SAM4S

ER-285M Electronic Cash Register

Operator's and Programming Manual

For Fast Startup,
See the "Quick Start Guide" on Page 13

All specifications are subject to change without notice.

M-ER285M Manual Version 1.24

CRS, Inc.
Limited Warranty and Disclaimers of Warranty

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Revision 2.0 - April 1, 2005

WARNING - U.S.

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

NOTICE - CANADA

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

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

ATTENTION

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

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

Precaution Statements

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

1-1 Safety Precautions

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

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

CAUTION

There is the danger of explosion if battery is incorrectly replaced.

Replace only with the same or equivalent type recommended by the manufacturer.

Dispose used batteries according to the manufacturer's instructions.

ATTENTION

ll y a danger d'explosion s'il y a remplacement incorrect de la batterie.

Remplacer uniquement avec une batterie du même type ou d'un type équivalent recommandé par le constructeur.

Mettre au rebut les batteries usagées conformément aux instructions du fabricant.

SAFETY NOTICE: "Electrical equipment should be installed near an easily accessible socket/outlet."

1-2 Servicing Precautions

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

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

1. Servicing precautions are printed on the cabinet. Follow them.
2. Always unplug the units AC power cord from the AC power source before attempting to:
   (a) Remove or reinstall any component or assembly
   (b) Disconnect an electrical plug or connector
   (c) Connect a test component in parallel with an electrolytic capacitor
3. Some components are raised above the printed circuit board for safety. An insulation tube or tape is sometimes used. The internal wiring is sometimes clamped to prevent contact with thermally hot components. Reinstall all such elements to their original position.
4. After servicing, always check that the screws, components and wiring have been correctly reinstalled. Make sure that the portion around the serviced part has not been damaged.
5. Check the insulation between the blades of the AC plug and accessible conductive parts (examples: metal panels and input terminals).
6. Insulation Checking Procedure: Disconnect the power cord from the AC source and turn the power switch ON. Connect an insulation resistance meter (500V) to the blades of AC plug.

   The insulation resistance between each blade of the AC plug and accessible conductive parts (see above) should be greater than 1 megohm.
7. Never defeat any of the B+ voltage interlocks. Do not apply AC power to the unit (or any of its assemblies) unless all solid-state heat sinks are correctly installed.
8. Always connect an instrument's ground lead to the instrument chassis ground before connecting the positive lead; always remove the instrument's ground lead last.

1-3 Precautions for Electrostatic Sensitive Devices (ESDs)

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

1-4 Safe Operation

- Do not locate your SAM4s ECR in a damp or wet environment. Avoid high humidity, direct sunlight and temperature extremes.
- Always plug your ECR into a grounded three-prong outlet. Never use two-prong adaptors or ungrounded outlets.
- Check to make sure the power outlet provides the correct voltage: (120V +/- 10%).
- Immediately disconnect the ECR from the power source in case of spilled liquid in the ECR, smoke, or strange smells. Call your authorized dealer for assistance.
- Do not operate the ECR with wet hands.
- Use a soft dry cloth to clean the ECR cabinet. Do not use wet clothes or solvents.
- Do not open the ECR case to attempt repairs. Dangerous voltages can cause shock. Service attempts by untrained personnel can cause unnecessary damage to your ECR.

1-5 Power Requirements

Be aware that other electrical devices on the same circuit can cause your ECR to malfunction. Avoid plugging your ECR into outlets where other high-current devices are connected.

Be aware that power quality issues, including voltage fluctuations, electrical noise, spikes, outages, interruptions, and other power viruses can disrupt or damage modern electronic equipment, including ECRs and PCs.

1-6 Surge Protectors and Power Conditioners

Most people are familiar with surge protectors, which guard against damage due to sudden spikes in the electrical current. A power conditioner provides protection against surges in power just as a surge suppressor does, but a power conditioner also maintains a continuous voltage during temporary voltage reductions, such as a brownout. This is referred to as *conditioning*. Power conditioners also can filter EMI emanating from a power source and can smooth the rhythmic cycle of alternating current. While surge protectors safeguard equipment, a power conditioner *cleans* the signal, eliminating interference on the line.

CRS recommends the PowerVAR ABC065-11 (CRS P/N 701002), a 0.65 amp power conditioner that is suitable for most ECR applications. POWERVAR standard power conditioners are for use with any microprocessor based electronic equipment.

Contents

Quick Start Guide

About the SAM4s *ER-285M*

The SAM4s ER-285M electronic cash register features a flat spill-resistant 49-position keyboard with 15 category keys. Because this model has a flat keyboard, you can quickly and easily setup or change key labels by printing or typing on the key sheet that lays under the protective overlay. This configuration is ideal for a wide range of food service environments or retail environments where the possibility of spills may be an issue. With its superb thermal printing system, the ER-285M provides extremely fast and quiet operation.

Ready to Use

Each SAM4s ECR is ready to use after un-boxing and loading the paper.

- The standard keyboard contains all the functions you will need for basic cash register operation.
- A standard capacity of 15 category keys, 2000 PLUs and 20 Groups allows for easy item management.
- In areas where sales tax is charged, you will want to enter the tax rate and set the taxable status for each category key.
- You will also wish to set descriptors for categories; if you choose not to set descriptors, the default descriptors “PLU1, PLU2,” etc. will be used.

Carefully read and follow the steps in this chapter to complete these basic programming steps and put your SAM4s ER-285M into service.

Easy to Customize

This manual also contains instructions for higher-level options and features that are available for the ER-285M. Among many options, you can add or relocate function keys on the keyboard, or you can connect POS peripherals including a DataTran integrated payment appliance. The programs required for these options are fully explained in the reference sections of this manual. You may require the assistance of your professional cash register dealer to design and implement your special requirements or options.

Basic Features and Functions

Standard Hardware

- Two Line, 20-Character Liquid Crystal Operator Display
- Ten Position Rear Customer Display
- 49-Position Flat Spill-Resistant Keyboard
- Thermal 32-Column Receipt or Journal Printer With Automatic Paper Loading
- Sturdy Cash Drawer with Media Slot and Key Lock or Key Release
- Removable 5 Bill/5 Coin Cash Drawer Insert with Adjustable Partitions
- 7-Position Control Lock
- One Standard Rs-232C Communication Port
- SD Card Port

Optional Hardware

- Load Cell Scale
- Kitchen Printer
- Bar Code Scanner
- Coin Changer
- Pole Display
- Datatran Integrated Payment Terminal
- Two additional RS-232C Communication Ports
- Card Reader

Software Features

- Up to 2 price levels for each PLU.
- Up to 5 PLU modifier keys.
- 2000 Price Look Ups (expandable up to 5,000 PLUs) for open or preset item registration. For direct registrations, up to 15 PLU keys (up to 30 using the keyboard shift function) are on the keyboard.
- 18 character programmable descriptors for PLUs and functions.
- Up to 99 PLU Group totals.
- Up to 99 clerks with separate report totals.

Display

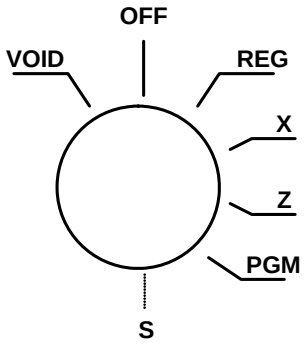
The *ER-285M* is equipped with a liquid crystal screen, allowing you to view up to 2 lines of information with up to 16 characters per line. The display is backlit for easy viewing in all light conditions.

When the control lock is in the OFF position, the register cannot be operated. When the control lock is in the REG, VOID, X, Z, PGM positions, the appropriate messages are displayed.

When the register is in an error condition, a text message describing the error will display.

Control Lock

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



VOID	Use to void (correct) items outside of a sale.
OFF	The register is inoperable.
REG	Use for normal registrations.
X	Use to read register reports.
Z	Use to read register reports and reset totals to zero.
PGM	Use to program the register.
S	The S position is a hidden position reserved for dealer access.

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

Control Keys

The *ER-285M* includes two sets of keys that may be used to access the following control lock positions.

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

Note: Keys may be removed from the control lock in the OFF or REG positions.

Default Keyboard

Note: The overlay depicted here is not actual size. See your SAM4s dealer for actual size overlays and key sheets.

PAPER FEED	RECEIPT ON/OFF	TAX	#/NS	CLERK	RA	PO
KBD SHIFT	%1	%2	RETURN	VOID	CANCEL	CHARGE2
1	6	11	CLEAR	X/TIME	PLU	CHARGE
2	7	12	7	8	9	CHECK
3	8	13	4	5	6	SUB TOTAL
4	9	14	1	2	3	CASH / TEND
5	10	15	0	00	.	

Quick Start Step #1: Unpacking

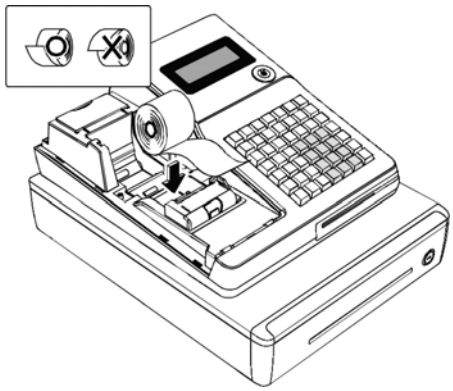
1. Unpack and unwrap the cash register.
2. Locate in the packing the following items:
   - 1 roll of paper
   - 1 rewind spindle
   - 2 sets of control keys
3. Remove the cardboard protectors from the cash drawer.
4. Plug the register into a grounded outlet (three-prong), turn the power switch on, insert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

Quick Start Step #2: Installing the Paper

Note: Beginning in 2011, the ER-285M printer was changed to the STM200 printer with drop-in paper loading. Go to "Installing the Paper: Models with the STM200 Printer" on page 21 if your ER-285M has the STM200 printer.

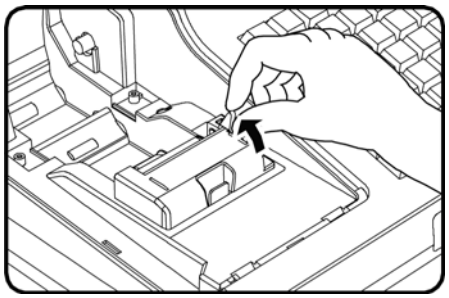
1. Remove the printer cover.

2. For proper feeding through the print head, cut or tear a straight even edge on the end of the paper roll. (Be sure to remove any paper with glue residue.) Place the paper roll in the paper holder so that the paper will feed from the bottom of the roll.

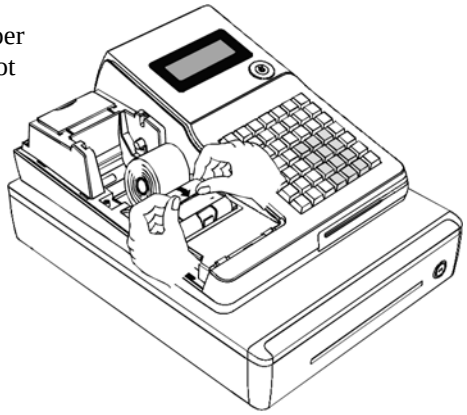


3. Open the paper lever and insert the end of the paper into the paper slot. The printer will feed automatically.

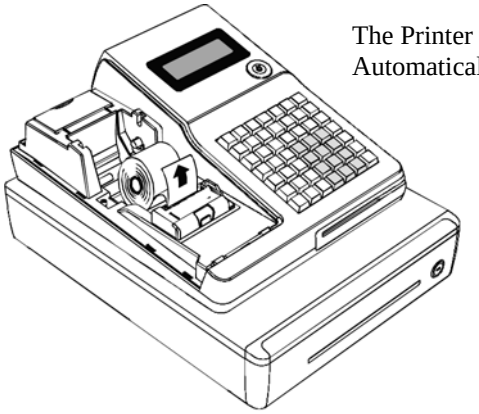
Open Paper Lever



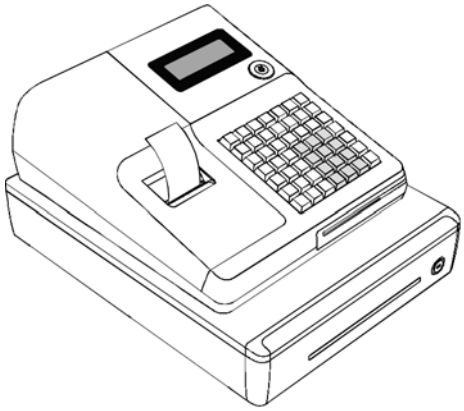
Insert End of Paper into the Paper Slot



The Printer will Feed Automatically



4. Close the paper lever. Feed the paper several inches and pass it through the paper slot on the printer cover. Replace the printer cover.



5. If you wish to use the printer to print a sales journal, insert the paper into the paper take-up spool. Wind the paper two or three turns around the spool shaft and install the spool in the mount. (Print option #31 must be set to allow journal printing. See “System Option Programming” on page 142.)

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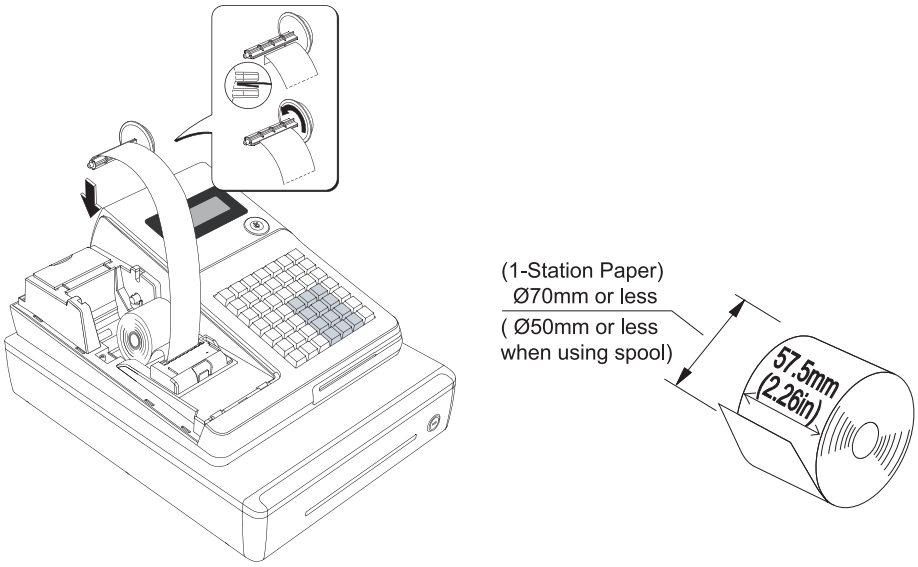
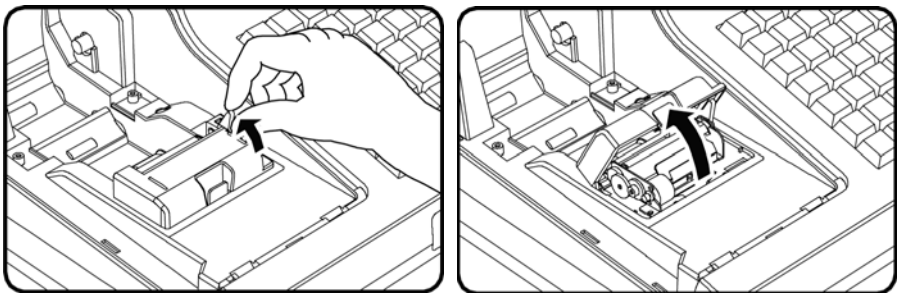


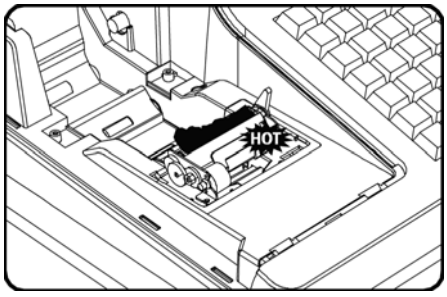
In Case of Paper Jam

1. Open the paper lever and open the cap of the printer.

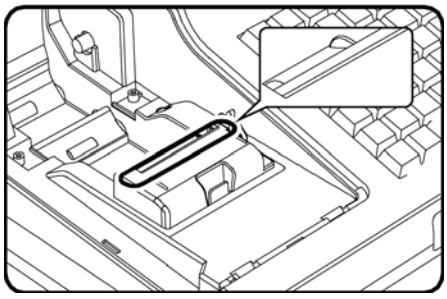


2. Remove the jammed paper.

NOTE: Be careful not to get burned – The print head is hot!



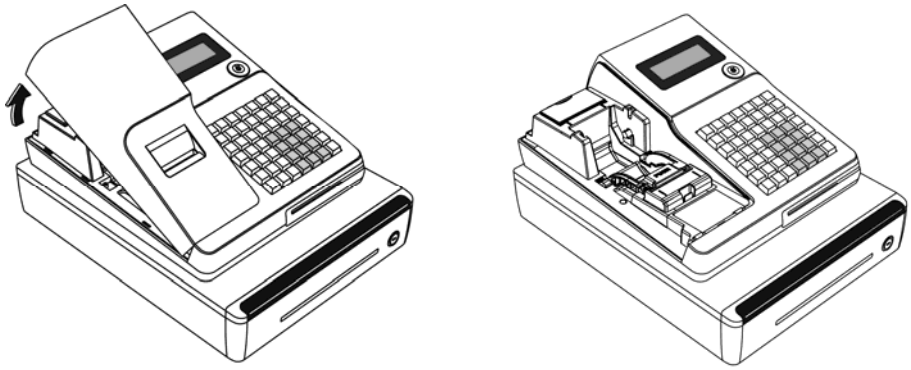
NOTE: Be careful: The tear bar is sharp!



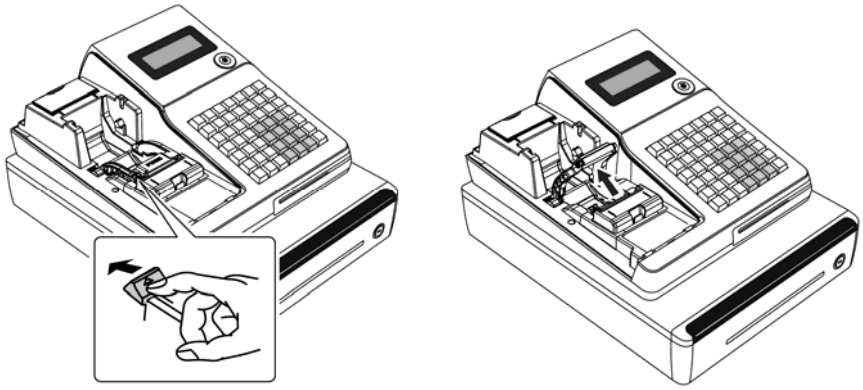
Installing the Paper: Models with the STM200 Printer

Note: Use these instructions to load the paper if your ER-285M is equipped with the model STM200 printer.

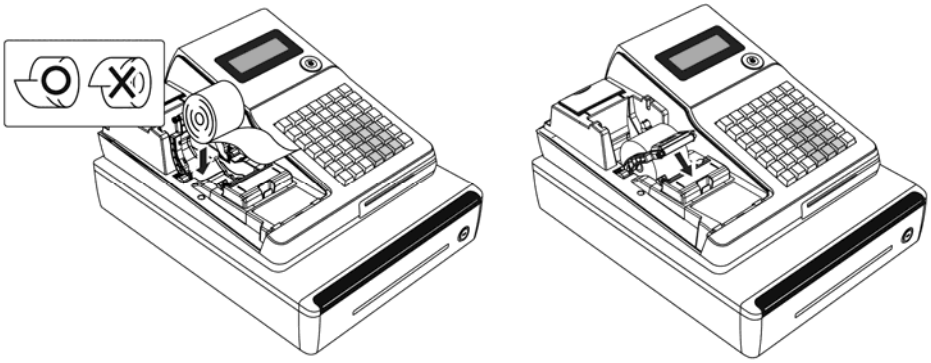
1. Remove the printer cover.



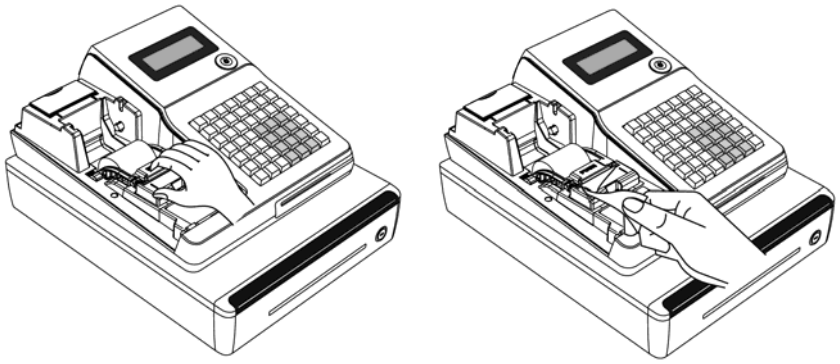
2. Push the yellow cap lever and lift up the platen roller.



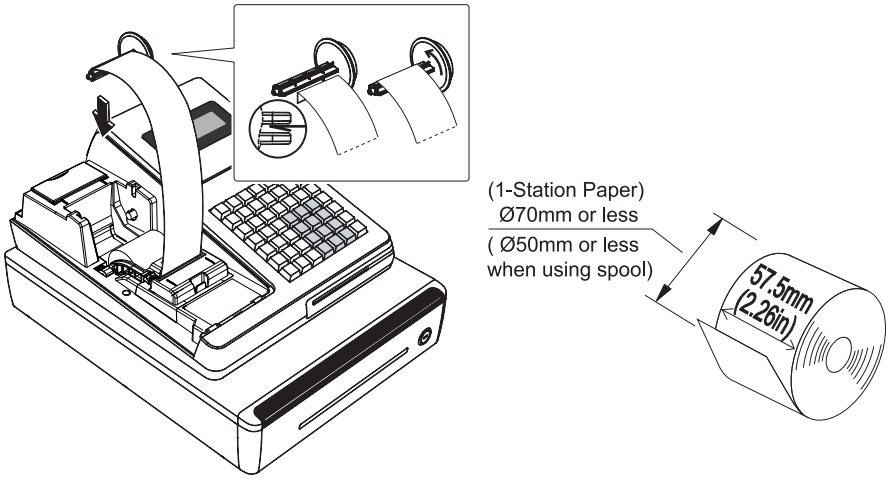
3. Load the paper and close the platen roller.



4. Close the platen roller firmly. Tear off the excess paper and close the platen roller.



5. If you wish to use the printer to print a sales journal, insert the paper into the paper take-up spool. Wind the paper two or three turns around the spool shaft and install the spool in the mount.



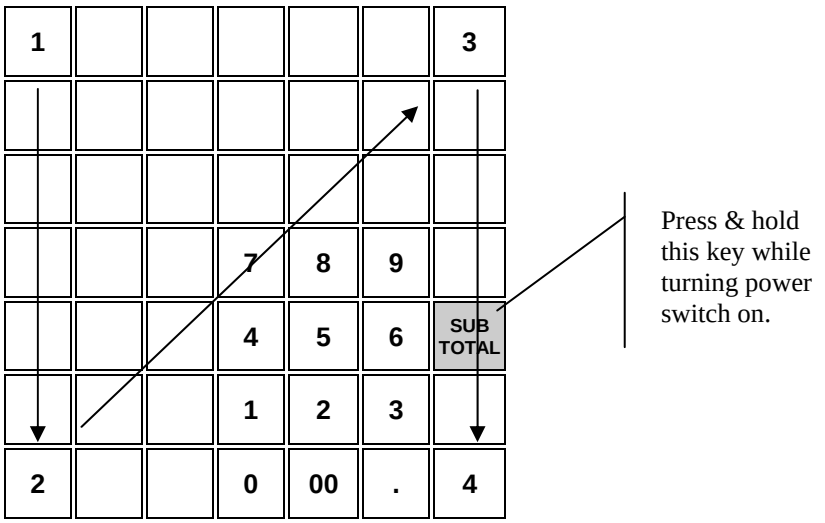
Quick Start Step #3: Memory All Clear

You must perform the Memory All Clear procedure described here before programming and using your SAM4s ER-285M.

CAUTION: The procedures described in this area are security sensitive. Clearing the ER-285M Series memory will reset programming, totals and counters. Do not share this information with unauthorized users and distribute the special SERVICE-Mode key only to those you may want to perform these functions.

Complete clearing of all memory areas and installation of the default program is done through the following special procedure:

1. Turn the register power switch to the **OFF** position.
2. Insert the "C" key and turn the control lock to the **S** position. (Note that the **S** position is one position clock-wise from the **PGM** position. The **S** position is not labeled.)
3. Press and hold the key position the **SUBTOTAL** key.
4. Continue to hold the **SUBTOTAL** key while turning register power switch to the **ON** position.
5. Release the **SUBTOTAL** key. The display reads: "RAM ALL CLEAR". .
6. Press the upper left key of the keyboard, then the lower left key, then the upper right key, and finally press the lower right key.



7. After a short delay, the printer will print the message:

   "RAM ALL CLEAR OK !" At this point memory is cleared and the default program is installed.

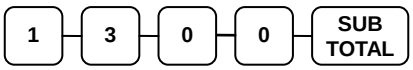
Quick Start Step #4: Basic Programming

This section covers the basic programming necessary to get your cash register running quickly. See "Program Mode Reference Guide" on page 123 if you wish to program options that are not included in this section.

Programming the Date and Time

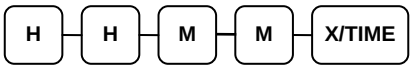
Use this program to set the clock and calendar on your *ER-285M*. The date changes automatically. After initial setting, time changing is usually required only for beginning and ending daylight savings time.

1. Turn the control lock to the **PGM** position.
2. To begin the program, enter **1 3 0 0**, press the **SUBTOTAL** key.



3. Enter the time in military time (based on 24 hours). The entry must be four digits: two digits for hour (HH) and two digits for the minutes (MM). For example enter 0630 for 6:30 AM or enter 1345 for 1:45 PM.

   Enter the current time and press the **X/TIME** key.



4. Enter the date in MM (month) DD (day) and YY (year) format. For example, for January 31, 2007, enter 013107.

   Enter the date and press the **X/TIME** key:

5. Press the **CASH** key to finalize the program.

Programming the Sales Tax Rate

Most sales taxes can be programmed by entering a tax percentage rate. If you have tax that can be computed through a straight percentage calculation, follow the simple steps in this section to enter your sales tax rate.

About Tax Tables

In some cases you may find that tax that is entered as a percentage does not follow exactly the tax chart that applies in your area. If this is the case, you must enter your tax using tax table programming. This method will match tax collection exactly to the break points of your tax table. If you determine that you need to set a tax table, see "Tax Table Programming" on page 129.

About Multiple Taxes

Some areas collect multiple taxes. For example, merchants may be required to collect one rate for merchandise and a different rate for liquor. To accommodate multiple taxes, the ER-285M can compute and report up to four different taxes. If you have a single tax rate, use tax rate 1 when programming.

About Canadian GST

Merchants in Canada can use tax 4 to compute and report the national goods and services tax (GST). See "Tax Table Programming" on page 129 for more information.

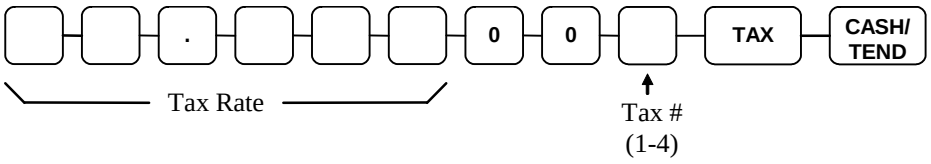
Verifying Accurate Tax Computation

Important Note: After you have entered your tax program, test for accuracy by entering several transactions of different dollar amounts. Carefully check to make sure the tax charged by the cash register matches the tax amounts on the printed tax chart for your area. Merchants are responsible for accurate tax collection. If the cash register is not calculating tax accurately, or if you cannot program your tax properly from the information in this manual, contact your local SAM4s dealer for assistance.

Programming a Tax Rate Percentage

1. Turn the control lock to the **PGM** position.
2. Enter the rate, with a decimal: 0.000-99.999. It is not necessary to enter proceeding zeros. For example, for 6%, enter 06.000 or 6.000.)
3. Enter **00**.
4. Enter the number of the tax rate you are programming (1-4).
5. Press the **TAX** key.
6. Press the **CASH/TEND** key to end programming.

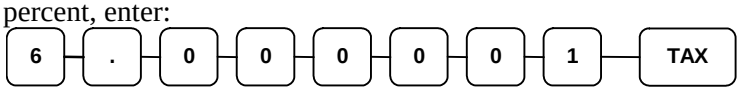
Tax Rate Programming Flowchart



Please Note: After programming the tax rate, you must program the PLUs taxable to calculate tax. Go to the next page for PLU programming steps.

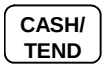
Tax Rate Programming Examples

If tax 1 is 6 percent, enter:



If tax 2 is 7.5 percent, enter:

Press the **CASH/TEND** key to end programming.



The rates you have entered will display and print on the printer:

```
DATE 03/09/2007 FRI   TIME 01:32

******* TAX PROGRAMMING *******
--------------------------------
TAX1
ADD-ON AT                 6.000%

TAX2
ADD-ON AT                 7.500%

CLERK 1          000046   00000
```

Programming PLU Tax & Preset Status

The ER-285 uses keyboard PLUs that act like traditional cash register “department” keys. All PLUs, whether registered directly through the keyboard, or indirectly by entering a PLU code, are programmed in the same manner and their sales totals are reported in the PLU report. Programming done here includes:

Tax Status

The PLU tax status determines whether tax is automatically calculated and added to the sale. For example, if PLU1 is taxable by tax rate 1, and tax rate 1 is a 6% add on tax, then $.60 will be added to the sale when a $10.00 item is registered.

Open and Preset PLUs

Preset PLUs automatically ring-up a preset amount. For example, you can use a preset PLU key to register a pack of cigarettes. Just press the key and the price you have programmed is recalled and added to the sale. If a PLU is not preset, it is “open”. In other words, you enter the price for the PLU. *All PLUs default to Preset status.*

Preset Override

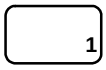
You can make a preset PLU and allow the operator to override the preprogrammed price. For example name brand cigarettes may be preset at $3.25 per pack, but a generic brand may cost only $2.75. If the preset has been set to allow override, touching the key will register the preset price, and you can also enter a different price for the same PLU. The disadvange of using override is that you lose price control. Any employee can sell an item at a reduced or inflated price without manager intervention.

More PLU Program Options

PLUs have considerable additional programmability. See “PLU Programming” on page 131 of the “Program Mode Reference Guide” chapter of this manual if you need to set other PLU options.

To Program Tax & Preset Status

1. Turn the control lock to the **PGM** position.
2. Enter **100**, press the **SUBTOTAL** key.
3. Select the PLU you wish to program in one of the following ways:
   - Press a PLU key on the keyboard, or

   - Enter the PLU # (up to15-digits) and press the **PLU** key

     Enter the PLU#, up to 15 digits → **PLU**
4. Determine the two-digit entry from the chart below. Answer each question and enter the value that represents your answer in the "=" column. Add the values for the first three questions to determine the first digit entry; add the values for the second three questions to determine the second digit entry.

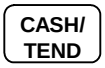
   Enter the two digits and press the **X/TIME** key.

	PLU Option	Value	=	SUM
First Digit	1. PLU is preset?	Yes = 0 No = 1		
	2. Allow preset override?	Yes = 0 No = 2		
	3. PLU is taxable by rate 1?	Yes = 4 No = 0		
Second Digit	1. PLU is taxable by rate 2?	Yes = 1 No = 0		
	2. PLU is taxable by rate 3?	Yes = 2 No = 0		
	3. PLU is taxable by rate 4?	Yes = 4 No = 0		

   Examples:

   For a preset PLU taxable by rate 1: enter **40,**
   For a non-preset PLU (open PLU) that is non-taxable: enter **10**,
   For a preset PLU without override, taxable by rate 1 and rate 2: enter **61**
5. Repeat steps **3** and **4** for each PLU you wish to program.
6. Press the **CASH/TEND** key to end programming. The tax status you have entered will display and print on the printer.

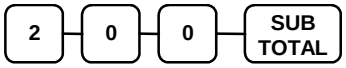
Setting a PLU Preset Price or an Open PLU Entry Limit

If a PLU is preset, you will need to set the price of the item. If a PLU is not preset, you can set a maximum amount that can be registered. The maximum entry is often called a HALO (High Amount Lock Out). If no HALO is set for an open department, the operator can register amounts up to 7-digits ($99,999.99).

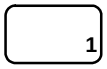
Merchants often set HALO limits to prevent errors and over-rings. For example, you can set a HALO of $50.00 if the highest price item in sold in a category is $50.00. If the operator inadvertently enters $500.00, the register will not accept the entry and display an error message.

To Set the Preset Price/HALO

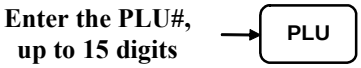
1. Turn the control lock to the **PGM** position.
2. To begin the program, enter **2 0 0**, press the **SUBTOTAL** key.



3. Select the PLU you wish to program in one of the following ways:
   - Press a PLU key on the keyboard, or



   - Enter the PLU # (up to15-digits) and press the **PLU** key



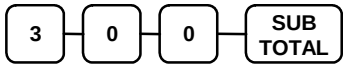
4. If the PLU is open, enter a HALO of up to 7 digits. If the PLU is preset, enter a preset price.

5. To program additional PLUs, repeat from step 3, or press the **CASH** key to finalize the program.

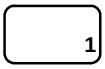
Setting a PLU Descriptor

Program descriptors by typing descriptors on the alpha keyboard overlay or by entering three-digit alpha character codes. Go to system option #32 to choose the method you wish to use. The descriptor code method described here is the default method.

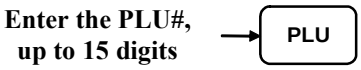
1. Turn the control lock to the **PGM** position
2. To begin the program, enter **3 0 0**, press the **SUBTOTAL** key.



3. Select the PLU you wish to program in one of the following ways:
   - Press a PLU key on the keyboard, or

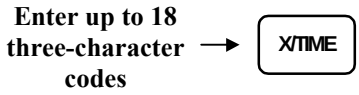


   - Enter the PLU # (up to15-digits) and press the **PLU** key



4. Enter up to 18 three-character codes from the chart on the next page.

   If you make a mistake while entering codes, press CLEAR and begin again at step #3.

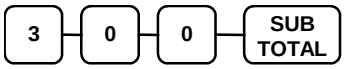


5. To program additional PLUs, repeat from step 3, or press the **CASH** key to finalize the program.

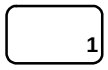
Descriptor Program Example

Set PLU #1 to print and display the descriptor “LIQUOR”

1. Turn the control lock to the **PGM** position
2. To begin the program, enter **3 0 0**, press the **SUBTOTAL** key



3. Press the PLU 1 key on the keyboard:



4. Enter the numeric codes: **076 073 081 085 079 082**. Press the **X/TIME** key.
5. Press the **CASH** key to finalize the program.

Descriptor Code Chart

CHAR	C	ü	é	â	ä	à	å	c	ê	ë
CODE	001	002	003	004	005	006	007	008	009	010
CHAR	è	ï	î	ì	Ä	Å	É	æ	Æ	ô
CODE	011	012	013	014	015	016	017	018	019	020
CHAR	ö	ò	û	ù	ÿ	Ö	Ü	¢	£	¥
CODE	021	022	023	024	025	026	027	028	029	030
CHAR	€	SPA	!	"	#	$	%	&	'	(
CODE	031	032	033	034	035	036	037	038	039	040
CHAR	)	*	+	,	-	.	/	0	1	2
CODE	041	042	043	044	045	046	047	048	049	050
CHAR	3	4	5	6	7	8	9	:	;	<
CODE	051	052	053	054	055	056	057	058	059	060
CHAR	=	>	?	@	A	B	C	D	E	F
CODE	061	062	063	064	065	066	067	068	069	070
CHAR	G	H	I	J	K	L	M	N	O	P
CODE	071	072	073	074	075	076	077	078	079	080
CHAR	Q	R	S	T	U	V	W	X	Y	Z
CODE	081	082	083	084	085	086	087	088	089	090
CHAR							a	b	c	d
CODE	091	092	093	094	095	096	097	098	099	100
CHAR	e	f	g	h	i	j	k	l	m	n
CODE	101	102	103	104	105	106	107	108	109	110
CHAR	o	p	q	r	s	t	u	v	w	x
CODE	111	112	113	114	115	116	117	118	119	120
CHAR	y	z	BACK SPACE			Double				
CODE	121	122	123			999				

Quick Start Step #5: Basic Operations

Clerk Sign-On

You must sign on a clerk to operate the register. The default ER-285M will allow 15 different clerks to sign on and operate the register, using the clerk code numbers 1 through 15.

1. Turn the control lock to the **REG** position. When no clerk is signed on, the display reads "CLOSED":

2. To sign on a clerk, enter the clerk number (1 to 15) and press the clerk key.

3. The "CLOSED" message no longer displays and the register prints a clerk log in chit:


```
DATE 01/10/2007 WED   TIME 15:36
X 1   REPORT                00001

********************************
CLERK LOG IN
********************************
CLERK 1                       $01
CLERK LOG IN TIME            22:42
CLERK 1           000218    00000
```

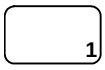
4. To sign the clerk off, enter 0 (Zero) and press the clerk key. The "CLOSED" message displays and the register prints a clerk log out chit.

Registering Items

Note: Open and preset PLUs will require the appropriate program to work as shown here.

