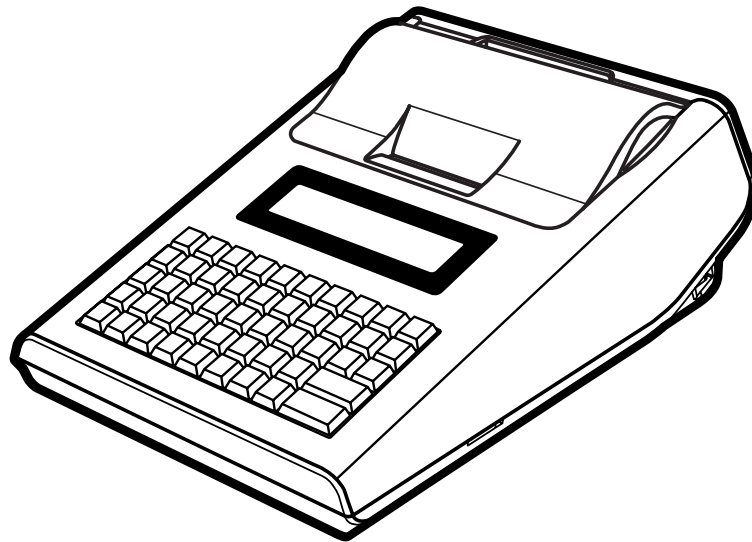


SAM4S

ER-230 Series Electronic Cash Register AU

Operation and Program Manual



All specifications are subject to change without notice

JK68-60969B Rev. 1.21 (Feb10)
From ER230 v1.000 to v1.004

ATTENTION

The product that you have purchased contains a rechargeable Ni-MH battery. This battery is 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.



WARNING

This is a Class A product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.

Precaution Statements

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

1-1 Safety Precautions

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

CAUTION

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

Il 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: "For pluggable equipment, the socket-outlet shall be installed near the equipment and shall be easily accessible."

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.

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Getting Started

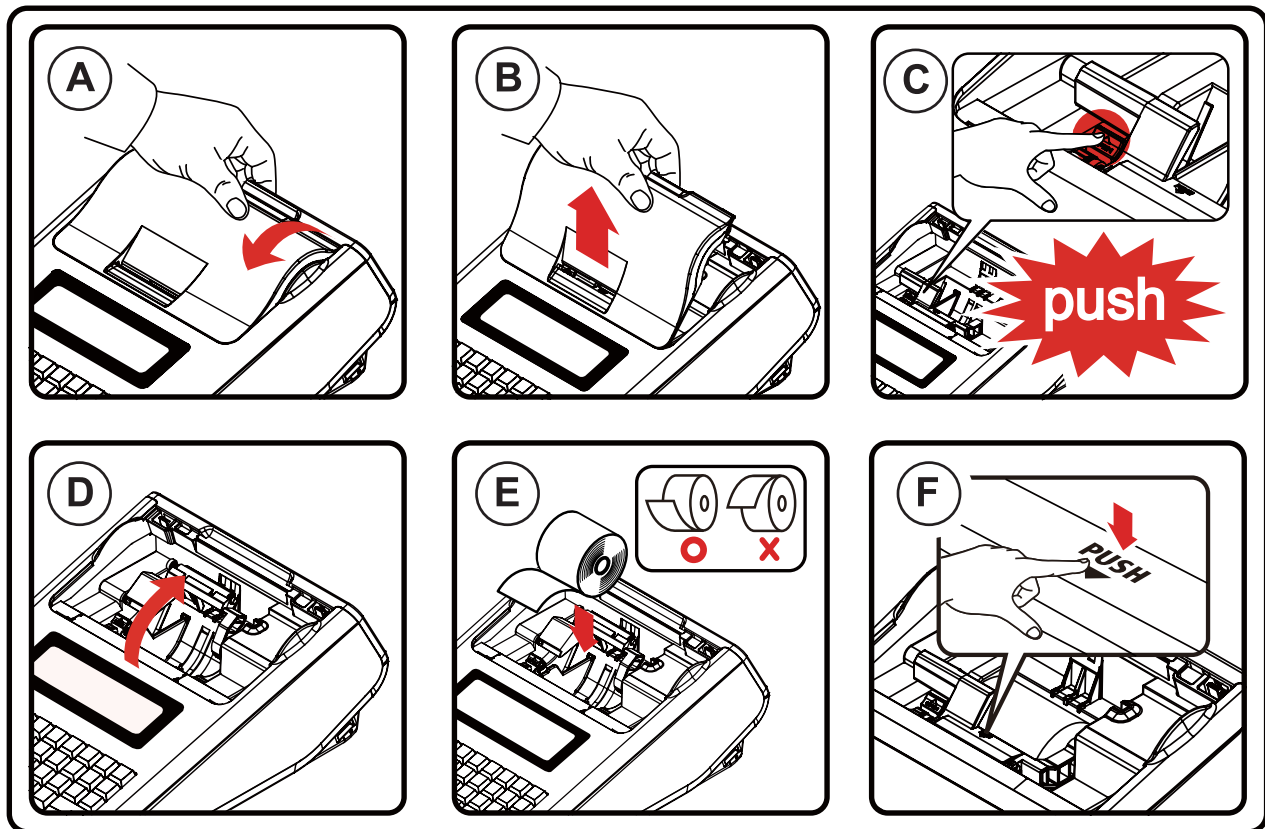
About the *ER-230 Series*

- The *ER-230 Series* features a 48-position keyboard with traditional raised keys. This keyboard will accommodate up to 12 NLU keys and works best in retail stores, or shops where it is not necessary to place a large number of preset item keys on the keyboard.
- A standard capacity of 50 PLUs and 5 Groups allows for easy item management. Approximately 500 PLUs can be allocated. For expansion to 5000 PLUs, please contact your dealer.
- *ER-230 Series* is an excellent low cost solution for a wide range of retail environments.
- *ER-230 Series*, with its superb thermal printing system, always provides the fastest in transaction speeds.
- *ER-230 Series is preset with 10% and Australia rounding as well as a number of other useful functions.*

Unpacking

1. Unpack and unwrap the cash register.
2. Located in the packing are the following items:
 - 1 roll of paper,
 - 1 DC power supply,
 - Operation and Program Manual,
3. Plug the DC outlet to cash register and AC end into a grounded outlet (three prong), press the **MODE** key until indicator shift to the **REG-Mode** position.

Installing the Paper



Basic Features and Functions

Standard Hardware

- Display: Single line, 12-position front and rear liquid crystal display standard.
- 48 position raised keyboard.
- 1 station Thermal 32-column printer with drop-and-print mechanism.
- 7-position mode switch.
- Standard customer display.
- Communications ports: 2 RJ-45 RS232C.
- Cash Drawer ports: 1 RJ-12.

Optional Hardware

- Cash Drawer.

NB: Cash Drawer for *ER-230 Series* is special version. Please contact your dealer.

- PC Link.
- Load cell scale.
- Kitchen printer / Bill Printer / Slip Printer / Journal Printer.
- Barcode scanner.
- EFTPOS Terminal.

Software Features

- Up to 2 price levels for each PLU.
- Up to 5 PLU modifier keys.
- **50** Price Look Ups (PLUs) default (expandable **up to 5,000**, please contact your dealer) for open or preset item registration. **50 PLUs** standard for open or preset item registration. For direct registrations, **12** PLU keys are on the keyboard.
- 12 character programmable descriptors for PLUs and functions.
- Up to 99 PLU Group totals.
- Up to 99 clerks with separate report totals.

Display

The rear display is a 12 digit florescent display that allows your customer to monitor the transaction and view the sale total.

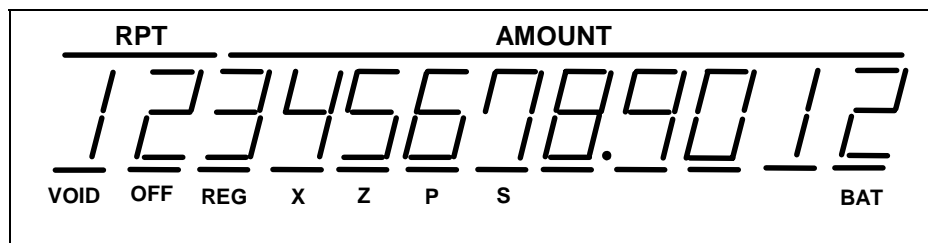
Rear Display Information

Item Count

The number of times an item has been repeated is displayed

Amount

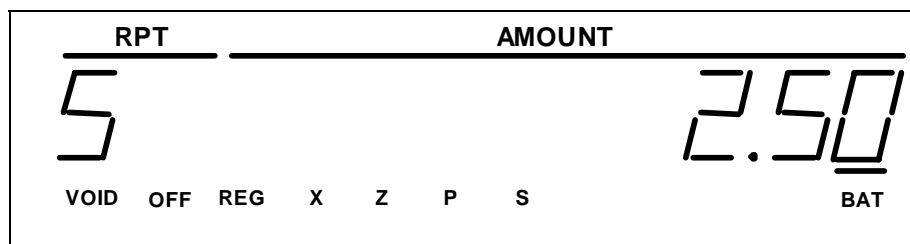
The amount of the item, subtotal or total, is displayed in the rightmost portion of the display



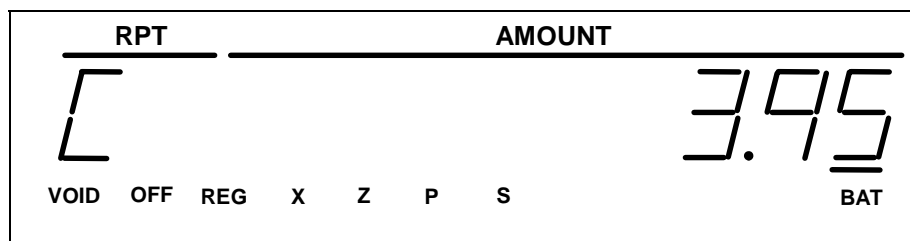
Rear Display Message

C	Change Due
-	Negative entry
Sub	Subtotal of the sale
=	Total of the sale

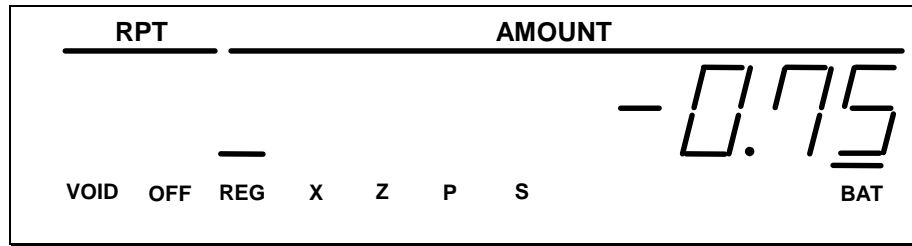
RPT



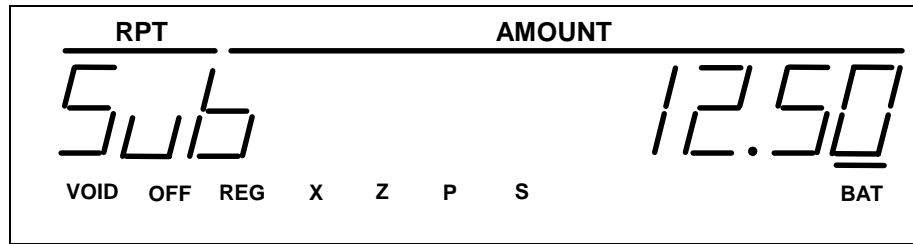
Change Due



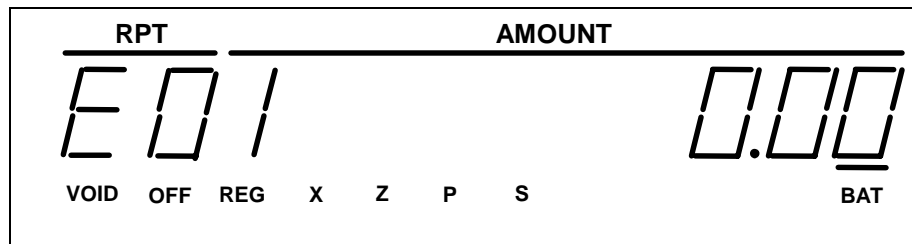
Negative Entry



Subtotal



Numbered Error Conditions



Error Code Table

E0	SEQUENCE ERROR
E1	PLU NO DATA
E2	CLERK ERROR
E3	AMOUNT COUNT OVER
E4	LAN TRAN
E5	COMMUNICATION ERROR
E6	TIME AND DATE
E7	LIMIT OVER
E8	INACTIVE
E9	XMODE ONLY
E10	NONADD
E11	ADDCHECK ERROR
E12	CONDIMENT ERROR
E14	REQ. STOCK
E15	REQ.DRAWER
E17	SCALE
E18	CLERK NOT MATCH
E19	COMPULSORY TARE
E20	REQ.DECLARATION
E21	OFF LINE
E22	REQ.ENDORSEMENT
E23	CONSOL OVER
E24	REQ.SUBTOTAL
E25	PROMO ERROR
E27	REQ. PASSWORD
E28	NO VOID PLU
E29	COM PORT SETUP ERROR
E30	REQ.PRESET VALUE
E31	REQ. OPEN VALUE
E32	REQ. AMOUNT
E33	REQ. PAYMENT
E34	INVALID FUNCTION
E39	REQ. VALID
PER	RECEIPT PRINTER PAPER END

- PFP** SYSTEM ERROR (If this problem occurs, call the service engineer.)
- E42** MEMORY ALLOCATION ERROR
- E43** PLU DELETE ERROR
- E45** PRINTER COVER OPEN
- E50** PRINTER DISCONNECTION ERROR
- E51** LOW BACK UP BATTERY ERROR
- E53** LOW BATTERY WARNING MESSAGE
(It is possible to use but the battery needs to be recharged.)
- E54** LOW BATTERY ERROR
(The machine can not be used any more.)

Keyboards

The *ER-230 Series* keyboard is shown below with the default legends and key assignments.

This configuration has 12 keyboard Department locations. Programmable key locations are shown with a bold border.

ER-230 Standard Keyboard Layout

RECEIPT FEED	-	CLEAR	PLU	X/TIME	#/NS	RA	PO	CLERK	MODE
VOID	+%	7	8	9	1	5	9	CHG1	CHG 2
ERROR CORR	-%	4	5	6	2	6	10	CONV1	CHECK
RETURN	MACRO 1	1	2	3	3	7	11	SBTL	
CANCEL	SCALE	0	00	.	4	8	12	CASH	

ER-230 Alpha Keyboard Layout

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

Memory Clear

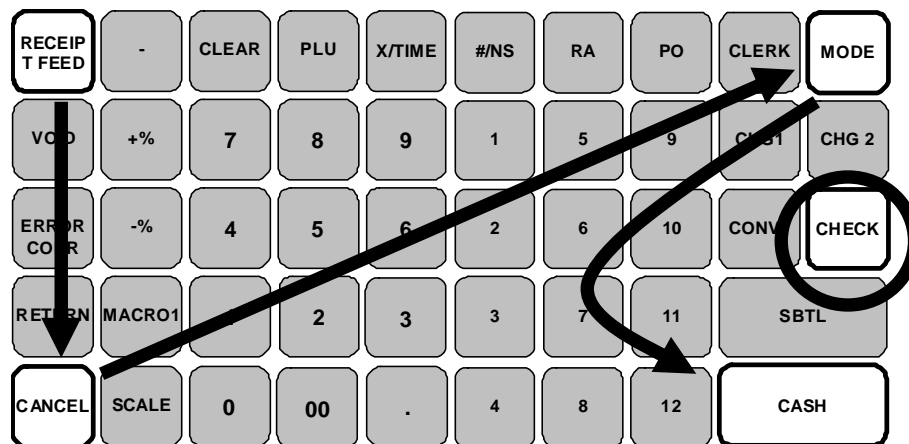
Memory All Clear (RAM Clear)

CAUTION: The procedures described in this area are security sensitive. Clearing all or parts of the *ER-230 Series* memory may cause damage or loss to the program. Do not share this information with unauthorized users.

Perform "**Clear All Totals**", or "**Clear PLU File**" if you wish to clear only parts of *ER-230 Series* memory. Complete clearing of all memory areas and installation of the default program can be done through the following special procedure:

To Perform a Memory All Clear (reset memory completely):

1. Turn the power switch located on the right side of the register to the **OFF** position.
2. Press and hold the key position where the **CHECK** key is located on the default keyboard layout.
3. Continue to hold the **CHECK** key while turning the power switch to the **ON** position.
4. After hear BEEP, release **CHECK** key, "**ALL CLEAR**" will appear on the display.
5. Press the **upper left key** (RECEIPT FEED) of the keyboard, then the **lower left key** (CANCEL), then the **upper right key** (MODE), and finally press the **lower right key** (CASH). "**g”-”O”-”O”-”d**" will appear on the display as you press each key one by one.



6. Display will show "**=====**" while proceeding.
7. When memory is cleared, the register prints a message "**RAM ALL CLEAR OK!**"

Initial Clear (Status Clear)

CAUTION: Do not share this information with unauthorized users.

