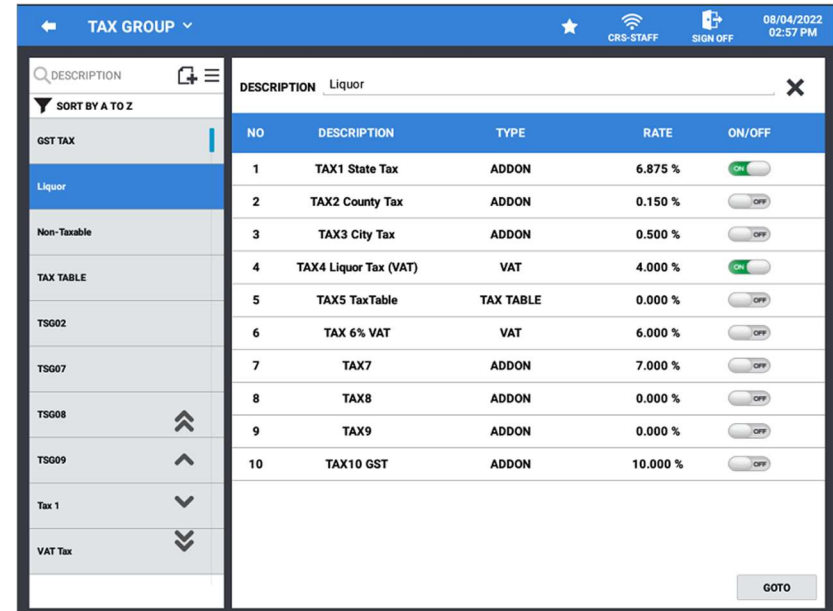
Tax Programming Chart Example

TAX NUMBER	SPECIFICATION	RATE
TAX1	ADDON	6.875
TAX2	VAT	6.875

Tax Group Programming

Tax Groups are used to assign tax rates to taxable PLUs. A tax group can be assigned a single tax rate, multiple tax rates or no tax rates (*for non-tax items*) depending on the application needs. As many tax groups as are necessary can be created using combinations of the 10 tax rates provided. Individual Tax Groups are assigned in the PLU Status Group programming and the PLU Status Groups are then assigned to individual PLUs to apply the appropriate tax for the item.

1. From the main **Program Mode** menu, touch **TAX** to view the TAX program categories then touch **TAX GROUP**.
2. Select a **Tax Group** to edit or create new Tax Groups as needed.
3. Turn **ON/OFF** the tax rates as needed for each Tax Group by pressing the On/Off button.
4. Pressing the **GOTO** button brings you to the TAX programming screen.



Tax Group Programming Chart Example

TAX GROUP	TYPE
Tax1 Add-On	TAX1 ON
Tax2 VAT	TAX2 ON

PLU

During PLU Programming, each PLU is assigned a descriptor, price or prices and a few unique options. The remaining PLU options are determined by linking the individual PLU's to a PLU Status Group. The PLU Status Group contains all the detailed option selections that might be assigned to a product. Separate PLU Status Groups are defined to accommodate the needs of groups of PLUs. Groups are designated to categorize and accumulate totals of PLU sales for PLU's assigned to each group. Groups are PLU categories such as BURGERS, CONDIMENTS, BEVERAGE. As many groups as are necessary for your application may be created. A PLU can be assigned to report its sales information to up to 3 groups.

1. From the **PROGRAM MODE** menu, touch **PLU**. The PLU programming consists of seven separate programming categories. These seven programming categories will determine how the PLU is registered in the sales mode.
 - ⇒ **PLU** – PLUs are the products or services that are available for sale. Each PLU is assigned a descriptor, Price, Cost, PLU code and a few unique options. The remaining PLU options are determined by linking the individual PLU to a PLU Status Group.
 - ⇒ **PLU Status Groups** – PLU options are determined by linking the individual PLU to a PLU Status Group. The PLU Status Group contains all the detailed programming selections that might be assigned to an individual PLU.
 - ⇒ **PLU Stock** – PLU Stock is a simple inventory system where each whole unit PLU activity subtracts a value of "1" from the stock counter.
 - ⇒ **MLU Chain** – MLU Chains (**M**enu **L**ook **U**p Chains) are used to group certain MLU menus together to make item registrations easier. Refer to page 86 for programming instructions.
 - ⇒ **Group programming** – Groups are designated to accumulate totals of PLU sales for PLU's assigned to each group.
 - ⇒ **Non-PLU** – NON-PLU program must be set if you wish to scan UPC's (using the EAN 13 code) with embedded prices, weights or quantities that are produced from a scale-printer. The Non-PLU settings here need to be configured to match the barcode format from the scale.
 - ⇒ **Quick PLU programming** – The Quick PLU menu provides another means to quickly access the programming for a specific PLU or add new PLUs to the database. Six quick access program areas are provided, PLU, PLU Status Group, Stock, Group, MLU Edit, and Function Key. Select one of these categories to go directly to the programming maintenance screen for that category. We can also enter the PLU code for a specific item to go to the programming for that specific PLU or add new PLUs to the database.
2. Touch the **PLU** program category you wish to edit:

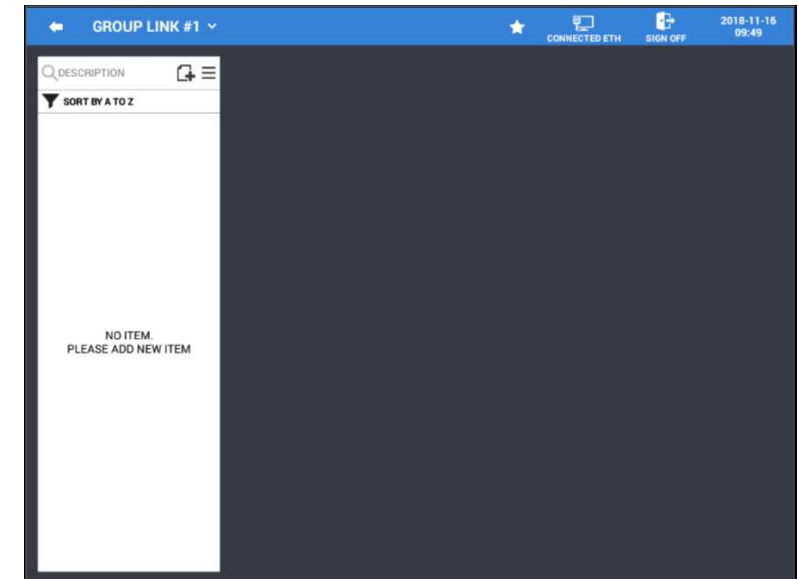
The programing sequence outlined here is intended to present the programming in a logical order.


- ⇒ Group Programming
- ⇒ PLU Status Group Programming
- ⇒ PLU programming

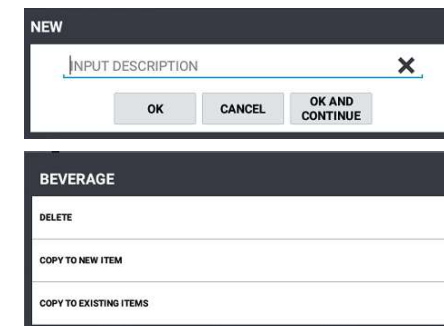
Group Programming

Groups are designated to accumulate totals of PLU sales for PLU's assigned to each group, as many groups as are necessary for your application may be created. A PLU can be assigned to report its sales information to up to 3 groups. This program allows you to set up the groups that PLUs will report to.

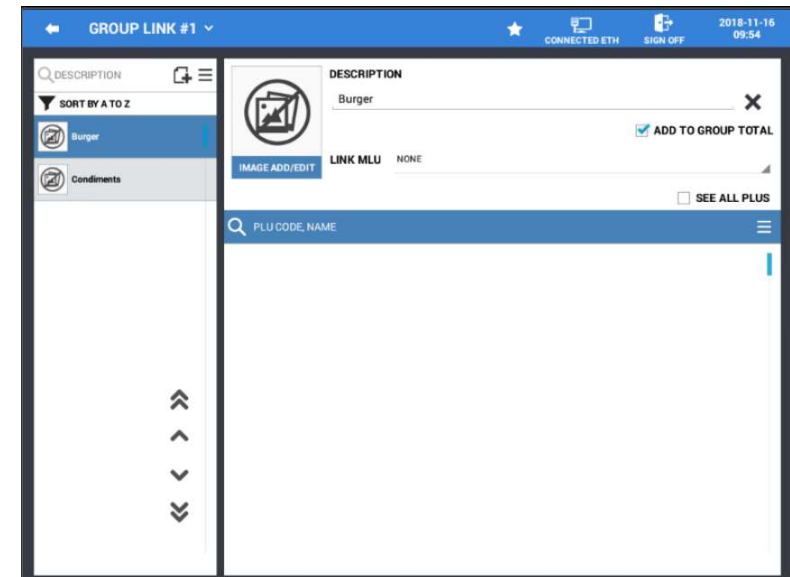
1. From the main **PROGRAM MODE** menu, touch **PLU** to view the PLU menu selection screen. Touch **GROUP** to access the **GROUP LINK #** programming screens.



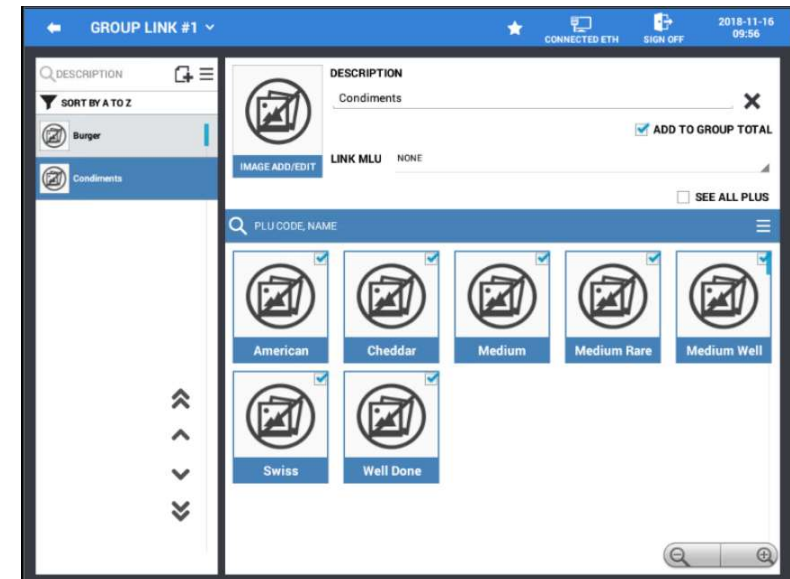
2. Add new Groups by pressing the  icon and type a descriptor for the group.
3. Alternately, you can copy an existing group by pressing and holding the desired group; you can delete individual groups in this manner as well.



4. Create the following groups:
 - BURGER
 - CONDIMENT
5. Check the option **Add to Group Total** to include the totals on the Group Report.



6. When PLUs are assigned to groups, we can select a group from the Group list. PLUs, that are assigned to the selected group will be checked in the PLU list. We can then Check or Uncheck PLU's to add or remove them from the selected group.
7. To view just the PLU's assigned to a selected group:
 - Select Group Link #1, #2, or #3
 - Select a group from the group list (Left Grid)
 - Uncheck the 'SEE ALL PLUS' check box
 - Only the PLUs that are assigned to the selected group are displayed. (Right Grid)
8. Use the PLU search to locate specific PLU's by Name or PLU Code.
9. Use the ☰ menu icon on the PLU search bar to sort the PLU's for the selected group alphabetically or by PLU Code.



Group Link # Definitions

PLUs can be assigned to up to 3 different groups for reporting purposes.

Select the Group Link # at the top title/bar to see the items associated for each of the group links, Group Link #1, #2, and #3.

IMAGE ADD/EDIT

Choose an image from your image library to appear to associate with the selected group.

DESCRIPTION

This is the name (up to 30 characters) for the group that will appear in programming and on reports. You can press the X at the end of the descriptor field to clear the descriptor.

ADD TO GROUP TOTAL

Select this option if you want the selected group to update the totals on the Group Report.


LINK MLU

Optionally you can choose a Link MLU. When selected, any PLU assigned to this group will be automatically added to the chosen MLU.


SEE ALL PLUS



When the option “see all PLUs” is selected, all PLUs programmed in the database appear on the display. When this option is unchecked, only the PLUs assigned to the selected group will display.

SEARCH ICON

 Allows you to search for specific PLUs by PLU Code or Name.

MENU ICON

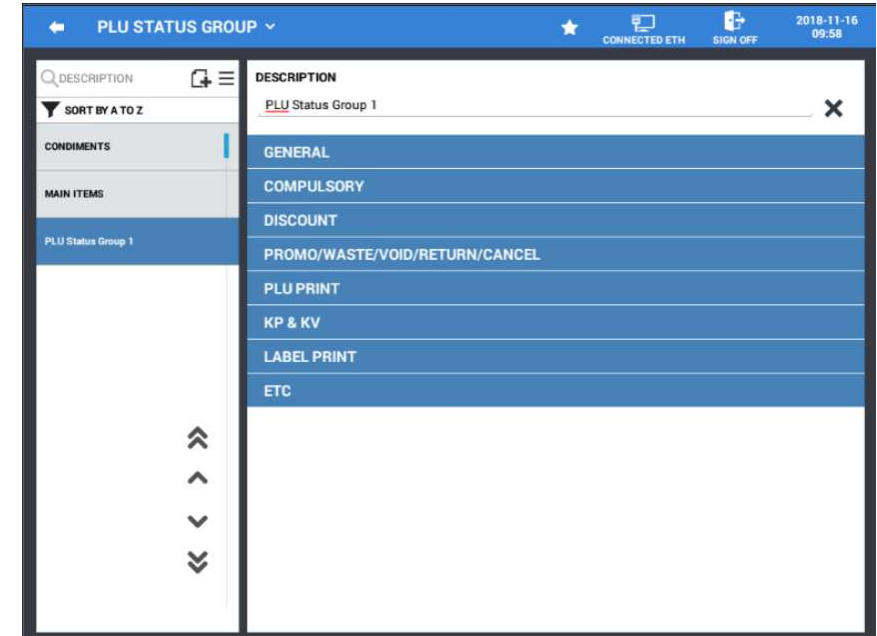
 Displayed PLUs within Groups can be sorted either alphabetically or by PLU Code.

You can use the zoom buttons   to increase or decrease the size of the icon images to display fewer or more PLUs as desired.

PLU Status Group Programming

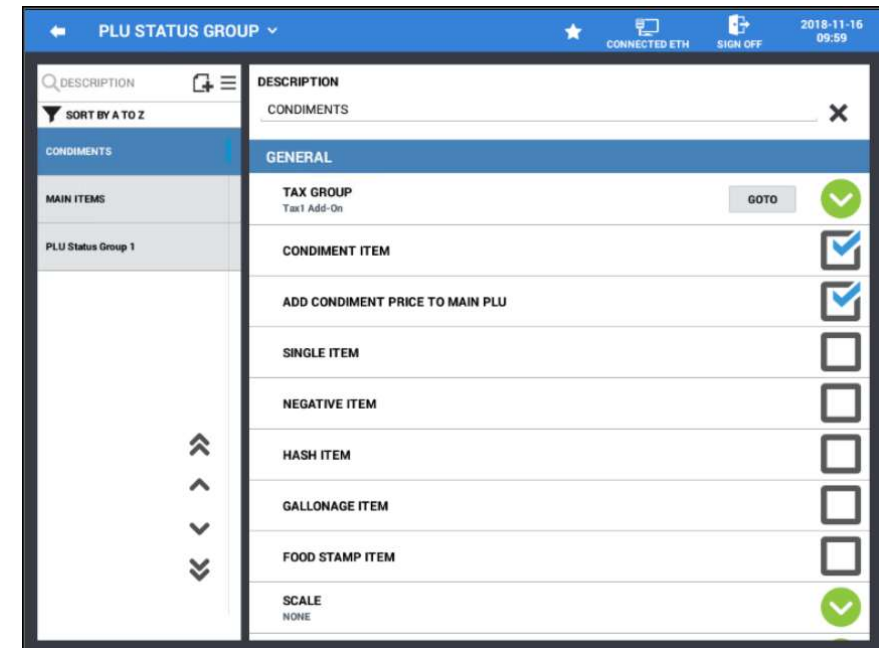
In most applications, large groups of PLU's are set with many identical options, while the PLU number, descriptor and price are unique. On the PLU Programming, each PLU is assigned a descriptor, price or prices and a few unique options. The remaining PLU options are determined by linking the individual PLU to a PLU Status Group. The PLU Status Group contains all the detailed programming selections that might be assigned to an individual PLU. Separate PLU Status Groups can be set up to accommodate the needs of different groups of PLU's.

1. From the **PROGRAM MODE** touch **PLU** to view the PLU program selection window, touch **PLU STATUS GROUP** to view the PLU status group options.
 - The list of PLU Status Groups is displayed in the Left Grid
 - The options settings for PLU Status Groups displays in the Right Grid.
2. The option settings for PLU Status Groups is broken out into separate sub sections:
 - General
 - Compulsory
 - Discount
 - Promo\Waste\Void\Return\Cancel
 - PLU Print
 - KP & KV
 - Label Print
 - ETC



3. Create PLU Status Groups:

- Main Item
- Condiments



PLU Status Group Definitions

DESCRIPTION

Type a description for the status group pressing the X will delete the current description and allow you to type a new description.

GENERAL

TAX GROUP

Check for each tax rate to determine if the appropriate tax(es) is automatically calculated when the item is sold.

CONDIMENT ITEM

Condiments PLUs differ from non-condiment PLUs in the manner they display and print during operations. Non-condiment PLUs are used for “main” items. Condiment items are indented and displayed/printed below a main item so that condiments or cooking instructions are easily understood for each “main” item.

ADD CONDIMENT PRICE TO MAIN PLU

When this option is selected, the price of the condiment is not displayed; instead, it is added to the main item price.

SINGLE ITEM

The transaction is finalized automatically when a single item PLU is registers as the first item in a sale.

NEGATIVE ITEM

Negative PLUs subtract from a sale, rather than add to a sale.

HASH ITEM

HASH PLUs do not affect certain totals in reports. See General Function Option #7 to determine specifically which totals are impacted by HASH PLUs.

GALLONAGE ITEM

Gallonage PLUs must be set as open PLUs. The PRICE/HALO will be set for the price per gallon.

In v2.0.109 and later the price is set at three decimal places; however, the PLU programming screen will always display in a two-digit decimal format. For example: A gallonage PLU price of \$3.99 per 9/10 gallon would be entered as "399" instead of 3999. (Originally the price was entered in tenths of a penny i.e. for \$3.99 per 9/10 gallon price was entered as 3999.) Gallonage PLUs will report the gallons sold in the activity counter on the PLU report by dividing the PLU total by the price per gallon.

FOOD STAMP ITEM

A separate itemizer keeps a running total of food stamp eligible items in each transaction. Then if the sale is paid by food stamps, the food stamp eligible subtotal can be recalled.

SCALE

Select NONE if no scale needed to register this item, AUTO SCALE if you wish to multiply items reporting to this group by a weight from a scale connected to the register, or OPEN SCALE which requires pressing the SCALE key to enter scale weights.

AUTO TARE

If selected, the tare # indicated here will automatically subtract from the weight from the scale. See "Function Key Programming" for the SCALE key to preset tare weights.

STOCK ITEM

Select if you wish to track PLU stock, where each whole unit PLU activity subtracts a value of "1" from the stock counter. (Note that if multiplication or decimal multiplication is used when the PLU is registered, the resulting quantity of activity will subtract from the stock counter. Stock is maintained in increments to the second decimal position, i.e. "X.XX").

PLU GIFT CARD ITEM

Set this option if the item is used to sell gift cards, selections are: None (not a gift card item), Activate (activating a new gift card), and Add (add value to previously activated gift card).

Note: Some processors may use the ADD selection for both Activating and Adding Value to gift cards.

NEED AGE VERIFICATION

If the sale of this item is restricted to persons of a certain minimum age, enter the required age for the restriction (i.e. 18 or 21). The operator will be forced to enter a date of birth that indicates an age higher than the age as specified in the NEED AGE VERIFICATION setting.

JUUL PRODUCT

This option is specific for JUUL products. Customers must be at least 21 years of age to purchase. Each JUUL product will be assigned to a specific PLU Status Group for the product type. JUUL product type selections are: JUUL STARTER KIT, JUUL DEVICE KIT, JUUL 4-PACK REFILL KIT, JUUL 2-PACK REFILL KIT. The selection NONE, is used for all Non-JUUL products.

To be able to sell/scan JUUL products, the scanner must have the Driver's License Parsing file.

NOT ADD TO ITEM COUNT ON RECEIPT (ADDED IN V2.0.135)

When selected, PLU's in this status group will not add to the item count shown on the register display or printed on receipts.

COMPULSORY

COMPULSORY ALPHATEXT

If selected, an alpha text message must follow the registration of this PLU.

COMPULSORY CONDIMENT ENTRY?

If selected, then a condiment entry must follow the registration of this PLU.

DISCOUNT

ALLOW SURCHARGE?

If selected, an item surcharge after registration of a PLU reporting to this group is allowed.

ALLOW DISCOUNT?

If selected, an item discount after registration of a PLU reporting to this group is allowed.

PROMO/WASTE/VOID/RETURN/CANCEL

ALLOW PROMO

Select if you wish to allow the PROMO; PROMO activity will remove the item cost from the sale, but the count will include the promo item.

ALLOW WASTE

If selected, the WASTE function is allowed on PLUs reporting to this group.

ALLOW VOID & RETURN

Select this option if Voids & Returns are to be allowed for this item.

ALLOW CANCEL

If checked, cancel operations are allowed when item assigned this PLU Status Group are registered.

If unchecked, the error message 'Canceling of this item is not allowed' displays.

PLU PRINT

PRINT RECEIPT

Must be checked for PLUs in this group to print on the receipt.

PRINT JOURNAL

Check this option if you want PLUs in this group to print to the journal.

PRINT ON GUEST CHECK

Must be set to Yes for PLUs in this group to print on the guest check.

PRINT PRICE ON GUEST CHECKS?

If selected, the price will print with the descriptor on guest checks.

PRINT PRICE ON RECEIPT/DETAIL?

If selected, the price will print with the descriptor on the receipt and detail.

KP & KV

KITCHEN PRINTER

Select if PLUs in this group are to be sent to a kitchen printer.

KITCHEN PRINTER GROUP

Select the kitchen printer group or groups to which PLUs in this group are to be sent.

KITCHEN VIDEO

Select Yes if PLUs in this group are to be sent to a kitchen video.

KITCHEN VIDEO GROUP #

Select the kitchen video group # to which PLUs in this group are to be sent. Condiment PLUs with a "0" status here will "follow" the last main item.

COLOR TO DISPLAY ON KV (0-31)

The color code set here will control the color or screen format displayed on an optional kitchen video system requisition screen. Color codes vary by KVS system. Refer to the documentation for your video system for specific information.

INVERSE \ RED PRINT ON KITCHEN PRINTERS?

Set to Yes if you wish PLUs in this group to print in red on the kitchen printer, i.e. condiments might be printed red. Red/black printer must be used.

AUTOMATIC HOLD ITEM

This flag allows PLUs to be placed on HOLD to the KP/KVS automatically.

PRINT PLU PRICE ON KP

When selected, the item price for KP items using this status group will be printed with the item on the kitchen printer.

LABEL PRINT**LABEL PRINT**

When checked, a label is printed when you store a check or tender a sale. Beginning in v1.062 Condiment items print along with main item. For Example:

COFFEE
Cream
Flavor Shot – Hazelnut

ETC**LINKED PLU**

If you wish the registration of the PLU assigned to this PLU status group to automatically cause the registration of another PLU, enter the number of the PLU you wish to register automatically here.

DISPLAY ON REGISTER SCREEN?

Set to No if you wish the registration of PLUs in this group not to display on the register operator screen.

ELIGIBLE FOR CANADIAN DONUT LAW

(Added in v2.0.156) Special Provincial or State sales tax laws might change the taxable status of an item depending upon the quantity sold. Donuts for example, might be taxable when sold individually at a bakery, but may not be taxable when sold by the dozen.

EXPIRATION DATE

Enter the Month – Day - Year for the selected PLU Status Group to Expire. Press Cancel to remove expiration date.

PLU Status Group Programming Chart Example


For this training exercise, create the PLU Status Groups as shown below.


Status Group	Descriptor	Tax Group	Condiment?	Add Condiment Price to Main PLU	Gallonage	Stock PLU?	Age Verification	Kitchen Printer	KP Group #	Print RED on KP?
1	MAIN ITEM	Tax1 Add-On	NO	NO	NO	NO		YES	KP-GRILL	NO
2	CONDIMENTS	Tax1 Add-On	YES	YES	NO	NO		YES	NONE	YES

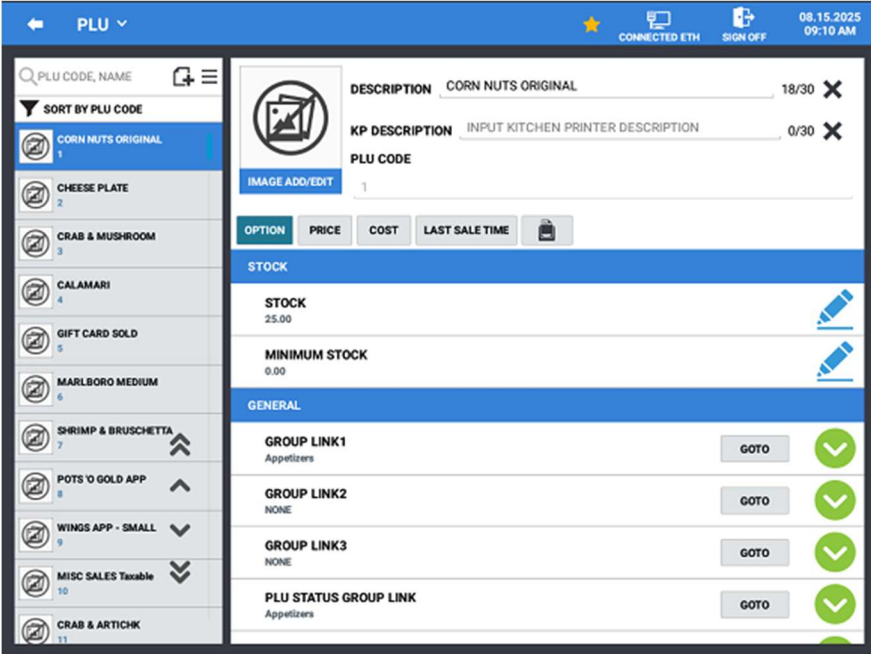
PLU Programming

This is where new items or services are added to the database and existing items can be maintained or deleted. Each PLU is assigned a descriptor, Price, Cost, PLU code and a few unique options. Each new PLU can be assigned a unique code number up to a maximum of 18-digits in length.

Note: When creating or editing PLUs each PLU is assigned to a Group Link1, Group Link2, Group Link3 and to a specific PLU Status Group. The Groups and PLU Status Groups must be created before they can be assigned to the PLU.

Item Labels can be printed from the PLU screen as well by pressing the  Label Print icon. A label printer must be connected to the station and specific setup is required to use this feature.

1. From the **PROGRAM MODE** touch **PLU** to view the PLU program selection window, touch **PLU** to view the PLU programming options.
2. All existing PLU's are listed in the grid on the left. PLU option settings are displayed in the grid on the right.
3. Select a PLU from the list to edit the options, price or cost for the item or Press the **Add Record** icon  to add new items to the database
4. There are five tabs to select from:
 - **OPTION**, **PRICE**, **COST**, **LAST SALE ITEM**, and **PRINT LABEL**
5. PLU **OPTION** settings are separated into sub sections:
 - **Stock**
 - **General**
6. The **PRICE** tab is used to enter the PLU Price\HALO
7. The **PLU COST** tab allows you to enter the merchant cost for the item.
8. The **LAST SALE TIME** allows us to view the date and time a particular PLU was sold
9. The **PRINT LABEL** tab allows us to print a label for the selected item.



