



Electronic Cash Register AU

Operation and Program Manual

ER-230

ER-380

ER-380M

ER-390M

ER-420M

ER-430M

ER-52xx/M

All specifications are subject to change without notice

Revision: 1.7 (Aug13)

Match: ER-230	JK68-60969M(Rev.01)r3
ER-380/M	JK68-60962Q(Rev.01)r3
ER-390M	JK68-60692J(Rev.01)r3
ER-420M	JK68-60694P(Rev.02)r3
ER-430M	JK68-60694I(Rev.01)r3
ER-5200/M	JK68-60953L(Rev.00)r4

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.

CAUTION



RISK OF EXPLOSION IF BATTERY IS REPLACED BY AN INCORRECT TYPE. DISPOSE OF USED BATTERIES ACCORDING TO THE INSTRUCTIONS.

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.

<p>SAFETY NOTICE: "For pluggable equipment, the socket-outlet shall be installed near the equipment and shall be easily accessible."</p>

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.

Contents

Introduction	1
About the <i>Sam4S ER-230, ER-3xx, 4xx, 52xx Electronic Cash Registers</i>	1
Using This Manual	3
Using Flowcharts.....	3
Using Option Tables.....	4
Using Status Charts	5
Basic Features and Functions	6
Operator Display	6
Customer Display	11
Error Code Table	14
Control Lock	16
Keyboards.....	17
Printers	25
Communication Ports	25
Miscellaneous Hardwares.....	25
Optional Hardware	25
Software Features	26
 Getting Started	 27
Quick Start Steps	27
Unpacking.....	28
Installing the Paper	29
Memory Clear	39
Initial Clear (Status Clear).....	39
Clerk Sign-On/Sign-Off	40
Direct Sign-On	40
Coded Sign-On.....	40
Straight Percentage Tax Rate Programming.....	41
Programming Tax & Preset Status for Keyboard PLUs	42
Programming a Price/HALO for Keyboard PLUs.....	43
Programming a Descriptor for Keyboard PLUs	44
 Operating Instructions	 45
Function Key Descriptions	45
Receipt On and Off.....	50
Program 99 - Receipt ON/OFF Programming.....	50

Item Registrations	51
Keyboard PLU Entry - Open Price / Preset Price Override.....	52
Keyboard PLU Entry - Preset Price.....	52
Keyboard PLU Entry - Repeat.....	53
Keyboard PLU Entry - Multiplication.....	54
Keyboard PLU Entry - Direct Multiplication with Preset Price	54
Keyboard PLU Entry - Multiplication with Decimal Point.....	55
Keyboard PLU Entry - Split Pricing.....	56
Keyboard PLU Entry - Single Item	56
Code PLU Entry - Open Price	57
Code PLU Entry - Preset Price / Single Item	57
Code PLU Entry - Preset Price Override.....	58
Code PLU Entry - Repeat.....	58
Code PLU Entry - Multiplication	59
Code PLU Entry - Multiplication with Decimal Point	59
Code PLU Entry - Split Pricing.....	60
Barcode PLU Entry - Open Price, Single Item.....	61
Barcode PLU Entry - Open Price, Multiple Items.....	61
Barcode PLU Entry - Preset Price Override, Single Item.....	62
Barcode PLU Entry - Preset Price Override, Multiple Items	62
Modifier Key	63
Price Level Key	64
Promo	65
Waste	66
KBD SHIFT (<i>ER-420M only</i>).....	67
Not Found PLU function (<i>ER-230 only</i>).....	68
Quick Entry	68
Detail Entry	69
Percent Key Operations	70
Preset Percent Discount on an Item.....	71
Enter a Percent Discount on an Item	71
Preset Percent Discount on Sale Total.....	72
Enter a Percent Discount on Sale Total	72
For Surcharge Operation	72
Dollar Amount Discount on Sale.....	73
Dollar Amount Discount on Item	73
Return Merchandise Registrations	74
Voids and Corrections	75
Error Correction (Void Last Item).....	75
Void Previous Item.....	75
Cancel	76
Void Mode Operations	76
No Sale Operations	77
Open Drawer	77
Non Add Number	77
Received On Account Operations.....	78
Paid Out Operations.....	79
Subtotaling a Sale	80
Eat In/Take Out/Drive Thru Sales (not applicable to <i>ER-230</i>).....	80
Totaling and Tendering.....	81
Totaling a Cash Sale	81
Totaling a Check Sale.....	81
Tendering a Cash Sale	82
Tendering a Check Sale.....	82
Totaling a Charge (EFTPOS) Sale	83

Tendering a Charge (EFTPOS) Sale	83
Cash Out within a Charge (EFTPOS) Sale.....	84
Check Cashing.....	85
Split Tender.....	85
Post Tender.....	86
Currency Conversion.....	86
Check Track System (<i>Account Management</i>) (not applicable to <i>ER-230</i>)	87
Overview	87
Clerk Interrupt.....	88
Table Management	90
Soft Check Tracking - (<i>Restaurant Style Billing</i>).....	91
Hard Check Tracking - (<i>Monthly Account Style Billing</i>).....	96
Scale Entry.....	100
Direct Scale Entry	100
Automatic Scale Entry.....	101
Tare Weight Entry	102
Manual Tare Weight Entry.....	103
Manual Weight Entry	104

X/Z Mode 105

Introduction	105
X/Z Reports	106
Running a Report - General Instructions.....	106
Report Table.....	107
Electronic Journal Table.....	107
Reset Hard Check Line # (not applicable to <i>ER-230</i>).....	108
Program 10 - Reset Hard Check Line # Programming.....	109
Cash Declaration.....	110
Program 90 - Cash Declaration Programming	110

Service Mode Programming 111

Overview	111
Memory All Clear.....	112
ER-230 Memory All Clear (RAM All Clear).....	112
ER-380/M, ER-390M, ER-420M, ER-430M, ER-52xx/M Memory All Clear (RAM All Clear).....	113
Memory Allocation Scan.....	116
PC Online Mode	116
Self Tests	116
Clear All Sales Totals	117
Program 20 - Clear All Sales Totals.....	117
Clear Grand Total	117
Program 30 - Clear Grand Total.....	117
Clear / Delete PLU File	117
Program 40 - Clear / Delete PLU File	117
EPROM Information	117
Program 50 - EPROM Information	117
Memory Allocation.....	118
Program 60 - Memory Allocation Programming.....	119
Function Key Assignment Programming	121
Program 70 - Function Key Assignment Programming	121
Function Key Codes - ER-230	122
Function Key Codes - All Other ER Models.....	123

Function Key Codes - For Earlier Released <i>ER380 ER380M</i>	124
RS-232 Serial Ports Communication Options	125
Program 80/81 - RS232C Serial ports Communication Options	125
RS-232 Option Chart.....	126
Load Receipt Images	129
Preparing a Graphic Logo Bitmap.....	129
Use the PC Utility to Convert the Image	130

Program Mode Programming 131

Default Programming	135
Descriptor Programming Methods.....	135
Alpha Overlay Method.....	136
Descriptor Code Method	140
Tax Programming	141
Tax Descriptor Related Programming	141
Straight Percentage Tax Rate Programming.....	142
PLU Programming.....	143
Program 100 - PLU Status Programming.....	144
Program 110 - PLU Auto Tare Programming	147
Program 150 - PLU Group Assignment Programming	148
Program 200 - PLU Price/HALO Programming	149
Program 250 - PLU Stock Amount Programming	151
Program 300 - PLU Description Programming	152
Program 350 - PLU Link Programming.....	153
Program 400 - PLU Delete Programming	154
Program 450 - PLU MIX & MATCH Programming	155
System Option Programming.....	156
Program 30 - System Option Programming	156
System Option Table (<i>ER-3xx, ER-4xx, ER-52xx/M</i>).....	157
System Option Table (<i>ER-230</i>)	162
Price Embedded Barcode Format	165
Print Option Programming.....	166
Program 40 - Print Option Programming	166
Print Option Table (<i>ER-3xx, ER-4xx, ER-52xx/M</i>).....	167
Print Option Table (<i>ER-230</i>)	172
Function Key Programming.....	176
Program 70 - Function Key Options Programming.....	177
Program 80 - Function Key Descriptor Programming	178
Program 90 - Function Key HALO or Percentage Rate Programming	179
#/NS (<i>Non Add#/No Sale</i>).....	180
ADDCHK (<i>Add Check - Cafeteria Tray Total</i>)	182
CANCEL (<i>Cancel a Sale</i>).....	183
CASH (<i>Cash Tender</i>)	184
CHARGE (1 ~ 8) (<i>Miscellaneous Tender</i>).....	185
CHKCASH (<i>Check (Cheque) Cashing</i>)	187
CHKENDOR (<i>Check (Cheque) Endorsement</i>).....	188
CHECK (<i>Cheque - Check (Cheque) Tender</i>)	189
CHECK # (<i>for Soft/Hard Check - Bill or Account</i>) (<i>Exclude ER-230</i>).....	190
CONV (1 ~ 4) (<i>Currency Conversion</i>).....	191
DVTHR (<i>Drive Through</i>) / EATIN (<i>Eat In</i>) / TKOUT (<i>Take Out</i>) (<i>Exclude ER-230</i>).....	192
ERRCORR (<i>Error Correct</i>)	193
F/S SUB (<i>Food Stamp Subtotal</i>).....	193
F/S TEND (<i>Food Stamp Tender</i>).....	194
GUEST (<i>Guest # - Bill or Account</i>) (<i>Exclude ER-230</i>).....	195

LEVEL1 - 2 (Price Levels)	195
MACRO (1 ~ 10) (Multiple Key Stroke Programmable Key)	196
RETURN (<i>Merchandise Return</i>)	196
MOD (1 ~ 5) (<i>Modifier</i>)	197
PO (1 ~ 3) (<i>Paid Out</i>)	199
PAYMENT (Close Account - Bill or Account) (<i>Exclude ER-230</i>)	199
PBAL (<i>Previous Balance</i> - Bill or Account) (<i>Exclude ER-230</i>)	200
PRINT CHK (<i>Print Check</i> , for Soft Check - Bill or Account) (<i>Exclude ER-230</i>) ..	201
PROMO (<i>Promotion</i>)	202
RA (1 ~ 3) (<i>Received on Account</i>)	203
SUBTOTAL	203
SCALE	204
SERVICE (<i>New Balance</i> , for Soft/Hard Check - Bill or Account) (<i>Exclude ER-230</i>)	205
TARE	206
TAX EXEMPT (<i>Tax Exempt</i>)	207
TIP (for Soft/Hard Check - Bill or Account) (<i>Exclude ER-230</i>)	208
VALIDATION	209
VOID (<i>Void Previous Item</i>)	209
WASTE	210
% (1 ~ 5) (Discounts or Surcharges)	211
KBD SHIFT (<i>ER-420M only</i>)	213
Mix & Match Programming	214
Program 600 - Trip Level Programming	215
Program 601 - Price Programming	215
Program 610 - Mix & Match Description Programming	216
Clerk Programming	217
Program 800 - Secret Code Programming	218
Program 801 - Drawer Assignment & Training Clerk Programming	219
Program 810 - Clerk Description Programming	220
Group Programming	221
Program 900 - Group Status Programming	222
Program 910 - Group Descriptors Programming	223
Miscellaneous Programming	224
Program 9999 - Mode Key Password Programming (For <i>ER-230 EPROM v1.008</i> <i>and later only</i>)	224
Use Password to Change Mode	224
Program 1500 - Macro Key Sequence Programming	225
Program 700 - Logo Description Programming	226
Program 701 - Financial Report Message Programming	227
Program 710 - Clerk Report Message Programming	230
Program 711 - Macro Name Programming	233
Program 1000 - NLU Code Number Programming	234
Program 1100 - Cash-In-Drawer Limit Programming	235
Program 1200 - Check Change Limit Programming	235
Program 1300 - Date and Time Programming	236
Program 1400 - Scale Tare Weight Programming	237
Program 1600 - Machine Number Programming	238
Program Scans	239
Program 15 - Program Scans	239

Sample Reports

241

Financial	241
Time	245
PLU	246

Clerk	247
Individual Clerk	248
Groups	249
Stock	250
Open Check	251

Introduction

About the **Sam4S ER-230, ER-3xx, 4xx, 52xx Electronic Cash Registers**

The *Sam4S ER-230, ER-3xx, 4xx, 52xx Electronic Cash Registers Range* is preset with 10% GST and Australian rounding as well as a number of other useful functions.