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

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

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

To Perform an Initial Clear (program restart):

1. Turn the power switch located on the right side of the register to the **OFF** position.
2. Press and hold the key position where the **SBTL** key is located on the default keyboard layout.
3. While continuing to hold the **SBTL** key, turn the power switch to the **ON** position.
4. The message "**INITIAL CLEAR OK!**" prints when the initial clear is complete.

Operating Instructions

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 (#/No Sale)	Use as a non-add key to print up to an 8-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 multiply a quantity of items or calculate split pricing on PLU entries. <i>Also</i> use to display time.
00, 0 - 9, Decimal	Use to make numeric entries in REG, X, Z, VOID, or P 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.
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 (up to 200 lines) when the receipt on/off function is OFF.
CASH OUT (EPROM V1.003)	Use to allow cash out function when EFTPOS terminal is connected and activated. 0(zero) amount cash out will generate a sequence error. This function only allows within a sale.

Keyboard Legend	Description
CHARGE (1 - 8) or EFTPOS	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 (CHEQUE)	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 (CHEQUE) CASHING	Use to exchange a check for cash. Cash-in-drawer and check-in-drawer totals are adjusted.
CHECK (CHEQUE) ENDORSEMENT	Use to print a check endorsement message on an optional slip printer to program an endorsement message.
CLEAR (Esc)	Use to clear entries made into the 10 key numeric pad or X/TIME key before they are printed. Also used to clear error conditions.
CLERK	<p>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.</p> <p>All entries made on the register will report to one of the 15 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.</p> <p>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.</p>
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.
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.
INACTIVE	Use to inactivate the key on the keyboard with warning/error message.
LEVEL (1 – 2)	Use to switch between different price level if price levels 2 is activated.
MACRO (1 - 10)	<p>Macro keys may be programmed to record, and then later perform, up to 50 keystrokes.</p> <p>For example, a macro key could be set to tender (preset tender) a common currency, such as \$5 into the cash key.</p>
MODE	Use to switch operation modes sequentially from VOID , OFF , REG , X , Z , PGM and S then back to VOID with another circle.

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.
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.
PFEED (RECEIPT FEED)	Advances the receipt printer paper one line, or continuously until the key is released.
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.
PRICE INQUIRY	Use to check the price of PLU.
PROMO	The PROMO key allows you to account for promotional items, as in "buy two, get one free". Pressing this key will remove an item's cost from the sale, but will include the sale of the item in the item's sales counter.
RCPT ON/OFF (RECEIPT ON/OFF)	Use to switch receipt printer on/off.
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.
RETURN	Used to return or refund merchandise. Returning an item will also return any tax that may have been applied.
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.
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 SHIFT (1 - 4)	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.
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	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.

Keyboard Legend	Description
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.
% (1 - 5) (percentage or dollar amount; and discount or surcharge)	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.

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** allows you to select stay-down or pop-up operation.

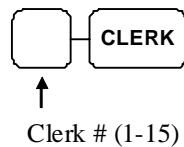
Depending on how your machine has been programmed, sign-on will take place only at the beginning of a shift (stay-down), or may have to be repeated for each transaction (pop-up). If your machine has been programmed for stay-down clerks, the clerk currently signed on must be signed off before another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

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

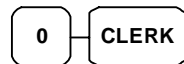
Before any transaction may take place, a clerk must be signed on. Clerk sign-on is accomplished in one of two ways:

Direct Sign-On

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

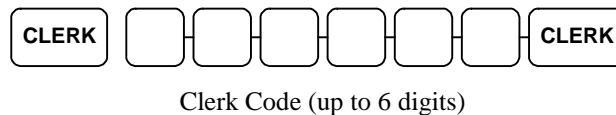


To sign the clerk off, enter 0 (Zero) and press the clerk key.

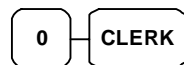


Coded Sign-On

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



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



Receipt On and Off

The **RECEIPT ON/OFF** function key may or may not be located on your keyboard.

If the RECEIPT ON/OFF Key is located on the keyboard

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

Please refer to “**S-Mode Programming - Function Key Assignment**” for detail.

OR

If The RECEIPT ON/OFF Key is NOT located on the keyboard

1. Move to the **X** position.
2. To turn the receipt *off*, enter **9 9**, press the **SBTL** key. Enter **1**, press **CASH**.



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



Item Registrations

All registrations on *ER-230 Series* are made into open or preset PLUs.

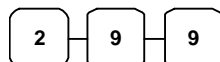
- In place of traditional PLU keys, some PLUs are located directly on the keyboard.
- When more items or categories are needed than the number of PLUs available on the keyboard, registrations can be into PLUs by entering the PLU code number and pressing the **PLU** key on the keyboard or by using a barcode scanner.
- The buffer for item registration is fixed **100 lines**.

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

Keyboard PLU Entry - Open Price / Preset Price Override

1. Enter an amount on the number pad. **Do not use the decimal key.**

For example, for \$2.99, enter:



2. Press a PLU key.

For example, press PLU 1:



Receipt Example:

THANK-YOU		
CALL AGAIN		
DATE	15/01/2003 WED	TIME 08:33
PLU1 T1		\$2.99
GST		\$0.18
TOTAL		\$3.17
CASH		\$3.17
CLERK 1	No.000011	00001

Keyboard PLU Entry - Preset Price

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:



Receipt Example:

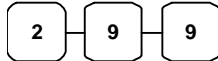
THANK-YOU		
CALL AGAIN		
DATE	15/01/2003 WED	TIME 08:33
PLU5		\$1.29
TOTAL		\$1.29
CASH		\$1.29
CLERK 1	No.000011	00001

Keyboard PLU Entry - Repeat

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.

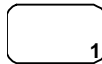
1. Enter an amount on the number pad. **Do not use the decimal key.**

For example, for \$2.99, enter:



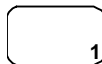
2. Press a PLU key.

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:



Receipt Example:

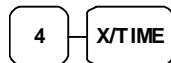
THANK-YOU		
CALL AGAIN		
DATE	15/01/2003 WED	TIME 08:33
PLU1 T1		\$2.99
PLU1 T1		\$2.99
GST		\$0.36
TOTAL		\$6.34
CASH		\$6.34
CLERK 1	No.000011	00001

Keyboard PLU Entry - 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.

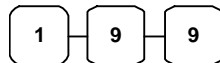
1. Enter the quantity of items being purchased, and then press the **X/TIME** key.

For example, enter **4** on the numeric key pad and press the **X/TIME** key:



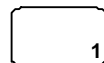
2. Enter an amount on the number pad. **Do not use the decimal key.**

For example, for \$1.99, enter:



3. Press a PLU key.

For example, press PLU **1**:



Receipt Example:

THANK-YOU		
CALL AGAIN		
DATE	15/01/2003 WED	TIME 08:33
4X	@1.99	
PLU1 T1		\$7.96
GST		\$0.48
TOTAL		\$8.44
CASH		\$8.44
CLERK 1	No.000011	00001

Keyboard PLU Entry - Direct Multiplication with Preset Price

When “Direct Multiply” (System Option #18-1) and “Direct Multiply more than one digit” (System Option #20-1) are both set to yes, you can multiply the preset price PLU directly.

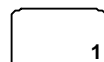
1. Enter the quantity of items being purchased.

For example, enter **4** on the numeric key pad.



2. Press a PLU key.

For example, press PLU **1**:



Receipt Example:

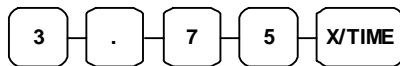
THANK-YOU		
CALL AGAIN		
DATE	15/01/2003 WED	TIME 08:33
4X	@1.99	
PLU1 T1		\$7.96
GST		\$0.48
TOTAL		\$8.44
CASH		\$8.44
CLERK 1	No.000011	00001

Keyboard PLU Entry - Multiplication with Decimal Point

If you are selling items by weight, or if you are selling goods by meter etc., you can multiply a fraction of a unit. It is up to 3 digits after decimal places.

1. Enter the amount with the decimal point, and then press the **X/TIME** key.

For example, for 3.75 kilos of produce, enter:



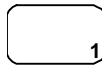
2. Enter an amount on the number pad. **Do not use the decimal key.**

For example, if the price is \$.99 per kilo, enter:



3. Press a PLU key.

For example, press PLU 1:



Receipt Example:

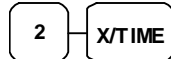
THANK-YOU		
CALL AGAIN		
DATE 15/01/2003 WED	TIME 08:33	
3.75X	@0.99	
PLU1 T1		\$3.71
GST		\$0.22
TOTAL		\$3.93
CASH		\$3.93
CLERK 1	No.000011	00001

Keyboard PLU Entry - Split Pricing

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.

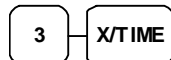
1. Enter the quantity purchased, and then press the **X/TIME** key.

For example, enter:



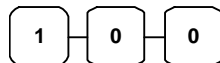
2. Enter the quantity of the group price, and then press the **X/TIME** key.

For example, if the items are priced 3 for \$1.00, enter:



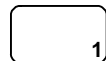
3. Enter an amount on the number pad.

For example, if the items are priced 3 for \$1.00, enter:



4. Press a PLU key.

For example, press PLU 1:



Receipt Example:

THANK-YOU		
CALL AGAIN		
DATE 15/01/2003 WED	TIME 08:33	
2@3FOR @1.00		
PLU1 T1		\$0.67
GST		\$0.04
TOTAL		\$0.71
CASH		\$0.71
CLERK 1	No.000011	00001

Keyboard PLU Entry - Single Item

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.

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:



Receipt Example:

THANK-YOU		
CALL AGAIN		
DATE 15/01/2003 WED	TIME 08:33	
PLU6		\$1.29
TOTAL		\$1.29
CASH		\$1.29
CLERK 1	No.000011	00001

Code PLU Entry - Open Price

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.

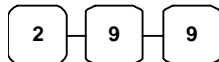
1. Enter the PLU number; press the **PLU** key.

For example, enter:



2. Enter an amount on the number pad. **Do not use the decimal key.**

For example, for \$2.99, enter:



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



Receipt Example:

THANK-YOU		
CALL AGAIN		
DATE	15/01/2003 WED	TIME 08:33
PLU2 T1		\$2.99
GST		\$0.18
TOTAL		\$3.17
CASH		\$3.17
CLERK 1	No.000011	00001

Code PLU Entry - Preset Price / Single Item

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

For example, enter:



Receipt Example:

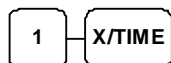
THANK-YOU		
CALL AGAIN		
DATE	15/01/2003 WED	TIME 08:33
PLU1		\$1.29
TOTAL		\$1.29
CASH		\$1.29
CLERK 1	No.000011	00001

Code PLU Entry - Preset Price Override

If the OVERRIDE PRESET is set to Y (yes), the PLU is operating as a preset override PLU. See "PLU Programming" in the "Program Mode Programming" chapter to program PLU descriptors and options.

1. Enter the quantity of items being purchased, and then press the **X/TIME** key, even there is only one item.

For example, enter **1** on the numeric key pad and press the **X/TIME** key:



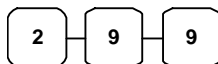
2. Enter the PLU number; press the **PLU** key.

For example, enter:



3. Enter an amount on the number pad. *Do not use the decimal key.*

For example, for \$2.99, enter:



4. Press the **PLU** key again.



Receipt Example:

THANK-YOU		
CALL AGAIN		
DATE	15/01/2003 WED	TIME 08:33
1	@\$2.99	
PLU2 T1		\$2.99
GST		\$0.18
TOTAL		\$3.17
CASH		\$3.17
CLERK 1	No.000011	00001

Code PLU Entry - Repeat

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

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

For example, enter:



2. To register a second item exactly as the first, press the **PLU** key again.



Receipt Example:

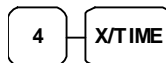
THANK-YOU		
CALL AGAIN		
DATE	15/01/2003 WED	TIME 08:33
PLU1 T1		\$2.99
PLU1 T1		\$2.99
GST		\$0.36
TOTAL		\$6.34
CASH		\$6.34
CLERK 1	No.000011	00001

Code PLU Entry - 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:



Receipt Example:

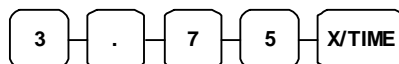
THANK-YOU CALL AGAIN		
DATE 15/01/2003 WED	TIME 08:33	
4X	@1.99	
PLU1 T1		\$7.96
GST		\$0.48
TOTAL		\$8.44
CASH		\$8.44
CLERK 1	No.000011	00001

Code PLU Entry - Multiplication with Decimal Point

If you are selling items by weight, or if you are selling goods by meter etc., you can multiply a fraction of a unit. It is up to 3 digits after decimal places.

1. Enter the quantity with the decimal point, and then press the **X/TIME** key.

For example, for 3.75 kilos of produce, enter:



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

For example, enter:



Receipt Example:

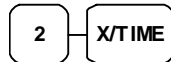
THANK-YOU CALL AGAIN		
DATE 15/01/2003 WED	TIME 08:33	
3.75X	@2.99	
PLU3 T1		\$11.21
GST		\$0.67
TOTAL		\$11.88
CASH		\$11.88
CLERK 1	No.000011	00001

Code PLU Entry - Split Pricing

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.

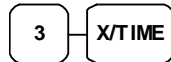
1. Enter the quantity purchased, and then press the **X/TIME** key.

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:



Receipt Example:

THANK-YOU		
CALL AGAIN		
DATE	15/01/2003 WED	TIME 08:33
2@3FOR	@2.99	
PLU3 T1		\$1.99
GST		\$0.12
TOTAL		\$2.11
CASH		\$2.11
CLERK 1	No.000011	00001

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.

This is often used to change the size, package, pricing or even eaten/takeaway, hot/cold etc., status of PLUs. Discuss your requirements with your dealer. The PLU Report lists these items separately.

Modifiers can be:

- **Stay down** so that registrations will be modified by the same modifier until another modifier is selected,
- **Pop-up after each item** to register, for example large, medium or small soft drink,
- **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

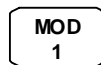
For example: PLU 1 is DRINK for \$1.00 and PLU#1001 is DRINK for \$1.25 as large. The Modifier 1 Key descriptor is LARGE.

1. Press a preset PLU key.

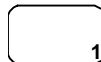
For example, press PLU **1** with a price of \$1.00.



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.

Receipt Example:

THANK-YOU		
CALL AGAIN		
DATE	15/01/2003 WED	TIME 08:33
DRINK		\$1.00
LARGE		
DRINK		\$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 5 different preset prices. Price Level keys shift the price that is being registered. Levels can be:

This feature allows you to change on item price. Often used for medium/large, eatin/takeaway, hot/cold drinks etc. The PLU Report will combine the price levels. Discuss your needs with your dealer.

- **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.

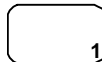
See "**System Options**" in the "**Program Mode Programming**" chapter to set how the price level keys operate.

Pop-Up Price Level Keys

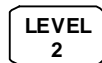
For example: PLU 1 is DRINK and price level 1 is \$1.00 and price level 2 is \$2.00 as large.

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.

Receipt Example:

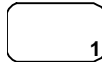
THANK-YOU		
CALL AGAIN		
DATE	15/01/2003 WED	TIME 08:33
DRINK		\$1.00
DRINK		\$2.00
PLU2		\$1.50
TOTAL		\$4.50
CASH		\$4.50
CLERK 1	No.000011	00001

Promo

The **PROMO** key allows you to account for promotional items, as in "buy two, 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.

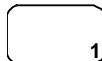
For example, press PLU 1 programmed with a price of \$1.00 for price level 1.



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.



Receipt Example:

THANK-YOU		
CALL AGAIN		
DATE 15/01/2003 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** 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

Receipt Example:

THANK-YOU		
CALL AGAIN		
DATE 15/01/2003 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 is 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 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.

These keys will be pre-programmed to operate on EITHER **PLUS** (item) OR **SUBTOTALS** (sale), but not both; EITHER **MINUS** (discount) OR **PLUS** (surcharges), but not both; EITHER **RATE** (percentage) OR **AMOUNT** (Dollar), but not both.

So, if you want to discount items but not every item in a sale, you will need two % keys. To discount on the whole sale, you will need to press SUBTOTAL first.

Preset Percent Discount on an Item

In this example the %1 function is programmed with **Percentage, Negative, Item, Preset** and **Overridable** with a **rate of 10%**. Please refer to **% (1 ~ 5) (Discounts or Surcharges)** in **Function Key Programming in Program Mode Programming** for more detail.

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

% 1
3. The discount is automatically subtracted.

Receipt Example:

THANK-YOU CALL AGAIN		
DATE 15/01/2003 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

3

.

3

3

3

3. Press the %1 key:

% 1
4. The discount is automatically subtracted.

Receipt Example:

THANK-YOU CALL AGAIN		
DATE 15/01/2003 WED	TIME 08:33	
PLU2	\$10.00	
% 1	-33.333%	
AMOUNT	-3.33	
TOTAL	\$6.67	
CASH	\$6.67	
CLERK 1	No.000011	00001

Preset Percent Discount on Sale Total

In this example the %1 function is programmed with **Percentage, Negative, Sale, Preset** and **Overridable** with a **rate of 10%**. Please refer to **% (1 ~ 5) (Discounts or Surcharges)** in **Function Key Programming in Program Mode Programming** for more detail.