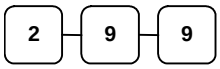
Preset Items

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

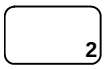


Open Price Items

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

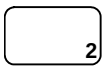


3. Press a **PLU** key. For example, press **PLU 2**:



Repeating an Item

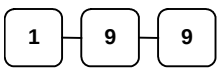
4. To register a second item exactly as the first, press the PLU key a second time. For example, press **PLU 2**:



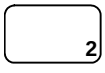
Registering Multiple Items

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

6. Enter an amount on the ten key-pad. Do not use the decimal key. For example, for $1.99, enter:



7. Press a **PLU** key. For example, press **PLU 2**:



Totaling a Cash Sale

1. Register the items you wish to sell.
2. To display the subtotal of the sale including tax, press **SUBTOTAL**:

   SUB TOTAL

3. To total a cash sale, press **CASH/TEND**:

   CASH/ TEND

4. The display will read "CASH", the drawer will open and the receipt will print as in the example on the right.

```
DATE 03/09/2007 FRI   TIME 01:32

PLU1 T1                      $2.99
PLU1 T1                      $2.99
4X              @ 1.99       $1.99
PLU2                         $7.96
TAX1                         $0.36
TOTAL                       $14.30
CASH                        $14.30
CLERK 1         NO.000011    00001
```

Tendering a Cash Sale

1. Register the items you wish to sell.
2. To display the subtotal of the sale including tax, press **SUBTOTAL**:

   SUB TOTAL

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

   2 0 0 0

4. Press **CASH/TEND**:

   CASH/ TEND

5. The display will read "CHANGE", the drawer will open and the receipt will print as in the example on the right.

```
DATE 03/09/2007 FRI   TIME 01:32

PLU1 T1                      $2.99
PLU1 T1                      $2.99
4X              @ 1.99       $1.99
PLU2                         $7.96
TAX1                         $0.36
TOTAL                       $14.30
CASH                        $20.00
CHANGE                       $5.67
CLERK 1         NO.000011    00001
```

Tendering a Check Sale

1. Register the items you wish to sell.
2. To display the subtotal of the sale including tax, press **SUBTOTAL**:

   SUB TOTAL

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

   2 0 0 0

4. Press **CHECK**:

   CHECK

5. The display will read "CHANGE", the drawer will open and the receipt will print as in the example on the right.

```
DATE 03/09/2007 FRI   TIME 01:32

PLU1 T1                    $2.99
PLU1 T1                    $2.99
4X            @ 1.99       $1.99
PLU2                       $7.96
TAX1                       $0.36
TOTAL                     $14.30
CHECK                     $20.00
CHANGE                     $5.70
CLERK 1       NO.000011    00001
```

Totaling a Charge Sale

1. Register the items you wish to sell.
2. To display the subtotal of the sale including tax, press **SUBTOTAL**:

   SUB TOTAL

3. Press **CHARGE**:

   CHARGE

4. The display will read "CHARGE1", the drawer will open and the receipt will print as in the example on the right.

```
DATE 03/09/2007 FRI   TIME 01:32

PLU1 T1                    $2.99
PLU1 T1                    $2.99
4X            @ 1.99       $1.99
PLU2                       $7.96
TAX1                       $0.36
TOTAL                     $14.30
CHARGE                    $14.30
CLERK 1       NO.000011    00001
```

Note: Charge tendering is not allowed without changing the Charge key options.

Register Reports

Introduction

All Management Functions take place with the control lock in the **X** or **Z** position. In this way only those with the correct key will have access to these functions. Some register operations may be programmed to require the control lock in the **X** position in order to operate. All reports require a key that will access the **X** or **Z** position.

X & Z Reports

System reports are divided into two basic categories:

- **X** reports, which read totals without resetting
- **Z** reports, which read totals and reset them to zero

Most reports are available in both categories. Some reports, such as the Cash-in-Drawer report and the From-To PLU report are available only as **X** reports.

A complete list of available reports is presented in a chart on the following page.

An example is given for each of these reports in the pages that follow. Those reports that may be optionally abbreviated through register programming are represented twice. They are first shown with the option off, giving all totals, and again with the option turned on, showing the abbreviated version of the same report.

Registers programmed with pop-up clerks must be signed on in the **REG** control lock position prior to taking reports.

X2/Z2 Reports: Period-to-Date Reports

Some reports also provide identical but separate *period to date* reports. These reports maintain a separate set of totals which may be allowed to accumulate over a period of days, weeks, months, or even years. **X2** reports read period to date totals without resetting, and **Z2** reports read period to date totals and reset them to zero. Period to date totals are updated each time a **Z1** report is completed.

The following example shows how the net sales total (from the financial report) would report on each report throughout each day of a weekly reporting period. Note how the daily totals are conveniently accumulated in the periodic report.

Day	Financial Report	Net Sales Total		Note
		Daily	Periodic	
Sunday	Z1	$70.00		Daily Total Reset to Zero
	X2		$70.00	Week-to-date total reading
Monday	Z1	$45.00		Daily Total Reset to Zero
	X2		$115.00	Week-to-date total reading
Tuesday	Z1	$95.00		Daily Total Reset to Zero
	X2		$210.00	Week-to-date total reading
Wednesday	Z1	$100.00		Daily Total Reset to Zero
	X2		$310.00	Week-to-date total reading
Thursday	Z1	$75.00		Daily Total Reset to Zero
	X2		$385.00	Week-to-date total reading
Friday	Z1	$115.00		Daily Total Reset to Zero
	X2		$500.00	Week-to-date total reading
Saturday	Z1	$200.00		Daily Total Reset to Zero
	X2		$700.00	Week-to-date total reading
	Z2		$700.00	Week–to-date total reset to zero

At the end of the period, in this case a week, the periodic totals are reset and the register is ready for a new period. Each user can choose how to use the periodic report, for weekly, monthly, or yearly analysis.

Running a Report - General Instructions

1. Select a report type and the report mode from the table below.
2. Turn the control lock to the position indicated.
3. Enter the key sequence for the report you have selected.

Report Type	Report Number	Report Mode	Control Lock Position	Key Sequence
Financial	1	X	X	1 – SUBTOTAL
		Z	Z	1 – SUBTOTAL
		X2	X	201 – SUBTOTAL
		Z2	Z	201 – SUBTOTAL
Time	2	X	X	2 – SUBTOTAL
		Z	Z	2 – SUBTOTAL
		X2	X	202 – SUBTOTAL
		Z2	Z	202 – SUBTOTAL
All PLU	3	X	X	3 – SUBTOTAL
		Z	Z	3 – SUBTOTAL
		X2	X	203 – SUBTOTAL
		Z2	Z	203 – SUBTOTAL
All Clerk	4	X	X	4 – SUBTOTAL
		Z	Z	4 – SUBTOTAL
		X2	X	204 – SUBTOTAL
		Z2	Z	204 – SUBTOTAL
Group	5	X	X	5 – SUBTOTAL
		Z	Z	5 – SUBTOTAL
		X2	X	205 – SUBTOTAL
		Z2	Z	205 – SUBTOTAL
All Stock	6	X	X	6 – SUBTOTAL
		Z	Z	6 – SUBTOTAL
Daily Sales	8	X2	X	208 – SUBTOTAL
		Z2	Z	208 – SUBTOTAL
Individual Clerk Report	9	X	X	9 – SUBTOTAL - # - CLERK - # - CLERK
		X2	X	209 – SUBTOTAL - # - CLERK - # - CLERK
Open Table	11	X	X	11 – SUBTOTAL
		Z	Z	11 – SUBTOTAL
From/To PLU	13	X	X	13-SUBTOTAL # – PLU – # – PLU
		X2	X	213-SUBTOTAL # – PLU – # – PLU
From/To Stock	14	X	X	14-SUBTOTAL # –PLU – # – PLU
Not Found PLU (V1.017 or later)	15	X	X	15 - SUBTOTAL
		Z	Z	15 - SUBTOTAL
Drawer Total	111	X	X	111-SUBTOTAL

Electronic Journal Reports

Print All EJ	300	X	X	300 -SUBTOTAL
Print EJ Cash	301	X	X	301 -SUBTOTAL
Print EJ Check	302	X	X	302 -SUBTOTAL
Print EJ Misc Tender	303	X	X	303 -SUBTOTAL
Print EJ % Key	304	X	X	304 -SUBTOTAL
Print EJ RA/PO	305	X	X	305 -SUBTOTAL
Print EJ Return	306	X	X	306 -SUBTOTAL
Print EJ Error Correct/Void	307	X	X	307 -SUBTOTAL
Print EJ No Sale	308	X	X	308 -SUBTOTAL
Print EJ Cancel	309	X	X	309 –SUBTOTAL
PRINT EJ By Clerk	401 – 99	X	X/Z	401-499 SUBTOTAL (depends on #of Clerks allocated)-
EJ Reset (No Print)	399	Z	Z	399- SUBTOTAL

Cash Declaration

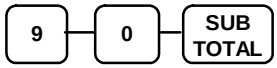
If compulsory cash declaration is required, you must declare the count of the cash drawer prior to taking **X** or **Z** financial and clerk reports.

You can enter the cash drawer total in one step, or to facilitate the counting of the cash drawer, you can enter each type of bill/coin and checks separately and let the register act as an adding machine. You can also use the **X/TIME** key to multiply the denomination of currency times your count.

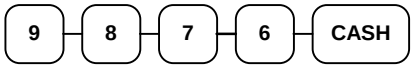
Either way you choose to enter cash, the register will compare your declaration with the expected cash and check in drawer totals and print the over or short amounts on the report.

For example:

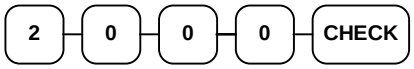
1. Turn the control lock to the **X** or **Z** position (depending upon the type of report you are taking.)
2. Enter **9 0** and press the **SUBTOTAL** key.



3. Enter the total of cash.



4. Enter the total of checks.

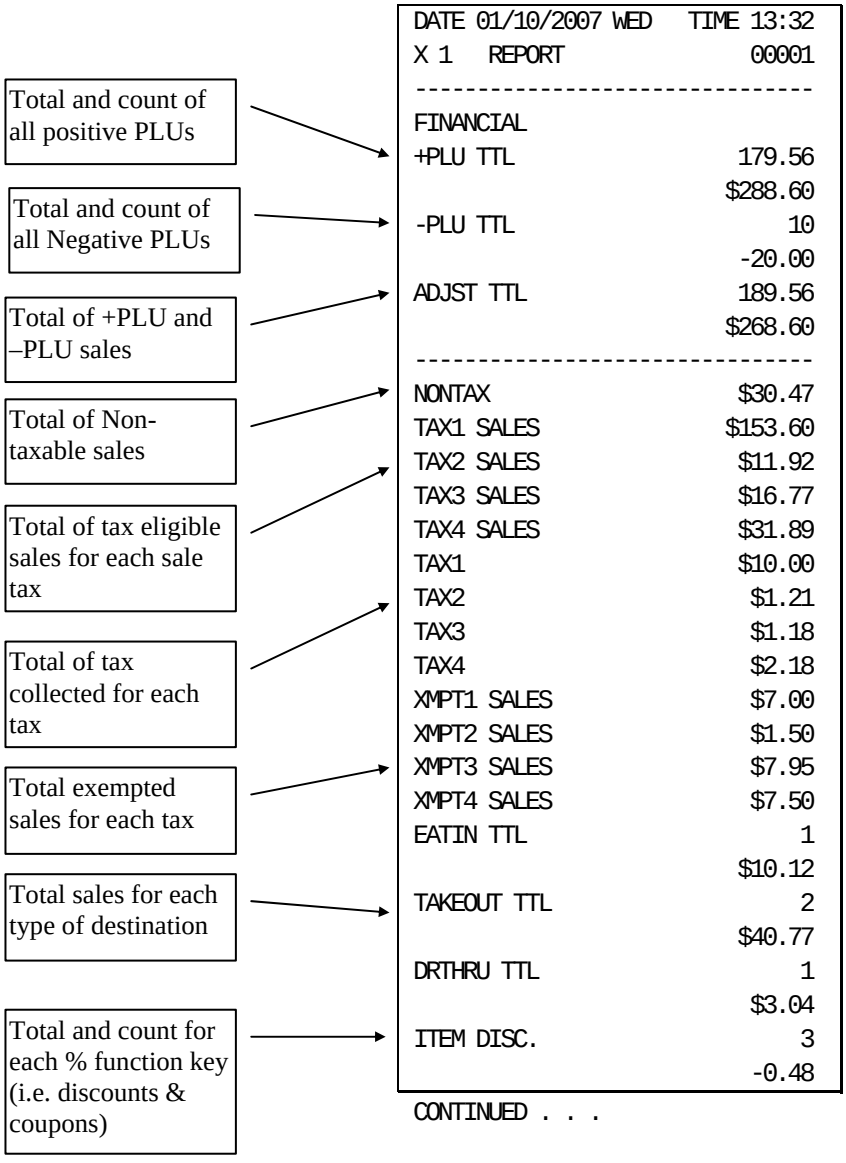


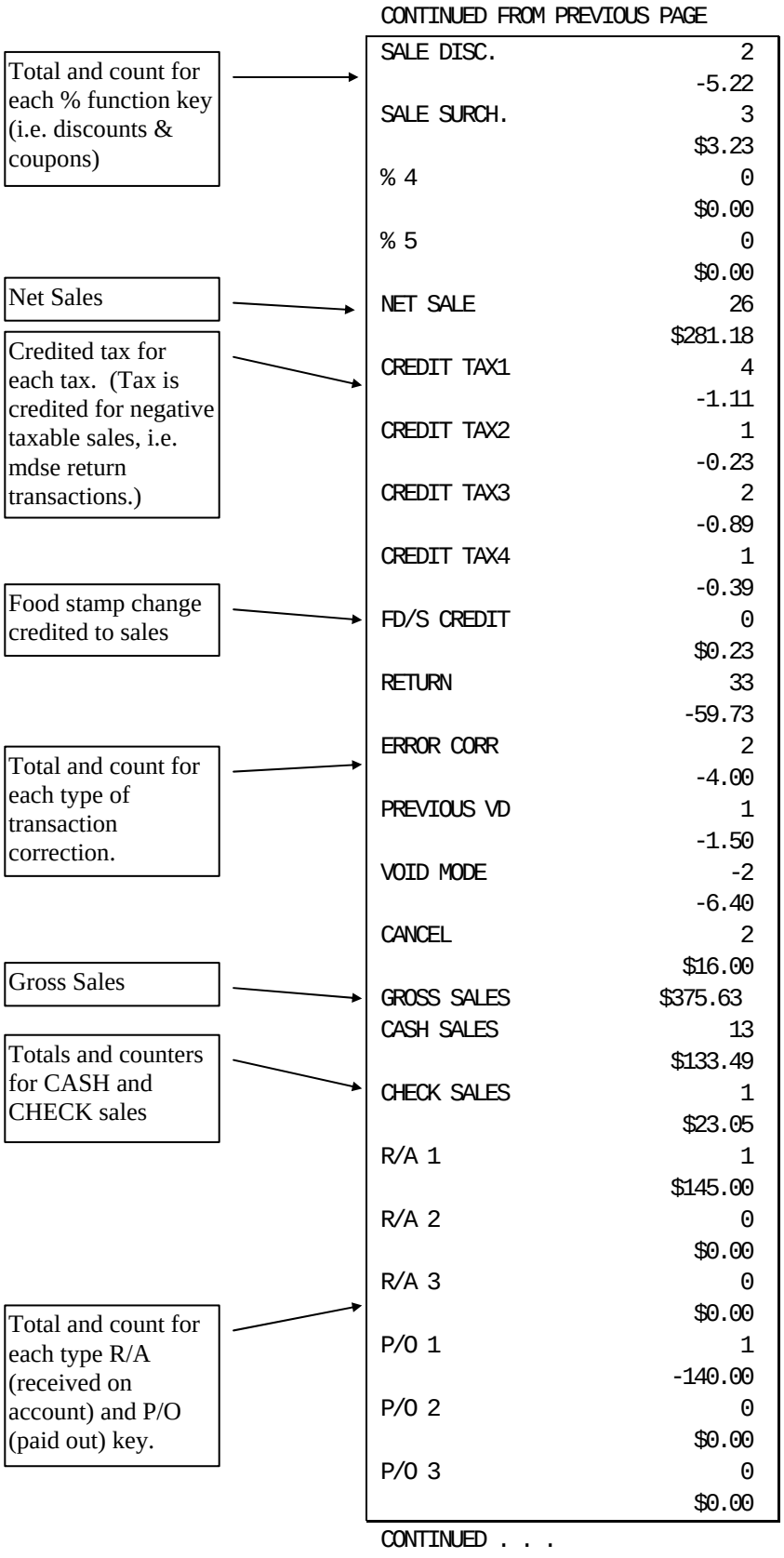
5. Press the **CASH** key to total the declaration.

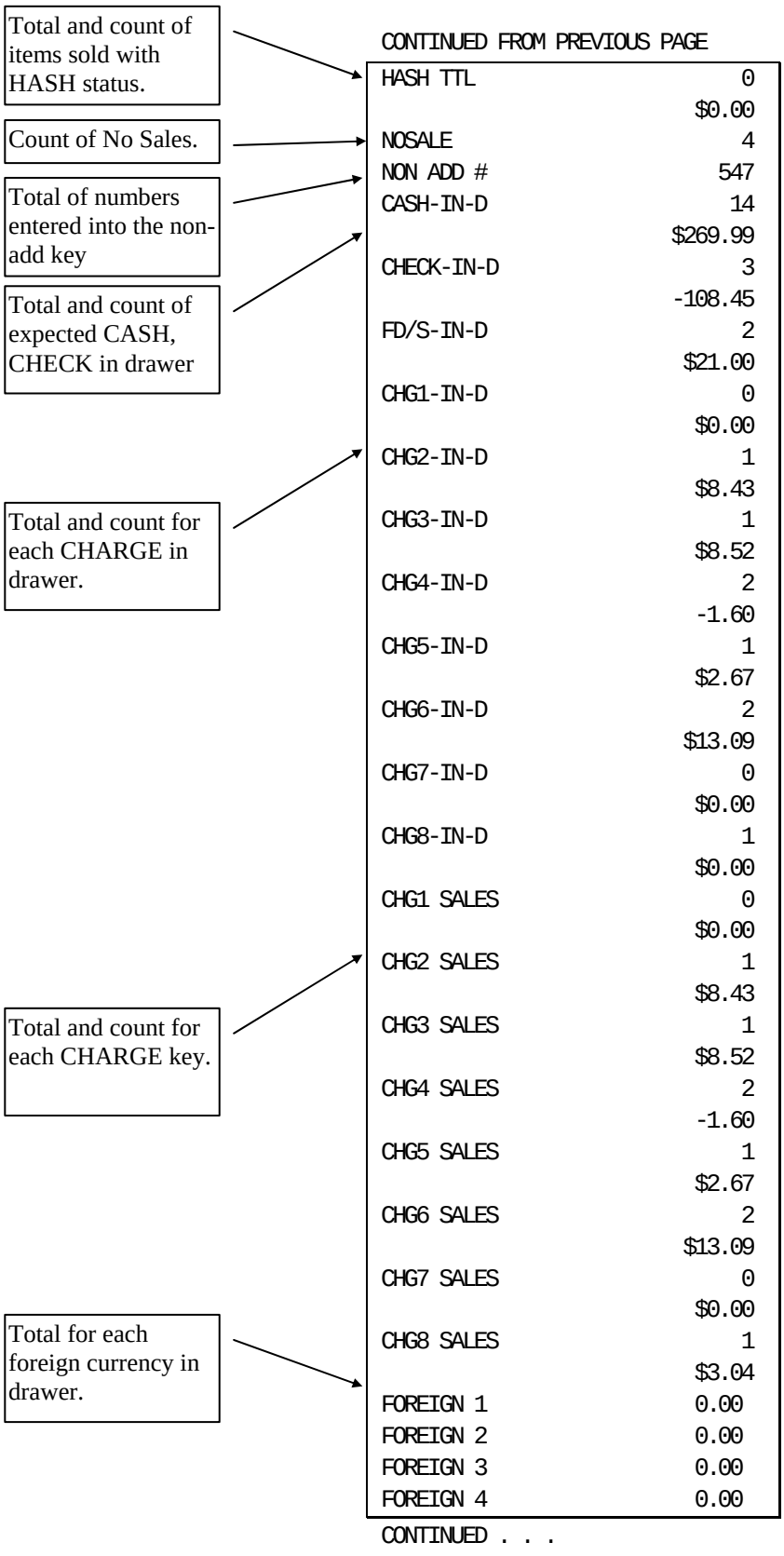

```
DATE 01/10/2007 WED   TIME 08:33

***       CASH DECLARATION      ***

CASH                          $98.76
CHECK                         $20.00
INPUT AMT                    $118.76
DRAWER TTL                   $118.76
DIFFERENCE                    $0.00

CLERK 1       NO.000001       00000
```

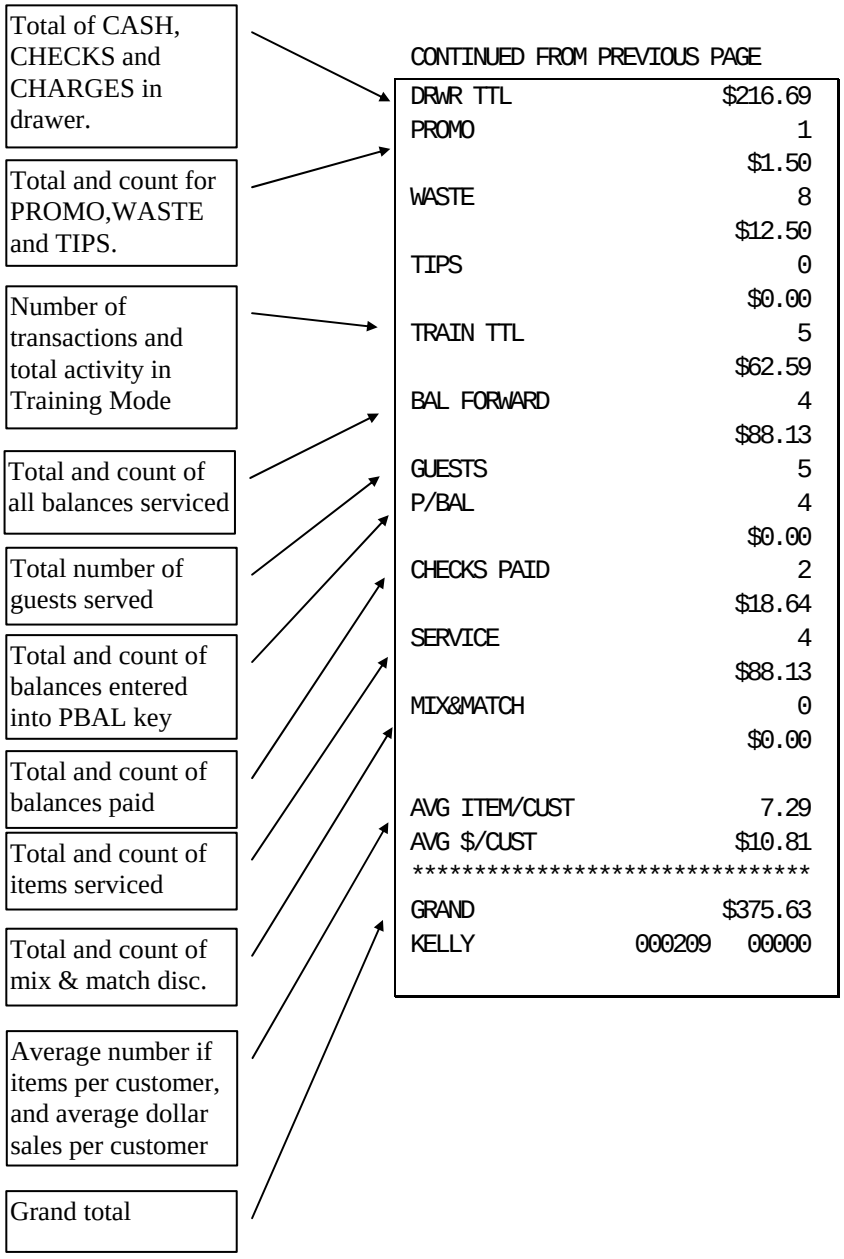
Sample Reports

Financial

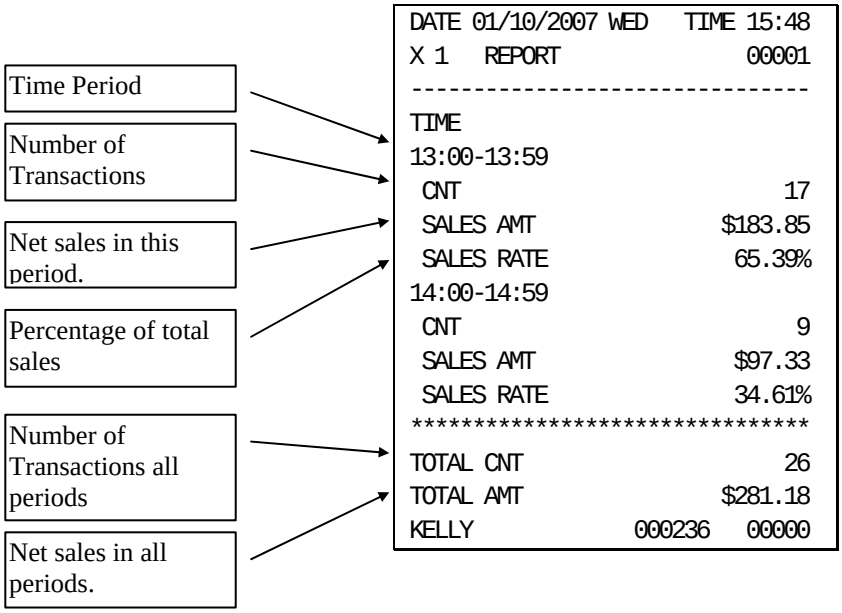



CONTINUED FROM PREVIOUS PAGE
SALE DISC. 2
-5.22
SALE SURCH. 3
$3.23
% 4 0
$0.00
% 5 0
$0.00
NET SALE 26
$281.18
CREDIT TAX1 4
-1.11
CREDIT TAX2 1
-0.23
CREDIT TAX3 2
-0.89
CREDIT TAX4 1
-0.39
FD/S CREDIT 0
$0.23
RETURN 33
-59.73
ERROR CORR 2
-4.00
PREVIOUS VD 1
-1.50
VOID MODE -2
-6.40
CANCEL 2
$16.00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

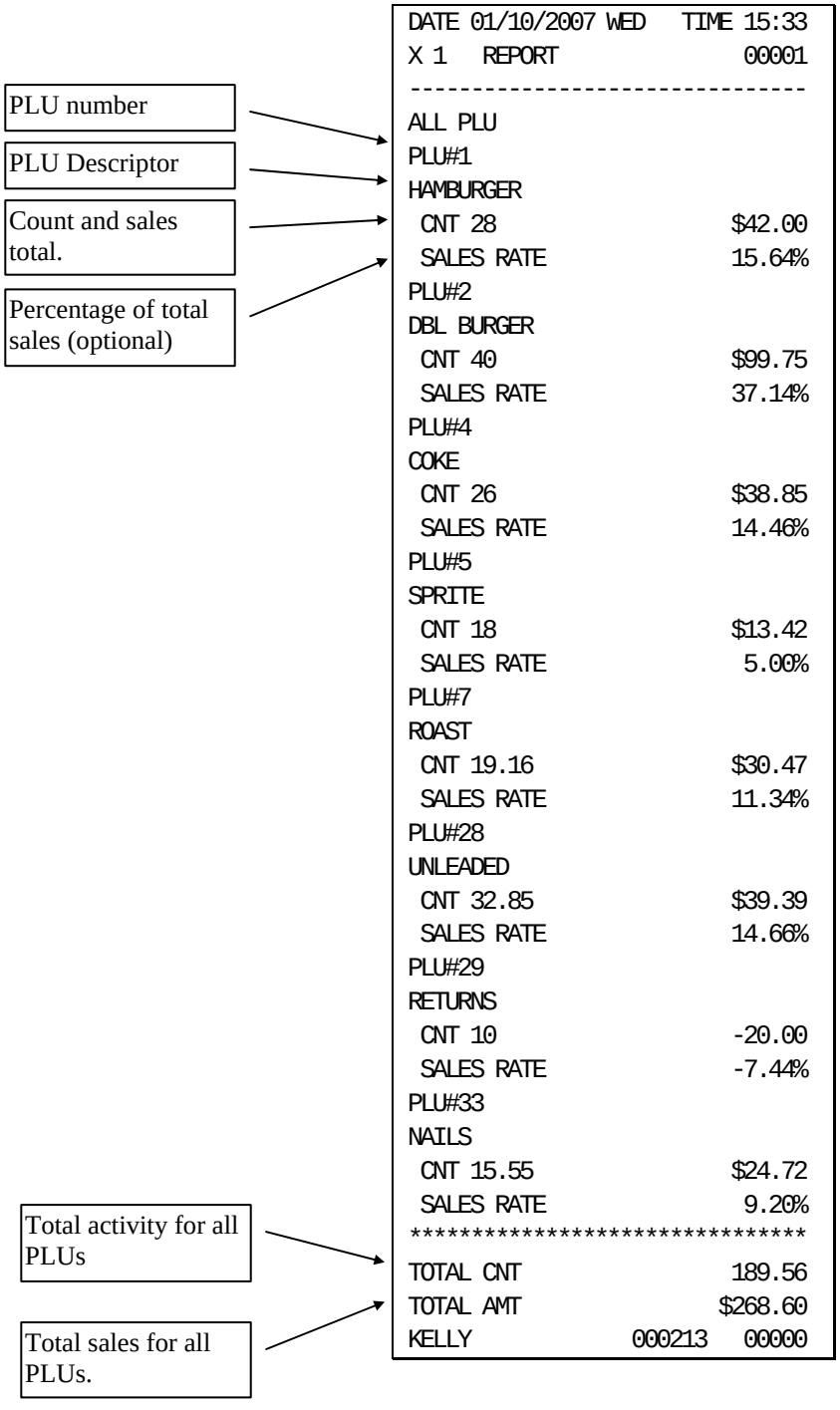

Total and count of items sold with HASH status.
Count of No Sales.
Total of numbers entered into the non-add key
Total and count of expected CASH, CHECK in drawer
Total and count for each CHARGE in drawer.
Total and count for each CHARGE key.
Total for each foreign currency in drawer.
CONTINUED FROM PREVIOUS PAGE
HASH TTL 0
$0.00
NOSALE 4
NON ADD # 547
CASH-IN-D 14
$269.99
CHECK-IN-D 3
-108.45
FD/S-IN-D 2
$21.00
CHG1-IN-D 0
$0.00
CHG2-IN-D 1
$8.43
CHG3-IN-D 1
$8.52
CHG4-IN-D 2
-1.60
CHG5-IN-D 1
$2.67
CHG6-IN-D 2
$13.09
CHG7-IN-D 0
$0.00
CHG8-IN-D 1
$0.00
CHG1 SALES 0
$0.00
CHG2 SALES 1
$8.43
CHG3 SALES 1
$8.52
CHG4 SALES 2
-1.60
CHG5 SALES 1
$2.67
CHG6 SALES 2
$13.09
CHG7 SALES 0
$0.00
CHG8 SALES 1
$3.04
FOREIGN 1 0.00
FOREIGN 2 0.00
FOREIGN 3 0.00
FOREIGN 4 0.00
CONTINUED . . .


Total of CASH, CHECKS and CHARGES in drawer.
Total and count for PROMO,WASTE and TIPS.
Number of transactions and total activity in Training Mode
Total and count of all balances serviced
Total number of guests served
Total and count of balances entered into PBAL key
Total and count of balances paid
Total and count of items serviced
Total and count of mix & match disc.
Average number if items per customer, and average dollar sales per customer
Grand total
CONTINUED FROM PREVIOUS PAGE
DRWR TTL $216.69
PROMO 1
$1.50
WASTE 8
$12.50
TIPS 0
$0.00
TRAIN TTL 5
$62.59
BAL FORWARD 4
$88.13
GUESTS 5
P/BAL 4
$0.00
CHECKS PAID 2
$18.64
SERVICE 4
$88.13
MIX&MATCH 0
$0.00
AVG ITEM/CUST 7.29
AVG $/CUST $10.81
****
GRAND $375.63
KELLY 000209 00000

Time

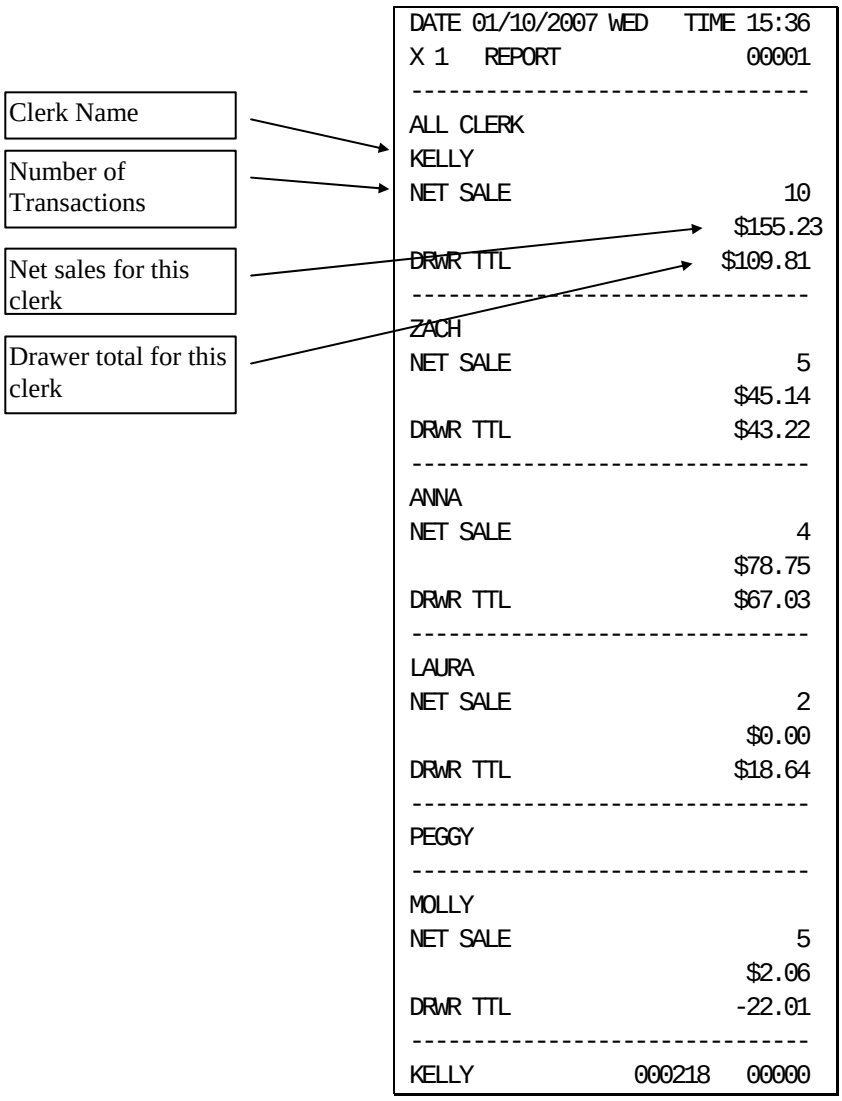

Time Period
Number of Transactions
Net sales in this period.
Percentage of total sales
Number of Transactions all periods
Net sales in all periods.
DATE 01/10/2007 WED TIME 15:48
X 1 REPORT 00001
TIME
13:00-13:59
CNT 17
SALES AMT $183.85
SALES RATE 65.39%
14:00-14:59
CNT 9
SALES AMT $97.33
SALES RATE 34.61%
TOTAL CNT 26
TOTAL AMT $281.18
KELLY 000236 00000

PLU

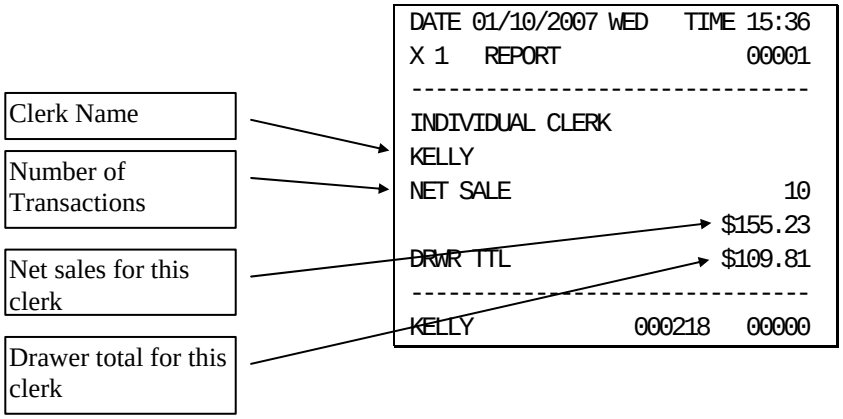

PLU number
PLU Descriptor
Count and sales total.
Percentage of total sales (optional)
Total activity for all PLUs
Total sales for all PLUs.
DATE 01/10/2007 WED TIME 15:33
X 1 REPORT 00001
ALL PLU
PLU#1
HAMBURGER
CNT 28 $42.00
SALES RATE 15.64%
PLU#2
DBL BURGER
CNT 40 $99.75
SALES RATE 37.14%
PLU#4
COKE
CNT 26 $38.85
SALES RATE 14.46%
PLU#5
SPRITE
CNT 18 $13.42
SALES RATE 5.00%
PLU#7
ROAST
CNT 19.16 $30.47
SALES RATE 11.34%
PLU#28
UNLEADED
CNT 32.85 $39.39
SALES RATE 14.66%
PLU#29
RETURNS
CNT 10 -20.00
SALES RATE -7.44%
PLU#33
NAILS
CNT 15.55 $24.72
SALES RATE 9.20%
TOTAL CNT 189.56
TOTAL AMT $268.60
KELLY 000213 00000

Clerk

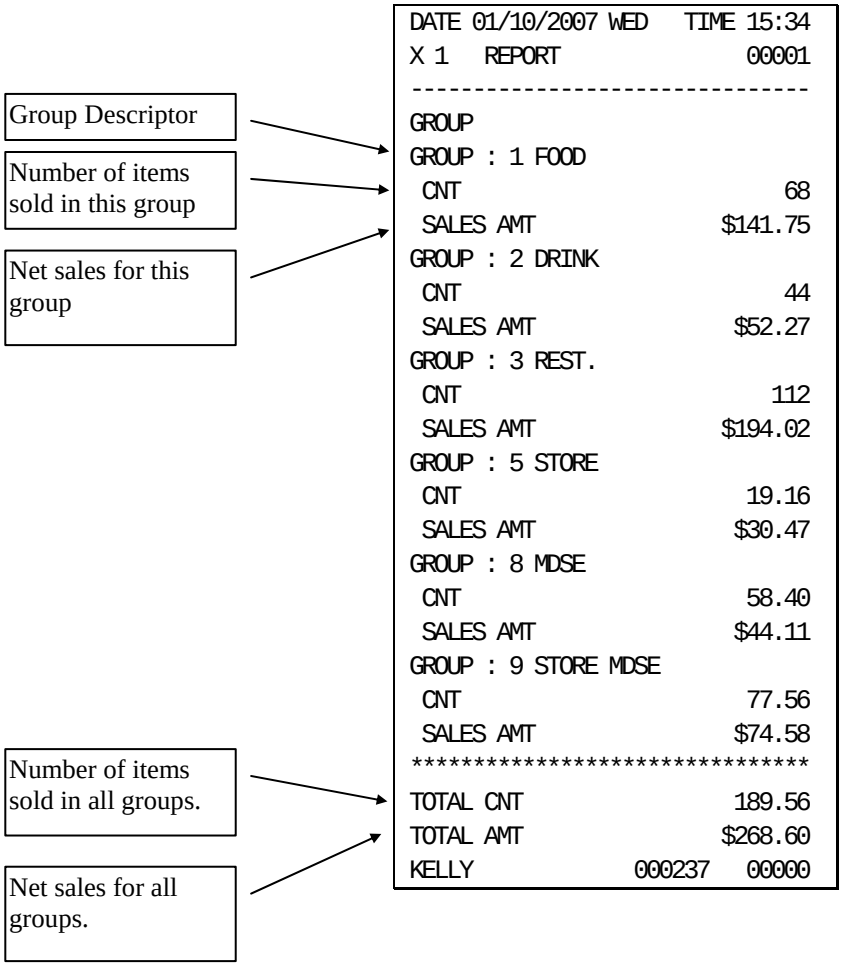
Note: Media totals can be printed for each clerk, if selected in Print Option Programming.