The *Sam4S ER-230, ER-3xx, 4xx, 52xx Electronic Cash Registers Range*, with its superb thermal printing system, always provides the fastest in transaction speeds.

The *ER-230* comes with or without batteries.

- The *ER-230* has a standard capacity of 50 PLUs and 5 Groups allows for easy item management.
- The *ER-230* is an excellent low cost solution for a wide range of retail environments.
- The *ER-230* 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.

The *ER-3xx Series* is offered in three different versions.

- The *ER-3xx Series* has a standard capacity of 300 PLUs and 20 Groups allows for easy item management.
- The *ER-3xx Series* is an excellent low cost solution for a wide range of retail environments.
- The *ER-380 / ER-380M* features a raised 44-position keyboard with 12/16 NLU keys.
- The *ER-390M* features a flat 90-position keyboard with 60 NLU keys. This keyboard will accommodate up to 60 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.

The **ER-4xx Series** is offered in two different versions.

- The **ER-4xx Series** has a standard capacity of 1000 PLUs and 20 Groups allows for easy item management.
- The **ER-4xx Series** is an excellent low cost solution for a wide range of retail environments.
- The **ER-420M** features a 48-position keyboard with traditional raised keys. This keyboard will accommodate up to 12/16 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.
- The **ER-430M** features a 90-position keyboard with traditional flat keys. This keyboard will accommodate up to 60 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.

The **ER-52xx Series** is offered in six different versions.

- The **ER-52xx Series** has a standard capacity of 1000 PLUs and 20 Groups allows for easy item management.
- The **ER-5200/ER-5200M** features a flat 160 position keyboard with 117 NLU keys. Because it offers protection from spills, this keyboard works best in restaurants, food service shops, or convenience stores where food is served.
- The **ER-5240/ER-5240M** features a 90 position keyboard with traditional raised keys. This keyboard will accommodate up to 40 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.
- The **ER-5215/ER-5215M** features a 60 position keyboard with traditional raised keys. This keyboard will accommodate up to 15 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.

This manual includes instructions for three models. The keyboard is the only significant difference between the three models. All other features are the same, unless otherwise noted.

Using This Manual

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

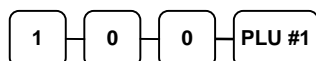
- **Introduction** - the section you are reading now; provides basic idea about the register and how to use this manual.
- **Getting Start** - provides quick start steps to help you get up and running for basic applications.
- **Operations** - guides you through the basic operation sequences.
- **Management Functions X/Z-Mode** - explains manager controlled functions, along with reports and balancing information.
- **S-Mode Programming** - provides instructions for secure programming – usually done by the installing dealer prior to installation.
- **P-Mode Programming** - provides complete programming instructions, including PLU, function key programs, and system options. This section is recommended for use by storeowners and managers. Call your SAM4s dealer if you find you need programming assistance.
- **Sample Reports** - provides a sample of each register report.

These SAM4s Cash Registers allows many different user applications. This manual was written with this in mind. Although we have tried to touch on all available options, your specific application may differ.

If you have questions concerning the configuration of your Sam4S Cash Register, contact your authorized SAM4s dealer.

Using Flowcharts

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



This flowchart means:

1. Press numeric key 1.
2. Press numeric key 0.
3. Press numeric key 0.
4. Press PLU #1.

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

Using Option Tables

Option Tables are used to list all available options which you can use to modify the way an ECR works. When the **Address** is **only** a number, it means each address can be programmed individually. Each option **Address** may have one or more (up to 3) sub-options. All 3 options have to be considered all together. Below is an example from *ER-420M / ER-430M* System Option #25...

Address	SYSTEM OPTION		VALUE	=	SUM
25	Descriptor Program Method	Keyboard overlay =	Yes = 0	a	a +
		Character code =	No = 1		
	% is not affect to net sale?		Yes = 0 No = 2	b	b +
	Disable Cash Declaration ?		Yes = 4 No = 0	c	c

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

In this System Option Address **#25**, there are 3 options - Descriptor Program Method (Keyboard overlay or Character code), % is not affect to net sale, and Disable Cash Declaration.

When **the factory default program** is loaded into the machine after **RAM All Clear** this address is set to “Keyboard overlay descriptor program method”, “% is not affect to net sale” and “Cash declaration is not disabled. So the decisions in the same order are: **Yes**, **Yes** and **No**. The values which represent the options in the same order are **0**, **0** and **0**. In this case, **a = 0**, **b = 0**, and **c = 0** for each option in same order. Therefore, the “**SUM**” value for this Address **#25** is $a + b + c$, which is **0**.

If Character code descriptor program method happens to be the desired method, you then need to choose **No** for the first option. The value of **a** becomes **1**. If the following two options remain the same (which **b** and **c** are both **0**), the **SUM** ($a + b + c$) value for this address will be $1 + 0 + 0$ and **1**.

On the other hand, from **factory default value** (which is **0**), if the only change you want to make is to “Disable Cash Declaration”, you need to choose **Yes** for this option, the value of **c** becomes **4**, the first two options (**a** and **b**) remain as **0**, the **SUM** value for this address will be $0 + 0 + 4 = 4$

So the possible **SUM** values for this **#25** are 0, 1, 2, 3, 4, 5, 6, and 7 according to your decision. So if you only want to change to “Use Character Code Descriptor Program Method” (the first example which **SUM** value $a + b + c = 1$), to program that decision into *ER-420M / ER-430M*:

Turn mode lock to **PGM-Mode** with right key, then



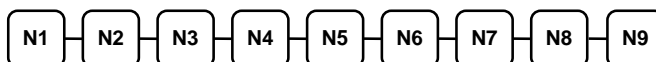
Using Status Charts

Similar to Option Tables, **Status Charts** similar job. Below shows one of the options in the PLU **Status Charts**:

Address	Program Option	Value	=	Sum
N5	PLU keeps inventory ?	Yes = 1 No = 0	a	a
	PLU is inactive ?	Yes = 2 No = 0	b	+
	PLU is scalable ? (Also make N6-1)	Yes = 4 No = 0	c	b +
				c

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

The difference with the Status Chart is that the Address is a string of numbers. The PLU Status Chart Address is a nine (9) digit number.



When N# is the Address number, the example above shows the fifth digit (N5) in the Address. Each SUM value in the Address is calculated in the same way as the **Option Tables**. For example above, when all three sub-options of **N5** are all **No**, **N5** equals **0 + 0 + 0 = 0**

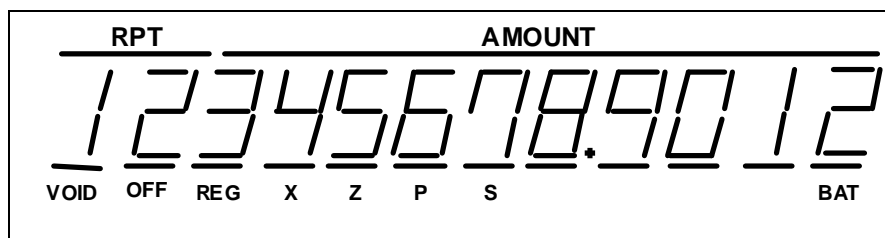
The factory default status for a PLU is **Preset Price** (N1-1 is Yes, equals **0**), **Overridable Preset Price** (N1-2 is Yes, equals **0**), and **GST** (N1-3 is Yes, equals **4**), for **N1**, which is **0 + 0 + 4 = 4**. The rest of Addresses in the status is all preset to **0**. Therefore, the status from **N1** to **N9** is **4 0 0 0 0 0 0 0 0**.

Basic Features and Functions

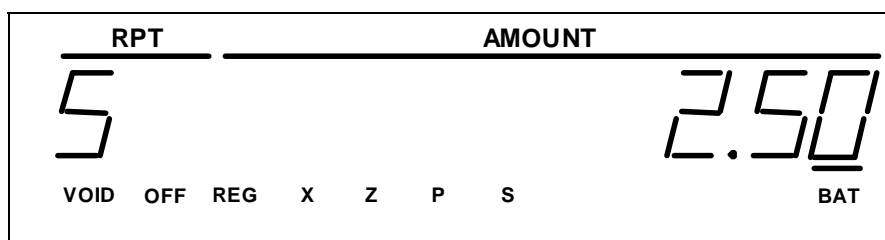
Operator Display

LCD - ER-230

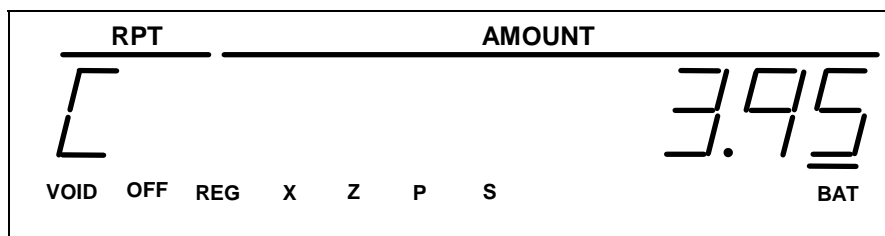
The rear display is a 12 digit florescent display that allows your customer to monitor the transaction and view the sale total.