The screenshot displays the PLU programming interface. On the left, a list of PLUs is shown, including 'CORN NUTS ORIGINAL', 'CHEESE PLATE', 'CRAB & MUSHROOM', 'CALAMARI', 'GIFT CARD SOLD', 'MARLBORO MEDIUM', 'SHRIMP & BRUSCHETTA', 'POTS 'O GOLD APP', 'WINGS APP - SMALL', 'MISC SALES Taxable', and 'CRAB & ARTICHK'. The right side shows the detailed view for 'CORN NUTS ORIGINAL'. The 'DESCRIPTION' field is 'CORN NUTS ORIGINAL' and the 'KP DESCRIPTION' field is 'INPUT KITCHEN PRINTER DESCRIPTION'. The 'PLU CODE' field is empty. Below these are tabs for 'OPTION', 'PRICE', 'COST', and 'LAST SALE TIME'. The 'OPTION' tab is active, showing 'STOCK' (25.00) and 'MINIMUM STOCK' (0.00). The 'GENERAL' section includes 'GROUP LINK1' (Appetizers), 'GROUP LINK2' (NONE), 'GROUP LINK3' (NONE), and 'PLU STATUS GROUP LINK' (Appetizers). Each group link has a 'GOTO' button and a green checkmark.

PLU Option Definitions

DESCRIPTION

This is the name of the saleable item, which will appear on receipts and reports. Descriptions can be up to 30 characters, the total characters used/allowed is shown at the end of the line. Pressing the X at the end of the description line will clear the current description.

KP DESCRIPTION

If desired, enter an alternate KP Description to be used at the KP/KVS. If no alternate KP Descriptor is entered, the PLU Descriptor will be used.

PLU CODE

PLU code can be up to 18 numeric digits. PLUs may be entered by code or by scan input.

IMAGE ADD/EDIT

You can display a thumbnail image of the PLU item. See “Loading Images For Item” in the Appendix for details.

OPTION

STOCK

STOCK

The current stock level is displayed. Press the pencil icon to Add to, Subtract from, or Override the current stock quantity for the item.

MINIMUM STOCK

You can enter minimum inventory levels for PLUs with stock item status. (The PLU must be linked to a PLU Status Group with the option Stock item checked.)

GENERAL

GROUP LINK 1, 2, 3

This field is used to provide the first type of sales analysis by category i.e. Beer, Lagers and so on.

The GOTO button allows you to go to the programming options for that group.

PLU STATUS GROUP LINK

Assign the appropriate PLU status group link for common system flags for this item.

The GOTO button allows you to go to the programming options for that PLU status group.

PRICE OPTION

Set the PLU as: Preset (No Override), Preset (Allow Override) or as an Open price entry PLU.

MLU CHAIN

This is where you assign MLU Chains “condiment chains” that will follow the PLU. You can also assign an individual MLU to an item by pressing the LOAD MLU button when the MLU Chain list is displayed.

MODIFIER QTY

This works in conjunction with the Stock Link PLU flag when the General Option setting 'Use Stock Link Program' is set for 'Stock Link PLU'. For example: when items such as cases of soda are broken down into 12-pack, 6-pack or singles, this determines how many units are to be reduced from the main stock item. The field consists of two decimal places, for example: 50 would result in 0.50 being reduced from the stock of the item program within the Link PLU# field; 100 will reduce the QTY by one.

RECIPE LINK

This links to the ingredient inventory, so that when the product is sold, the quantities of each ingredient used are subtracted from stock for the allocated recipe and the appropriate sub recipes.

STOCK LINK PLU \ KP DESCRIPTOR PLU \ LINK PLU

This operation depends on the General Option setting 'Use Stock Link PLU On PLU Program'.

STOCK LINK PLU – When the General Option 'Use Stock Link Program On PLU' is set for Stock Link PLU. Set the number for the PLU where stock is affected (by activity of this PLU) here. (Used with Modifier QTY above.)

This capability is used where multiple PLUs affect a single inventory item. For example: cup counts for beverage items or where items are counted without regard to brand, such as cigarette packs.

KP DESCRIPTOR PLU - When the General Option 'Use Stock Link Program On PLU' is set for KP Descriptor PLU instead of its own descriptor. This allows for a secondary PLU descriptor to print on the KP. (For example, this can be used to print Spanish in the kitchen.)

LINK PLU - When the General Option 'Use Stock Link Program On PLU' is set for LINK PLU Set the number for the PLU you want to register with the current PLU. (For Example: Link a CRV PLU Link for bottles or cans.)

ALLOW PRICE CHANGE

If selected, the PLU price can be changed from the REGISTER mode using the [PLU INFO] or the [PRICE CHECK] keys.

PRICE

PRICE LEVEL (1 – X)

Entered here are the assigned price level(s) for each product. Price/HALO can be up to 8-digits.

Note: Additional Price Level function keys must be created in 'Function Key' programming before they can be assigned to PLUs.

GOTO, NEW, EDIT, DELETE

GOTO – Press to go to the Price Level programming

NEW – Press to add a new Price Level to the PLU (price level key must first be created in function key programming before you can assign here)

EDIT – Press to edit the selected Price and Price Level assignment.

DELETE – Press to delete the selected price.

COST


The PLU COST tab allows you to enter the merchant cost of the item.

1. From the PLU programming screen, select the PLU you want to add the cost to, press the **COST** tab.
2. Select the **'NEW'** button at the bottom right of the display. The cost entry dialog displays.
3. Enter the merchant cost of the item and press **OK**. The cost is entered for the item.
4. If the cost was entered incorrectly, you can edit the cost amount. Select the PLU you wish to edit the cost for and press the **EDIT** button at the lower right of the screen.
5. Enter the correct cost for the PLU and press **OK**. You are returned to the main PLU screen.
6. You can also delete the cost entry for the selected item. Select the PLU you wish to remove the cost for and press the **DELETE** button at the lower right of the screen. The cost entry will be removed.

LAST SALE TIME

Beginning in v1.1.46 and later, we can view the date and time a particular PLU was sold. This can be helpful when determining if an item should be removed or deleted. If the selected item has no sales history, it will indicate 'NONE'.

PRINT LABEL

Labels can be printed from the PLU screen by pressing the  Print Label icon; Specific setup is required for this feature. On the PLU programming screen, select the item you wish to print a label for then press the Label Print icon.

1. The Print Label dialog displays:
 - a. Select the **QTY**, number of labels for each selected item you want to print.
 - b. Select the **LABEL FORMAT** as defined in the Label Print setup.
(As defined in Pprogram Mode > Receipt & Message > Lable Print.)
 - c. Select the **PRICE LEVEL**, this will be the price that prints on the label.
2. Press **OK** on the Print Label dialog to print the labels and close the dialog.

PLU Programming Chart Example

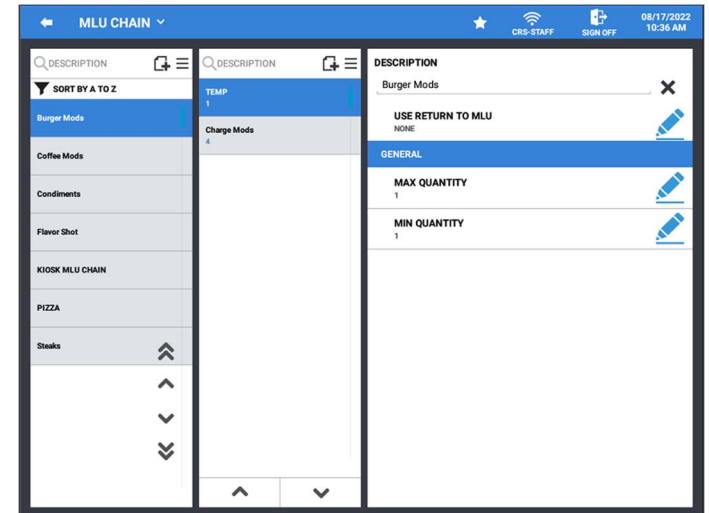
PLU #	Descriptor	Group Link#1	Group Link#2	Group Link#3	PLU Status Group Link	Price Option	MLU Chain	Allow Price Change	Price
100	Hamburger	Burger			Main Item	Preset (No Override)	Burger Mods		5.95
200	Cheeseburger	Burger			Main Item	Preset (No Override)	Burger Mods		5.95
1000	Swiss	Condiment			Condiments	Preset (No Override)			
1001	American	Condiment			Condiments	Preset (No Override)			
1002	Cheddar	Condiment			Condiments	Preset (No Override)			
2000	Medium Rare	Condiment			Condiments	Preset (No Override)			
2001	Medium	Condiment			Condiments	Preset (No Override)			
2002	Medium Well	Condiment			Condiments	Preset (No Override)			
2003	Well Done	Condiment			Condiments	Preset (No Override)			

MLU CHAIN

The MLU Chains (*Menu Look Up* Chains) are used to group certain MLU menus together when certain items require additional selections to complete. MLU Chains can then be assigned to PLUs to make item registration easier. When a PLU with a MLU Chain assigned to it is registered, the operator is required to make selections from the MLU's before tendering is allowed. For example, a Hamburger may link to an MLU Chain for temperature and cheese selection.

Create MLU Chains

1. From the **PROGRAM MODE** menu, touch **PLU** to view the PLU program selection window, then touch **MLU CHAIN** to view, add or edit current MLU Chains.
2. Use the **Add New MLU Chain** icon at the top of the MLU Chain list & MLU list to add MLU Chains or to add MLU's to the selected MLU Chain.
3. MLU Chain programming is separated into 3 columns:
 - **Left Column** – Lists the current MLU Chains
If you have many MLU Chains programmed the **⤴ ⤵** double arrow keys allow you to go to the top & bottom of the MLU Chain list. The **⤴ ⤵** single arrow keys allow you to go up & down a single page at a time.
 - **Middle Column** – Shows the MLU's assigned to the selected MLU Chain
The **⤴ ⤵** arrow buttons can be used to move the currently selected MLU up and down the list. The MLU's will appear in the order they are presented here when in the register mode.
 - **Right Column** – Sets the parameters for each MLU Chain
DESCRIPTION – Type a descriptor (*up to 30-characters*) for the selected MLU Chain.
USE RETURN TO MLU – This setting allows you to enter an MLU to return to when the max quantity for all the MLU's in the chain are satisfied. When this is set, all the MLU's in the chain will automatically be set to the same selection. If any of the MLU's in the chain have a Max QTY = 0; you will be returned to that MLU instead of the designated USE RETURN TO MLU.
MAX QUANTITY / MIN QUANTITY – Set the maximum & minimum number or selections for each of the MLU's in the chain.
- * **Note:** If multiplication is used, the multiplier number counts towards the MAX & MIN Quantity.
4. Create a **Burgers** MLU Chain.
5. Assign the **TEMPERATURE** and **SELECT CHEESE** MLU's to the chain. Set the Max/Min Quantity to 1.
6. Assign the MLU Chain to PLU's: **Hamburger** and **Cheeseburger**.
 - * **Note:** The menu icon **☰** accesses the **EDIT MODE** and **SORT** functions for MLU Chains and **EDIT MODE** functions for MLU's assigned to MLU Chains.



Assign MLU Chain to PLU

1. From the **PROGRAM MODE** touch **PLU** to view the PLU program selection window, touch **PLU** to view the PLU programming options.
2. Select the **PLU** you want to assign a **MLU Chain** to.
3. In the **PLU General Options** scroll down to the option **MLU CHAIN**. Press the drop down selection to choose the **MLU Chain** you want to assign to this item.
4. Repeat as necessary.

Options

Options programming is used to define the most fundamental parameters of the register system. The selections available in the Options category menu include: Options, Rounding and Tare Weight programming.

1. From the main **PROGRAM MODE** menu select **OPTIONS**, the **OPTIONS** category menu selections displays.
2. Three selections are available in the **OPTIONS** category.
 - **Options**
 - **Rounding**
 - **Tare Weight**
3. Choose the category from the selection menu you wish to edit.

OPTIONS CATEGORIES

Options are organized into individual Sub-Categories to make it easier for the programmer to locate and set specific options.

1. Select **OPTIONS** from the **PROGRAM MODE** category selections, then select **OPTIONS** from the menu selections. The list of option categories is displayed.

General	TAX	Drawer	Training
Level	Guest Check	KP/KV	Print
Report	Time Keeping	HASH	System

2. Go through each of the Options Categories to familiarize yourself with the selections.

Receipt Message


The information that prints at the top (Header) and at the bottom (Footer) of receipts can be customized to the customer's preference. Custom messages can be created for certain operations or for special instructions. Error Messages and Report Messages can be edited here as well as the Label Print formats.

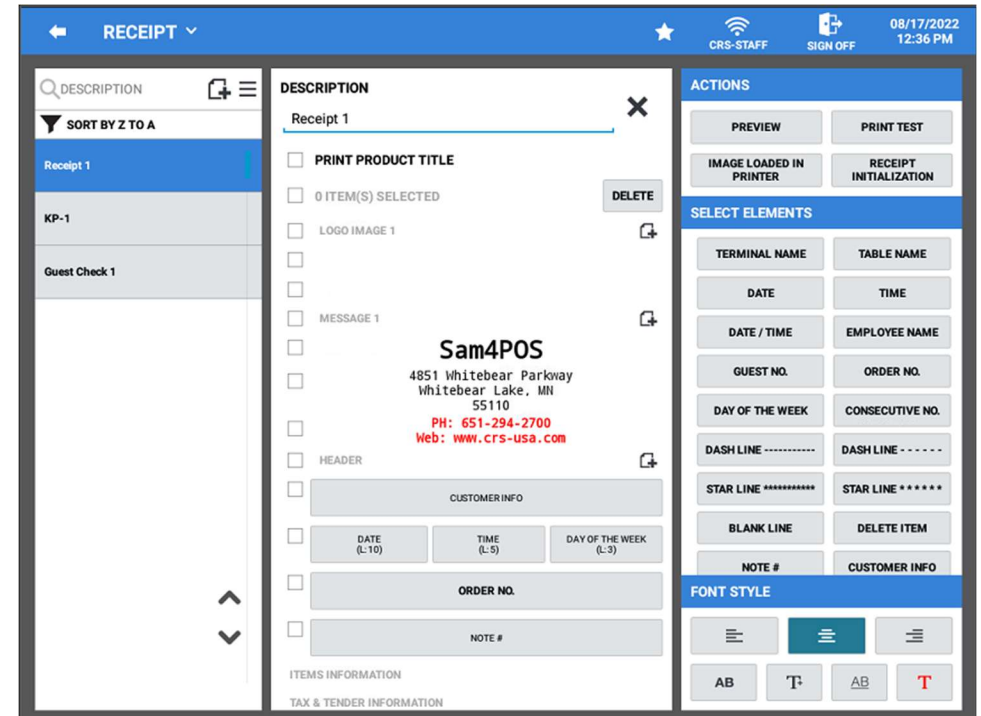
1. Select **RECEIPT & MESSAGE** from the main **PROGRAM MODE** menu
2. Touch the **Receipt program category** you wish to edit. The Receipt & Message category menu has the following program areas:
 - ⇒ **Receipt** – Programming for the header and footer information that appears on each of your receipts. kitchen and guest check printers that you may have. Custom receipts can then be assigned for use in the Employee – Station – Receipt Format programming.
 - ⇒ **Message** – Programming area for creating custom messages to be used for certain operations or for special instructions with the Alpha Text key.
 - ⇒ **Error Message** – Error messages can be individually selected and edited; edited messages or all messages can be selected to revert (*reset*) back to the original message.
 - ⇒ **Report Message** – Report messages can be individually selected and edited or set to 'Do Not Use' on reports. You can select individual or all edited messages to revert (*reset*) back to the original message.
 - ⇒ **Label Print** – The Label Print programming is used to set up the different label types that may be used, such as product labels and shelf labels.
 - ⇒ **Gratuity** – Gratuity programming area allows you to create suggested gratuity to print on receipts. When created, you will need to add the Gratuity Line to the desired Receipt.
 - ⇒ **Receipt Message** – Receipt Message programming allows you to edit certain receipt element descriptors.
 - ⇒ **Key Type Message** – The default Key Type descriptors can be individually selected and edited; this allows further customization of key types. You can select individual or all edited messages to revert (*reset*) back to the default message.
 - ⇒ **Text Inserter Message** – This allows for a concise open drawer message to appear on the display when a text inserter is defined and mapped.

Receipt

Receipt Logo Message Program

Program the header and footer information that appears on each of your receipts, kitchen and guest check printers that you may have. These receipt messages can then be assigned for use in the Employee – Station - Receipt Format programming.

1. Select **RECEIPT** from the **PROGRAM MODE, RECEIPT & MESSAGE** menu selections. The receipt programming screen displays.
2. Add a new receipt message by pressing the  icon and type in a descriptor for the receipt message.
3. You can also create a new receipt message by pressing and holding an existing message in the list. Messages can be deleted or inactivated in this manner as well.



4. Use the **Menu** ☰ icon to **Sort** the list alphabetically or choose **Edit Mode** to select & delete receipts.
5. After you have created your receipt messages, you can edit the **DESCRIPTION** if desired. Then you can design the message by selecting the elements you want to appear on the receipt. Refer to the Receipt Description Definitions on page 91 for details of this section.
6. Add elements such as Date, Time, Dash Lines, etc. from the **SELECT ELEMENTS** section. Simply press and drag the desired element to the Header and Footer sections as desired.

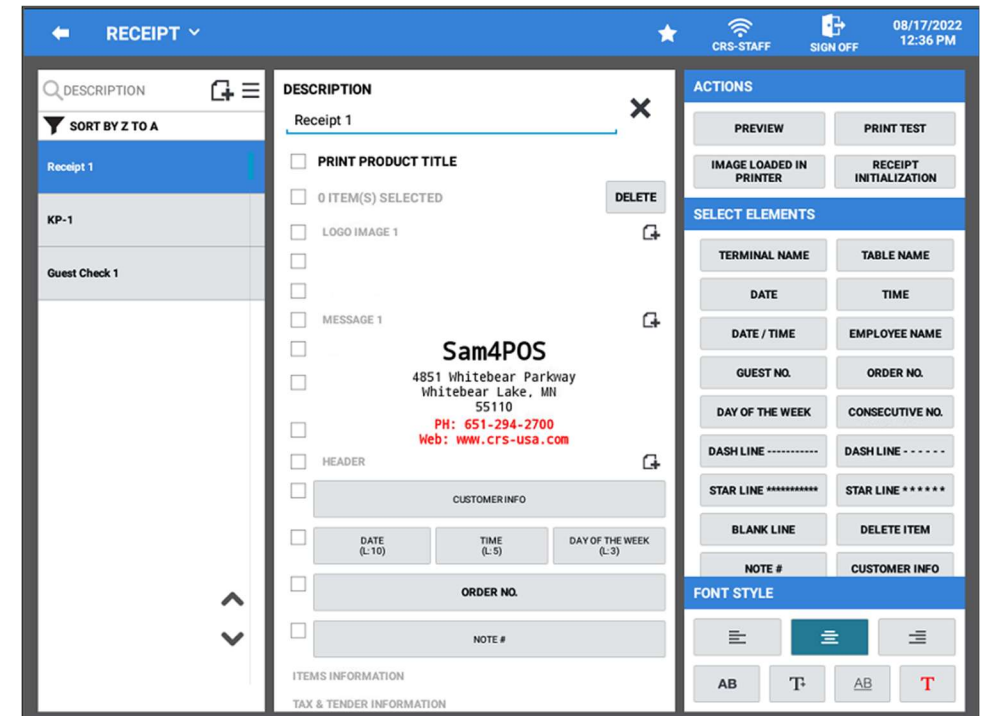
SELECT ELEMENTS	
Terminal Name	Table Name
Date	Time
Date / Time	Employee Name
Guest No.	Order No.
Day Of The Week	Consecutive No.
Dash Line -----	Dash Line - - - - -
Star Line *****	Star Line * * * * *
Blank Line	Delete Item
Note #	Customer Info

7. Use the **FONT STYLE** options to edit the font of your receipt message; options include:



- Justification Settings
- Bold Font
- Font Size
- Underline Font
- Red Font

8. When you have completed editing the receipt message you can use the **ACTIONS** options to:

- **Preview** the receipt.
- **Print Test** the receipt.
- **Receipt Initialization** will clear all entries and restore them to default.



Receipt Description Definitions

Element Name	Element Description
Logo Image 1	Pre-Amble Image that appears at the top of the receipt above the pre-amble.
Message 1	Pre-Amble Message that appears at the top of the receipt. Create as many line as you need, 52 Characters per line. You can create as many Message 1 sections as needed. The font style for each section can be modified separately.
Header	Choose from the Select Elements to add to the header. This is the area between the message 1 section and the receipt data.
Items Information	Not selectable; Items will appear as per PLU Status programming.
Tax & Tender Information	Not selectable; Tax and Tender will appear as per options programming.
Gratuity	Type in a message for Gratuity <i>i.e.</i> <i>TIP:</i> _____
Footer	Choose from the Select Elements to include on the footer. This is the area between the receipt data and message 2 section.
Message 2	Post-Amble Message that appears at the bottom of the receipt.
Logo Image 2	Post-Amble Image that appears at the bottom of the receipt below the post-amble message.
Barcode	
QR Code	
Logo Image 3	This is the image that appears at the bottom of the receipt below all other elements.

Assign Receipt Message to Station

1. From the **PROGRAM MODE** touch **EMPLOYEE** to view the employee program selection window.
2. Touch **STATION** on the Employee selection window to view the station programming options.
3. Here you can **ADD, EDIT** or **DELETE** stations as necessary. Stations can be sorted alphabetically if desired.

DESCRIPTION

Type in a descriptor for the selected station, you can use the X at the end of the description field to clear the current descriptor.

GENERAL

The general section assigns the default MLU Group, Default MLU and FLU used for the selected station.

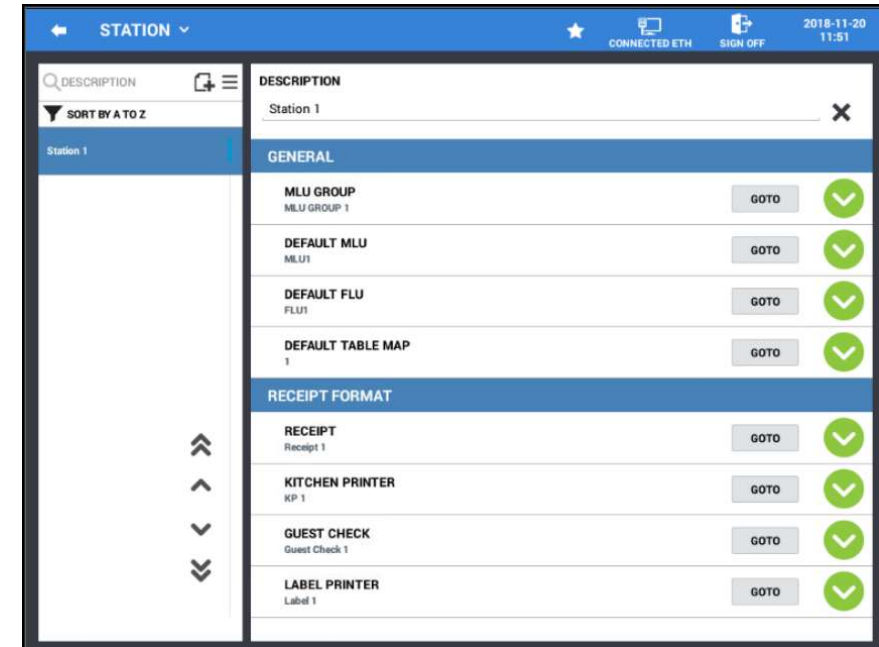
- MLU GROUP
- DEFAULT MLU
- DEFAULT FLU
- DEFAULT TABLE MAP

RECEIPT FORMAT

Receipt format is used to assign the receipt message to be used for the selected stations printers:

- RECEIPT
- KITCHEN PRINTER
- GUEST CHECK
- LABEL PRINTER

The **GOTO** buttons are used to directly access the programming for the option selection.



Screen Edit

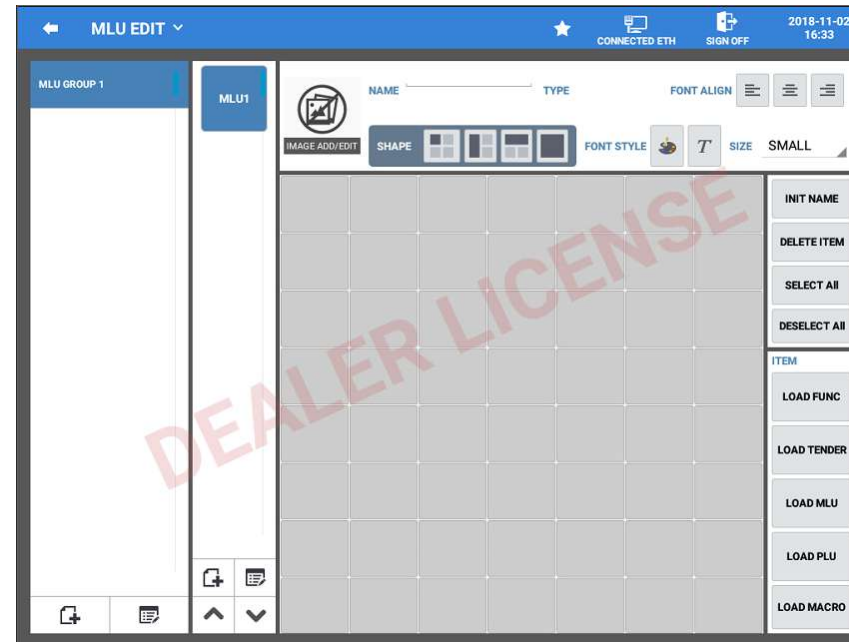
The Screen Edit program area is used to set up the Table Map, Menu Lookup (MLU Edit) and Function Lookup (FLU Edit) screens that will be used to complete register operations on the Sam4POS. The Real Keyboard on the Sam4POS loaded into the SAP-630/530 is also programmed from here.

1. Select **SCREEN EDIT** from the main **PROGRAM MODE** menu.
2. Choose the **Screen Edit program category** you wish to edit. Screen Edit is separated out into separate categories for:
 - ⇒ **MLU Edit** – Menu Look Up programming determines what is displayed in the item area of the operator screen. The MLU Edit screen is separated into MLU Groups (Left Column) and individual MLU's in each group (Center Column) and the items assigned to the MLU's (Right Column). MLU's are selected by touching an MLU key in the vertical panel to the left of the item area.
 - ⇒ **FLU Edit** – Function Look Up programming is very similar to MLU programming except that no PLU items can be assigned to a FLU. The FLU keys are displayed on the bottom of the operator screen. If multiple FLU's are available, you can use scroll buttons to view the keys on all available FLU's.
 - ⇒ **Table Map** – The table map allows you to create multiple tables in a grid formation for table service operations. Multiple seating zones and table configurations may be created to represent different seating areas and organize the appearance of the tables with custom names and colors. Refer to the “Table Map” programming guide available on the CRS website.
 - Refer to the Sam4POS Programming Manual or the separate Table Map program supplement available on the CRS website for details.
 - ⇒ **KIOSK** – Support for the KIOSK operation was added in version 1.1.45, this allows you to set up the station as a KIOSK for customer order entry operation.
 - Refer to the Sam4POS Programming Manual or the separate KIOSK setup guide available on the CRS website for details.
 - ⇒ **Rear Display** – Support for the optional integrated 9.7-inch and 15-inch rear LCD customer display was added beginning in v1.1.11 and is only available on Sapphire and SAP-6600(II) terminals.
 - Refer to the Sam4POS Programming Manual or the separate Dual Monitor setup guide available on the CRS website for details.
 - ⇒ **Real Keyboard** – The SAP-630/SAP-530 terminals have a large traditional ECR style keyboard, most applications will be designed with menu items located on the traditional keyboard, and condiments, options and instructions displayed on the screen. The Real Keyboard must be created and assigned to the stations before the keyboard will work on the SAP-630/SAP-530 terminal.

MLU Edit

The **Menu Look Up** (MLU) programming determines what is displayed in the item area of the operator screen. The MLU Edit screen is separated into MLU Groups (Left Column) and individual MLU's in each group (Center Column) and the items assigned to the MLU's (Right Column). MLU's are selected by touching an MLU key in the vertical panel to the left of the item area.