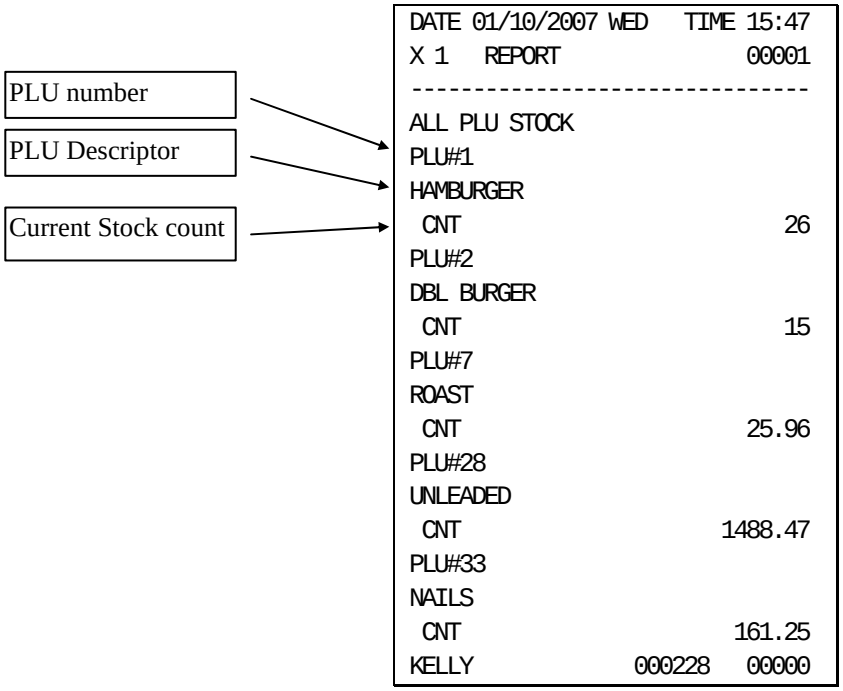
Individual Clerk



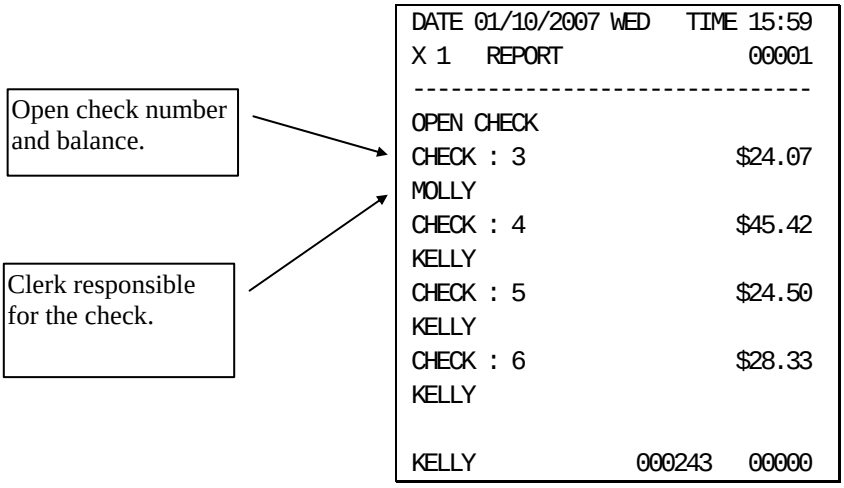
Groups


Group Descriptor
Number of items sold in this group
Net sales for this group
Number of items sold in all groups.
Net sales for all groups.
DATE 01/10/2007 WED TIME 15:34
X 1 REPORT 00001
GROUP
GROUP : 1 FOOD
CNT 68
SALES AMT $141.75
GROUP : 2 DRINK
CNT 44
SALES AMT $52.27
GROUP : 3 REST.
CNT 112
SALES AMT $194.02
GROUP : 5 STORE
CNT 19.16
SALES AMT $30.47
GROUP : 8 MDSE
CNT 58.40
SALES AMT $44.11
GROUP : 9 STORE MDSE
CNT 77.56
SALES AMT $74.58
TOTAL CNT 189.56
TOTAL AMT $268.60
KELLY 000237 00000

Stock


PLU number
PLU Descriptor
Current Stock count
DATE 01/10/2007 WED TIME 15:47
X 1 REPORT 00001
ALL PLU STOCK
PLU#1
HAMBURGER
CNT 26
PLU#2
DBL BURGER
CNT 15
PLU#7
ROAST
CNT 25.96
PLU#28
UNLEADED
CNT 1488.47
PLU#33
NAILS
CNT 161.25
KELLY 000228 00000

Open Check


Open check number and balance.
Clerk responsible for the check.
DATE 01/10/2007 WED TIME 15:59
X 1 REPORT 00001
OPEN CHECK
CHECK : 3 $24.07
MOLLY
CHECK : 4 $45.42
KELLY
CHECK : 5 $24.50
KELLY
CHECK : 6 $28.33
KELLY
KELLY 000243 00000

Balancing Formulas

+/-	Net Sales	$ Example
=	PLU Sales Total	$
+	Tax 1	$
+	Tax 2	$
+	Tax 3	$
+	Tax 4	$
+	Sale Coupon Amounts	$
+	Sale Percent Discounts	$
+	Sale Surcharge Amounts	$
=	Net Sales	$

+/-	Gross Sales	$ Example
=	Net Sales	$
+	Negative PLU Total	$
+	Item Coupon Total	$
+	Item Percent Discount	$
+	Sale Coupon Amounts	$
+	Sale Percent Discounts	$
+	Credit Tax 1	$
+	Credit Tax 2	$
+	Credit Tax 3	$
+	Credit Tax 4	$
+	Merchandise Return	$
+	Void Position Total	$
+	Mix & Match Total	$
=	Gross Sales	$

Operator Reference Guide

Function Key Descriptions

Keys are listed in alphabetical order. Some of the keys described below are not included on the default keyboard. See "Function Key Assignment Programming" to add or change programmable keys.

Keyboard Legend	Description
#/NS	Use as a non-add key to print up to an 9-digit numeric entry on the receipt. This entry will not add to any sales totals. The **#/NS** key is also used to open the cash drawer without making a sale.
X/TIME	Use to a multiply a quantity of items or calculate split pricing on PLU entries.
00, 0-9, Decimal	Use to make numeric entries in **REG**, **X**, **Z**, **VOID**, or **PGM** positions. The decimal key is used for decimal or scale multiplication, when setting or entering fractional percentage discounts, or when programming fractional tax rates. *Do not use the decimal key when making amount entries into PLUs*.
ADD CHECK	Use to combine individual trays (in a cafeteria situation) that will be paid together. Each tray subtotal can advance the consecutive number, depending on programming.
CANCEL	Cancels a transaction without updating PLU, or function key totals. The Cancel function may only be used prior to tendering. Once tendering begins, the Cancel function may no longer be used. The **CANCEL** key corrects the appropriate totals and counters and the Financial report records total of transactions canceled.

Keyboard Legend	Description
CASH	Calculates the sale total including tax, finalizes the sale, and opens the cash drawer. Change computation is allowed by entering an amount before pressing the **CASH** key. The cash drawer will open only if the amount tendered is equal to or greater than the total amount of the sale. Post tendering is also available should a second change calculation be necessary. Re-enter the tendered amount and press the **CASH** key to show the new change computation. Press the **CASH** key a second time to issue a buffered receipt (with up to 50 unique items or 104 if items are repeated) when the receipt on/off function is OFF.
CHECK	Use to finalize check sales. Calculates the sale total including tax, finalizes the sale, and opens the cash drawer. Change computation is allowed by entering an amount before pressing the **CHECK** key. The cash drawer will open only if the amount tendered is equal to or greater than the total amount of the sale. Change issued will be subtracted from the cash-in-drawer total.
CHECK CASHING	Use to exchange a check for cash. Cash-in-drawer and check-in-drawer totals are adjusted.
CHECK ENDORSEMENT	Use to print a check endorsement message on an optional slip printer to program an endorsement message.
CHARGE (1-8)	Use to finalize charge sales. Calculates the sale total including tax, finalizes the sale, and opens the cash drawer. Change computation is allowed by entering an amount before pressing the **CHARGE** key. The cash drawer will open only if the amount tendered is equal to or greater than the total amount of the sale. Change issued will be subtracted from the cash-in-drawer total.
CHECK #	The **CHECK #** key is used to begin a new, or access an existing balance (hard check) or itemized bill (soft check.) Check track numbers that are entered manually may be set at a fixed length of one to nine digits. Check track numbers assigned automatically will begin with #1. Existing checks are accessed by entering the check track number and pressing the **CHECK #** key.
CLEAR	Use to clear entries made into the 10 key numeric pad or **X/TIME** key before they are printed. Also used to clear error conditions.

Keyboard Legend	Description
CLERK	The register will not operate in register mode unless a clerk has been signed on. Clerk sign-on is accomplished by "direct" or "secret code" sign-on. All entries made on the register will report to one of the clerk totals. When a clerk is signed on, all entries following will add to that clerk's total until another clerk is signed on. However, a clerk cannot be changed in the middle of a transaction. To sign a clerk off, thereby displaying the "CLOSED" message on the display, enter 0, and then press the **CLERK** key. This disables the register until another clerk is signed on. The current clerk must first be signed off before another clerk may be signed on.
CONV (1 - 4)	The currency conversion function, allowed after subtotal, converts and displays the new subtotal at a preprogrammed exchange rate. Tendering is allowed after using the currency conversion function. Change is calculated and issued in home currency. The amount of foreign currency tendered is stored in a separate total on the Financial report, but not added to the drawer total.
EAT-IN **TAKE OUT** **DRIVE THRU**	Eat-In, Take Out and Drive Thru are subtotal functions. In areas that have different tax rules for eat-in and take out sales, the **EAT-IN**, **TAKE OUT** and **DRIVE THRU** keys can be programmed to automatically charge or exempt taxes. Sales may not be split between Eat-In, Take Out and Drive Thru. The **EAT-IN**, **TAKE OUT** and **DRIVE THRU** keys maintain separate totals on the Financial report.
ERROR CORR	Use to correct the last entry. The **ERROR CORR** key corrects the appropriate totals and counters.
F/S SHIFT	When pressed before a PLU entry, the **F/S SHIFT** key reverses the preprogrammed food stamp status of the PLU. For example, an item not food stamp eligible can be made food stamp eligible.
F/S SUB	Displays the amount of the sale that is food stamp eligible.
F/S TEND	Use to tender food stamps for eligible sales.
GUEST #	Use to enter the count of guests served as part of a guest check.
KBD SHIFT	Use to shift the keyboard level. Enter 1 or 2 and press the KBD SHIFT key to change to the appropriate level. A manager key (X-Mode) may be required.
MACRO (1-10)	Macro keys may be programmed to record, and then later perform, up to 50 keystrokes. For example, a macro key could be set to tender (preset tender) a common currency, such as $5 into the cash key.
RETURN	Used to return or refund merchandise. Returning an item will also return any tax that may have been applied.

Keyboard Legend	Description
MODIFIER 1-5	The Modifier key alters the next PLU registered, either by changing the Code number of the PLU so that a different item is registered, or by adding the modifier descriptor.
P/BAL	Use to enter the amount of an outstanding balance.
PAID OUT (1–3)	Use to record money taken from the register to pay invoices, etc. The paid out amount subtracts from the cash-in-drawer total. Paid outs are allowed outside of a sale only.
% Keys (1-5)	Up to five **%** keys may be placed on the keyboard. Each **%** key is set with a specific function, such as item discount or surcharge, or sale discount or surcharge. The percent rate may be entered or preprogrammed, or the percent keys can be programmed with a negative open or preset price, thus acting as coupon keys. A percentage key may also be set up to accept charge tip entries.
PLU	The **PLU** key is used to register price look-ups by number entry. PLUs can be programmed open or preset, and positive or negative.
PRINT CHECK	Use to print a guest check. The check can be printed on an optional (RS-232C) printer, or can be printed on the receipt printer. The **PRINT CHECK** key can be set to automatically service the check.
PROMO	The **PROMO** key allows you to account for promotional items, as in "buy two, and get one free". Pressing this key will remove an item's cost from the sale, but will include the sale of the item in the item's sales counter.
FEED	Advances the receipt paper one line, or continuously until the key is released.
RECD ACCT (1–3)	The **RECD ACCT** (received on account) key is used to record media loaned to the cash drawer, or payments received outside of a sale. The cash drawer will open. The amount received adds to the cash-in-drawer total.
SCALE	Use to make weight entries. When a scale is attached, press the scale key to show the weight in the display, then press (or enter) a PLU to multiple the weight times the price. When a scale is not attached, you can enter the weight (using the decimal key for fractions). PLUs may be programmed to require an entry through the scale key.
SERVICE	Use to temporarily finalize Previous Balance or Table tracking transactions.
SUBTOTAL	Displays subtotal of sale including tax. Must be pressed prior to a sale discount or sale surcharge.
TABLE #	Tracks the current balance for a guest check or table.

Keyboard Legend	Description
TARE	Tares are container weights. If you are using the scale function, you can preset up to 5 different tare weights. The tare can be subtracted automatically when a specific PLU is registered, or manually inputting the tare number and pressing the TARE key can subtract the tare. Tare #5 can be programmed for entering tare weights manually.
TAX EXEMPT	Press the **TAX EXEMPT** key to exempt tax 1, tax 2, tax 3, and/or tax 4 from the entire sale.
TAX (1-4) SHIFT	When pressed before a PLU entry, the tax shift keys reverse the tax status of the PLU, i.e., a PLU with non-tax status would become taxable or a PLU with tax status would become non-taxable.
TIP	The **TIP** key allows a gratuity to be added to a guest check before payment. The **TIP** key may be programmed as either a percentage or amount. If programmed as a percentage, tax programming defines whether the percentage is calculated on the net amount, or the amount after taxes.
VOID	Use to correct an item entered earlier within a sale. The **VOID** key corrects the appropriate totals and counters. To correct the last item, use the **ERROR CORR** key. For void operations outside of a sale (Transaction Void), use the **VOID** position on the control lock. The Financial report records totals for each type of void separately.
VALID	Validation requires an optional slip printer. Press the **VALID** key to print a one-line validation on a separate form or piece of paper. Any item registration, discount or payment may be validated.
WASTE	The **WASTE** key allows control of inventory by accounting for items that must be removed from stock due to spoilage, breakage or mistakes. Press the **WASTE** key before entering wasted items, and then press the **WASTE** key again to finalize. The **WASTE** key may be under manager control, requiring the control lock to be in the **X** position. The **WASTE** key is not allowed within a sale.

Clerk Sign-On/Sign-Off

See "System Option Programming" to review your clerk options:

- System option #2 allows you to select direct or code entry sign on
- System option #3 selects stay-down or pop-up operation.

Depending on how your machine has been programmed, sign-on will take place only at the beginning of a shift (stay-down), or may have to be repeated for each transaction (pop-up). If your machine has been programmed for stay-down clerks, the clerk currently signed on must be signed off before another clerk may be signed on.

Check with your store manager to see which options have been selected for your register.

Before any transaction may take place, a clerk must be signed on. Clerk sign-on is accomplished in one of two ways:

Direct Sign-On

To sign on a clerk, enter the clerk number and press the clerk key.

To sign the clerk off, enter 0 (Zero) and press the clerk key.

Coded Sign-On

To sign on a clerk, press the clerk key, enter the clerk code, and then press the clerk key again.

Clerk Code (up to 6 digits)

To sign the clerk off, enter 0 (Zero) and press the clerk key.

Receipt On and Off

Press the **RECEIPT ON/OFF** key to toggle the receipt status from **ON** to **OFF**. If the **RECEIPT ON/OFF** is not present on your keyboard, use this procedure to set receipt status.

1. Turn the control lock to the **X** position.
2. To turn the receipt *off*, enter **9 9**, press the **SUBTOTAL** key. Enter **1,** press **CASH**.

3. To turn the receipt *on*, enter **9 9**, press the **SUBTOTAL** key. Enter **0,** press **CASH**.

Item Registrations

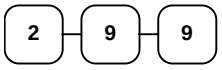
All registrations on *ER-285M Series* are made into open or preset PLUs.

- In place of traditional PLU keys, some PLUs are located directly on the keyboard.
- When more items or categories are needed than the number of PLUs available on the keyboard, registrations can be into PLUs by entering the PLU code number and pressing the **PLU** key on the keyboard.

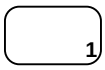
This system simplifies reporting by listing all items (regardless of how they are entered) on the PLU report, while reporting for groups of items or categories is available from the Group report

Open Keyboard PLU Entry

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



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

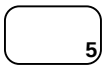



```
DATE 03/09/2007 FRI   TIME 01:32

PLU1 T1                    $2.99
TAX1                       $0.18
TOTAL                      $3.17
CASH                       $3.17
CLERK 1          000011    00001
```

Preset Price Keyboard PLU

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

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

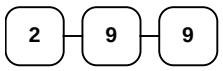



```
DATE 03/09/2007 FRI   TIME 01:32

PLU5                       $1.29
TOTAL                      $1.29
CASH                       $1.29
CLERK 1        NO.000011   00001
```

Keyboard PLU Repeat Entry

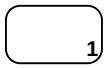
Open or preset price PLUs can be repeated as many times as necessary by pressing the same PLU again. The number of times the item is repeated is shown on the display.

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



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

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

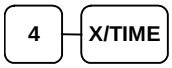



```
DATE 03/09/2007 FRI    TIME 01:32

PLU1 T1                      $2.99
PLU1 T1                      $2.99
TAX1                         $0.36
TOTAL                        $6.34
CASH                         $6.34
CLERK 1        NO.000011     00001
```

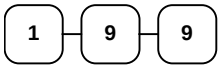
Keyboard PLU Multiplication

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

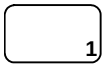
1. Enter the quantity of items being purchased, and then press the **X/TIME** key. For example, enter **4** on the numeric key pad and press the **X/TIME** key:



2. Enter an amount on the key pad. Do not use the decimal key. For example, for $1.99, enter:



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

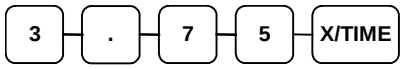



```
DATE 03/09/2007 FRI   TIME 01:32

4X              @1.99
PLU1 T1                     $7.96
TAX1                        $0.48
TOTAL                       $8.44
CASH                        $8.44
CLERK 1         NO.000011   00001
```

Keyboard PLU Multiplication with Decimal Point

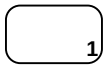
If you are selling items by weight, or if you are selling yard goods, you can multiply a fraction of a unit.

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



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

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

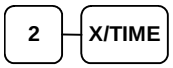



```
DATE 03/09/2007 FRI   TIME 01:32

3.75X          @0.99
PLU1 T1                     $3.71
TAX1                        $0.22
TOTAL                       $3.93
CASH                        $3.93
CLERK 1        NO.000011    00001
```

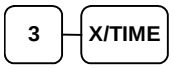
Split Pricing (Keyboard PLU)

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

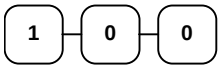
1. Enter the quantity purchased, and then press the **X/TIME** key. For example, enter:



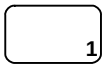
2. Enter the quantity of the group price, and then press the **X/TIME** key. For example, if the items are priced 3 for $1.00, enter:



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



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



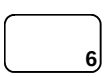

```
DATE 03/09/2007 FRI   TIME 01:32

2@3FOR          @1.00
PLU1 T1                    $0.67
TAX1                       $0.04
TOTAL                      $0.71
CASH                       $0.71
CLERK 1         NO.000011  00001
```

Single Item Keyboard PLU

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

Note: If a non-single item PLU is registered before a single item PLU, the transaction will require normal finalization.

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



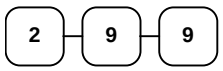

```
DATE 03/09/2007 FRI   TIME 01:32

PLU6                       $1.29
TOTAL                      $1.29
CASH                       $1.29
CLERK 1         NO.000011  00001
```

Open Code Entry PLU

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

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

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

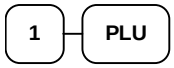


3. Press the **PLU** key again.


```
DATE 03/09/2007 FRI    TIME 01:32

PLU2 T1                      $2.99
TAX1                         $0.18
TOTAL                        $3.17
CASH                         $3.17
CLERK 1        NO.000011     00001
```

Preset Price Code Entry PLU

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

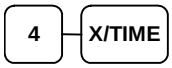



```
DATE 03/09/2007 FRI    TIME 01:32

PLU1                         $1.29
TOTAL                        $1.29
CASH                         $1.29
CLERK 1        NO.000011     00001
```

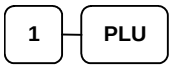
Code Entry PLU Multiplication

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

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



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

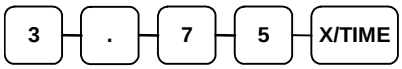



```
DATE 03/09/2007 FRI   TIME 01:32

4X          @1.99
PLU1 T1                   $7.96
TAX1                      $0.48
TOTAL                     $8.44
CASH                      $8.44
CLERK 1     NO.000011     00001
```

Code Entry PLU Multiplication with Decimal Point

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

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



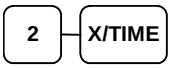
2. Enter the PLU number; press the **PLU** key. For example, enter:


```
DATE 03/09/2007 FRI   TIME 01:32


3.75X       @2.99
PLU3 T1                  $11.21
TAX1                      $0.67
TOTAL                    $11.88
CASH                     $11.88
CLERK 1     NO.000011     00001
```

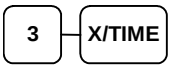
Split Pricing Code Entry PLU

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

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



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



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


```
DATE 01/10/2007 WED   TIME 08:33

2@3FOR          @2.99
PLU3 T1                     $1.99
TAX1                        $0.12
TOTAL                       $2.11
CASH                        $2.11
CLERK 1         NO.000011   00001
```

Keyboard Shift

The **KBD SHIFT** key is located on the default keyboard and is used to access two levels of keyboard PLU keys. In the default configuration, keyboard level one accesses PLUs 1-15, while keyboard level 2 accesses PLUs 16-30. (Note that this numbering sequence can be changed, see option #37 in "System Option Programming" on page 142.)

Keyboard levels are typically used to separate items sold at different times. For example, keyboard level one could register breakfast items and keyboard level two could register lunch items. In this case, when keyboard levels register different items, a different keysheet can be inserted for the appropriate time of day.

Note that you may be required to place the key in the **X** position to change levels. See "KBD SHIFT" on page 167 to program this option.

To Set the Keyboard in Level 1

1. Enter **1**, press the **KBD SHIFT** key.

To Set the Keyboard in Level 2

2. Enter **2**, press the **KBD SHIFT** key.

Modifier Key

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

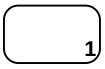
Modifiers can be:

- *Stay down* so that registrations will be modified by the same modifier until another modifier is selected. For example, use stay down for lunch or dinner menus.
- *Pop-up after each item* to register, for example large, medium or small soft drink,
- *Pop-up after each transaction* to register, for example, toppings of various pizza sizes.

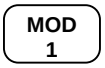
See "System Options" in the "Program Mode Programming" chapter to select stay down/pop-up status.

Pop-Up Modifier Key Affecting PLU Code

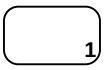
1. Press a preset PLU key. For example, press PLU **1** with a price of $1.00.



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



3. Press the same PLU key. In this example the modifier 1 will add the digit 1 to the fourth PLU # position, resulting in the registration of PLU #1001.



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

```
TDATE 01/10/2007 WED   TIME 08:33

PLU1                          $1.00
MOD1
#1001                         $1.25
PLU2                          $1.50
TOTAL                         $3.75
CASH                          $3.75
CLERK 1        NO.000011      00001
```

Price Level Key

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

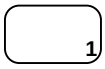
If you use this feature, the same PLU can be given up to two different preset prices. Price Level keys shift the price that is being registered. Levels can be:

- *Stay down* so that registrations will stay in the selected level until another level is selected,
- *Pop-up after each item* to register, for example large, medium or small soft drink,
- *Pop-up after each transaction* to register, for example, toppings of various pizza sizes.

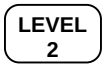
See "System Options" in the "Program Mode Programming" chapter to set how the price level keys operate.

Pop-Up Price Level Keys

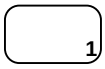
1. Press a preset PLU key. For example, press PLU **1** programmed with a price of $1.00 for price level 1.



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



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



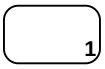
4. Press another PLU key. In this example press PLU **2** programmed to register PLU #2 with price level 1. Note that the level 1 price is registered.

```
DATE 01/10/2007 WED   TIME 08:33

PLU1                        $1.00
PLU1                        $2.00
PLU2                        $1.50
TOTAL                       $4.50
CASH                        $4.50
CLERK 1       NO.000011     00001
```

Promo

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

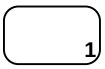
1. Register an item. For example, press PLU **1** programmed with a price of $1.00 for price level 1.

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

3. Press PLU **1** again. You cannot enter an item that has not been already registered in this transaction.


```
DATE 01/10/2007 WED   TIME 08:33

PLU1                        $1.00
          ***PROMO***
PLU1
TOTAL                       $0.00
CASH                        $0.00
CLERK 1       NO.000011     00001
```

Waste

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

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

   WASTE

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

   WASTE

```
DATE 01/10/2007 WED   TIME 08:33

          ***WASTE***
PLU1                        $1.25
PLU2                        $1.50
          ***WASTE***
TOTAL                       $2.75
CLERK 1       NO.000011     00001
```

Percent Key Operations

A total of five **%** functions are available. **%1** and **%2** are located on the default keyboard. Your keyboard may be different. More or less **%** keys may be located on the keyboard, or they may be located on one of the function look up menu keys.

Each function is individually programmable to add or subtract, from an individual item or from a sale total, amounts (coupons) or percentages. You can also program the percentage key taxable or non-taxable, so that sales taxes are calculated on the net, or the gross amount of the item or sale. You can also program preset prices or percentages.

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

Preset Percent Discount on an Item

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

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

   % 1

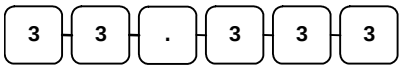
3. The discount is automatically subtracted.

```
DATE 01/10/2007 WED   TIME 08:33

PLU2                        $10.00
% 1                      -10.000%
AMOUNT                       -1.00
TOTAL                        $9.00
CASH                         $9.00
CLERK 1       NO.000011      00001
```

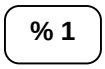
Enter a Percent Discount on an Item

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

1. Register the discounted item.
2. Enter the percentage. If you are entering a fraction of a percent, you must use the decimal key. For example, for one third off enter:



3. Press the **%1** key:



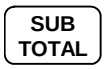
4. The discount is automatically subtracted.

```
DATE 01/10/2007 WED   TIME 08:33

PLU2                        $10.00
% 1                      -33.333%
AMOUNT                      -3.33
TOTAL                       $6.67
CASH                        $6.67
CLERK 1       NO.000011     00001
```

Percent on Sale Total

The percent can be an open or preset amount. In this example an open percentage surcharge of 15% is applied.

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



3. Enter the percentage, and then press the appropriate discount key. For example, for 15% enter:

4. The surcharge is automatically added.

```
DATE 01/10/2007 WED   TIME 08:33

PLU2                        $10.00
% 1                      15.000%
AMOUNT                       $1.50
TOTAL                       $11.50
CASH                        $11.50
CLERK 1       NO.000011     00001
```

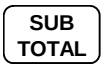
Coupon on Sale (Vendor Coupon)

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

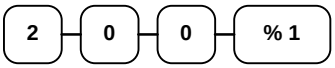
- You may be allowed to enter only one coupon in a sale, after the **SUBTOTAL** key is pressed,
- You may be allowed to enter multiple coupons, but you must press the **SUBTOTAL** key before each coupon entry, or
- You may be allowed to enter multiple coupons, without first pressing **SUBTOTAL**.

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

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

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

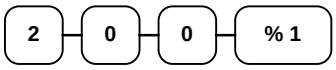
4. The coupon is subtracted.

```
DATE 01/10/2007 WED   TIME 08:33

PLU2                        $10.00
%1                           -2.00
TOTAL                        $8.00
CASH                         $8.00
CLERK 1        NO.000011     00001
```

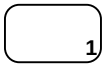
Coupon on Item (Store Coupon)

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

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



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



4. The coupon is automatically subtracted.

```
DATE 01/10/2007 WED   TIME 08:33

PLU1                        $10.00
PLU1 C                       -2.00
TOTAL                        $8.00
CASH                         $8.00
CLERK 1        NO.000011     00001
```

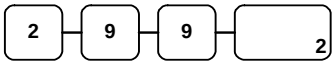
Return Merchandise Registrations

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

1. Press **RETURN**:

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

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

```
DATE 01/10/2007 WED   TIME 08:33

RETURN **************************
PLU2 T1                     -2.99
TAX1 AMT                    -0.18
TOTAL                       -3.17
CASH                        -3.17
CLERK 1        NO.000011    00001
```

Voids and Corrections

Error Correction (Void Last Item)

This function corrects the last item entered.

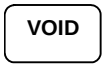
1. Register the item you wish to sell.
2. Press the **ERROR CORR** key:


```
DATE 01/10/2007 WED   TIME 08:33

PLU1 T1                    $2 29
PLU2                       $1.29
ERR CORR ----------------------
PLU2                       -1.29
TAX1 AMT                   $0.14
TOTAL                      $2.43
CASH                       $2.43
CLERK 1       NO.000011    00001
```

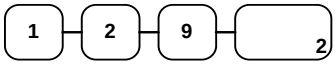
Void Previous Item

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

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



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




```
DATE 01/10/2007 WED   TIME 08:33

PLU2                       $1.29
PLU1 T1                    $2.29
VOID --------------------------
PLU2                       -1.29
TAX1 AMT                   $0.14
TOTAL                      $2.43
CASH                       $2.43
CLERK 1       NO.000011    00001
```

Cancel

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

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

CANCEL

```
DATE 01/10/2007 WED   TIME 08:33

PLU1 T1                    $2.29
PLU2                       -0.50
CANCEL ************************
CLERK 1       NO.000011   00001
```

Void Position Operations

You can use the **VOID** control lock position to correct any complete transaction. To correct any transaction:

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

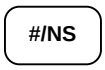
```
DATE 01/10/2007 WED   TIME 08:33

VOID MODE **********************
PLU1 T1                    -2.29
PLU2                       -1.00
TAX1 AMT                   -0.14
TOTAL                      -3.43
CASH                       -3.43
CLERK 1       NO.000011   00001
```

No Sale Operations

Open Drawer

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

1. Press **#/NS**:

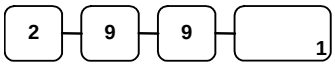
2. The drawer will open and the receipt will print as in the example on the right.

```
DATE 01/10/2007 WED   TIME 08:33

NO SALE ------------------------
CLERK 1        NO.000011   00001
```

Non Add Number

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

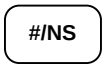
1. Register the items you wish to sell.

2. Enter the number you wish to record, for example enter:

3. Press **#/NS:**

4. Press **CHECK**:

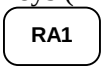
   


```
DATE 01/10/2007 WED   TIME 08:33

PLU1 T1                    $2.99
NON-ADD#                   1234
TAX1 AMT                   $0.18
TOTAL                      $3.17
CHECK                      $3.17
CLERK 1        NO.000011   00001
```

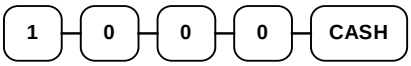
Received On Account Operations

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

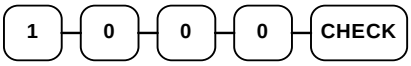
1. Press one of the received on account keys (**RA1**-**RA3)**

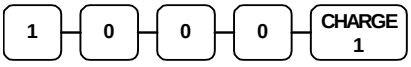
2. Enter the amount of cash received, press **CASH**.

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

4. Enter the charge amount received, press **CHARGE1**

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

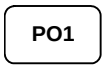
   


```
DATE 01/10/2007 WED   TIME 08:33

RA1
CASH                        $10.00
CHECK                       $10.00
CHARGE1                     $10.00
RA1                         $30.00
CLERK 1        NO.000011     00001
```

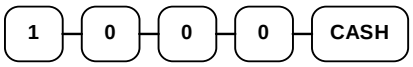
Paid Out Operations

You can use the paid out function **(PO1-PO3)** to track cash, checks or charges paid out or to record loans from the cash drawer.

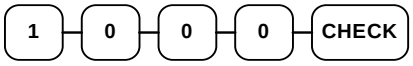
1. Press one of the paid out keys (**PO1-PO3)**

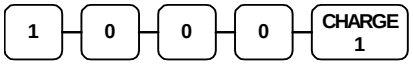
2. Enter the amount of cash paid out, press **CASH**.

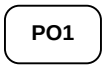
3. Enter the check amount paid out, and press **CHECK**.

4. Enter the charge amount received, press **CHARGE1**

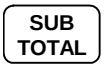
5. You can continue to itemize paid outs, or you can finalize by pressing or selecting the same paid out key.


```
DATE 01/10/2007 WED   TIME 08:33

PO1
CASH                       -10.00
CHECK                      -10.00
CHARGE1                    -10.00
PO1                        -30.00
CLERK 1        NO.000011   00001
```

Subtotaling a Sale

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

   The subtotal can be printed if the system option is set. See "Print Option Programming" in the "Program Mode Programming" chapter.

Eat In/Take Out/Drive Thru Sales

Different types of sales, such as "Eat In", "Take Out" and "Drive Thru" can be categorized by placing separate keys on the keyboard. **EAT IN**, **TAKE OUT**, and **DRIVE THRU** keys function as subtotal keys. You can force the operator to press one of the keys before tendering. See "System Option Programming" in the "Program Mode Programming" chapter. Separate totals will be maintained on the financial report to detail sales counts and amounts for each key.

Totaling and Tendering

There are ten tender functions available to categorize sales. **CASH** and **CHECK** are individual keys on the keyboard

Totaling a Cash Sale

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

   CASH

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

```
DATE 01/10/2007 WED   TIME 08:33

PLU2                        $7.96
TOTAL                       $7.96
CASH                        $7.96
CLERK 1        NO.000011    00001
```

Totaling a Check Sale

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

   CHECK

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

```
DATE 01/10/2007 WED   TIME 08:33

PLU2                        $7.96
TOTAL                       $7.96
CHECK                       $7.96
CLERK 1        NO.000011    00001
```

Tendering a Cash Sale

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

3. Press **CASH**:

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

```
DATE 01/10/2007 WED   TIME 08:33

PLU1 T1                     $2.99
PLU1 T1                     $2.99
4X            $1.99
PLU2                        $7.96
TAX1                        $0.36
TOTAL                      $14.30
CASH                       $20.00
CHANGE                      $5.70
CLERK 1       NO.000011     00001
```

Tendering a Check Sale

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

3. Press **CHECK**:

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

```
DATE 01/10/2007 WED   TIME 08:33

PLU1 T1                     $2.99
PLU1 T1                     $2.99
4X            $1.99
PLU2                        $7.96
TAX1                        $0.36
TOTAL                      $14.30
CHECK                      $20.00
CHANGE                      $5.70
CLERK 1       NO.000011     00001
```

Totaling a Charge Sale

Use the charge keys to track charge or credit card sales. See "Function Key Programming" in the "Program Mode Programming" chapter to change the descriptors for the charge tender functions. For example, you can use CHARGE 1 to track Visa card sales. The descriptor "VISA" will print on receipt and reports. You can also set tendering options for the charge keys, i.e. whether to allow over tendering or to enforce tendering.

Note: If an optional Datatran is installed for integrated payments, charge keys may be programmed for credit, debit or gift card transactions.

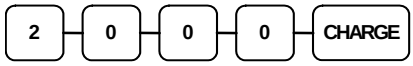
1. Register the items you wish to sell.
2. Press one of the charge keys:


```
DATE 01/10/2007 WED   TIME 08:33

PLU1 T1                    $2.99
PLU1 T1                    $2.99
4X            $1.99
PLU2                       $7.96
TAX1                       $0.36
TOTAL                     $14.30
CHARGE                    $14.30
CLERK 1       NO.000011    00001
```

Tendering a Charge Sale

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

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



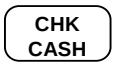
DATE 01/10/2007 WED		TIME 08:33
PLU1 T1		$2.99
PLU1 T1		$2.99
4X	$1.99	
PLU2		$7.96
TAX1		$0.36
TOTAL		$14.30
CHARGE		$20.00
CHANGE		$5.70
CLERK 1	NO.000011	00001

Check Cashing

Check cashing means exchanging cash for a check. If you wish to cash checks, you must place a **CHKCASH** key on the keyboard. See "Function Key Assignment" in the "Program Mode Programming" chapter.