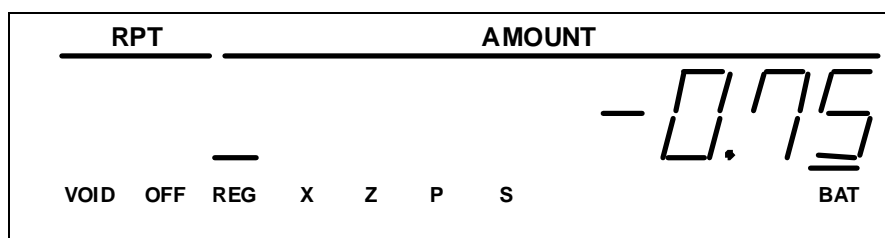
RPT



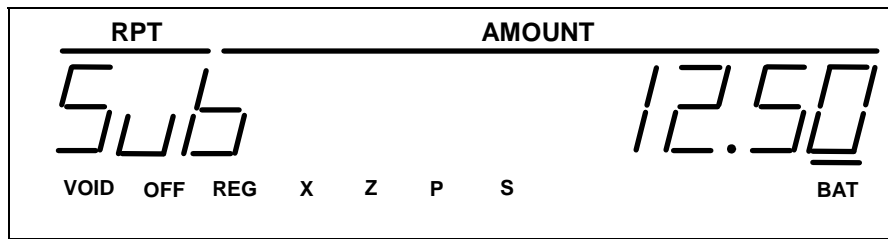
Change Due



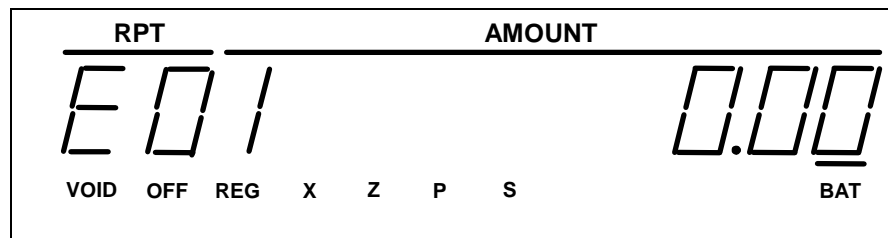
Negative Entry



Subtotal



Numbered Error Conditions



LCD - ER-380M, ER-390M, ER-4xx Series & ER-52xxM Series

The *ER-380M, ER-390M, ER-4xx Series & ER-52xxM Series* come with a liquid crystal screen, allowing you to view up to 2 lines of information with up to 20 characters per line. The display is backlit and adjustable to provide excellent visibility, regardless of lighting conditions.

When the control lock is in the OFF position, the register can not be operated. When the control lock in the REG, VOID, X, Z, PGM or SM positions the appropriate message, there are displayed with the message "CLOSED". You must sign on a clerk to remove the "CLOSED" message and begin operation.

REG

REGISTER MODE CLOSED

VOID

VOID MODE CLOSED

Operator Display Example

- ◆ Press **1 0 0 0**, then **PLU12** to register of the PLU 12

PLU12	
1	10.00

- ◆ Press **5 0 0 0**, then **CASH** to tender a sale and change will be shown

CASH	50.00
CHANGE	40.00

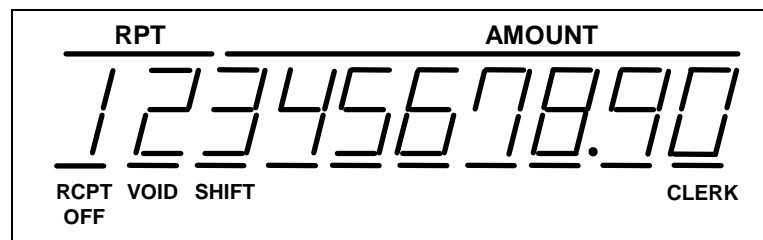
Displayed Error Conditions

** WARNING! ** SEQUENCE ERR
--

VFD MODEL - ER-380 & ER-52xx Series

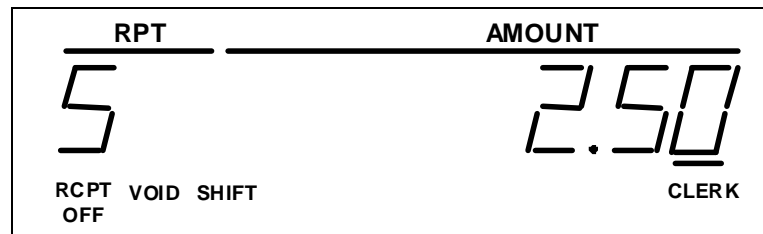
The **ER-380 & ER-52xx Series** come with a ten position front display. Annotations on the display window include:

- **RPT**, where a counter appears when the same item is multiplied or repeated.
- The **AMOUNT** area shows the amount, i.e. price, subtotal or total.
- **RCPT OFF** indicates when the receipt is turned off.
- The **VOID** symbol illuminates during Void operations.
- The **SHIFT** symbol illuminates during Tax Shift operations
- The **CLERK** segment remains illuminated as long as a clerk is signed on.

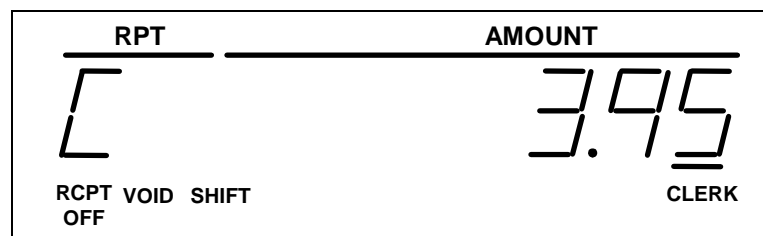


The front display offers supplemental descriptors which appear in the first two display positions (as shown). These descriptors help the operator by supplying additional information while operating the register, and may be accompanied by an error tone. Supplemental descriptors include:

RPT



Change Due



Negative Entry

RPT		AMOUNT	
1		-0.75	
RCPT OFF	VOID	SHIFT	CLERK

Subtotal

RPT		AMOUNT	
Sub		12.50	
RCPT OFF	VOID	SHIFT	CLERK

Total of Sale

RPT		AMOUNT	
—		12.50	
RCPT OFF	VOID	SHIFT	CLERK

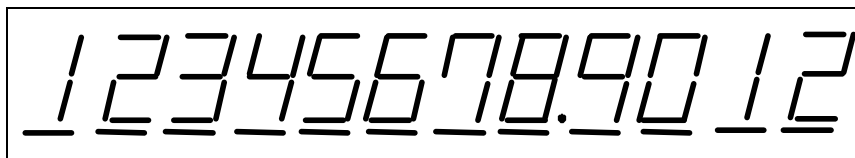
Numbered Error Conditions

RPT		AMOUNT	
E01		0.00	
RCPT OFF	VOID	SHIFT	CLERK

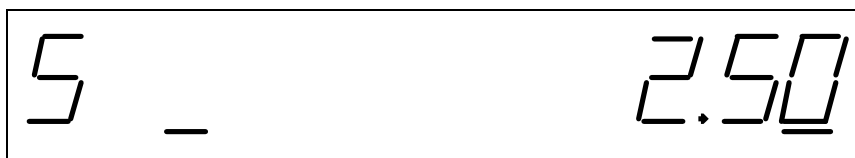
Customer Display

LCD MODEL - ER-230 Series

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

A 12-digit LCD display showing the numbers 1 through 12 in a segmented font. The digits are arranged in a single row, with a decimal point visible between the 8 and 9.

RPT

A 12-digit LCD display showing the transaction 'RPT'. The first digit is '5', followed by a space and a dash. The last three digits are '2.50'.

Change Due

A 12-digit LCD display showing the transaction 'Change Due'. The first digit is 'L', followed by a space and a dash. The last three digits are '3.95'.

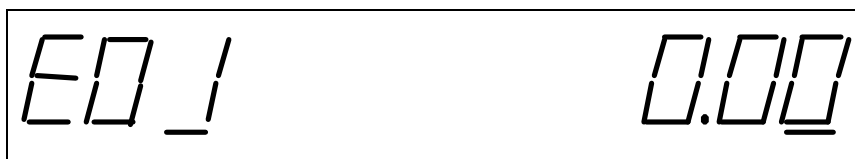
Negative Entry

A 12-digit LCD display showing the transaction 'Negative Entry'. The first digit is a dash, followed by a space and a dash. The last three digits are '-0.75'.

Subtotal

A 12-digit LCD display showing the transaction 'Subtotal'. The first three digits are 'Sub', followed by a space and a dash. The last three digits are '12.50'.

Numbered Error Conditions

A 12-digit LCD display showing the transaction 'Numbered Error Conditions'. The first three digits are 'EO', followed by a space and a dash. The last three digits are '0.00'.

VFD MODEL (exclude ER-230 Series)

The rear display is a 10 digit florescent display that allows your customer to monitor the transaction and view the sale total. The rear display can be lifted and turned for easy customer viewing.

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

RPT



Change Due



Negative Entry



Subtotal



Total of Sale

A digital display with a black border. On the left, there is an equals sign (=) formed by two horizontal bars. On the right, the number 12.50 is displayed in a seven-segment font.

Numbered Error Conditions

A digital display with a black border. On the left, the code E01 is displayed in a seven-segment font. On the right, the number 0.00 is displayed in a seven-segment font.

Error Code Table

ER-230	ER-3xx	ER-4xx	ER-52xx	Error Message
			E00	SEQUENCE ERROR
			E01	PLU NO DATA
			E02	CLERK ERROR
			E03	AMOUNT COUNT OVER
			E04	LAN TRAN
			E05	COMMUNICATION ERROR
			E06	TIME AND DATE
			E07	LIMIT OVER
			E08	INACTIVE
			E09	XMODE ONLY
			E10	NONADD
			E11	ADD CHECK ERROR
			E12	CONDIMENT ERROR
			E13	REQ. EAT IN
			E14	REQ. STOCK
			E15	REQ. DRAWER
			E16	REQ. GUEST
			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
			E26	CHECK OPEN
			E27	REQ. PASSWORD
			E28	NO VOID PLU
			E29	232C SETUP ERROR
			E30	REQ. PRESET VALUE
			E31	REQ. OPEN VALUE

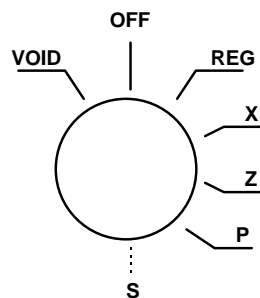
ER-230	ER-3xx	ER-4xx	ER-52xx	Error Message
E32				REQ. AMOUNT
E33				REQ. PAYMENT
E34				INVALID FUNCTION
	E35			REQ. TABLE
	E36			REQ. PBAL
	E37			REQ. CHECK #
	E38			ONLY ONE TABLE
E39				REQ. VALID
E42	E43	E42		MEMORY ALLOCATION ERROR
E43		E43		PLU DELETE ERROR
EJFULL	E44			ELECTRONIC JOURNAL FULL
E45		E45		RECEIPT AND JOURNAL PRINTER END
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 use any more.)
PER	PER	PER	PER	RECEIPT PRINTER PAPER END
		PEJ	PEJ	JOURNAL PRINTER PAPER END
			PNR	RECEIPT PRINTER PAPER NEAR END
			PNJ	JOURNAL PRINTER PAPER NEAR END
	PCO		PCO	PRINTER COVER OPEN
			ACJ	AUTO CUTTER PAPER JAM
			A[]	SYSTEM OPTION ERROR No Auto Cutter Installed. Set System Option #24 = 0
PFP	PFP	PFP	PFP	SYSTEM ERROR (If this problem occurs, call the service engineer.)