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

SBTL

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

% 1

4. The discount is automatically subtracted.

Receipt Example:

THANK-YOU		
CALL AGAIN		
DATE 15/01/2003 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 Sale Total

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

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

SBTL

3. Enter the percentage, and then press the appropriate discount key.

For example, for 15% enter:

1 **5** **%1**

4. The surcharge is automatically added.

Receipt Example:

THANK-YOU		
CALL AGAIN		
DATE 15/01/2003 WED	TIME 08:33	
PLU2	\$10.00	
% 1	15.000%	
AMOUNT	\$1.50	
TOTAL	\$11.50	
CASH	\$11.50	
CLERK 1	No.000011	00001

For Surcharge Operation

When a % function is preset with “Percentage, **Positive**, Item, Preset and Overridable” or “Percentage, **Positive**, Sale, Preset and Overridable” with a preset percentage rate, the % function key will perform as a **Surcharge** on Item or Sale. Of course a override rate can be put in manually. Please refer to operation sequences on previous.

For setting, please refer to **% (1 ~ 5) (Discounts or Surcharges)** in **Function Key Programming in Program Mode Programming** for more detail.

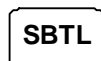
Dollar Amount Discount on Sale

When programmed as "amount", "sale", "open" and "negative", a % key will deduct an amount from a sale. Also, depending upon programming:

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

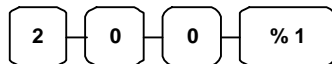
In this example, a discount may be entered only once, and you must first press **SBTL**.

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



3. Enter the amount of the discount, and then press the appropriate % key.

For example:



4. The discount is subtracted.

Receipt Example:

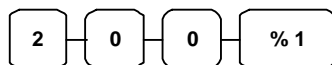
THANK-YOU		
CALL AGAIN		
DATE 15/01/2003 WED	TIME 08:33	
PLU2		\$10.00
% 1		-2.00
TOTAL		\$8.00
CASH		\$8.00
CLERK 1	No.000011	00001

Dollar Amount Discount on Item

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

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

For example:



3. The discount is automatically subtracted.

Receipt Example:

THANK-YOU		
CALL AGAIN		
DATE 15/01/2003 WED	TIME 08:33	
PLU1		\$10.00
% 1		-2.00
TOTAL		\$8.00
CASH		\$8.00
CLERK 1	No.000011	00001

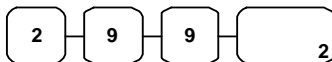
Return Merchandise Registrations

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.

Receipt Example:

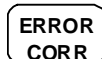
THANK-YOU		
CALL AGAIN		
DATE 15/01/2003 WED	TIME 08:33	
RETURN *****		
PLU2 T1		-2.99
GST AMT		-0.18
TOTAL		-3.17
CASH		-3.17
CLERK 1	No.000011	00001

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:



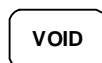
Receipt Example:

THANK-YOU CALL AGAIN		
DATE 15/01/2003 WED	TIME 08:33	
PLU1 T1		\$2.29
PLU2		\$1.29
ERR CORR	-----	
PLU2		-1.29
GST AMT		\$0.14
TOTAL		\$2.43
CASH		\$2.43
CLERK 1	No.000011	00001

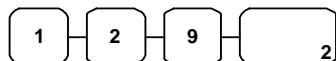
Void Previous Item

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.



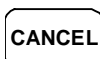
Receipt Example:

THANK-YOU CALL AGAIN		
DATE 15/01/2003 WED	TIME 08:33	
PLU2		\$1.29
PLU1 T1		\$2.29
VOID	-----	
PLU2		-1.29
GST 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



Receipt Example:

THANK-YOU		
CALL AGAIN		
DATE 15/01/2003 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.

THANK-YOU		
CALL AGAIN		
DATE 15/01/2003 WED	TIME 08:33	
VOID MODE *****		
PLU1 T1		-2.29
PLU2		-1.00
GST AMT		-0.14
TOTAL		-3.43
CASH		-3.43
CLERK 1	No.000011	00001

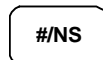
NB. Be sure to turn the key back when finished.

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.

Receipt Example:

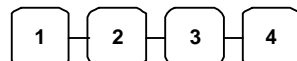
THANK-YOU		
CALL AGAIN		
DATE 15/01/2003 WED	TIME 08:33	
NO SALE -----		
CLERK 1	No.000011	00001

Non Add Number

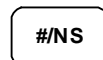
You can also use the **#/NO SALE** key to print any number (up to 9 digits) on the printer paper. You can enter the number any time during a transaction. For example, if you wish to record a checking account number, enter the number and press the **#/NO SALE** key before totaling the sale with the **CHECK**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

1. Register the items you wish to sell.
2. Enter the number you wish to record.

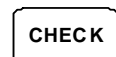
For example enter:



3. Press **#/NS**:



4. Press **CHECK**:



Receipt Example:

THANK-YOU		
CALL AGAIN		
DATE 15/01/2003 WED	TIME 08:33	
PLU1 T1		\$2.99
NON-ADD#	1234	
GST AMT		\$0.18
TOTAL		\$3.17
CHECK		\$3.17
CLERK 1	No.000011	00001

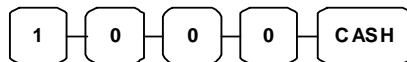
Received On Account Operations

You can use one of the received on account functions (**RA1-RA3**) to accept cash or checks 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.

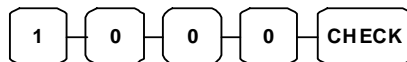
1. Press one of the received on account keys (**RA1-RA3**)



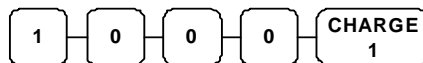
2. Enter the amount of cash received, press **CASH**.



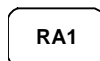
3. Enter the check amount received, and press **CHECK**.



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.



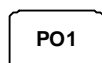
Receipt Example:

THANK-YOU		
CALL AGAIN		
DATE	15/01/2003 WED	TIME 08:33
RA1		
CASH		\$10.00
CHECK		\$10.00
CHARGE1		\$10.00
RA1		\$30.00
CLERK 1	No.000011	00001

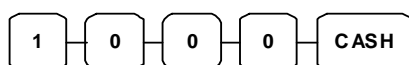
Paid Out Operations

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

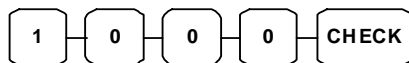
1. Press one of the paid out keys (**PO1-PO3**)



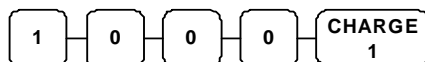
2. Enter the amount of cash paid out, press **CASH**.



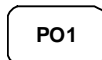
3. Enter the check amount paid out, and press **CHECK**.



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



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



Receipt Example:

THANK-YOU		
CALL AGAIN		
DATE	15/01/2003 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 **SBTL**. 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.

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**:

A rectangular button with rounded corners and a thin border, containing the word "CASH" in bold, uppercase letters.
3. The display will indicate the total amount of the cash sale.

Receipt Example:

THANK-YOU		
CALL AGAIN		
DATE	15/01/2003 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**:

A rectangular button with rounded corners and a thin border, containing the word "CHECK" in bold, uppercase letters.
3. The display will indicate the total amount of the cash sale.

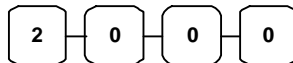
Receipt Example:

THANK-YOU		
CALL AGAIN		
DATE	15/01/2003 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.

Receipt Example:

THANK-YOU CALL AGAIN			
DATE	15/01/2003 WED	TIME	08:33
PLU1	T1		\$2.99
PLU1	T1		\$2.99
4X		\$1.99	
PLU2			\$7.96
GST			\$0.36
TOTAL			\$14.30
CASH			\$20.00
CHANGE			\$5.70
CLERK	1	No.000011	00001

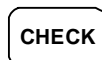
Tendering a Check Sale

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.

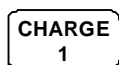
Receipt Example:

THANK-YOU CALL AGAIN			
DATE	15/01/2003 WED	TIME	08:33
PLU1	T1		\$2.99
PLU1	T1		\$2.99
4X		\$1.99	
PLU2			\$7.96
GST			\$0.36
TOTAL			\$14.30
CHECK			\$20.00
CHANGE			\$5.70
CLERK	1	No.000011	00001

Totaling a Charge (EFTPOS) Sale

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

1. Register the items you wish to sell.
2. Press one of the charge key if it is located on the keyboard:



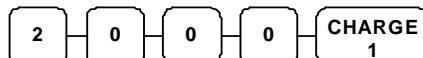
Receipt Example:

THANK-YOU CALL AGAIN		
DATE 15/01/2003 WED	TIME 08:33	
PLU1 T1		\$2.99
PLU1 T1		\$2.99
4X	\$1.99	
PLU2		\$7.96
GST		\$0.36
TOTAL		\$14.30
CHARGE1		\$14.30
CLERK 1	No.000011	00001

Tendering a Charge (EFTPOS) 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:



Receipt Example:

THANK-YOU CALL AGAIN		
DATE 15/01/2003 WED	TIME 08:33	
PLU1 T1		\$2.99
PLU1 T1		\$2.99
4X	\$1.99	
PLU2		\$7.96
GST		\$0.36
TOTAL		\$14.30
CHARGE1		\$20.00
CHANGE		\$5.70
CLERK 1	No.000011	00001

Cash Out within a Charge (EFTPOS) Sale (*EPROM v1.006 and later*)

CASH OUT within a charge (EFTPOS) sale may or may not be allowed. See "**Function Key Assignment Programming**" in the "**Service Mode Programming**" chapter to assign **CASH OUT** key.

1. Register the items you wish to sell.
2. Enter the amount of cash for cash out then press **CASH OUT** key.

2 0 0 0 CASH OUT

3. Press **EFTPOS** key.

EFTPOS

Receipt Example:

THANK-YOU		
CALL AGAIN		
DATE 15/01/2003 WED	TIME 08:33	
PLU1 T1		\$2.99
PLU1 T1		\$2.99
4X	\$1.99	
PLU2		\$7.96
GST		\$0.36
SUBTOTAL		\$14.30
CASH OUT		\$20.00
EFTPOS		\$34.30
CHANGE		\$20.00
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.

Receipt Example:

THANK-YOU		
CALL AGAIN		
DATE 15/01/2003 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.

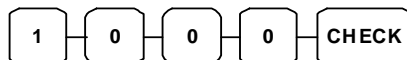
1. Register the items you wish to sell.
2. Enter the amount of cash tendered by the customer.

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.

Receipt Example:

THANK-YOU		
CALL AGAIN		
DATE 15/01/2003 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.

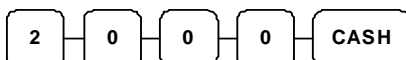
1. Register the items you wish to sell.

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.

Receipt Example:

THANK-YOU		
CALL AGAIN		
DATE 15/01/2003 WED	TIME 08:33	
PLU1 T1		\$2.00
GST		\$0.12
CASH		\$2.12
CLERK 1	No.000011	00001

Currency Conversion

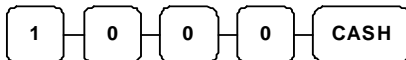
If you normally accept currency from neighboring nations, you can program to convert the subtotal of a sale to the equivalent cost in the foreign currency. You can set up four separate conversion functions for different foreign currencies. To do this, you need to program the conversion factor. For example, 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!**

Receipt Example:

THANK-YOU		
CALL AGAIN		
DATE 15/01/2003 WED	TIME 08:33	
PLU1 T1		\$2.00
GST		\$0.12
TOTAL		\$2.12
CONV 1		¥2.90
CHANGE RATE	@1.3720	
HOME AMT.		\$10.00
CHANGE		\$5.17
CLERK 1	No.000011	00001

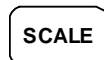
The currency symbol you program will display here. See "Print Option Programming" in the "Program Mode Programming" chapter.

Scale Entry

Direct Scale Entry

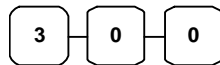
Place a product on the scale and access the **SCALE** function to display the weight on the cash register. Then make the appropriate entry; the PLU must have "**scalable**" status.

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



3. Note that the weight is displayed on the screen. Enter the price per **kilo** on the number pad. *Do not use the decimal key.*

For example, for \$3.00, enter:



4. Press a PLU key.

For example, press PLU 1:



Receipt Example:

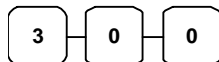
THANK-YOU		
CALL AGAIN		
DATE 15/01/2003 WED	TIME 08:33	
1.50 kg	@3.00/kg	
PLU1		\$4.50
GST		\$0.27
TOTAL		\$4.77
CASH		\$4.77
CLERK 1	No.000011	00001

Automatic Scale Entry

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

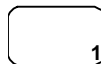
1. Place an item on the scale.
2. Press a PLU key, if the item is a preset item, or enter the price per **kilo** on the number pad. *Do not use the decimal key.*

For example, for \$3.00, enter:



3. Press a PLU key.

For example, press PLU 1:



Receipt Example:

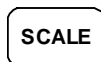
THANK-YOU CALL AGAIN		
DATE 15/01/2003 WED	TIME 08:33	
1.50 kg	@3.00/kg	
PLU1		\$4.50
GST		\$0.27
TOTAL		\$4.77
CASH		\$4.77
CLERK 1	No.000011	00001

Tare Weight Entry

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

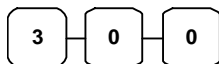


3. Press the **SCALE** key.



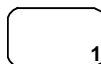
4. Note that the weight, less the tare weight, is displayed on the screen. Enter the price per kilo on the number pad. *Do not use the decimal key.*

For example, for \$3.00, enter:



5. Press a PLU key.

For example, press PLU 1:



Receipt Example:

THANK-YOU CALL AGAIN		
DATE 15/01/2003 WED	TIME 08:33	
1.50 kg	@3.00/kg	
PLU1		\$4.50
GST		\$0.27
TOTAL		\$4.77
CASH		\$4.77
CLERK 1	No.000011	00001

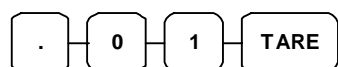
Manual Tare Weight Entry

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

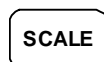


3. Enter the weight of the tare.

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

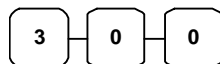


4. Press the **SCALE** key.



5. Note that the weight, less the tare weight, is displayed on the screen. Enter the price per **kilo** on the number pad. **Do not use the decimal key.**

For example, for \$3.00, enter:



6. Press a PLU key.

For example, press PLU **1**:



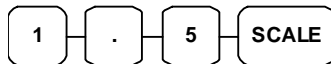
Receipt Example:

THANK-YOU		
CALL AGAIN		
DATE 15/01/2003 WED	TIME 08:33	
1.50 kg	@3.00/kg	
PLU1		\$4.50
GST		\$0.27
TOTAL		\$4.77
CASH		\$4.77
CLERK 1	No.000011	00001

Manual Weight Entry

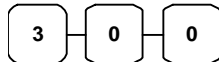
Operators can make manual weight entries if the item has been programmed to accept them. You must use the decimal key to enter fractional manual weights.

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 **kilo** on the number pad. *Do not use the decimal key.*

For example, for \$3.00, enter:



4. Press a PLU key.

For example, press PLU 1:



Receipt Example:

THANK-YOU		
CALL AGAIN		
DATE	15/01/2003 WED	TIME 08:33
1.50 kg MANUAL WT. @ @3.00		
PLU1		\$4.50
GST		\$0.27
TOTAL		\$4.77
CASH		\$4.77
CLERK 1	No.000011	00001

X/Z Mode

Introduction

All Management Functions take place with the control lock in the **X** 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.

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

A complete list of available reports is presented in 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.

Running a Report - General Instructions

1. Refer to the “**Report Table**” and “**Electronic Journal Table**”.
2. Select a report type and the report mode.
3. Turn the control lock to the position indicated.
4. Enter the key sequence for the report you have selected.

Report Table

Report Type	Report Number	Report Mode	Control Lock Position	Key Sequence
Financial	1	X Z X2 Z2	X Z X Z	1 – SBTL 1 – SBTL 201 – SBTL 201 – SBTL
Time	2	X Z X2 Z2	X Z X Z	2 – SBTL 2 – SBTL 202 – SBTL 202 – SBTL
All PLU	3	X Z X2 Z2	X Z X Z	3 – SBTL 3 – SBTL 203 – SBTL 203 – SBTL
All Clerk	4	X Z X2 Z2	X Z X Z	4 – SBTL 4 – SBTL 204 – SBTL 204 – SBTL
Group	5	X Z X2 Z2	X Z X Z	5 – SBTL 5 – SBTL 205 – SBTL 205 – SBTL
All STOCK	6	X Z	X Z	6 – SBTL 6 – SBTL
Daily Sales	8	X2 Z2	X Z	208 – SBTL 208 – SBTL
Individual Clerk Report	9	X X2	X X	9-SBTL-#-CLERK-#-CLERK 209-SBTL-#-CLERK-#-CLERK
From/To PLU	13	X X2	X X	13-SBTL XXXX – PLU – XXXX – PLU 213-SBTL XXXX – PLU – XXXX – PLU
From/To STOCK	14	X	X	14-SBTL XXXX –PLU – XXXX – PLU
DRAWER TOTAL	111	X	X	111-SBTL

Electronic Journal Table

Report Type	Report Number	Report Mode	Control Lock Position	Key Sequence
PRINT ALL EJ	300	X	X	300 -SBTL
PRINT EJ CASH	301	X	X	301 -SBTL
PRINT EJ CHECK	302	X	X	302 -SBTL
PRINT EJ MISC/T	303	X	X	303 -SBTL
PRINT EJ %	304	X	X	304 -SBTL
PRINT EJ RA/PO	305	X	X	305 -SBTL
PRINT EJ RETURN	306	X	X	306 -SBTL
PRINT EJ EC/VOID	307	X	X	307 -SBTL
PRINT EJ NO SALE	308	X	X	308 -SBTL
PRINT EJ CANCEL	309	X	X	309 -SBTL
PRINT EJ BY CLERK	401 – 15	X	X/Z	401-415(depends on Max Clerk)-SBTL
EJ RESET (No Printing)	399	Z	Z	399- SBTL

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.