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

2. Press **CHKCASH**:



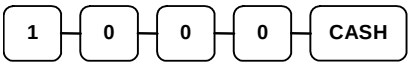
3. The display will indicate the amount of the check and the cash change.

```
DATE 01/10/2007 WED   TIME 08:33

          ***CHKCASH***
CHECK                      $20.00
CASH                       -20.00
CLERK 1        NO.000011   00001
```

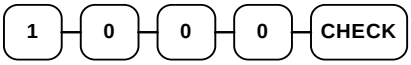
Split Tender

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

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



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



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

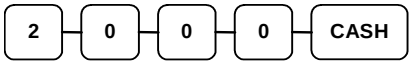
```
DATE 01/10/2007 WED   TIME 08:33

PLU2                        $20 00
TOTAL                       $20.00
CASH                        $10.00
TOTAL                       $10.00
CHECK                       $10.00
CLERK 1        NO.000011    00001
```

Post Tender

Post tendering means computing change after the sale has been totaled and the drawer is open. This feature is useful when a customer changes the amount of the tender or when a "quick change artist" confuses a clerk. Normally, this function is not allowed. If you wish to allow post tendering, you must set the appropriate system option.

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

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



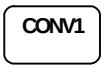
5. The display will indicate the change due.

```
TDATE 01/10/2007 WED    TIME 08:33

PLU1 T1                      $2.00
TAX1                         $0.12
CASH                         $2.12
CLERK 1        NO.000011     00001
```

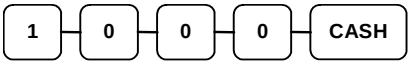
Currency Conversion

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

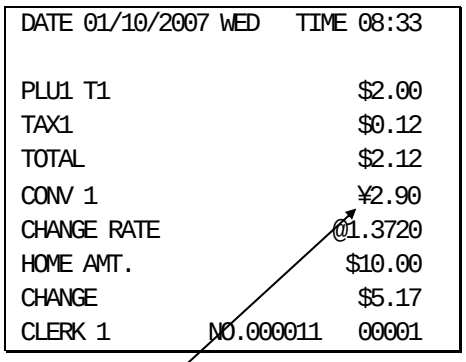
1. Register the items you wish to sell.
2. Press the **CONV1** key if it is located on the keyboard:



3. Enter the amount of the foreign currency tender, Press **CASH**:



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



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

Table Service Restaurant Operations

Overview

The *SAM4s ER-285M* can be used to add items or receive payments on guest checks using a manual previous balance, hard check, or soft check system. (Note that you must select hard or soft check posting in memory allocation programming. The default selection is soft.)

- If manual previous balance is selected, the check balance is not saved in memory and is input manually by the operator (use the **PBAL** key).
- If a hard check system is selected, only the previous balance is maintained in memory.
- If a soft check system is selected, the check detail is kept in memory until the check is paid. (The maximum size of the soft check is set in memory allocation programming.) When a soft check system is used, the receipt can be used to print the final check that is presented to the customer for payment.

  Consolidation of like items can be selected for guest check printing. For example, if three rounds of drinks are served, the check will print "**3 TAP BEER**" rather than "**1 TAP BEER**" three times. (See option #20 in "Print Option Programming" on page 147.)

Note: If you wish to print guest check transactions on a slip or a pre-printed guest check, an optional slip printer must be connected. See your *SAM4s* dealer for more information.

Function Keys and Options

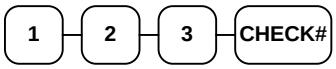
Functions necessary for restaurant operations may not appear on the default keyboard. Any or all of the following functions can be located on the keyboard. See "Function Key Assignment Programming" on page 117 if it is necessary to locate these keys on your keyboard.

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

Soft Check

Opening a Soft Check

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

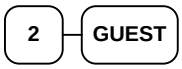
   or, press the **CHECK #** key to automatically assign a check:

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

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

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

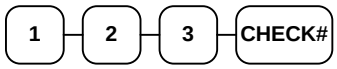
Receipt Example:

```
DATE 01/10/2007 WED   TIME 08:33

CHECK #                   #123
PBAL                      $0.00
TABLE                       #3
GUEST                       #2
CHICKEN                   $7.00
STEAK                    $10.00
SERVICE                  $17.00
BFWD                     $17.00
CLERK 1       NO.000011   00001
```

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

Adding to a Soft Check

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

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

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

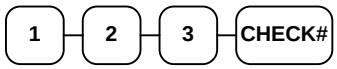
   

Receipt Example:

```
DATE 01/10/2007 WED   TIME 08:33

CHECK #                   #123
PBAL                     $17.00
TABLE                        #3
GARLIC BREAD              $2.00
SERVICE                   $2.00
BFWD                     $19.00
CLERK 1       NO.000012   00001
```

Printing a Soft Check

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

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

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

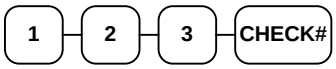
Sample of soft check printed on the receipt:

```
DATE 01/10/2007 WED   TIME 08:33

CHECK #                   #123
PBAL                     $19.00
TABLE                        #3
CHICKEN                   $7.00
STEAK                    $10.00
GARLIC BREAD              $2.00
SERVICE                   $0.00
BFWD                     $19.00
                       CHK # : 1
CLERK 1       NO.000012   00001
```

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

Paying a Soft Check

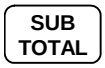
1. Enter the number of the guest check, press the **CHECK #** key:

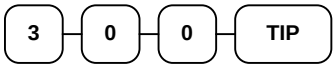
   

   or, if you entered a table number, enter the table number and press the **TABLE** key:

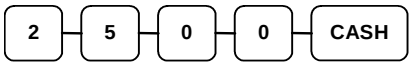
   

2. If necessary, add additional items. If you wish to add a tip, press **SUBTOTAL**, then enter the tip amount and press the **TIP** key:

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

Sample of soft check printed on the receipt:

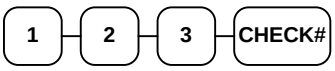
```
DATE 01/10/2007 WED   TIME 08:33

CHECK #                    #123
PBAL                      $19.00
TABLE                        #3
TIP                        $3.00
CHECKS PAID               $22.00
CASH                      $25.00
CHANGE                     $3.00
                        CHK # : 2
CLERK 1        NO.000013   00001
```

Hard Check

Hard check operations require an optional slip printer. See your SAM4s dealer for more information.

Opening a Hard Check

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

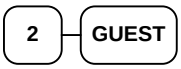
   or, press the **CHECK #** key to automatically assign a check:

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

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

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

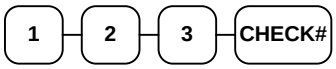
   

Receipt Example:

```
DATE 01/10/2007 WED   TIME 08:33

CHECK #                   #123
PBAL                      $0.00
TABLE                       #3
GUEST                       #2
CHICKEN                   $7.00
STEAK                    $10.00
SERVICE                  $17.00
BFWD                     $17.00
CLERK 1       NO.000011   00001
```

Adding to a Hard Check

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

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

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

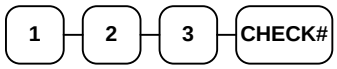
   

Receipt Example:

```
DATE 01/10/2007 WED   TIME 08:33

CHECK #                   #123
PBAL                     $17.00
TABLE                        #3
GARLIC BREAD              $2.00
SERVICE                   $2.00
BFWD                     $19.00
CLERK 1       NO.000012   00001
```

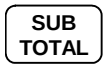
Paying a Hard Check

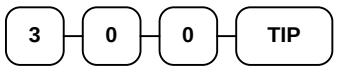
1. Enter the number of the guest check, press the **CHECK #** key:



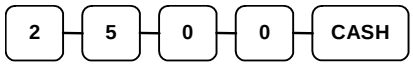
   or, if you entered a table number, enter the table number and press the **TABLE** key:

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





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



Sample of Hard Check postings printed on an optional printer:

```
DATE                    01/10/2007          WED
CHECK #                                     #4
PBAL                                       $0.00
STEAK T1                                  $15.50
LOBSTER T1                                $19.50
WINE T1                                    $2.50
WINE T1                                    $2.50
TAX1                                       $3.60
SERVICE                                   $43.60
BFWD                                      43.60
NO.000017 REG 01 KELLY                  TIME 09:15
PBAL                                      $43.60
2X                 @2.50
WINE T1                                    $5.00
TAX1                                       $4.05
SERVICE                                    $5.45
BFWD                                      49.05
NO.000019 REG 01 KELLY                  TIME 09:47
PBAL                                      $49.05
2X                 @2.50
WINE T1                                    $5.00
TAX1                                       $4.50
CHECKS PAID                               $54.50
TOTAL                                     $54.50
CASH                                      $54.50

NO.000021 REG 01 KELLY                  TIME 10:16
```

Clerk Interrupt

A transaction in progress can be interrupted so that another transaction can take place.

- Clerk interrupt can be used in a retail store where more than one clerk is sharing the same cash register. A clerk begins registering items for a customer. This transaction is delayed while the clerk is helping the customer select another item. In the mean time another customer is ready to check out with a different clerk. Or,
- Clerk interrupt can also be used in a retail store with a single clerk. If a transaction is started and delayed, the same clerk can interrupt the transaction to help another customer.

With clerk interrupt implemented, the second clerk can sign on before the first transaction is finalized. When the sign on is completed, the first transaction is suspended, and the second clerk can register a new transaction. When the first clerk signs on again, the balance of the suspended transaction is recalled and the clerk can complete the original transaction.

Note: The clerk interrupt feature is only available when the check tracking system is not being used. System option #26 provides an option for either clerk interrupt or check tracking is selected.

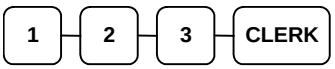
Clerk Interrupt Program Notes

To Implement the Clerk Interrupt System:

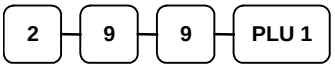
1. Set system option #2 to a value of **1** (code entry clerk system). See "System Option Programming" on page 142.
2. Set system option #26 to a value of **1** (clerk interrupt system selected). See "System Option Programming" on page 142.
3. Set clerk codes. See "Program 800 - Secret Code Programming" on page 180.

Clerk Interrupt Operation

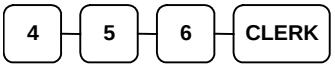
1. Sign on a clerk with the appropriate clerk code.



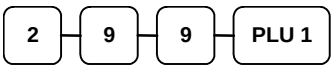
2. Begin a transaction by registering an item

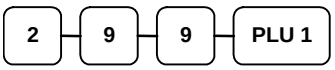


3. Suspend the transaction by signing on a different clerk. A receipt prints for the interrupted transaction:



4. The new clerk registers and finalizes a transaction





5. The original clerk signs on again; the suspended transaction is recalled. When the suspended transaction is completed, a receipt for the entire transaction is printed.

```
DATE 03/09/2007 FRI   TIME 22:32

PLU1 T1                     $2.99
      ** CLERK INTERRUPT **
TAX1                        $0.18
TOTAL                      $3.17
CLERK 1          000011   00001
```

```
DATE 03/09/2007 FRI   TIME 01:32

********************************
CLERK LOG IN
********************************
CLERK 2                       02
CLERK LOG IN TIME          22:32
CLERK 2          000012   00001
```

```
DATE 01/10/2007 WED   TIME 08:33

PLU1 T1                     $2.99
PLU1 T1                     $2.99
TAX1                        $0.36
TOTAL                       $6.34
CHARGE1                     $6.34
CLERK 2        NO.000013   00001
```

```
DATE 03/09/2007 FRI   TIME 22:42

CHECK #                       #1
PLU1 T1                     $2.99
PLU2                       $10.00
TAX1                        $0.18
TOTAL                      $13.17
CASH                       $20.00
CHANGE                      $6.83
CLERK 1          000011   00001
```

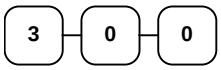
Scale Operations

Direct Scale Entry

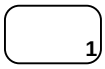
Place a product on the scale and access the **SCALE** function to display the weight on the cash register. Then make the appropriate entry; the PLU must have "scaleable" status.

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

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



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

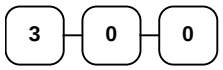



```
DATE 01/10/2007 WED   TIME 08:33

1.50 LB     @3.00/LB
PLU1                        $4.50
TAX1                        $0.27
TOTAL                       $4.77
CASH                        $4.77
CLERK 1        NO.000011    00001
```

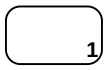
Automatic Scale Entry

Place a product on the scale and make the appropriate PLU entry. The PLU must be set with "auto scale status".

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



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



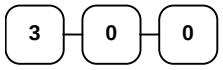

```
DATE 01/10/2007 WED   TIME 08:33

1.50 LB     @3.00/LB
PLU1                        $4.50
TAX1                        $0.27
TOTAL                       $4.77
CASH                        $4.77
CLERK 1       NO.000011     00001
```

Tare Weight Entry

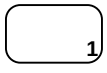
1. Place an item on the scale.
2. Enter the preprogrammed tare number. Press the **TARE** key.

3. Press the **SCALE** key.

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



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

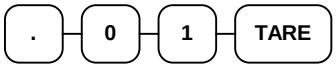



```
DATE 01/10/2007 WED   TIME 08:33

1.50 LB     @3.00/LB
PLU1                        $4.50
TAX1                        $0.27
TOTAL                       $4.77
CASH                        $4.77
CLERK 1       NO.000011     00001
```

Manual Tare Weight Entry

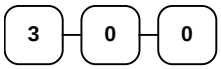
1. Place an item on the scale.
2. Enter the manual tare number, **5**. Press the **TARE** key:

3. Enter the weight of the tare, for example, enter **.01**, press the tare key:

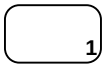


4. Press the **SCALE** key.

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



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

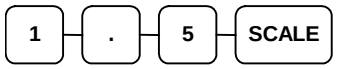



```
DATE 01/10/2007 WED   TIME 08:33

1.50 LB     @3.00/LB
PLU1                        $4.50
TAX1                        $0.27
TOTAL                       $4.77
CASH                        $4.77
CLERK 1        NO.000011    00001
```

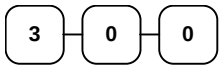
Manual Weight Entry

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

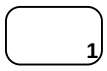
1. Place an item on the scale.
2. Enter the weight using the decimal key for fractional weights. Press the **SCALE** key:



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



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




```
DATE 01/10/2007 WED   TIME 08:33

1.50 LB   MANUAL WT. @ @3.00
PLU1                        $4.50
TAX1                        $0.27
TOTAL                       $4.77
CASH                        $4.77
CLERK 1       NO.000011     00001
```

PC Online Mode

You can use the ER-280 Series PC utility to program your register at a PC or to poll reports from you register. There are no special commands to ready the register for communication.

The register must be:

- outside of a sale,
- a clerk must be signed on, and
- the RS-232C port must be set for PC communication. See “RS-232 Communication Options” on page 119.

Not Found PLU

The "Not Found PLU" feature is available at software version 1.019. It is suggested for use when an optional scanner is used to input PLUs. If an item is scanned that is not programmed in the PLU file, the operator has the option to input the price of the item and assign it the same descriptor and properties of another PLU, or enter the descriptor and tax status independently. This provides a simple mechanism for building an item file for a low-cost scanning installation.

Note: Beginning at software version 5.012 the ECR error will sound continuously when a not found PLU item is entered. The operator is forced to press CLEAR before the NOT FOUND PLU message is displayed. This change was made to prevent the operator from scanning additional items while unaware of the not found PLU item. In addition, at software version 5.008 or later you can disable the not found PLU function using system option #39.

Not Found PLU: Quick Entry

Action	Display	Notes
1. Scan or input PLU	NOT FOUND PLU STOP:0 SAVE:1	
2. Press **1**	INPUT PRICE PRESS X/TIME key	
3. Enter the item price; press **X/TIME**	SELECT COPY PLU	
4. Touch a PLU on Keyboard (or enter PLU # and press the **PLU** key)	*The item is registered and displayed*	The item is added to the PLU file with the price as entered and the descriptor and options of the PLU that was entered as the COPY PLU.

Not Found PLU: Detail Entry

Action	Display	Notes
1. Scan or input PLU	NOT FOUND PLU STOP:0 SAVE:1	
2. Press **1**	INPUT PRICE PRESS X/TIME key	
3. Enter the item price; press **X/TIME**	SELECT COPY PLU	
4. Enter **0**; press **PLU**	DESC	
5. Enter the item descriptor: press **X/TIME**.	TAXABLE	You must enter descriptor by descriptor code. (If using Quick Entry, you can enter descriptors later using the PC Utility.)
6. Enter the tax status (from the last 2-digits of the PLU Status Program) press **X/TIME**.	*The item is registered and displayed*	For example, enter **40** for taxable by tax rate 1. Note that the item is assigned by default to PLU Group 1.

Not Found PLU Report

Turn the key lock to **X** or **Z**: enter **15** and press **SUBTOTAL**. Note: Up to 48 not found PLU items can be retained. When capacity is reached, you must clear (Z) the Not Found PLU report.

Service Mode Reference Guide

Overview

Use the Service Mode (**S** Mode) to perform secure operations. The **S** position is one position clock-wise from the **PGM** position. The **S** position is not labeled. The key labeled "C" accesses this position.

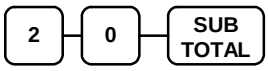
The following procedures are done from the Service Mode.

- Clear All Totals
- Clear Grand Total
- Clear PLU file
- EPROM Information
- Memory Allocation
- Assignment of Functions to Keyboard Locations
- RS232C Port Options

CAUTION: The procedures described in this area are security sensitive. Do not share this information with unauthorized users and distribute the special SERVICE-Mode key only to those you may want to perform these functions.

Clear All Totals

1. Turn the control lock to the **S** position.
2. To reset all register totals and counters, enter **20**, and then press the **SUBTOTAL** key.

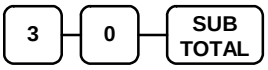


3. The display reads “CLEAR TOTALS” and register prints a receipt.

```
DATE 03/09/2007 FRI   TIME 01:32

********************************
ALL TOTAL CLEAR
********************************

CLERK 1          000046   00000
```

Clear Grand Total

1. Turn the control lock to the S position.
2. To reset only the Grand Total, enter **30**, and then press the **SUBTOTAL** key.

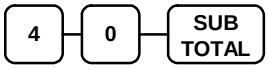


3. The display reads “CLEAR GRAND TOT.” and register prints a receipt.

```
DATE 03/09/2007 FRI   TIME 01:32

********************************
GRAND TOTAL CLEAR
********************************

CLERK 1          000046   00000
```

Clear PLU File

1. Turn the control lock to the **S** position.
2. To reset all PLU data, including both programming and totals, enter **40**, and then press the **SUBTOTAL** key.



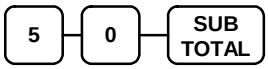
3. The display reads “CLEAR PLU FILE” and register prints a receipt.

```
DATE 03/09/2007 FRI   TIME 01:32

********************************
PLU FILE CLEAR
********************************

CLERK 1          000046   00000
```

EPROM Information

The registers operating programs are stored in flash ROM (read-only memory). The programs may be updated periodically. The versions of operating programs can be read through this procedure.

1. Turn the control lock to the **S** position.
2. To reset EPROM versions, enter **50**, and then press the **SUBTOTAL** key.



3. The display reads “PLEASE WAIT. . .”, after a short delay, the display reads “EPROM INFO”, displays the current version and prints a receipt.

```
DATE 03/09/2007 FRI   TIME 01:32

ER-280 EPROM
VERSION  : STD 1.0
CHECKSUM : 421BR
BOOT/APP : 2292/IF89
Oct  18  2006

CLERK 1          000046   00000
```

Memory Allocation

The amount of memory in the ER-285M is fixed and has a default allocation, i.e. you can use 2000 PLUs, 15 clerks, 20 groups, etc. A significant amount of standard memory is not allocated, therefore you can easily add to the default quantities of many memory items.

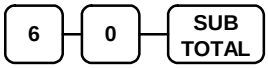
This program allows you to change the default allocation in each of nine areas. The default, minimum and maximum for each memory area is shown on the table below:

MEMORY ITEM	Default	Minimum	Maximum
PLU	2000	50	10,000
CLERKS	15	1	99
GROUP	20	1	99
GUEST CHECKS	15	1	500
SOFT CHECK	30 lines	1 line	50 lines
CHECK TYPE	Std: Soft Check		Option: Hard Check
PRICE LEVEL	1	1	2
MIX AND MATCH	10 tables	0 tables	99 tables
ELECTRONIC JOURNAL	3000 lines	0 lines	24,000 lines

NOTE: Memory allocation should be programmed before the register is programmed and placed into service. If memory allocation is changed, the current program and totals will be lost.

To Set Memory Allocation

1. Turn the control lock to the **S** position.
2. Enter **60**, and then press the **SUBTOTAL** key.



3. Refer to the chart below. Enter the index number and press the **X/TIME** key.

X	Memory Area
1	PLU
2	CLERK*
3	GROUP
4	CHECK#*
5	SOFT CHECK LINE
6	CHECK TYPE : Hard (1), Soft (0)
7	PRICE LEVEL
8	MIX AND MATCH
9	ELECTRONIC JOURNAL

4. Enter the quantity to allocate for the memory item and press the **CASH** key.

Quantity

5. If you wish to allocate another memory area, repeat steps number 3 and 4.
6. Press **CASH** to exit the memory allocation program. The current allocation will print.

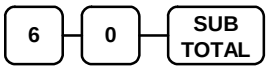
NOTE: The number of clerks cannot exceed the number of checks allocated. For example, if you wish to allocate 20 clerks, you must also allocate at least 20 checks.

Memory Allocation Printout

```
DATE 03/09/2007 FRI   TIME 01:32

********************************
TTL AVAIL : 928576
TTL USED : 311915
------------_-----------------
1.ALLOCATED PLU IS :2000
2.ALLOCATED CLERK IS :15
3.ALLOCATED GROUP IS :20
4.ALLOCATED CHECK IS :15
5.ALLOCATED CHK LINE IS :30
6.CHECK IS :HARD(H),SOFT(Y):Y
7.ALLOCATED LEVEL IS : 1
8.ALLOCATED MNM IS : 10
9.ALLOCATED EJ LINE IS :3000
********************************
CLERK 1          000046   00000
```

Memory Allocation Scan

1. Turn the control lock to the **S** position.
2. To scan the allocated memory, enter **60**, press the **SUBTOTAL** key.



3. Press **CASH** key.

Function Key Assignment Programming

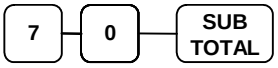
Function keys may be relocated, inactivated or changed with this program. For example, you may wish to place functions, such as **PREVIOUS BALANCE** and **SERVICE** that are not placed on the default keyboard. Or perhaps, you may wish to remove a function, such as **CANCEL**, for security reasons.

Please note the following limitations:

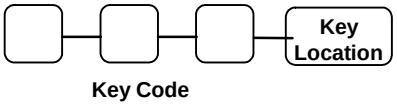
- If you assign a duplicate of a function code, the duplicate will function exactly as the original - you will not get separate totals and counters on reports for the duplicated key.
- You can reassign keys only in locations that are programmable. See "Default Keyboard", where the key locations that may be programmed are identified.

To Assign a Function Key to a Location

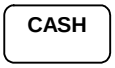
1. Turn the control lock to the **S** position.
2. Enter **70**, and then press the **SUBTOTAL** key.



3. Refer to "Function Key Code Chart" to find the code for the key you wish to assign, press the location you wish to program. Repeat this step to assign another key.



4. Press CASH key to finalize key assignment program.



Function Key Code Chart

Code	Function
1 ~ 50	NLU 1 ~ 50
51	Numeric 1
52	Numeric 2
53	Numeric 3
54	Numeric 4
55	Numeric 5
56	Numeric 6
57	Numeric 7
58	Numeric 8
59	Numeric 9
60	Numeric 0
61	Numeric 00
62	DECIMAL
63	#/NS
64	%1
65	%2
66	%3
67	%4
68	%5
69	X/TIME
70	ADD CHECK
71	CANCEL
72	CASH
73	CHARGE 1
74	CHARGE 2
75	CHARGE 3

Code	Function
76	CHARGE 4
77	CHARGE 5
78	CHARGE 6
79	CHARGE 7
80	CHARGE 8
81	CHECK CASH
82	ENDORSE
83	CHECK TEND
84	CHECK #
85	CLEAR (ESC)
86	CLERK #
87	CURR. CONV.
88	CURR. CONV.
89	CURR. CONV.
90	CURR CONV.
91	DRIVE THRU
92	EAT-IN
93	ERR CORRECT
94	F/S SHIFT
95	F/S SUB
96	F/S TEND
97	GUEST
98	PLU
99	LEVEL 1
100	LEVEL 2
101	MACRO 1

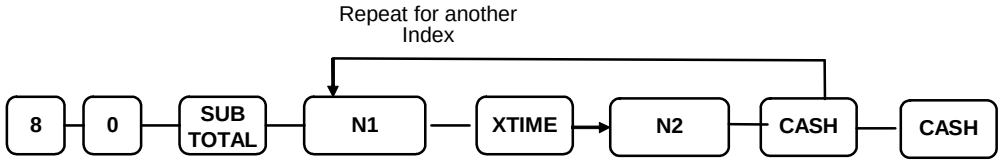
Code	Function
102	MACRO 2
103	MACRO 3
104	MACRO 4
105	MACRO 5
106	MACRO 6
107	MACRO 7
108	MACRO 8
109	MACRO 9
110	MACRO 10
111	RETURN
112	MOD 1
113	MOD 2
114	MOD 3
115	MOD 4
116	MOD 5
117	P/BAL
118	PO 1
119	PO 2
120	PO 3
121	RECEIPT FEED
122	PRINT CHECK
123	PROMO
124	RA 1
125	RA 2
126	RA 3
127	SUBTOTAL

Code	Function
128	SCALE
129	SERVICE
130	TABLE #
131	TARE
132	TAKE OUT
133	TAX EXEMPT
134	TAX SHIFT 1
135	TAX SHIFT 2
136	TAX SHIFT 3
137	TAX SHIFT 4
138	TIP
139	VOID
140	WASTE
141	VALIDATION
142	KBD SHIFT
143	Not used
144	RCPT ON/OFF
145	INACTIVE
146	NON ADD

RS-232 Communication Options

You must define devices attached to RS-232C communications ports, and the options for the device.

1. Turn the control lock to the **S** position.
2. For Port #1, enter **8 0** and press the **SUBTOTAL** key,
   For Port #2, enter **8 1** and press the **SUBTOTAL** key,
   For Port #3, enter **8 2** and press the **SUBTOTAL** key
3. Refer to the chart RS-232C option chart that follows and enter the number of the address you wish to program (N1) and press the **X/TIME** key.
4. Enter the value that represents your selection (N2) and press the **CASH** key.
5. Repeat from step 3 for any additional options you wish to program.
6. Press **CASH** to exit the program



N1	OPTION	N2	VALUE
1	Baud Rate	0	9600 BPS
		1	1200 BPS
		2	2400 BPS
		3	4800 BPS
		4	19200 BPS
2	Parity	0	NONE
		1	ODD
		2	EVEN
3	Data Bits	0	8 BITS
		1	7 BITS
4	Stop Bits	0	1 BIT
		1	2 BIT

5	Device Function	0	NONE
		1	PC
		2	SCALE
		3	REMOTE JOURNAL
		4	REMOTE PRINTER
		6	SCANNER
		7	COIN
		8	EFT
		9	POLE
		10	PDC
6	Initial Feeding Line KP	0 - 20	
7	End Feeding Line KP	0 - 20	
8	Initial Feeding Line Slip	0 - 20	
9	Print Line On Guest Check	0 - 50	
10	Scale Type	0	NCI
		1	CAS
		2	Weigh by Ounce (v1.019 or later)
11	Printer Type	0	NONE
		1	SAM4S ELLIX10
		2	SAM4S ELLIX20
		3	SRP-270
		4	SRP-350
		5	CITIZEN3550
		6	CITIZEN810
		7	CITIZEN230
		8	EPSON TMT88-2
		9	EPSON U200
		10	EPSON U295
		11	EPSON U300
		12	EPSON U325
		13	EPSON U375
		14	STAR SP-200
		15	STAR SP-298
		16	STAR SP-300
		17	STAR TSP-200
12	Pole Display	0	EPSON
		1	ICD

Self Tests

Self-tests can be performed to check the functions of the register.

1. Turn the control lock to the **S** position.
2. Enter the test number from the chart below and press the **SBTL** key.

Test	Key Sequence	Results/Instructions
Printer	**10 SBTL**	The receipt printer generates a printer test pattern.
Display	**11 SBTL**	Displays illuminate a test pattern.
Keyboard	**12 SBTL**	Press any key. The key's hex value is displayed. Turn key lock to end the test.
Mode Lock	**13 SBTL**	Turn the mode lock to display the lock position. Return the key to S to end the test.
RS232C Port 1 RS232C Port 2 RS232C Port 3	**14 SBTL** **24 SBTL** **34 SBTL**	Loop back connector must be connected. Displays "232 Port Good" if successful; displays "232 Port No Good" if unsuccessful.
Endless Printing	**15 SBTL** **16 SBTL**	The receipt prints a sample ticket. The print is repeated until the key lock is turned.
SD Card	**17 SBTL**	Insert an SD card. After the test is complete, the display reads "TEST SD CARD INSERTED". Press Clear. Card information is printed.
MCR	**18 SBTL**	Swipe card to test. If successful, "TRK 1 OK TRK 2 OK" displays. Track data is printed.

Program Mode Reference Guide

Overview

Most register programming takes place in program mode (the control lock is placed in the PGM position.) Programs here include:

- Tax Programming – Set tax rates or tables can be set for each of four possible taxes. Value added taxes and GST (Canada) can be set.
- PLU Programming – Set PLU prices, descriptors and options. Also assign PLUs to groups, link to other PLUs, assign to mix and match groups, set stock levels and set additional options
- System Option Programming – Set options related to the operation of your register.
- Print Option Programming – Set options related to the printing of receipts and reports.
- Function Key Programming – Set descriptors, entry limits and specific options related to each function key you may be using.
- Clerk Programming – Set names, codes and drawer assignments for each clerk.
- Mix & Match Programming – Apply discounts such as “buy 2 and get $1 off”.
- Group Programming – Groups collect sales from sets of items (PLUs) Set descriptors and options for groups here.
- Miscellaneous Programming—Program macro sequences, logo messages, financial/clerk report messages, NLU assignments, cash-in-drawer limit, check change limit, date/time, scale tare weights, and the machine number.
- Program Scans – Print a record of you register program.
- Program Backup and Restore – Back up your program to a SD memory card.

Default Programming

Each SAM4s ECR is ready to use after un-boxing, loading the paper and completing the memory all clear procedure (see “Quick Start Guide” on page 13.)

- All keyboard PLUs are nontaxable and preset, with a “0” price and a default status programming of "00000000".
- All system options are set to **0** in default programming, unless otherwise noted. Change only the options that will deviate from default programming. There is no need to re-enter an option status of **0**, since **0** is its original setting.
- All programming (unless otherwise noted) is done with the control lock in the **PGM** position. Each section details a specific area of register programming.

Descriptor Programming Methods

Descriptors are programmable for PLUs, function keys, groups, clerks and the logo/messages. There are two methods available to program descriptors, the *Program Overlay Method*, and the *Descriptor Code Method*. The method you use will depend upon the setting you make at system option #32.

Descriptor Program Overlay

Note: The overlay depicted here is not actual size. See your SAM4s dealer for actual size overlays and key sheets.

		S	U	W	Z	BACK SPACE
F	L	R	T	V	Y	SPACE
E	K	Q			X	DOUBLE
D	J	P	7	8	9	CAPS
C	I	O	4	5	6	
B	H	N	1	2	3	
A	G	M	0	00	.	

Descriptor Code Chart

CHAR	C	ü	é	â	ä	à	å	c	ê	ë
CODE	001	002	003	004	005	006	007	008	009	010
CHAR	è	ï	î	ì	Ä	Å	É	æ	Æ	ô
CODE	011	012	013	014	015	016	017	018	019	020
CHAR	ö	ò	û	ù	ÿ	Ö	Ü	¢	£	¥
CODE	021	022	023	024	025	026	027	028	029	030
CHAR	€	SPA	!	"	#	$	%	&	'	(
CODE	031	032	033	034	035	036	037	038	039	040
CHAR	)	*	+	,	-	.	/	0	1	2
CODE	041	042	043	044	045	046	047	048	049	050
CHAR	3	4	5	6	7	8	9	:	;	<
CODE	051	052	053	054	055	056	057	058	059	060
CHAR	=	>	?	@	A	B	C	D	E	F
CODE	061	062	063	064	065	066	067	068	069	070
CHAR	G	H	I	J	K	L	M	N	O	P
CODE	071	072	073	074	075	076	077	078	079	080
CHAR	Q	R	S	T	U	V	W	X	Y	Z
CODE	081	082	083	084	085	086	087	088	089	090
CHAR							a	b	c	d
CODE	091	092	093	094	095	096	097	098	099	100
CHAR	e	f	g	h	i	j	k	l	m	n
CODE	101	102	103	104	105	106	107	108	109	110
CHAR	o	p	q	r	s	t	u	v	w	x
CODE	111	112	113	114	115	116	117	118	119	120
CHAR	y	z	BACK SPACE			Double				
CODE	121	122	123			999				

Initial Clear

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

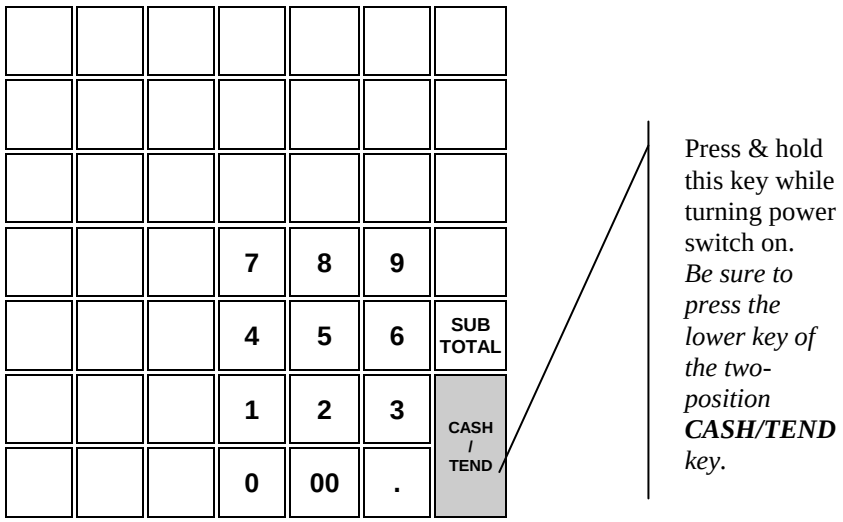
CAUTION: Do not share this information with unauthorized users. Distribute the P Mode key only to those you may want to perform this function.

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

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

To Perform an Initial Clear:

1. Turn the register power switch to the **OFF** position.
2. Turn the control lock to the **PGM** position.
3. Press and hold the key position where the **CASH** key is located on the default keyboard. *Be sure to press the lower key of the two-position **CASH/TEND** key.* (Because the ER-285M keyboard is programmable, your keyboard may have another function in this location. Use this location even if your keyboard has been modified and a different function is in this location.)
4. Continue to hold this key while turning register power switch to the **ON** position.
5. The message "INITIAL CLEAR OK!" prints when the initial clear is complete. Release the **CASH** key.



Tax Programming

The *ER-285M Series* has the capability to support four separate taxes.

Taxes can be calculated as either a straight percentage rate between .001% and 99.999%, or a 60 break point tax table. Each tax may be either an add-on tax (added to the cost of a taxable item), or a value added tax (VAT) that is included in the price of the item.

Tax rate 4 may be set to function as the Canadian Goods & Services Tax (GST). Definitions for tax rates 1, 2, 3 & 4 are made as part of tax programming.

- If you are entering a tax rate (add-on or VAT), see "Straight Percentage Tax Rate Programming" to enter the percentage rate.
- If you are entering a Canadian Goods and Services Tax (GST), use tax rate 4 for the GST tax, and use tax rates 1, 2 and/or 3 for any other provincial tax or taxes. See "Straight Percentage Tax Rate Programming" to enter the GST status and percentage rate.

Important Note: After you have entered your tax program(s), test for accuracy by entering several transactions of different dollar amounts. Carefully check to make sure the tax charged by the cash register matches the tax on the printed tax chart for your area. As a merchant, you are responsible for accurate tax collection. If the cash register is not calculating tax accurately, contact your dealer for assistance.

Straight Percentage Tax Rate Programming

When tax requirements may be met using a straight percentage rate, use the following method to program a tax as a straight percentage.

Programming Straight Percentage Tax Rates and Status

1. Turn the control lock to the **PGM** position.
2. If the tax is a percentage rate, with a decimal. (0.000-99.999). It is not necessary to enter preceding zeros. For example, for 6%, enter 06.000 or 6.000.
3. For the type of tax:

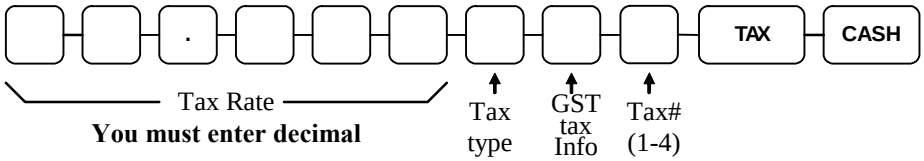
If the tax is a percentage added to the sale (normal add on tax), enter:	0
If the tax is a percentage value added tax (VAT; calculated as part of the sale), enter:	2

4. Enter **0** here for all taxes, unless if you are programming tax 4 as a Canadian GST. If tax 4 is a Canadian GST, enter the sum of the options below:

OPTION	VALUE	=	SUM
GST (tax 4) is taxable by rate 1?	Yes = 1 No = 0		
GST (tax 4) is taxable by rate 2?	Yes = 2 No = 0		
GST (tax 4) is taxable by rate 3?	Yes = 4 No = 0		

5. Enter the number (1-4) of the tax you are programming.
6. Press the **TAX** key.
7. Press the **CASH** key to end programming.

Tax Rate Programming Flowchart



Tax Table Programming

In some cases, a tax that is entered as a percentage does not follow exactly the tax charts that apply in your area (even if the tax chart is based on a percentage). In these cases, we recommend that you enter your tax using tax table programming. This method will match tax collection exactly to the break points of your tax table.

Before programming, obtain a copy of the tax table you wish to program. You will need the printed tax table if you wish to determine the break point entries yourself.

Note: You can enter up to 60 break points.