Control Lock

On *ER-230*, a **MODE** function key sequentially changing through 7 positions. A **Password** feature added to **MODE** function key on v1.008 to provide better security. Please see **P-Mode, Program Mode Programming, Miscellaneous Programming, Program 9999** for detail.

All other ER models have a control lock in order to access following control lock positions.

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



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

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

Control Keys

All ER models (except *ER-230*) include two sets of keys that may be used to access the following control lock positions.

Key	Positions Accessible						
	VOID	OFF	REG	X	Z	PGM	S
Keys Removable from		✓	✓				
REG Key		✓	✓				
VD Key	✓	✓	✓	✓			
Z Key	✓	✓	✓	✓	✓		
P Key	✓	✓	✓	✓	✓	✓	
C Key	✓	✓	✓	✓	✓	✓	✓

Keyboards

ER-230 Standard Keyboard Layout

The ***ER-230*** keyboard includes 48 key positions with the default legends and key assignments as shown below. This configuration has 12 keyboard NLU locations. The keyboard legend label can be replaced by removing the protective plastic key cap.

Programmable key locations are shown with a **bold** border.

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	SUBTOTAL	
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		

ER-380/ER-380M Keyboard

The **ER-380 / ER-380M** keyboard includes 44 key positions with the default legends and key assignments as shown below. This configuration has 16 keyboard NLU locations. The keyboard legend label can be replaced by removing the protective plastic key cap.

Programmable key locations are shown with a **bold** border.

FEED	G CLERK	X/TM	7	8	9	M 4	Q 8	U 12	X 14	Y 16
C %1	F RECEIPT On/Off	I MOD 1/ SHIFT	4	5	6	L 3	P 7	T 11	W 13	Z 15
B CANCEL	E RETURN	H VOID	1	2	3	K 2	O 6	S 10	SUB TOTAL	Y CHECK
A #/NS	D PLU	CLEAR	0	00	.	J 1	N 5	R 9	CASH	

ER380/ER380M Alpha Keyboard

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

ER-390M Keyboard

The **ER-390M** keyboard includes 90 key positions with the default legends and key assignments as shown below. This configuration has 60 keyboard NLU locations. The keyboard legend sheet can be replaced by lifting the protective plastic cover.

Programmable key locations are shown with a **bold** border.

1	7	13	19	52	31	37	43	49	55	PAPER FEED	#NS	RECD ACCT	PAID OUT	CLERK #
2	8	14	20	26	32	38	44	50	56	C/CONV	CLEAR	PLU	X/TIME	%1
3	9	15	21	27	33	39	45	51	57	VOID	7	8	9	CHARG E
4	10	16	22	28	34	40	46	52	58	RETURN	4	5	6	CHECK
5	11	17	23	29	35	41	47	53	59	ERROR CORR	1	2	3	SBTL
6	12	18	24	30	36	42	48	54	60	CANCEL	0	00	•	CASH

ER390M Alpha Keyboard

										PAPER FEED				
!	@	#	\$	%	^	&	*	()					
Q	W	E	R	T	Y	U	I	O	P		7	8	9	
A	S	D	F	G	H	J	K	L	;		4	5	6	
Z	X	C	V	B	N	M	,	.	/		1	2	3	
+	-	<	>	?	=	CAPS	DOUBLE	SPACE	BACK SPACE		0	00	•	

ER-420M Keyboard

The **ER-420M** keyboard includes 48 key positions with the default legends and key assignments as shown below. This configuration has 12 keyboard NLU locations. The keyboard legend label can be replaced by removing the protective plastic key cap.

Programmable key locations are shown with a **bold** border.

RCPT FEED	DETL FEED	RCPT ON/OFF	CLERK	7	8	9	4	8	12	CHARG 1	RECD ACCT
ADD CHECK	%1	%2	X/TIME	4	5	6	3	7	11	CHARG 2	PAID OUT
KBD SHIFT	CANCEL	RETURN	VOID	1	2	3	2	6	10	SUB TOTAL	CHECK
PLU	# NS	ERROR CORR	CLEAR	0	00	•	1	5	9	CASH/TEND	

ER420M Alpha Keyboard Overlay

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

ER-430M Keyboard

The **ER-430** keyboard includes 90 key positions with the default legends and key assignments as shown below. This configuration has 60 keyboard NLU locations. The keyboard legend sheet can be replaced by lifting the protective plastic cover.

Programmable key locations are shown with a **bold** border.

1	7	13	19	52	31	37	43	49	55	RCPT FEED	DETL FEED	RECD ACCT	PAID OUT	CLERK #
2	8	14	20	26	32	38	44	50	56	#/NS	CLEAR	PLU	X/TIME	%1
3	9	15	21	27	33	39	45	51	57	VOID	7	8	9	CHARGE
4	10	16	22	28	34	40	46	52	58	RETURN	4	5	6	CHECK
5	11	17	23	29	35	41	47	53	59	ERROR CORR	1	2	3	SBTL
6	12	18	24	30	36	42	48	54	60	CANCEL	0	00	•	CASH

ER430M Alpha Keyboard Overlay

										PAPER FEED	JOURNAL FEED			
!	@	#	\$	%	^	&	*	()					
Q	W	E	R	T	Y	U	I	O	P		7	8	9	
A	S	D	F	G	H	J	K	L	;		4	5	6	
Z	X	C	V	B	N	M	,	.	/		1	2	3	
+	-	<	>	?	=	CAPS	DOUBLE	SPACE	BACK SPACE		0	00	•	

ER-5200/ER-5200M Keyboard

The **ER-5200/ER-5200M** keyboard includes 160 key positions with the default legends and key assignments as shown below. This configuration has 117 keyboard NLU locations. The keyboard legend sheet can be replaced by lifting the protective plastic cover.

Programmable key locations are shown with a **bold** border.

RECT FEED	DETL FEED	RCPT ON/OFF										TAX	ADD CHECK	PAID OUT	CLERK
												% 1	CHECK #	RECD ACCT	CONV1
												% 2	SERVIC E	VOID	CONV2
												% 3	ERROR CORR	RETURN	EAT IN
												VALID	#/NS	CANCEL	TAKE OUT
												CLEAR	PLU	X/TIME	CHARG E2
												7	8	9	CHARG E1
												4	5	6	CHECK
												1	2	3	SBTL
												0	00	.	CASH

ER-5200/ER-5200M Alpha Keyboard Overlay

!	@	#	\$	%	^	&	*	()	-	+				
Q	W	E	R	T	Y	U	I	O	P	<	>				
A	S	D	F	G	H	J	K	L	;	'	?				
Z	X	C	V	B	N	M	,	.	/	:	=	7	8	9	
CAPS	DOUBLE	SPACE	SPACE	SPACE	SPACE	SPACE	CAPS	DOUBLE	BACK SPACE	"		4	5	6	
												1	2	3	
												0	00	•	

ER-5240/ER-5240M Keyboard

The **ER-5240/ER-5240M** keyboard includes 90 key positions with the default legends and key assignments as shown below. This configuration has 40 keyboard NLU locations. The keyboard legend label can be replaced by removing the protective plastic key cap.

Programmable key locations are shown with a **bold** border.

RECT FEED	DETL FEED	RCPT ON/OFF	#/NS	TAX	CHECK #	SERVIC E	RECD ACCT	PAID OUT	PRINT CHECK	ADD CHECK	CONV1	CONV2	EAT IN	CLERK
ERROR CORR	P L U	CLEAR		X/TIME	5	10	15	20	25	30	35	40	TAKE OUT	CHARG 2
VOID		7	8	9	4	9	14	19	24	29	34	39	DRIVE THRU	CHARG 1
%1	RETURN	4	5	6	3	8	13	18	23	28	33	38	CHECK	
%2	CANCEL	1	2	3	2	7	12	17	22	27	32	37	SUBTOTAL	
%3	VALID	0	00	•	1	6	11	16	21	26	31	36	CASH	

ER-5240/ER-5240M Alpha Keyboard Overlay

					!	@	#	\$	%	^	&	*	()
					Q	W	E	R	T	Y	U	I	O	P
		7	8	9	A	S	D	F	G	H	J	K	L	;
		4	5	6	Z	X	C	V	B	N	M	,		
		1	2	3	-	+	<	>		?	:	=		
		0	00	•	CAPS	DOUBLE	SPACE	DOUBLE	BSPACE	"	.	/		

Internal Printers

ER-230 and *ER-3xx*: 1 station Thermal 32-column printer with drop-and-print mechanism.

ER-4xx: 2 station Thermal 24-column printer with auto-load mechanism.

ER-52xx/M: 2 station Thermal 32-column printer with drop-and-print mechanism.

Communication Ports

ER-230: 2 x *RJ45* RS232C

ER-380: 1 x *DB9* RS232C

ER-380M, *ER-4xx* and *ER-52xx/M*: 2 x *DB9* RS232C

Miscellaneous Hardware

- **Cash Drawer**

ER-230: **Optional** with a drawer port build-in.

ER-3xx, *ER-4xx* and *ER-52xx/M*: Sturdy Metal Cash Drawer with removable 4 Bill/8 Coin drawer insert.

- **Clock**

The 24-hour real-time clock with automatic day and date change

Optional Hardware

- PC Link.
- Load cell scale.
- Kitchen printer / Bill Printer / Slip Printer / Journal Printer.
- Barcode scanner.
- Pole Display (exclude *ER-230 Series*).
- Real clerk keys and lock assembly for 15 clerks (*only for ER-52xx Series*).
- Cash Drawer (*ER-230 Series* only)

NOTE: Cash Drawer for *ER-230 Series* is 7 volt version, large version is a 4 Bill/8 Coin metal drawer and small is a 4 Bill/4 Coin plastic drawer.

Software Features

- Up to 2 price levels for each PLU.
- Up to 5 PLU modifier keys.
- 18 (12 only for **ER-230 Series**) character programmable descriptors for PLUs, Function Keys, Clerk Names, Group Names and Reporting Fields.
- 32 (24 only for **ER-4xx**) single space characters by 6 lines programmable descriptors for both receipt header and footer.
- For **ER-230 Series**, **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.
- For **ER-3xx Series**, **300** Price Look Ups (PLUs) default (expandable **up to 5,000 with an extend memory chip**) for open or preset item registration. **117(ER-380 & ER-380M) /100(ER-390M) PLUs** standard for open or preset item registration. For direct registrations, **12/16(ER-380 & ER-380M), 60(ER-390M)** PLU keys are on the keyboard.
- For **ER-4xx Series**, **1000** Price Look Ups (PLUs) default (expandable **up to 9,000 with an extend memory chip**) for open or preset item registration. **50(ER-420M)/100(ER-430M) PLUs** standard for open or preset item registration. For direct registrations, **up to 16(up to 48 are accessible with SHIFT function key) (ER-420M)/60(ER-430M)** PLU keys are on the keyboard.
- For **ER-52xx Series**, **1000** Price Look Ups (PLUs) default (expandable **up to 15,000 with up to two extend memory chips**) for open or preset item registration. **117 PLUs** standard for open or preset item registration. For direct registrations, **up to 117(ER-5200/ER-5200M)/up to 40(ER-5240/ ER-5240M)/up to 15(ER-5215/ ER-5215M)** PLU keys are on the keyboard.
- Up to 99 PLU Group totals.
- Up to 99 clerks with separate report totals.
- 100 lines of receipt buffer for item registration.