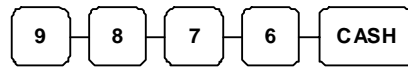
For example:

1. Move to the **X** or **Z** position
(depending upon the type of report
you are taking.)

2. Press the **SBTL** key.



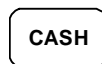
3. Enter the total of cash.



4. Enter the total of checks.



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



Receipt Example:

DATE 15/01/2003 WED	TIME 08:33
*** CASH DECLARATION ***	
C A S H	\$98.76
C H E C K	\$20.00
INPUT AMT	\$118.76
DRAWER TTL	\$118.76
DIFFERENCE	\$0.00
CLERK 1	No.000001 00000

Service Mode Programming

Overview

The following procedures are done from the Service Mode menu:

- *Program 20 - Clear All Sales Totals*
- *Program 30 - Clear Grand Total*
- *Program 40 - Clear / Delete PLU File*
- *Program 50 - EPROM Information*
- *Program 60 - Memory Allocation Programming / Scan*
- *Program 70 - Function Key Assignment Programming*
- *Program 8x - RS232C Serial Ports Communication Options*

Memory Allocation Scan

1. Switch to **S** Mode by press **MODE** function key to scan the allocated memory.
2. Enter **60**, press the **SBTL** key.



3. Press **CASH** key.



PC Online Mode

In *ER-230 Series*, there are no special commands to enter PC Online Mode.

When you want to enter PC Online mode, all you have to do is to set 232 Communication Option in Programming.

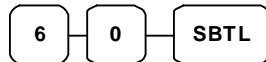
When PC sends commands to ECR, The ECR will be automatically Online Mode if connected.

Memory Allocation

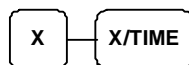
NB. This will clear the Memory!

Program 60 - Memory Allocation Programming

1. Switch to **S** Mode by press **MODE** function key.
2. To Allocate Memory, enter **60**, and then press the **SBTL** key.



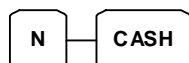
3. Refer to the chart below. Enter the index number and press the **X/TIME** key.



X	MEMORY ITEM
1	PLU
2	CLERK
3	GROUP
4	<i>Reserved</i>
5	<i>Reserved</i>
6	<i>Reserved</i>
7	PRICE LEVEL
8	MIX AND MATCH
9	ELECTRONIC JOURNAL LINE # (EJ LINE #)

4. Enter the Number to allocate for the Memory Item and Press **CASH** key.

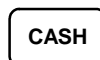
See the example data table below



MEMORY ITEM	N
PLU	50 (Max.5000)
CLERK	5 (Max. 99)
GROUP	20 (EPROM v1.003) 5 (Max. 99)
	<i>Reserved</i>
	<i>Reserved</i>
	<i>Reserved</i>
PRICE LEVEL	1 (Max. 2)
MIX AND MATCH	20 (Max. 99)
EJ LINE #	3000 (EPROM v1.003) 300 (Max. 15000?)

※Default values have been highlighted in **bold** print

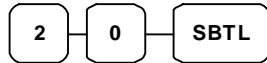
5. If you want to finish memory allocation, Enter **CASH** key with no numeric key input. If you want to allocate another memory area, repeat step 3 and 4.



Clear All Sales Totals

Program 20 - Clear All Sales Totals

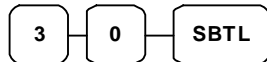
1. Switch to **S** Mode by press **MODE** function key.
2. To Reset Total, enter 20, and then press the SBTL key.



Clear Grand Total

Program 30 - Clear Grand Total

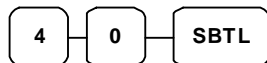
1. Switch to **S** Mode by press **MODE** function key.
2. To Reset Grand Total, enter 30, and then press the SBTL key.



Clear / Delete PLU File

Program 40 - Clear / Delete PLU File

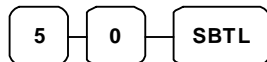
1. Switch to **S** Mode by press **MODE** function key.
2. To Reset PLU file, enter 40, and then press the SBTL key.



EPROM Information

Program 50 - EPROM Information

1. Switch to **S** Mode by press **MODE** function key.
2. To Scan EPROM Information, enter 50, and then press the SBTL 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.

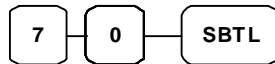
Program 70 - Function Key Assignment Programming

Please note the following limitations:

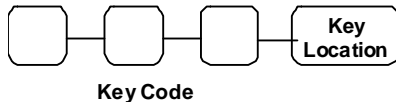
- If you assign a duplicate of a function code, the duplicate will function exactly as the original - you will not get separate totals and counters on reports for the duplicated key.
- You can reassign keys only in locations that are programmable. See "Keyboards", where the key locations that may be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

To Assign a Function Key to a Location:

1. Switch to **S Mode** by press **MODE** function key.
2. Enter 70, and then press the **SBTL** key.



3. Refer to Function Key Codes 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 Codes

Code	Function	Code	Function	Code	Function	Code	Function
1	NLU 1	327	CHARGE 5	359	MACRO 4	390	NOT USED
~ 50	~ NLU 50	328	CHARGE 6	360	MACRO 5	391	TAXEXMT
51	NOT USED	329	CHARGE 7	361	MACRO 6	392	TAX SHIFT 1
~ 300	~ NOT USED	330	CHARGE 8	362	MACRO 7	393	TAX SHIFT 2
301	Numeric 1	331	CHECK CASHING	363	MACRO 8	394	TAX SHIFT 3
302	Numeric 2	332	ENDORSE	364	MACRO 9	395	TAX SHIFT 4
303	Numeric 3	333	CHECK TEND	365	MACRO 10	396	NOT USED
304	Numeric 4	334	NOT USED	366	MDSE RETURN	397	NOT USED
305	Numeric 5	335	CLEAR (ESC)	367	MOD 1	398	VOID ITEM
306	Numeric 6	336	CLERK #	368	MOD 2	399	WASTE
307	Numeric 7	337	CURR.CONV.1	369	MOD 3	400	NOT USED
308	Numeric 8	338	CURR.CONV.2	370	MOD 4	401	VALIDATION
309	Numeric 9	339	CURR.CONV.3	371	MOD 5	402	PRICE INQUIRY
310	Numeric 0	340	CURR.CONV.4	372	NOT USED	403	CASH OUT (EPROM v1.003)
311	Numeric 00	341	NOT USED	~ 374	~ NOT USED		
312	DECIMAL	342	NOT USED	375	PAID OUT 1	404	NOT USED
313	#/NS	343	ERR CORRECT	376	PAID OUT 2	~ 444	NOT USED
314	%1	344	F/S SHIFT	377	PAID OUT 3	445	RCPT ON/OFF
315	%2	345	F/S SUB	378	PAPER FEED	446	MODE
316	%3	346	F/S TEND	379	NOT USED	447	INACTIVE
317	%4	347	NOT USED	380	NOT USED	448	NON ADD
318	%5	~ 349	~ NOT USED	381	PROMO	449	NOT USED
319	X/TIME	350	PLU	382	REC ON ACCT 1		
320	ADD CHECK	351	PRICE LEVEL 1	383	REC ON ACCT 2		
321	CANCEL	352	PRICE LEVEL 2	384	REC ON ACCT 3		
322	CASH	353	NOT USED	385	SUB TOTAL		
323	CHARGE 1	~ 355	~ NOT USED	386	SCALE		
324	CHARGE 2	356	MACRO 1	387	NOT USED		
325	CHARGE 3	357	MACRO 2	388	NOT USED		
326	CHARGE 4	358	MACRO 3	389	TARE		

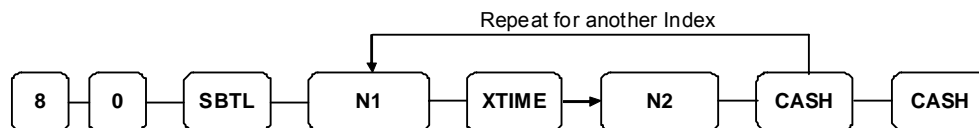
RS232C Serial Ports Communication Options

You must define the device that is attached to the RS-232C communications port, and the options for the device. **The Default is Comm1 is set to PC Polling**

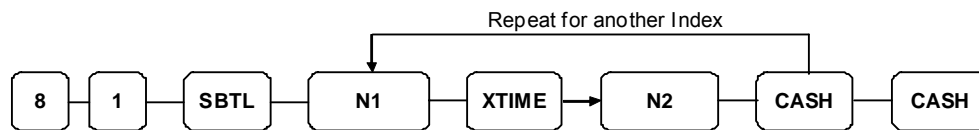
Program 8x - RS232C Serial Ports Communication Options

1. Switch to **S** Mode by press **MODE** function key.
2. Enter **8 0** and press the **SBTL** key to Program Port 1 OR
Enter **8 1** and press the **SBTL** key to Program Port 2.
3. Refer to the chart RS-232C option chart that follows and enter the number of the address you wish to program and press the **X/TIME** key.
4. Enter the value that represents your selection and press the **CASH** key.
5. Repeat from step 2 for any additional options you wish to program.
6. Press **CASH** to exit the program

PORT 1



PORT 2



N1	OPTION	N2	VALUE
1	Baud Rate	0	9600 BPS
		1	1200 BPS
		2	2400 BPS
		3	4800 BPS
		4	19200 BPS
		5	38400 BPS
		6	57600 BPS
		7	115200 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

N1	OPTION	N2	VALUE
5	Device Function (Port1 is set to 1 PC as default (EPROM v1.014); Port2 is set to 0 NONE as default)	0	NONE
		1	PC
		2	SCALE
		4	RECEIPT PRINTER
		6	SCANNER
		8	EFT
6	Initial Feeding Line KP	0 – 20	0
7	End Feeding Line KP	0 – 20	7
8	Initial Feeding Line Slip	0 – 20	0
9	<i>Reserved</i>		
10	Scale Type	0	NCI
		1	CAS
11	Printer Type	0	NONE
		1	SAM4S ELLIX 10
		2	SAM4S ELLIX 20
		3	CITIZEN3550/3551
		4	CITIZEN810
		5	CITIZEN230
		6	EPSON TMT88-2
		7	EPSON U200
		8	EPSON U295
		9	EPSON U300
		10	EPSON U325
		11	EPSON U375
		12	STAR SP-200
		13	STAR SP-298
		14	STAR SP-300
		15	STAR TSP-200
12	<i>Reserved</i>		
13	EFT Type	0	EFT GLED
		1	EFT INGE
		2	EFT ZVT700
		3	TYRO EFTPOS (EPROM v1.003)
		4	EFT NZINGE (EPROM v1.003)

N1	OPTION	N2	VALUE
14	EFT Config Byte	0 – 127	0
15	EFT Currency	0	NONE
		1	DM
		2	EURO
16	EFT Password	0- 99999999	0

※Default values have been highlighted in **bold** print

*Remote Journal Printer

Program Mode Programming

Default Programming

- All keyboard PLUs are **Taxable, Preset** and **Override**, without entry limits by default status programming of “**400000000**”.
- 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 **P** position. Each section details a specific area of register programming.
- The Default program is set to **10.000% VAT on Tax 1** and the description is set to **GST** already.

Descriptor Programming

Descriptors are programmable for PLUs, function keys, groups, clerks and the logo/messages. During descriptor programming, the keyboard button functions changes to the layout shown below.

Program Overlay Method

ER-230 Alpha Keyboard Overlay

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

Descriptor Code

Descriptor Code Chart

CHAR	Ç	ü	é	â	ä	à	å	ç	ê	ë
CODE	001	002	003	004	005	006	007	008	009	010
CHAR	è	ï	î	ì	Ä	Å	É	æ	Æ	ô
CODE	011	012	013	014	015	016	017	018	019	020
CHAR	ö	ò	û	ù	ÿ	Ö	Ü	▪	£	¥
CODE	021	022	023	024	0250	026	027	028	029	030
CHAR	€	SPACE	!	"	#	\$	%	&	'	(
CODE	031	032	033	034	035	036	037	038	039	040
CHAR)	*	+	,	-	.	/	0	1	2
CODE	041	042	043	044	045	046	047	048	049	050
CHAR	3	4	5	6	7	8	9	:	;	<
CODE	051	052	053	054	055	056	057	058	059	060
CHAR	=	>	?	@	A	B	C	D	E	F
CODE	061	062	063	064	065	066	067	068	069	070
CHAR	G	H	I	J	K	L	M	N	O	P
CODE	071	072	073	074	075	076	077	078	079	080
CHAR	Q	R	S	T	U	V	W	X	Y	Z
CODE	081	082	083	084	085	086	087	088	089	090
CHAR							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				

Tax Programming

The *ER-230 Series* has the capability to support four separate taxes.

Taxes can be calculated as either a straight percentage rate of between 0.001% 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.

- **The Default program is set to 10.000% VAT on Tax 1 and the description is set to GST already.**
- 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.

Descriptor – Program 80

Refer to “Program 80 – Function Key Descriptor”

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. Switch to **P** Mode by press **MODE** function key.
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:

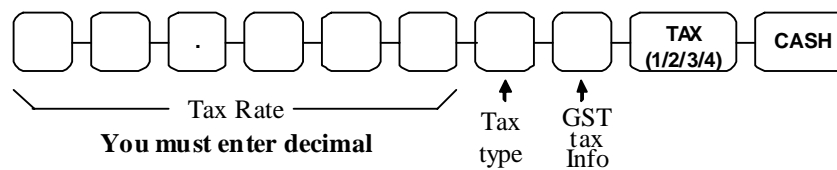
If the tax is a percentage added to the sale (normal add on tax), enter:	0
If the tax is a percentage value added tax (VAT; calculated as part of the sale), enter:	2

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. Press the Tax Shift key for the tax you are programming.
6. Press the **CASH** key to end programming.

Tax Rate Programming Flowchart



The Default program is set to 10.000% VAT on Tax 1 and the description is set to GST already.

PLU Programming

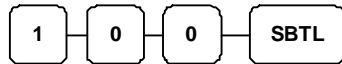
All PLUs, whether they are registered by pressing a PLU key on the keyboard, or by entering the PLU number and pressing the **PLU** key, have the same programming options. These options are set through separate programs:

- **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 validation, compulsory condiment and print options.
- **Program 110 - PLU Auto Tare Programming.**
- **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** allows 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

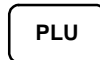
PLUs default to Taxable by Rate 1. i.e GST

1. Switch to **P** Mode by press **MODE** function key.
2. To begin the program, enter **1 0 0**, press the **SBTL** key.

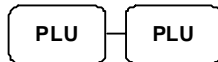


3. Select the PLU or PLUs you wish to program in one of the following ways:

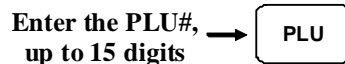
- Press a PLU key on the keyboard, or



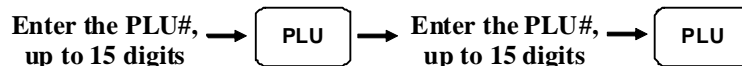
- Press the first PLU keys that are to receive the same status and Press the last PLU keys, or



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

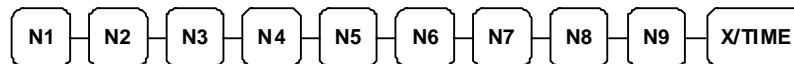


- Enter the number of the first PLU in a range of PLUs that are to receive the same setting; press the **PLU** key. Enter the last number in the range; press the **PLU** key.



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, if you are only selecting a value for **N9**, i.e. auto tare by number 1, just enter **1**.)

Australian GST status is preset by default.