1. Select **MLU EDIT** from the **SCREEN EDIT** menu screen; The **MLU EDIT** screen displays:

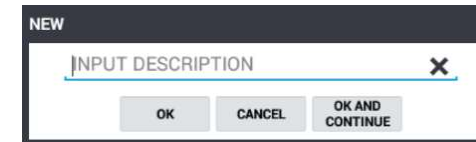


MLU Groups

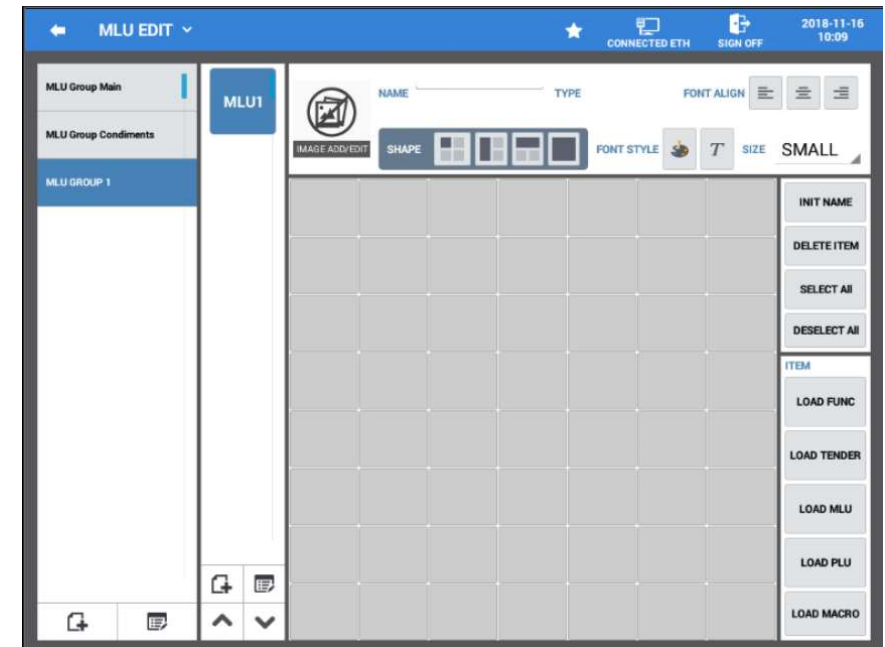
MLU Groups organize the MLU's that will be displayed in the register. The default MLU group can be assigned by station so each station can display a different MLU group as desired. For example: the bar station can have a different default MLU Group than the dining area. MLU Group description can be up to 30 characters.

Add a New MLU Group

1. Touch the  **Add New MLU Group** icon at the bottom of the left most column.
 - a. Input a Description for the new MLU Group. Create MLU Groups for:
 - MAIN
 - Condiments
2. Press **OK** or select **OK AND CONTINUE** if you are adding additional MLU groups. Pressing **CANCEL** will exit without creating any new MLU Groups.
3. The new MLU Groups are now displayed.
4. Use the edit  icon at the bottom of the MLU Group list to open the edit mode; select MLU Groups you want to delete from the list.
 - Press the trash can  icon to delete the selected MLU Groups.
 - Press the **X** to exit the edit/delete mode.



A dialog box titled "NEW" with a close button (X) in the top right corner. It contains a text input field labeled "INPUT DESCRIPTION" with a blue underline. Below the input field are three buttons: "OK", "CANCEL", and "OK AND CONTINUE".








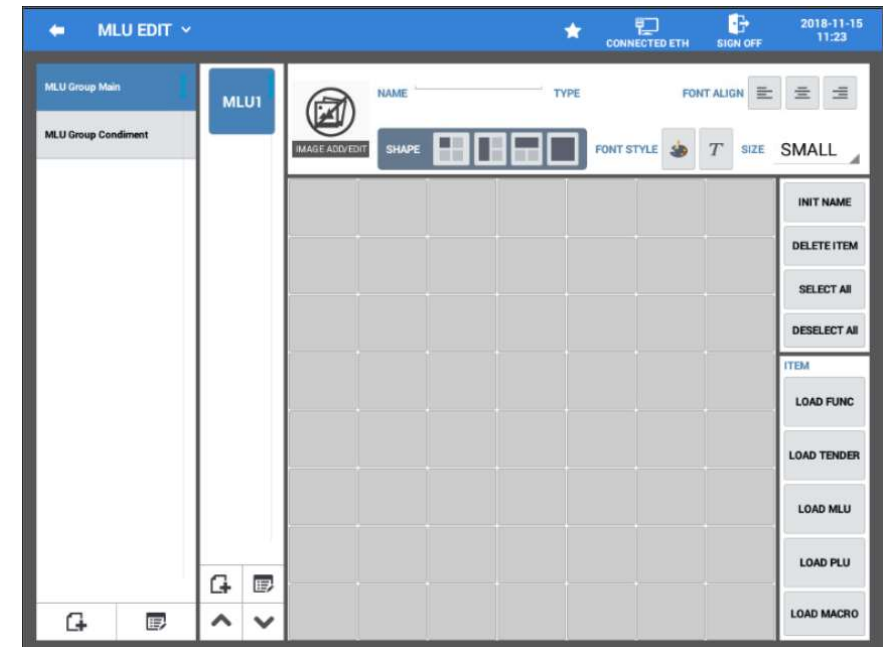
Programming MLU's

After creating MLU Groups, Individual MLU's need to be created for each MLU Group. These MLU's are the screens that will appear in the register mode.

- Each MLU on the Sapphire terminals has a grid of 9 rows and 8 columns for a total of 72 cells that can be programmed as necessary.
- Each MLU on all other terminals and tablets has a grid of 8 rows and 7 columns for a total of 56 cells that can be programmed as necessary.
- The keys on the MLU screen can be assigned any PLU currently in the database, function keys, tender keys, Macro's or other MLU's.


Add a New MLU

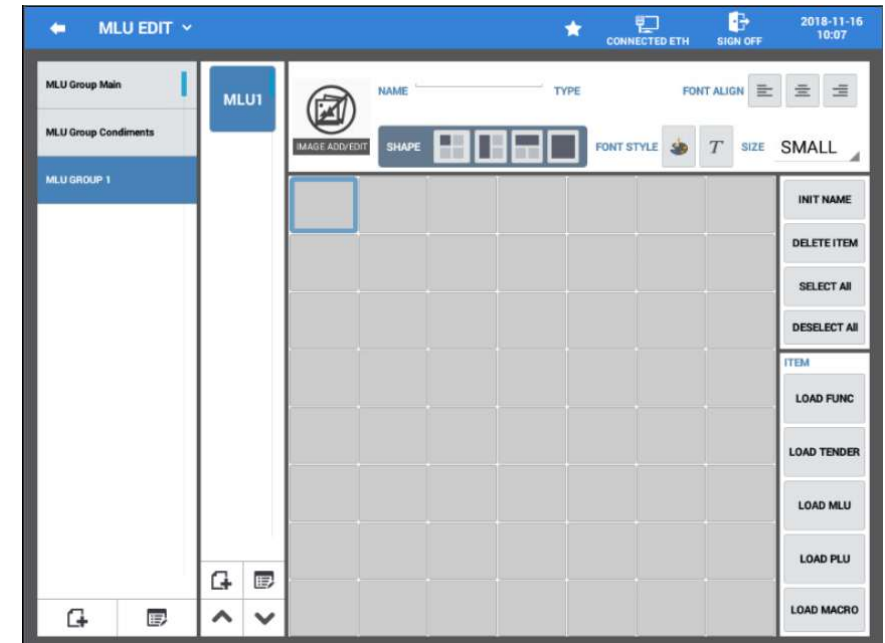
1. Select the MLU Group from the list to add MLU(s) for the group.
2. Touch the  **New MLU** icon at the bottom of the middle column to add new MLU's to the selected MLU Group.
3. Select an image for the MLU if desired, input the MLU description (up to 30 characters), set as Manager Required if desired to limit access. This restricts the use of this FLU to only those employees set as Manager
 - You can change the Background Color and Text Color for the MLU. This will display in the register mode as per your settings.
 - If desired, the MLU can be set for manager control. This restricts the use of this MLU to only those employees set as Manager.
4. Press **OK** to save the new MLU or select **OK AND CONTINUE** if you are adding additional MLU's. Pressing **CANCEL** will exit without adding any new MLU's.
5. The new FLU is created and appears in the FLU selection pane. There are 14 programable cells available on each FLU grid for assigning functions, tenders, macros or MLU's.
6. Use the  icon at the bottom of the MLU list to select MLU's you want to delete from the list.
 - Press the trash can  icon to delete the selected MLU's.
 - Press the **X** to exit the edit/delete mode.
7. The   buttons at the bottom of the MLU list can be used to reposition the currently selected MLU down or up the MLU list. This allows you to position the most used MLU's in a list to the top so they are more easily found while in the operator/register mode screen.
8. Create the following MLU's:
 - Select the **MLU Group MAIN**, add an MLU:
 - ◇ BURGERS
 - Select the **MLU Group CONDIMENT**; add MLU's:
 - ◇ Temperature
 - ◇ Select Cheese



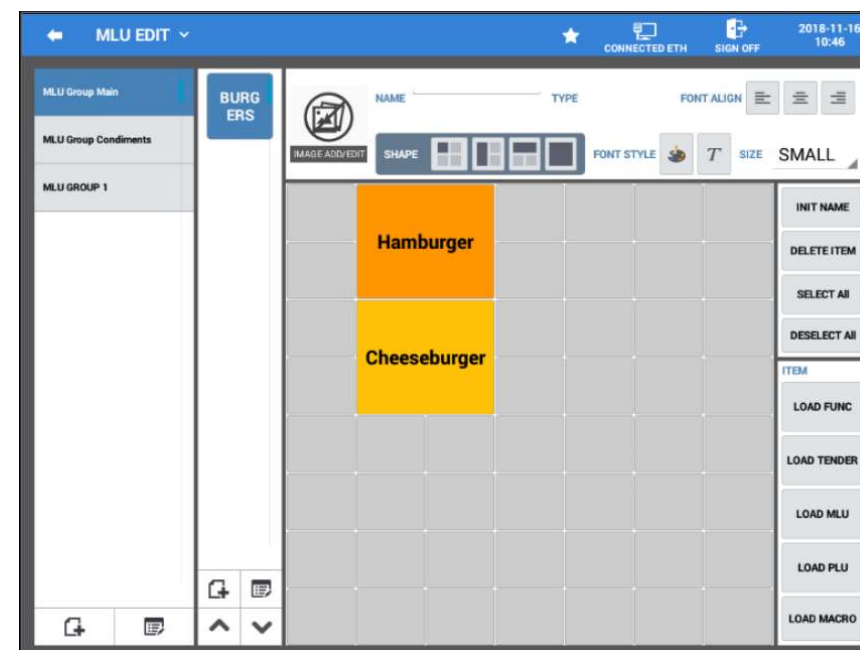
MLU Key Assignment

You can save significant setup time by assigning multiple PLU's to locations simultaneously, and by assigning attributes, such as button shape, font and color to a group of buttons simultaneously.

1. Select an **MLU Group** from the list (Left Column) to view the MLU's associated with that group.
2. Select an **MLU** from the list (Middle Column) of existing MLU's in the MLU group or add a new **MLU** to the list.
3. Select the cell on the item area grid on the MLU you wish to program. Choose one of the **ITEM LOAD** selection buttons; **LOAD FUNC**, **LOAD TENDER**, **LOAD MLU**, **LOAD PLU** or **LOAD MACRO**.
4. Select all the items from your ITEM LOAD selection that you want to appear on the MLU grid. To make finding items easier, you can press the Sort icon to sort the items alphabetically or by code #. You can also search  by PLU Code # or by PLU Name.
5. You can add an image for the selected key on the MLU if desired or change the MLU description (up to 30 characters).
 - The **MLU key Size** on the grid may be changed as desired.
 - Make Double key (High or Wide)
 - Make Quad key (Double High & Wide)
 - You can change the **Font Style** for the selected button, This will display in the register mode as per your settings:
 - Background Color and Text Color for the FLU
 - Standard Font or *Italic Font*
 - The **Font Size** can be edited:
 - Small, Medium, Large, X-Large
6. Add PLU's to the newly created MLU's:
 - **BURGERS** (on *MLU Group Main*)
 - Hamburger
 - Cheeseburger
 - **TEMPERATURE** (on *MLU Condiments*)
 - Medium Rare – Medium – Medium Well – Well Done
 - **SELECT CHEESE** (on *MLU Condiments*)
 - Swiss – American – Cheddar –



7. All your selections will appear on the MLU.
- You can rearrange the items as desired on the grid. Press and drag the selection to the desired location.
 - Edit the appearance of the items on the MLU with the elements in the designer pane.






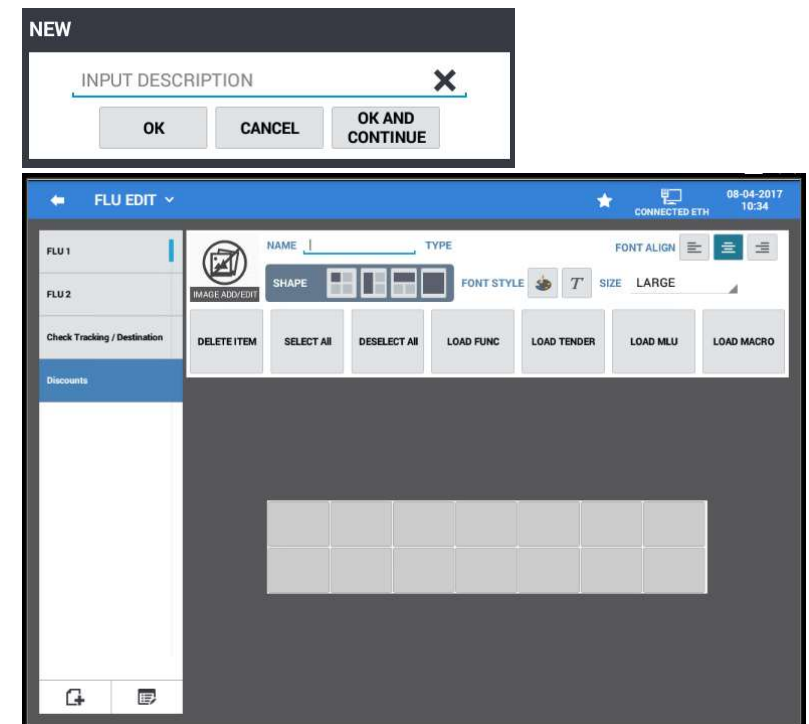
FLU Edit

A **Function Look Up** (FLU) is very similar to an MLU, except that no PLU items can be assigned to an FLU. The FLU keys are displayed on the bottom of the operator screen below the MLU grid.

- Each FLU on the Sapphire terminals has a grid of 2 rows and 8 columns for a total of 16 cells that can be programmed as necessary.
- Each FLU on all other terminals and tablets has a grid of 2 rows and 7 columns for a total of 14 cells that can be programmed as necessary.
- The cells on an FLU screen can be assigned with any function key, tender key, Macro or other MLU's.


Adding New FLU Screens

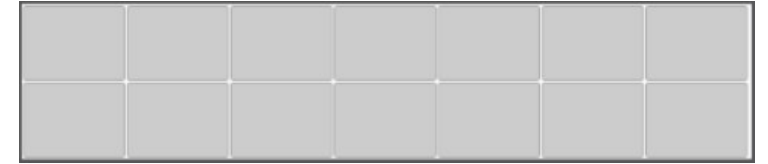
1. Touch the  **Add New FLU** icon at the bottom of the left most column to create a new FLU.
2. **Input a Description** (up to 30 characters) for the new FLU, set as Manager Required if desired to limit access. This restricts the use of this FLU to only those employees set as Manager.
3. Press **OK** to add the new FLU. Alternately you can press OK AND CONTINUE to add additional FLU's. Pressing CANCEL will exit without adding any FLU's.
4. The new FLU is created and appears in the FLU selection pane. There are 14 programable cells available on each FLU grid for assigning functions, tenders, macros or MLU's.
5. The  **Edit** icon located at the bottom of the FLU list can be used to select and delete FLU's from the list.
 - Press the trash can  icon to delete the selected FLU's.
 - Press the **X** to exit the edit/delete mode.
6. Additionally, you can **Press & Hold** on an individual FLU to Edit, Delete, or copy the selected FLU to New or Existing FLU items.



FLU Key Assignment

The FLU assignment pane allows up to 14 individual keys to be assigned. Select a cell in the grid to add function keys, tender keys, Macro's or MLU's. These keys can be edited using the design attributes.

1. Choose an FLU from the list you wish to edit.
2. Select the cell on the FLU item grid you wish to program. Choose one of the **ITEM LOAD** selection buttons; **LOAD FUNC**, **LOAD TENDER**, **LOAD MLU**, **LOAD PLU** or **LOAD MACRO**.
3. Select all the items from your ITEM LOAD selection that you want to appear on the MLU grid. To make finding items easier, you can press the Sort icon to sort the items alphabetically or by code #. You can also search  by Description\Name.
4. You can add an image for the selected key on the FLU if desired, change the FLU description (up to 30 characters).
 - The FLU key Size on the grid may be changed as desired.
 - Make Double key (High or Wide)
 - Make Quad key (Double High & Wide)
 - You can change the Font Style for the selected button, This will display in the register mode as per your settings:
 - Background Color and Text Color for the FLU
 - Standard Font or *Italic Font*
 - The Font Size may also be edited:
 - Small, Medium, Large, X-Large



Real Keyboard

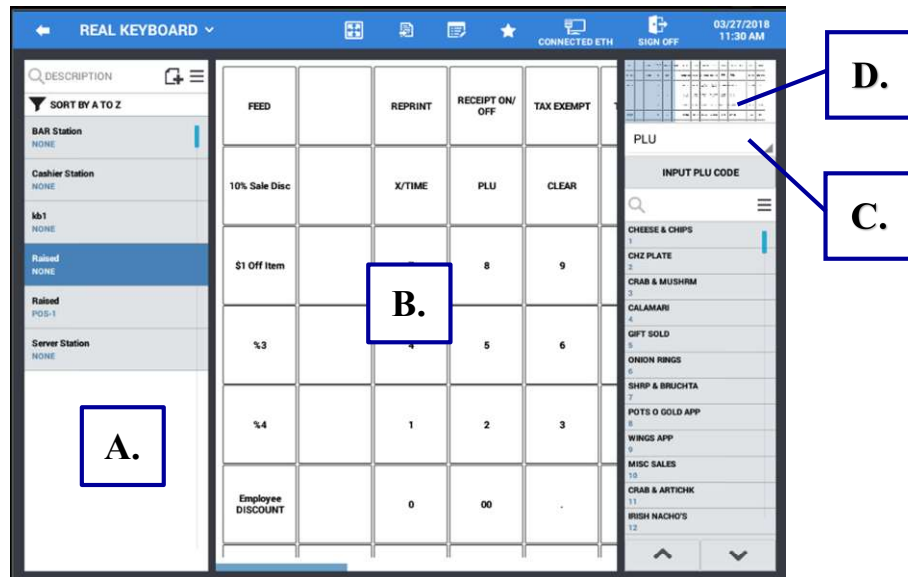
The SAP-630/SAP-530 terminals have a large traditional ECR style keyboard, most applications will be designed with menu items located on the traditional keyboard, and condiments, options and instructions displayed on the screen. The Real Keyboard must be created and assigned to the stations before the keyboard will work on the SAP-630/SAP-530 terminal.


Multiple keyboards can be created with a separately defined set of keyboard functions for each key on the keyboard. For example, separate levels might be required for different lunch/dinner menus, Or, within a restaurant, different keyboards might be set up for pre-check, bar and/or cashier stations.

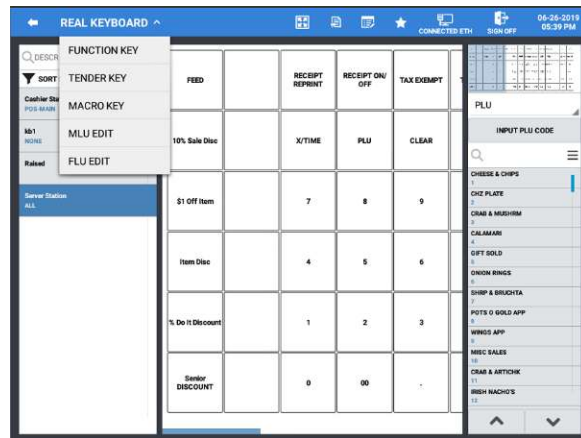
Each register might contain the functions for each station on a separate level, so that any register could function at any station by simply changing the keyboard assignment for the terminal and key legend sheets.

Refer to the “Sam4POS Programming Manual” for complete programming details.

1. Select **REAL KEYBOARD** from the **SCREEN EDIT** menu screen, the **REAL KEYBOARD** screen displays.











2. Select a keyboard from the list to edit or add new keyboards as required.
3. You can use the menu icon  to **SORT** the keyboard list alphabetically, **A TO Z** or **Z TO A** or choose the **EDIT MODE** to select keyboards in the list to delete.
4. Press the **REAL KEYBOARD** v dropdown menu to access other **SCREEN EDIT** program areas from the Real Keyboard screen.



Real Keyboard Screen Selections

Program Area	Description
A.	Real Keyboard Groups selection pane (keyboard levels)
B.	Keyboard Layout, Editing Pane
C.	Key Assignment, Key Type Selections: PLU, FLU, Function Key, Tender Key, MLU, Real Key Group, MACRO
D.	Keyboard Viewing

Real Keyboard Header Icons

Icon	Description
	Press to Exit the Real Keyboard programming and return to the main program mode.
	Press the Real Keyboard title for the sub-menu dropdown to access the other Screen Edit program areas: Function/Tender Keys or MLU/FLU edits. MACRO keys can also be accessed from here.
	Press to see an Expanded View for keyboard
	Press to Export the Keyboard Template, select USB or Email
	Edit Keyboard Template, change background & text color, font size, style, alignment
	Favorite icon – Use to add or remove the real keyboard on the favorite list.
	Shows the current connection method for the terminal.
	Sign Off – signs off the current employee, loads the main sign on screen.

Refer to the “Sam4POS Programming Manual” for complete details.

Device Programming

Device programming is where all the individual peripheral devices used on the Sam4POS system are configured and routed to all the stations in the system.

1. Select **DEVICE** from the **PROGRAM MODE** main menu selection screen
2. Select the **Device category** you wish to edit from the selections. Device programming is separated into five program categories:
 - ⇒ **Device Setting** – Where all your devices are configured for the port that they will occupy
 - ⇒ **Device Mapping** – Used to assign devices to the various stations in the SAM4POS system.
 - ⇒ **KP Group** – Use this programming area to determine the KP Groups that will be used for assignment in the PLU Status Group programming.
 - ⇒ **Card Read Format** – Determines the card data (on Cards with magnetic strip on the card) that will be utilized when the employee is set to use the MSR for employee Sign On/Off and or for Time In/Out, or for opening checks in guest check operations. In addition, we can set up the parameters for cards (Drivers Licenses or ID Cards with magnetic strip on the card) used for Age Verification.
 - ⇒ **EFT Operation** – Credit Card (EFT) maintenance operations can be performed at the SAM4POS terminal from the EFT operations menu.

Device Setting

The Device setting programming area is where all your devices are configured for the port that they will occupy. The peripheral device selections available for use on the Sam4POS are: Printer, Scanner, Line Display, Scale, EFT, Coin Dispenser, Liquor Dispenser, Kitchen Video, Text Inserter & SRM. Each device will have additional programming options specific to the device.

Newly added devices will appear in the Device Setting at all stations within the IRC system. To simplify device mapping when multiple terminals are in an IRC network, it is best to connect your devices to the same port on each terminal. For example: all Receipt printers on COM1, Kitchen Printers on COM2, all EFT devices on COM3, etcetera.

Caution: If you use a USB to Serial converter such as the POSio Serial to USB Adapter (*CRS Item# 250119*), you can connect a serial device to an available USB port. Available in v1.1.24 and later. This option is ***NOT recommended*** for mission critical devices, such as the EFT Device.

Important! When connecting Ethernet devices, the IP scheme for the device must be the same IP scheme as used on the Sam4pos system. The first 3 octets must match; the last octet must be unique.

Note: If you have the **SAP-630** terminal, the **Internal Printer** is already been added & configured. You cannot delete or edit the device settings for the Internal Printer.

Note: If used, the **Chef Tab** kitchen video system will be set up as a **Kitchen Printer** in device setting & mapping.

The SAP-630 & SAP-530 terminals have an internal printer and an internal VFD line display. When a DB is created on an SAP-530\SAP-630 then loaded into an SAP-6600(II)\SAP-4800(II) or HM616\HM626 the internal printer and VFD line display will appear in the device list. You cannot delete the “Internal Printer” or “Internal Line Display”. Having these devices on the list does not affect normal operations or the setting up of devices.



If a merchant insists that the internal printer not appear in the list, you can do the following:

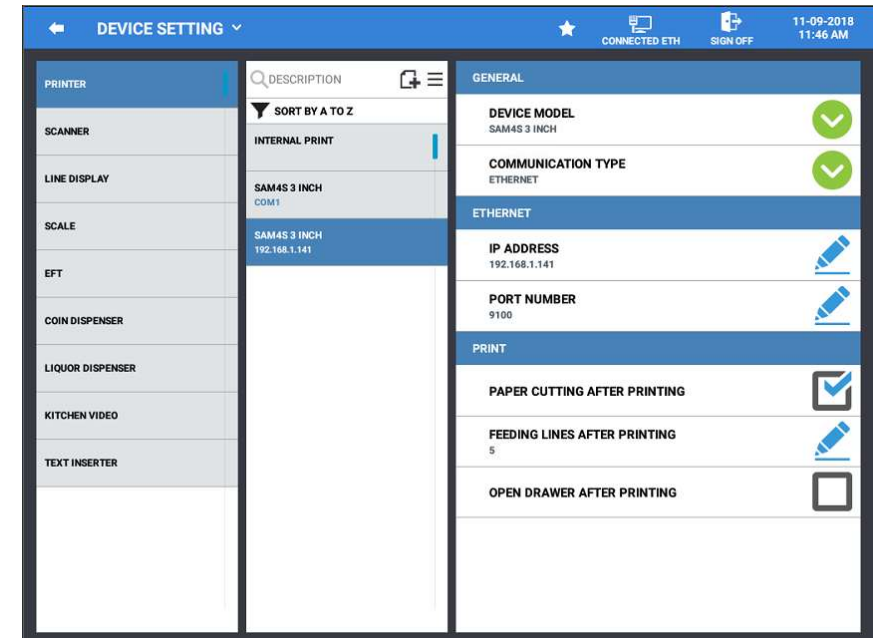
- Backup the current Program to CSV

Sign on to the terminal using the System Admin code.

- Perform a DB all configuration database clear
- CSV RESTORE (OVERWRITE) excluding the following items:
 - * Device.csv
 - * Device_Map.csv

Refer to the separate Admin Mode Supplement for details.


1. Select **DEVICE SETTING** from the **DEVICE** menu selections. The **DEVICE SETTING** programming screen displays.
2. In the left grid, Choose the device from the device selection list you wish to add or edit.
3. In the middle grid: Press the  icon to add a new device or select an existing device to edit if already added.
4. After the device is added to the list; Press the  icon to Test, Sort, or enter the Edit Mode for the selected device.
 - **TEST** – Sends a test print to the selected device.
 - **EDIT MODE** – Select devices to delete as necessary.
 - **SORT** – Sort devices alphabetically.