Determining Break Point Entries

1. Examine the printed tax table for the tax you are programming.
2. Refer to the "Tax Table Programming Example - Illinois 6% Tax Table" to help with this exercise.
3. Calculate the break point differences by subtracting the high side of the previous range from the high side of the dollar range.
4. Examine the pattern of break point differences to determine when the break points begin to repeat. Mark the beginning break points that do not fit a pattern as "non-repeat breaks." Mark the break points that are repeating in a pattern as "repeat breaks."

Programming a Tax Table

1. Turn the control lock to the **PGM** position.
2. Enter **10**.
3. Enter a digit to represent the tax you are programming:
   1 for TAX 1
   2 for TAX 2
   3 for TAX 3
   4 for TAX 4
4. Press the **TAX** key.
5. Enter the maximum amount that is not taxed and press the appropriate **TAX** key.
6. Enter the first tax amount charged and press the appropriate **TAX** key.
7. For each non-repeat break point, up to the last non-repeat break point, enter the high side from the sale dollar range and press the appropriate **TAX** key.
8. For the last non-repeat break point, enter the high side from the sale dollar range and press the **X/TIME** key.
9. For each repeat break point, enter the high side from the sale dollar range and press the appropriate **TAX** key.
10. Press the **CASH** key to end the tax table program.

Tax Table Programming Example - Illinois 6% Tax Table

Tax Charged	Sale Dollar Range	Break point Differences	
$0.00	$0.00 - $0.10		
$0.01	$0.11 - $0.21	11	
$0.02	$0.22 - $0.38	17	
$0.03	$0.39 - $0.56	18	Non-Repeat
$0.04	$0.57 - $0.73	17	
$0.05	$0.74 - $0.91	18	
$0.06	$0.92 - $1.08	17	
$0.07	$1.09 - $1.24	16	Repeat
$0.08	$1.25 - $1.41	17	
$0.09	$1.42 - $1.58	17	
$0.10	$1.59 - $1.74	16	
$0.11	$1.75 - $1.91	17	
$0.12	$1.92 - $2.08	17	
$0.13	$2.09 - $2.24	16	
$0.14	$2.25 - $2.41	17	

To enter the sample program for the Illinois 6% tax table in tax 1:

1. Enter **1 0 1** press the **TAX** key.
2. Enter **1 0** (the maximum amount that is not taxed), press the **TAX** key.
3. Enter **1** (the first tax amount charged), press the **TAX** key.
4. Enter **2 1** (non-repeat break point), press the **TAX** key.
5. Enter **3 8 (**non-repeat break point), press the **TAX** key
6. Enter **5 6** (non-repeat break point), press the **TAX** key.
7. Enter **7 3** (non-repeat break point), press the **TAX** key.
8. Enter **9 1** (non-repeat break point), press the **X/TIME** key.
9. Enter **1 0 8** (repeat break point), press the **TAX** key.
10. Enter **1 2 4** (repeat break point), press the **TAX** key.
11. Enter **1 4 1** (repeat break point), press the **TAX** key.
12. Press the **CASH** key to complete the tax program.

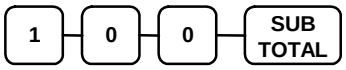
PLU Programming

All PLUs, whether they are registered by pressing a PLU key on the keyboard, or by entering the PLU number and pressing the **PLU** key, have the same programming options. These options are set through separate programs:

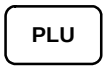
- Program 100 – PLU Status Programming determines whether the PLU is open, preset or inactive. Also selected here are tax, food stamp, scale, negative, single item, hash, gallonage, compulsory number entry, compulsory condiment and print options.
- Program 110 – PLU Auto Tare Programming. Use this option if the register is used with an optional scale, and you wish to automatically deduct a tare for a PLU representing an item sold by weight.
- Program 150 – PLU Group Assignment allows you to select up to two groups where each PLUs sales will accumulate.
- Program 200 - PLU Price/HALO Programming determines the PLU price if the PLU is preset, or the high amount lock out (HALO) if the PLU is open.
- Program 250 - PLU Stock Amount Programming allows you to add stock to the PLU sales counters for PLUs you have designated as stock keeping PLUs.
- Program 300 - PLU Description Programming allows you to set a unique, up to 18-character descriptor for each PLU.
- Program 350 - PLU Link Programming allow you to link a PLU to another PLU, so that registration of the first PLU will automatically trigger registration of the linked PLU.
- Program 400 - PLU Delete Programming allows you to delete the PLU.
- Program 450 - PLU Mix & Match Programming.

Program 100 - PLU Status Programming

1. Turn the control lock to the **PGM** position.
2. To begin the program, enter **1 0 0**, press the **SUBTOTAL** key.

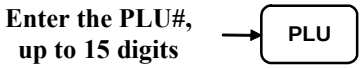


3. Select the PLU or PLUs you wish to program in one of the following ways:
   - Press a PLU key on the keyboard, or

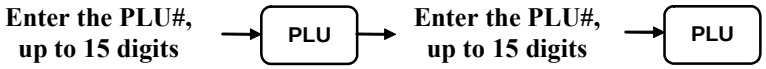


   - Press the first PLU keys that are to receive the same status and Press the last PLU keys, or

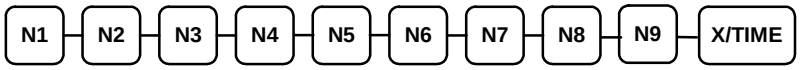
   - Enter up to 15 digit number of the PLU and press the **PLU** key, or



   - Enter the number of the first PLU in a range of PLUs that are to receive the same setting; press the **PLU** key. Enter the last number in the range; press the **PLU** key.



4. Refer to the "PLU Status Chart" to determine the values for **N1** through **N9**. (If an address offers more than one option, add the values for each option and enter the sum. For example, if you wish the PLU to be taxable by rates 1 and 3, add the values for your choices, 1 + 4, and enter the sum "5" for address N5.) Enter the values you have selected, press the **X/TIME** key. (**You do not need to enter preceding zeros**. For example, for a PLU taxable by tax 1, enter **4 0**.)



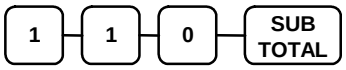
5. To program additional PLUs, repeat from step 3, or press the **CASH** key to finalize the program.

PLU Status Chart

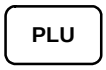
Address	Program Option	Value	=	Sum
N1	Print item's price on receipt?	Yes = 0 No = 1		
	Print item's price on check?	Yes = 0 No = 2		
	PLU is disabled PROMO function?	Yes = 4 No = 0		
N2	PLU counter is not reset when a PLU Z report is done?	Yes = 1 No = 0		
	PLU is preset override in MGR control?	Yes = 2 No = 0		
N3	PLU is food stamp eligible?	Yes = 1 No = 0		
	PLU is negative item?	Yes = 2 No = 0		
	PLU is hash?	Yes = 4 No = 0		
N4	PLU is single item?	Yes = 1 No = 0		
	Compulsory non-add number?	Yes = 2 No = 0		
	PLU is gallonage?	Yes = 4 No = 0		
N5	PLU is inventory?	Yes = 1 No = 0		
	PLU is inactive?	Yes = 2 No = 0		
	PLU is scalable?	Yes = 4 No = 0		
N6	P.LU is auto-scale entry?	Yes = 1 No = 0		
	PLU is a condiment?	Yes = 2 No = 0		
	Compulsory condiment entry?	Yes = 4 No = 0		
N7	Print PLU on receipt?	Yes = 0 No = 1		
	NOT USED			
	Print PLU on check?	Yes = 0 No = 4		
N8	PLU is preset?	Yes = 0 No = 1		
	Allow preset override ?	Yes = 0 No = 2		
	PLU is taxable by rate 1?	Yes = 4 No = 0		
N9	PLU is taxable by rate 2?	Yes = 1 No = 0		
	PLU is taxable by rate 3?	Yes = 2 No = 0		
	PLU is taxable by rate 4?	Yes = 4 No = 0		

Program 110 - PLU Auto Tare Programming

1. Turn the control lock to the **PGM** position.
2. To begin the program, enter **1 1 0**, press the **SUBTOTAL** key.

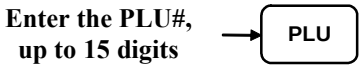


3. Select the PLU or PLUs you wish to program in one of the following ways:
   - Press a PLU key on the keyboard, or

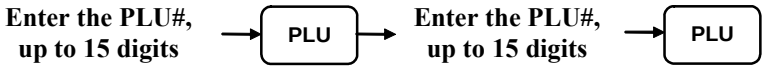


   - Press the first PLU keys that are to receive the same status and Press the last PLU keys, or

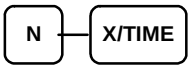
   - Enter up to 15 digit number of the PLU and press the **PLU** key, or



   - Enter the number of the first PLU in a range of PLUs that are to receive the same setting; press the **PLU** key. Enter the last number in the range; press the **PLU** key.



4. Enter a value (1-5) to indicate the number of the preprogrammed tare weight you want to automatically subtract when the PLU is used for scale entry (using an optional scale). Enter 0 to disable automatic tare subtraction.



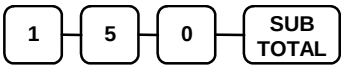
5. Repeat from step 3 to program additional PLUs, or press the **CASH** key to finalize the program.

Program 150 - PLU Group Assignment

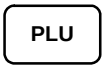
Each PLU may report to any three of 99 groups. (The number of groups depends upon memory allocation, see "Memory Allocation" on page 114.) Group totals appear on reports, so that you can track sales of different types of items. A group can also be used to designate items that are to print on an optional kitchen printer. (The first group entered is the kitchen printer routing group.)

Note: By default, a PLU will report to group "1", if not programmed to report to another group.

1. Turn the control lock to the **PGM** position.
2. To begin the program, enter **1 5 0**, press the **SUBTOTAL** key.

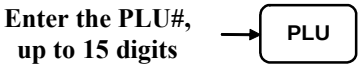


3. Select the PLU or PLUs you wish to program in one of the following ways:
   - Press a PLU key on the keyboard, or

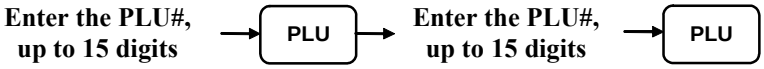


   - Press the first PLU keys that are to receive the same status and Press the last PLU keys, or

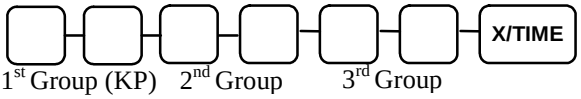
   - Enter up to 15 digit number of the PLU and press the **PLU** key, or



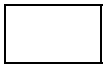
   - Enter the number of the first PLU in a range of PLUs that are to receive the same setting; press the **PLU** key. Enter the last number in the range; press the **PLU** key.



4. Enter up to three 2-digit numbers representing the groups where you wish to add the PLUs sales, i.e. enter **1 0** for group 10 or enter **0 4** for group four. Press the **X/TIME** key.



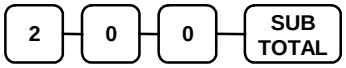
5. To program additional PLUs, repeat from step 3, or press the **CASH** key to finalize the program.



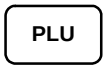
Program 200 - PLU Price/HALO Programming

If a PLU is open, set the HALO (high amount lock out) here. If a PLU is preset set the preset price here. If a PLU is set with gallonage status, enter the price per gallon here. (Enter price per gallon in tenths of a penny, i.e. 1299 for $1.29 9/10 per gallon.)

1. Turn the control lock to the **PGM** position.
2. To begin the program, enter **2 0 0**, press the **SUBTOTAL** key.

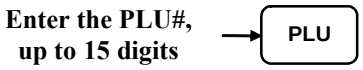


3. Select the PLU or PLUs you wish to program in one of the following ways:
   - Press a PLU key on the keyboard, or

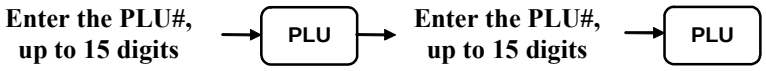


   - Press the first PLU keys that are to receive the same status and Press the last PLU keys, or

   - Enter up to 15 digit number of the PLU and press the **PLU** key, or



   - Enter the number of the first PLU in a range of PLUs that are to receive the same setting; press the **PLU** key. Enter the last number in the range; press the **PLU** key.



4. If the PLU is open, enter a HALO of up to 7 digits. If the PLU is preset, enter a preset price.

   If a second price level is allocated, you **must** enter the price for the second level:

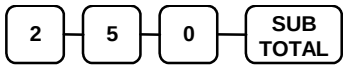
5. To program additional PLUs, repeat from step 3, or press the **CASH** key to finalize the program.

Program 250 - PLU Stock Amount Programming

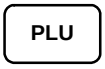
With this program, you can you can add stock to the PLU sales counters for PLUs you have designated as stock keeping PLUs. See “Program 100 – PLU Status Programming”. The stock number set here can be the amount of stock that is being added to the current level, or optionally, it can be the new total stock level. See option #18 in "System Option Programming" to set this option.

Note: Stock is kept in decimal units. When entering stock, you must assume a decimal position in the second position, i.e. xxxx.xx. For example, 100 is entered as 10000, or forty three and three quarters is entered as 4375.

1. Turn the control lock to the **PGM** position.
2. To begin the program, enter **2 5 0**, press the **SUBTOTAL** key.



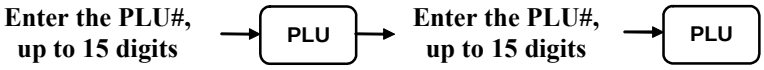
3. Select the PLU or PLUs you wish to program in one of the following ways:
   - Press a PLU key on the keyboard, or



   - Press the first PLU keys that are to receive the same status and Press the last PLU keys, or

   - Enter up to 15 digit number of the PLU and press the **PLU** key, or

   - Enter the number of the first PLU in a range of PLUs that are to receive the same setting; press the **PLU** key. Enter the last number in the range; press the **PLU** key.



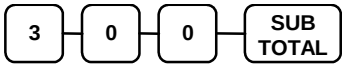
4. Enter the stock amount you wish to add (up to six digits), press the **X/TIME** key.

5. To program additional PLUs, repeat from step 3, or press the **CASH** key to finalize the program.

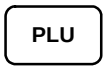
Program 300 - PLU Description Programming

Program descriptors by typing descriptors on the alpha keyboard overlay or by entering three-digit alpha character codes. Go to system option #32 to choose the method you wish to use. The descriptor code method is the default method.

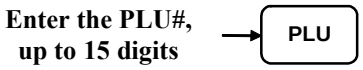
1. Turn the control lock to the **PGM** position
2. To begin the program, enter **3 0 0**, press the **SUBTOTAL** key.



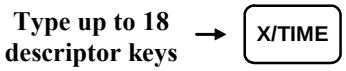
3. Select the PLU you wish to program in one of the following ways:
   - Press a PLU key on the keyboard, or



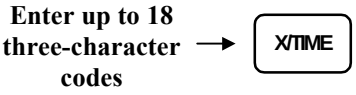
   - Enter up to 15 digit number of the PLU and press the **PLU** key, or



4. If you are programming using alpha overlay;



or,

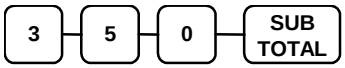


5. To program additional PLUs, repeat from step 3, or press the **CASH** key to finalize the program.

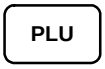
Program 350 - PLU Link Programming

PLU link programming allows you to link a PLU to another PLU, so that registration of the first PLU will automatically trigger registration of the linked PLU. For example, you may wish to link a bottle deposit with the sale of beverages, or you may wish to register a group of items normally sold together.

1. Turn the control lock to the **PGM** position.
2. To begin the program, enter **3 5 0**, press the **SUBTOTAL** key.

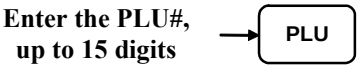


3. Select the PLU you wish to program in one of the following ways:
   - Press a PLU key on the keyboard, or



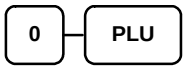
   - Enter up to 15 digit number of the PLU and press the **PLU** key, or

4. Enter the number of the PLU you wish the PLU linked to; press the PLU key. Or press the PLU key on the keyboard you wish the PLU linked to.



or,

If you want to unlink,

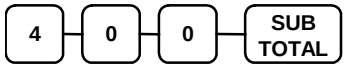


5. To program additional PLUs, repeat from step 3, or press the **CASH** key to finalize the program.

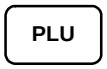
Program 400 – PLU Delete Programming

NOTE: To delete a PLU, all totals for the PLU must be cleared from Z reports (including Stock, PLU and Not Found PLU reports.)

1. Turn the control lock to the **PGM** position.
2. To begin the program, enter **4 0 0**, press the **SUBTOTAL** key.

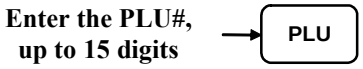


3. Select the PLU or PLUs you wish to program in one of the following ways:
   - Press a PLU key on the keyboard, or

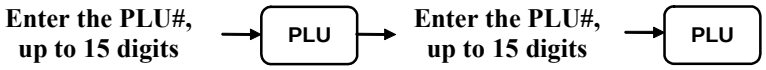


   - Press the first PLU to be deleted and then press the last PLU key to be deleted, or

   - Enter up to 15 digit number of the PLU and press the **PLU** key, or



   - Enter the number of the first PLU in a range you wish to delete and press the **PLU** key. Enter the last number in the range; press the **PLU** key.



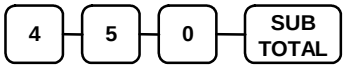
4. Press **X/TIME** key.

5. To delete additional PLUs, repeat from step 3, or press the **CASH** key to finalize the program.

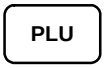
Program 450 - PLU Mix & Match Programming

Retailers often offer discounts when multiples of different items are purchased. For example, the offer: “save $5 on any three bottles of wine” can be handled by a mix and match discount. The default *ER-285M* can accommodate up to 10 different mix and match discounts, the total can be increased to a maximum of 100 through memory allocation. If an item is eligible for a mix and match discount, enter the number of the mix & match discount table here.

1. Turn the control lock to the **PGM** position.
2. To begin the program, enter **4 5 0**, press the **SUBTOTAL** key.

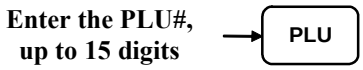


3. Select the PLU you wish to program in one of the following ways:
   - Press a PLU key on the keyboard, or

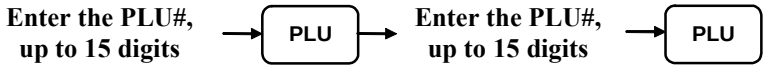


   - Press the first PLU keys that are to delete and Press the last PLU keys, or

   - Enter up to 15 digit number of the PLU and press the **PLU** key, or



   - Enter the number of the first PLU in a range you wish to delete and press the **PLU** key. Enter the last number in the range; press the **PLU** key.



4. Enter the number of the Mix & Match Table (1-100); press the **X/TIME** key.

5. Repeat from step 3 to program additional PLUs, or press the **CASH** key to finalize the program.

System Option Programming

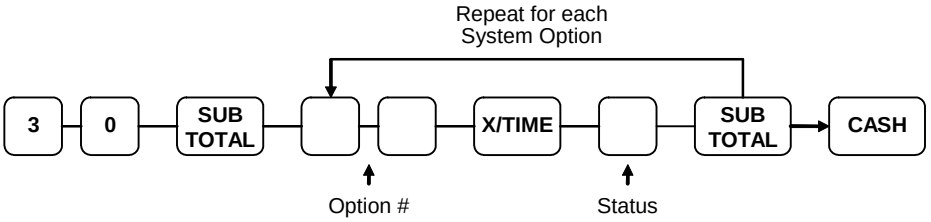
Refer to the “System Option Table” to review the system options. Read each option carefully to determine if you wish to make any changes.

NOTE: Because after clearing memory all options settings are automatically set to 0, and because your most likely option selections require a status setting of 0, you do not need to program this section unless you wish to change the default status.

Programming a System Option:

1. Turn the control lock to the **PGM** position.
2. Enter **3 0**, press the **SUBTOTAL** key.
3. Enter a system option address, and then press the **X/TIME** key.
4. Enter the number representing the status you have selected, or if there is more than one decision to be made in an address, add the values representing your choices for each decision and enter the sum. Press the **SUBTOTAL** key.
5. Repeat from step 3 for each system option you wish to change.
6. Press the **CASH** key to end system option programming.

System Option Flowchart



System Option Table

Address	SYSTEM OPTION		VALUE	=	SUM
1	Beeper is active?		Yes = 0 No = 1		
	MCR CLERK SIGN		Yes = 2 No = 0		
	% affects net sale?		Yes = 0 No = 4		
2	Clerk sign on method is:	Direct entry = Code entry =	0 1		
3	Clerks are:	Pop-up = Stay down =	1 0		
4	Drawer needs to be shut to operate?		Yes = 0 No = 1		
	Activate open Drawer Alarm?		Yes = 2 No = 0		
5	The number of seconds before the open drawer warning tone sounds (Default is 30 seconds).		1-99		
6	Allow the post tender function?		Yes = 1 No = 0		
	Open drawer on post tender?		Yes = 0 No = 2		
	Allow multiple receipts?		Yes = 4 No = 0		
7	Cash Declaration Required before Z Financial report?		Yes = 1 No = 0		
	Allow negative balance sales in the X control lock position only?		Yes = 2 No = 0		
8	Allow zero balance sales in the X control lock position only?		Yes = 1 No = 0		
	Consecutive number is reset after a financial report?		Yes = 2 No = 0		
9	Reset Grand Total after Z financial Report?		Yes = 1 No = 0		
	Cash drawer will open when reports are run?		Yes = 0 No = 2		
	Open drawer during training mode?		Yes = 0 No = 4		
10	Decimal place: (0,1,2,3) default=2		0-3		
11	Date format is:	MMDDYY = DDMMYY = YYMMDD =	0(default) 1 2		
12	Percentage and Tax calculations will:	Round up at 0.005 = Always round up = Always round down =	0(default) 1 2		

Address	SYSTEM OPTION		VALUE	=	SUM
13	Split price calculations will:	Round up at 0.005 = Always round up = Always round down =	0(default) 1 2		
14	Compulsory destination (Eat In/Take Out/Drive Thru) before tendering?		Yes = 1 No = 0		
	Hash is	Normal = Non Add =	0 2		
15	Reset the Financial report Z counter after a Z1 Financial report?		Yes = 1 No = 0		
	Reset the Time report Z counter after a Z1 Time report?		Yes = 2 No = 0		
	Reset the PLU report Z counter after a Z1 PLU report?		Yes = 4 No = 0		
16	Reset the Clerk report Z counter after a Z1 Clerk report?		Yes = 1 No = 0		
	Reset the Group report Z counter after a Z1 Group report?		Yes = 2 No = 0		
17	Reset the Daily sale report Z counter after a Z2 Daily sale report?		Yes = 1 No = 0		
	Activate Paper sensor?		Yes = 0 No = 2		
	Deactivate Split Pricing?		Yes = 4 No = 0		
18	Allow Direct Multiply?		Yes = 1 No = 0		
	Inventory(stock) counter program	Adds to current level = Replaces current level =	2 0		
19	The number of numeric digits: 0 is no limit		0-14		
20	Direct multiply more than one digit?		Yes = 1 No = 0		
	Tender Validation amount is:	Amount tendered = Amount of sale =	2 0		
21	Display add-price of linked item?		Yes = 1 No = 0		
	Allow sale when stock reaches “0”?		Yes = 0 No = 2		
	Allow Canadian round on subtotal?		Yes = 4 No = 0		
22	Allow Canadian round on cash?		Yes = 1 No = 0		
	Allow Z stock report?		Yes = 0 No = 2		

Address	SYSTEM OPTION		VALUE	=	SUM
23	Training mode	Enter = Exit =	1 0		
24	Enable Electronic Journal?		Yes = 1 No = 0		
	Prompt operator when Electronic Journal is full		Yes = 0 No = 2		
	Stop operations when Electronic Journal is full		Yes = 4 No = 0		
25	Send only negative entries to Electronic Journal		Yes = 1 No = 0		
	Send reset report to Electronic Journal		Yes = 2 No = 0		
	Disable Cash Declaration?		Yes = 4 No = 0		
26		Check Tracking = Clerk Interrupt =	0 1		
	Not used				
	Not count in memory in void mode?		Yes = 4 No = 0		
27	Disable level keys:	Level 1 = Level 2 =	1 2		
28	Price level is:	Pop up after item = Pop up after sale = Stay down =	0 1 2		
29	Modifier is:	Pop up after item = Pop up after sale = Stay down =	0 1 2		
30	Store Name (see Note 1 below)		8 Char		
31	EFT Draft is Fine Dining (prints tip line)?		Yes = 1 No = 0		
	Use Spool?		Yes = 2 No = 0		
	Mix and Match discount is taxable?		Yes = 4 No = 0		
32	PIN Pad type:		DUKPT= 1 ROTATE =0		
	Use magnetic card reader (MCR) for clerk sign on?		Yes = 2 No = 0		
	Use Alpha Program overlay?		Yes = 4 No = 0		
33	MSR uses tracks 1 & 2 or tracks 3 & 4?		1 & 2 = 0 3 & 4 = 1		

Address	SYSTEM OPTION		VALUE	=	SUM
34	MSR Connected to		DataTran = 0 PDC = 1 Register = 2		
35	PIN pad connected to device on: Port 1 = Port 2 = Port 3 =		0 1 2 3		
36	MCR Uses Digit (0-9) (for employee cards)		0		
37	Keyboard Level numbering system (see note 2 below):	Numbered by level = Numbered by key =	0 1		
38	Reserved				
39	Disable Not Found PLU Function (available version 5.008 or later)		Yes = 1 No = 0		

Note 1

Using system option #30, you can set the store name for program and report backup/load data to an SD card.

Note 2

In the default configuration (option 37=0):

- Level 1 accesses PLUs 1-15
- Level 2 accesses PLUs 16-30

An optional numbering method is available for PLUs and Levels. You may wish to consider this option when you are using pop-up levels for sizes and you want different sizes of the same item to be listed together on the PLU report. With this option selected:

- PLU #1 accesses PLU 1 on level 1, PLU 2 on level 2
- PLU #2 accesses PLU 3 on level 1, PLU 4 on level 2
- PLU #3 accesses PLU 5 on level 1, PLU 6 on level 2

and so on until:

- PLU #15 accesses PLU 29 on level 1, PLU 30 on level 2

Note 3

Canadian Rounding on cash added at version 5.013 or later. Set options #21 & 22. Also set Subtotal key options.

Print Option Programming

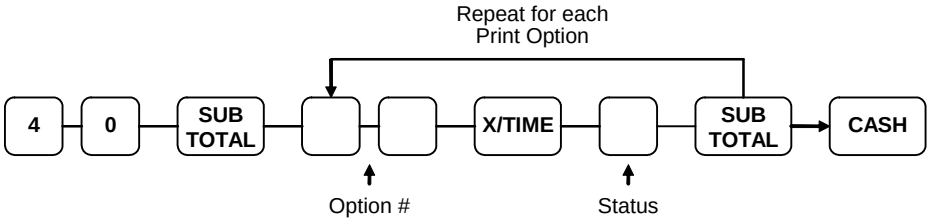
Refer to the “Print Option Table” to review the print options. Read each option carefully to determine if you wish to make any changes.

NOTE: Because after clearing memory all options settings are automatically set to 0, and because your most likely option selections require a status setting of 0, you do not need to program this section unless you wish to change the default status.

Programming a Print Option:

1. Turn the control lock to the **PGM** position.
2. Enter **4 0**, press the **SUBTOTAL** key.
3. Enter a print option address, and then press the **X/TIME** key.
4. Enter the number representing the status you have selected, or if there is more than one decision to be made in an address, add the values representing your choices for each decision and enter the sum. Press the **SUBTOTAL** key.
5. Repeat from step 3 for each print option you wish to change.
6. Press the **CASH** key to end print option programming.

Print Option Flowchart



Print Option Table

Address	PRINT OPTION	VALUE	=	SUM
1	Print media total on clerk report?	Yes = 1 No = 0		
	Print tax symbol?	Yes = 0 No = 2		
2	Void/Return totals will print on the Financial report?	Yes = 0 No = 1		
	Audaction total will print on the Financial report?	Yes = 2 No = 0		
3	Skip media totals with zero activity on the Financial report?	Yes = 0 No = 1		
	Skip media totals with zero activity on the Clerk report?	Yes = 0 No = 2		
	Print Clerk report at the end of the Financial report?	Yes = 4 No = 0		
4	Print PLU sale item number?	Yes = 1 No = 0		
	Print PLU with zero totals on report?	Yes = 2 No = 0		
	Subtotal is printed on receipt when the **SUBTOTAL** key is pressed?	Yes = 4 No = 0		
5	Print percentage of sales on the PLU report?	Yes = 1 No = 0		
	Print consecutive number counter on receipt?	Yes = 0 No = 2		
6	Print date on receipt?	Yes = 0 No = 1		
	Print time on receipt?	Yes = 0 No = 2		
	Print machine number on receipt?	Yes = 0 No = 4		
7	Print clerk name on receipt?	Yes = 0 No = 1		
	Print Z counter on reports?	Yes = 0 No = 2		
8	Home Currency symbol (see note 1 below)	$ (Default)		
9	Print receipt when sign on/off?	Yes = 0 No = 1		
	Print Grand total on the X Financial report?	Yes = 0 No = 2		
	Print Grand total on the Z Financial report?	Yes = 0 No = 4		
10	Print Gross total on the X Financial report?	Yes = 0 No = 1		
	Print Gross total on the Z Financial report?	Yes = 0 No = 2		

Address	PRINT OPTION		VALUE	=	SUM
11	Print the subtotal without tax on the receipt?		Yes = 1 No = 0		
	Tax amount to print on receipt is:	Combined = Itemized =	2 0		
12	Print the tax amount on receipt?		Yes = 0 No = 1		
	Print taxable totals?		Yes = 2 No = 0		
	Print the tax rate?		Yes = 4 No = 0		
13	Print a breakdown of the VAT eligible sale?		Yes = 1 No = 0		
	Print training mode message on the receipt during training mode operations?		Yes = 2 No = 0		
14	Currency Symbol: (See note2 below)	CONV. #1 =	.		
15		CONV. #2 =	.		
16		CONV. #3 =	.		
17		CONV. #4 =	.		
18	Print the kitchen printer order number on the registers receipt?		Yes = 0 No = 1		
	Print the item's price on the kitchen printer requisition?		Yes = 2 No = 0		
19	Print registrations in void mode on the kitchen printer requisition?		Yes = 0 No = 1		
	Print registrations in training mode on the kitchen printer requisition?		Yes = 2 No = 0		
20	Combine like items on the kitchen printer?		Yes = 0 No = 1		
	Consolidation of like items on check track?		Yes = 0 No = 2		
	Chooses volume unit When the PLU is gallonage.	Gallons = Liters =	0 4		
21	Print preamble message on receipt?		Yes = 0 No = 1		
	Print postamble message on receipt?		Yes = 0 No = 2		
22	Print preamble message on the guest check?		Yes = 1 No = 0		
	Print postamble message on the guest check?		Yes = 2 No = 0		
23	Print average items per customer on the Financial report?		Yes = 0 No = 1		
	Print average sales per customer on the Financial report?		Yes = 0 No = 2		

Address	PRINT OPTION			VALUE	=	SUM
24	Issue a second receipt for the same transaction?			Yes = 1 No = 0		
	Priority print by group on the kitchen printer?			Yes = 2 No = 0		
	Print the PLU number and descriptor on the receipt?			Yes = 4 No = 0		
25	Do not print when polling reports?			Yes = 1 No = 0		
	Print PLU# on PLU report?			Yes = 2 No = 0		
	Grand total is:	Net sale Gross sale	= =	4 0		
26	NOT USED					
27	Send order to the kitchen printer when the SBTL key is pressed?			Yes = 1 No = 0		
	Print date on hard check?			Yes = 2 No = 0		
28	Pre Print graphic logo on receipt?			Yes = 1 No = 0		
	Post-Print graphic logo on receipt?			Yes = 2 No = 0		
29	Pre Print graphic logo on the guest check (printed by register printer)?			Yes = 1 No = 0		
	Post-Print graphic logo on the guest check (printed by register printer)?			Yes = 2 No = 0		
30	Print pre-logo	Default User	= =	0 1		
	Print post-logo	Default User	= =	0 2		
31	Number of Pre-feeding lines			0-5		
32	Number of Post-feeding lines			0-5		
33	Print Electronic Journal from:	Oldest New	= =	0 1		
	Mask card number on all EFT drafts			Yes = 0 No = 2		
	Font Size:	Normal Small	= =	0 4		
34	Copy of Datatran receipt (0-99)			0		
35	Prints High Density			Yes = 1 No = 0		
36	Quick journal review (R-Mode/10 Subtotal) prints last xx (0-99) lines of electronic journal. (Requires v1.010 software or later.)			0-99		

37	No signature requires if EFT transaction is under xxxx (i.e. if 2000 is set here, no signature is required on transactions under $20.00. Requires v1.010 software or later.)	0000		

NOTE 1: Print Option# 8 - Users outside of the USA can designate a different currency symbol. To select a different symbol enter three digit alpha character codes.

NOTE 2: Print Option# 14,15,16,17 - If you are using the currency conversion feature, you can select the appropriate symbol for each foreign currency you are accepting. To select a different symbol enter three digit alpha character codes.

Function Key Programming

Three programs are used to program function keys:

- *Program 70* - is used to set each keys individual options
- *Program 80* - is used to program a 18 character alpha numeric descriptor
- *Program 90* - is used to set a high amount limit (HALO)

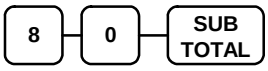
In this chapter you will find:

- General instructions for programs 80 and 90.
- Individual *Program 70* option programming for each function key (options vary by function)

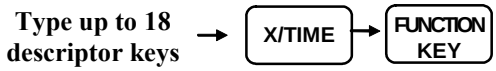
Program 80 - Function Key Descriptor

By default, descriptors are programmed by entering three-digit alpha codes. If you wish to program descriptors by typing descriptors on the alpha keyboard overlay you must select 'Yes' in system option #32 (See "System Option Programming" on page 142).

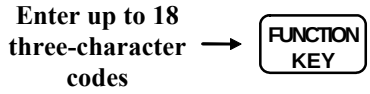
1. Turn the control lock to the **PGM** position.
2. To begin the program, enter **8 0**, press the **SUBTOTAL** key.



3. If you are programming alpha overlay



or,



4. To program additional function keys, repeat from step 3, or press the **CASH** key to finalize the program.

#/NS Key Descriptor Program Note

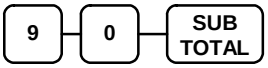
Since two distinct functions, # entry and no sale, reside on the same key, different programs are used to program each descriptor.

- To program the no sale descriptor use program 80 (Enter **80**, press **SUBTOTAL**)
- To program the # key descriptor, use program 81 (enter **81**, press **SUBTOTAL**)

Program 90 - Function Key HALO

Use Program 90 to program a high amount lock out (HALO) for a function key. Only specific keys require this program.

1. Turn the control lock to the **PGM** position.
2. To begin the program, enter **9 0**, press the **SUBTOTAL** key.

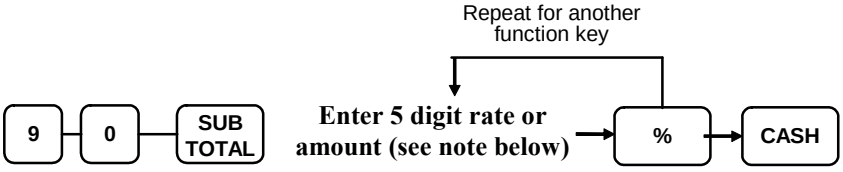


3. Enter a HALO amount limit for the function of up to eight digits, (or "0" for no HALO).

4. Press the function key on the keyboard you wish to program.

5. To program additional function keys, repeat from step 2, or press the **CASH** key to finalize the program.

Program Note for %1 -%5 Function Keys

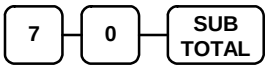


Note: If key is amount, enter 5-digit HALO, or 0 for no HALO. If key is percentage enter the percentage in a five-digit format, without the decimal (XX.XXX). For example: for 10%, enter 10000; for 5.55%, enter 05550; for 99.999%, enter 99999.

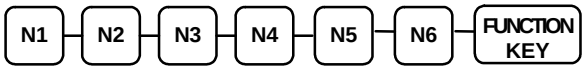
Program 70 - Function Key Options – General Instructions

Use Program 70 to set options for function keys. Because of the differences inherent in function keys, individual options will be different. See the specific instructions for each key that follow the general instructions.

1. Turn the control lock to the **PGM** position.
2. To begin the program, enter **7 0**, press the **SUBTOTAL** key.



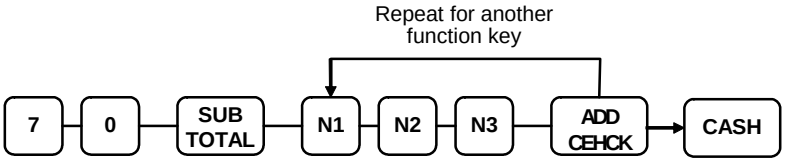
3. Enter the values for the option digit or digits. Depending on the function key you are programming, you may enter up to six digits **N1** through **N6**. Determine the values for **N1** through **N6** by referring to the specific function key information that follows. (**You do not need to enter preceding zeros**. For example, if the function key offers six digits, **N1** through **N6** and you are only selecting a value for **N6**, just enter the value for **N6**.) Press the function key you wish to program.