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



PLU Status Chart

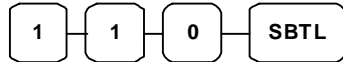
Address	Program Option	Value	=	Sum
N1	PLU is preset price ?	Yes = 0 No = 1		
	PLU allows override of preset?	Yes = 0 No = 2		
	PLU is taxable by rate 1(GST)?	Yes = 4 No = 0		
N2	PLU is taxable by rate 2?	Yes = 1 No = 0		
	PLU is taxable by rate 3?	Yes = 2 No = 0		
	PLU is taxable by rate 4?	Yes = 4 No = 0		
N3	PLU is food stamp eligible?	Yes = 1 No = 0		
	PLU is a 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 entry ?	Yes = 2 No = 0		
	PLU is gallonage?	Yes = 4 No = 0		
N5	PLU keeps inventory?	Yes = 1 No = 0		
	PLU is inactive?	Yes = 2 No = 0		
	PLU is scalable? (Also make N6 +1)	Yes = 4 No = 0		
N6	PLU is auto-scale entry? (Also make N5 +4)	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		
	Reserved			
	Reserved			
N8	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		

Address	Program Option	Value	=	Sum
N9	PLU counter is not reset when a PLU Z report is done?	Yes = 1 No = 0		

※Default values have been highlighted in **bold** print

Program 110 - PLU Auto Tare Programming

1. Switch to **P** Mode by press **MODE** function key.
2. To begin the program, enter **1 1 0**, press the **SBTL** key



3. Select the **PLU** or **PLUs** you wish to program in one of the following ways:

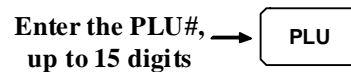
- Press on the keyboard, or



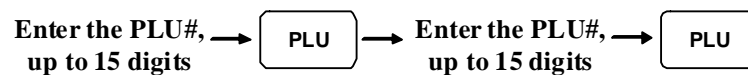
- Press the first **PLU** keys that are to receive the same status and press the last **PLU** keys, or



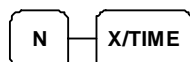
- Enter up to 15 digit number of the PLU and press the **PLU** key, or



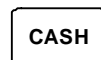
- Enter the number of the first PLU in a range of PLUs that are to receive the same setting, and press the **PLU** key. Enter the last number in the range; press the **PLU** key.



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, follow with **X/TIME** key.



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

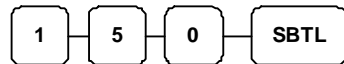


Program 150 - PLU Group Assignment

Each PLU may report to any three levels of 20 groups. 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.

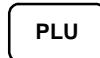
Note: The PLU will report to group "0", if not programmed to report to groups 1-20.

1. Switch to **P** Mode by press **MODE** function key.
2. To begin the program, enter **1 5 0**, press the **SBTL** key.

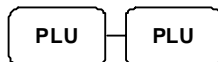


3. Select the PLU or PLUs you wish to program in one of the following ways:

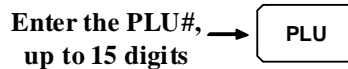
- Press a **PLU** key on the keyboard, or



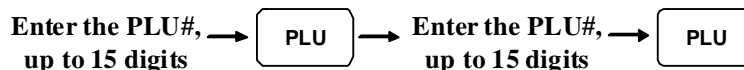
- Press the first **PLU** keys that are to receive the same status and Press the last **PLU** keys, or



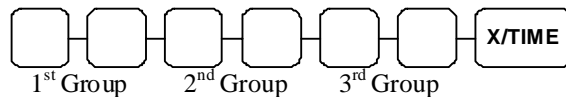
- Enter up to 15 digit number of the PLU and press the **PLU** key, or



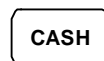
- Enter the number of the first PLU in a range of PLUs that are to receive the same setting; press the **PLU** key. Enter the last number in the range; press the **PLU** key.



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. If a PLU is link to group 03 as 1st group only, please enter 010000. Then press the **X/TIME** key.



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

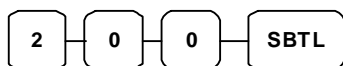


Program 200 - PLU Price/HALO Programming

NOTE: IF Price Level in the Memory Allocation is set 2, the 2nd price level must be set as well. Price of level 2 may be \$0.00.

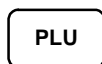
If a PLU is open, set the HALO (high amount lock out) here. If a PLU is preset set the preset price here. If a PLU is set with gallonage status, enter the price per liter here. (Enter price per liter in tenths of a cent, i.e. 1299 for \$1.29 9/10 per liter.)

1. Switch to **P** Mode by press **MODE** function key.
2. To begin the program, enter **2 0 0**, press the **SBTL** key.



3. Select the PLU or PLUs you wish to program in one of the following ways:

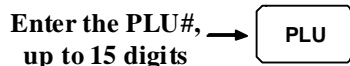
- Press a PLU key on the keyboard, or



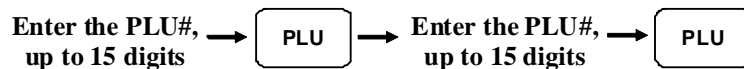
- Press the first **PLU** keys that are to receive the same status and Press the last **PLU** keys, or



- 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. Press **X/TIME** key.



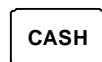
Price/HALO

If the PLU Price Level is 2, repeat this again.



Price/HALO

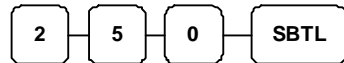
5. To program additional PLUs, repeat from step 3, or press the **CASH** key to finalize the program.



Program 250 - PLU Stock Amount Programming

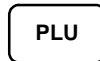
With this program, you can add stock to the PLU sales counters for PLUs you have designated as stock keeping PLUs. See “**Program 100 - PLU Status Programming**”. The stock number set here can be the amount of stock that is being added to the current level, or optionally, it can be the new total stock level. See **option #18** in "Error! Not a valid bookmark self-reference." to set this option.

1. Switch to **P** Mode by press **MODE** function key.
2. To begin the program, enter **2 5 0**, press the **SBTL** key.

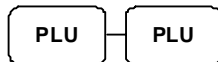


3. Select the PLU or PLUs you wish to program in one of the following ways:

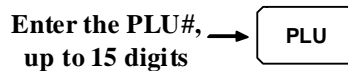
- Press a PLU key on the keyboard, or



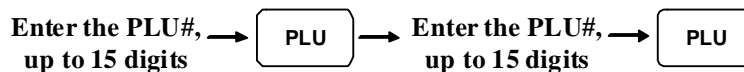
- Press the first PLU keys that are to receive the same status and Press the last PLU keys, or



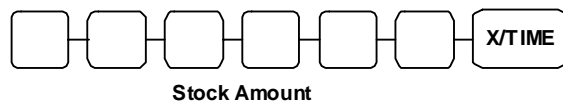
- Enter up to 15 digit number of the PLU and press the PLU key, or



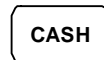
- Enter the number of the first PLU in a range of PLUs that are to receive the same setting; press the PLU key. Enter the last number in the range; press the PLU key.



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



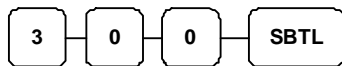
5. To program additional PLUs, repeat from step 3, or press the **CASH** key to finalize the program.



Program 300 - PLU Description Programming

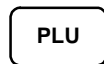
Program descriptions by typing description on the alpha keyboard overlay or by entering three digit alpha character codes. **To use three digit alpha character codes you must select 'No' in system option #35 (See "System Option Programming").** Also see "Descriptor Programming Methods for Alpha Overlay and/or Descriptor Code Table."

1. Switch to **P** Mode by press **MODE** function key.
2. To begin the program, enter **3 0 0**, press the **SBTL** key.

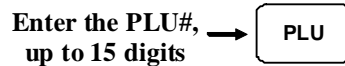


3. Select the PLU you wish to program in one of the following ways:

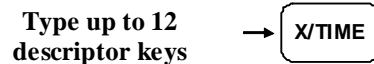
- Press a PLU key on the keyboard, or



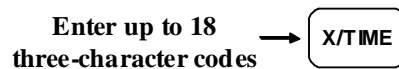
- Enter up to 15 digit number of the PLU and press the **PLU** key, or



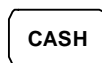
4. If you are programming using alpha overlay;



or,



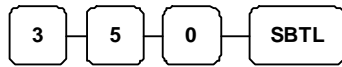
5. To program additional PLUs, repeat from step 3, or press the **CASH** key to finalize the program.



Program 350 - PLU Link Programming

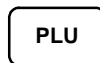
PLU link programming allows you to link a PLU to another PLU, so that registration of the first PLU will automatically trigger registration of the linked PLU. For example, you may wish to link a bottle deposit with the sale of beverages, or you may wish to register a group of items normally sold together.

1. Switch to **P** Mode by press **MODE** function key.
2. To begin the program, enter **3 5 0**, press the **SBTL** key.

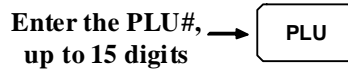


3. Select the PLU you wish to program in one of the following ways:

- Press a PLU key on the keyboard, or



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



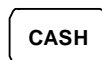
4. Enter the number of the PLU you wish the PLU linked to; press the PLU key. Or press the PLU key on the keyboard you wish the PLU linked to.



If you want to unlink,



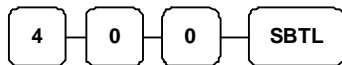
5. To program additional PLUs, repeat from step 3, or press the **CASH** key to finalize the program.



Program 400 - PLU Delete Programming

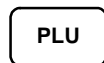
NOTE: To delete a PLU, all totals for the PLU must be cleared from Z reports (including Stock and PLU reports.)

1. Switch to **P** Mode by press **MODE** function key.
2. To begin the program, enter **4 0 0**, press the **SBTL** key.



3. Select the PLU or PLUs you wish to program in one of the following ways:

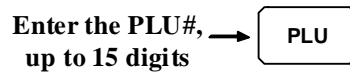
- Press a PLU key on the keyboard, or



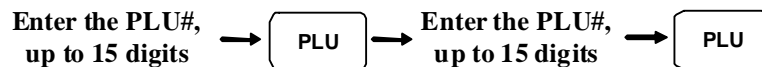
- Press the first PLU keys that are to delete and Press the last PLU keys, or



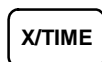
- Enter up to 15 digit number of the PLU and press the **PLU** key, or



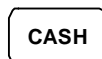
- Enter the number of the first PLU in a range you wish to delete and press the **PLU** key. Enter the last PLU number in the range; press the **PLU** key.



4. Press X/TIME key.

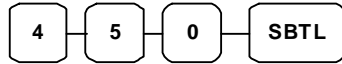


5. To program additional PLUs, repeat from step 3, or press the **CASH** key to finalize the program.



Program 450 - PLU MIX & MATCH Programming

1. Switch to **P** Mode by press **MODE** function key.
2. To begin the program, enter **4 5 0**, press the **SBTL** key.



3. Select the PLU you wish to program in one of the following ways:

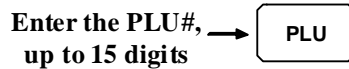
- Press a PLU key on the keyboard, or



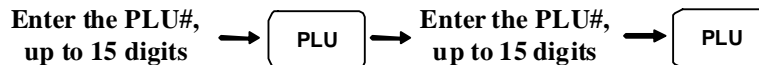
- Press the first PLU keys that are to delete and Press the last PLU keys, or



- 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 PLU number in the range; press the **PLU** key.



4. Enter the number of the Mix & Match Table (1-20); press the **X/TIME** key.



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



Not Found PLU function

Program descriptions by typing description on the alpha keyboard overlay or by entering three digit alpha character codes. **To use three digit alpha character codes you must select ‘No’ in system option #25 (See “System Option Programming”).** Also see **Descriptor Programming Methods for Alpha Overlay** and/or **Descriptor Code Table**.

This option can be used to create codes quickly in Register for new items.

1. Switch to **REG** Mode by press **MODE** function key.
2. Register an item, which does not exist in the register

Enter the PLU#,
No more then 15 digits → PLU

3. The “**NO7 FOuNd**” (NOT FOUND) will appear, allowing the user to continue with creation of item by pressing **1** (or to quit by pressing **CLEAR**).

1

4. The “**P**” (PRICE) will appear, input the **price** and press **X/TIME** key. *Do not use the decimal key.*

 X/TIME
Price/HALO

If the PLU Price Level is 2, repeat this again.

 X/TIME
Price/HALO

5. The “**PLu**” (PLU) will appear, ready to enter detail of the product; the product can then either be completed quickly with both descriptor and all settings including tax, offers etc. by copying from an existing item, or by entering the PLU name, price, and tax status manually.

Copy from an Existing Item

- Press one of the 12 PLU key on the keyboard.

PLU #

- Enter PLU number then press **PLU** function key.

Enter the PLU# → PLU

The new item will be created and registered as per the selected product.

Or

Manually enter details

- a. Press the **PLU** key,

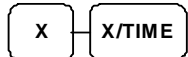


- b. The “**dEC**” (DESCRIPTOR) will appear, ready to enter the name of the item, then press **X/Time** key,

Type up to 12
descriptor keys



- c. The “**7**” (TAX) will appear, ready to enter the Tax information, For Example 0
X/time will set no tax, or enter tax rate using the settings below.



X	Tax Type	X	TAX Type
40	Tax 1 (GST)	2	Tax 3
1	Tax 2	4	Tax 4
0	No Tax		

6. The item will be registered with the description and price entered, and tax status selected.

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. Default value has been highlighted in **bold** print.

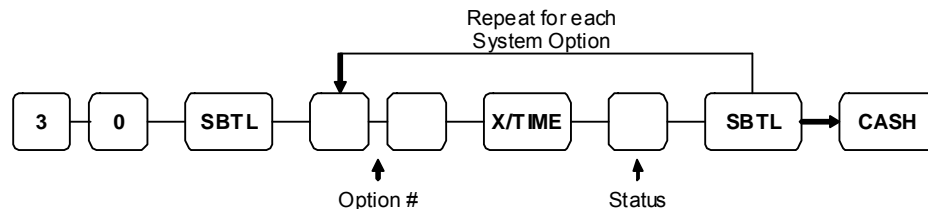
NOTE: Because after Memory All Clear all options settings are automatically set to default, you do not need to program this section unless you wish to change the default status.

Program 30 - System Option Programming

Programming a System Option:

1. Switch to **P** Mode by press **MODE** function key.
2. Enter **3 0**, press the **SBTL** 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 **SBTL** 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



※Default values have been highlighted in **bold** print

System Option Table

Address	SYSTEM OPTION		VALUE	=	SUM
1	Beeper is active?		Yes = 0 No = 1		
2	Clerk sign on method is:	Direct entry =	0		
		Code entry =	1		
3	Clerks are:	Pop-up =	Yes = 1		
		Stay down =	No = 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 (1 - 99).		30		
6	Allow the post tender function?		Yes = 1 No = 0		
	Open drawer on post tender?		Yes = 0 No = 2		
	Allow multiple receipts? (See Print Opt. #23)		Yes = 4 No = 0		
7	Cash Declaration Required before Z Financial report?		Yes = 1 No = 0		
8	Reset consecutive transaction number after a financial report?		Yes = 1 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)		2		
11	Date format is:	MMDDYY =	0		
		DDMMYY =	1		
		YYMMDD =	2		
12	Percentage and Tax calculations will:	Round up at 0.005 =	0		
		Always round up =	1		
		Always round down =	2		
13	Split price calculations will:	Round up at 0.005 =	0		
		Always round up =	1		
		Always round down =	2		

Address	SYSTEM OPTION		VALUE	=	SUM
14	Hash is	Normal =	Yes = 1		
		Non-add =	No = 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	Add to current level =	Yes = 2		
		Counter replaces current level =	No = 0		
19	The number of numeric digits: (0-14; 0 is no limit)		0		
20	Direct multiply more than one digit?		Yes = 1 No = 0		
	Tender validation amount is:	Amount tendered =	Yes = 2		
		Amount of sale =	No = 0		
21	Display add price of linked item?		Yes = 1 No = 0		
	Allow sale when stock reaches “0”?		Yes = 0 No = 2		
22	Allow Australian rounding on subtotal? (Also see Sys Opt #22-2, #32-1, and #32-2) (must turn New Zealand Rounding off first)		Yes = 1 No = 0		
	Allow Australian rounding on cash? (Also see Sys Opt #22-1, #32-1, and #32-2) (must turn New Zealand Rounding off first)		Yes = 2 No = 0		
	Allow Z stock report?		Yes = 0 No = 4		
23	Training mode	Enter =	1		
		Exit =	0		

Address	SYSTEM OPTION		VALUE	=	SUM
24	Use Spool		Yes = 1 No = 0		
25	Descriptor pgm Method	Keyboard overlay =	Yes = 0		
		Character code =	No = 1		
	% is not affect to net sale?		Yes = 2 No = 0		
	Disable Cash Declaration ?		Yes = 4 No = 0		
26	Disable level keys:	Level 1 =	Yes = 1 No = 0		
		Level 2 =	Yes = 2 No = 0		
27	Price level is:	Pop-up after item =	0		
		Pop-up after sale =	1		
		Stay-down =	2		
28	Modifier is:	Pop-up after item =	0		
		Pop-up after sale =	1		
		Stay-down =	2		
29	Price Embedded Barcode type? (0/1/2/3/4/7) (See note below)		0		
30	Enable Electronic Journal?		Yes = 1 No = 0		
	Prompt operator when Electronic Journal is full		Yes = 0 No = 2		
31	Print density? (0-2)		0		
32	Allow New Zealand round on subtotal? (Also see Sys Opt #22-1, #22-2, and #32-2) (must turn AU Rounding off first)		Yes = 1 No = 0		
	Allow New Zealand round on cash? (Also see Sys Opt #22-1, #22-2, and #32-1) (must turn AU Rounding off first)		Yes = 2 No = 0		

※Default values have been highlighted in **bold** print

Note: Price Embedded Barcode Format

Barcode Format	1 st	2 nd	3 rd	4 th	5 th	6 th	7 th	8 th	9 th	10 th	11 th	12 th	13 th	
Type 1	D1	D2	I1	I2	I3	I4	I5	S	P1	P2	P3	P4	C	(5 and 4)
Type 2	D1	D2	I1	I2	I3	I4	S	P1	P2	P3	P4	P5	C	(4 and 5)
Type 3	D1	D2	I1	I2	I3	I4	I5	I6	P1	P2	P3	P4	C	(6 and 4)
Type 4	D1	D2	I1	I2	I3	I4	I5	P1	P2	P3	P4	P5	C	(5 and 5)
Type 7	D1	D2	I1	I2	I3	I4	I5	W1	W2	W3	W4	W5	C	(5 and 5)

D1, D2 = Department Number (02, 20 ~ 29)

I1 ~ I6 = Item Code digits

P1 ~ P5 = Price digits

W1 ~ W5 = Weight digits

S = Check sum digit for price

C = Check sum digit for all characters

Type 0: Price Embedded Barcode not used

Type 1: 2 digits Department Number, **5** digits Item Code, 1 digit Price Checksum, **4** digits Price, and 1 digit Checksum.