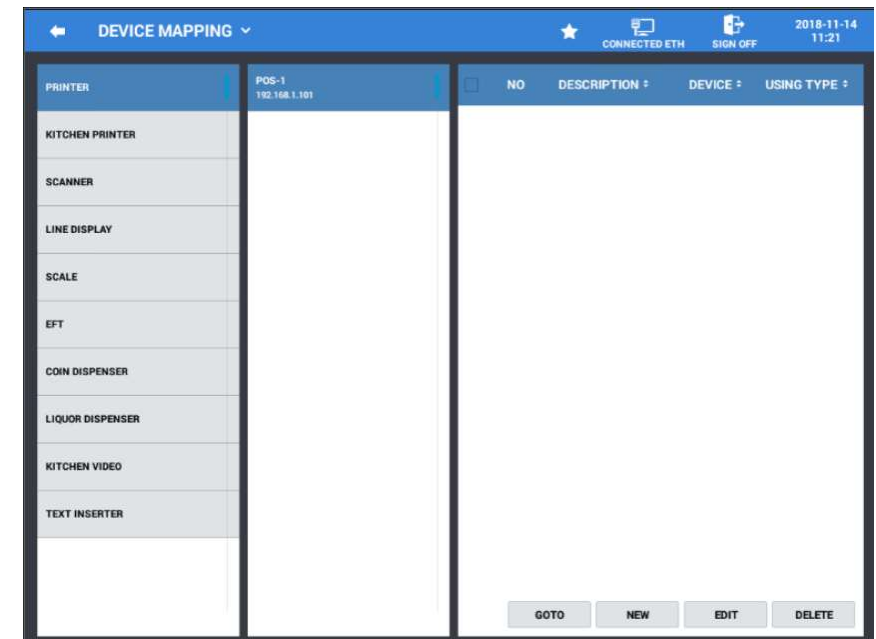


Device Mapping

The Device Mapping programming area is used to assign which devices (Printer, Scanner, Line Display, Scale, Rear Display, EFT and Coin Dispenser) will be used on the various stations in the SAM4POS system. The Device Mapping program area was changed beginning in v1.0.80. Kitchen Printer is now a separate selection from Printer mapping. The Kitchen Printer area is used to assign K. Printers that will be used on each of the stations in the Sam4POS system.

Device Mapping (v1.0.80 and Later)

1. From the **Program Mode** select the **Device** category then select **DEVICE MAPPING** from the available selections.
 - Alternately, you can press the drop-down arrow  while on the **DEVICE SETTING** screen to view the device category selections; then select **DEVICE MAPPING** from the selection list.
2. The **DEVICE MAPPING** program screen is displayed:
 - Device Selections appear in the Leftmost column (Defaults to PRINTER)
 - Stations in the system are listed in the Middle column
 - Devices assigned show in the Rightmost column



3. Select **PRINTER** from the list of available device selections.
4. Press the **NEW** button in the bottom right column to add a Receipt Printer:
 - **Input Description:** Type a descriptor for the new printer (up to 30 characters). *i.e.* Receipt 1
 - **Select Device:** Selections are from the list of available devices as set in the Device Setting screens.
 - **Select From Terminal:** Chose the terminal where the device is connected.
 - **Select Device Using Type:** Select the type of use for the specified device. Selections are: Receipt, Journal, Label
 - **Select Backup Device:** Optional setting if you wish to define a backup device in the case the main device is unavailable.
 - **Select Backup Terminal:** Select the terminal where the backup device is connected.
5. Press **OK** to add the Receipt Printer, press **OK AND CONTINUE** to add additional printers. Pressing **CANCEL** will exit without adding any printers.
6. Your assigned printers now show in the rightmost column

NEW

INPUT DESCRIPTION ✕

SELECT DEVICE

SAM4S 3 INCH (COM1/9600/8/NONE/1)

SELECT FROM TERMINAL SELECT DEVICE USING TYPE

POS-1 RECEIPT

SELECT BACKUP DEVICE SELECT BACKUP TERMINAL

NONE NONE

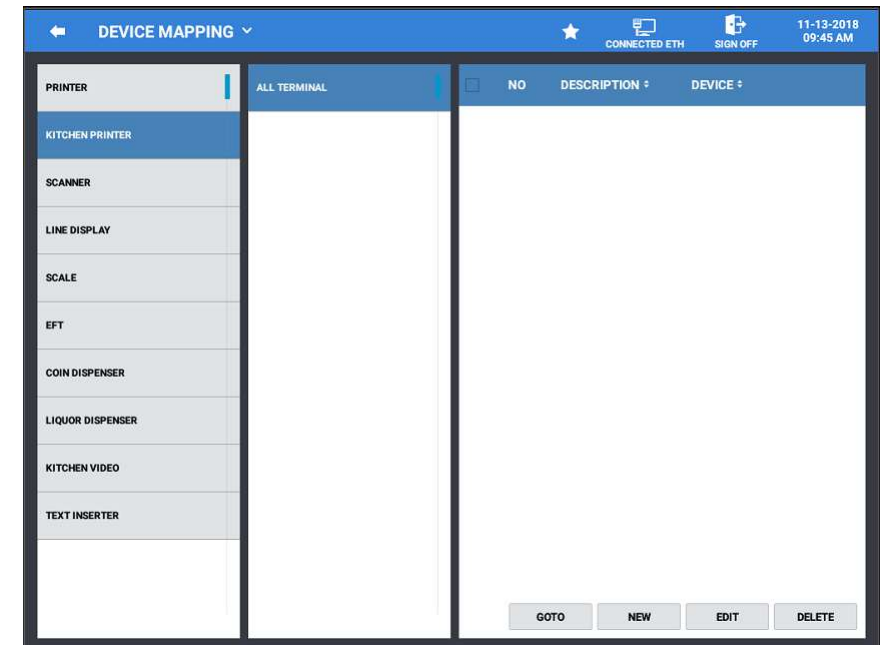
OK CANCEL OK AND CONTINUE

DEVICE MAPPING ★ CONNECTED ETH SIGN OFF 2018-11-14 11:38

PRINTER	POS-1 192.168.1.101	NO	DESCRIPTION	DEVICE	USING TYPE
KITCHEN PRINTER		<input type="checkbox"/>	1	Receipt 1	POS-1 SAM4S 3 INCH (192.168.1.141)
SCANNER				BACKUP	NONE
LINE DISPLAY					
SCALE					
EFT					
COIN DISPENSER					
LIQUOR DISPENSER					
KITCHEN VIDEO					
TEXT INSERTER					

GOTO NEW EDIT DELETE

7. Select **KITCHEN PRINTER** from the list of available device selections.
8. **ALL TERMINAL** is set by default. When terminals are setup in an IRC system, you can set up Kitchen Printer mapping to be the same for All Terminals or set differently for individual stations.
 - If all terminals in a system will use the same kitchen printer mapping, use this selection to map the printers.
 - If each terminal in a system will use different mapping for kitchen printers, we can select the station from the list to add the printer mapping for each station.
 - If using the KP Time Period programming, use kitchen printer mapping for each individual terminal in the system (*note the All Terminal setting*).



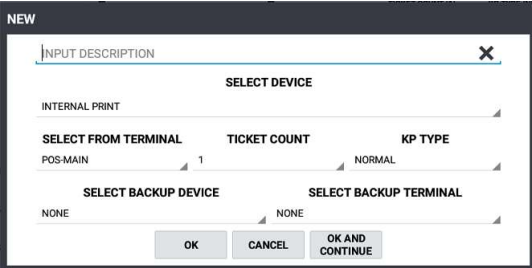
Adding Kitchen Printers

When you select Kitchen Printer on the Device Mapping screen, the stations in the system are listed in the middle column. At the top of the stations list is the ALL TERMINAL selection. Each individual station is listed below the All Terminal selection. **ALL TERMINAL** is selected by default.

- If all terminals in a system will use the same kitchen printer mapping, use the ALL TERMINAL selection to add the printers.
- If each terminal in a system will use different mapping for kitchen printers, we can select the station from the list to add the printer mapping for each station.
- If using the KP Time Period, use kitchen printer mapping for each individual terminal in the system (not the All Terminal setting).

Kitchen Printers to be used in the system are Added\Edited\Listed in the right most column on the Device Mapping Screen.

1. Press the **NEW** button to assign a device. The NEW item dialog displays:
 - **Input description** – Type in a description for the device (up to 30 characters). *i.e. KP Grill, Bar, etc.*
 - **Select Device** – Choose the printer from the list of available printers as set in the Device Setting.
 - **Select From Terminal** – Chose the terminal from the list where the device is connected.
 - **Ticket Count** – Set the number of KP tickets to be printed.
 - **KP Type** – Select the type for the specified device:
 - * **Normal** – Prints all items on one ticket.
 - * **Single** – Prints each item on a separate ticket; (regardless of the KP Option settings).
 - * **Normal & Single** – Prints all items on one ticket & prints each item separately.
 - * **Single & Normal** – Prints each item on a separate ticket & prints all items on one ticket.
 - **Select Backup Device** – Set if you wish to define a backup device in the case the main device is offline.
 - **Select Backup Terminal** – Select the terminal where the backup device is connected.
2. Press **OK** when complete to add the device mapping or press **OK AND CONTINUE** to map more printers. Press **CANCEL** if you want to exit without mapping additional kitchen printers.

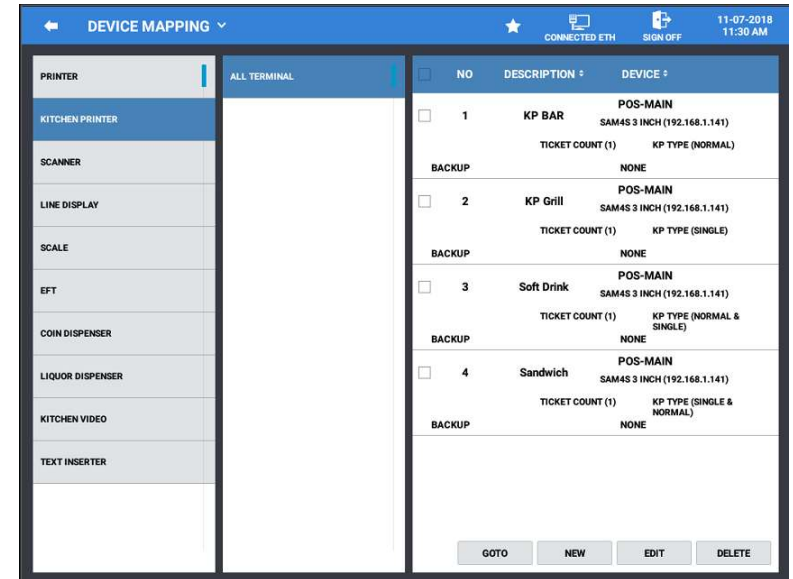


The screenshot shows a dialog box titled "NEW" with a close button (X) in the top right corner. The dialog contains several fields and buttons:

- INPUT DESCRIPTION**: A text input field with a close button (X) on the right.
- SELECT DEVICE**: A dropdown menu with "INTERNAL PRINT" selected.
- SELECT FROM TERMINAL**: A dropdown menu with "POS-MAIN" selected.
- TICKET COUNT**: A numeric input field with "1" entered.
- KP TYPE**: A dropdown menu with "NORMAL" selected.
- SELECT BACKUP DEVICE**: A dropdown menu with "NONE" selected.
- SELECT BACKUP TERMINAL**: A dropdown menu with "NONE" selected.
- Buttons**: "OK", "CANCEL", and "OK AND CONTINUE" are located at the bottom right.

3. Your Mapped Devices now display:

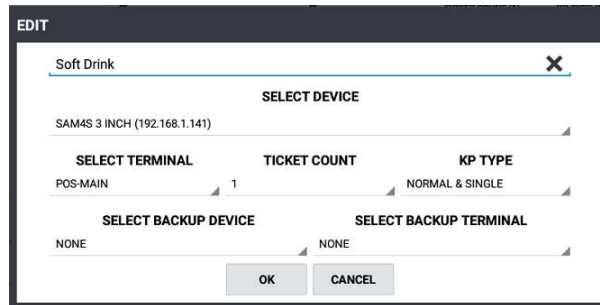
- **GOTO** – Brings up the Device Setting programming.
- **NEW** – To add additional Kitchen Printers.
- **EDIT** – Allows changes to the settings for the selected Kitchen Printer.
You can select an individual printer or multiple printers to edit all at one time.
- **DELETE** – Will delete the selected Kitchen Printer.



Edit Kitchen Printers

If necessary, you can edit the kitchen printer information.

1. Select a Kitchen Printer from the list you wish to edit; Press the **EDIT** button to open EDIT item dialog:



INPUT DESCRIPTION

You can delete and type in a new description for the device (up to 30 characters) if desired.

SELECT DEVICE

Choose the appropriate printer from the list of available printers as set in the Device Setting.

SELECT TERMINAL

Choose the terminal from the list where the device is connected.

TICKET COUNT

Set the number of KP tickets to be printed.

KP TYPE

Select the type for the specified device.

- **Normal** – Prints all items on one ticket.
- **Single** – Prints each item on a separate ticket; (regardless of the KP Option settings).
- **Normal & Single** – Prints all items on one ticket & prints each item separately.
- **Single & Normal** – Prints each item on a separate ticket & prints all items on one ticket.

SELECT BACKUP DEVICE

Set if you wish to define a backup device in the case the main device is offline.

SELECT BACKUP TERMINAL

Select the terminal where the backup device is connected.

2. Press **OK** when complete to add the device mapping or press OK AND CONTINUE to map more printers. Press CANCEL if you want to exit without mapping additional kitchen printers.



KP Group

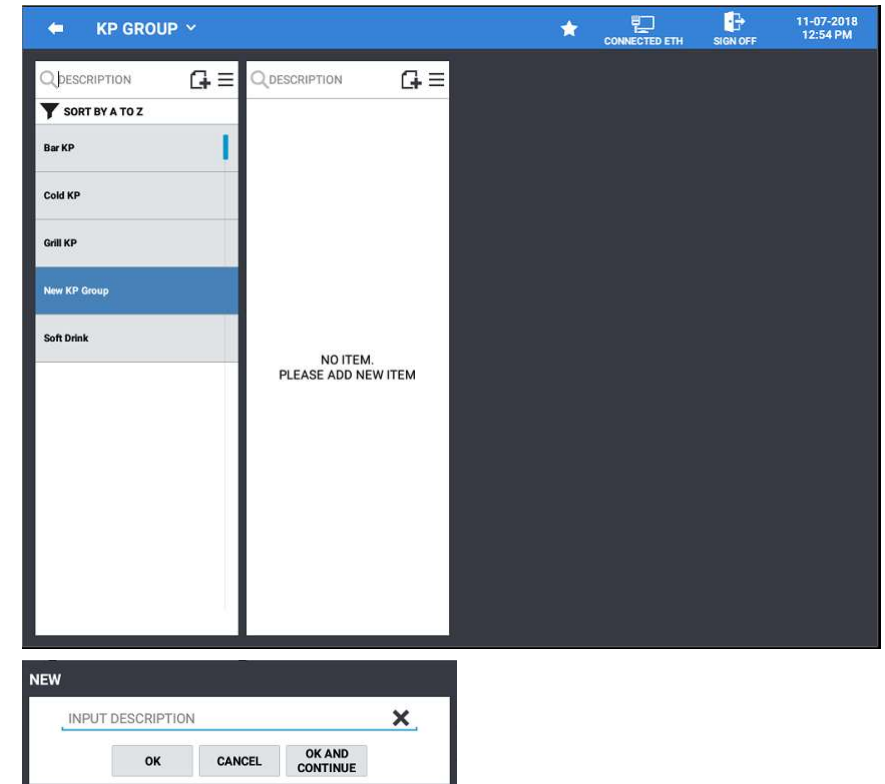
The KP Group programming defines which groups of PLU's will be sent to which kitchen printers. Most commonly, separate KP Groups are created for each t you want to send to a kitchen printer. Refer to the separate Kitchen Printer Setup Guide for complete details about setting up kitchen printers.



Note: You must create a KP printer in the Device Mapping before you can create a KP Group.

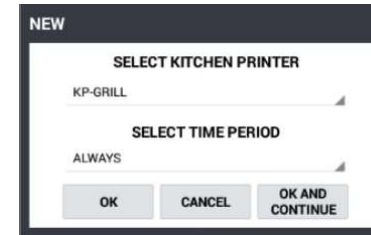
Note: KP Time Periods must be created prior to assignment here.

KP Group (v1.0.80 and Later)

1. From the **Program Mode/Device** menu, select **KP GROUP** from the available selections.
 - Alternately, you can press the drop-down arrow  on the /DEVICE MAPPING screen to view the sub menu selections; then select KP GROUP from the selections.
2. The **KP GROUP** program screen is displayed:
 3. From the **KP GROUP** programming screen press the  icon in the left column to add a new KP Group(s) or select an existing KP Group from the list.
 4. Input a description (up to 30 characters) for the KP Group: i.e. **KP-GRILL**
 5. Press **OK** to close the dialog or press OK AND CONTINUE to add additional KP Groups. Press CANCEL if you wish to exit the KP Group without adding the group.



- Press the  icon to access the **EDIT MODE** to select and delete KP Groups or select **SORT** to sort the KP Groups alphabetically.
- After the KP Groups are created, press the  icon in the center column to assign the printer to be used for the KP group and select the time period for the group.
- Press **OK** to save your settings, press **OK AND CONTINUE** if adding additional printers/time periods. Pressing **CANCEL** will exit without adding any printers.



- When the printer and time period are selected, the **KP OPTION** selections are displayed.

KP Option

DESCRIPTION

You edit the description for the KP Group here if desired.

TICKET COUNT

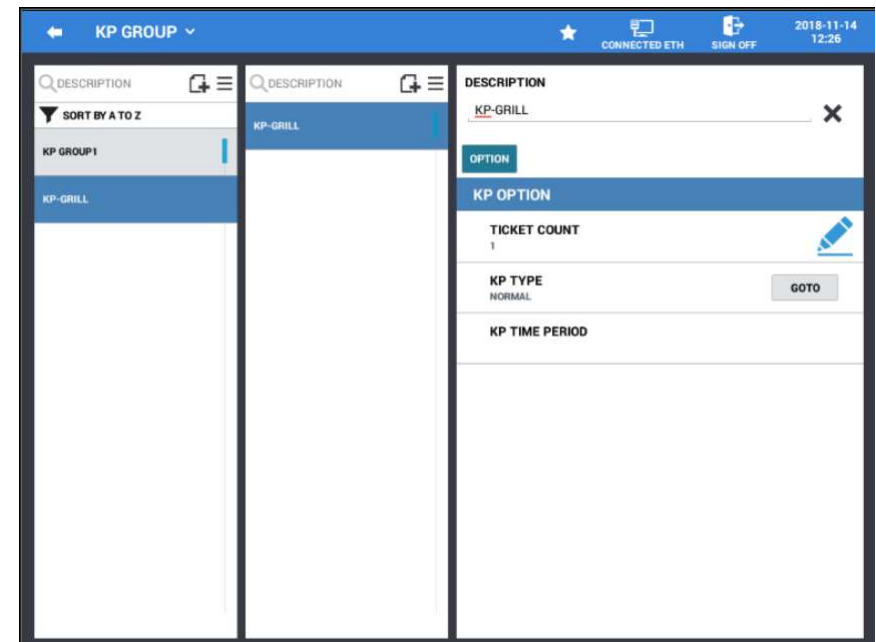
This is the number of tickets you wish to print. This number initially comes from the Device Mapping setting.

KP TYPE

This setting comes from the Device Mapping setting. Pressing the **GOTO** button will bring you to the Device Mapping screen.

KP TIME PERIOD

This setting comes from the Device Mapping setting.



- Press the  **Menu** icon to access the **EDIT MODE** to select and delete printers for the selected group.

Network & Revenue

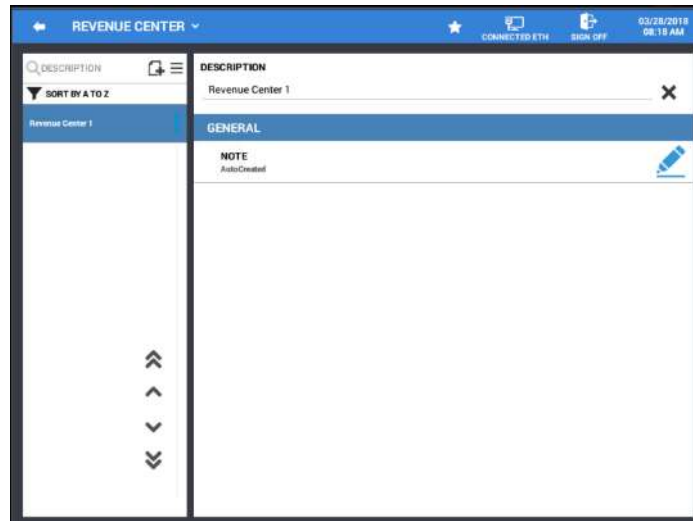
The Network & Revenue category has two program areas: Revenue Center and Terminal & Network.

1. From the main **PROGRAM MODE** selection menu, touch **NETWORK & REVENUE**
2. Touch the category you wish to edit. Network & Revenue has two program areas: Revenue Center and Terminal & Network.
 - ⇒ **Revenue Center** – The Revenue Center is not used; no programming is required. You can disable this category if desired so it does not appear as a selection.
 - ⇒ **Terminal & Network** – This program area is used to view the current Terminal Information and to establish IRC (*Inter-Register Communication*) for the system. Refer to the “IRC Network Setup” chapter on page 115 in the Appendix for details.

Revenue Center

Revenue Center is Not used; no programming is required. This category may be disabled so it does not appear as a selection.

1. From the main **PROGRAM MODE** selection menu, touch **NETWORK & REVENUE**.
2. Select **REVENUE CENTER** from the **NETWORK & REVENUE** selection menu.



Terminal & Network

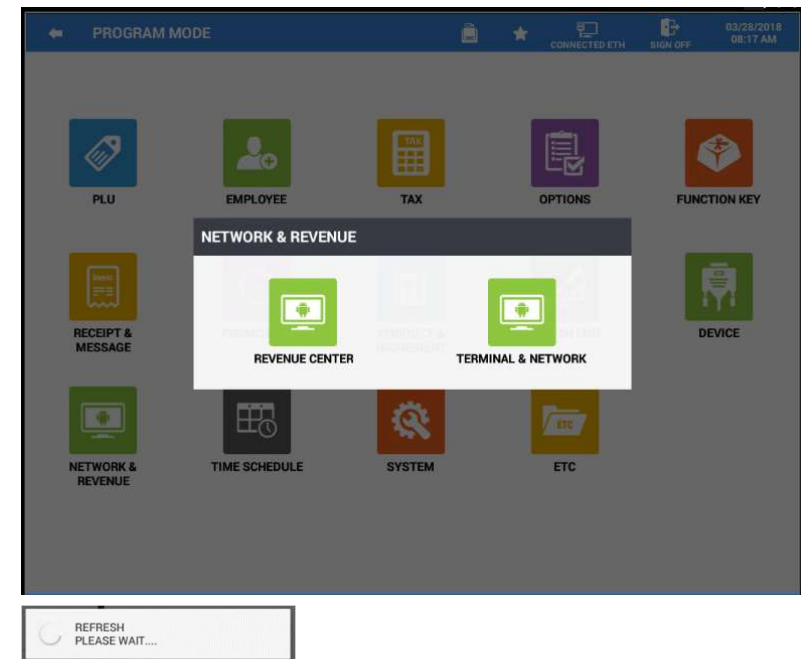
This program area is used to view the current Terminal Information and to establish IRC (*Inter-Register Communication*) for the system.

Note: When accessing the Terminal & Network category, a message may appear indicating: Store Name Does Not Match; Are You Sure To Delete This Item? You can press YES each time this message is displayed, no program or report data is affected.

IRC Network Setup

IRC (*Inter Register Communications*) is defined in the Terminal & Network selection in the Network & Revenue programming. The IRC uses standard Ethernet communications. When the IRC is active, all terminals in the system are updated automatically when program changes are made.

1. From the main **PROGRAM MODE** selection menu, touch **NETWORK & REVENUE**.
2. Select **TERMINAL & NETWORK** from the **NETWORK & REVENUE** selection menu.

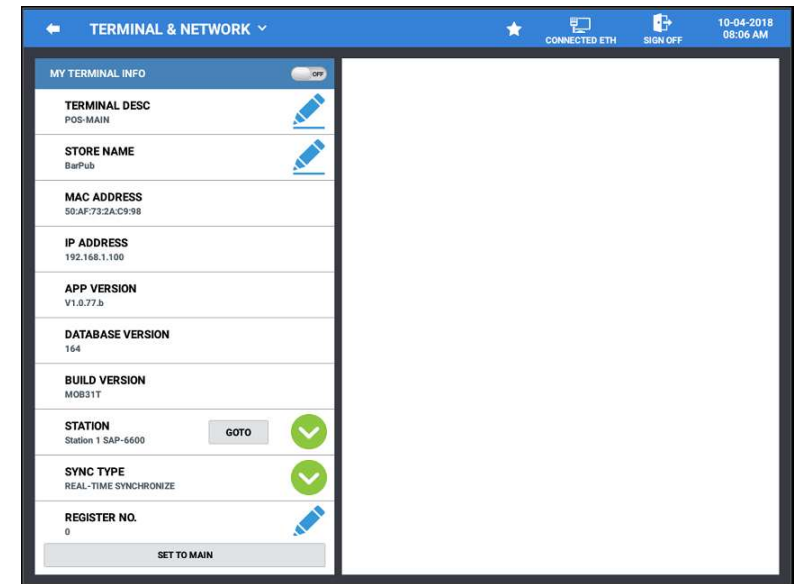


3. The terminal information will **REFRESH** each time this area is accessed:

4. When the data has been refreshed, the Terminal Info screen is displayed:
5. Press the **SET TO MAIN** or **RELEASE MAIN** button as needed.
 - **SET TO MAIN** – Pressing this button will set the current station as the Main terminal in an IRC configuration. Only one station in a network can be defined as the MAIN station.
 - **RELEASE MAIN** – Turns the IRC off on the POS-Main terminal.

Note: IRC must be turned off on all satellite stations before the current POS-MAIN station can be released.

- **TERMINAL DESC** –
 - When a station is Set To Main, the Terminal Descriptor is automatically set as POS-MAIN.
 - At all satellite stations, enter a unique descriptor for each satellite terminal, i.e. Bar Terminal, Server Station, etc. before turning the IRC On.
- Set the **STORE NAME** on all terminals in the system:
 - The STORE NAME must match exactly on all terminals in an IRC system and is case sensitive.
- **IP ADDRESS** – Each station in the system must have a unique IP; the first 3 octets of the IP will be the same, the last octet must be unique.
Example: 192.168.1.100, 192.168.1.101, 192.168.1.102, etc.
- Decide which terminal will be the “**MAIN TERMINAL**”
 - Touch **SET TO MAIN** on that terminal
- At all other terminals, move the slider bar next to **MY TERMINAL INFO**, to **ON**.
 - The stations will Synchronize to the MAIN Terminal, current settings and totals will be lost.



Time Schedule

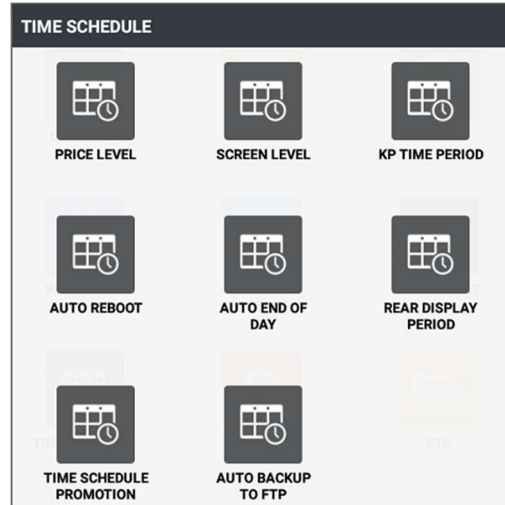
The Time Schedule programming enables certain actions to automatically occur at a predetermined time. All the time schedule operations are programmed in the same manner and will execute the operation even if no employee is signed on.