Getting Started

Quick Start Steps

Using Quick Start Instructions provided here you can configure your register for use in your retail store. Basic setup instructions include: programming prices, descriptors, and loading a tax percentage. Your Sam4S ECR is now fully functional for many basic-use applications.

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

Steps In this chapter:

1. Unpacking
2. Installing the Paper
3. Clearing All Memory
4. Setting a Straight Percentage Tax for Tax Rate 1
5. Programming Status (includes Tax Status) for Keyboard PLUs
6. Programming a Descriptor for Keyboard PLUs

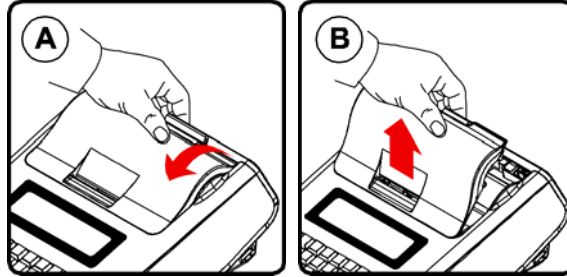
Unpacking

1. Unpack and unwrap the cash register.
2. Located in the packing are the following items:
 - Paper roll:
 - => **ER-230 and ER-3xx series**: 1 roll of paper,
 - => **ER-4xx and ER-52xx series**: 2 rolls of paper
 - Paper spindle:
 - => **ER-230**: Unavailable
 - => **ER-3xx series**: Optional (along with motor as a kit)
 - => **ER-4xx and ER-52xx series**: 1 (standard)
 - 1 DC power supply, (*for ER-230 series*)
 - 2 sets of control keys, (*exclude ER-230 series*)
 - Operation and Program Manual,
3. Remove the cardboard protectors from the cash drawer. (*exclude ER-230 series*)
4. **For ER-230 series**, 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. **For All other models**, Plug the register into a grounded outlet (three prong), insert a control key and turn the key to the **REG** control lock position.

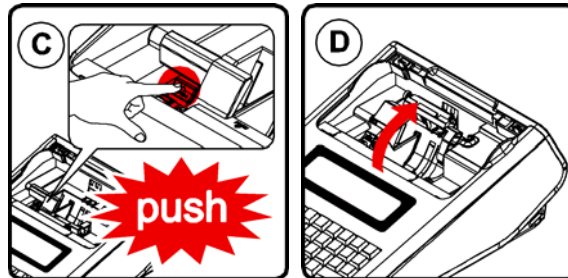
Installing the Paper

For *ER-230 series*:

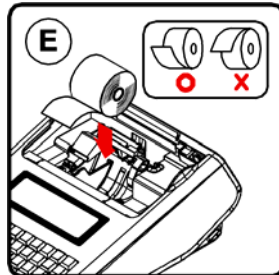
1. Remove the printer Cover (A) and (B).



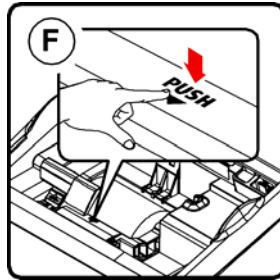
2. Open the housing clam cover by pressing the knob printer (orange button) (C) and (D).



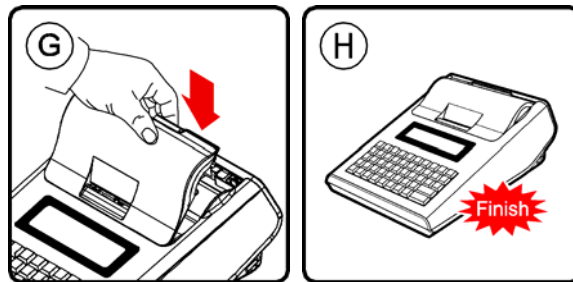
3. Remove the used paper roll core if there is one.
4. Insert the paper roll as shown. Besure to note the correct direction that the paper comes off the roll. Poll out a small amount of paper as shown (E).



5. Close the housing cover (F).

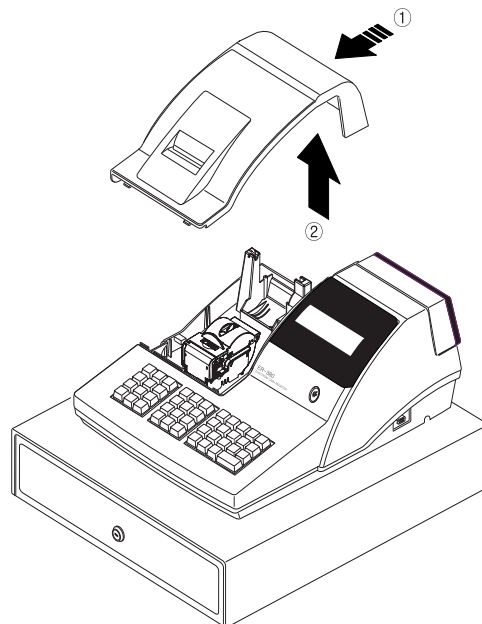


6. Replace the printer cover.

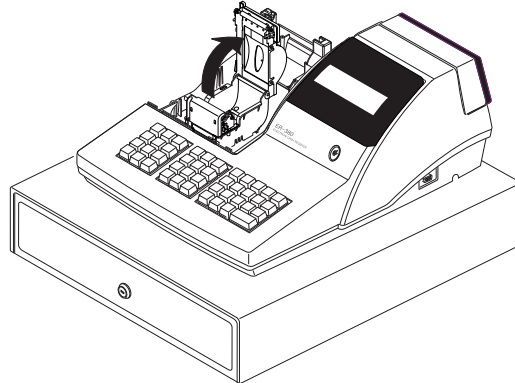
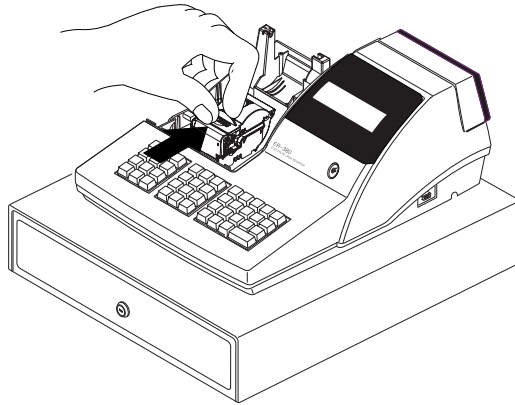


For **ER-3xx series** (*ER-380 shown in the picture*):

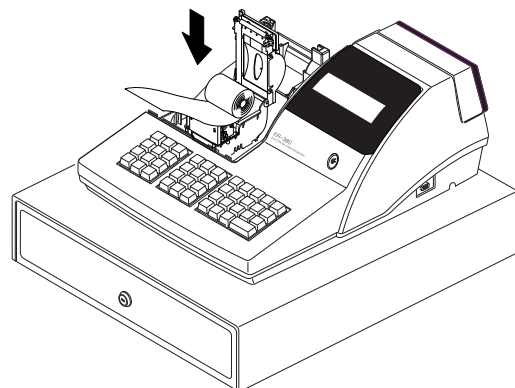
1. Remove the printer cover.



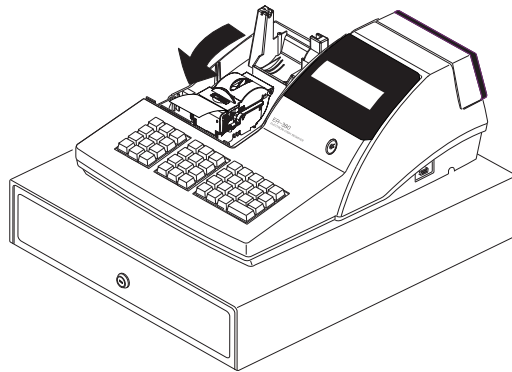
2. Push the blue cap lever and then lift up to open the paper cover.



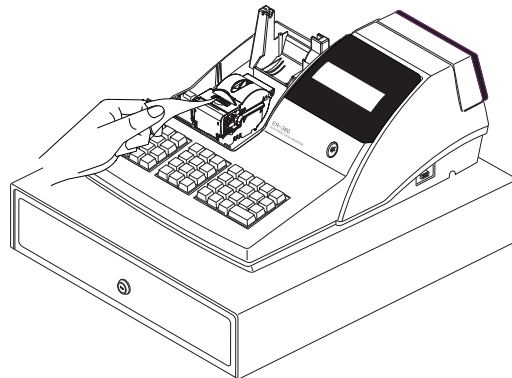
3. Ensure that the paper is being fed from the bottom of the roll.



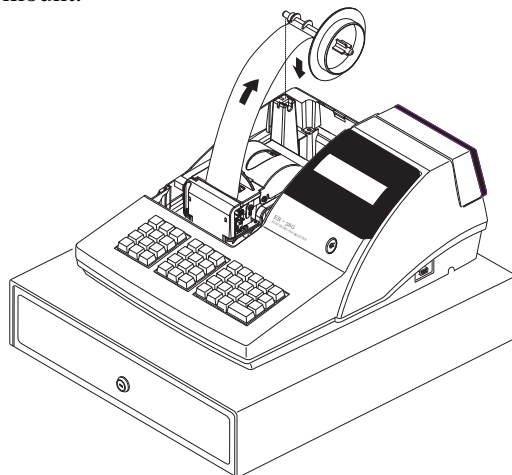
4. Put the leading edge of the paper over the printer
5. Close the paper cover slowly until it locks firmly



6. Passing the leading edge of the paper through the cutter slot. Tear off the excess paper. Replace the printer cover.

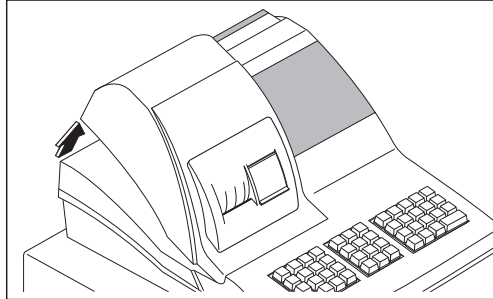


- ※ If you wish to use the printer to print a sales journal or electronic journal, insert the paper into the paper take-up spool. Wind the paper two or three turns around the spool shaft and install the spool in the mount.