Type 2: 2 digits Department Number, **4** digits Item Code, 1 digit Price Checksum, **5** digits Price, and 1 digit Checksum.

Type 3: 2 digits Department Number, **6** digits Item Code, **4** digits Price, and 1 digit Checksum.

Type 4: 2 digits Department Number, **5** digits Item Code, **5** digits Price, and 1 digit Checksum.

Type 7: 2 digits Department Number, **5** digits Item Code, **5** digits **Weight**, and 1 digit Checksum.

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. Default value has been highlighted in **bold** print.

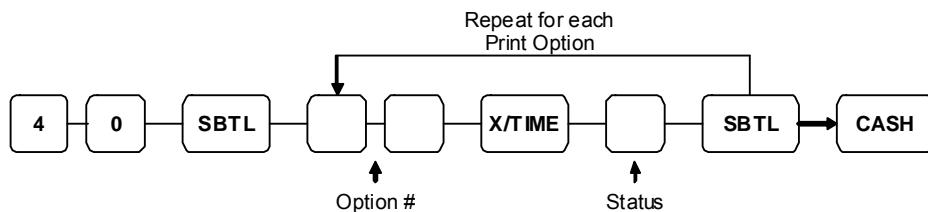
NOTE: Because after Memory All Clear all options settings are automatically set to default, you do not need to program this section unless you wish to change the default status.

Program 40 - Print Option Programming

Programming a Print Option:

1. Switch to **P** Mode by press **MODE** function key.
2. Enter **4 0**, press the **SBTL** key.
3. Enter a print option address, and then press the **X/IME** 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 **SBTL** 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



※Default values have been highlighted in **bold** print

Print Option Table

Address	PRINT OPTION	VALUE	=	SUM
1	Print tax symbol ?	Yes = 1 No = 0		
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 sale item number (PLU number) ?	Yes = 1 No = 0		
	Print PLU with zero totals on report?	Yes = 2 No = 0		
	Subtotal is printed when the SBTL 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		
	Print machine number on receipt?	Yes = 4 No = 0		
6	Print date on receipt?	Yes = 0 No = 1		
	Print time on receipt?	Yes = 0 No = 2		
7	Print clerk name on receipt?	Yes = 0 No = 1		
	Print Z counter on reports?	Yes = 0 No = 2		
8	Home Currency symbol (See note1 below)	\$		
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		

Address	PRINT OPTION		VALUE	=	SUM
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		
11	Print the subtotal without tax on the receipt?		Yes = 1 No = 0		
	Tax amount to print on receipt is:	Combined =	2		
		Itemized =	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 receipt?		Yes = 0 No = 1		
	Print the item’s price on the kitchen printer / requisition?		Yes = 2 No = 0		
19	Send/print order to the kitchen printer / requisition in void mode ?		Yes = 0 No = 1		
	Send/print order to the kitchen printer / requisition in training mode ?		Yes = 2 No =0		
20	Combine like items on the kitchen printer / requisition?		Yes = 0 No = 1		
	Chooses volume unit when the PLU is gallonage.	Gallons =	0		
		Liters =	2		
21	Print preamble message on receipt?		Yes = 0 No = 1		
	Print postamble message on receipt?		Yes = 0 No = 2		
22	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
23	Issue a second receipt for the same transaction? (Buffer receipt issue when receipt printer is on) (Also see Sys Opt #6)	Yes = 1 No = 0		
	Priority print by group on the kitchen printer?	Yes = 2 No = 0		
	Print PLU number on the receipt?	Yes = 4 No = 0		
24	Not print when polling reports? (Note: this setting is equivalent to 'print when polling reports – Yes')	Yes = 1 No = 0		
	Print PLU number on PLU report?	Yes = 2 No = 0		
	Grand total is:	Net sale = 4		
		Gross sale = 0		
26	NOT USED			
25	Send order to the kitchen printer when the SBTL key is pressed?	Yes = 1 No = 0		
26	Print preamble graphic logo on receipt?	Yes = 1 No = 0		
27	Print preamble graphic logo	Default = 0		
		User = 1		
28	Number of Pre-feeding lines (0-5) on receipt	0		
29	Number of Post-feeding lines (0-5) on receipt	0		

※Default values have been highlighted in bold print

NOTE 1: Print Option# 8 - Users outside of the USA can designate a different currency symbol. To select a different symbol, type descriptors on the alpha keyboard overlay or enter three digit alpha character codes. **To use three digit alpha character codes you must select 'No' in system option #30 (See "System Option Programming"). Also see Descriptor Programming Methods for Alpha Overlay and/or Descriptor Code Table.**

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, type descriptors on the alpha keyboard overlay or enter three digit alpha character codes. **To use three digit alpha character codes you must select 'No' in system option #30 (See "System Option Programming"). Also see Descriptor Programming Methods for Alpha Overlay and/or Descriptor Code Table.**

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 12 character alpha numeric descriptor
- **Program 90** - is used to set a high amount limit (HALO)
(for percentage key is discount/surcharge rate.)

In this chapter you will find:

- General instructions for programs 70, 80 and 90.
- Specific programming instructions for each function key.

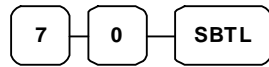
To change descriptors on reports see:

***“Program 701 - Financial Report Message Programming” and
“Program 710 - Clerk Report Message Programming” also.***

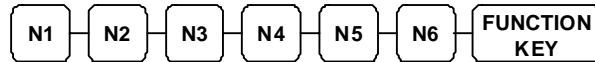
Program 70 - Function Key Options

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 in this chapter to find the options for each key.

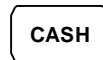
1. Switch to **P** Mode by press **MODE** function key.
2. To begin the program, enter **7 0**, press the **SBTL** key.



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.



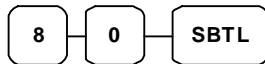
4. To program additional function keys, repeat from step 3, or press the **CASH** key to finalize the program.



Program 80 - Function Key Descriptor

Program descriptions by typing description on the alpha keyboard overlay or by entering three digit alpha character codes. **To use three digit alpha character codes you must select 'No' in system option #25 (See "System Option Programming").** Also see **Descriptor Programming Methods** for **Alpha Overlay** and/or **Descriptor Code Table**.

1. Switch to **P** Mode by press **MODE** function key.
2. To begin the program, enter **8 0**, press the **SBTL** key.



3. If you are programming alpha overlay

Type up to 12 descriptor keys → X/TIME → FUNCTION KEY

or,

Enter up to 12 three-character codes → FUNCTION KEY

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

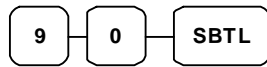
```
graph LR; CASH[CASH]
```

NB: The **MACRO (1-8)** function keys descriptor is programmed with **Programmed 711**. Please refer to **Miscellaneous Programming - Macro Name Programming**.

Program 90 - Function Key HALO or Percentage Rate

Use Program 90 to program a high amount lock out (HALO) for a function key. Only specific keys require this program. For example, you can set a HALO for the **CASH**, **CHECK** or **CHARGE** keys. Refer to the specific function key programming information in this chapter to determine when the HALO option is available.

1. Switch to **P** Mode by press **MODE** function key.
2. To begin the program, enter **9 0**, press the **SBTL** key.



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

**Enter 1-8 digit
HALO**

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

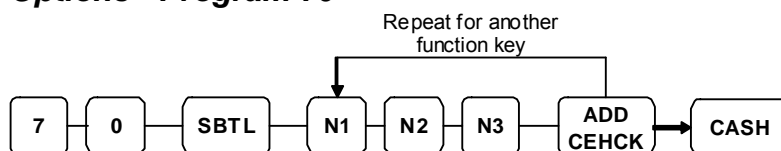


5. To program additional function keys, repeat from step 2, or press the **CASH** key to finalize the program.



ADD CHECK (Cafeteria Tray Total)

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	Delete the pre/postamble when this function is used?	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		

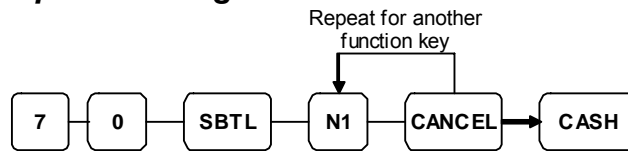
※Default values have been highlighted in **bold** print

Descriptor - Program 80

- Refer to "Program 80 - Function Key Descriptor"

CANCEL (Cancel a Sale)

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		

※Default values have been highlighted in **bold** print

Descriptor - Program 80

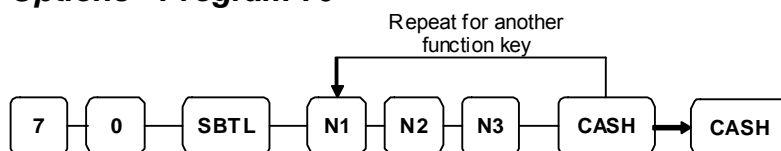
- Refer to “Program 80 - Function Key Descriptor”

HALO - Program 90

- Refer to “Program 90 - Function Key HALO ”

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		

※Default values have been highlighted in **bold** print

Descriptor - Program 80

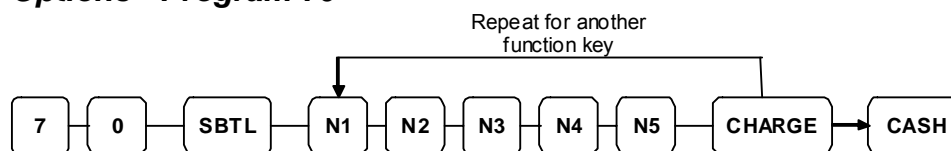
- Refer to “Program 80 - Function Key Descriptor”

HALO - Program 90

- Refer to “Program 90 - Function Key HALO”

CHARGE (1 ~ 8)

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		
	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 Port (0-2)	0		

※Default values have been highlighted in **bold** print

Descriptor - Program 80

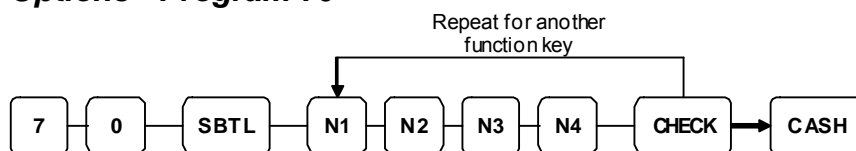
- Refer to “Program 80 - Function Key Descriptor”

HALO - Program 90

- Refer to “Program 90 - Function Key HALO”

CHECK (CHEQUE)

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		

※Default values have been highlighted in **bold** print

Descriptor - Program 80

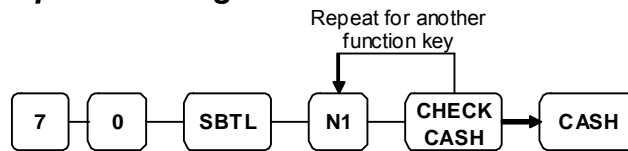
- Refer to “Program 80 - Function Key Descriptor”

HALO - Program 90

- Refer to “Program 90 - Function Key HALO”

CHECK (CHEQUE) 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		

※Default values have been highlighted in **bold** print

Descriptor - Program 80

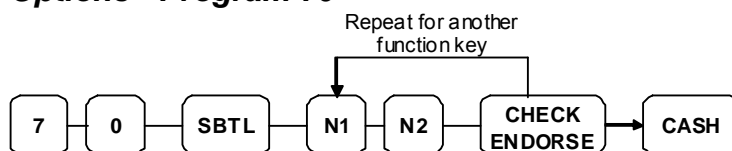
- Refer to “Program 80 - Function Key Descriptor”

HALO - Program 90

- Refer to “Program 90 - Function Key HALO”

CHECK (CHEQUE) 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		

※Default values have been highlighted in **bold** print

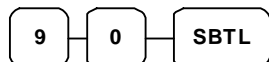
Descriptor - Program 80

- Refer to “Program 80 - Function Key Descriptor”

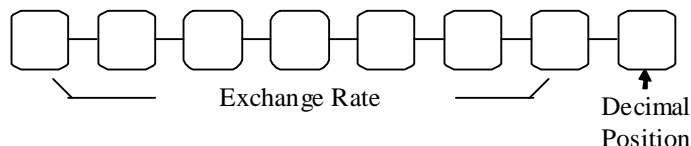
CURRENCY CONVERSION

Currency Conversion Rate - Program 90

1. Switch to P Mode by press MODE function key.
2. To begin the program, enter **9 0**, press the **SBTL** key.



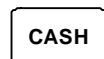
3. Enter the exchange rate of up to 7 digits (do not enter the decimal point), and then enter a number from 0 to 7 to indicate the decimal position. See "Currency Exchange Rate Programming Examples" below.



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



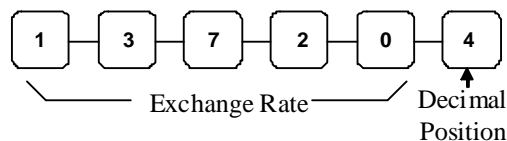
5. To program additional function keys, repeat from step 2, or press the **CASH** key to finalize the program.



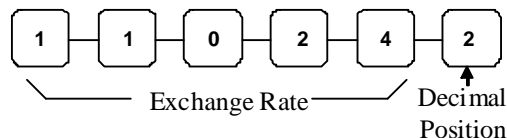
Currency Exchange Rate Programming Examples

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).

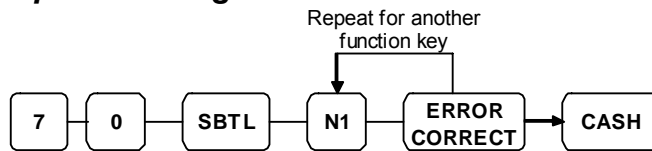


The US dollar (home currency) is worth 110.24 Japanese Yen (foreign currency).



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		

※Default values have been highlighted in **bold** print

Descriptor - Program 80

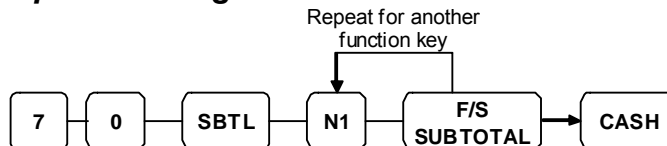
- Refer to “Program 80 - Function Key Descriptor”

HALO - Program 90

- Refer to “Program 90 - Function Key HALO”

F/S SUB

Options - Program 70



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

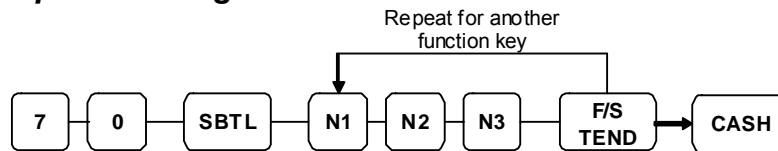
※Default values have been highlighted in **bold** print

Descriptor - Program 80

- Refer to “Program 80 - Function Key Descriptor”

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 = 4 Food stamps = 0		
N3	Open cash drawer?	Yes = 0 No = 1		
	Validation is compulsory?	Yes = 2 No = 0		

※Default values have been highlighted in **bold** print

Descriptor - Program 80

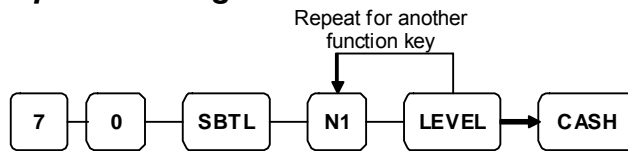
- Refer to “Program 80 - Function Key Descriptor”

HALO - Program 90

- Refer to “Program 90 - Function Key HALO”

LEVEL1 - 2 (Price Levels)

Options - Program 70



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

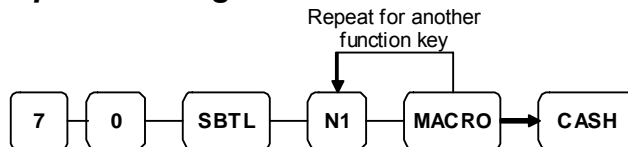
※Default values have been highlighted in **bold** print

Descriptor - Program 80

- Refer to “Program 80 - Function Key Descriptor”

MACRO (1 ~ 10)

Options - Program 70



Address	OPTION	VALUE	=	SUM
N1	Key is active in X control lock position only? (EPROM v1.012)	Yes = 1 No = 0		

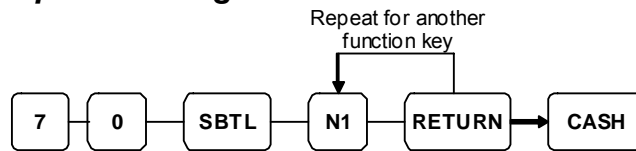
※Default values have been highlighted in **bold** print