1. Select **TIME SCHEDULE** from the main **PROGRAM MODE** menu selection screen.
2. Choose the **Time Schedule category** from the selection menu you wish to set up or edit. Time Schedules are available for:
 - ⇒ **Price Level** – The default program provides one price level. However, SAM4POS allows you to create as many different price levels as are necessary for your application.
 - ⇒ **Screen Level** – MLU screens can be set to automatically load at certain times. This is useful if you want different MLU screens such as Breakfast/Lunch/Dinner to display at a specified time.
 - ⇒ **KP Time Period** – Use to automatically switch the KP Period at specified times. KP Time Periods are used when setting up KP Group programming.
 - ⇒ **Auto Reboot** – Allows you to set a time for the terminal to automatically reboot or shutdown as desired.
 - ⇒ **Auto End Of Day** – End Of Day reporting can be set to automatically generate at a specified time. Report totals as defined in the **End Of Day (EOD)** report screen will be cleared, printed and eMailed the same as if they were executed from the EOD screen. Auto End Of Pay, Auto End Of Not Found PLU and REPORT function key reporting can also be set be setup from this program area.
 - ⇒ **Rear Display Period** – Is only available on the SAP-6600(II) terminals.
 - **NOTE:** The SAP-630 does not have the Rear Display Period category selection.
 - ⇒ **Time Schedule Promotion** – Used to automatically apply certain promotions at specified times. Time Schedule Promotions are used with the promotion programming when the option “Use Time Schedule” is set on the promotion function key.
 - ⇒ **Auto Backup To FTP** – When time constraints prevent backing up Logs & Database files immediately to your own FTP site, this operation can be scheduled to initiate the backup automatically at a defined time. The Auto Backup to FTP will follow the FTP settings in the Program Mode > System > Log Backup.
 - ⇒ **Real Keyboard Period** – This feature is available for the SAP-630\SAP-530 terminals only. Multiple Real-Keyboards can be created with an individually defined set of keyboard functions for each key on the keyboard. For example, separate levels might be required for different lunch/dinner menus; Or, within a restaurant, different keyboards might be set up for pre-check, bar and/or cashier stations.
 - **NOTE:** The SAP-6600(II) does not have the Real Keyboard Period category selection.

Important: If you use the Auto-Backup to send Logs/Database files to the CRS FTP, be sure to turn off the Auto-Backup schedule after the files have been uploaded. If the schedule is not turned off the FTP site will quickly fill up and no files will be able to be uploaded.

Setting Up Time Schedules

1. Select **TIME SCHEDULE** from the main **PROGRAM MODE** menu selection screen.



2. The **TIME SCHEDULE** selection menu appears; choose the program category from the selection menu you wish to setup or edit.

Note: The SAP-6600(II) does not have the Real-Keyboard Period category selection.

The SAP-630 does not have the Rear Display Period category.

Time Schedule Categories

SAP-6600(II)

Price Level, Screen Level, KP Time Period

Auto Reboot, Auto End Of Day, ***Rear Display Period*** (SAP-6600(II) only)

Time Schedule Promotion

SAP-630 / HM626 / HM616

Price Level, Screen Level, KP Time Period

Auto Reboot, Auto End Of Day, Time Schedule Promotion

Real Keyboard Period (SAP-630 only)

System

The System menu provides access to the SAM4POS application License information, as well as program backup and restore operations. We can also access the Android terminals settings, access the Super Macro files, load upgrades via APK install, Team Viewer remote access operations and perform touch calibration.

1. Choose **SYSTEM** from the main **PROGRAM MODE** menu selection screen.
2. Choose the program area you wish to access from the **SYSTEM** menu selections. The System category selections are:
 - ⇒ **Register License** – Displays the current license information and serial number for the SAM4POS station. Refer to “License Registration” on page 29 for details.
 - ⇒ **Database** – Provides access to the database backup operations for the current program files. This will back up the current database files and sales information.
 - ⇒ **Log Backup** – Provides a means to save log data and database files to a USB drive, Internal Storage or FTP site. Backing up to an FTP site requires access to an active internet connection.
 - ⇒ **Settings** – Android terminal can be accessed without having to completely exit out of the SAM4POS application.
 - ⇒ **Super Macro** – The super macro is a troubleshooting resource; it records the keystrokes performed. Super Macro data is stored in the internal memory as the SAM4POS\VerboseLog.
 - ⇒ **Program Backup & Restore** – Provides a means to back up the program files in a CSV format and backup the current image file in the SAM4POS.
 - ⇒ **APK Install** – Used to install AKP files to the terminal such as updating the SAM4POS application firmware or updating the TeamViewer Quick Support.
 - ⇒ **Team Viewer** – Team Viewer is a remote access utility that can be used to remotely support the SAM4POS application.
 - ⇒ **Calibrator** – allows you to calibrate the touch screen without having to exit the SAM4POS application. Available calibration methods include a 3-Point, 5-Point and 9-Point calibration.

Register License

As discussed previously, this category displays the current license information for the station. Licenses are registered from this screen and the EULA can be viewed.

- ⇒ **My License Info** – Provides current license information and expiration date.
- ⇒ **License Registration** – Press this button to view the current license information or to register a new license for the station.
- ⇒ **View EULA** – Press this button to view the **E**nd **U**ser **L**icense **A**greement.

Database

The database menu provides access to the database backup operations for the current program files. The database can be backed up manually or you can set the backup to execute at a specified date and time.

NOTE: The Options > Options> Report Options: Email Address For Export & Gmail Account & Password settings do not save when the performing a Database Backup. This is by design so that if you Database Restore the same program at a different merchants site, the original merchants Gmail credentials are not accessible to the new merchant site.

Database Backup

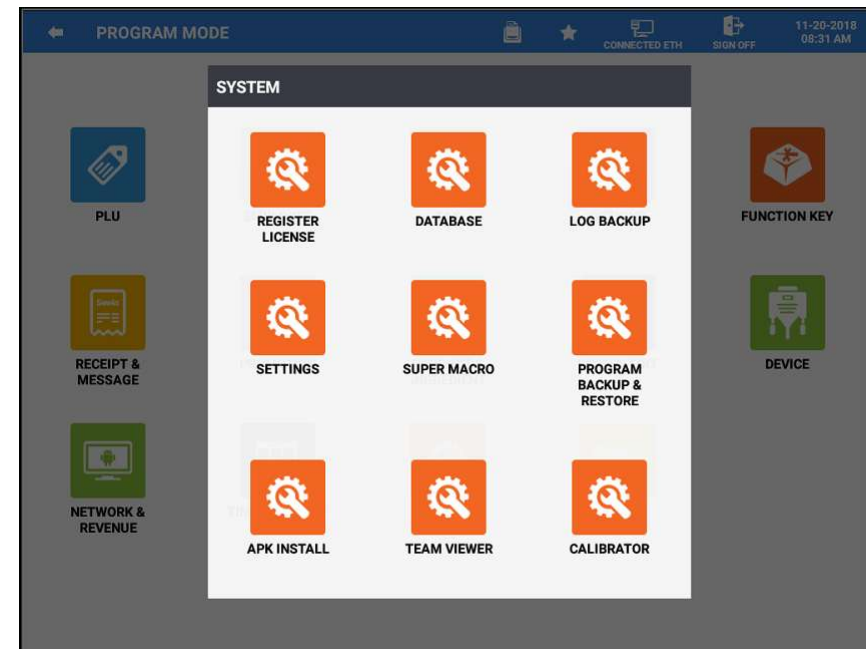
The System menu provides access to the SAM4POS application License information, as well as program backup and restore operations. The Database can be saved to a USB memory device or to the Sam4POS terminals Internal Storage.

A lot of time can be spent creating or editing a customer's program, it is a good practice to back up the program after editing or creating the program. The Database menu provides access to the Database Backup operation. The Database can be backed up manually or the backup can be set to execute at a specified date and time. We can also restore the customer's program file from the database menu; you must sign on as the system admin to perform the database restore.

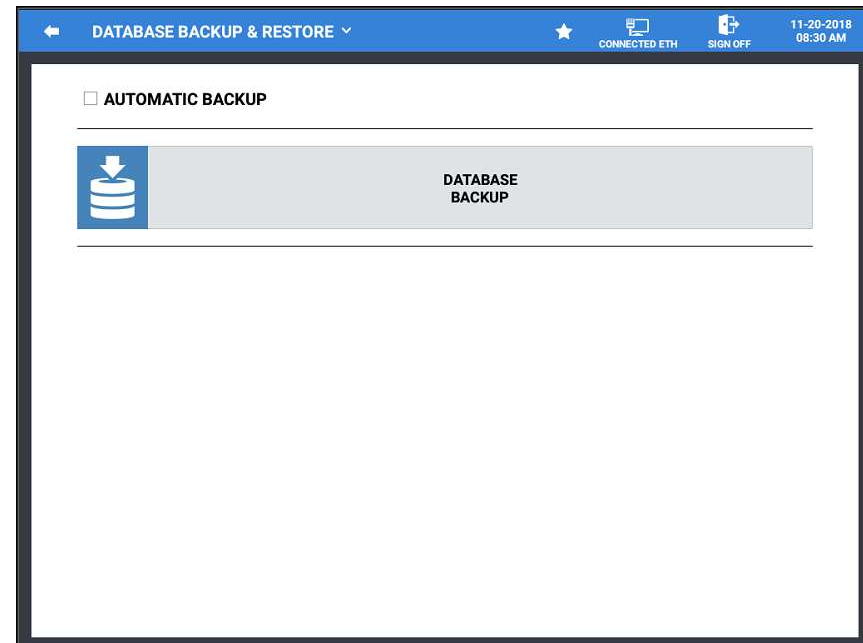
Caution! Dealers can only Restore a database from a database backed up from terminal that is licensed to them.

You cannot restore a database file backed up from a terminal licensed to a different dealer.

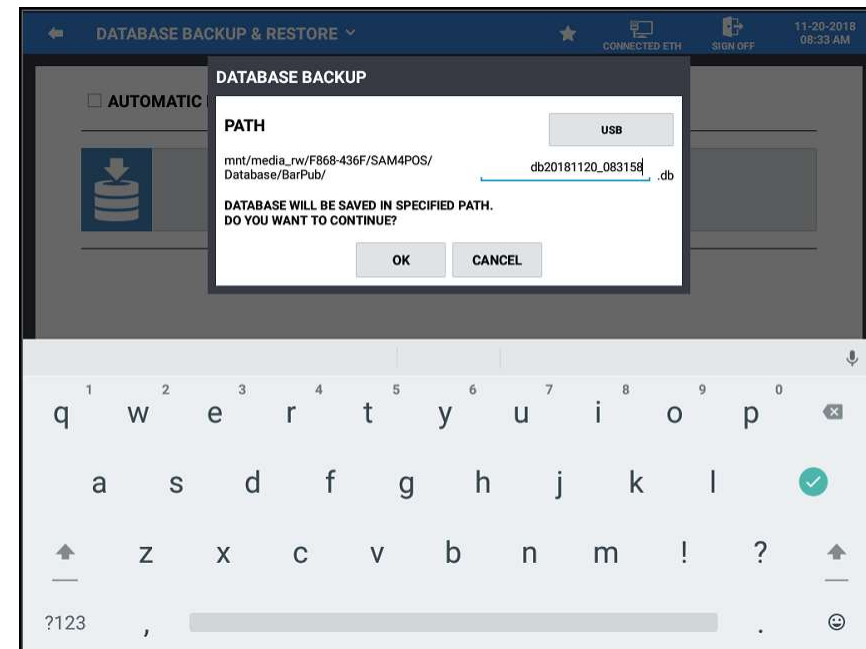
1. From the main **PROGRAM MODE** menu selection screen Choose **SYSTEM**.
2. The **SYSTEM** menu screen displays. Choose the **DATABASE** menu selection.



3. Press the **DATABASE BACKUP** to open the database backup dialog.



4. Select the device **PATH** you wish to back up to; PATH selections are USB or Internal Storage.
Note: If you have more than one terminal at an installation, to keep each register file separate, you can type in a description in the PATH, *i.e.* POS-1, POS-2, POS-3, etc.
5. Press **OK** to initiate the backup of the current database.



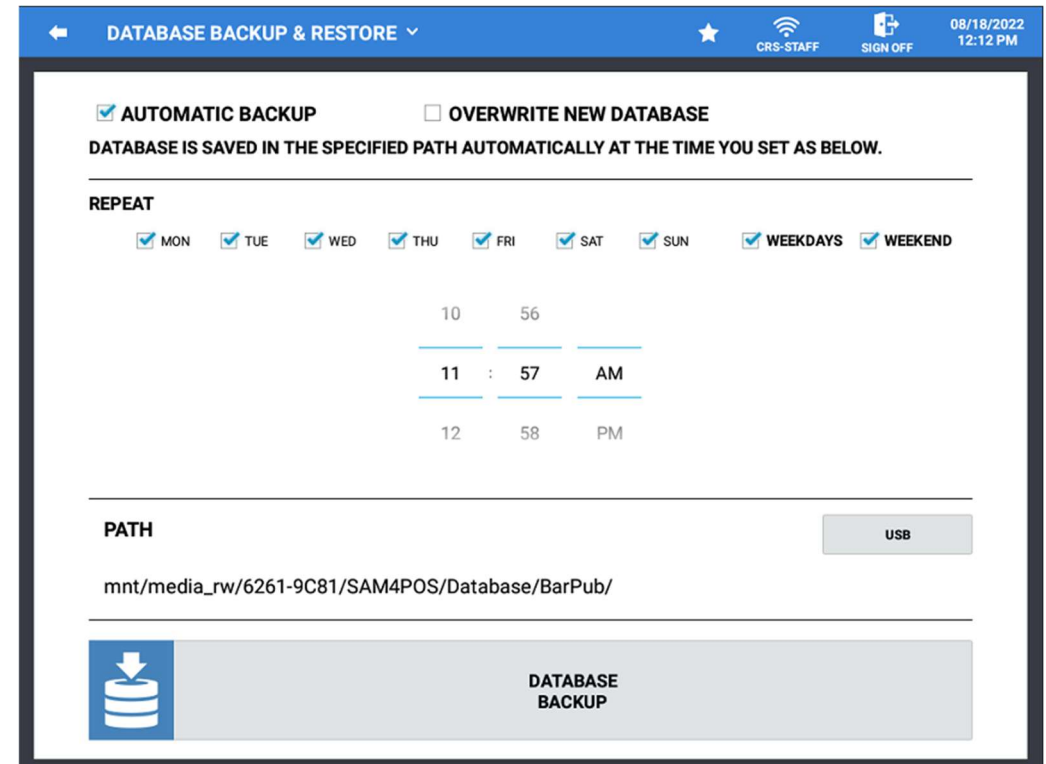
6. The Database Backup Success dialog displays; press **OK**.



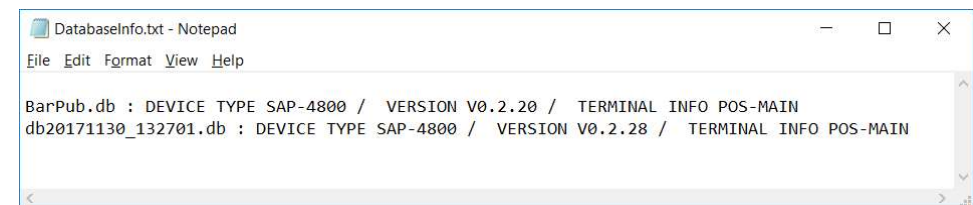
7. If your customer makes frequent changes to the database (*menu changes, daily specials, etc.*) we can set the **AUTOMATIC BACKUP** to initiate at a specified Date/Time.
 - If saving the Backup to Internal Storage, make sure to also check the **Overwrite New Database** selection. This will overwrite any existing Database Backups with the New Database Backup.

Warning! If this is not checked, each time the database is backed up a new DB file is created and saved to internal storage, eventually this will fill up the Internal Storage.

8. When the database has backed up successfully, three files are created on your memory device:
 - DatabaseInfo.txt
 - “dbDate_Time”.db
 - “dbDate_Time”.txt
9. The DatabaseInfo.txt file contains terminal information about the saved DB:
10. As a Best Practice, when you save the DB files from the store, keep them in separate directories for each terminal in the system.



DatabaseInfo.txt	8/18/2022 11:57 AM	Text Document	1 KB
db20220818_115701.db	8/18/2022 11:57 AM	Data Base File	3,235 KB
db20220818_115701.txt	8/18/2022 11:57 AM	Text Document	1 KB



LOG Backup

The log backup provides a means to save log data and database files to a USB drive or Internal Storage. We can also send the log data to an FTP site if desired. Backing up to an FTP site requires access to an active internet connection.

The Sam4POS terminal automatically generates a log file that saves operational data for the last 10 days, in IRC systems, each station maintains its own log files. When reporting an operation issue or if you experience a generic FAILURE error message, we may ask to receive the Log's with the Database files from all stations in the system.

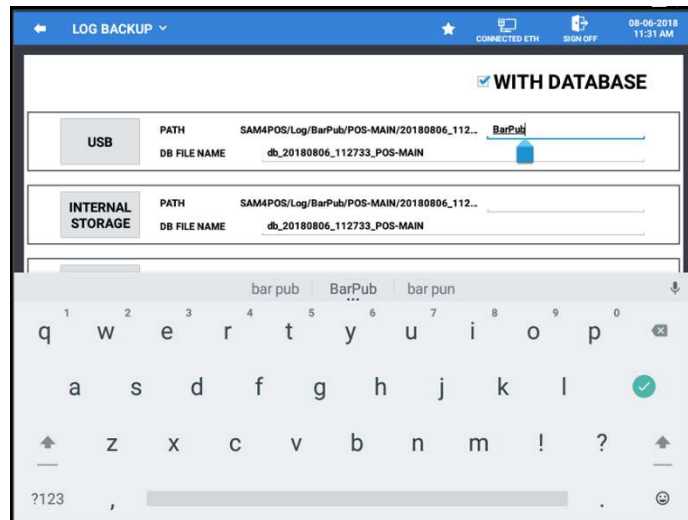
1. From the **PROGRAM MODE**, go to **SYSTEM** and select **LOG BACKUP**. The Log Backup dialog screen displays:

Device Type	PATH	DB FILE NAME
USB	SAM4POS/Log/BarPub/POS-MAIN/20181120_095... BarPub	db_20181120_095232_POS-MAIN
INTERNAL STORAGE	SAM4POS/Log/BarPub/POS-MAIN/20181120_095...	db_20181120_095232_POS-MAIN

FTP	IP ADDRESS	PORT NUMBER
	crsftp.crs-usa.com	0

Type in your desired directory name in the PATH of the device you want to back up to or use the default.

2. Check the **WITH DATABASE** selection to back up the database with the Log backup.
3. On the **PATH** line for the device you are backing up to, type in a directory name for the data to back up to.
4. In the **DB FILE NAME**, you can use the default file name or type in a custom file name if desired.



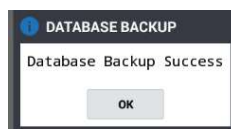
5. Press the button for **USB**, **SD Card**, or **FTP** to initiate the backup.
6. **Note: PATH and DB FILE NAME are not used when backing up to FTP.**
7. The Backup begins, the progress dialog displays:



8. Each Log file currently available in the SAM4POS will be backed up to the directory as defined: **D:\SAM4POS\Log\SAM4POS\POS-MAIN\DemoStore.**
9. When the backup is complete, the confirmation messages will display briefly:



Press OK; then



Press OK




10. The data files are saved as a zipped (compressed) file to the directory as defined. The file is saved as a Date_Time stamped format such as **Log_20171019_090922.zip.**
11. Unzip the log files to view individual logs. Logs are saved as a text file you can view the log files using a text editor such as MS Notepad.
12. Press the back-arrow icon on the title bar to exit the log backup.

Remote FTP Log Backup

When reporting an operation issue or if you experience a generic FAILURE error message, we may ask to receive the terminals Log's with the Database. The log backup provides a means to save log data and database files to a USB drive or an SD Card. We can also send the log data to an FTP site if desired. Backing up to an FTP site requires access to an active internet connection.

1. From the **PROGRAM MODE**, go to **SYSTEM** and select **LOG BACKUP**. The Log Backup dialog screen displays:
2. Check the **“WITH DATABASE”** selection to back up the database along with the Log Backup.

Note: PATH and DB FILE NAME are not used when backing up to FTP.

3. Enter the **IP ADDRESS** or URL for the FTP site where you want to send the backup to; Press **Next** (the  icon).
4. Enter **0** for the **PORT NUMBER**; Press **Next** (the  icon).
5. Enter a 'Store Name'; Then Press **Done** (the  icon).
6. Make sure the 'WITH DATABASE' option is checked; Press the **FTP** button to initiate the backup.

The screenshot shows the 'LOG BACKUP' dialog with the following fields:

Destination	PATH	DB FILE NAME
USB	SAM4POS/Log/BarPub/POS-530RT/20180910_09... BarPub	db_20180910_091837_POS-530RT
EXTERNAL SD CARD	SAM4POS/Log/BarPub/POS-530RT/20180910_09...	db_20180910_091837_POS-530RT
INTERNAL STORAGE	SAM4POS/Log/BarPub/POS-530RT/20180910_09...	db_20180910_091837_POS-530RT

The **FTP** section is active, showing:

- IP ADDRESS: crftp.crs-usa.com
- PORT NUMBER: 0

7. The SAM4POS connects to the FTP Server, then the Backup begins, the progress dialog displays:

The progress dialog shows two sections:

- CONNECTING TO FTP SERVER PLEASE WAIT....
- SAVING PLEASE WAIT.... with a progress bar at 70% and a timer at 7/10.

8. Each Log file currently available in the SAM4POS will be backed up to the FTP Site along with the database.
9. When the backup is complete, the confirmation messages will display briefly:
10. The data files are saved to the FTP site.
11. Press the back-arrow icon on the title bar to exit the log backup.

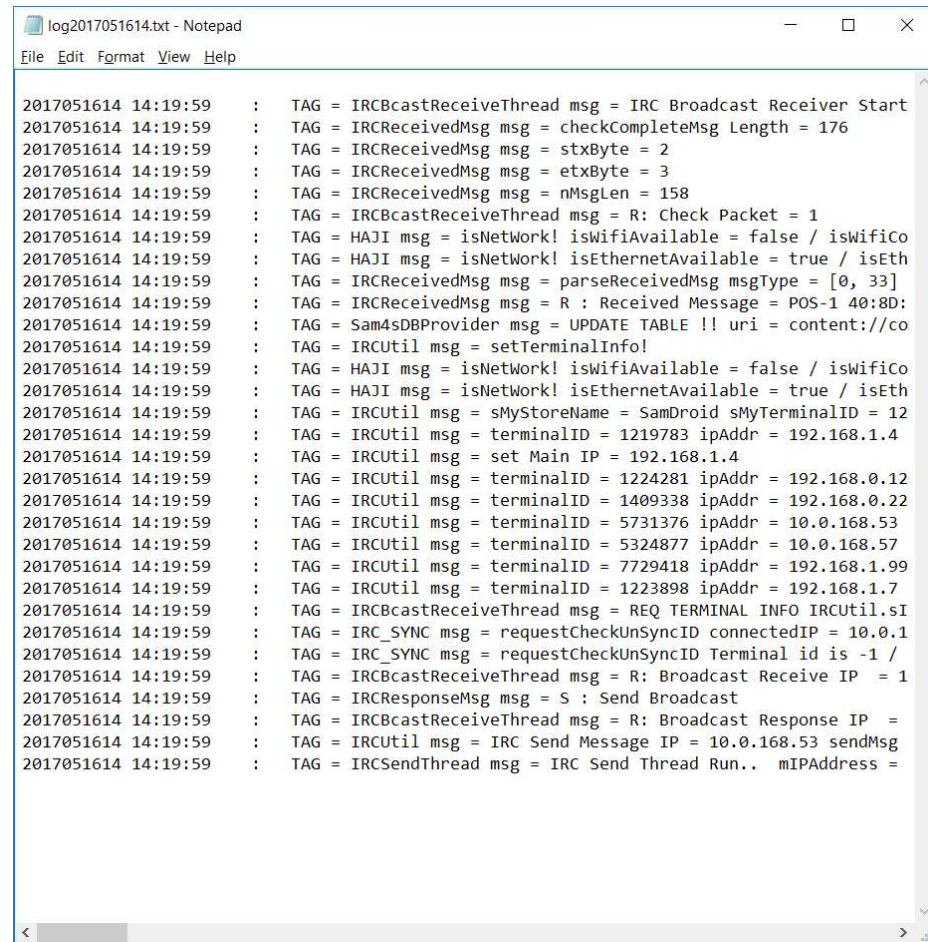
Two confirmation dialog boxes are shown:

- DATABASE BACKUP SUCCESS** with an **OK** button.
- LOG BACKUP SUCCESS** with an **OK** button.

Press OK

Press OK

Log Backup Example



```
log2017051614.txt - Notepad
File Edit Format View Help

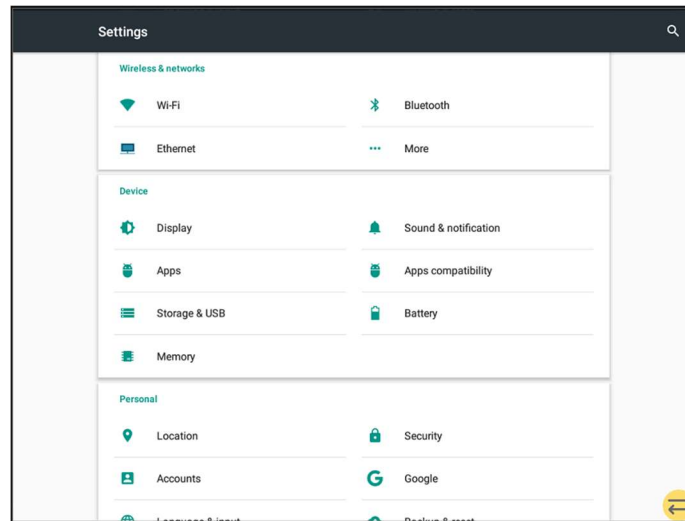
2017051614 14:19:59 : TAG = IRCBcastReceiveThread msg = IRC Broadcast Receiver Start
2017051614 14:19:59 : TAG = IRCReceivedMsg msg = checkCompleteMsg Length = 176
2017051614 14:19:59 : TAG = IRCReceivedMsg msg = stxByte = 2
2017051614 14:19:59 : TAG = IRCReceivedMsg msg = etxByte = 3
2017051614 14:19:59 : TAG = IRCReceivedMsg msg = nMsgLen = 158
2017051614 14:19:59 : TAG = IRCBcastReceiveThread msg = R: Check Packet = 1
2017051614 14:19:59 : TAG = HAJI msg = isNetwork! isWifiAvailable = false / isWifiCo
2017051614 14:19:59 : TAG = HAJI msg = isNetwork! isEthernetAvailable = true / isEth
2017051614 14:19:59 : TAG = IRCReceivedMsg msg = parseReceivedMsg msgType = [0, 33]
2017051614 14:19:59 : TAG = IRCReceivedMsg msg = R : Received Message = POS-1 40:8D:
2017051614 14:19:59 : TAG = Sam4sDBProvider msg = UPDATE TABLE !! uri = content://co
2017051614 14:19:59 : TAG = IRCUtil msg = setTerminalInfo!
2017051614 14:19:59 : TAG = HAJI msg = isNetwork! isWifiAvailable = false / isWifiCo
2017051614 14:19:59 : TAG = HAJI msg = isNetwork! isEthernetAvailable = true / isEth
2017051614 14:19:59 : TAG = IRCUtil msg = sMyStoreName = SamDroid sMyTerminalID = 12
2017051614 14:19:59 : TAG = IRCUtil msg = terminalID = 1219783 ipAddr = 192.168.1.4
2017051614 14:19:59 : TAG = IRCUtil msg = set Main IP = 192.168.1.4
2017051614 14:19:59 : TAG = IRCUtil msg = terminalID = 1224281 ipAddr = 192.168.0.12
2017051614 14:19:59 : TAG = IRCUtil msg = terminalID = 1409338 ipAddr = 192.168.0.22
2017051614 14:19:59 : TAG = IRCUtil msg = terminalID = 5731376 ipAddr = 10.0.168.53
2017051614 14:19:59 : TAG = IRCUtil msg = terminalID = 5324877 ipAddr = 10.0.168.57
2017051614 14:19:59 : TAG = IRCUtil msg = terminalID = 7729418 ipAddr = 192.168.1.99
2017051614 14:19:59 : TAG = IRCUtil msg = terminalID = 1223898 ipAddr = 192.168.1.7
2017051614 14:19:59 : TAG = IRCBcastReceiveThread msg = REQ TERMINAL INFO IRCUtil.sI
2017051614 14:19:59 : TAG = IRC_SYNC msg = requestCheckUnSyncID connectedIP = 10.0.1
2017051614 14:19:59 : TAG = IRC_SYNC msg = requestCheckUnSyncID Terminal id is -1 /
2017051614 14:19:59 : TAG = IRCBcastReceiveThread msg = R: Broadcast Receive IP = 1
2017051614 14:19:59 : TAG = IRCResponseMsg msg = S : Send Broadcast
2017051614 14:19:59 : TAG = IRCBcastReceiveThread msg = R: Broadcast Response IP =
2017051614 14:19:59 : TAG = IRCUtil msg = IRC Send Message IP = 10.0.168.53 sendMsg
2017051614 14:19:59 : TAG = IRCSendThread msg = IRC Send Thread Run.. mIPAddress =
```

Settings

From the Android Settings area, we can set the Date & Time, Cash Drawer port voltage setting and turn on COM port voltage. The settings for the Android terminal can be accessed without having to completely exit out of the Sam4POS Application. The available settings differ between the different model terminals, Sapphire A60/A70, SAP-6600(II)/630 and the HM626 & HM616 tablets.