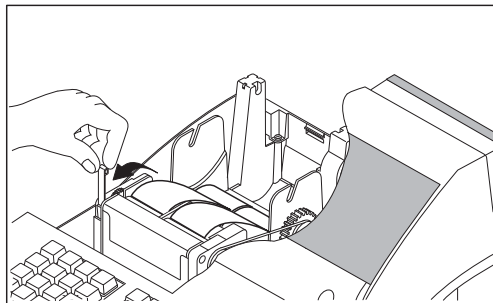
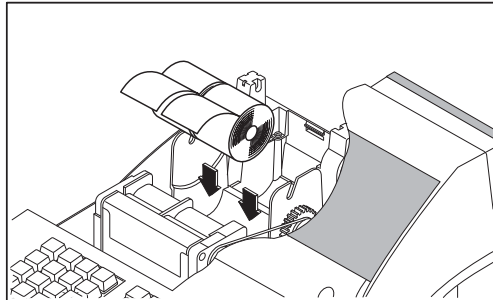


For **ER-4xx series** (*ER-420M shown in the picture*):

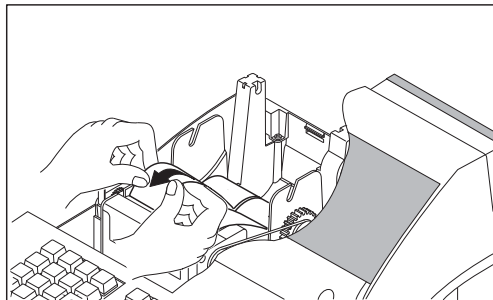
1. Remove the printer cover.



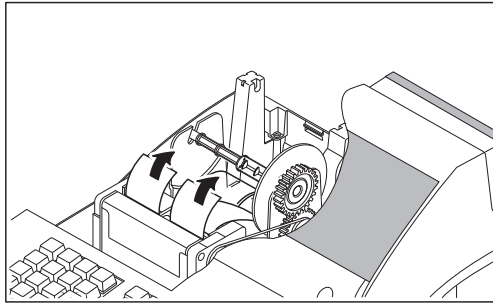
2. For proper feeding through the print head, cut or tear a straight even edge on the end of the paper roll. (Be sure to remove any paper with glue residue.) Place the paper roll in the paper holder so that the paper will feed from the bottom of the roll.



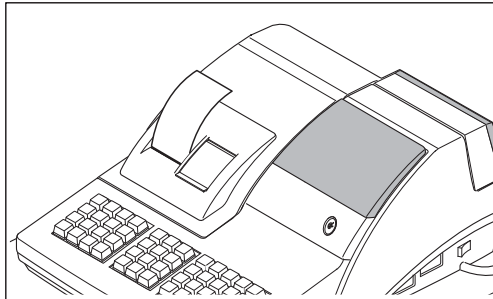
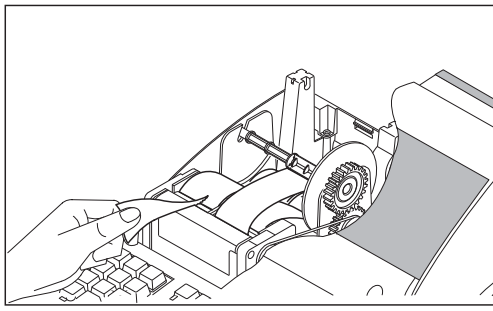
3. Insert the end of the paper into the paper slot.



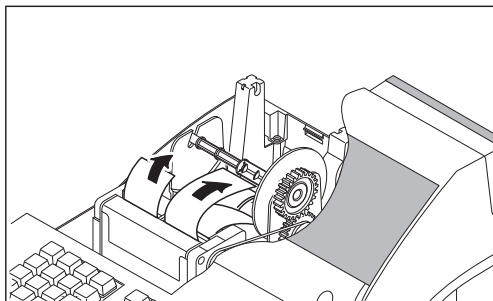
4. Close the paper lever and press the PAPER FEED key until the paper comes out.



5. Passing the leading edge of the paper through the cutter slot. Tear off the excess paper. Replace the printer cover.



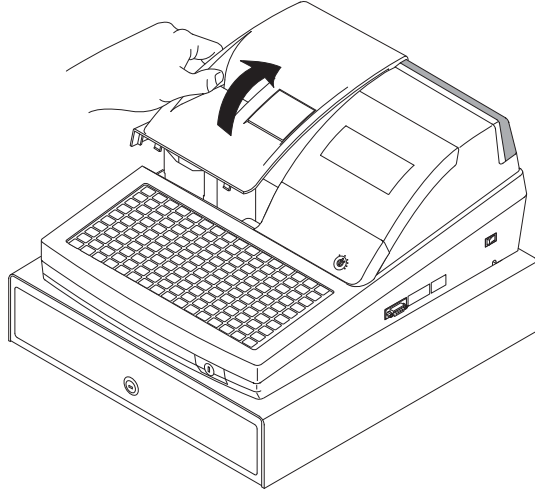
- ※ If you wish to use the printer to print a sales journal, insert the paper into the paper take-up spool. Wind the paper two or three turns around the spool shaft and install the spool in the mount.



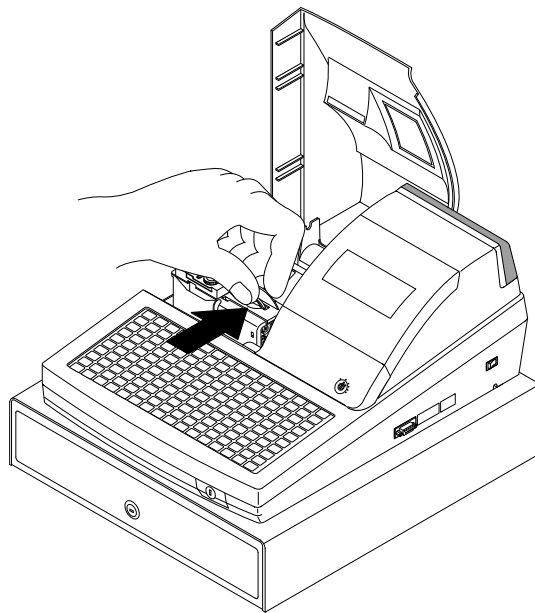
- ※ *ER-420M* is possible to feed automatically when you rock the paper levers and insert paper.

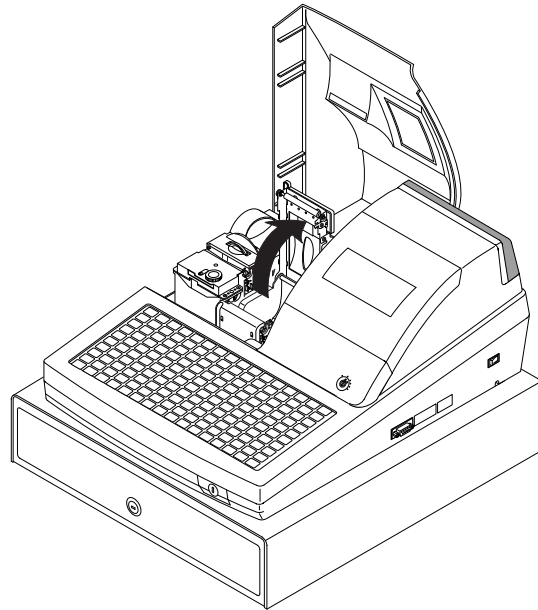
For **ER-52xx series** (*ER-5200M shown in the picture*):

1. Remove the printer cover.

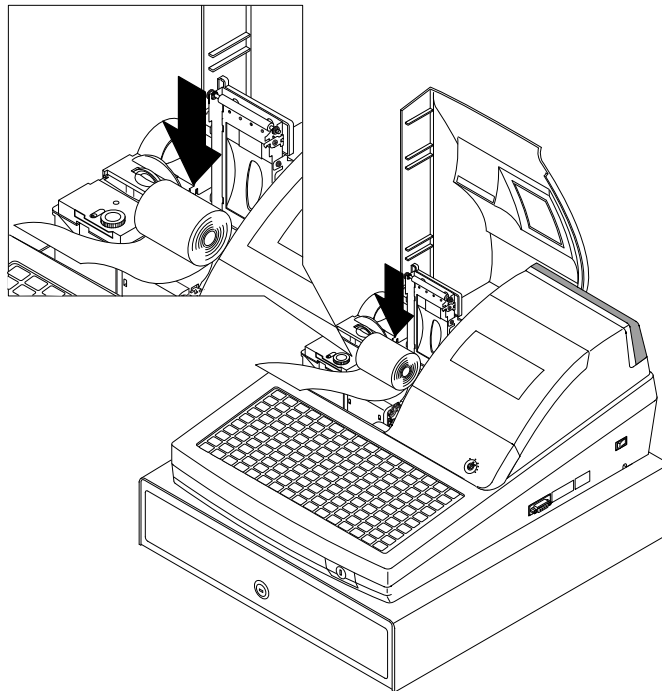


2. Push the blue cap lever and then lift up to open the paper cover.

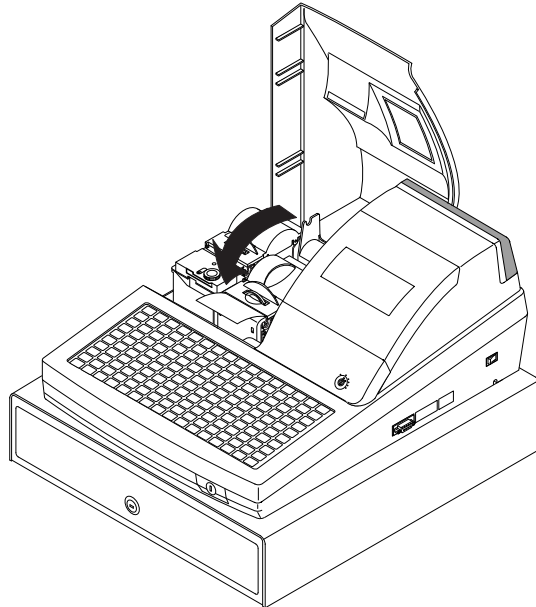




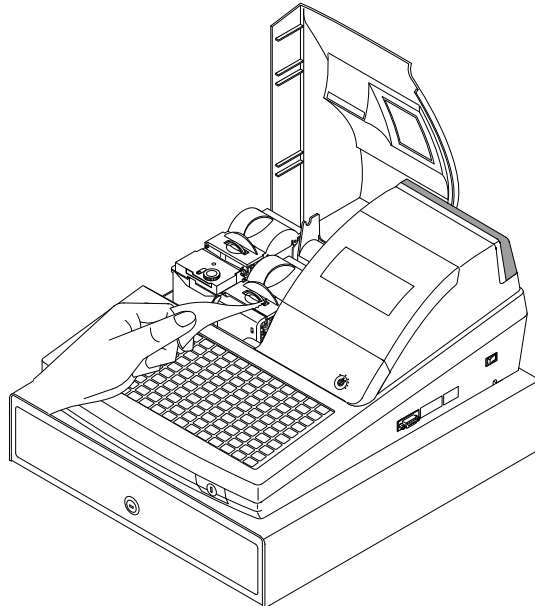
3. Ensure that the paper is being fed from the bottom of the roll.