4. To program additional function keys, repeat from step 3, or press the **CASH** key to finalize the program.

ADD CHECK

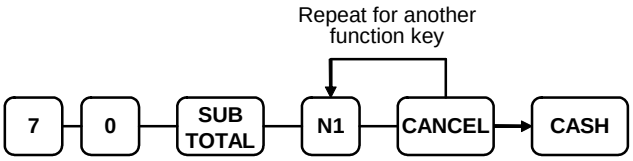
Options - Program 70



Address	OPTION	VALUE	=	SUM
N1	Key is inactive?	Yes = 1 No = 0		
	Compulsory before tendering?	Yes = 2 No = 0		
	Advance the consecutive # when this function is used?	Yes = 0 No = 4		
N2	Receipt is printed as a chit with or without preamble.	Yes = 0 No = 1		
	Exempt tax 1?	Yes = 2 No = 0		
	Exempt tax 2?	Yes = 4 No = 0		
N3	Exempt tax 3?	Yes = 1 No = 0		
	Exempt tax 4?	Yes = 2 No = 0		
	Validation is compulsory?	Yes = 4 No = 0		

CANCEL

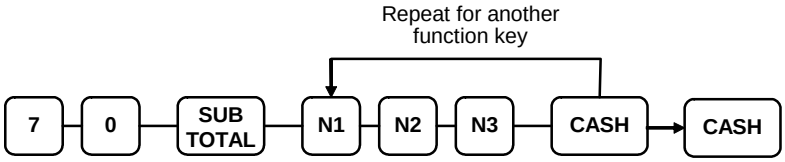
Options - Program 70



Address	OPTION	VALUE	=	SUM
N1	Key is inactive?	Yes = 1 No = 0		
	Key is active in **X** control lock position only?	Yes = 2 No = 0		
	Validation is compulsory?	Yes = 4 No = 0		

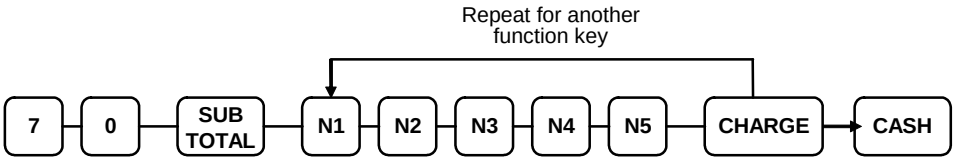
CASH

Options - Program 70



Address	OPTION	VALUE	=	SUM
N1	Amount tender is compulsory?	Yes = 1 No = 0		
	Allow over tendering and under tendering in **X** control lock position only?	Yes = 2 No = 0		
	Disable under tendering?	Yes = 4 No = 0		
N2	Open cash drawer?	Yes = 0 No = 1		
	Exempt tax 1?	Yes = 2 No = 0		
	Exempt tax 2?	Yes = 4 No = 0		
N3	Exempt tax 3?	Yes = 1 No = 0		
	Exempt tax 4?	Yes = 2 No = 0		
	Validation is compulsory?	Yes = 4 No = 0		

CHARGE 1-8

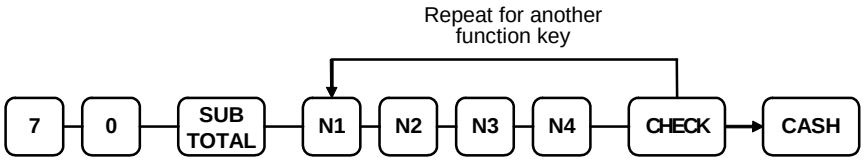


Address	OPTION	VALUE	=	SUM
N1	Amount tender is compulsory?	Yes = 1 No = 0		
	Allow over tendering and under tendering in **X** control lock position only?	Yes = 2 No = 0		
	Disable under tendering?	Yes = 4 No = 0		
N2	Open cash drawer?	Yes = 0 No = 1		
	Allow over tendering?	Yes = 2 No = 0		
	Non-add # entry compulsory?	Yes = 4 No = 0		
N3	Exempt tax 1?	Yes = 1 No = 0		
	Exempt tax 2?	Yes = 2 No = 0		
	Exempt tax 3?	Yes = 4 No = 0		
N4	Exempt tax 4?	Yes = 1 No = 0		
	Validation compulsory?	Yes = 2 No = 0		
	Send to EFT?	Yes = 4 No = 0		
N5	EFT Function	Credit = 1 Debit = 2 Gift = 3 Gift NSF = 4* Cash Benefit = 5**		

* Gift card with a value less than the amount of the sale will be accepted as an undertender against the sale amount (requires version 1.010 software or later.)
** Cash Benefit function available at version 5.008 or later

CHECK

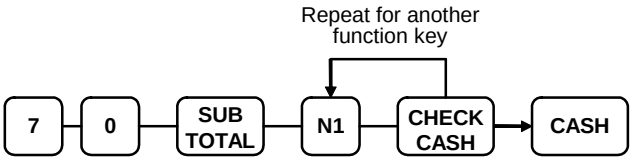
Options - Program 70



Address	OPTION	VALUE	=	SUM
N1	Amount tender is compulsory?	Yes = 1 No = 0		
	Allow over tendering and under tendering in **X** control lock position only?	Yes = 2 No = 0		
	Disable under tendering?	Yes = 4 No = 0		
N2	Open cash drawer?	Yes = 0 No = 1		
	Exempt tax 1?	Yes = 2 No = 0		
	Exempt tax 2?	Yes = 4 No = 0		
N3	Exempt tax 3?	Yes = 1 No = 0		
	Exempt tax 4?	Yes = 2 No = 0		
N4	Check endorsement compulsory?	Yes = 1 No = 0		
	Validation is compulsory?	Yes = 2 No = 0		

CHECK CASHING

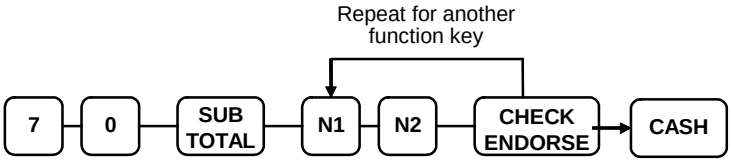
Options - Program 70



Address	OPTION	VALUE	=	SUM
N1	Key is inactive?	Yes = 1 No = 0		
	Key is active in **X** control lock position only?	Yes = 2 No = 0		
	Validation is compulsory?	Yes = 4 No = 0		

CHECK ENDORSEMENT

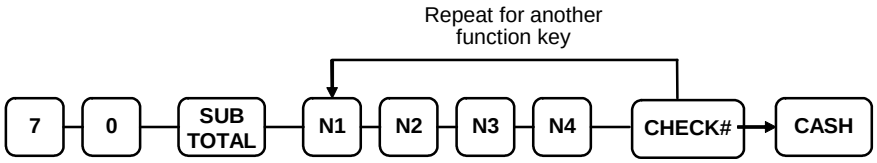
Options - Program 70



Address	OPTION	VALUE	=	SUM
N1	Key is inactive?	Yes = 1 No = 0		
	Print the amount of the check and endorsement message?	Yes = 2 No = 0		
	Print date?	Yes = 4 No = 0		
N2	Print time?	Yes = 1 No = 0		
	Print clerk?	Yes = 2 No = 0		
	Print consecutive number?	Yes = 4 No = 0		

CHECK

Options - Program 70

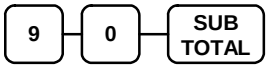


Address	OPTION	VALUE	=	SUM
N1	Key is inactive?	Yes = 1 No = 0		
	Required at Start of Sale?	Yes = 2 No = 0		
	Opening clerk has exclusive access?	Yes = 4 No = 0		
N2	Check track # and balance will print on receipt?	Yes = 0 No = 1		
	Check track # and balance will print on remote?	Yes = 0 No = 2		
	Allow only one check per table?	Yes = 4 No = 0		
N3	Check# is automatically assigned by register?	Yes = 1 No = 0		
	PBAL Key is used as Drive thru recall key?	Yes = 2 No = 0		
N4	Length of Check (0-9)	0-9		

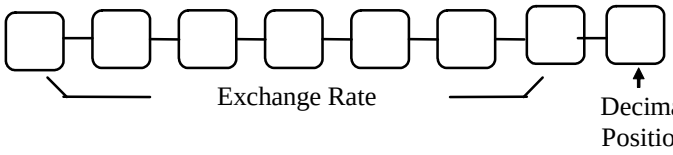
CURRENCY CONVERSION

Currency Conversion Rate - Program 90

1. Turn the control lock to the **PGM** position.
2. To begin the program, enter **9 0**, press the **SUBTOTAL** key.



3. Enter the exchange rate of up to 7 digits (do not enter the decimal point), and then enter a number from 0 to 7 to indicate the decimal position. See "Currency Exchange Rate Programming Examples" below.



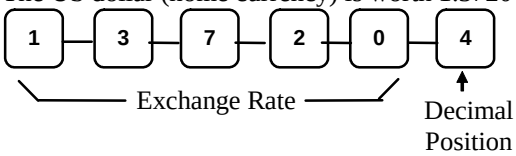
4. Press the function key on the keyboard you wish to program.

5. To program additional function keys, repeat from step 2, or press the **CASH** key to finalize the program.

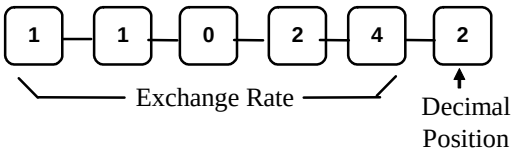
Currency Exchange Rate Programming Examples

Note: Foreign currency exchange rates may be stated as "foreign currency in dollars", or "dollars in foreign currency". Use the rate stated in "dollars in foreign currency" when you are programming this section.

The US dollar (home currency) is worth 1.3720 Canadian dollars (foreign currency).

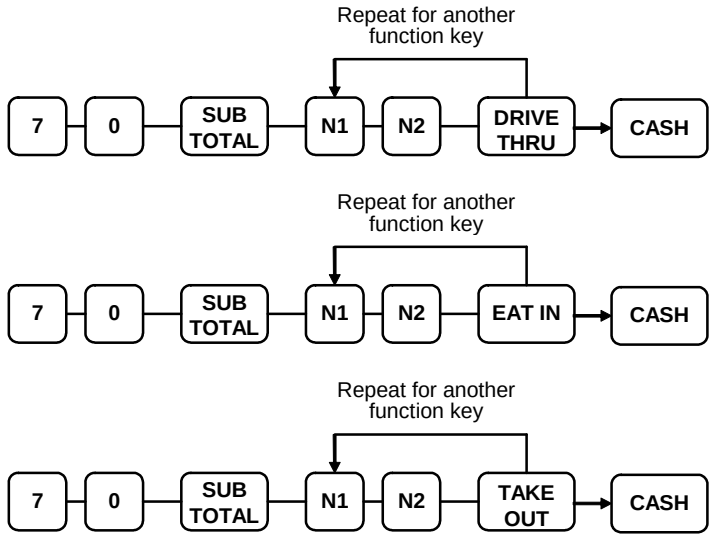


The US dollar (home currency) is worth 110.24 Japanese Yen (foreign currency).



DRIVE THRU / EAT IN / TAKE OUT

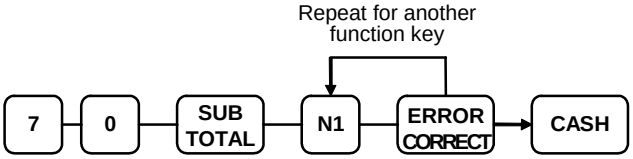
Options - Program 70



Address	OPTION	VALUE	=	SUM
N1	Exempt tax 1?	Yes = 1 No = 0		
	Exempt tax 2?	Yes = 2 No = 0		
	Exempt tax 3?	Yes = 4 No = 0		
N2	Exempt tax 4?	Yes = 1 No = 0		
	Validation is compulsory?	Yes = 2 No = 0		

ERROR CORRECT

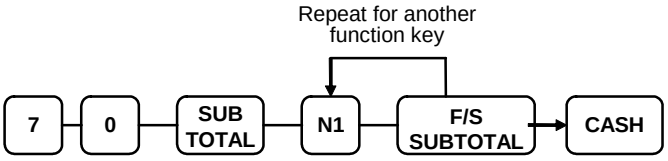
Options - Program 70



Address	OPTION	VALUE	=	SUM
N1	Key is inactive?	Yes = 1 No = 0		
	Key is active in **X** control lock position only?	Yes = 2 No = 0		
	Validation is compulsory?	Yes = 4 No = 0		

F/S SUB

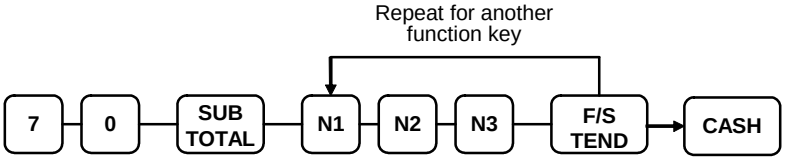
Options - Program 70



Address	OPTION	VALUE	=	SUM
N1	Key is inactive?	Yes = 1 No = 0		

F/S TEND

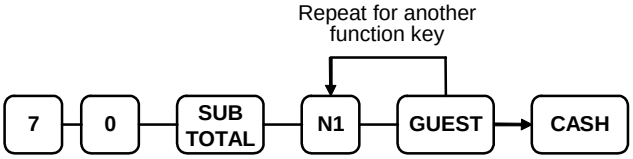
Options - Program 70



Address	OPTION		VALUE	=	SUM
N1	Exempt tax 1?		Yes = 1 No = 0		
	Exempt tax 2?		Yes = 2 No = 0		
	Exempt tax 3?		Yes = 4 No = 0		
N2	Exempt tax 4?		Yes = 1 No = 0		
	The tender is allowed in any amount?		Yes = 2 No = 0		
	Food stamp change Is issued in	Cash = Food stamps =	4 0		
N3	Open cash drawer?		Yes = 0 No = 1		
	Validation is compulsory?		Yes = 2 No = 0		
	Send to EFT? (available at version 5.008 or later)		Yes = 4 No = 0		

GUEST

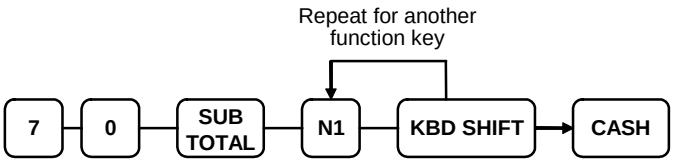
Options - Program 70



Address	OPTION	VALUE	=	SUM
N1	Required when opening a new check?	Yes = 1 No = 0		
	Before registering, enter a guest number?	Yes = 2 No = 0		
	Print Guest # at the kitchen printer?	Yes = 4 No = 0		

KBD SHIFT

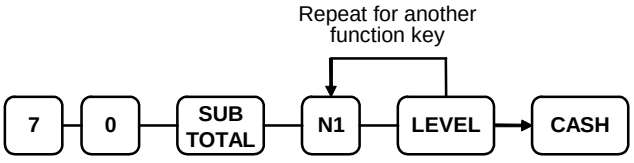
Options - Program 70



Address	OPTION	VALUE	=	SUM
N1	Key is: Pop up	0		
	Stay down	1		
	Key is active in **X** control lock position only?	Yes = 2 No = 0		

LEVEL1-2

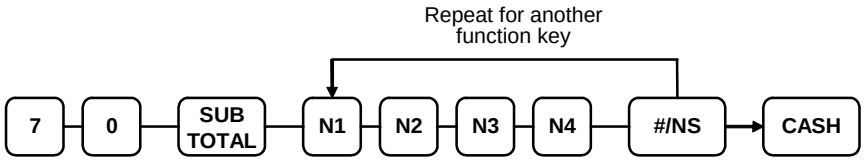
Options - Program 70



Address	OPTION	VALUE	=	SUM
N1	Print level description at the KP?	Yes = 1 No = 0		

#/NS

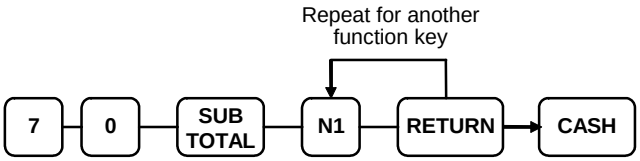
Options - Program 70



Address	OPTION	VALUE	=	SUM
N1	No Sale is inactive?	Yes = 1 No = 0		
	No Sale active in **X** control lock position only?	Yes = 2 No = 0		
	No Sale inactive after non-add # entry?	Yes = 4 No = 0		
N2	Enforce non-add # entry at start of sale?	Yes = 1 No = 0		
	Print when a NO SALE is performed?	Yes = 0 No = 2		
	Non-add # entries are prohibited?	Yes = 4 No = 0		
N3	Compulsory non-add entry must match number of digits set in the MAX DIGIT flag below?	Yes = 1 No = 0		
	Print non-add on guest check?	Yes = 2 No = 0		
N4	Enter maximum number of digits for non-add number entry. Zero (0) means no limit.	0-8		

RETURN

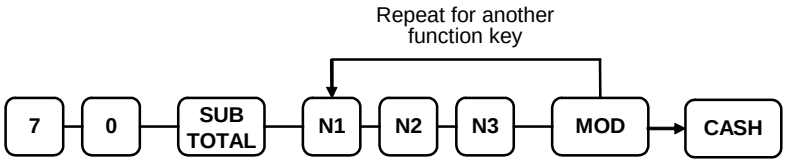
Options - Program 70



Address	OPTION	VALUE	=	SUM
N1	Key is inactive?	Yes = 1 No = 0		
	Key is active in X control lock position only?	Yes = 2 No = 0		
	Validation is compulsory?	Yes = 4 No = 0		

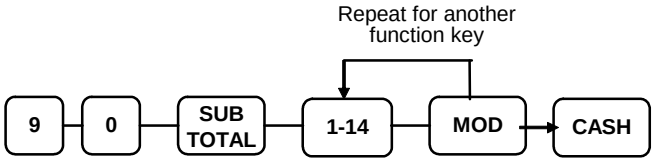
MODIFIER 1-5

Options - Program 70



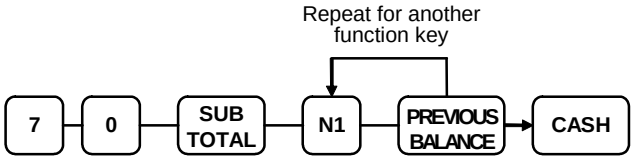
Address	OPTION	VALUE	=	SUM
N1	Key is active in **X** control lock position only?	Yes = 1 No = 0		
	Modify PLU#?	Yes = 2 No = 0		
N2	Print modifier descriptor on the guest check?	Yes = 1 No = 0		
	Print modifier descriptor on the receipt?	Yes = 2 No = 0		
N3	Value of affected digit (0-9)	0-9		

* Affect Digit (1-14) of PLU#



PBAL

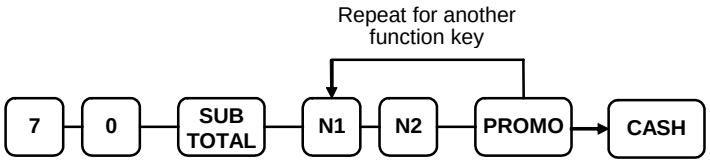
Options - Program 70



Address	OPTION	VALUE	=	SUM
N1	Previous balance may be entered at any time?	Yes = 1 No = 0		
	Previous balance required at the start of the sale?	Yes = 2 No = 0		

PROMO

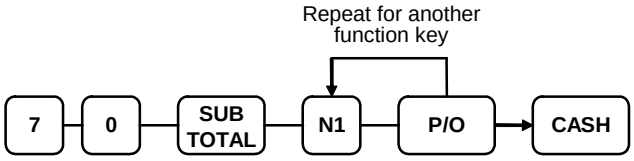
Options - Program 70



Address	OPTION	VALUE	=	SUM
N1	Key is inactive?	Yes = 1 No = 0		
	Key is active in X control lock position only?	Yes = 2 No = 0		
	Taxable by tax 1?	Yes = 4 No = 0		
N2	Taxable by tax 2?	Yes = 1 No = 0		
	Taxable by tax 3?	Yes = 2 No = 0		
	Taxable by tax 4?	Yes = 4 No = 0		

PAID OUT1-3

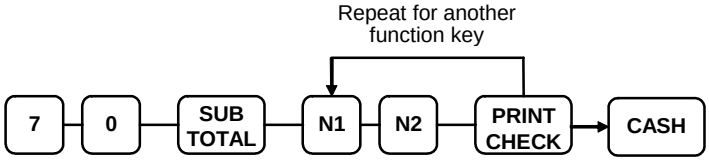
Options - Program 70



Address	OPTION	VALUE	=	SUM
N1	Key is inactive?	Yes = 1 No = 0		
	Key is active in X control lock position only	Yes = 2 No = 0		
	Validation is compulsory?	Yes = 4 No = 0		

PRINT CHECK

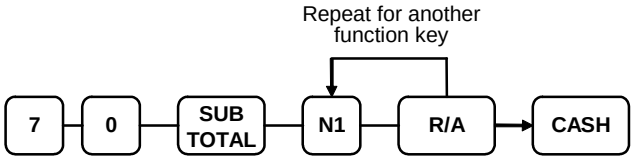
Options - Program 70



Address	OPTION	VALUE	=	SUM
N1	Enter Port Number. (Zero if the check will print on the receipt printer)	0-3		
N2	Automatically Service Check?	Yes = 1 No = 0		
	Skip printing of the # of times the check is printed?	Yes = 2 No = 0		

RECD ON ACCT1-3

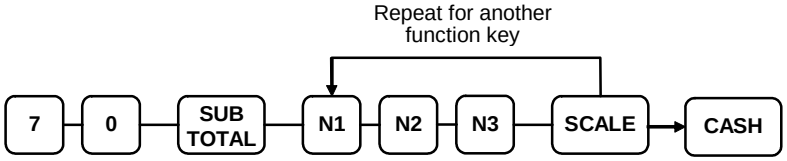
Options - Program 70



Address	OPTION	VALUE	=	SUM
N1	Key is inactive?	Yes = 1 No = 0		
	Key is active in X control lock position only?	Yes = 2 No = 0		
	Validation is compulsory?	Yes = 4 No = 0		

SCALE

Options - Program 70

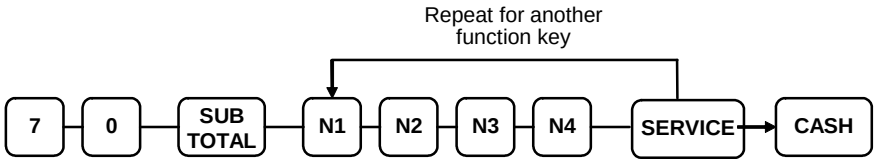


Address	OPTION		VALUE	=	SUM
N1	Key is inactive?		Yes = 1 No = 0		
	Key is active in **X** control lock position only?		Yes = 2 No = 0		
	Allow manual entry of weight?		Yes = 4 No = 0		
N2	Subtract tare weight on the scale entry?		Yes = 1 No = 0		
	*Weight symbol for manual entry is:	Kg =	2		
		Lb =	0		
	Allow register scaleable items by weight extension or by price entry?		Yes = 4 No = 0		
N3	**Weight symbol for manual entry is:		Lb = 0 Kg = 1 Oz = 2		

*Use this setting for software versions before v1.019
**Use this setting for software versions v1.019 or later

SERVICE

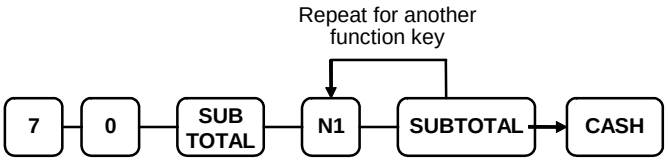
Options - Program 70



Address	OPTION	VALUE	=	SUM
N1	Compulsory non-add number before this key is used?	Yes = 1 No = 0		
	Print on receipt?	Yes = 0 No = 2		
	Allow negative balance in **X** control lock position only?	Yes = 4 No = 0		
N2	Calculate tax 1?	Yes = 0 No = 1		
	Calculate tax 2?	Yes = 0 No = 2		
	Calculate tax 3?	Yes = 0 No = 4		
N3	Calculate tax 4?	Yes = 0 No = 1		
	Validation is compulsory?	Yes = 2 No = 0		
N4	Enter the port number if you are using a hard check system.	0-3		

SUBTOTAL

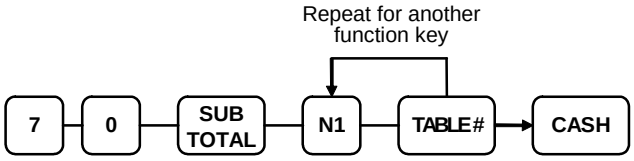
Options - Program 70



Address	OPTION	VALUE	=	SUM
N1	Key is inactive?	Yes = 1 No = 0		
	Display Rounded Subtotal? (Available at software v5.013 or later)	Yes = 2 No = 0		

TABLE

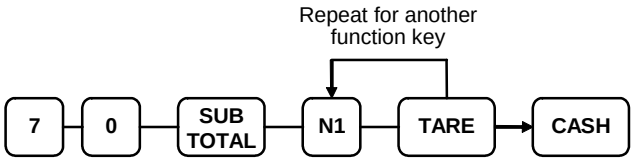
Options - Program 70



Address	OPTION	VALUE	=	SUM
N1	Table number entry compulsory before opening a new check?	Yes = 1 No = 0		
	Before entering, enter a table number?	Yes = 2 No = 0		
	Print table# at the remote printer?	Yes = 4 No = 0		

TARE

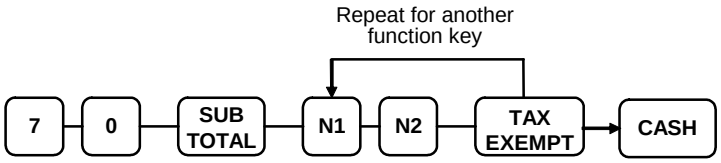
Options - Program 70



Address	OPTION	VALUE	=	SUM
N1	Key is inactive?	Yes = 1 No = 0		
	Key is active in **X** control lock position only?	Yes = 2 No = 0		
	Using tare number five to manually enter a tare weight?	Yes = 4 No = 0		

TAX EXEMPT

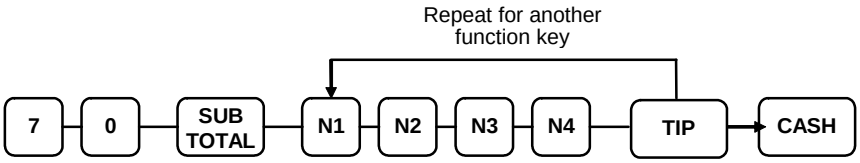
Options - Program 70



Address	OPTION	VALUE	=	SUM
N1	Exempt tax 1?	Yes = 1 No = 0		
	Exempt tax 2?	Yes = 2 No = 0		
	Exempt tax 3?	Yes = 4 No = 0		
N2	Exempt tax 4?	Yes = 1 No = 0		
	Compulsory non-add number before this key is used?	Yes = 2 No = 0		
	Validation is compulsory?	Yes = 4 No = 0		

TIP

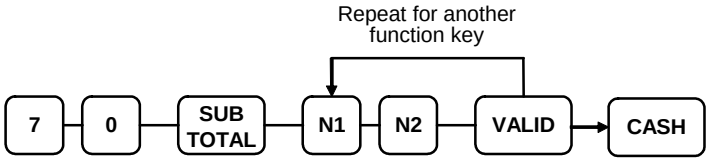
Options - Program 70



Address	OPTION		VALUE	=	SUM
N1	Type of tip is:	Percentage =	1		
		Amount =	0		
N2	Key is inactive?		Yes = 1 No = 0		
	Key is active in **X** control lock position only?		Yes = 2 No = 0		
	Add tax rate 1?		Yes = 4 No = 0		
N3	Add tax rate 2?		Yes = 1 No = 0		
	Add tax rate 3?		Yes = 2 No = 0		
	Add tax rate 4?		Yes = 4 No = 0		
N4	Add the tip total to the NET and GROSS sales total?		Yes = 1 No = 0		

VALIDATE

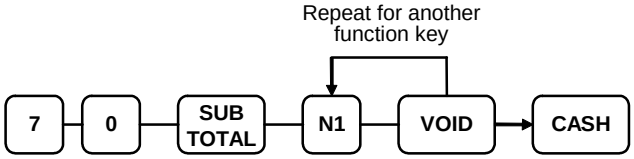
Options - Program 70



Address	OPTION	VALUE	=	SUM
N1	Enter Port Number. Enter Zero if validation is not used.	0-3		
N2	Key is inactive?	Yes = 1 No = 0		
	Allow multiple validations?	Yes = 2 No = 0		

VOID

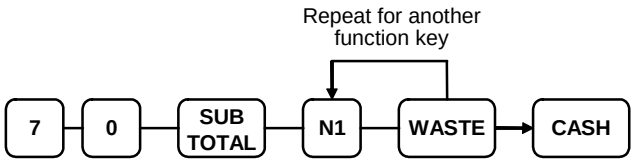
Options - Program 70



Address	OPTION	VALUE	=	SUM
N1	Key is inactive?	Yes = 1 No = 0		
	Key is active in **X** control lock position only?	Yes = 2 No = 0		
	Validation is compulsory?	Yes = 4 No = 0		

WASTE

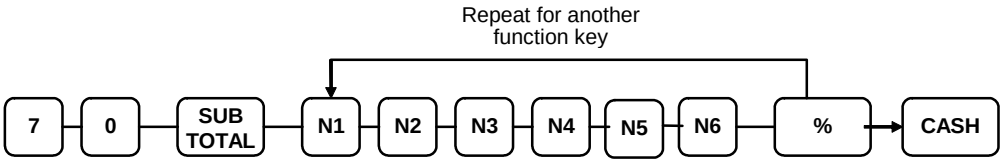
Options - Program 70



Address	OPTION	VALUE	=	SUM
N1	Key is inactive?	Yes = 1 No = 0		
	Key is active in **X** control lock position only?	Yes = 2 No = 0		
	Validation is compulsory?	Yes = 4 No = 0		

%1- %5

Options - Program 70



Address	OPTION			VALUE	=	SUM
N1	Apply an:	Amount	=	1		
		Percentage	=	0		
	Key is inactive?			Yes = 2 No = 0		
	% Key is active in **X** control lock position only?			Yes = 4 No = 0		
N2	% Key is:	Open	=	1		
		Preset	=	0		
	% Key is:	Sale	=	2		
		Item	=	0		
	Allow % key override preset?			Yes = 4 No = 0		
N3	% Key is:	Positive	=	1		
		Negative	=	0		
	% Amount taxable tax 1?			Yes = 2 No = 0		
N4	% Amount taxable tax 2?			Yes = 1 No = 0		
	% Amount taxable tax 3?			Yes = 2 No = 0		
	% Amount taxable tax 4?			Yes = 4 No = 0		
N5	Reduce (or increase) the food stamp subtotal by % entry?			Yes = 1 No = 0		
	Allow only one time subtotal entry?			Yes = 2 No = 0		
	Allow multiple amount discounts (coupons) without pressing subtotal?			Yes = 4 No = 0		
N6	Allow % key preset override active in **X** control lock position only?			Yes = 1 No = 0		
	Validation is compulsory?			Yes = 2 No = 0		

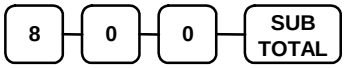
Clerk Programming

Clerks (which may be used as cashiers), have the following programming options. These options are set through separate programs:

- *Program 800 - Secret Code programming* determines the code that is used for clerk sign on if a code entry sign on method is selected in system option #2 (See "System Option Programming")
- *Program 801* – Drawer Assignment & Training Clerk Programming
- *Program 810 - Clerk Description Programming* allows you to set a unique, up to 18 character, descriptor for each clerk

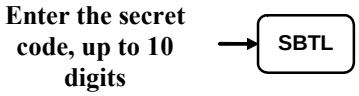
Program 800 - Secret Code Programming

1. Turn the control lock to the **PGM** position.
2. To begin the program, enter **8 0 0**, press the **SUBTOTAL** key.



3. Enter the number of the clerk you wish to program; press the **X/TIME** key.

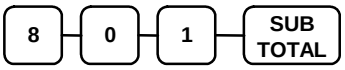
4. Enter a secret code (up to 10 digits); press the **SUBTOTAL** key.



5. Repeat from step 3 for each clerk you wish to program. Press the **CASH** key to finalize the program.

Program 801 - Drawer Assignment & Training Clerk

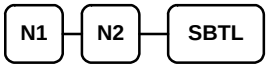
1. Turn the control lock to the **PGM** position.
2. To begin the program, enter **8 0 1**, press the **SUBTOTAL** key.



3. Enter the number of the clerk you wish to program; press the **X/TIME** key.

4. Enter an option digit from the table below, press the **SUBTOTAL** key.

Address	OPTION	VALUE	=	SUM
N1	Drawer assignment: (0: default drawer, 1: no drawer)	0-1		
N2	Training Mode Clerk	Yes = 1 No = 0		

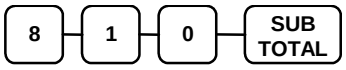


5. Repeat from step 3 for each clerk you wish to program. Press the **CASH** key to finalize the program.

Program 810 – Clerk Description Programming

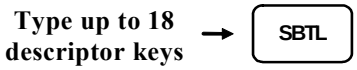
By default, descriptors are programmed by entering three-digit alpha codes. If you wish to program descriptors by typing descriptors on the alpha keyboard overlay you must select 'Yes' in system option #32 (See "System Option Programming" on page 142).

1. Turn the control lock to the **PGM** position.
2. To begin the program, enter **8 1 0**, press the **SUBTOTAL** key.

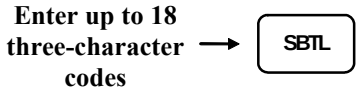


3. Enter the number of the clerk you wish to program; press the **X/TIME** key.

4. If you are programming using alpha overlay;



or,



5. Press the **CASH** key to finalize the program.

Mix & Match Programming

Retailers often offer discounts when multiples of different items are purchased. For example, the offer: “save $5 on any three bottles of wine” can be handled by a mix and match discount. The default ER-*285M* can accommodate up to 10 different mix and match discounts, the total can be increased through memory allocation.

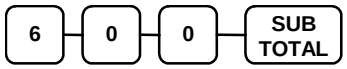
Mix & Match Tables have the following programming options that are set through separate programs:

- *Program 600 - Trip Level Programming* sets the number of items that must be purchased to receive the discount.
- *Program 601 - Price Programming* sets the amount of the discount
- *Program 610 - Mix & Match Description Programming* allows you to set a unique, up to 18character, descriptor for Mix & Match Table.
- The mix & match discount can be set to be taxable (tax the net amount) or non-taxable (tax the gross amount). See system option #31 in “System Option Programming” on page 142.

You also must link eligible items to the appropriate table. See “Program 450 - PLU Mix & Match Programming” on page 141 to identify the mix and match table for the eligible PLU.

Program 600 - Trip Level Programming

1. Turn the control lock to the **PGM** position.
2. To begin the program, enter **6 0 0**, press the **SUBTOTAL** key.



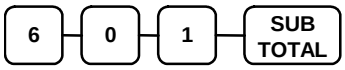
3. Enter the number of the M&M table you wish to program; press the **X/TIME** key.

4. Enter a level of up to 5 digits (The Maximum Level you can enter is 30000) press the **SUBTOTAL** key.

5. Repeat from step 3 for each table you wish to program. Press the **CASH** key to finalize the program.

Program 601 - Price Programming

1. Turn the control lock to the **PGM** position.
2. To begin the program, enter **6 0 1**, press the **SUBTOTAL** key.



3. Enter the number of the M&M table you wish to program; press the **X/TIME** key.

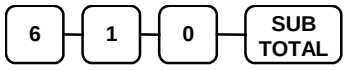
4. Enter a price (up to 7 digits); press the **SUBTOTAL** key.

5. Repeat from step 3 for each table you wish to program. Press the **CASH** key to finalize the program.

Program 610 - Mix & Match Description Programming

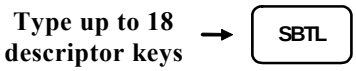
By default, descriptors are programmed by entering three-digit alpha codes. If you wish to program descriptors by typing descriptors on the alpha keyboard overlay you must select 'Yes' in system option #32 (See "System Option Programming" on page 142).

1. Turn the control lock to the **PGM** position.
2. To begin the program, enter **6 1 0**, press the **SUBTOTAL** key.

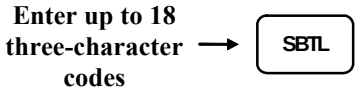


3. Enter the number of the M&M table you wish to program; press the **X/TIME** key.

4. If you are programming using alpha overlay;



or,



5. Press the **CASH** key to finalize the program.

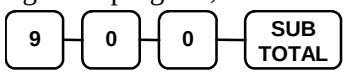
Group Programming

Group totals are available to accumulate totals of individual PLUs that are assigned to each group. Each PLU can be assigned to one, two or three different groups. (The number of groups is determined by memory allocation. The default is 20 groups; the maximum is 99.)

- Use program 900 to assign a group status, i.e. a group can be set to *not add* to the total of all groups, or a group can be used to designate like items for kitchen printer assignment.
- Use program 910 to assign a unique descriptor for each group, so that the group may be easily understood on the group report.

Programming Group Status - Program 900

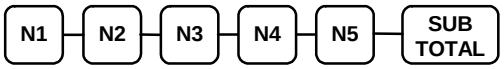
1. Turn the control lock to the **PGM** position.
2. To begin the program, enter **9 0 0**, press the **SUBTOTAL** key.



3. Enter the number of the group you wish to program; press the **X/TIME** key.

4. Enter an option digit from the table below, press the **SUBTOTAL** key.

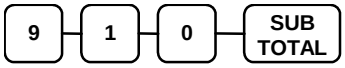
Address	OPTION	VALUE	=	SUM
N1	Group total is added to the total of all groups on the Group report?	Yes = 0 No = 1		
	Send to kitchen printer?	Yes = 2 No = 0		
N2	No Choice	0		
	KP PORT#: R (print a kitchen requisition)	1		
	KP PORT#: 1	2		
	KP PORT#: 2	4		
N3	KP PORT#: 3	Yes = 1 No = 0		
N4	Print red on KP?	Yes = 1 No = 0		
N5	Gift Card Function:	None = 0 Activate = 1 Add = 2		



5. To program additional groups, repeat from step 3, or press the **CASH** key to finalize the program.

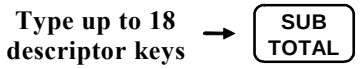
Programming Group Descriptors

1. Turn the control lock to the **PGM** position.
2. To begin the program, enter **9 1 0**, press the **SUBTOTAL** key.

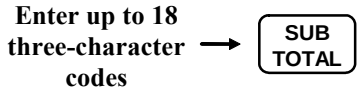


3. Enter the number of the group you wish to program; press the **X/TIME** key.

4. If you are programming using alpha overlay;



or,



5. To program additional groups, repeat from step 3, or press the **CASH** key to finalize the program.

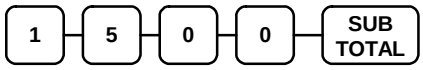
Miscellaneous Programming

Macro Programming

Macros are special function keys that are used to execute a sequence of key depressions. For example, a macro might be used to execute a string of reports or to automatically tender a preset amount. Up to ten different macros may be placed on the keyboard. (See "Function Key Assignment Programming" to place macros on the keyboard.)