Descriptor - Program 771

- Refer to “**Program 771** - Macro Name Programming” in **Macro Name Programming**

MDSE 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		

※Default values have been highlighted in **bold** print

Descriptor - Program 80

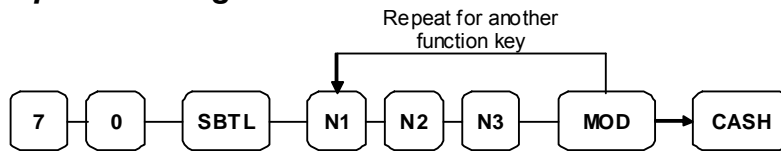
- Refer to “Program 80 - Function Key Descriptor”

HALO - Program 90

- Refer to “Program 90 - Function Key HALO”

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)	1		

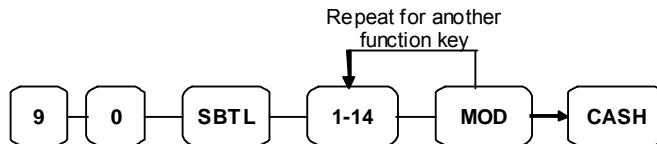
※Default values have been highlighted in **bold** print

Descriptor - Program 80

- Refer to "Program 80 - Function Key Descriptor"

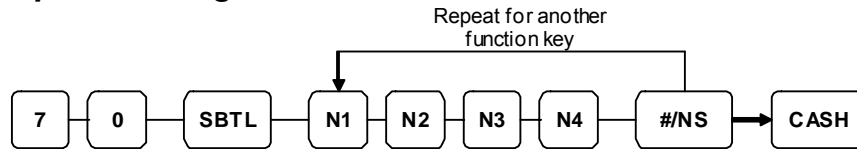
Affect Digit - Program 90

Affect Digit (1-14) of PLU#



#/NS (Non Add#/No Sale)

Options - Program 70



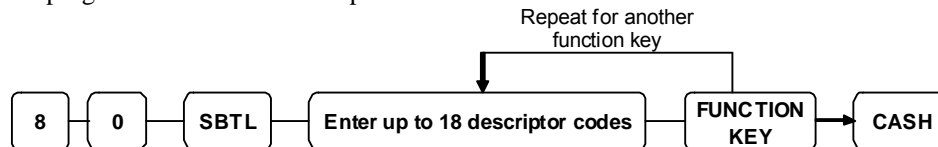
Address	OPTION	VALUE	=	SUM
N1	No Sale is inactive?	Yes = 1 No = 0		
	No Sale active in X control lock position only?	Yes = 2 No = 0		
	No Sale inactive after non-add # entry?	Yes = 4 No = 0		
N2	Enforce non-add # entry at start of sale?	Yes = 1 No = 0		
	Print when a NO SALE is performed?	Yes = 0 No = 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. (0-8; Zero (0) means no limit).	0		

※Default values have been highlighted in **bold** print

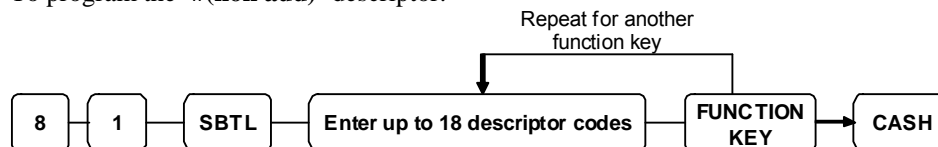
Descriptor - Programs 80 & 81

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:

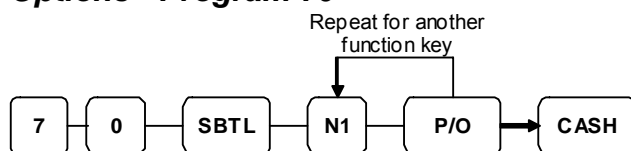


To program the ' **#(non add)** ' descriptor:



PAID OUT (1 ~ 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		

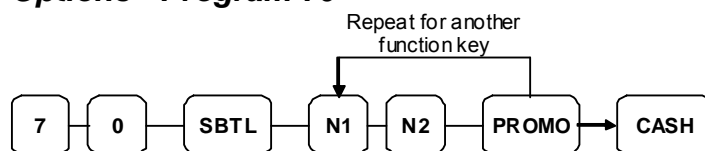
※Default values have been highlighted in **bold** print

Descriptor - Program 80

- Refer to “Program 80 - Function Key Descriptor”

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		

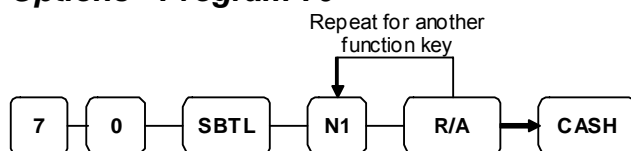
※Default values have been highlighted in **bold** print

Descriptor - Program 80

- Refer to “Program 80 - Function Key Descriptor”

RECD ON ACCT (1 ~ 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		

※Default values have been highlighted in **bold** print

Descriptor - Program 80

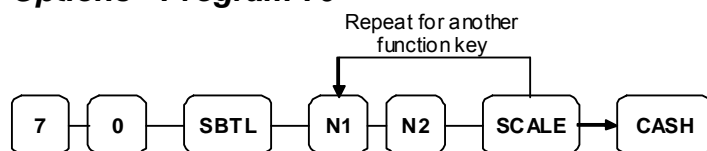
- Refer to “Program 80 - Function Key Descriptor”

HALO - Program 90

- Refer to “Program 90 - Function Key HALO”

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		

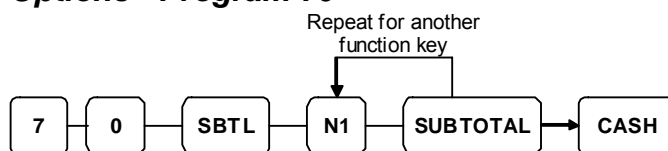
※Default values have been highlighted in **bold** print

Descriptor - Program 80

- Refer to “Program 80 - Function Key Descriptor”

SUBTOTAL

Options - Program 70



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

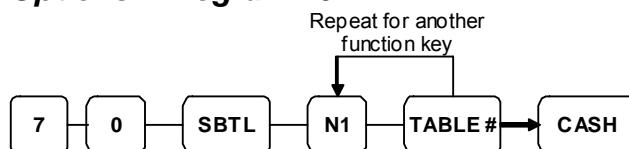
※Default values have been highlighted in **bold** print

Descriptor - Program 80

- Refer to “Program 80 - Function Key Descriptor”

TABLE

Options - Program 70



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

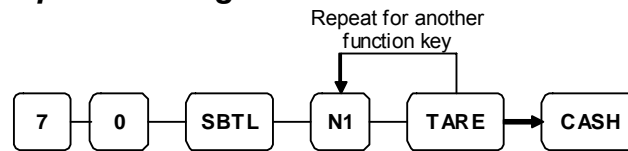
※Default values have been highlighted in **bold** print

Descriptor - Program 80

- Refer to “Program 80 - Function Key Descriptor”

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		

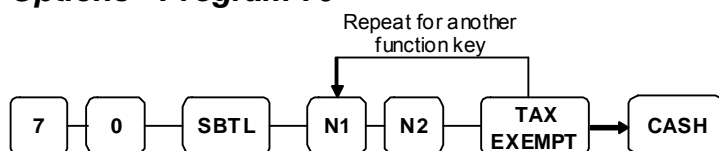
※Default values have been highlighted in **bold** print

Descriptor - Program 80

- Refer to “Program 80 - Function Key Descriptor”

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		

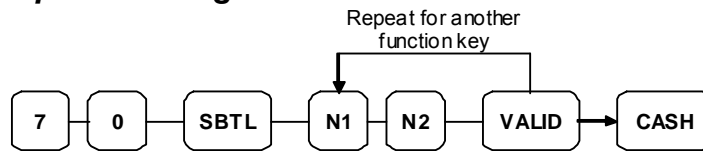
※Default values have been highlighted in **bold** print

Descriptor - Program 80

- Refer to “Program 80 - Function Key Descriptor”

VALIDATE

Options - Program 70



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

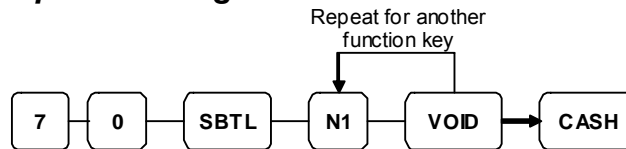
※Default values have been highlighted in **bold** print

Descriptor - Program 80

- Refer to “Program 80 - Function Key Descriptor”

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		

※Default values have been highlighted in **bold** print

Descriptor - Program 80

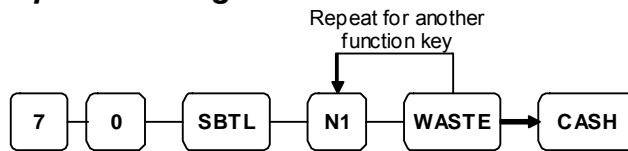
- Refer to “Program 80 - Function Key Descriptor”

HALO - Program 90

- Refer to “Program 90 - Function Key HALO”

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		

※Default values have been highlighted in **bold** print

Descriptor - Program 80

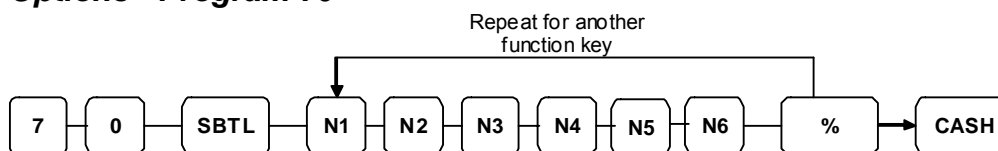
- Refer to “Program 80 - Function Key Descriptor”

HALO - Program 90

- Refer to “Program 90 - Function Key HALO”

% (1 ~ 5) (Discounts or Surcharges)

Options - Program 70



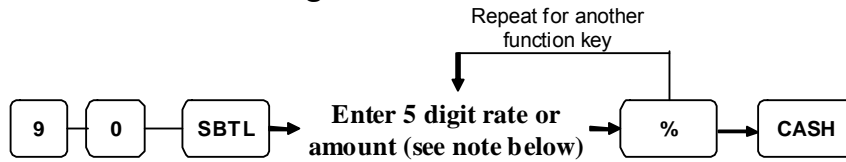
Address	OPTION		VALUE	=	SUM
N1	Apply an:	Amount =	1		
		Percentage =	0		
	Key is inactive?		Yes = 2 No = 0		
	% Key is active in X control lock position only?		Yes = 4 No = 0		
N2	% Key is:	Open =	1		
		Preset =	0		
	% Key is:	Sale =	2		
		Item =	0		
	Allow % key override preset?		Yes = 4 No = 0		
N3	% 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		

※Default values have been highlighted in **bold** print

Descriptor - Program 80

- Refer to "Program 80 - Function Key Descriptor"

Preset % Rate - Program 90



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.

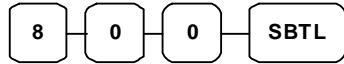
Clerk Programming

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

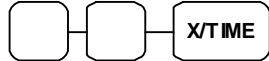
- ***Program 800 - Secret Code programming*** determines the code that is used for clerk sign on if a code entry sign on method is selected in system option #2 (See "**System Option Programming**")
- ***Program 801 – Drawer Assignment & Training Clerk Programming***
- ***Program 810 - Clerk Description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

Program 800 - Secret Code Programming

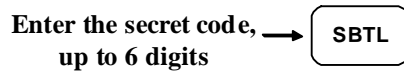
1. Switch to **P** Mode by press **MODE** function key.
2. To begin the program, enter **8 0 0**, press the **SBTL** key.



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



4. Enter a secret code (up to 6 digits); press the **SBTL** key.

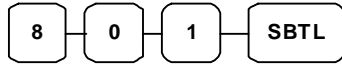


5. Repeat from step 3 for each clerk you wish to program. Press the **CASH** key to finalize the program.

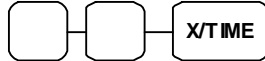


Program 801 - Drawer Assignment & Training Clerk

1. Switch to **P** Mode by press **MODE** function key.
2. To begin the program, enter **8 0 1**, press the **SBTL** key.



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



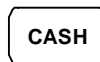
4. Enter an option digit from the table below, press the **SBTL** key.

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

※Default values have been highlighted in **bold** print



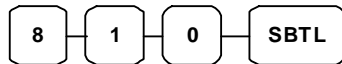
5. Repeat from step 3 for each clerk you wish to program. Press the **CASH** key to finalize the program.



Program 810 - Clerk Description Programming

Program descriptions by typing description on the alpha keyboard overlay or by entering three digit alpha character codes. **To use three digit alpha character codes you must select 'No' in system option #25 (See "System Option Programming").** Also see **Descriptor Programming Methods for Alpha Overlay** and/or **Descriptor Code Table**.

1. Switch to **P** Mode by press **MODE** function key.
2. To begin the program, enter **8 1 0**, press the **SBTL** key.



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



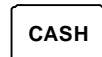
4. If you are programming using alpha overlay;

Type up to 12
descriptor keys → SBTL

or,

Enter up to 12
three-character codes → SBTL

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



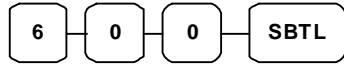
Mix & Match Programming

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

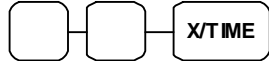
- *Program 600 - Trip Level Programming*
- *Program 601 - Price Programming*
- *Program 610 - Mix & Match Description Programming* allows you to set a unique, up to 18 characters, descriptor for Mix & Match Table.

Program 600 - Trip Level Programming

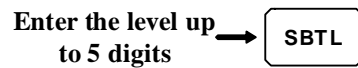
1. Switch to **P** Mode by press **MODE** function key.
2. To begin the program, enter **6 0 0**, press the **SBTL** key.



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 **SBTL** key.

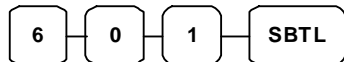


5. Repeat from step 3 for each table you wish to program. Press the **CASH** key to finalize the program.

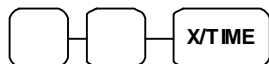


Program 601 - Price Programming

1. Switch to **P** Mode by press **MODE** function key.
2. To begin the program, enter **6 0 1**, press the **SBTL** 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 **SBTL** key.



Price/HALO

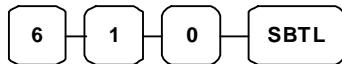
5. Repeat from step 3 for each table you wish to program. Press the **CASH** key to finalize the program.



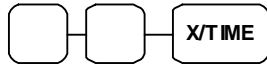
Program 610 - Mix & Match Description Programming

Program descriptions by typing description on the alpha keyboard overlay or by entering three digit alpha character codes. **To use three digit alpha character codes you must select 'No' in system option #25 (See "System Option Programming").** Also see **Descriptor Programming Methods** for **Alpha Overlay** and/or **Descriptor Code Table**.

1. Switch to **P** Mode by press **MODE** function key.
2. To begin the program, enter **6 1 0**, press the **SBTL** 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,

Type up to 12
descriptor keys

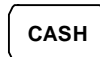


or,

Enter up to 12
three-character codes



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



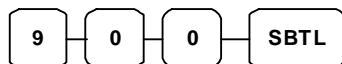
Group Programming

5 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.

- **Program 900 - Group Status Programming** allows 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.
- **Program 910 - Group Descriptors Programming** to assign a unique descriptor for each group, so that the group may be easily understood on the group report.

Program 900 - Group Status Programming

1. Switch to **P** Mode by press **MODE** function key.
2. To begin the program, enter **9 0 0**, press the **SBTL** key.



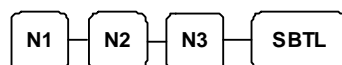
3. Enter the number of the group you wish to program; press the **X/TIME** key.



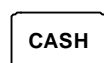
4. Enter an option digit from the table below, press the **SBTL** key.

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	Print RED on KP?	Yes = 1 No = 0		

※Default values have been highlighted in **bold** print



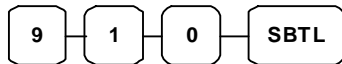
5. To program additional groups, repeat from step 3, or press the **CASH** key to finalize the program.



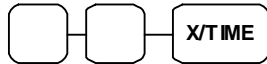
Program 910 - Group Descriptors Programming

Program descriptions by typing description on the alpha keyboard overlay or by entering three digit alpha character codes. **To use three digit alpha character codes you must select 'No' in system option #25 (See "System Option Programming").** Also see **Descriptor Programming Methods** for **Alpha Overlay** and/or **Descriptor Code Table**.

1. Switch to **P** Mode by press **MODE** function key.
2. To begin the program, enter **9 1 0**, press the **SBTL** key.



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



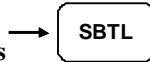
4. If you are programming using alpha overlay,

Type up to 12
descriptor keys



or,

Enter up to 12
three-character codes



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



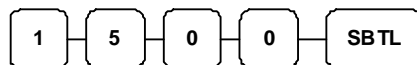
Miscellaneous Programming

Program 1500 - Macro Key Sequence 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

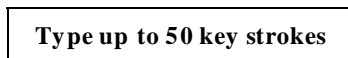
1. Switch to **P** Mode by press **MODE** function key.
2. To begin the program, enter **1 5 0 0**, press the **SBTL** key.