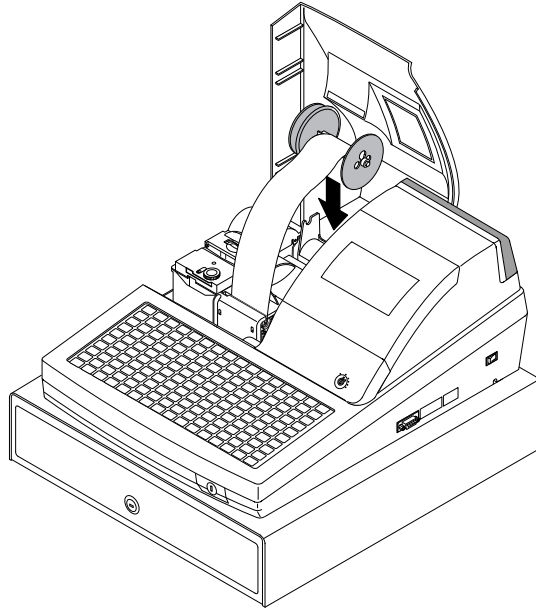
4. Put the leading edge of the paper over the printer
5. Close the paper cover slowly until it locks firmly



6. Passing the leading edge of the paper through the cutter slot. Tear off the excess paper. Replace the printer cover.



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



Memory Clear

Initial Clear (Status Clear)

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

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

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

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

To Perform an Initial Clear:

1. Unplug the register.
2. Turn the control lock to the **PGM-Mode** (*skip this step for ER-230*).
3. Press and hold the button position where the **SUBTL** button is located on the default keyboard layout.
4. While continuing to hold the **SUBTL** button, plug the register into a power source.
5. The message "**INITIAL CLEAR OK!**" prints when the initial clear is complete.
6. Press **CLEAR** button, the display now shows **PROGRAM MODE CLOSED**.

NOTE: Please see **Clerk Sign-On/Sign-Off** for detail when **CLOSE** appear on the display.

Receipt Example:

DATE 01/05/2012 TUE	TIME 08:30
=====	
INITIAL CLEAR OK !	
=====	
CLERK 00	000002 00000

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.

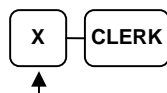
Check with your store manager to see which options have been selected for your register.

A clerk must be signed on before any transaction may take place. **CLOSEd** or **CLOSED** will appear on the display if fail to do so. Clerk sign-on is accomplished in one of two ways:

To sign On/Off Clerk, need to turn control lock to **REG-Mode**.

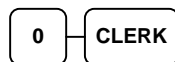
Direct Sign-On

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



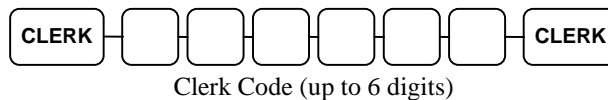
X is clerk number start from **1**, for the maximum number, please see **S-Mode, Memory Allocation Scan**, look for **#2 ALLOCATED CLERK IS:** for detail. Default is **15** (*ER-230* is **5**).

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

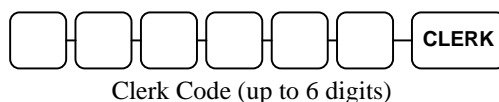


Coded Sign-On

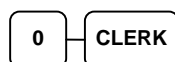
To sign on a clerk, press the **CLERK** key, enter the clerk code, and then press the **CLERK** key again.



When Clerk Interrupt is activated (please see "Table Management and Clerk Interrupt Operations" in Operation Instructions), to sign on a clerk is enter the clerk code then press the **CLERK** key.



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



Straight Percentage Tax Rate Programming

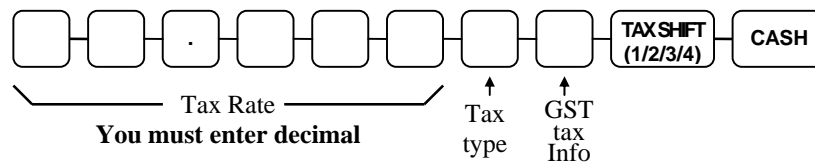
NOTE: On Sam4S ECRs, Tax Rate has been preset to 10.000% VAT (Value Added Tax) GST for Australian Market. If you do need to re-program Tax rate, you will need the appropriate TAX SHIFT button on the keyboard. Please see **Service Mode Programming - Function key Assignment Programming for detail.)**

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

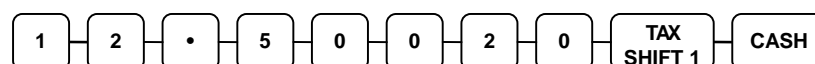
Programming Straight Percentage Tax Rates and Status

1. Turn the control lock to the **PGM-Mode**.
Switch to **P** Mode by press **MODE** function key. (For *ER-230*)
2. Enter the tax rate with a decimal. (00.000-99.999). It is not necessary to enter preceding zeros, but you must enter the decimal. For example, **New Zealand GST** is **12.5%**, enter **1 2 • 5 0 0**.
3. Enter **2 0**. (Entries here set tax options for **value added tax** and **normal tax**. See **P-Mode Programming - Tax Programming** for details.)
4. Press the appropriate **Tax Shift** key for the tax you are programming.
5. Press the **CASH** key to end programming.

Tax Rate Programming Flowchart



Flowchart for New Zealand GST Programming



Programming Tax & Preset Status for Keyboard PLUs

NOTE: On Sam4S ECRs, PLU Status has been preset to Preset Price, Preset Price Overridable and Taxable by GST (Tax Rate 1) which status is 4 0 0 0 0 0 0 0 for Australia Market.

Tax status and preset status for PLUs is set as part of the PLU Status Program, where many other PLU options are set as well. For many basic users, tax and preset status are the only necessary settings, so a short cut program sequence is shown here. If you need to review other PLU status options, go to **P-Mode Programming - Program 100 - PLU Programming** for detailed instructions.

1. Turn the control lock to the **PGM-Mode**.
Switch to **P** Mode by press **MODE** function key. (For *ER-230*)
2. To begin the program, enter **1 0 0**, press the **SUBTL** key.
3. Press a PLU item key on the keyboard.

PLU

4. Enter the nine digits as shown and press the **X/TIME** key.

For an **open-price-entry, taxable by GST** (tax rate 1) PLU, enter:

5 0 0 0 0 0 0 0 0 X/TIME

For an **open-price-entry, non-taxable** PLU, enter:

1 0 0 0 0 0 0 0 0 X/TIME

For a **preset-price, non-taxable** PLU, enter:

0 0 0 0 0 0 0 0 0 X/TIME

For a **preset-price, taxable by GST** (tax rate 1) PLU (**default status**), enter:

4 0 0 0 0 0 0 0 0 X/TIME

5. To program additional PLU Status, repeat from step 3, or press the **CASH** key to finalise the program.

CASH

Programming a Price/HALO for Keyboard PLUs

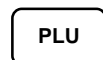
NOTE: This PLU Price/HALO Programming is only for 1 Price Level PLUs. For detail, please find out Price Level setup according to **Service Mode Programming, Memory Allocation Scan**. Then refer to **Program Mode Programming - Program 200 - PLU Price/HALO Programming** for detail.

If a PLU is **open-price**, set the **HALO (high amount lock out)** here. If a PLU is **preset-price**, set the **preset price** here.

1. Turn the control lock to the **PGM-Mode**.
Switch to **P Mode** by press **MODE** function key. (For *ER-230*)
2. To begin the program, enter **2 0 0**, press the **SUBTL** key.



3. Press a PLU key on the keyboard.

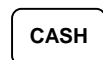


4. If the PLU is open, enter a HALO of up to 7 digits. If the PLU is preset, enter a preset price. (*Note: Do not enter the decimal.* The maximum preset price you can enter is \$9999999.) Press the **X/TIME** key.



Price/HALO

5. To program additional PLU Price/HALO, repeat from step 3, or press the **CASH** key to finalise the program.

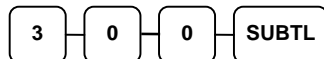


Programming a Descriptor for Keyboard PLUs

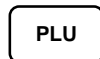
NOTE: On Sam4S ECRs, Descriptor Programming Method has been preset to **Descriptor Overlay**. Please refer to **Introduction - Basic Function and Feature - Keyboards** to find out the alpha overlay for your register model.

1. Turn the control lock to the **PGM-Mode**.
Switch to **P Mode** by press **MODE** function key. (For *ER-230*)


2. To begin the program, enter **3 0 0**, press the **SUBTL** key.



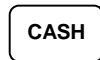
3. Press a **PLU** key on the keyboard.



4. Enter up to 18 / 12 (**ER-230**) character for the descriptor.

Type up to 18 / 12 (**ER-230**)
descriptor keys → 

5. To program additional **PLU** Descriptor, repeat from step 3, or press the **CASH** key to finalise the program.



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)	When #/NS key is used as a NON ADD # key, it will print an up to 9-digit numeric entry on the receipt (preceeding 0s will be ignored). This entry will not add to any sales totals. The #/NS key is also used as a NO SALE key to open the cash drawer without making a sale.
X/TIME	Use X/TIME key to multiply a quantity of items or calculate split pricing on PLU entries.
00, 0 - 9, Decimal	Use to make numeric entries. 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 ADD CHECK key to combine individual trays (such as in a cafeteria situation) that will be paid together. Each tray subtotal can advance the consecutive number, depending on programming.
CANCEL	Use CANCEL key to cancel a transaction without updating PLU, or function key totals. The cancel function may only be used prior to tendering. Once tendering begins, the cancel function may no longer be used. The CANCEL key corrects the appropriate totals and counters and the Financial report records total of transactions canceled.
CASH	Use CASH key to calculate the sale total including tax, finalises 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.

Keyboard Legend	Description
CASH OUT	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.
CHARGE (1 - 8) (for 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.
CHECK # (Exclude ER-230)	The CHECK # key is used to begin a new, or access an existing balance (hard check) or itemized bill (soft check.) Check track numbers that are entered manually may be set at a fixed length of one to nine digits (preceding 0s will be ignored). Check track numbers assigned automatically will begin with #1. Existing checks are accessed by entering the check track number and pressing the CHECK # key.
CLEAR (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	The register will not operate in VOID, REG, X, Z modes unless a clerk has been signed on. Clerk sign-on is accomplished by “direct” or “secret code” sign-on. All entries made on the register will report to one of the clerk totals. When a clerk is signed on, all entries following will add to that clerk’s total until another clerk is signed on. However, a clerk cannot be changed in the middle of a transaction. To sign a clerk off, thereby displaying the “CLOSED” message on the display, enter 0, and then press the CLERK key. This disables the register until another clerk is signed on. The current clerk must first be signed off before another clerk may be signed on.
CONV (1 - 4)	The currency conversion function, allowed after subtotal, converts and displays the new subtotal at a preprogrammed exchange rate. Tendering is allowed after using the currency conversion function. Change is calculated and issued in home currency. The amount of foreign currency tendered is stored in a separate total on the Financial report, but not added to the drawer total.