Enabling the COM Ports and voltage settings on the SAP-6600/630 is done in the bios settings. An external Keyboard is required to access the BIOS settings. Use the external keyboard to edit and save changes. Video showing Enable Com Port/Setting Com Port Voltage: <https://youtu.be/NIWbZ4zZ8MU>

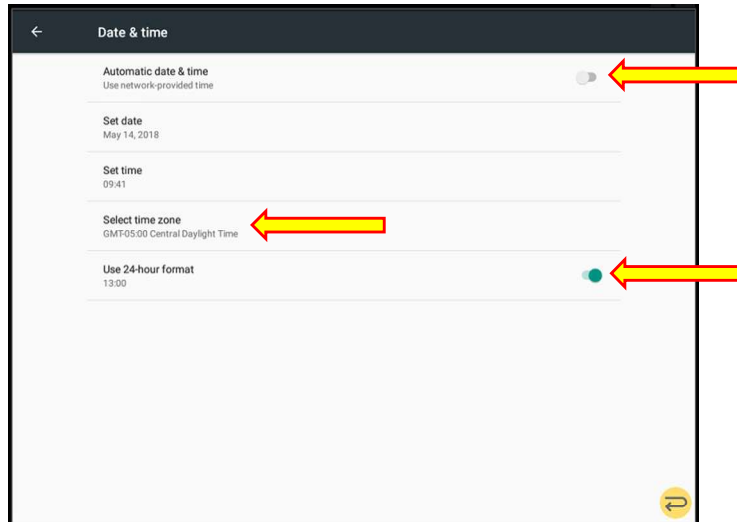
1. From the from the main **PROGRAM MODE** select the **SYSTEM** menu the touch **SETTINGS**. The **MANAGER REQUIRED / MANAGER PASSWORD** entry dialog displays (*depending on the current employee authority settings*).




2. From the Android Settings area, we can edit:
 - Wireless & Networks:
 - Wi-Fi \ Ethernet
 - Device:
 - Display, Apps Storage & USB, Memory Sound & Notification, Apps Compatibility, Battery
 - Personal:
 - Location, Accounts, Language & Input, Security, Google, Backup & Reset
 - System:
 - Date & Time, Printing, Developer Options, Accessibility, Super User, About Tablet
 - * Developer Options: Cash Drawer port voltage setting and turn on COM port voltage on SAP-4800II and SAP-530 terminals.

Date & Time Setting

1. From the main **PROGRAM MODE** select the **SYSTEM** menu the touch **SETTINGS**.
 - The **MANAGER REQUIRED / MANAGER PASSWORD** entry dialog displays (depending on the current employee authority settings).
 - Enter your manager password and press **ENTER**. (The default manager password is 9999.) The Settings menu screen for your Android device displays.
2. Scroll down the **Settings** category list to the **SYSTEM** category.



3. Select Date & Time from the available selections and set as desired:
 - **Automatic date & time** or manually enter the date & time. Then choose
 - **Select Time Zone** and Scroll to the desired time zone; (tap to select the zone).
 - **Use 24-hour Format** – Choose 24-hour format (as shown) or 12-hour AM/PM format.
4. To return to the SAM4POS application, press the  icon.

COM Port Voltage Setting

SAPPHIRE A60/A70

COM Port Voltage settings on the Sapphire A60/A70 terminals is enabled in the Android settings.

In the Sam4POS, go to **Program Mode > System > Settings > Device Status > COM Settings**.

Available settings for **COM 1 ~ COM 4** are: **NONE, 5V** or **12V**.

SAP-6600(II)/SAP-630

Enabling the COM Ports and voltage settings on the SAP-6600(II)/630 is done in the BIOS settings. Use an external Keyboard to access the BIOS settings, edit and save changes.

Alternately, if no keyboard is available, you can reboot the terminal and double-tap the SETUP in the upper right corner of the display when it appears to access the BIOS settings. You can also double-tap settings to access, edit and save your changes.

Video showing Enable Com Port/Setting Com Port Voltage: <https://youtu.be/NIWbZ4zZ8MU>

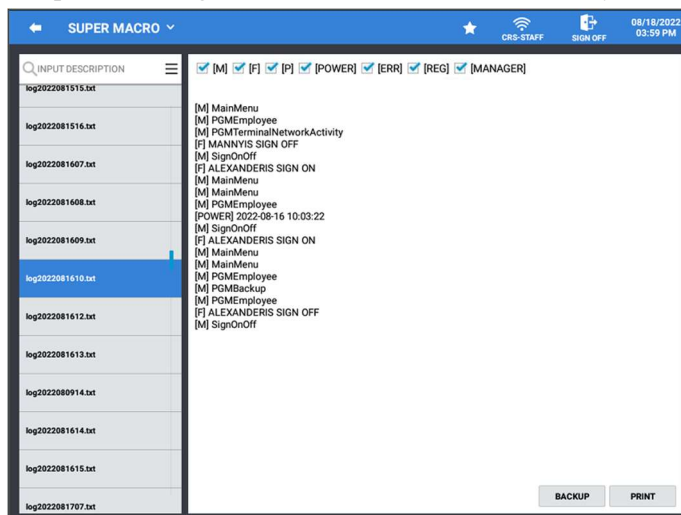
1. **Power Off** the SAM4POS ECR and connect a USB keyboard to the terminal.
2. **Power On** the SAM4POS ECR; press **Delete** when the terminal begins loading to access BIOS settings.
3. Using the arrow keys on the keyboard, arrow over to the **Advanced** tab and select **F81960 Super IO Configuration**; press **ENTER**.
4. Arrow down to the desired **COM1/2/3 Power Select** and press **ENTER**.
 - Select the appropriate voltage setting (**5V** or **12V**) for the connected device; press **ENTER**.
5. Press **F10** to **Save & Exit** the BIOS settings.
6. The SAM4POS CASH REGISTER APPLICATION will launch to the main sign on screen.

Super Macro

The super macro is a troubleshooting resource; it records the keystrokes performed on the terminal. We can back up the super macro data to either an SD card or to a USB drive. Super Macro data is stored in memory as the SAM4POS\VerboseLog. The super macro data is organized by date in a text file format (i.e. log20170123.txt). We can also print the super macro data to the local printer on the SAM4POS station.

Note: On terminals that have an SD port, the SD port is viewed as a USB port. Super Macro data is available on the terminal for 10 days.

1. From the **PROGRAM MODE** go to **SYSTEM** and select **SUPER MACRO** from menu selections.
2. Select the super macro log date text file from the left column you wish to view.



[M]	Keystroke is a mode selection
[F]	Keystroke is a function key
[P]	Keystroke is a PLU entry
[POWER]	Indicates terminal lost power/ rebooted
[ERR]	Select to display errors that may
[REG]	Indicates the register sales mode is selected
[MANAGER]	Select to display manager operations

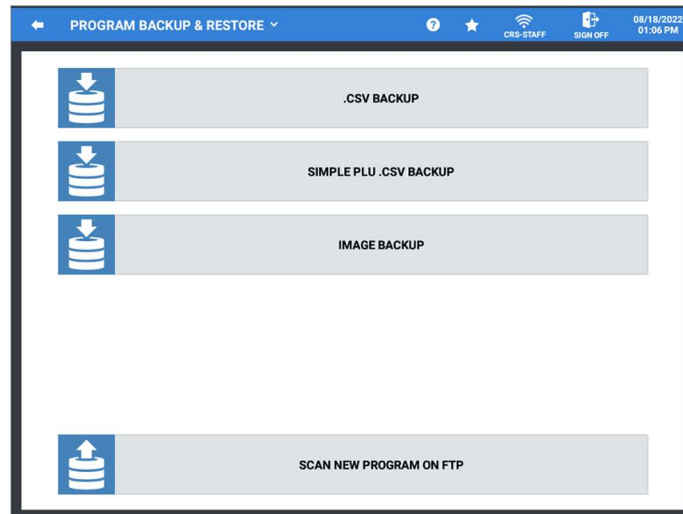
3. Check the selection(s) at the top of the viewing window on the right you want to view on the selected Super Macro log file. Each keystroke is preceded with a code. Refer to the chart below for code definitions.
4. Press the appropriate operation button to:
 - **Backup** – Back up the currently selected super macro data to a USB Drive (when installed). When no USB installed the selected file is saved to internal storage. When backed up, the super macro data is saved to VerboseLog directory on the USB drive or internal storage. i.e. D:\SAM4POS\VerboseLog
 - **Print** – Print the selected super macro log file to the receipt printer for the current station.
5. The **menu icon** ≡ can be used to access the **Edit Mode** (to select individual files to delete) or select **EJ Report Send Range To Email**.

Program Backup & Restore

Program Backup & Restore provides a means to back up the program files in a CSV format and backup the current image file in the SAM4POS.

Note: Restore operations are only available when signed on using the system admin code.

- ⇒ .CSV Backup – The .CSV BACKUP backs up all the configuration programs into files that can be opened and edited in Excel.
- ⇒ Simple PLU .CSV Backup – SIMPLE_PLU.CSV BACKUP backs up just the specific PLU data necessary into a file that can be opened and edited in Excel.
- ⇒ Image Backup – The IMAGE BACKUP backs up any images that are being used on keys, screens, receipts or screensavers.
- ⇒ Scan New Program On FTP – merchants can use this operation to send data to their own FTP server. In the case of “Polling” we will be sending and receiving data via FTP. To use this feature, you must first set the FTP option settings in: **Program Mode** \ **OPTIONS** \ **OPTIONS** \ **GENERAL OPTIONS** \ **FTP** settings.



AKP Install

The APK Install selection on the System menu selection screen provides an easy means to update the SAM4POS application without having to exit out of the Sam4POS application. Updating the Sam4POS application file does not clear any current programming or affect report totals. Refer to Software updates\AKP Install on page 45 for details. The most current SAM4POS Application files can be obtained from the CRS Website at: <https://www.crs-usa.com/products/software>.

The APK files are specific to the type of terminal you have. When you download and unzip the file from the CRS web site, all APK files for all the different Sam4POS terminal models are included in the downloaded file: **(a), (b), (c), (d), (e)**.

Version (a) – Is used with the SAP-530 and SAP-4800(II).

(4800_530)Sam4pos_Vx.x.xx.a

Version (b) – Is used with the SAP-6600(II) and SAP-630 terminals.

(6600_630)Sam4pos_Vx.x.xx.b

Version (c) – Is used with the Hisense HM616 Tablet.

(HM-616)Sam4pos_Vx.x.xx.c

Version (d) – Installs on the Hisense HM626 Tablet *(Requires v2.0.106 or later.)*

(HM-626)Sam4pos_Vx.x.xx .d

Version (f) – Installs on Hisense HM-626 tablets. *(Requires v2.0.184.)*

(HM-626)Sam4pos_Vx.x.xx .f

* This (f) firmware version takes care of duplicated license code issues for the HM626. The (f) version uses the CPU serial number + Wi-Fi Mac address, so you need to **connect the tablet to the WI-FI before you install SAM4POS.**

Version (e) – Is used with the Sam4s Sapphire A60 and A70 terminals. *(Requires v2.0.161 or later.)*

(Sapphire)Sam4pos_Vx.x.xxx.e

Updates can be performed locally using a USB drive or you can update the APP remotely using Team Viewer file transfer.

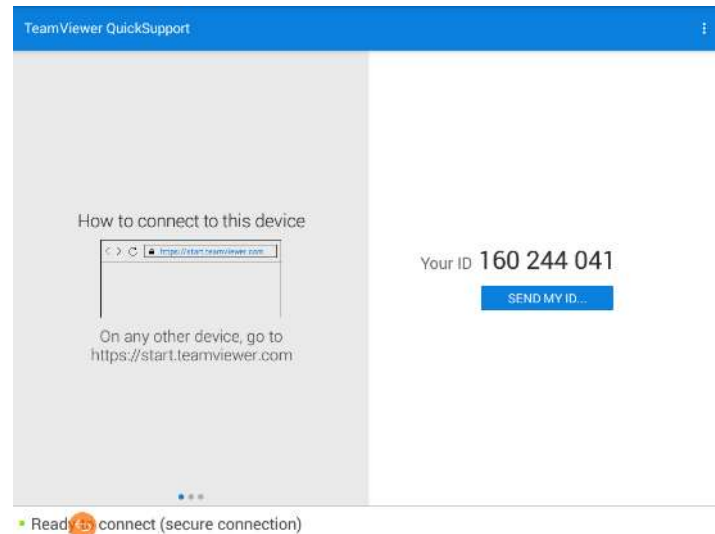


Team Viewer

Team Viewer is a remote access utility that can be used to remotely support the SAM4POS application. The Team Viewer Quick Support application is already pre-loaded on the SAM4POS terminals. A connection to the Internet is required to be able to use this feature.

The device used to connect remotely to the Sam4POS terminal must have a premium (paid for) licensed version of TeamViewer. The Team Viewer license needs to include the Mobile Support module to be able to use with Sam4POS.

Note: In some cases, it also may be necessary to upgrade the TeamViewer Quick Support application on the Sam4POS terminal.



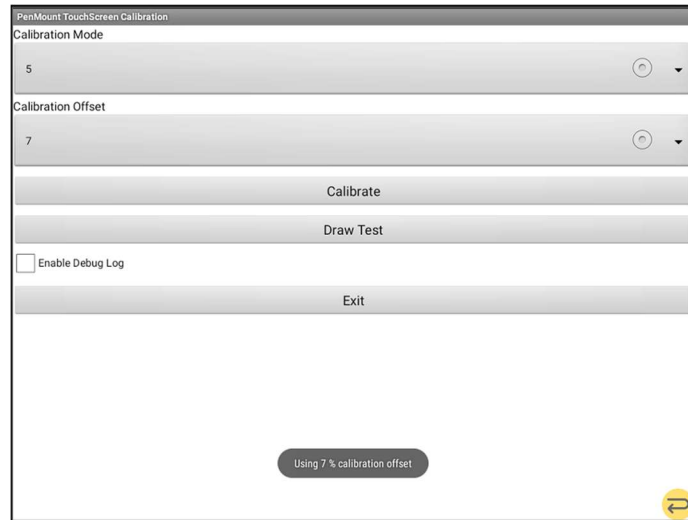
As an alternative a dealer could install Team Viewer Host. **TeamViewer Host** is a powerful and simple-to-use application that, once installed on one or multiple machines, allows computers using TeamViewer to remotely access them 24/7. It includes options for login/logout and remote system restart.

Calibrator

The Calibrator feature allows you to access the PENMOUNT touch screen calibration utility without having to exit out of the Sam4POS application. Available calibration methods include a 5-Point and 9-Point calibration. A Draw Test is available here as well. The Enable Debug Log selection is not used.

The touch controller on the SAP-6600(II) terminals was changed beginning with Serial Numbers 2108~ and later to the ACDC Touch Studio. Terminals using the ACDC touch controller do not require any calibration. Attempting to initiate the calibrator on these terminals will result in the Error: **[PENMOUNT] Failed to get RawX/RawY**

Sapphire A60 & A70 terminals require no calibration. If you select the CALIBRATOR category you will see a pop-up notification **CAN NOT START APPLICATION.**



ADMIN Operations

System Admin

Certain operations are only available when signed on to the Sam4POS terminal as the system admin or test mode. Specific operating codes are used to access these operations. Only operation in the program mode are allowed when signing on using the system admin code or test mode code.

Note: On the SAP-630/530 terminals, you must turn the mode switch to the “P” position to sign on with the Admin code.

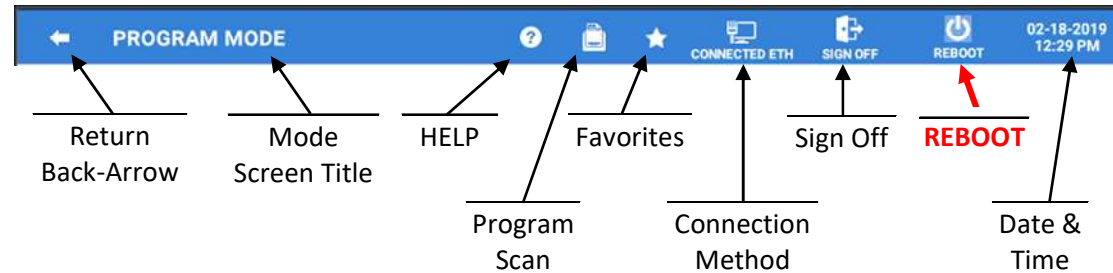
These password codes should not be shared with merchants and customers (end users) as these operations could potentially cause loss of all sales and programming data or licensing information. Refer to the separate ADMIN Mode supplement for complete details.

When you sign on to Sam4POS with the system admin code **4 5 6 8 5 2 7 5 3 9 5 1**, the Sam4POS terminal enters into the SYSTEM ADMIN MODE. You will have access to just the Program Mode while signed on as the System Admin. The program screens will appear as they normally do. Additional Operations reserved for the admin are available.

You can change the default System Admin Password (up to 12-digits) by going to: Program Mode " Options " Options " System Option: Admin Password

Exiting (Sign-Off) to the initial sign on screen releases the terminal from the SYSTEM ADMIN MODE.

Program Mode Title Bar Icons



Note: When signed on as the System Admin, An additional icon for **REBOOT** is displayed on all title bars.

Additional operations available when signed on as the system admin are:

- ⇒ Help Menu: Edit selections
- ⇒ Program Mode: Enable\Disable categories
- ⇒ Delete All PLU's: PLU Program \Edit Menu
- ⇒ Device\EFT Operation: Enable\Disable operations that appear
- ⇒ Database Restore & CSV file Restore & Image Restore operations
- ⇒ Convert SPS-500/2000, ER-900 & SPS-300 Programs to Database
- ⇒ PM Data Backup – (Not Used)
- ⇒ Scan New Program On FTP - Customers can use this to send data to their own FTP server. In the case of "Polling" we will be sending and receiving data via FTP. This is used with the FTP general option settings:

Program Mode \ OPTIONS \ OPTIONS \ GENERAL OPTIONS \ FTP

Database Restore

The database restore operation is reserved for dealers when signed on using the 12-digit ADMIN code. Use this operation to restore a program file that was previously backed up. All program data and report totals are saved when the Database Backup is performed, this data is restored when the Database Restore is performed. The default backup path is USB:/SAM4POS/Database/Sam4POS

In the Case of a dealer, they will only be able to load their own programs (Dealer Name must match with the license of the machine the program was saved on and attempting to be loaded on).

Security Note: Dealers will only be able to load their own programs (Dealer Name must match with the license of the machine the program was saved on and attempting to be loaded on). A dealer cannot backup the database from a different dealers installation and restore that database onto one of their own terminals.

Here is a helpful video showing the Database Restore: <https://www.youtube.com/watch?v=kvpDYMQDD70>

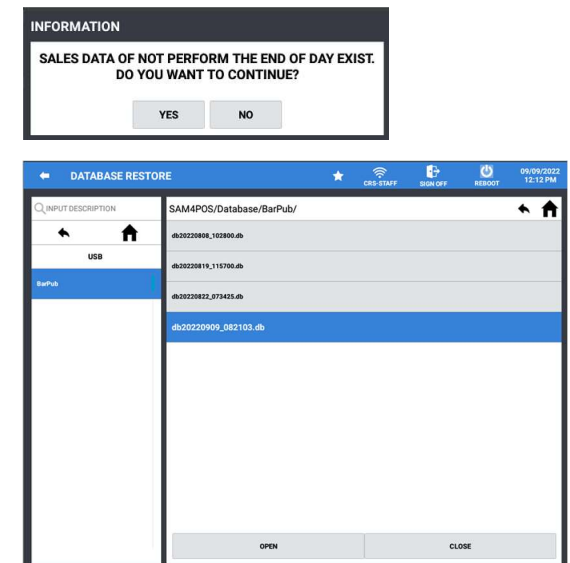
Note: Terminal must be licensed to allow this operation; 1, 2, 3, 5, or Dealer license. If the Sam4POS terminal has not been licensed or the license has expired, you will not be allowed to load a database file.

For demonstration, we will load each of the Sam4POS Demo programs:

- Quick Service Demo
- Retail Demo
- Table Service Demo

While signed on as the SYSTEM ADMIN, when you go to SYSTEM \ DATABASE and select DATABASE RESTORE, if the terminal info field in the Database being restored is different than the terminal info field in destination terminal, the terminal info in Database is replaced with the existing terminal info in the destination terminal.

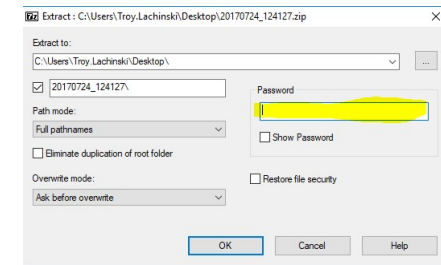
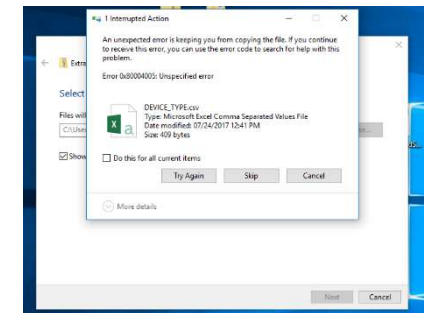
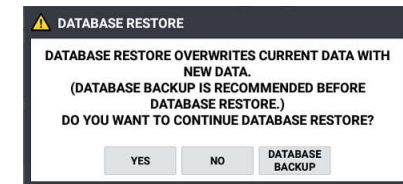
1. From the main sign on screen; sign on to Sam4POS as the System Admin: *(456 852 753 951)*
2. From the main **PROGRAM MODE** menu, press **SYSTEM**, select **DATABASE**, then touch **DATABASE RESTORE** on the menu selection screen. An Information dialog appears:
3. Press **YES** to continue. Pressing **NO** will exit the operation.
4. The Database Restore dialog screen displays.
5. Select the backup file you want to restore; Press **OPEN**.



6. The Database Restore confirmation dialog displays; Press **YES** to proceed with the restore operation.
 - Pressing **NO** will exit the operation without loading the database.
 - Pressing **Database Backup** will backup the current database.
7. The selected database will be restored and the Sam4POS application will automatically reboot.
8. After the **APP Reboot**, you will need to sign on to the terminal using an employee code associated with the restored database.

Note: Attempting to extract a program backup from a different dealers' installation will result in the Interrupted Action Error: This is due to the "dealer protection" feature in Sam4POS. The zip file has a password (the password built into the Sam4POS licenses for the dealer).

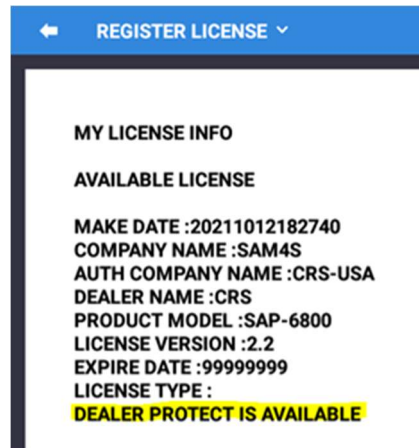
You will need to extract the file with the appropriate password entered.



Different To Dealer Name

If you receive the message “Different To Dealer Name” when attempting to restore a Database Backup file, there are several things you can check.

- You would get this error if the terminal you are loading the program on to doesn't have a valid license. The terminal must have a current Site license or Dealer license to be able to restore Database files and must match the original dealer license information.
- This error will result when loading a database that was saved on a license that is not yours.
 - Check the “Dealer Name” on the Register License screen to verify it is correct. This must match exactly with the dealer name on the terminal the database was backed up from.
- When saving the DB from a site, the license screen should show “DEALER PROTECT IS AVAILABLE”.



- This error also results if any of the 3 database backup files that are created when you perform a database backup are missing.
 - DatabaseInfo.txt
 - db20210521_155448.txt
 - db20210521_155448.db

Convert SPS'S PGMS to Database

The database restore operation is reserved for dealers when signed on using the 12-digit ADMIN code. If you have a program file from an SPS-500 or SPS-2000 series register that you want to use with Sam4POS, you can use this operation to convert the selected files and import these directly into the Sam4POS terminal.

Beginning in v1.1.49 and later program files from the ER-900 Series and SPS-300 Series ECR's can also be converted. When the Sam4POS has been cleared, you can load the program saved from your SPS-500/2000 or SPS-300/ER-900 Series ECR.

If the saved program files are on an SD card, you will need to copy them to your USB memory device.

CONVERT SPS'S PGMS TO DATABASE

You can review the operation for upgrading from the SPS-2000/500 ECR's to Sam4POS in the video link here:

<https://www.youtube.com/watch?v=kM6bh3LJ3-o&list=PLtF-h-a37jHmbhGgLO3nB76hP-avFSW29&index=2&pp=iAQB>

RESTORING MLU CHAINS

The video link below shows how to restore SPS-2000/500 MLU Chains when converting SPS's PGMS to the Sam4POS Database:

https://www.youtube.com/watch?v=6g_2vw1a2m0&list=PLtF-h-a37jHmbhGgLO3nB76hP-avFSW29&index=69&pp=iAQB

Note: If terminals are in an IRC system ,the IRC must be turned off before you can convert the SPS's program.