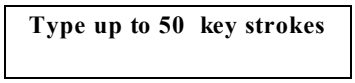
To Program a Macro

1. Turn the control lock to the **PGM** position.
2. To begin the program, enter **1 5 0 0**, press the **SUBTOTAL** key.



3. Press the **Macro** key that you wish to program.

4. Optionally, you can turn the key lock to the position where you wish the macro to set the register. For example, if you wish the macro to set the key lock to **X** to run a report, turn the key lock to **X**. When used in the **REG** position, the macro will set the register to **X** and run the report.
5. Press up to 50 keystrokes that you wish the macro to execute.



6. Turn the control lock to the PGM position. Press the same **Macro** key to end the sequence

7. Repeat from step 3 - 5 to program additional macros. Press the **CASH** key to finalize the program.

To Remove a Macro

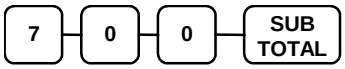
If you wish to remove a keystroke from a macro, replace the current function with the **INACTIVE** function.

Message Programming

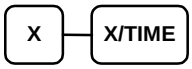
Programming the Receipt/Check Endorsement/Datatran Messages

A preamble message of up to six lines can be printed at the top of each receipt; a postamble message of up to six lines can be printed at the bottom of each receipt: an endorsement message of up to ten lines can be printed when a check is endorsed on an optional slip printer. Each line can consist of up to 32 characters.

1. Turn the control lock to the **PGM** position.
2. To begin the program, enter **7 0 0**, press the **SUBTOTAL** key.

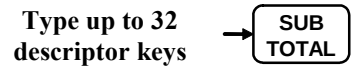


3. Refer to the chart below and enter the number that represents the line you wish to program; press the **X/TIME** key.

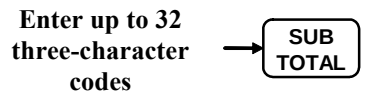


X	Message Line	X	Message Line
1	1st line of Preamble	**14**	2nd line of Endorsement
2	2nd line of Preamble	**15**	3rd line of Endorsement
3	3rd line of Preamble	**16**	4th line of Endorsement
4	4th line of Preamble	**17**	5th line of Endorsement
5	5th line of Preamble	**18**	6th line of Endorsement
6	6th line of Preamble	**19**	7th line of Endorsement
7	1st line of Postamble	**20**	8th line of Endorsement
8	2nd line of Postamble	**21**	9th line of Endorsement
9	3rd line of Postamble	**22**	10th line of Endorsement
10	4th line of Postamble	**23**	1st line of Datatran Msg.
11	5th line of Postamble	**24**	2nd line of Datatran Msg.
12	6th line of Postamble	**25**	3rd line of Datatran Msg.
13	1st line of Endorsement	**26**	4th line of Datatran Msg.

4. If you are programming using the alpha overlay:



or,

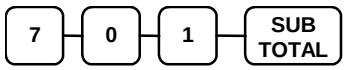


5. Press the **CASH** key to finalize the program.

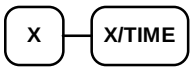
Programming the Financial Report Message

The Financial Report selection allows you to reprogram the descriptors that appear with the Financial Report totals and counters. For example, the first total on the financial report "+PLU TTL" represents the total of all positive PLU entries. You might wish to re-label this total to say "FOOD SALES". You can reprogram any of the Financial Report totals listed here with any 18-character descriptor. (See “Financial Report Message”).

1. Turn the control lock to the **PGM** position.
2. To begin the program, enter **7 0 1**, press the **SUBTOTAL** key.



3. Refer to the chart below and enter the number that represents the line you wish to program; press the **X/TIME** key.



4. If you are programming

Type up to 18 descriptor keys → SUB TOTAL

or,

Enter up to 18 three-character codes → SUB TOTAL

5. Press the **CASH** key to finalize the program.

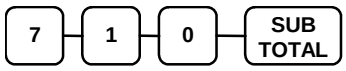
Financial Report Message

X	Message Line	X	Message Line	X	Message Line
1	+PLU TTL	**29**	CREDIT TAX4	**57**	CHG7-IN-D
2	-PLU TTL	**30**	FD/S CREDIT	**58**	CHG8-IN-D
3	ADJST TTL	**31**	RETURN	**59**	CHG1 SALES
4	NONTAX	**32**	ERROR CORR	**60**	CHG2 SALES
5	TAX1 SALES	**33**	PREVIOUS VD	**61**	CHG3 SALES
6	TAX2 SALES	**34**	VOID MODE	**62**	CHG4 SALES
7	TAX3 SALES	**35**	CANCEL	**63**	CHG5 SALES
8	TAX4 SALES	**36**	GROSS SALES	**64**	CHG6 SALES
9	TAX1	**37**	CASH SALES	**65**	CHG7 SALES
10	TAX2	**38**	CHECK SALES	**66**	CHG8 SALES
11	TAX3	**39**	R/A 1	**67**	FOREIGN 1
12	TAX4	**40**	R/A 2	**68**	FOREIGN 2
13	XMPT1 SALES	**41**	R/A 3	**69**	FOREIGN 3
14	XMPT2 SALES	**42**	P/O 1	**70**	FOREIGN 4
15	XMPT3 SALES	**43**	P/O 2	**71**	DRWR TTL
16	XMPT4 SALES	**44**	P/O 3	**72**	PROMO
17	EATIN TTL	**45**	HASH TTL	**73**	WASTE
18	TAKEOUT TTL	**46**	AUDACTION	**74**	TIP
19	DRTHRU TTL	**47**	NOSALE	**75**	TRAIN TTL
20	% 1	**48**	CASH-IN-D	**76**	BAL FORWARD
21	% 2	**49**	CHECK-IN-D	**77**	GUESTS
22	% 3	**50**	FD/S-IN-D	**78**	P/BAL
23	% 4	**51**	CHG1-IN-D	**79**	CHECKS PAID
24	% 5	**52**	CHG2-IN-D	**80**	SERVICE
25	NET SALE	**53**	CHG3-IN-D	**81**	MIX&MATCH
26	CREDIT TAX1	**54**	CHG4-IN-D		
27	CREDIT TAX2	**55**	CHG5-IN-D		
28	CREDIT TAX3	**56**	CHG6-IN-D		

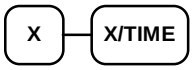
Programming the Clerk Report Message

The Clerk Report selection allows you to reprogram the descriptors that appear with the Clerk Report totals and counters. For example, the first total on the clerk report "NET SALES" might be re-labeled to say "GROSS SALES". You can reprogram any of the Financial Report totals listed here with any 18-character descriptor. (See “Clerk Report Message”).

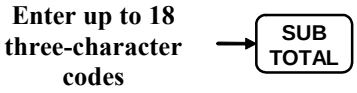
1. Turn the control lock to the **PGM** position.
2. To begin the program, enter **7 1 0**, press the **SUBTOTAL** key.



3. Refer to the chart below and enter the number that represents the line you wish to program; press the **X/TIME** key.



4. If you are programming



5. Press the **CASH** key to finalize the program.

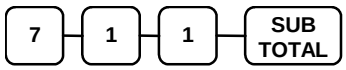
Clerk Report Message

X	Message Line	X	Message Line	X	Message Line
1	NET SALE	**24**	CREDIT TAX2	**47**	CHG2 SALES
2	NONTAX	**25**	CREDIT TAX3	**48**	CHG3 SALES
3	TAX1 SALES	**26**	CREDIT TAX4	**49**	CHG4 SALES
4	TAX2 SALES	**27**	FD/S CREDIT	**50**	CHG5 SALES
5	TAX3 SALES	**28**	RETURN	**51**	CHG6 SALES
6	TAX4 SALES	**29**	ERROR CORR	**52**	CHG7 SALES
7	TAX1	**30**	PREVIOUS VD	**53**	CHG8 SALES
8	TAX2	**31**	VOID MODE	**54**	FOREIGN 1
9	TAX3	**32**	CANCEL	**55**	FOREIGN 2
10	TAX4	**33**	GROSS SALES	**56**	FOREIGN 3
11	XMPT1 SALES	**34**	CASH SALES	**57**	FOREIGN 4
12	XMPT2 SALES	**35**	CHECK SALES	**58**	DRWR TTL
13	XMPT3 SALES	**36**	R/A 1	**59**	PROMO
14	XMPT4 SALES	**37**	R/A 2	**60**	WASTE
15	EATIN TTL	**38**	R/A 3	**61**	TIP
16	TAKEOUT TTL	**39**	P/O 1	**62**	TRAIN TTL
17	DRTHRU TTL	**40**	P/O 2	**63**	BAL FORWARD
18	% 1	**41**	P/O 3	**64**	GUESTS
19	% 2	**42**	HASH TTL	**65**	P/BAL
20	% 3	**43**	CASH-IN-D	**66**	CHECKS PAID
21	% 4	**44**	CHECK-IN-D	**67**	SERVICE
22	% 5	**45**	FD/S-IN-D	**68**	NOSALE
23	CREDIT TAX1	**46**	CHG1 SALES	**69**	MIX&MATCH

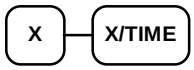
Programming the Macro Name

Up to ten function locations may be designated as Macro keys. You may wish to program a name for a macro. For example if a macro executes a Series of commands to produce daily reports, you can program the descriptor “DAILY”, so the macro can easily be identified. Macro names can also be helpful when looking at keyboard layout information with the PC communication utility.

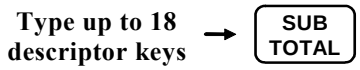
1. Turn the control lock to the **PGM** position.
2. To begin the program, enter **7 1 1**, press the **SUBTOTAL** key.



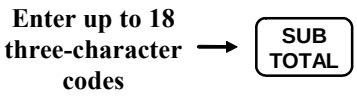
3. Refer to the chart below and enter the number that represents the line you wish to program; press the **X/TIME** key.



4. If you are programming using alpha overlay;



or,



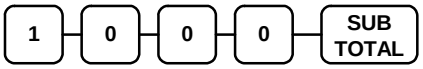
5. Press the **CASH** key to finalize the program.

NLU Code Number Programming

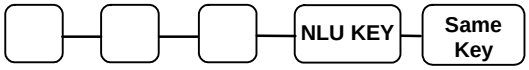
The term NLU refers to the fixed Keyboard PLUs on the keyboard. On the default keyboard, there are 15 NLU keys on each keyboard level and the PLU# assigned to the NLU key is the same, i.e. NLU key number one is PLU #1. However, with this program, you can assign any PLU number you wish to any one of the 15 possible NLU keys on each level.

Programming the NLU Code Number

1. Turn the control lock to the **PGM** position.
2. To begin the program, enter **1 0 0 0**, press the **SUBTOTAL** key.



3. Type the new PLU code number you wish to use for this NLU key, and Press the NLU key on the keyboard you wish to program, and Press the NLU key again.



NLU Code

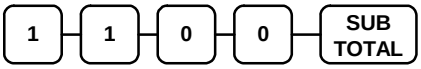
4. Press **CASH** to finalize the program

Cash-In-Drawer Limit Programming

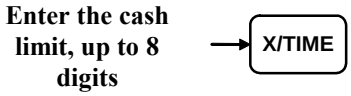
You can set a limit for cash in drawer. When cash in drawer exceeds the limit you program here, a warning will display on the screen. You must press **CLEAR** to remove the warning and continue operations. The warning will continue to appear at the completion of every transaction with the limit exceeded, until you use the **PAID OUT** function to remove cash from the drawer.

Programming the Drawer Limit

1. Turn the control lock to the **PGM** position.
2. To begin the program, enter **1 1 0 0**, press the **SUBTOTAL** key.



3. Enter a cash-in-drawer limit (up to 8 digits or **0** for no limit); press the **X/TIME** key.



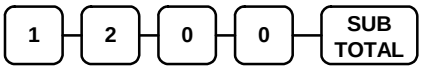
4. Press the **CASH** key to finalize the program.

Check Change Limit Programming

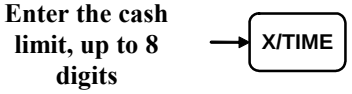
Use this program to set the maximum amount of cash that can be returned when a check is tendered for an amount greater than the amount of the sale. For example, if the check change limit is $10.00 the maximum amount that can be tendered into the check key on a $5.00 sale is $15.00.

Programming the Check Change Limit

1. Turn the control lock to the **PGM** position.
2. To begin the program, enter **1 2 0 0**, press the **SUBTOTAL** key.



3. Enter a cash-in-drawer limit (up to 8 digits or **0** for no limit); press the **X/TIME** key.



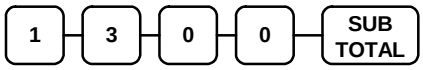
4. Press the **CASH** key to finalize the program.

Date and Time Programming

Use this program to set the clock and calendar on your *ER-285M Series*. The date changes automatically. After initial setting, time changing will probably be required only for beginning and ending daylight savings time.

Programming the Date and Time

1. Turn the control lock to the **PGM** position.
2. To begin the program, enter **1 3 0 0**, press the **SUBTOTAL** key.



3. Enter time in military standard time (based on 24 hours), must be four digits (i.e. 1300 hours = 1:00 PM); press the **X/TIME** key.

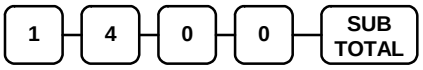
4. Enter the date in MM (month) DD (day) and YY (year) format. Press the **X/TIME** key:

5. Press the **CASH** key to finalize the program.

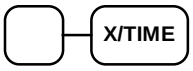
Scale Tare Weight Programming

A tare is the amount of weight representing the container, or package when items are sold by weight. You can pre-program five tare weights, representing the weight of different containers. When you place an item and a container on optional scale, you can enter the tare number to automatically subtract the pre-programmed tare weight. If you choose to use tare #5 for manual tare weight entry, do not enter a weight for tare #5. (See TARE.)

1. Turn the control lock to the **PGM** position.
2. To begin the program, enter **1 4 0 0**, press the **SUBTOTAL** key.



3. Enter the number (**1**-**5**) of the tare you wish to program; press the **X/TIME** key.



4. Enter the weight of the tare (one digit preceding the decimal key, the decimal key, and then three digits after the decimal key). Press the **SUBTOTAL** key.

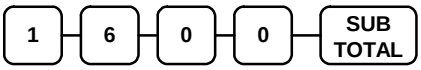
5. To program additional tare weights, repeat from step 3, or press the **CASH** key to finalize the program.

Machine Number Programming

The machine number is printed on the register receipt. Program a machine number so that any receipt can be identified with the store or register where the transaction took place.

Programming the Machine Number

1. Turn the control lock to the **PGM** position.
2. To begin the program, enter **1 6 0 0**, press the **SUBTOTAL** key.



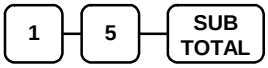
3. Enter a machine number (up to 5 digits); press the **X/TIME** key.

4. Press the **CASH** key to finalize the program.

Program Scans

Since much time and energy has been invested in the planning and programming of your SAM4s cash register, it is advisable to print a hard copy of the final program for future reference. This copy should be kept in a safe place.

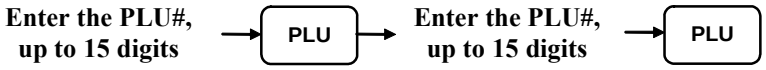
1. Turn the control lock to the **PGM** position.
2. To print a program scan, enter **1 5**, press the **SUBTOTAL** key.



3. Refer to the chart below. Enter the number that represents the program you wish to print and press the **X/TIME** key.

X	Program	X	Program
0	Group	**10**	Clerk Report Message
1	Tax	**11**	Macro Name
2	System Option	**12**	Drawer Limit
3	Print Option	**13**	Check Change Limit
4	Function Keys	**14**	Time & Date
5	Clerk	**15**	Tare Weight
6	Preamble Message	**16**	Machine Number
7	Postamble Message	**17**	Mix & Match
8	Endorsement Message	**18**	Datatran Message
9	Financial Report Message		

4. To read PLU program information, enter the number of the first PLU in a range of PLUs that are to be scanned; press the **PLU** key. Enter the last number in the range; press the **PLU** key,



Or, press the first PLU keys that are to scanned and Press the last PLU keys,

5. To read MACRO information, press the MACRO key to be scanned,

6. To read additional parts of the program, repeat from step 3, or press the **CASH** key to finalize the program.

Program Backup and Restore

You can use an SD flash memory card to backup and restore the full program. The program data is saved in a separate folder named with the store name be programmed in system option #30.

The SD card can also be used to save reports, which can then be viewed on a PC using the ER-280 PC Utility. The report data is saved in a separate folder named with current date and time.

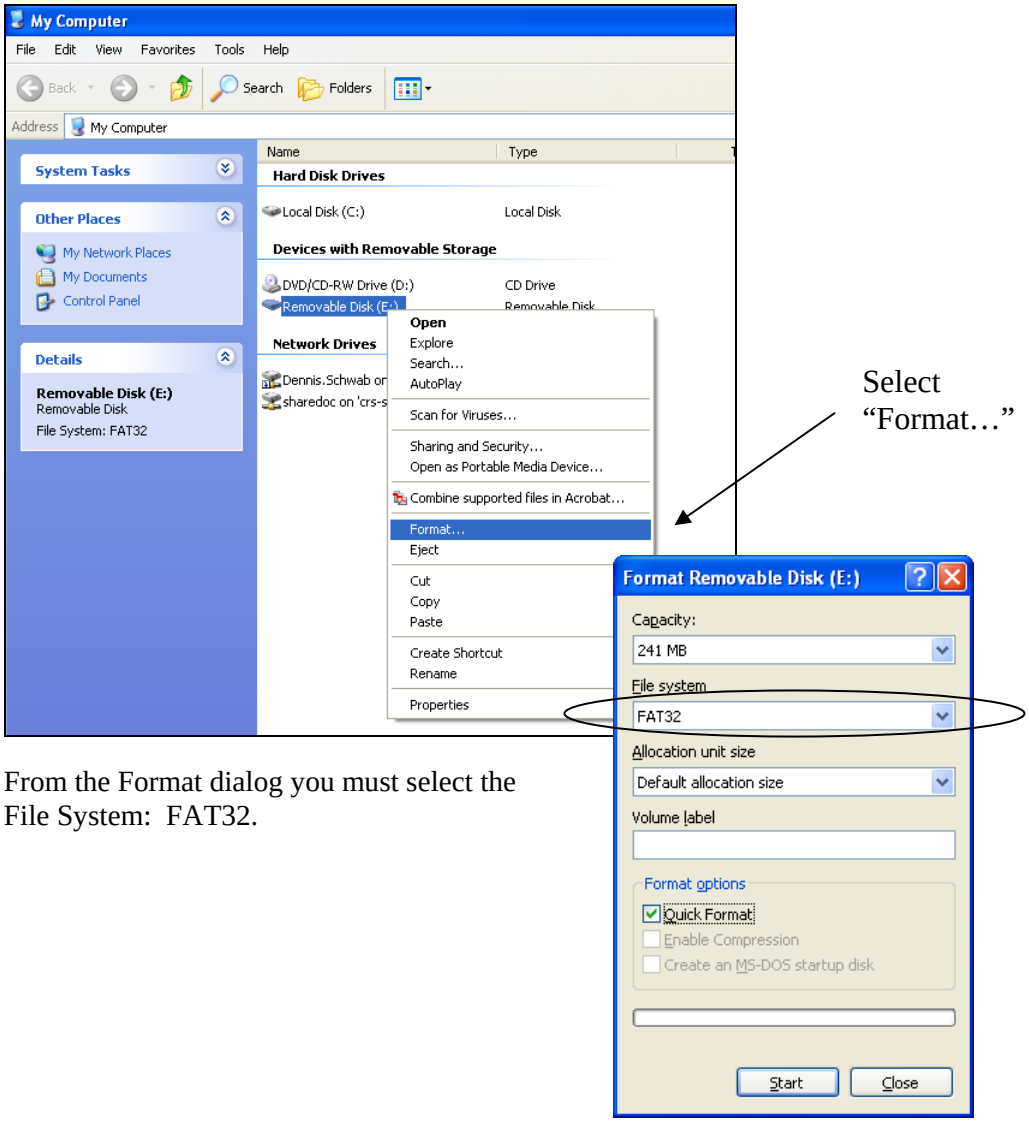
NOTE: SD cards must be formatted as FAT 32. To avoid compatibility issues, CRS recommends that you purchase SD cards from CRS.

Note: If you are Using an SD Card for the First Time . . .

Caution: Formatting the SD card will clear all data on the SD card and prepare it for use.

1. Start Windows Explorer.

2. Select the SD card drive, right click and select *Format*. (Win XP screen shown; slightly different procedures are used with different operating systems.)

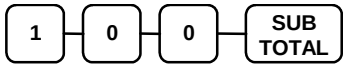


3. From the Format dialog you must select the File System: FAT32.

Backing Up the Program to an SD Card

CAUTION: When backing up and restoring data, the store name must be programmed in system option #30.

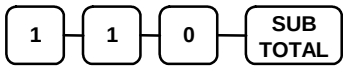
1. Turn the control lock to the **S** position.
2. To backup the program to SD, enter **1 0 0**, press the **SUBTOTAL** key.



Restore Program from the SD Card

CAUTION: Memory allocation must be set the same as the saved program. Be sure to print out the memory allocation so that it can be re-entered before restoring the program.

1. Turn the control lock to the **S** position.
2. To load the complete program to the register from the SD card, enter **1 1 0**, press the **SUBTOTAL** key.



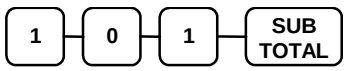
3. Beginning at software version 5.008, you can restore program areas separately. Enter the 3-digit code from the table below and press the **SUBTOTAL** key.

Code	Program Area	Code	Program Area
141	PLU only	**142**	Group only
143	Tax only	**144**	System only
145	Print only	**146**	Function key only
147	Clerk only	**148**	Logo only
149	FIN Report Logo	**150**	CLK Report Logo
151	Stock only	**152**	Macro only
153	MISC only	**154**	MNM only

Saving Reports to an SD Card

Reports saved are the current X1 readings.

1. Turn the control lock to the **S** position.
2. To backup Reports to SD, enter **1 0 1**, press the **SUBTOTAL** key.



Firmware Update by SD Card

You can use a SD flash memory card to update the register firmware. (When necessary, update files are supplied by CRS in the form of a file named "ER-280.BIN" and posted on the dealer pages of www.crs-usa.com. Detailed update instructions will be supplied with the update package.)

Important Note: To upgrade firmware to Version 1.024 or higher, you must upgrade using the PC Method. After upgrading to Version 1.024, subsequent upgrades may be done via SD.

Both the Application area and Boot areas must be upgraded using the PC method. For complete upgrade files and procedures, see the instructions contained in the upgrade Zip file posted on the SAM4s ER-285M dealer support page at www.crs-usa.com.

To perform an update by SD:

1. At your PC, create a folder in the root of the SD card named "update".
2. Copy the update file "ER-280.BIN" to the "update" folder.
3. Place the SD card in the SD port of the ER-285M, located on the right side of the register.
4. Turn the key lock to the **S** position. (Note that the **S** position is one position clockwise from the **PGM** position. The **S** position is not labeled.)
5. Enter **55**, press **SUBTOTA**L, and then press **CASH**. The display will indicate that the card is being read. The register will beep three times when the update is complete.
6. RAM Clear the register. See "Quick Start Step #3: Memory All Clear" on page 23.

Integrated Payment Appendix

Overview

Connection to a DataTran integrated payment appliance allows electronic payments to be initiated and completed at the ER-285M cash register. Although connected, the functions of the ECR and DataTran devices are distinct.

When an electronic payment transaction is completed at the ER-285M, the DataTran communicates with the payment processor, through telephone modem or Internet connection (depending upon the model of DataTran used). The DataTran works much like an ordinary standalone payment terminals, except that the keyboard, display and printing functions take place only at the ER-285M cash register.

Standard cash register reports are separate and distinct from local total, transaction and batch reports that are stored in the DataTran. Payment batch data is stored in the DataTran. Batch and DataTran functions are performed by entering the appropriate command in the ER-285M "Z" key lock position and printed by the cash register. Standard ER-285M reports (Financial and/or Clerk reports) provide summary information for each payment key and tip totals. As a "best practice" it is recommended that payment summary information from cash register reports be confirmed with batch information reported from the DataTran.

Payment Application Best Practice Notes

Password Security: The ER-285M features a clerk sign-on system. Operations are not allowed until a clerk is signed on and the receipt indicates the clerk who performed each operation. Best practices include:

- Each employee should be set up as a unique employee.
- Employee codes should be changed from the default setting.
- When there is employee turnover, employee codes should be changed.

Key Security: The ER-285M features a control lock with different levels of key security. Refer to Control Lock on page 15. Keys that access the "**Z**" key lock position (where DataTran payment functions can be performed) should be distributed only to managers or employees authorized to perform those functions.

Configuration Information

ER-285M

RS-232C

EFT Device	Card Reader	PIN Pad (for debit)	Persistent DSL IP Connection	Phone Connection
• Datatran SL	ECR Option	Option – Connects to Datatran	No	Yes
• Datatran SL and IPTran	ECR Option	Option – Connects to Datatran	Yes	Yes (for Dial Backup)
• NoLoad/Autoload IPTran	ECR Option	Option – Connects to IPTran	Yes	No
• NoLoad/Autoload DialTran	ECR Option	Option – Connects to DialTran	No	Yes
• NoLoad/Autoload TwinTran	ECR Option	Option – Connects to Twintran	Yes	Yes
• PC w/IPEnable	ECR Option	Option – Requires PDC	Yes	Check with DataCap for dial backup

Daily Procedures

Open Batch

NOTE: To present events in a logical order, OPEN BATCH is shown at the *beginning* of the day, but in practical day-to-day operation it is recommended to open a new batch ***right after*** closing today's batch, so it is ready to go for the next day.

1. Turn the control lock to the **Z** position.
2. Enter **501**, press **SBTL**.
3. The message "WAITING RESP." displays momentarily, then the message "REPORT MODE" returns. (An open batch chit prints when using v1.017 software or later).
4. The register is ready for operation; return the control lock to the **REG** position.

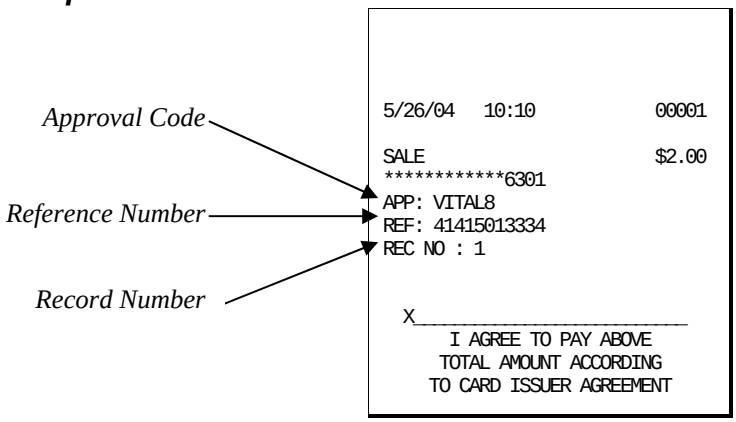
```
5/26/04   10:10            00001
 BATCH WAS OPENED SUCCESSFULLY
CLERK 1        NO.000118   00001
```

Sample Transaction

1. Register a normal transaction. Press the appropriate **CHARGE** key. The message 'SLIDE CARD" displays:
2. Swipe the card. The message "WAITING." continues to display until the card verification is complete.
3. When verification is complete, the draft is printed. The transaction is complete and the register is ready for the next operation.

Note: If multiple documents are to be printed, the message "PRESS CASH KEY" displays. Tear off the printer paper, and press CASH/TEND to resume printing, or press CLEAR to continue without printing the next document.

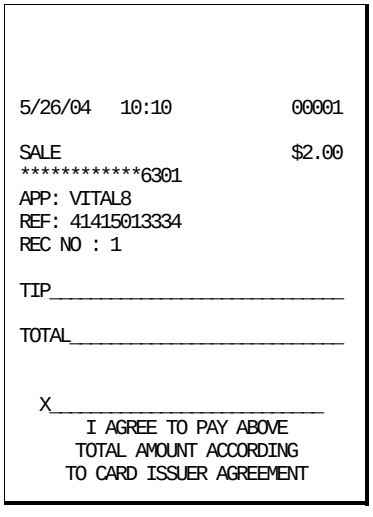
Sample Draft



Sample Draft – With Gratuity

To print the tip entry line, see option #31 in System Option programming.

(Note: See "Tip (Gratuity) Entry" on page 214 if it is necessary to enter a tip amount.)

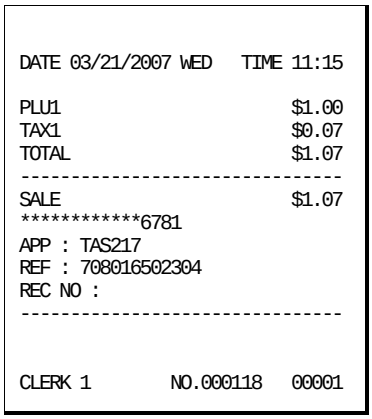


Sample Debit Transaction

1. Register a normal transaction. Press the appropriate **CHARGE** key (with debit function.) The message 'SLIDE CARD" displays:
2. Swipe the card. The message "GETTING PIN" displays. (At the PIN pad, the ENTER PIN message displays.)
3. At the PIN pad, enter the PIN and press the ↵ (ENTER) key. The register displays "PIN INPUT OK" momentarily and then displays "WAITING RESP." until the card verification is completed.
4. When verification is complete, the draft is printed. The transaction is complete and the register is ready for the next operation.

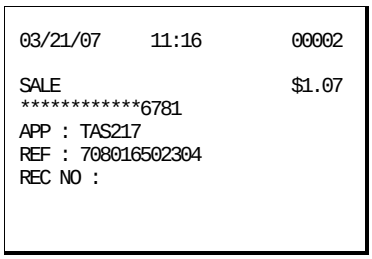
Note: If multiple documents are to be printed, the message "PRESS CASH KEY" displays. Tear off the printer paper, and press CASH/TEND to resume printing, or press CLEAR to continue without printing the next document.

Sample Receipt



```
DATE 03/21/2007 WED   TIME 11:15

PLU1                          $1.00
TAX1                          $0.07
TOTAL                         $1.07
--------------------------------
SALE                          $1.07
***********6781
APP : TAS217
REF : 708016502304
REC NO :
--------------------------------


CLERK 1       NO.000118   00001
```

Sample Draft



```
03/21/07     11:16          00002

SALE                          $1.07
***********6781
APP : TAS217
REF : 708016502304
REC NO :
```

Sample EBT Transaction

Notes: EBT and cash benefit operations are available at version 5.008. The Datatran device must also be loaded with the EBT application. For cash benefit transactions, use a Charge function key set with the "cash benefit" function. For food stamp transactions:

1. Register a normal transaction. Press the **Food Stamp Tender** key (with EBT function.) The message 'SLIDE CARD" displays:
2. Swipe the card. The message "GETTING PIN" displays. (At the PIN pad, the ENTER PIN message displays.)
3. At the PIN pad, enter the PIN and press the ↵ (ENTER) key. The register displays "PIN INPUT OK" momentarily and then displays "WAITING RESP." until the card verification is completed.
4. When verification is complete, the draft is printed. The transaction is complete and the register is ready for the next operation.

Note: If multiple documents are to be printed, the message "PRESS CASH KEY" displays. Tear off the printer paper, and press CASH/TEND to resume printing, or press CLEAR to continue without printing the next document.

Sample Receipt

```
DATE 07/05/2012 THU   TIME 11:15

PLU1 F                        $1.00
TOTAL                         $1.00
F/S TOTAL                     $1.00
F/S TEND                      $1.00
--------------------------------
FS SALE                       $1.00
FS BALANCE                   $10.00
**********6781
APP : TEST12
SEQ NO : 00001
--------------------------------


CLERK 1        NO.000012   00000
```

Sample Draft

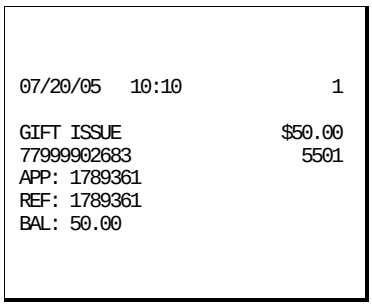
```
DATE 07/05/2012 THU   TIME 11:15

FS SALE                       $1.00
FS BALANCE                   $10.00
**********6781
APP : TEST12

CLERK 1        NO.000013   00000
```

Gift Card Operations

Sale of Gift Card

1. Register the gift card amount into a PLU linked to a unique PLU Group with the gift card activate function.
2. Immediately after the PLU is registered, the message “SLIDE GIFT CARD” displays.
3. Swipe the gift card. The terminal displays “WAITING RESP.” until the card is activated with the proper amount. *The activation draft is not printed until the sale is completed.*
4. If necessary, continue to register additional items or gift cards in the same transaction. Up to five gift cards may be sold in the same transaction.
5. When activation is complete, the receipt and the draft(s) are printed.

Sample Draft



```
07/20/05   10:10                1

GIFT ISSUE                 $50.00
77999902683                  5501
APP: 1789361
REF: 1789361
BAL: 50.00
```

Addition to Gift Card

The procedure is identical to the sale of gift card, except enter the amount of the addition into a distinct PLU linked to a separate PLU Group set with the gift card add function.

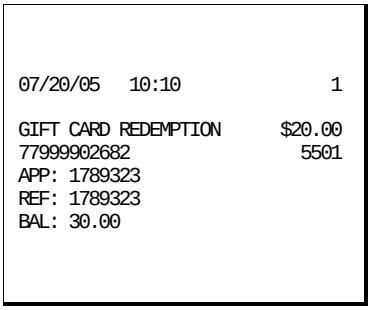
Payment with Gift Card

1. Register a normal transaction.
2. Press the appropriate MISC TEND key (with gift function). The message "SLIDE GIFT CARD" displays.
3. Swipe the gift card. The terminal displays "WAITING RESP." until the card verification is complete.
4. If the gift card balance is sufficient to pay the entire transaction, the receipt and the draft are printed when verification is complete.

   If the gift card balance is insufficient to pay the entire transactions (gift card undertenders are allowed with the appropriate program settings) the draft will print and the register will display the balance still due. The transaction will finalize and the receipt will print when the remaining sale balance is paid.

Sample Draft

Note:
Gift Balance is printed



```
07/20/05   10:10                1

GIFT CARD REDEMPTION       $20.00
77999902682                  5501
APP: 1789323
REF: 1789323
BAL: 30.00
```

Sample Receipt

```
DATE 07/20/2005 WED   TIME 10:10

   1  PLU1                 $20.00
      TOTAL                $20.00
      GIFT CARD            $20.00
SALE                       $20.00
*******2682
APP: 1789323
REF: 1789323
REC: 1789323
        * ORDER# 0166 *
EMPLOYEE1    NO.000066    REG 01
```

Manual Card Entry

Manual card entry is allowed for credit and gift transactions; Manual card entry is not allowed for debit transactions.

1. Register a normal transaction. Press the appropriate **CHARGE** key. The message 'SLIDE CARD" displays.
2. If card will not read, press **CLEAR** once, the message "ENTER ACCT NO" displays.
3. Enter the account number and press **CASH** (or press Clear twice to abort the transaction.)
4. For credit transactions, the message "ENTER EXP DATE" displays. Enter the 4-digit expiration date and press **CASH.** (This step is not required for gift card manual entry).
5. When verification is complete, the draft is printed.

Note: If multiple documents are to be printed, the message "PRESS CASH KEY" displays. Tear off the printer paper, and press CASH/TEND to resume printing, or press CLEAR to continue without printing the next document.

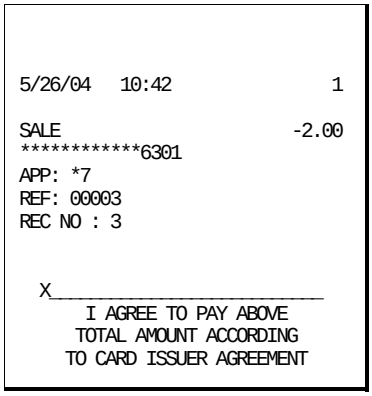
Merchandise Return

Complete the merchandise return transaction as you would a normal transaction. Press **MDSE RTRN** prior to entering each returned item.

1. Register a normal transaction. Press the appropriate CHARGE key. The message "SLIDE CARD" displays.
2. Swipe the card. The message "SLIDE CARD" continues to display until the card verification is complete.
3. When verification is complete, the draft is printed.

Note: If multiple documents are to be printed, the message "PRESS CASH KEY" displays. Tear off the printer paper, and press CASH/TEND to resume printing, or press CLEAR to continue without printing the next document.

Sample Draft



Void Transaction

Transaction Void allows a transaction to be removed from the batch and not reported to the cardholder statement. You will need the original receipt, with the approval code from the processor (shown after "APP") and the reference number (shown after "REF") to complete the void transaction. See the sample draft on page 207.

1. Turn the key lock to the VOID position.
2. Register a normal transaction.
3. Press the appropriate **CHARGE** key. The message "SLIDE CARD" displays
4. Swipe the card. The message "ENTER APP CODE" displays.
5. Enter the approval code printed for the transaction to be voided, press CASH. . The message "ENTER REF NO" displays.

NOTE: The approval code is an alphanumeric entry. You must use the alpha code chart to determine the numeric entries. For example the approval code "VITAL8" would be entered as "086 073 084 065 076 056" if you are using alpha code entry. If you are using the alpha overlay, type the code on the overlay.

6. Enter the Reference number from the transaction to be voided; press CASH. The transaction is found and the original record removed.

Tip (Gratuity) Entry

Gratuities (tips) indicated by the customer on the payment draft must be entered into the ECR before the batch is closed. After entry, the transaction total in the batch is adjusted to reflect the original transaction amount plus the tip.

***Notes**:*

Tip amounts added here are added to the 'TIP' total on the Financial and Clerk reports of the ER-285M. If the tip entry procedure is used more that once to adjust the tip, the transaction in the batch will be adjusted with the latest tip amount entered, but each tip entry will add to the 'TIP' total on the register's Financial report.