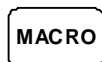
3. Press the **Macro** key that you wish to program.



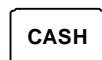
4. Type up to 50 key strokes



5. Press the same **Macro** key to end the sequence



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



To removing a Macro

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

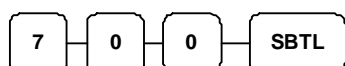
Program 700 - Logo Description Programming

Program descriptions by typing description on the alpha keyboard overlay or by entering three digit alpha character codes. **To use three digit alpha character codes you must select 'No' in system option #25 (See "System Option Programming").** Also see **Descriptor Programming Methods** for **Alpha Overlay** and/or **Descriptor Code Table**.

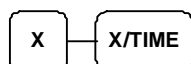
Programming the Receipt/Check/Endorsement Message

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; a 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. Switch to **P** Mode by press **MODE** function key.
2. To begin the program, enter **7 0 0**, press the **SBTL** 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	1 st line of Preamble	12	6 th line of Postamble
2	2 nd line of Preamble	13	1 st line of Endorsement
3	3 rd line of Preamble	14	2 nd line of Endorsement
4	4 th line of Preamble	15	3 rd line of Endorsement
5	5 th line of Preamble	16	4 th line of Endorsement
6	6 th line of Preamble	17	5 th line of Endorsement
7	1 st line of Postamble	18	6 th line of Endorsement
8	2 nd line of Postamble	19	7 th line of Endorsement
9	3 rd line of Postamble	20	8 th line of Endorsement
10	4 th line of Postamble	21	9 th line of Endorsement
11	5 th line of Postamble	22	10 th line of Endorsement

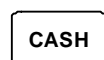
4. If you are programming using alpha overlay,

Type up to 32
descriptor keys → 

or,

Enter up to 32
three-character codes → 

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



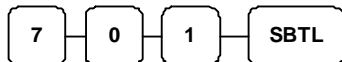
Program 701 - Financial Report Message Programming

Program descriptions by typing description on the alpha keyboard overlay or by entering three digit alpha character codes. **To use three digit alpha character codes you must select 'No' in system option #25 (See "System Option Programming").** Also see **Descriptor Programming Methods** for **Alpha Overlay** and/or **Descriptor Code Table**.

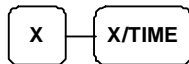
Programming the Financial Report Message

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. Switch to **P** Mode by press **MODE** function key.
2. To begin the program, enter **7 0 1**, press the **SBTL** key.



3. Refer to the chart below and enter the number that represents the line you wish to program; press the **X/TIME** key.



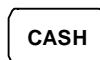
4. If you are programming using alpha overlay,

Type up to 12
descriptor keys → SBTL

or,

Enter up to 12
three-character codes → SBTL

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



Financial Report Message

X	Message Line	X	Message Line	X	Message Line
1	+PLU TTL	32	CANCEL	63	CHG8 SALES
2	-PLU TTL	33	GROSS SALES	64	FOREIGN 1
3	ADJST TTL	34	CASH SALES	65	FOREIGN 2
4	NONTAX	35	CHECK SALES	66	FOREIGN 3
5	TAX1 SALES	36	R/A 1	67	FOREIGN 4
6	TAX2 SALES	37	R/A 2	68	DRWR TTL
7	TAX3 SALES	38	R/A 3	69	PROMO
8	TAX4 SALES	39	P/O 1	70	WASTE
9	TAX1	40	P/O 2	71	TRAIN TTL
10	TAX2	41	P/O 3	72	MIX&MATCH
11	TAX3	42	HASH TTL	73	ROUND TTL
12	TAX4	43	AUDACTION	74	CASH OUT (EPROM V1.002)
13	XMPT1 SALES	44	NOSALE		
14	XMPT2 SALES	45	CASH-IN-D		
15	XMPT3 SALES	46	CHECK-IN-D		
16	XMPT4 SALES	47	FD/S-IN-D		
17	% 1	48	CHG1-IN-D		
18	% 2	49	CHG2-IN-D		
19	% 3	50	CHG3-IN-D		
20	% 4	51	CHG4-IN-D		
21	% 5	52	CHG5-IN-D		
22	NET SALE	53	CHG6-IN-D		
23	CREDIT TAX1	54	CHG7-IN-D		
24	CREDIT TAX2	55	CHG8-IN-D		
25	CREDIT TAX3	56	CHG1 SALES		
26	CREDIT TAX4	57	CHG2 SALES		
27	FD/S CREDIT	58	CHG3 SALES		
28	RETURN	59	CHG4 SALES		
29	ERROR CORR	60	CHG5 SALES		
30	PREVIOUS VD	61	CHG6 SALES		
31	VOID MODE	62	CHG7 SALES		

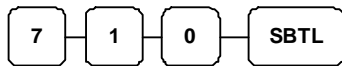
Program 710 - Clerk Report Message Programming

Program descriptions by typing description on the alpha keyboard overlay or by entering three digit alpha character codes. **To use three digit alpha character codes you must select 'No' in system option #25 (See "System Option Programming").** Also see **Descriptor Programming Methods for Alpha Overlay** and/or **Descriptor Code Table**.

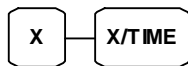
Programming the Clerk Report Message

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. Switch to **P** Mode by press **MODE** function key.
2. To begin the program, enter **7 1 0**, press the **SBTL** key.




3. Refer to the chart below and enter the number that represents the line you wish to program; press the **X/TIME** key.



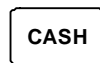
4. If you are programming using alpha overlay,

Type up to 12
descriptor keys → 

or,

Enter up to 12
three-character codes → 

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



Clerk Report Message

X	Message Line
1	NET SALE
2	GROSS SALES
3	CASH-IN-D
4	CHECK-IN-D
5	CHG1 SALES
6	CHG2 SALES
7	CHG3 SALES
8	CHG4 SALES
9	CHG5 SALES
10	CHG6 SALES
11	CHG7 SALES
12	CHG8 SALES
13	DRWR TTL

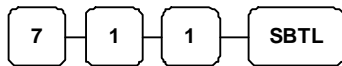
Program 711 - Macro Name Programming

Program descriptions by typing description on the alpha keyboard overlay or by entering three digit alpha character codes. **To use three digit alpha character codes you must select 'No' in system option #25 (See "System Option Programming").** Also see **Descriptor Programming Methods for Alpha Overlay** and/or **Descriptor Code Table**.

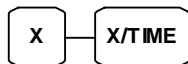
Programming the Macro Name

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. Switch to **P** Mode by press **MODE** function key.
2. To begin the program, enter **7 1 1**, press the **SBTL** key.




3. Refer to the chart below and enter the number that represents the Macro key Macro 1 you wish to program; press the X/TIME key.




X	Macro Key	X	Macro Key
1	Macro 1	6	Macro 6
2	Macro 2	7	Macro 7
3	Macro 3	8	Macro 8
4	Macro 4	9	Macro 9
5	Macro 5	10	Macro 10

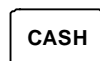
4. If you are programming using alpha overlay,

Type up to 12
descriptor keys → 

or,

Enter up to 12
three-character codes → 

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



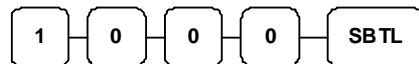
Program 1000 - NLU (Number Look Up) Code Number Programming

NLU (Number Look Up) are fixed keys on the keyboard (like traditional department keys) that access specific PLUs.

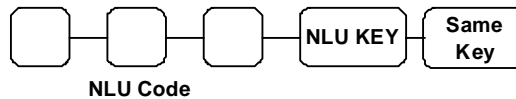
On the default keyboard, there are 60 NLU keys and the PLU# assigned to the NLU key is the same, i.e. NLU key #1 is PLU #1..However, with this program, you can assign any PLU number you wish to any one of the 60 possible NLU keys.

Programming the NLU Code Number

1. Switch to **P** Mode by press **MODE** function key.
2. To begin the program, enter **1 0 0 0**, press the **SBTL** 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.



4. Press **CASH** to finalize the program

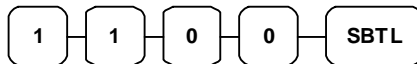


Program 1100 - Cash-In-Drawer Limit Programming

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. Switch to **P** Mode by press **MODE** function key.
2. To begin the program, enter **1 1 0 0**, press the **SBTL** 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.

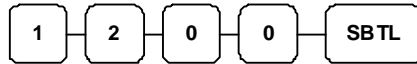


Program 1200 - Check Change Limit Programming

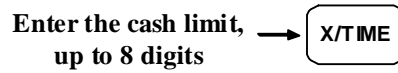
Use this program to set the maximum amount of cash that can be returned when a check is tendered for an amount greater than the amount of the sale. For example, if the check change limit is \$10.00 the maximum amount that can be tendered into the check key on a \$5.00 sale is \$15.00.

Programming the Check Change Limit

1. Switch to **P** Mode by press **MODE** function key.
2. To begin the program, enter **1 2 0 0**, press the **SBTL** 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.

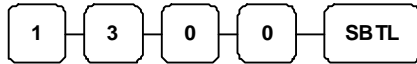


Program 1300 - Date and Time Programming

Use this program to set the clock and calendar on your *ER-230 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. Switch to **P** Mode by press **MODE** function key.
2. To begin the program, enter **1 3 0 0**, press the **SBTL** 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.

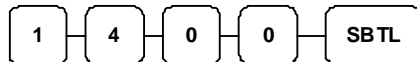


Program 1400 - Scale Tare Weight Programming

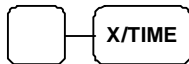
A tare is the amount of weight representing the container, or package when items are sold by weight. You can pre-program five tare weights, representing the weight of different containers. When you place an item and a container on optional scale, you can enter the tare number to automatically subtract 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.)

Programming the Scale Tare Weight

1. Switch to **P** Mode by press **MODE** function key.
2. To begin the program, enter **1 4 0 0**, press the **SBTL** 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, then three digits after the decimal key). Press the **SBTL** key.



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

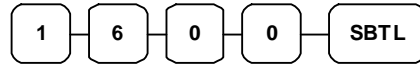


Program 1600 - Machine Number Programming

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. Switch to **P** Mode by press **MODE** function key.
2. To begin the program, enter **1 6 0 0**, press the **SBTL** 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 *ER-230 Series*, it is advisable to print a hard copy of the final program for future reference. This copy should be kept in a safe place.

Program 15 - Program Scans

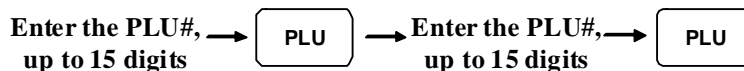
1. Switch to **P** Mode by press **MODE** function key.
2. To print a program scan, enter **1 5**, press the **SBTL** key.



3. In this step, there are three different ways to scan program information. One is PLU, the other is Macro, and the third is Others.

PLU PROGRAM SCAN

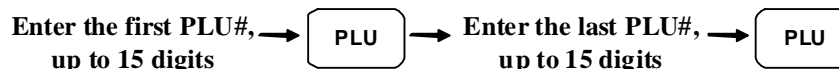
- To read single PLU program information, enter the number (1-1000) of the PLU and press the same number and PLU key.



- Press a PLU key on the keyboard and press same key again.



- To read multiple PLU program information, enter the first number (1-1000) and press PLU key. Press the last number (1-1000) and press PLU key



- Press a PLU key on the keyboard.



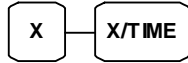
MACRO PROGRAM SCAN

- To read MACRO information, press the MACRO key to be scanned,



OTHERS PROGRAM SCAN

Refer to the chart below and enter a digit to represent the segment of the program you wish to print; press the **X/TIME** key. To see additional scan, repeat this operation.



X	Program	X	Program
0	Group	9	Financial Report message
1	Tax	10	Clerk Report message
2	System option	11	Macro Name
3	Print option	12	Drawer Limit
4	Function keys	13	Check Change Limit
5	Clerk	14	Time & Date
6	Preamble message	15	Tare Weight
7	Postamble message	16	Machine Number
8	Endorsement message	17	Mix & Match

4. Press the CASH key to finalize the program.



Sample Reports

Financial

WARNING:X or Z report	DATE 15/01/2003 WED TIME 13:32	Report Counter
	X 1 REPORT 00001	

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

Total of Non-taxable sales	NONTAX \$30.47	
	GST SALES \$153.60	
	TAX2 SALES \$11.92	
	TAX3 SALES \$16.77	
Total of tax eligible sales for each sale tax	TAX4 SALES \$31.89	
	GST \$10.00	
	TAX2 \$1.21	
	TAX3 \$1.18	
Total of tax collected for each tax	TAX4 \$2.18	
	XMPT1 SALES \$7.00	
	XMPT2 SALES \$1.50	
Total exempted sales for each tax	XMPT3 SALES \$7.95	
	XMPT4 SALES \$7.50	
	ITEM DISC. 3	
	-0.48	
Total and count for each % function key (i.e. discounts & coupons)	SALE DISC. 2	
	-5.22	
	continued . . .	

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

continued . . .

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Total and count of items sold with HASH status.	P/O 3	0
		\$0.00
Count of No Sales.	HASH TTL	0
		\$0.00
Total of numbers entered into the non-add key	NOSALE	4
	NON ADD #	547
Total and count of expected CASH, CHECK in drawer	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
Total and count for each CHARGE in drawer.	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
Total and count for each CHARGE key.	CHG1 SALES	0
		\$0.00
	CHG2 SALES	1
		\$8.43
	CHG3 SALES	1
		\$8.52
	CHG4 SALES	2
		-1.60
	CHG5 SALES	1
		\$2.67
	CHG6 SALES	2
		\$13.09
	CHG7 SALES	0
		\$0.00

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Total for each Foreign currency in drawer.	CHG8 SALES	1	
		\$3.04	
	FOREIGN 1	0.00	
	FOREIGN 2	0.00	
	FOREIGN 3	0.00	
	FOREIGN 4	0.00	
	DRWR TTL	216.69	
	PROMO	1	
		\$1.50	
	WASTE	8	
		\$12.50	
	TRAIN TTL	5	
		\$62.59	
	MIX&MATCH	0	
		\$0.00	
	AVG ITEM/CUST	7.29	
	AVG \$/CUST	\$10.81	

	GRAND		
	\$375.63		
	ETHAN	000209	00000
Total of CASH, CHECKS and CHARGES in drawer.			
Total and count for PROMO, WASTE and TIPS.			
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			

Time

Time Period		DATE 15/01/2003 WED	TIME 15:48
Number of Transactions		X 1 REPORT	00001
Net sales in this period.		-----	
Percentage of total sales		TIME	
Number of Transactions all periods		13:00-13:59	
Net sales in all periods.		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
		ETHAN	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.

```

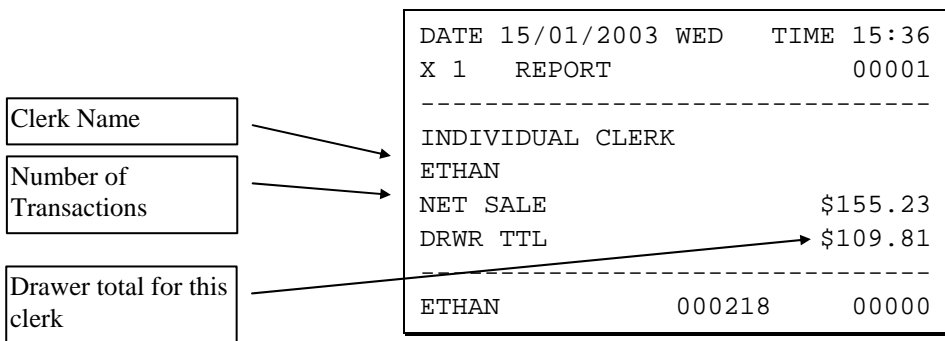
DATE 15/01/2003 WED    TIME 15:33
X 1   REPORT          00001
-----
ALL PLU
PLU#1
HAMBURGER
  CNT 28                $42.00
  SALES RATE            15.64%
PLU#2
DBL BURGER
  CNT 40                $99.75
  SALES RATE            37.14%
PLU#4
COKE
  CNT 26                $38.85
  SALES RATE            14.46%
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
ETHAN                  000213    00000
  
```

Clerk

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

Clerk Name	DATE 15/01/2003 WED	TIME 15:36
Number of Transactions	X 1 REPORT	00001
Drawer total for this clerk	ALL CLERK	
	ETHAN	
	NET SALE	\$155.23
	DRWR TTL	\$109.81
	ZACH	
	NET SALE	\$45.14
	DRWR TTL	\$43.22
	ANNA	
	NET SALE	\$78.75
	DRWR TTL	\$67.03
	LAURA	
	NET SALE	\$0.00
	DRWR TTL	\$18.64
	PEGGY	
	MOLLY	
	NET SALE	\$2.06
	DRWR TTL	-22.01
	ETHAN	000218 00000

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 15/01/2003 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
ETHAN                    000237    00000
```

Stock

PLU number

PLU Descriptor

Current Stock count

```
DATE 15/01/2003 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
ETHAN                      000228  00000
```

JK68-60969B Rev. 1.21 (Feb10)
From ER230 v1.000 to v1.004