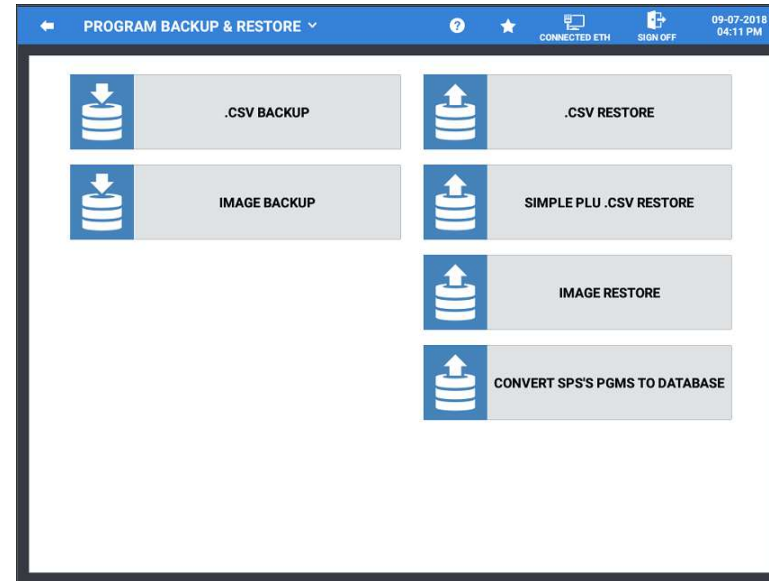
The files needed from the SPS terminal for this operation include:

- **PLU PGM**
- **PLU STATUS PGM**
- **GROUP PGM**
- **TAX PGM**
- **EMPLOYEE PGM**
- **AUTHORITY PGM**
- **JOB CODE & PAY RATE PGM**
- **PROMOTION PGM**
- **KEY RELOCATION PGM**

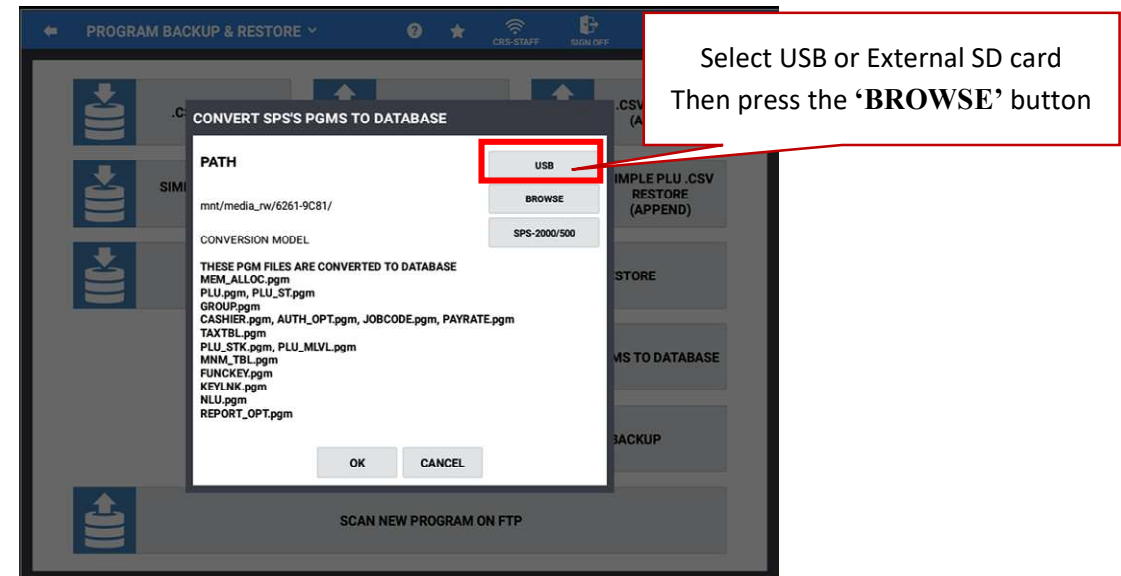
You can simply backup the entire program from your SPS-500/2000, ER-900 or SPS-300 Series ECR and copy the specific store folder to your USB memory device.

Convert Database Procedure

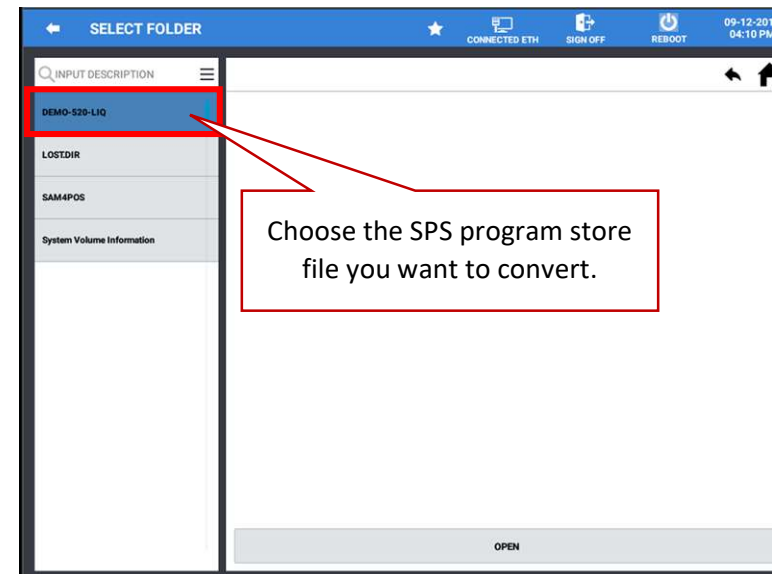
1. Sign on to the Sam4POS terminal with the System Admin Password. *(456 852 753 951)*
2. From the main **PROGRAM MODE** menu, select **SYSTEM** and then choose **PROGRAM BACKUP & RESTORE**.
3. Select **CONVERT SPS'S PGMS TO DATABASE**.



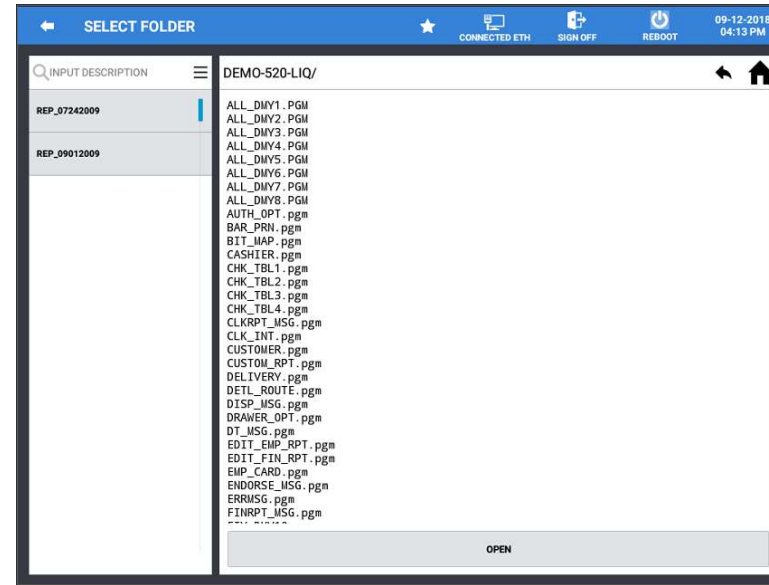
4. The Convert SPS's PGMs To Database dialog screen displays:
5. Select the device **PATH** where the SPS's PGM files are stored. Path selections are: **USB**, or **INTERNAL STORAGE**.
6. Choose the type of program file you are converting:
 - a. SPS-2000/500
 - b. SPS-300
 - c. ER-900
7. Press the **'BROWSE'** button to select the SPS store program file on your memory device you want to convert are located.



8. Browse to the program file you want to convert.



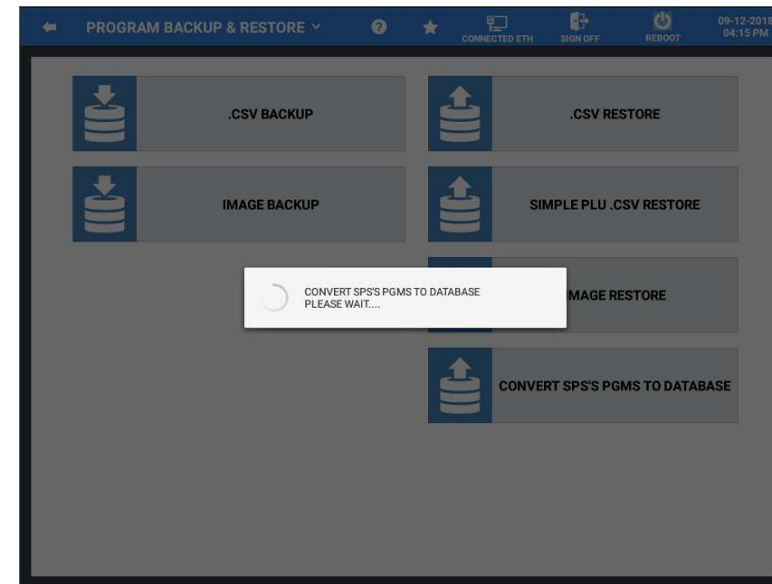
9. When the program file is selected, The individual program files will display:
10. Press **OPEN** to procede with the conversion.



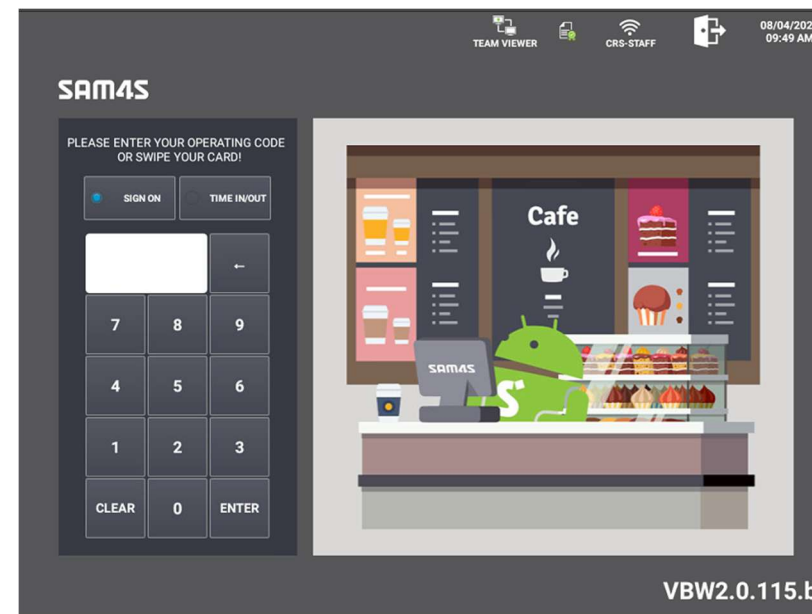
11. When the program file is opened, You are returned to the **CONVERT SPS'S PGMS TO DATABASE** screen.
12. Verify the **PATH** is correct; Press **OK** to procede with the conversion. (*Pressing Cancel will exit the operation without converting the program and return you to the Program Backup & Restore menu screen.*)



13. The selected program file will be converted and loaded into the Sam4POS terminal; There will be a long pause during this process.
14. When complete, the message '**FINISHED CONVERTING SPS'S PGM**' displays briefly, then the Sam4POS APP will reboot.



15. After the **APP Reboot**, you will be returned to the main sign on screen.
16. You will need to sign on using the employee codes associated with the converted program file.



Appendix

IRC Networks

Multiple stations at a site can be set up in an IRC (*Inter Register Communications*) configuration. CRS strongly recommends isolating the Sam4POS network (Sam4POS terminals & peripherals) from the site LAN. It is recommended to use a wired ethernet connection using the LAN port on the terminal to an ethernet switch for the IRC. The switch would then be connected to the DHCP Server (Router). However, Wi-Fi connections are also supported. The SAP-630 terminals require the purchase of an optional Wi-Fi board for each terminal.

The IRC uses standard 10/100 Base-T Ethernet (TCP/IP) communications and is established in the Terminal & Network selection in the Network & Revenue programming. When the IRC is active, all terminals in the system are updated automatically when program changes are made. All terminals in the IRC are connected to an Ethernet switch in a simple “star topology” configuration.

Dynamic or Static IP Addressing can be used on all terminals in the system. The **Dynamic (DHCP) IP** addressing method is recommended to prevent IP address conflicts. **DHCP** is the default setting and is the recommended connection setting for the Ethernet connection on the Sam4POS ECRs to a router. An internet connection is not required for normal operation with Sam4POS. However, if you are going to provide remote support Connecting to the Internet is required.

In a 2-station installation the Sam4pos ECRs can be connected with a crossover cable eliminating the need for the Ethernet switch. Each ECR would require a Static IP in this scenario.

Any Sam4pos terminal model can be connected to the IRC system; SAP-6600(II), SAP-630/530, SAP-4800(II) or HM626 & HM616 Tablets. You will need to use a wireless router for connecting the HM-626/616 Tablets to communicate to the rest of the network when they are not docked in a charging dock or smart dock.

The features and operations for all terminal models that support the Sam4POS application are the same, and all models support the communications and peripherals described in this manual. Any exceptions or differences will be noted when they apply.

Refer to the separate Sam4POS Networking & Installation Guide for more details.

A video showing how to network terminals & tablets can be viewed on the CRS YouTube page:

<https://www.youtube.com/watch?v=NTKCrAyJYWI&list=PLtF-h-a37jHmbhGgLO3nB76hP-avFSW29&index=62&pp=iAQB>

Additional networking information can be found in the Sam4POS Networking & Installation Guide available on the CRS Website:

<https://www.crs-usa.com/products/sam4pos-android-software-5-year-license->

Required Programming

The programming required for setting up Sam4POS in an IRC System consists of:

ANDROID SYSTEM > SETTINGS

- **Wireless & Network settings** – Turn **Wi-Fi OFF** and turn **Ethernet ON**; then set up the Ethernet Settings.

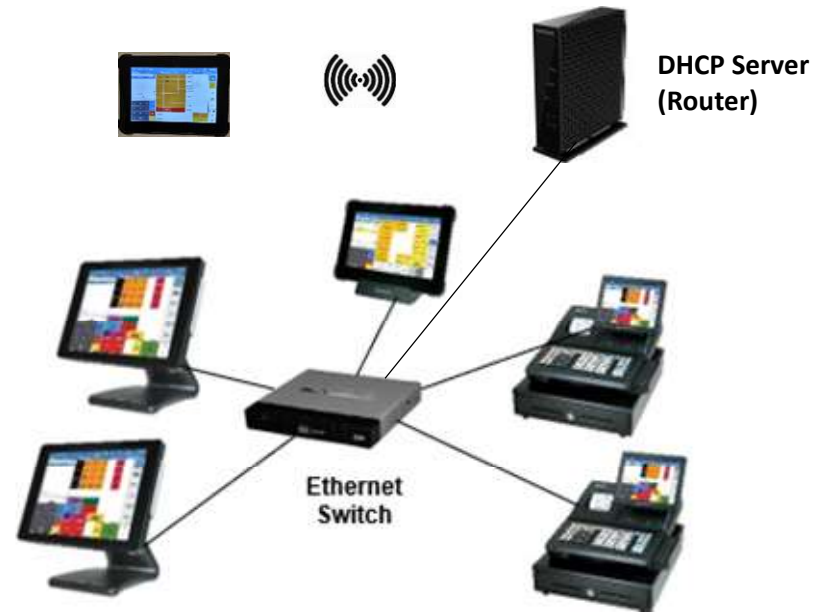
TERMINAL & NETWORK

- **IP ADDRESS** – Each station in the system must have a unique IP; Use DHCP for Ethernet\LAN connections. When using\setting static IP's, the first 3 octets of the IP scheme will be the same, the last octet must be unique. Example: 192.168.1.**201**, 192.168.1.**202**, 192.168.1.**203**, etc.
- Set the **STORE NAME** on all terminals in the system. The '**STORE NAME**' must match exactly at all terminals and is case sensitive.
- **TERMINAL DESC** – Enter a descriptor for the current terminal, i.e. POS-MAIN, Bar Terminal, Server Station, etc.
- Decide which terminal in the system will be the "**MAIN TERMINAL**", Touch **SET TO MAIN** on that terminal. One terminal in an IRC system must be set as the MAIN before satellite terminals can be added.
- Turn **IRC ON** at all other satellite stations. Move the slider bar next to **MY TERMINAL INFO**, to **ON**. The connected satellite stations will Synchronize all programming and report data from the POS-MAIN Terminal. Any current database settings and totals will be overwritten at the satellite stations.

IRC Configuration Example

All terminals in the IRC are connected to an Ethernet switch in a simple “star topology” configuration. The switch is also connected to the DHCP Router.

Multiple Stations in IRC System







Two Stations in IRC System



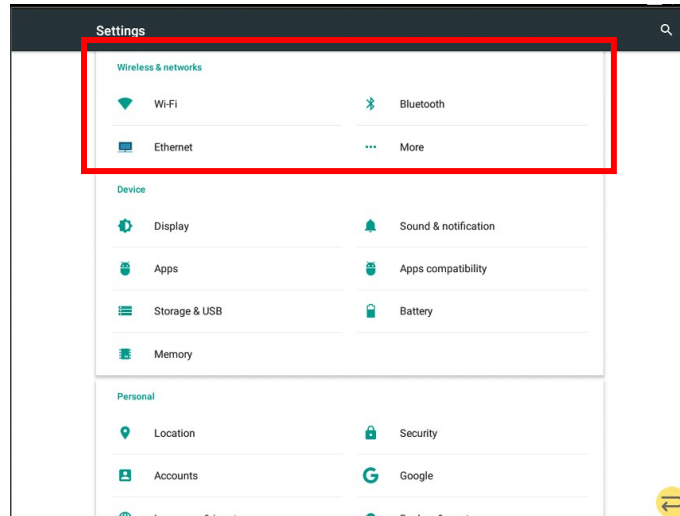
Android Settings

There are several ways to access the stations Android settings.

- Go to the **Program Mode > System > Settings**
- From the **Main Sign On Screen** press the **Exit**  **icon** to go to the main Android screen. Enter the Manager Password at the prompt. Select the **Settings**  **icon**.
- From any screen, press the **Connection Method**   icon on the title bar.

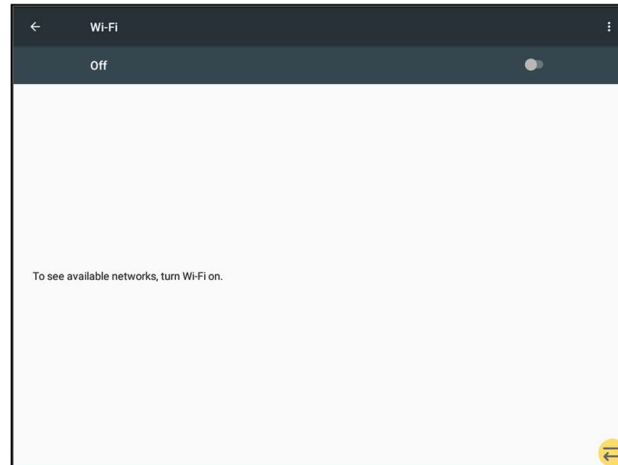
Wireless & Network

From the main Android **Settings** screen, go to the **Wireless & Networks** category:



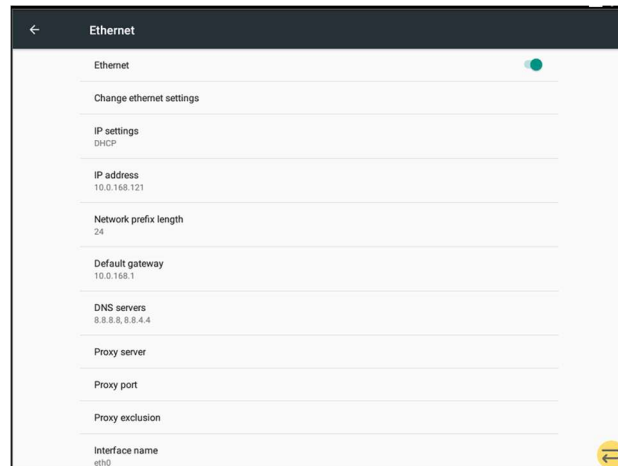
Wi-Fi

SAP-6600II and SAP-630 stations; **Turn Wi-Fi OFF.**



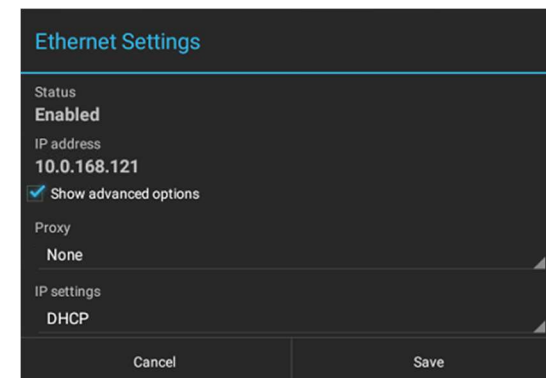
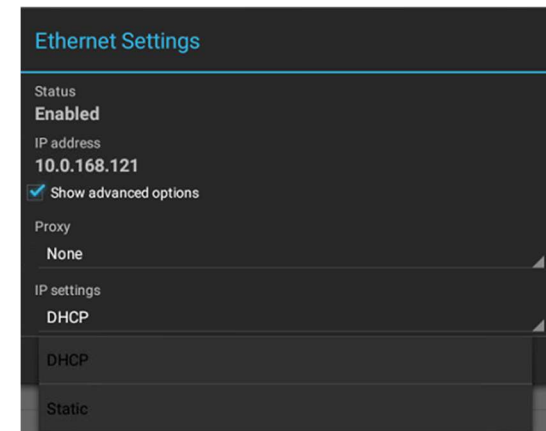
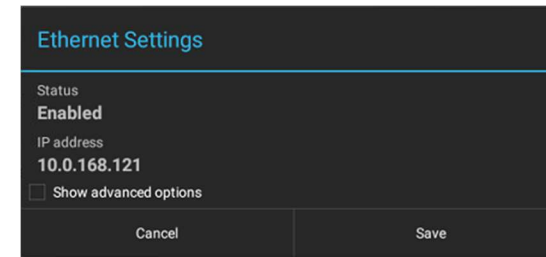
Ethernet

SAP-6600II and SAP-630 stations; **Turn Ethernet ON.**



Ethernet Settings

1. From the Ethernet Settings screen select **Change Ethernet Settings**. The Ethernet Settings dialog is displayed.
2. Check the **Show Advance Options** checkbox.
3. The **Proxy** and the **IP Settings** dropdown selections are available.
 - Tap the **IP Settings** dropdown and select **DHCP** if this is not already selected.
4. Click **SAVE** after selecting **DHCP**.
 - You will be returned to the Ethernet settings screen.



Terminal & Network

IP Address

Each station in the IRC system must have a unique IP; Use DHCP for Ethernet\LAN connections to a router. When using\setting static IP's, the first 3 octets of the IP scheme will be the same, the last octet must be unique. For Example: 192.168.1.**201**, 192.168.1.**202**, 192.168.1.**203**, etc.

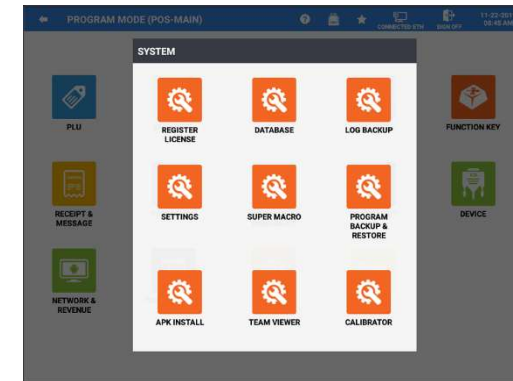
Setting Static IP Addresses

DHCP is the default setting and is the recommended connection setting for the Ethernet connections on the Sam4POS ECRs in an IRC configuration.

If you decide to use static IP's anyway, all terminals in the IRC network must share the same IP network scheme, only the last octet at each terminal will be unique. For Example: 192.168.1.**201**, 192.168.1.**202**, 192.168.1.**203**, etc. All stations IP settings must be outside the DHCP scope of the router to avoid IP conflicts.

The terminal IP address is set in the main Android settings. You can access these settings from within the Sam4POS Cash Register Application: Program Mode > System > Settings. When setting static IP addressing on the stations, be sure to use IP addresses that are outside the DHCP scope of the DHCP Server (Router).

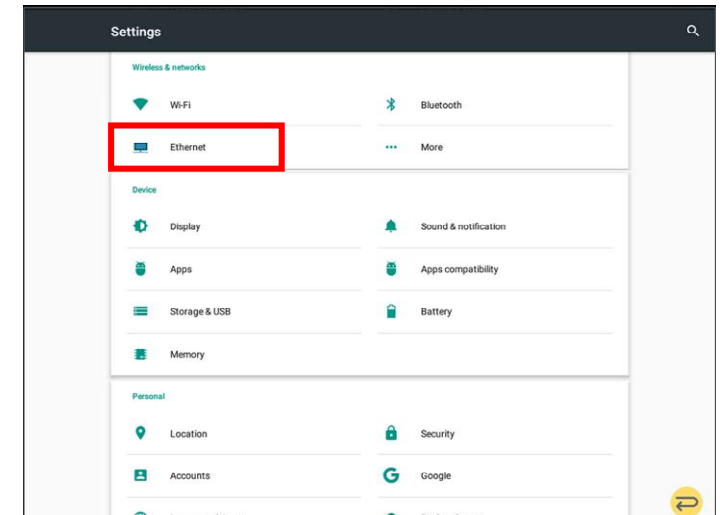
1. Choose **SYSTEM** from the main **PROGRAM MODE** menu selection screen.
2. Then select **SETTINGS** category selection menu screen.



3. If the employee doesn't have ADMIN authority, the **Manager Required / Manager Password** entry dialog displays.
4. Enter the manager password (default is 9999), then press **ENTER**.

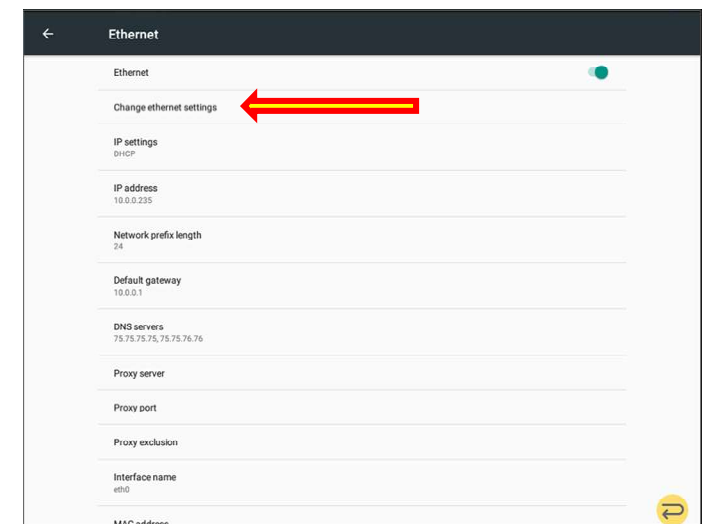
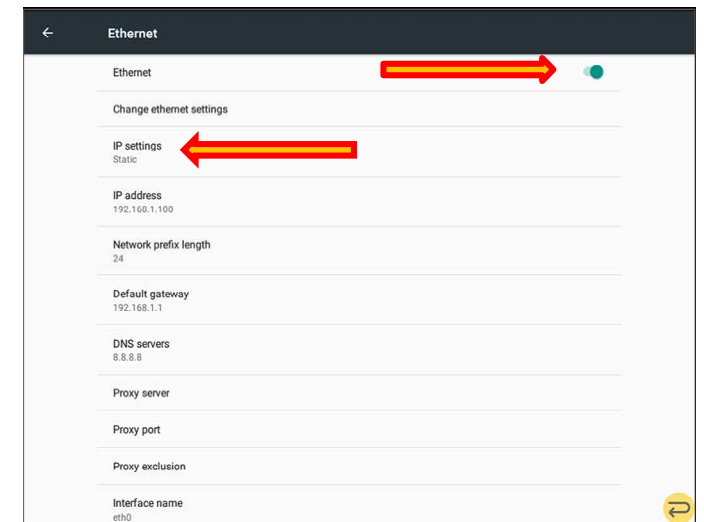


5. The **Settings** dialog screen displays.
6. Under the **Wireless & Networks** section, Choose **Ethernet**.

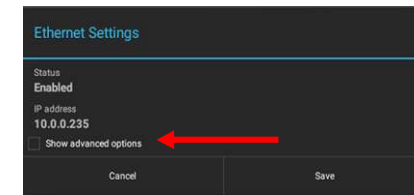


7. Verify the:
- a. **Ethernet** switch is in the **ON** position and
 - b. **IP Settings** is set for **Static**:

8. If the IP Settings is not set as static; Press **Change Ethernet Settings**

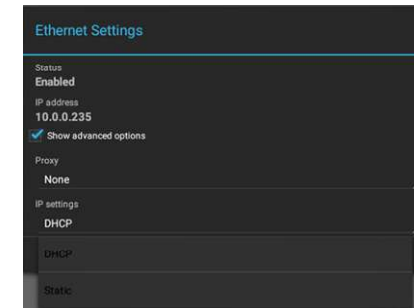


9. On the **Ethernet Setting** dialog, check the **Show advanced options** selection:



10. On the Advanced options Ethernet Settings, press the **IP Settings** to view the selections:

a. Change the IP Settings from DHCP to **Static**.



11. Set IP Address and Gateway:

IP Address – 192.168.1.101

The First 3 octets must be the same at all stations; the last octet at each station must be unique.

Gateway – 192.168.1.1

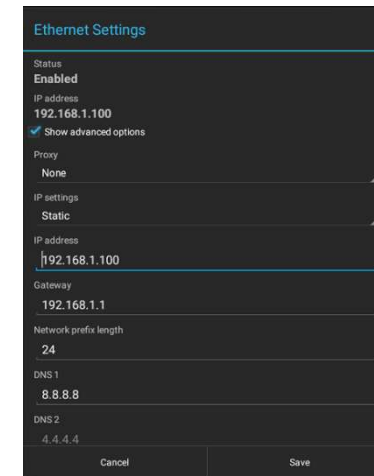
The First three octets must match the system IP scheme; the last octet is commonly 1. The gateway setting will be the same on all terminals in the system.