Tips cannot be added to completed debit or gift transactions. (Debit transactions are immediately deducted from the customer account; Gift transactions are immediately deducted from the card balance.)

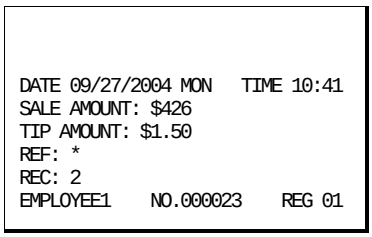
Best Practice Recommendation

The tip chit is normally kept by the server. If cash is removed from the cash drawer to pay the tip amount to the server, the amount of the tip must be recorded using the "Paid Out" function of the ER-285M. If the tip paid out is not recorded, the drawer will not balance.

Tip Entry Procedure

1. Turn the key lock to the **Z** position, enter **510** and press **SUBTOTAL**.
2. At the message "ENTER REC NO.", enter the record number of the transaction and press **CASH/TEND**.
3. At the message "ORIG TRAN AMOUNT", enter the original transaction amount and press **CASH/TEND**.
4. At the message "TIP AMOUNT", enter the tip amount and press **CASH/TEND**.
5. If the record number and transaction number are valid, the tip amount is entered in the batch and a tip entry chit prints as shown below.

Sample Tip Chit:



Local Total Report

As a "best practice" run an Issue Local Total report and a ER-285M Financial report. Confirm that credit totals match the financial report before closing the batch. See "Issue Local Total" on page 218 for instructions and a report sample.

Close Batch/Close Batch with Debit

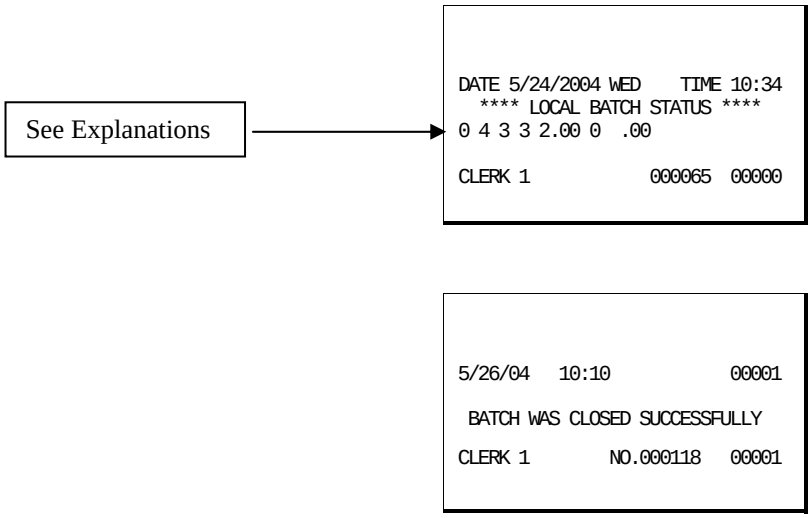
If you are accepting debit payments, always use the Close Batch with Debit function, regardless of whether debit transactions take place that day. If you are not accepting debit payment, always use the Close Batch function.

NOTE: To present things in a logical order, OPEN BATCH is shown at the *beginning* of the day, but in practical day-to-day operation it is recommended to open a new batch ***right after*** closing today's batch, so it is ready to go for the next day.

1. Turn the control lock to the **Z** position.
2. Enter **502** (for Close Batch) or,
   Enter **512** (for Close Batch with Debit)

   and press **SBTL**.
3. The message "WAITING RESP." displays momentarily. When communication is complete, the Local Batch Status prints and the batch is closed (a batch closed message prints at v1.017 or later.) The message "REPORT MODE" returns.

Close Batch



Local Batch Status Explanations:

(From Left to Right)

o	Batch Status (at the time the report is started) C=Closed/O=Open/X=Incomplete
4	Batch Number
3	Batch Transaction Count
3	Batch Item Count
2.00	Batch Balance
0	Batch Forwarded Transaction Count
.00	Batch Forwarded Balance

Reset Mode Procedures

DataTran Function Table

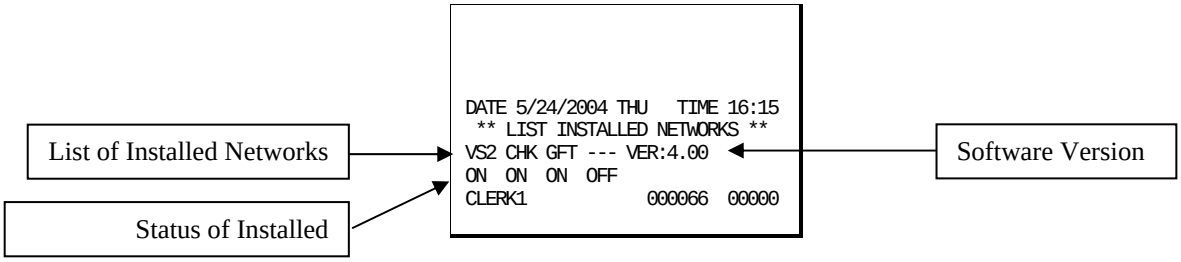
Function	Procedure
Initialize EFT	**Z-Mode**: Enter **500**, press **SBTL**
Open Batch	**Z-Mode**: Enter **501**, press **SBTL**
Close Batch	**Z-Mode**: Enter **502**, press **SBTL**
Clear Current Batch	**Z-Mode** (versions before 1.019) **S-Mode** (versions 1.019 or later): Enter **503**, press **SBTL**
Change Batch Number	**Z-Mode**: Enter **504**, press **SBTL**
Issue Local Total	**Z-Mode**: Enter **505**, press **SBTL**
Issue Transaction	**Z-Mode**: Enter **506**, press **SBTL**
Issue Batch Status	**Z-Mode**: Enter **507**, press **SBTL**
Dial In Load	**Z-Mode**: Enter **508**, press **SBTL**
Dial Out Load	**Z-Mode**: Enter **509**, press **SBTL**
Tip Entry	**Z-Mode**: Enter **510**, press **SBTL**
Pin Pad Initialize	**Z-Mode**: Enter **511**, press **SBTL**
Close Batch with Debit	**Z-Mode**: Enter **512**, press **SBTL**
DataTran Diagnostics	**Z-Mode**: Enter **513**, press **SBTL**
Log File Report*	**Z-Mode**: Enter **514**, press **SBTL**
Voice Authorization	**Z-Mode**: Enter **515**, press **SBTL**

*The “Log File Report” is available beginning a software version 1.014. This report records each time the “Issue Transaction” (report 506) is generated. When the “Log File Report” reaches 20 entries, the error message “Log File Full” is displayed when a “Issue Transaction” (report 506) is attempted. The “Log File Report” entries clear when the “Log File Report” (report 514) is taken.

Initialize EFT

Z-Mode: Enter **500**, press **SBTL**

Select Initialize EFT to verify communications, software versions and installed networks.



Open Batch

Z-Mode: Enter **501**, press **SBTL**

See Daily Procedures, page 206 for explanation.

Close Batch/Close Batch with Debit

Z-Mode: Enter **502**, press **SBTL** (Close Batch)

Z-Mode: Enter **512**, press **SBTL** (Close Batch with Debit)

See Daily Procedures, page 217 for explanation.

Clear Current Batch

S-Mode: Enter **503**, press **SBTL**

The clear current batch command erases all the current batch transactions from the DataTran memory even if they have not been settled. *An Issue Transaction (Local Transaction Report) should be printed prior to clearing the batch.* This will ensure that the operator has the transaction detail to re-enter if required.

Clear current batch should only be done under the direction of DATACAP or your processor.

Chg Batch Number

Z-Mode: Enter **504**, press **SBTL**

(At the ENTER BATCH NO message, enter the new number, press **CASH**.)

The change batch number command is used to assign a new batch number to an existing batch. It is used with certain credit card processors to rectify settlement problems. It is used infrequently. (Attempt to change batch number will be denied if bank does not allow the feature.)

Issue Local Total

Z-Mode: Enter **505**, press **SBTL**

This report is added for ease of customer balancing actual totals in the Datatran to the system wide reports. A summary of each kind of credit card and a batch total should match the totals within the ER-285M report before the Settle Batch is attempted.

```
DATE 5/24/2004 WED   TIME 10:55
  ****LOCAL  TOTAL REPORT ****
AMEX           .00 0
VISA          120.32 5
MASTER         .00 0
DISCOVER       .00 0
PRIVATE LABEL  .00 0
DINERS         .00 0
JCB            .00 0
DEBIT          .00 0
TOTAL         120.32 5
CLERK 1          000069   00000
```

Issue Transaction (Local Transaction Report)

Z-Mode: Enter **506**, press **SBTL**

The Local Transaction Report contains details of each transaction in the current batch.

Example

(See Appendix for report key.)

```
DATE 5/24/2004 WED    TIME 10:59
*** LOCAL TRANSACTION REPORT ***
1 A 54 ************6301 0501 1 V
ITAL6 * 100.00 * * * * * 4 * 052
604 113803 5 @ NY * * 00 * * D 1
00 00 * * * 00001 * * * * * 0524
04 113803 * * * * 00 *
CLERK 1           000070   00000
```

Issue Batch Status

Z-Mode: Enter **507**, press **SBTL**

The Local Batch Status Report also prints when a batch is closed.

See Explanations →

```
DATE 5/24/2004 WED    TIME 10:34
  **** LOCAL BATCH STATUS ****
0 4 3 3 2.00 0  .00

CLERK 1           000065  00000
```

Local Batch Status Explanations:

(From Left to Right)

O	Batch Status C=Closed/O=Open/X=Incomplete
4	Batch Number
3	Batch Transaction Count
3	Batch Item Count
2.00	Batch Balance
0	Batch Forwarded Transaction Count
.00	Batch Forwarded Balance

Dial In Load/Dial Out Load

These functions apply only to legacy DataTran equipment. Perform if instructed by Datacap support. You will be required to enter the phone number and terminal I.D.

Z-Mode: Enter **508**, press **SBTL** (Dial In Load)

Z-Mode: Enter **509**, press **SBTL** (Dial Out Load)

DataTran NoLoad/AutoLoad Notes/TwinTran

NoLoad

Parameters managed at the processor host, not in the DataTran. For installation, changes, exchanges, call the processor, tell them the unique "mac" id, run tests and begin operations.

AutoLoad

Parameters managed on PSCS, Datacap's web-based load system. Parameters are downloaded to the DataTran upon first use and for reloads on demand.

TwinTran

When a TwinTran is first installed, the dealer *must do a Dial Out Load through the IP connection*. If, for any reason, the internet is not available, the device cannot be loaded. If it is being installed at a location where the Internet is not currently operational and the customer wants to use the dial out method for approvals, the procedure below must be done at a location where the internet is working.

To load a TwinTran using a Sam4s register;

With the TwinTran connected to the register and an active Ethernet line, enter into the Dial Out mode. At the Phone number field enter the number "1". If the register uses the code entry method for alpha characters enter the 3 digit code (049). At the Enter ID prompt, enter the serial number of the TwinTran. Select Tone phone connection. The TwinTran will call DataCap's host PC and load itself. This takes approximately 20 seconds. After the TwinTran is loaded, one successful credit transaction must be done. After that the unit can be connected as the customer wishes.

Pin Pad Initialize

Z-Mode: Enter **511**, press **SBTL**

Initializes the pin pad. Perform at the time of installation or as part of pin pad troubleshooting procedures.

DataTran Diagnostics

This feature is available with newer datacap "Tran" devices and ER-285M ECRs running software version 1.017or later.

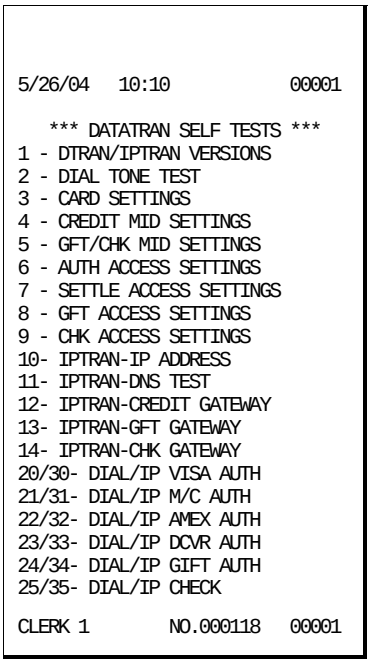
Note: Use these commands with the assistance of a Datacap support representative.

Datatran diagnostic commands are functions built into each Tran series model that assist an installer or operator troubleshoot problems related to communications, networking or merchant parameters.

To Receive a List of Available Tests for the Connected Tran

1. From **Z-Mode**: Enter **513**, press **SBTL**.
2. Enter "**0**" then press **CASH**.

Test Number "0" returns a listing of tests that are available in the connected Tran application. The list of available diagnostic commands will vary by Tran model; for example, DialTran devices will not support networking tests that pertain to IPTran and TwinTran. Tran device diagnostics include payment gateway connection tests, transaction tests, phone number settings and merchant parameter summaries that are appropriate to the particular Tran device. A sample list of functions is as follows:



To Execute a Diagnostic Test

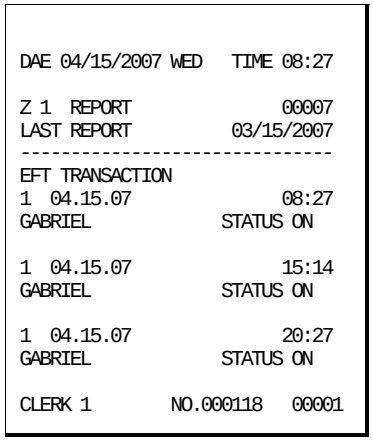
The responses to the diagnostic commands are variable in content and not intended to be interpreted by software. The printing of the diagnostic output is intended to have a human operator read the results that will be readily interpreted with the assistance of a Datacap support representative.

1. From **Z-Mode**: Enter **513**, press **SBTL**.
2. Enter the diagnostic report number and then press **CASH**.

Log File Report

Z-Mode: Enter **514**, press **SBTL**

The "Log File Report" is available beginning a software version 1.014. This report records each time the "Issue Transaction" (report 506) is generated. When the "Log File Report" reaches 20 entries, the error message "Log File Full" is displayed when a "Issue Transaction" (report 506) is attempted. The "Log File Report" entries clear when the "Log File Report" (report 514) is taken.



```
DAE 04/15/2007 WED   TIME 08:27

Z 1  REPORT              00007
LAST REPORT          03/15/2007
------------------------------
EFT TRANSACTION
1  04.15.07              08:27
GABRIEL             STATUS ON

1  04.15.07              15:14
GABRIEL             STATUS ON

1  04.15.07              20:27
GABRIEL             STATUS ON

CLERK 1        NO.000118   00001
```

Post Authorization

(Function available at ECR firmware version 1.024 and later.)

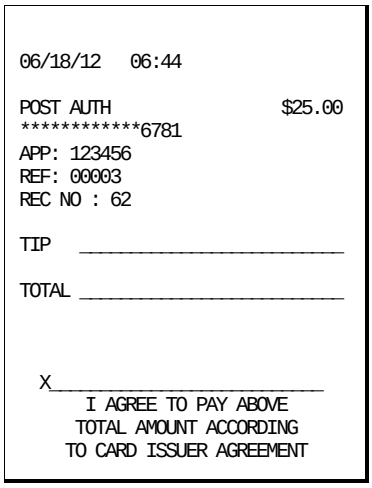
Z-Mode: Enter **515**, press **SBTL**

If electronic authorization is not approved and the merchant receives voice authorization, the transaction can be entered into the batch with this function. Note that this function does not adjust any other cash register totals or counters.

1. From **Z-Mode**: Enter **515**, press **SBTL**.
2. Slide the card.
3. Enter the sale amount and then press **CASH**.
4. Enter the approval code and then press **CASH**.
5. The draft prints and the sale is added to the batch.

NOTE: The approval code is an alphanumeric entry. You must use the alpha code chart to determine the numeric entries. For example the approval code "VITAL8" would be entered as "086 073 084 065 076 056" if you are using alpha code entry. If you are using the alpha overlay, type the code on the overlay.

Sample Draft



Required ECR Programs

1. Set EFT status for the port you are using. See “RS-232 Communications Options”. Set BAUD to “2400” and set device function to “EFT Device”.
2. See “System Option Programming”. Set address #31 to **1** for Normal Draft. Add the value of **0** to the current value for a draft with a tip line.
3. See “System Option Programming”. Set address #34 to a value of **0** if the MSR is connected to the Datatran, **1** if using a PDC and **2** if using the optional internal MSR**.**
4. If using PIN debit and a PIN pad, set system options #32 and #35 with the appropriate values. (Select DUKPT encryption.)
5. See “CHARGE 1-8 Function Key Options”. Set option **N4** to send the transaction to the EFT and set option **N5** to reflect the type of payment: Credit, Debit or Gift or GIFT NSF (gift payment and under-tender allowed).
6. If you are using gift cards, see “Group Programming” to set up separate groups with Activate and Add status. See “PLU Programming” to create a PLU for Gift Card Activate, link this PLU to the PLU Activate group; create a PLU for Gift Card Add, link this PLU to the PLU Add group.

Local Transaction Report Key

A B C D E F G H I J K H I J K L M N O P Q R S T [U V WX Y Z AA BB]

Field	Description		Min	Max	Type
A	Transaction Sequence Number		1	5	Numeric
B	Transaction Status		1	1	Alphanumeric
C	Network Transaction Code		1	3	Alphanumeric
D	Credit Card Account Number		1	38	Alphanumeric
E	Expiration Date		4	4	Numeric
F	Card Reader Flag		1	1	Numeric
G	Approval Code		1	16	Alphanumeric
H	Reference Number		1	16	Alphanumeric
I	Transaction Amount		3	11	Numeric
J	Operator ID		1	10	Alphanumeric
K	AMEX Category or Product Code		1	10	Alphanumeric
L	Arrival Date		3	6	Numeric
M	Departure Date		3	6	Numeric
N	Gratuity Amount		3	11	Numeric
O	Media Type		1	2	Numeric
P	Special Program Code		1	1	Numeric
Q	Transaction Date		3	6	Numeric
R	Transaction Time		4	4	Numeric
S	Authorization Source Code		1	1	Numeric
T	Card Holder ID	1	1	Numeric	
U	PS2000 or MIC Payment Service Indicator		1	1	Alphanumeric
V	PS2000 Transaction ID or		15	15	Alphanumeric
	MIC Banknet Reference Number		9	9	Alphanumeric
	MIC Banknet Authorization Date		4	4	Numeric
	MIC POS Entry Mode		1	1	Alphanumeric
	MIC Mag Stripe Error Code		1	1	Alphanumeric
W	PS2000 Validation Code		4	4	Alphanumeric
X	Authorization Response Code		2	2	Alphanumeric
Y	PS2000 Authorization Currency Code or		3	3	Alphanumeric
	MIC Entry Mode Change Indicator		1	1	Alphanumeric
	MIC Track Data - CVC Error		1	1	Alphanumeric
	MIC Track Data - Error Code		1	1	Alphanumeric
	ZMerchant Category Code		2	2	Alphanumeric
	AAEntry Mode		2	2	Alphanumeric
	BBOriginal Authorized Amount	3	11	Numeric	

Local Transaction Report Field Definitions

A. Transaction Sequence Number: The DataTran will use this field to return the internal sequence number assigned to each accessed transaction.

B. Transaction Status: The DataTran will use this field to return the current status of each accessed transaction.
Allowed values: “A” = Authorized but not captured, “C” = Captured, “F” = Forced Entry, or “V” = Void.

C. Network Transaction Code: When available, the DataTran will use this field to return the service provider’s code assigned to each accessed transaction.

D. Credit Card Account Number: The DataTran will use this field to return the card account number used in each accessed transaction .
E. Expiration Date: The DataTran will use this field to return the expiration date of the credit card used in each accessed transaction.
   Format: “YYMM” or “MMYY” (“YY” = year and “MM” = month).
F. Card Reader Flag: The DataTran will use this field to return the type of account number entry used in each accessed transaction.
   Allowed values: 0 = Hand entered account number, or 1 = Entered by card reader.
G. Approval Code: The DataTran will use this field to return the approval code of each accessed transaction.
H. Reference Number: When available, the DataTran will use this field to return the reference number of each accessed transaction.
I. Transaction Amount: The DataTran will use this field to return the sales amount of each accessed transaction.
   Format: -9999999.99 (decimal point required).
J. Operator ID: When available, the DataTran will use this field to return the cashier or operator ID number entered in each accessed transaction.
K. AMEX Category or Product Code: When available, the DataTran will use this field to return the American Express product or category code of each accessed transaction.
L. Arrival Date: When available, the DataTran will use this field to return the customer’s arrival date entered in each accessed transaction.
   Formats: “MMDDYY” (“MM” = month, “DD” = day, and “YY” = year).
M. Departure Date: When available, the DataTran will use this field to return the customer’s departure date entered in each accessed transaction.
   Formats: “MMDDYY” (“MM” = month, “DD” = day, and “YY” = year).
N. Gratuity Amount: When available, the DataTran will use this field to return the gratuity amount entered in each accessed transaction.
   Format: -9999999.99 (decimal point required).
O. Media Type: The DataTran will use this field to return the media type used in each accessed transaction:
   2 = American Express 6 = Private Label
   3 = Visa 7 = Diner’s Club or Carte Blanche
   4 = MasterCard 8 = JCB
   5 = Discover 9 = Debit
P. Special Program Code: When available, the DataTran will use this field to return the special program code entered for each accessed transaction.
Q. Transaction Date: The DataTran will use this field to return the date of each accessed transaction.
   Formats: “MMDDYY” (“MM” = month, “DD” = day, and “YY” = year).
R. Transaction Time: The DataTran will use this field to return the time of each accessed transaction.
   Format: “HHMM” (“HH” = military hours and “MM” minutes).
S. Authorization Source Code: When available, the DataTran will use this field to return the Authorization Source Code of each accessed transaction.
T. Card Holder ID: When available, the DataTran will use this field to return the Card Holder ID type of each accessed transaction.
U. Payment Service Indicator: When available, the DataTran will use this field to return the Payment Service Indicator (also referred to as the ACI field) of each accessed transaction.
V. Transaction ID: When available, the DataTran will use this field to return either the PS2000 Transaction ID number or MIC data of each accessed transaction.
W. Validation Code: When available, the DataTran will use this field (also known as the ACI field) to return the validation code of each accessed transaction.

X. Authorization Response Code: When available, the DataTran will use this field to return the authorization response code of each accessed transaction.
Y. Authorization Currency Code: When available, the DataTran will use this field to return the authorization currency code of each accessed transaction.
Z. Merchant Category Code: When available, the DataTran will use this field to return the merchant category code of each accessed transaction.
AA. Entry Mode: When available, the DataTran will use this field to return the entry mode of each accessed transaction.
BB. Original Authorization Amount: When available, the DataTran will use this field to return the original authorization amount of each accessed transaction.
Format: -9999999.99 (decimal point required).

Glossary

Activity Count

The activity counter increments each time an entry is made on a particular PLU, or function key. The counter prints on the appropriate reports.

Cancel

Press the CANCEL function to abort a transaction in progress. All current items are removed (voided).

Cash Declaration

This option forces the operator to count the cash drawer and input the results before the financial report can be taken. Absentee owners may want clerks or managers to declare the drawer counts to insure that all cash is deposited, regardless of overages, or shortages. As an added benefit, the overage or shortage amount is calculated and printed on the financial report.

Clerk

Sales c*lerks* are individuals who are responsible for selling the merchandise to the customer. Typically, management wants to know merchandise sales levels for each clerk, in order to monitor productivity, account for cash and other media, and/or pay commissions. The default program provides operation for 15 clerks, however up to 99 different clerks can used by changing the default memory allocation.

Compulsory

When an operation is programmed compulsory, the appropriate entry must be performed in order to complete the operation.

Compulsory Amount Tendering

This forces the operator to input the tender, rather than pressing a payment key directly. The change will always be computed by the register when a customer tenders an amount greater than the total due. Compulsory tendering will reduce cashier change errors.

Compulsory Condiment

When a kitchen printer, or requisition system is used, the merchant may wish to force the entry of a condiment or instruction for specific items. If compulsory condiment status is set for a specific PLU, then a condiment PLU must follow the entry of the item.

Compulsory Drawer

With compulsory drawer enabled, the clerk cannot begin a new transaction until the drawer is closed. This simple feature was designed to teach cashiers the habit of closing the cash drawer after each transaction. You'll reduce potential errors, theft and fraud that can take place when your cashier works out of an open drawer.

Compulsory Number Entry

This option forces the operator to enter a reference number (using the #/NS key) before a PLU entry can be made or a transaction finalized with a Charge key. The number could represent an SKU number that would be tracked manually, or other data such as a customer count.

Consecutive Number

A sequential number is printed on each receipt issued. This is not a "customer count" as this number is incremented for non-sales activity such as no-sales and reports. A count of revenue generating transactions (true customer count) is printed with the Net Sales total on the financial report.

Currency Conversion

Use the currency conversion function to convert and display the value of the transaction in foreign currency. Only cash tender is allowed after pressing the currency conversion function. Change is calculated and issued in home currency.

Decimal Multiplication

If you sell weighed goods, yard goods, or any merchandise sold in fractions of a unit, the decimal multiplication feature calculates each transaction quickly and accurately. For example, if your customer selects 4.75 pounds of an item sold at $1.59 per pound, you enter 4.75 on the numeric keypad, press the X/TIME (multiplication) key, then enter the price per pound and press the appropriate PLU key.

Default Program

The original program installed in the *ER-285M*. The register has a default program which makes it operational after a memory clear. Nearly all option, rate, and status programs are set to zero as the default condition.

Department

Note: The ER-285M uses price look-ups (PLUs) to perform the function of traditional cash register departments. PLUs may be registered directly on the keyboard (like traditional departments) or indirectly by entering the item or PLU number and then pressing the PLU key.

Electronic Journal

The ER-285M does not provide a journal printer, which adds significantly to the acquisition and operating costs of a cash register. Today most systems, even expensive PC-based systems do not print a traditional sales journal. For business records, a copy of daily financial summaries is usually all that is needed. Like some of the more expensive POS systems, the SAM4s ER-285M has the capability of storing a sales journal in memory. The electronic journal can be reviewed and discarded, saved to an SD card or polled by a PC for archival. When ECR memory reserved for electronic journal is full, current records are saved and old data is discarded.

EPROM

Erasable, **P**rogrammable **R**ead-**O**nly **M**emory (EPROM) is used by the manufacturer to contain the program that runs the register. EPROMs maintain memory when power is off, allowing the register to be especially stable and reliable. In the case that the register's program is improved, or updated, the EPROM can be updated by a qualified service technician through a utility in the register.

Error Condition

An error condition signals that mis-operation has occurred. It is identified by an audible tone and an error descriptor appearing on the display.

Error Correct

An error correct operation voids the last item entered, it must be used within a sale.

Food Stamp

Note: Many areas now administer food stamp payments through EBT cards, rather than traditional food stamp coupons. Beginning at version 5.008, the ER-285M is capable of accepting EBT electronic payments.

Merchants who accept food stamp payments have the responsibility of accepting food stamps only for food stamp eligible merchandise.

The SAM4s ER-285M offers a sophisticated routine to separate food stamp eligible items and accept the appropriate payments. First, each PLU is pre-programmed with food stamp eligibility status. If the customer is paying by food stamps, the operator can then recall and display the food stamp eligible total. Depending upon local rules, sales tax can be forgiven on any taxable food stamp eligible item. Change less than one dollar from food stamp tender is applied to non-food stamp eligible items, or issued in cash change. If both cash and food stamp change is due, the register displays both types of change due.

Using this system, all food stamp items are automatically sorted, with change and tax calculated by the register. Thus, a potentially confusing transaction can be handled quickly with little risk for errors.

Gallonage

To simplify gasoline transactions, PLUs can be designated to calculate gallons sold on fuel purchases. The price of the fuel sold is entered as it would be in a normal “open” PLU. However the price per gallon of fuel is entered where the PLU preset price is normally maintained. When fuel is sold, the register will refer to the programmed price per gallon and calculate the number of gallons sold. Both the gallons pumped and dollar amount of the gas purchase are conveniently printed on the customer receipt and sales journal. This provides all the necessary information for a customer that needs a receipt for gas purchases. The total of gallons sold is also maintained on the appropriate PLU report, in the place of the PLU item counter. Several gallonage PLUs could be placed on the keyboard to maintain records for different pumps, or types of fuel. Thus, the dollar and gallon totals can provide a useful security check against separate pump totals.

Groups (PLU Groups)

Groups are used to organize sets of items. For example, in a restaurant Grill Items, Drinks, and Ice Cream items might be separated into different groups. Up to 99 group totals are available. Group reporting is available on the group report.

HALO

The high amount lock-out (HALO) limits the amount allowed to be entered in a PLU, or function key.

HASH

Merchants often sell non-merchandise items, such as lottery tickets, or bottle deposits, that they do not wish to account for as reportable revenue. HASH PLUs are useful to account for non-revenue income. They will add to the appropriate totals on the PLU report, they will add to the transaction totals, and they will be accountable for in drawer totals, but they will not affect the merchants, NET SALES, GROSS SALES or NON-RESETTABLE GRAND TOTAL. As a system option, HASH can be defined to not add to the transaction (NON-ADD).

Link (PLU Link)

Use linked PLUs if you wish the registration a PLU to automatically cause the registration of another PLU (for example to automatically add a bottle deposit.) Linked PLUs are set with Program 350, PLU Link programming.

Macro

Macro keys may be programmed to record, and then later perform, up to 50 keystrokes.

For example, a macro key could be set to tender (preset tender) a common currency, such as $5 into the cash key.

Memory Allocation

Memory allocation is a program that determines how the system memory is divided to provide the correct features for your application. For example, you may require more or less clerk memory, PLUs, or electronic journal memory. Memory allocation allows you to maximize the features you need while minimizing the features you do not need.

Mix & Match

Retailers often offer discounts when multiples of different items are purchased. For example, the offer: “save $5 on any three bottles of wine” can be handled by a mix and match discount. The default *ER-285M* can accommodate up to 10 different mix and match discounts, the total can be increased to a maximum of 100 through memory allocation.

Multiple Receipts

In some cases, for example where a mail-in rebate is offered, an extra copy of a receipt is needed. If allowed, the receipt must be re-printed immediately, before another transaction is started.

Negative PLUs

As you program PLUs, you will find a setting to make them negative (normally they are positive). Positive PLUs are used for items that add to the sale. Negative PLUs are used for items that subtract from a sale, like individual store coupons or bottle deposit credits.

No Sale

No sale is an operation to simply open the cash drawer. No sales are counted and reported on the financial report.

Not Found PLU

For small merchants, the ER-285M can build a PLU file “on the fly”. Each time an item is scanned (or entered by PLU number) that is not in the PLU file, the operator is prompted to enter the price and other options for the item. At the end of the day, the “Not Found PLU Report” will allow the manager to verify the prices and update the PLU file as needed. T

Open (PLU)

Open PLUs accept price entries, rather than register a preset price. To prevent errors, you may set a high limit (HALO) for open entries.

Override

Override is an operation used to bypass a programmed price or entry limit (HALO).

Over-Tendering/Under-Tendering

When a payment is made less than the amount due, it is called an under-tender. After an under-tender, the register calculates and displays the remaining balance for the sale. Additional payments must be made until the total due is satisfied. When the sale is fully paid, the cash drawer will then open and the receipt is completed. When a payment is made more than the amount due, it is called an over-tender. The register will compute and display the change due and the receipt will be completed. Note that register options can be set to allow or disallow over-tendering for check and charge payments.

Paid Out

The Paid Out key is used to track cash paid out of the cash drawer or to record pick ups from the cash drawer.

PLUs

Price look-ups (PLUs) are accessed by indexing a code number and pressing the PLU key, or by pressing a keyboard PLU key. PLUs can be programmed with a preset or open price. PLUs record an activity count and dollar total on the PLU report. PLU sales may also report to a group.

Post Tender

Post tendering is available to help prevent cashier confusion when a customer decides to change the tender amount. When Post Tendering is allowed, the operator can re-enter a cash tender and the register will re-calculate the change.

To post tender after finalizing the sale, enter the cash amount presented by the customer and then press **CASH**. The amount of change due to the customer is then displayed. This is a calculation function only, and no totals or counters are updated by the use of this feature.

Preamble/Postamble Message

Programmable messages allow each merchant to customize his receipt with the store name, address, phone number, website or other critical identification information or advertising messages. The SAM4s ER-285M allows a preamble message of up to six lines, each with up to 24-characters, to be printed at the top of each receipt. A postamble of up to 6-lines of 24-characters can also be printed at the bottom of the receipt.

Preset (PLU)

When a PLU is pre-programmed or pre-set with a fixed amount, the preset amount will automatically register when the PLU is pressed or entered.

Preset Override

When a PLU is preset, it is possible to override the preset price with a different price. If the override function is set to be allowed in the PLU program, you can simply enter a new price and press the PLU key.

Receipt

A receipt is a printed tape given to a customer as a record of the sale transaction.

Received on Account

The Received on Account key is used to track cash received into the cash drawer or to record loans to the cash drawer.

Register Number

The number of the register can be set and printed on each receipt. If the merchant uses more than one register, or has more than one location, the register where a transaction took place or report was taken is easily identified.

Single Item

The transaction is finalized automatically when a single item PLU is registered as the first item in a sale. Single item status is used to speed transaction entry when an item is normally sold in a one-item sale, for example, a pack of cigarettes, a newspaper or an admission ticket.

Split Pricing

Often merchants price items in multiples, for example 3 for $1. The register will compute the price of items when the exact quantity is not purchased. If the customer chooses to buy 2 items at 3 for $1, enter 2, press the X/TIME key, enter 3, press the X/TIME key and then enter the price and the PLU. The register will compute the price for the items purchased.

Stock (PLU Stock)

Each PLU reports an activity counter. Normally the activity counter increments (adds) and is reset when a PLU Z-report is taken. You can choose to use the PLU activity counter as a stock counter. If used as a stock counter, each PLU activity will reduce the count. A separate program allows you to add to the stock count or enter a new stock count. Stock counts are not reset when PLU Z-reports are taken.

Surcharge (Item)

An item percent surcharge adds a percentage to the price of an item. This addition nets the PLU total.

Surcharge (Sale)

A sale percent surcharge adds a percentage to the entire sale.

Tare

Tares are container weights. If you are using the scale function, you can preset up to 5 different tare weights. The tare can be subtracted automatically when a specific PLU is registered, or manually inputting the tare number and pressing the TARE key can subtract the tare. Tare #5 can be programmed for entering tare weights manually.

Tax Computation by Rate/Tax Computation by Table

In the simplest method of tax calculation, the register is set with a tax rate (or rates) and the taxes are computed by a percentage calculation. In some cases, a tax that is entered as a percentage does not follow exactly the tax charts that apply in your area (even if the tax chart is based on a percentage). In these cases, we recommend that you enter your tax using tax table programming. This method will match tax collection exactly to the break points of your tax table.

Tax Exempt

Tax exempt is used to exclude the tax from an entire sale.

Tax Shift

Tax shift keys are used to reverse the tax status of a PLU entry.

Tender

A tender is the register operation in which the amount of the payment is entered. If the tender

exceeds the amount due, the sale is finalized and change due is displayed.

Training Operation

Training operations do not add to PLU or function key totals. This allows an operator to practice making entries without updating sales totals. If you wish to perform training operations, designate one of the clerks for training. Y**ou must clear (Z) the register before the training clerk can be used.** When that clerk is signed on, the register is in "training mode".

Transaction Number

See consecutive number.

VAT

Value-**A**dded **T**ax (VAT) is a tax collection system where a portion of the item's sale price is tax. VAT is different than most sales taxes where tax amounts are calculated and **added-on** to the sale. Value added taxes are included in the item price. Most locales in the USA do not use a VAT system, which is used in Canada and other nations.

Void

A void operation will erase a previous item entry. It must be used inside of a sale only.

X & Z Reports

X (eXamine) reads reports without resetting and **Z** (Zero) reads and resets your sales totals.

Index

E

F

G

H

I

K

L

M

N

O

P

R

S

T

V

W

X

Z

Manual Revision Record

Edition	Date published	Revision contents
V 1.0	4/23/2007	Initial printing
V 1.1	4/25/2007	Add Balancing Formula; correct system option #31
V 1.2	10/22/2007	Added: DataTran Configuration diagram p206; System option #32 PIN pad options reversed; Print option #33, masking EFT# reversed.
V 1.3	11/26/2007	Added RS232c device function "3" for remote journal; p119.
V 1.4	11/27/2007	Added self tests, p121.
V 1.5	4/14/2008	Updated required programs for integrated payment applications (p223). Added print options #36 & #37. Added Gift NSF function to Charge key program.
V1.6	1/6/2009	Added Not Found PLU operation, p108 (requires V1.017)
V1.7	4/13/2009	Program settings (RS232C Options & Scale key option) to support ounce-scale added.
V1.8	4/15/2009	Log File Report procedure added.
V1.9	1/13/2010	Change to S-Mode for Clear Batch, see pg. 212
V1.10	3/5/2010	FAT32 required for SD formatting, see 202
V1.11	9/09/2010	Additional Datatran diagnostic information added.
V1.12	11/22/2010	Glossary added.
V1.13	1/31/2011	Paper loading instructions updated for STM200 Printer
V1.14	9/13/2011	Maximum paper diameter updated: pg19 & pg22. Corrected example of PLU status entry on page 130.
V1.15	1/6/2012	CHECK CASH key code identified as code #81.
V1.16	6/20/2012	Post Authorize function added (v1.024 or later)

V1.17	7/3/2012	Added functions supported by v5.008 or later: System option #39, disable not found PLU; EBT options for Food Stamp tender & Charge keys; selective program load by SD card.
V1.18	7/23/2012	System Option #31 Print Tip Line options reversed.
V1.19	8/01/2012	Updated balancing formula.
V1.20	1/07/2013	Not Found PLU Error Improved.
V1.21	3/04/2013	Batch Status Explanation Updated
V1.22	3/15/2013	Added options for Canadian rounding--Subtotal Function Key Program & System Options #21 & 22. Canadian rounding requires software version 5.013 or later.
V1.23	12/13/2013	Receipt buffer size corrected: approximately 100 lines can be re-printed or printed after sale.
V1.24	12/16/2013	Receipt buffer again clarified: up to 50 unique items or 104 if items are repeated.

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(All specifications are subject to change without notice)