Network Prefix Length – 24 (Same on all terminals in system.)

DNS 1 – 8.8.8.8 (Same on all terminals in system.)

DNS 2 – 4.4.4.4 (Same on all terminals in system.)

12. Press **Save** when finished.



Note: The Static IP address chosen needs to be out of the DHCP scope range to prevent IP address conflicts.

13. Press the **return icon**  to return to the System menu.

Notes:

DNS address does not mean much unless you want to connect to internet service, you can use the Google DNS server address for internet access.

- * DNS 1 – 8.8.8.8
- * DNS 2 – 4.4.4.4

GATEWAY address must be same for all terminals, typically this is the router IP address.

- * If there is no router, terminals are connected with a crossover cable or through a switch no Gateway IP address is needed, can leave it blank.

SUBNET address must be same for all terminals, typically 255.255.255.0 is used for Class C networks which supports up to 254 hosts.

- * Sam4POS ECRs find each other by broadcasting to see if there are stations with the same “Store Name” in the same subnet. Once it finds them, it records the IP address, db, version, etcetera, info and updates them as necessary in the “terminal information db”.

HM626 & HM616 Tablet Wi-Fi Static IP

The tablet would typically connect to the IRC system via Wi-Fi.

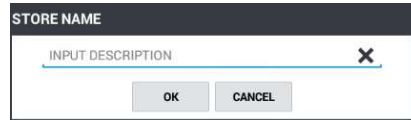
- Go to: **Program Mode “ System “ Settings**
- Select: **Wi-Fi; Press & Hold on Current Connection**
- Select: **Modify Network**
- Check **Advanced Options**
- Scroll Down to **IP Settings** - Change From DHCP to **Static**
- Scroll Down & **Input Static IP - Gateway - Etc.**
- **Save**

Note: Ethernet settings on the HM626 & HM616 can be found in: **Program Mode “ System “ Settings “ More “ Ethernet** However, these settings are not commonly used.

Set Store Name

All terminals in the IRC system must have the exact same store name and is case sensitive. Be aware that if spaces are used in a store name, such as Bar Pub, the number of spaces used must be the same at all stations as well. If an extra space is added to the store name at one station, that station will not be seen on the IRC network. It may be better to eliminate space or use a character between names. For example, instead of Bar Pub; use BarPub or Bar-Pub.

1. From the **Program Mode > Network & Revenue > Terminal & Network**; Press the pencil icon  to type in the **STORE NAME** at each terminal. Pressing the **X** at the end of the field will clear the current description.




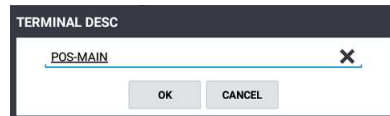
2. The Store Name must be identical at each station in the IRC. Press **OK**.

Terminal Descriptor

Each Station in the IRC must have a unique Terminal Descriptor to make it easy to identify.

For example: POS-MAIN, POS-01, POS-02, COUNTER-1, Drive-Thru-1, etc.

1. From the **Program Mode → Network & Revenue → Terminal & Network: Terminal DESC**; Press the pencil icon  to type in a unique **TERMINAL DESC** at each terminal. Pressing the **X** at the end of the field will clear the current description.

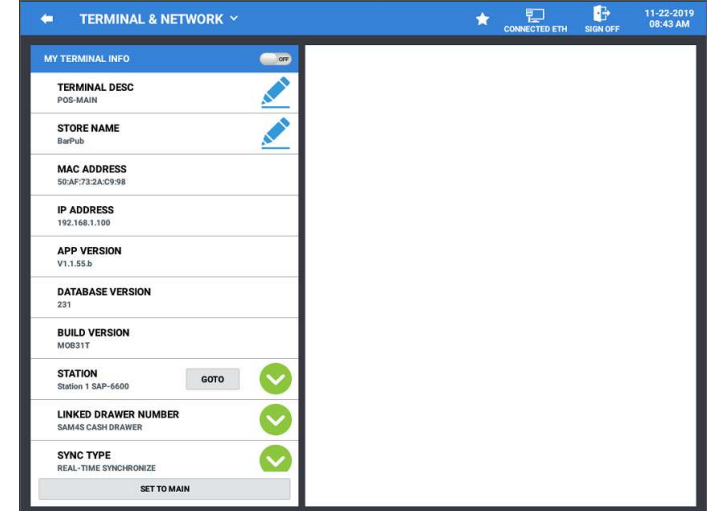


2. Press **OK**.

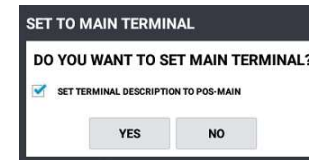
Set Main Terminal

One terminal in the system must be set up as the main terminal. Determine which terminal you want to be the ‘Main Terminal’, then proceed as follows:

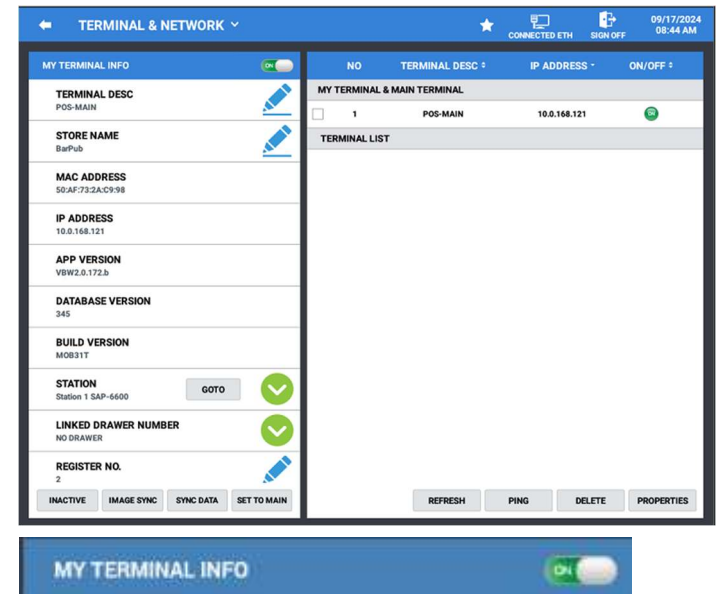
1. From the **Program Mode > Network & Revenue > Terminal & Network**; Press the “**Set To Main**” button at the bottom of the **My Terminal Info** column.



2. The **SET TO MAIN TERMINAL** confirmation dialog displays: Press **YES** to confirm you want to make this terminal the main terminal.



3. The **Terminal Description** will be changed to **POS-MAIN** and the **My Terminal Info** IRC switch will be turned **ON**.



4. On all other satellite terminals in the system, move the slide switch at the top of the **My Terminal Info** column to the **ON** position.

MAIN TERMINAL ACTION BUTTONS

When set as the main terminal, additional action buttons are available at the bottom of the screen:



IMAGE SYNC –

Synchronizes the image file with all other terminals.

SYNC DATA –

Synchronizes database information from the POS-Main station to all satellite stations in the IRC System, The notification dialog displays:

Press **YES** and all satellite stations will initialize after they synchronize, then load back to the main Sign-On screen. At the POS-MAIN station a dialog showing the terminals that were synchronized is displayed.

Beginning with v2.0.170 if a station in the system is In A Sale or Offline, it will be indicated in the List Of Synchronized Terminals.

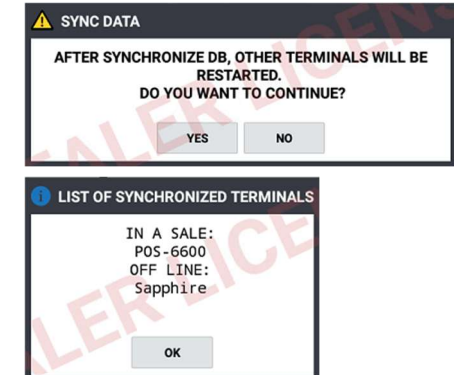
Press **OK** to close the List Of Synchronized Terminals dialog.

RELEASE MAIN –

Releases the current MAIN terminal. *(Turns the IRC OFF at the POS-Main station.)*

Note: The IRC must be turned off on all Satellite substations before the current MAIN station can be released.

When set as the main terminal, additional action buttons are available at the bottom of the Terminal List column on the Terminal & Network screen:

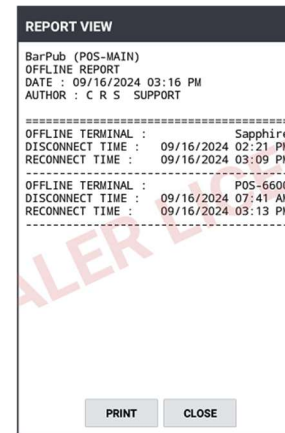


REPORT – (Added in v2.0.171)

Press this button to view the Terminal **OFFLINE REPORT**.

Note: The REPORT button only appears after satellite stations are added to the IRC.

- Press **PRINT** to print the Offline Report to the receipt printer for the station.
- Press **CLOSE** to close the Offline Report dialog.



REFRESH –

Press this button to **REFRESH** the terminals list in the IRC.

PING –

Allows you to **PING** terminals in the IRC to verify the connection: Select a terminal in the IRC list; Press the **PING** button.

The **PING Test** dialog appears briefly, then the **SUCCESS** message briefly displays.

DELETE –

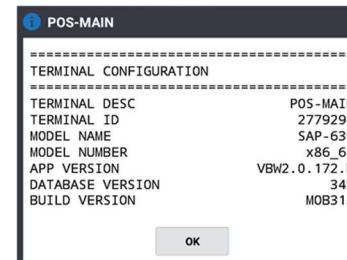
Allows you to **DELETE** selected satellite terminal(s) in the IRC list.

(You can select all stations in the list, press **DELETE**, then press **REFRESH** to repopulate the terminal list.)

PROPERTIES –

Select any terminal in the list and press the **PROPERTIES** button to view the terminal configuration information for the selected station.

Press **OK** to close the Terminal Configuration dialog.



Turn IRC ON at Satellite Stations

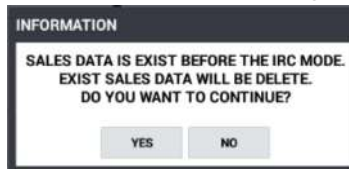
After the Main terminal is a system is defined, add additional satellite stations as necessary. Satellite stations must have the exact same STORE NAME and must be on the same IP scheme as the POS-MAIN station. You will also need to enter a unique Terminal Descriptor for each satellite station.

When a satellite station is added to an IRC system it will automatically Sync all programming with the Main terminal program.

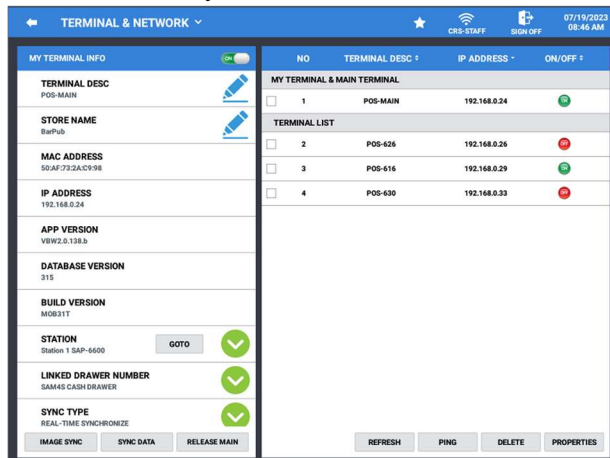
1. On all satellite terminals you want to include in the IRC system, tap the **IRC On/Off slide switch** on the My Terminal Info bar, on the top left column, to turn **ON** the IRC:



2. Then the **INFORMATION** dialog “Sales Data Is Exist Before The IRC Mode. . .” displays:



3. All current programming and totals will be overwritten; If you have totals you want to write to the report data, perform the EOD before proceeding. Press **YES** to confirm you want to continue adding the station to the IRC. Pressing **NO** will abort the process without changing current programming.
 - Satellite stations will **REFRESH** then **SYNCHRONIZE** and start **RECEIVING FILES** from the POS-MAIN terminal.
 - When the downloading is complete, the station will indicate **SUCCESS** then the **APP REBOOTING** dialog appears and then will load back to the main sign on screen.
4. All stations on the network with the same Store Name appear in the terminal list on the POS-MAIN station.
 - Stations in the system that have the **IRC switch turned ON** (*My Terminal Info = ON*) will display in the terminal list on the right side of the screen as **ON** (*green button*).
 - Stations in the system that have the **IRC switch turned OFF** (*My Terminal Info = OFF*) will display in the terminal list on the right side of the screen as **OFF** (*red button*).



5. Turn the **IRC ON** at the remaining stations in the system as necessary. You can now Sign on to stations as necessary, the IRC is set up.

SATELLITE TERMINAL ACTION BUTTONS

When the IRC is activated in a system, the Satellite Terminals in an IRC configuration (*terminals that are not set as the MAIN terminal*) will display as shown:



INACTIVE –

In an IRC network press this button if you wish to set the selected terminal inactive.

IMAGE SYNC –

Press this button to synchronize the images in an IRC network.

SYNCH DATA –

Press this button to synchronize the programming in an IRC network.

CHANGE TO MAIN –

In an IRC network, press this button to change the selected terminal as the main terminal.



REFRESH –

Press this button to REFRESH the terminals list in the IRC.

PING –

Allows you to PING other terminals in the IRC to verify the connection:

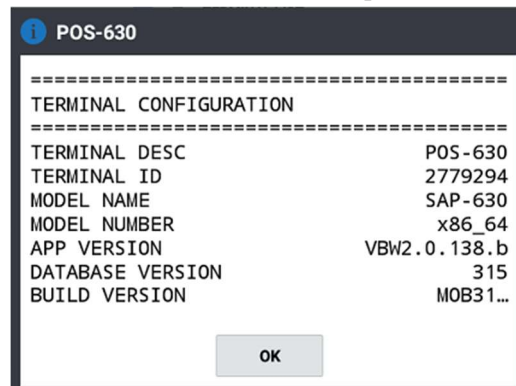
Select a terminal in the IRC list, Press the PING button

DELETE –

Allows you to DELETE a terminal in the IRC list.

PROPERTIES –

Select a terminal in the list and press the PROPERTIES button to view the terminal property info for the selected station.



Press **OK** to close the Terminal Configuration dialog.

Integrated Credit

EFT

The Sam4POS terminals only support EMV enabled devices for EFT integrated payment transactions. Currently, the Sam4POS interfaces with EMV Datacap Tran Series devices and DC Direct devices, and the EVO-Tetra devices. An active internet connection is required for the EFT integrated payment device.

Datacap

- DC Direct devices require v2.0.148 or later and uses an ethernet interface. Datacap DC Direct PAX devices use PORT Number 8080; Datacap DC Direct Ingenico devices use PORT Number 80.
 - Refer to the separate Sam4POS Datacap DC Direct integrated payment guide for complete details.
- Datacap-EMV Tran Series devices will work on any firmware version. These devices use a serial connection to interface with Sam4POS. The IPTran\PDC will connect to the sites internet service.
 - Refer to the separate Sam4POS Datacap-EMV Tran Series integrated payment guide for setup and operation details.

EVO-Tetra

- The EVO-Tetra interface is available in v2.0.14 and later and uses the Device Model: Ingenico CRS. Only the Ethernet interface is supported with the EVO-Tetra. Set the EVO-Tetra device IP within the IP scheme of the Sam4POS system with PORT Number 5555.
 - Refer to the separate Sam4POS EVO-Tetra Supplement for setup and operation details.

DC Direct Setup

Sam4POS will require the DC Direct compatible version application firmware v2.0.148 or later.

- The SAM4POS application only supports EMV enabled devices for integrated payment transactions.

Sam4POS integrated payment processing utilizing Datacap DC Direct™ API integration is a semi-integrated solution (Out of Scope) for processing electronic payments at the Sam4POS station. Sam4POS sends the transaction amount to the integrated payment device for authorization, then Sam4POS waits for a response for the payment approval or declined message.

The **Sam4POS APK files** are specific to the type of terminal you have. When you download and unzip the file from the CRS web site, all APK files for all the different Sam4POS terminal models are included in the file download: **(a), (b), (c), (d), (e), (f)**.

Version (a) – Installs on the Sam4s SAP-530 and SAP-4800(II) terminals.

(4800_530)Sam4pos_Vx.x.xx .a

Version (b) – Installs on the Sam4s SAP-6600(II) and SAP-630 terminals.

(6600_630)Sam4pos_Vx.x.xx .b

Version (c) – Installs on the Hisense HM616 Tablet.

(HM-616)Sam4pos_Vx.x.xx .c

Version (d) – Installs on the Hisense HM626 Tablet *(Requires v2.0.106 or later.)*

(HM-626)Sam4pos_Vx.x.xx .d

Version (e) – Installs on the Sam4s Sapphire A60 and A70 terminals. *(Requires v2.0.161 or later.)*

(Sapphire)Sam4pos_Vx.x.xxx .e

When installed, the Sam4POS application will automatically load when the device is powered-up, other Android applications or desktop functions are not available to the user without authorization.

The programming in the various devices is essentially the same except where noted. Many Sam4POS programming & operation Tutorial Videos are available on the CRS YouTube page:

<https://www.youtube.com/playlist?list=PLtF-h-a37jHmbhGgLO3nB76hP-avFSW29>

Version “f” – Is a special firmware that installs on Hisense HM-626 tablet. *(Requires v2.0.184 or later.)*

The “f” version takes care of duplicated license code issues for the HM626. The “f” version uses the CPU serial number + Wi-Fi Mac address, so you need to connect the tablet to the WIFI before you install SAM4POS.

PROCEDURE

- Generate EOD
- Backup the current Database *(May want to backup each station.)*
- Install the DC Direct compatible Sam4POS APK firmware for your terminal type.
- If necessary, Restore the Database – *(If you have an IRC system; Set the POS-Main station, then turn IRC ON at each satellite station to Sync Data with POS-Main.)*

Device Programming

Device programming is where all the individual peripheral devices used on the SAM4POS system are configured and mapped (routed) to the stations in the system, including EFT devices. The Datacap DC Direct Integrated Payment Device required an Ethernet or Wi-Fi connection to the Sam4POS terminal.

For the DC Direct integration with Sam4POS, the following categories are used in the Device Programming.

- **Device Setting**
Use the Device Setting to add the EFT DC-Direct™ Device.
- **Device Mapping**
Assign (Map) the DC Direct device to the stations that will utilize the device.
- **EFT Operation**
For performing EFT Batch operations.

Use the Device Setting to add the EFT DC-Direct™ Device. The connection type for the DC Direct Device must be configured as Ethernet with the ethernet PORT Number set to:

- With PAX devices use PORT NUMBER 8080
- With Ingenico devices use PORT NUMBER 80

The IP address for the DC-Direct™ Device and the Sam4POS terminals must all be on the same IP scheme. The first 3 octets of the IP address must be the same, only the last octet will be unique. The Sam4POS terminals and the DC-Direct™ Devices should all be set for DHCP IP Address.

Should you decide you want to use Static IP Addressing:

- To use Static IPs at the Terminals and Datacap DC Direct™ devices, you can set up "Private" Static IP programming within the Router itself (Out of the DHCP Scope of the router).
- The Dealer will need to contact the Internet Service Provider (ISP) to obtain the 'Public' Static IP information for the site: Static Gateway, Subnet Mask, DNS Primary & DNS secondary.

The Device Mapping programming category is used to assign the DC-Direct™ Device to the various stations in the SAM4POS system.

DC Direct Integrated Credit Card (*EFT*) maintenance operations can be performed at the SAM4POS ECR from the EFT Operation menu. Each type of EFT device will have EFT Operations specific to that type of EFT device. All integrated payment interface types are listed on the EFT Operation screen, many of these interfaces are not used in the U.S.A. Unused EFT interface types can be hidden by the System Admin if desired.

A video showing this procedure can be viewed here: [Hiding Credit Interfaces in Sam4POS - YouTube](#)

NOTE: SAM4POS only supports EMV integrated credit card processing. (There will be no Non-EMV integration.)

Sam4POS is storing limited transaction information from the integrated payment approvals at the register. This is required to be able to perform "By Record" operations such as TIP Entry.

No Credit card data is saved in Sam4POS. Merchants need to log in to their credit card processors portal to view transaction detail data.

Device Setting

Use the Device Setting to add the EFT DC-Direct™ Device. The communication type for the DC Direct Device must be configured as Ethernet with the ethernet PORT Number set to:

- DC Direct on a PAX device uses PORT NUMBER 8080
- DC Direct on an Ingenico device uses PORT NUMBER 80

The IP address for the DC-Direct™ Device and the Sam4POS terminals must all be on the same IP scheme. The first 3 octets of the IP address must be the same, only the last octet will be unique. The Sam4POS terminals and the DC-Direct™ Devices should all be set for DHCP IP Address.

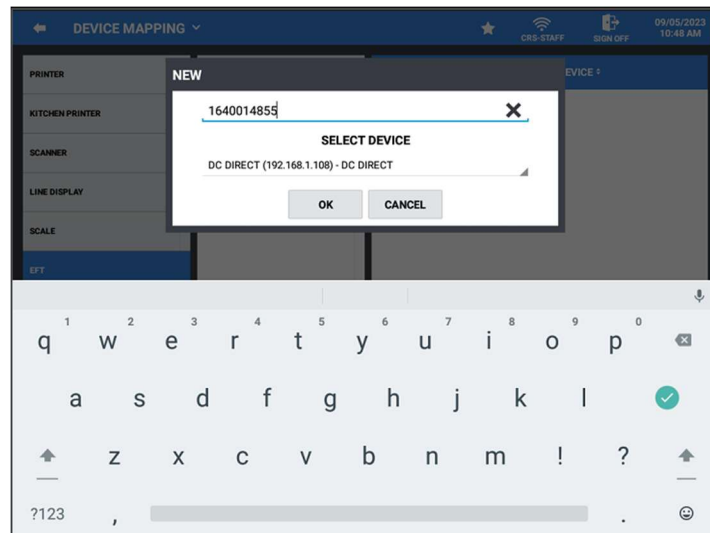
Should you decide you want to use Static IP Addressing:

- To use Static IPs at the Terminals and Datacap DC Direct™ devices, you can set up "Private" Static IP programming within the Router itself (Out of the DHCP Scope of the router).
- The Dealer will need to contact the Internet Service Provider (ISP) to obtain the 'Public' Static IP information for the site: Static Gateway, Subnet Mask, DNS Primary & DNS secondary.

Device Mapping

The Device Mapping programming category is used to assign the DC-Direct™ Device to the various stations in the SAM4POS system.

1. From the **PROGRAM MODE > DEVICE** category selections; Select **DEVICE MAPPING**.
2. Choose the **EFT** device from the selection list in the left column to map the Datacap DC Direct™ device to the SAM4POS terminal.
3. Select the station in the middle column to assign the Datacap DC Direct™ device to; Press the **NEW** button at the bottom of the right column to assign a device.
4. The **NEW** item dialog for the selected device displays.
 - On the **INPUT DESCRIPTION** line, Enter the **DC Direct Device ID** for the device.
 - * This is the 16-digit Serial Number for the DC Direct device.
 - * If running the later version of DC Direct this should only have the last 16-digits of the serial number.
 - On the **SELECT DEVICE** line, choose the **Datacap DC Direct™** correct DC Direct device for this station.



5. Press **OK** to map the device to the station. Pressing **CANCEL** will exit without mapping devices.
6. The buttons at the bottom right of the mapping screen can be used to edit existing mapped devices.
 - **GOTO** – Brings up the Device Setting programming.
 - **NEW** – To add additional new devices to a station.
 - (Once the DC-Direct™ Device is mapped to the station, the **NEW** button is grayed out. This is because you can only have one EFT Device mapped to a station.)
 - **EDIT** – Allows user to choose a different EFT device.
 - **DELETE** – Will delete the selected device assignment.
7. Continue mapping the DC-Direct™ Devices to the remaining stations as necessary. Press the back arrow to exit out of the Device/Device Mapping screens.

NOTE: You must enter the Merchant ID in System Option before Testing Datacap DC Direct™ . The ID's used here are our test merchant codes. The Merchant ID's used in your setup will be unique to the merchant site.

8. Now you can test the operation of your **Datacap DC Direct™ Terminal**.

Datacap DC Direct™ Device Test

When the Datacap DC-Direct™ device is setup & mapped, and the Merchant ID information has been entered, you can test the device to verify the connection settings are correct. The Sam4POS has a PING TEST built into the Device Setting screen to allow you test the connection.

1. From the **Program Mode > Device** category selections; choose **Device Setting**.
2. On the **Device Setting** screen, Select **EFT** from the device selections in the left column. Then select the **DC-Direct™ Device** in the middle column.
 - Press the **Menu icon** ≡ at the top of the middle column, then select **TEST** from the sub menu selections.
3. The **PING TEST** will launch and indicate **SUCCESS** if the connection is good.
 - A response of **FAIL** would indicate the settings are not correct or there may be a configuration issue within the DC-Direct™ device.

EFT Operation

DC Direct Integrated Credit Card (*EFT*) maintenance operations can be performed at the SAM4POS ECR from the EFT Operation menu. Each type of EFT device will have EFT Operations specific to that type of EFT device. All integrated payment interface types are listed on the EFT Operation screen, many of these interfaces are not used in the U.S.A. Unused EFT interface types can be hidden by the System Admin if desired.

A video showing this procedure can be viewed here: [Hiding Credit Interfaces in Sam4POS - YouTube](#)

NOTE: SAM4POS only supports EMV integrated credit card processing. (There will be no Non-EMV integration.)

Sam4POS is storing limited transaction information from the integrated payment approvals at the register. This is required to be able to perform “*By Record*” operations such as TIP Entry.

No Credit card data is saved in Sam4POS. Merchants need to log in to their credit card processors portal to view transaction detail data.

Datacap DC Direct™ Operation Definitions

Operation	Definition
Reset Pin Pad	Use to Initialize\Reset the Pin-Pad connected to the installed Datacap device.
Close Batch	Closes the current batch and opens a new batch.
Parameter Download	This operation tells the PAX Pin-Pad to get new parameters from Datacap. Perform this operation after installing the Datacap DC Direct device. This operation does not work for Ingenico Tetra Devices (Lane/Move/Link/Desk). Note: The Parameter Download for Ingenico Axium devices is not yet available with DC Direct. For now, the Parameter Download needs to be performed on the Ingenico device.
Get Gift Card Balance	Select Get Gift Card Balance, the operator will be prompted to slide a gift card. The balance remaining on the gift card will be printed on the receipt printer
Get EBT Balance	Use to check the EBT food stamp balance on the customers EBT Card. The balance remaining on the EBT card will be printed on the stations receipt printer.
EMV Voucher For EBT	Use to manually enter EBT transactions.
Clear EMV File	This clears the internally stored token file that stores the Authorization Response messages that allow the Sam4POS to perform “By Record” operations.
Verify Card	Use this operation to verify a card is valid, activated, not reported as lost/stolen.
Batch Summary	Use this operation to print a summary of the transaction in the current batch.
Cash Out	Allows the customer to receive a CASH OUT payment for the remaining balance available on a Gift Card.
EMV Voice Auth	If electronic authorization is not approved and the merchant receives voice authorization, the transaction can be entered into the batch with this operation.
EMV Return (Add Balance)	This operation is used to return funds to the customer’s credit card.
Get EBT Cash Balance	Select Get EBT Cash Balance, the operator will be prompted to slide the EBT card. The remaining Cash Balance will be printed on the stations receipt printer.

Parameter Download

After installing the Datacap DC Direct device and your device setting & mapping configuration is completed and connected to an active internet connection, perform the Parameter Download.

This operation tells the DC Direct PAX Pin-Pad to get new parameters from Datacap. This operation does not work for Ingenico Tetra Devices (Lane/Move/Link/Desk).

Note: The Parameter Download for Ingenico Axium devices with DC Direct is not yet available. For now, the Parameters need to be loaded on the Ingenico device.