Keyboard Legend	Description
EAT-IN TAKE OUT DRIVE THRU (Exclude ER-230)	Eat-In, Take Out and Drive Thru are subtotal functions. In areas that have different tax rules for eat-in and take out sales, the EAT-IN, TAKE OUT and DRIVE THRU keys can be programmed to automatically charge or exempt taxes. Sales may not be split between Eat-In, Take Out and Drive Thru. The EAT-IN, TAKE OUT and DRIVE THRU keys maintain separate totals on the Financial report.
ERROR CORR	Use to correct the last entry. The ERROR CORR key corrects the appropriate totals and counters.
F/S SHIFT	When pressed before a PLU entry, the F/S SHIFT key reverses the preprogrammed food stamp status of the PLU. For example, an item not food stamp eligible can be made food stamp eligible.
F/S SUB	Displays the amount of the sale that is food stamp eligible.
F/S TEND	Use to tender food stamps for eligible sales.
GUEST # (Exclude ER-230)	Use to enter the count of guests served as part of a guest check.
INACTIVE	Use to inactivate the key on the keyboard with warning/error message.
KBD SHIFT (ER-420M only)	This function provides capability to access three levels of NLU keys.
JFEED (JOURNAL FEED) (Two Printer Stations models only)	Advances the journal printer paper one line, or continuously until the key is released.
LEVEL (1 - 2)	Use to switch between different price levels if price level 2 is activated.
MACRO (1 - 10)	Macro keys may be programmed to record, and then later perform, up to 50 keystrokes. For example, a macro key could be set to tender (preset tender) a common currency, such as \$5 into the cash key.
MODE (ER-230 Only)	Use to switch operation modes sequentially from VOID, OFF, REG, X, Z, PGM and S then back to VOID with another circle. A password can be programmed for security since firmware version v01.008 .
MODIFIER (1 - 5)	The Modifier key alters the next PLU registered, either by changing the Code number of the PLU so that a different item is registered, or by adding the modifier descriptor.
P/BAL (Exclude ER-230)	Use to enter the amount of an outstanding balance.
PO (1 - 3) (Paid Out)	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.
PAYMENT (Exclude ER-230)	Used to allow final payment on a Soft Check when part of the bill has previously been paid.
PFEED (Receipt Feed)	Advances the receipt printer paper one line, or continuously until the key is released.

Keyboard Legend	Description
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	Used to check the price of PLU without register the item.
PRINT CHECK (Exclude <i>ER-230</i>)	Use to print a guest check. The check can be printed on an optional (RS-232C) printer, or can be printed on the receipt printer. The PRINT CHECK key can be set to automatically service the check.
PROMO	The PROMO key allows you to account for promotional items, as in "buy two, get one free". Pressing this key will remove an item's cost from the sale, but will include the sale of the item in the item's sales counter.
RCPT ON/OFF (Receipt On/Off)	Use to switch receipt printer on/off. When OFF , no receipt will print during a sale. (If the System Option "Buffer Receipt" is set YES , a receipt can still be issued by pressing CASH key the second time.)
RA (1 - 3) (Received on Account)	The RA (Received on Account) key is used to record media loaned to the cash drawer, or payments received outside of a sale. The cash drawer will open. The amount received adds to the cash-in-drawer total.
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 (New Balance) (Exclude <i>ER-230</i>)	Use to temporarily finalise Previous Balance or Table tracking transactions.
SUBTOTAL	Displays subtotal of sale including tax. Must be pressed prior to a sale discount or sale surcharge.
TABLE # (Exclude <i>ER-230</i>)	Tracks the current balance for a guest check or table.
TARE	Tares are container weights. If you are using the scale function, you can preset up to 5 different tare weights. The tare can be subtracted automatically when a specific PLU is registered, or manually inputting the tare number and pressing the TARE key can subtract the tare. Tare #5 can be programmed for entering tare weights manually.
TAX EXEMPT	Press the TAX EXEMPT key to exempt tax 1, tax 2, tax 3, and/or tax 4 from the entire sale.
TAX 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.

Keyboard Legend	Description
TIP (Exclude <i>ER-230</i>)	<p>The TIP key allows a gratuity to be added to a guest check before payment. The tip amount is deducted from the Cash-in-Drawer amount for the Clerk/Cashier closing the guest check.</p> <p>The TIP key may be programmed as either a percentage or amount. If programmed as a percentage, tax programming defines whether the percentage is calculated on the net amount, or the amount after taxes.</p>
VOID	<p>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.</p>
VALID	<p>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.</p>
WASTE	<p>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.</p>
% (1 - 5)	<p>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.</p> <p>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.</p> <p>A percentage key may also be set up to accept charge tip entries.</p>

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

Program 99 - Receipt ON/OFF Programming

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



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



Item Registrations

All registrations 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.
- The buffer for item registration is fixed **100 lines**.

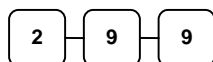
This system simplifies reporting by listing all items (regardless of how they are entered) on the PLU report, while reporting for groups of items or categories is available from the Group report.

To perform a item registration, need to turn control lock to **REG-Mode** if there is no specific instruction given.

Keyboard PLU Entry - Open Price / Preset Price Override

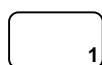
1. Enter an amount on the number pad. *Do not use the decimal key.*

For example, for \$2.99, enter:



2. Press a PLU.

For example, press PLU 1:



Receipt Example:

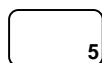
THANK-YOU		
CALL AGAIN		
DATE	01/05/2012 TUE	TIME 08:30
PLU1 T1		\$2.99
ROUND		\$0.01
TOTAL		\$3.00
CASH		\$3.00
GST		\$0.27
CLERK 1	NO.000011	00001

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.

For example, press PLU 5:



Receipt Example:

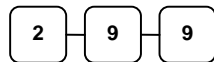
THANK-YOU		
CALL AGAIN		
DATE	01/05/2012 TUE	TIME 08:30
PLU5		\$1.29
ROUND		\$0.01
TOTAL		\$1.30
CASH		\$1.30
CLERK 1	NO.000012	00001

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:



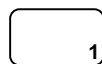
2. Press a PLU.

For example, press PLU 1:



3. To register a second item exactly as the first, press the PLU a second time.

For example, press PLU 1:



Receipt Example:

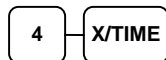
THANK-YOU		
CALL AGAIN		
DATE	01/05/2012 TUE	TIME 08:30
PLU1 T1		\$2.99
PLU1 T1		\$2.99
ROUND		\$0.02
TOTAL		\$6.00
CASH		\$6.00
GST		\$0.54
CLERK 1	No.000013	00001

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.

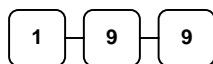
1. Enter the quantity of items being purchased, and then press the **X/TIME** key.

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.

For example, press PLU **1**:



Receipt Example:

THANK-YOU CALL AGAIN		
DATE 01/05/2012 TUE	TIME 08:30	
4	@ \$ 1.99	
PLU1 T1		\$7.96
ROUND		-0.01
TOTAL		\$7.95
CASH		\$7.95
GST		\$0.72
CLERK 1	No.000014	00001

Keyboard PLU Entry - Direct Multiplication with Preset Price

When “**Direct Multiply**” (System Option #18-1) is set to yes, you can multiply the preset price PLU directly when **number of item is up to 9**. When “**Direct Multiply more than one digit**” (System Option #20-1) is also set to yes, you can then multiply **more than 9 items** directly when PLU is preset price.

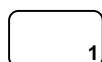
1. Enter the quantity of items being purchased.

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



2. Press a PLU.

For example, press PLU **1**:



Receipt Example:

THANK-YOU CALL AGAIN		
DATE 01/05/2012 TUE	TIME 08:30	
4	@ \$ 1.99	
PLU1 T1		\$7.96
ROUND		-0.01
TOTAL		\$7.95
CASH		\$7.95
GST		\$0.72
CLERK 1	No.000015	00001

Keyboard PLU Entry - Multiplication with Decimal Point

If you are selling goods by weight or by length 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:

3 **.** **7** **5** **X/TIME**

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

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

9 **9**

3. Press a PLU.

For example, press PLU 1:

1

Receipt Example:

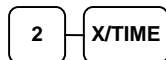
THANK-YOU CALL AGAIN		
DATE 01/05/2012 TUE	TIME 08:30	
3.75	@ \$ 0.99	
PLU1 T1		\$3.71
ROUND		-0.01
TOTAL		\$3.70
CASH		\$3.70
GST		\$0.34
CLERK 1	No.000016	00001

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.

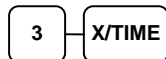
1. Enter the quantity purchased, and then press the **X/TIME** key.

For example, enter:



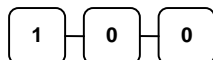
2. Enter the quantity of the group price, and then press the **X/TIME** key.

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:

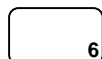
THANK-YOU		
CALL AGAIN		
DATE	01/05/2012 TUE	TIME 08:30
2@3FOR	@ \$ 1.00	
PLU1 T1		\$0.67
ROUND		-0.02
TOTAL		\$0.65
CASH		\$0.65
GST		\$0.06
CLERK 1	NO.000017	00001

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. (Or enter a price and press a single item open PLU key.)

For example, press PLU 6:



Receipt Example:

THANK-YOU		
CALL AGAIN		
DATE	01/05/2012 TUE	TIME 08:30
PLU6		\$1.29
ROUND		\$0.01
TOTAL		\$1.30
CASH		\$1.30
CLERK 1	NO.000018	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 price 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	01/05/2012 TUE	TIME 08:30
PLU2 T1		\$2.99
ROUND		\$0.01
TOTAL		\$3.00
CASH		\$3.00
GST		\$0.18
CLERK 1	No.000019	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	01/05/2012 TUE	TIME 08:30
PLU1 T1		\$1.29
ROUND		\$0.01
TOTAL		\$1.30
CASH		\$1.30
GST		\$0.12
CLERK 1	No.000020	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 01/05/2012 TUE	TIME 08:30	
1	@ \$ 2.99	
PLU2 T1		\$2.99
ROUND		\$0.01
TOTAL		\$3.00
CASH		\$3.00
GST		\$0.27
CLERK 1	NO.000021	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:

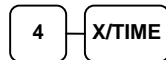
THANK-YOU		
CALL AGAIN		
DATE 01/05/2012 TUE	TIME 08:30	
PLU1 T1		\$2.99
PLU1 T1		\$2.99
ROUND		\$0.02
TOTAL		\$6.00
CASH		\$6.00
GST		\$0.55
CLERK 1	NO.000022	00001

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:

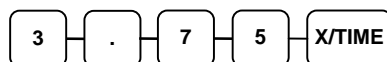
THANK-YOU		
CALL AGAIN		
DATE 01/05/2012 TUE	TIME 08:30	
4	@ \$ 1.99	
PLU1 T1		\$7.96
ROUND		-0.01
TOTAL		\$7.95
CASH		\$7.95
GST		\$0.72
CLERK 1	No.000023	00001

Code PLU Entry - Multiplication with Decimal Point

If you are selling items by weight or by length 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:

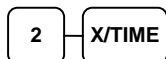
THANK-YOU		
CALL AGAIN		
DATE 01/05/2012 TUE	TIME 08:30	
3.75	@ \$ 2.99	
PLU3 T1		\$11.21
ROUND		-0.01
TOTAL		\$11.20
CASH		\$11.20
GST		\$1.02
CLERK 1	No.000024	00001

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.

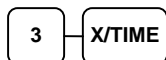
1. Enter the quantity purchased, and then press the **X/TIME** key.

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:

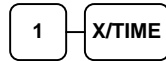


Receipt Example:

THANK-YOU		
CALL AGAIN		
DATE	01/05/2012 TUE	TIME 08:30
2@3FOR	@ \$2.99	
PLU3 T1		\$1.99
ROUND		\$0.01
TOTAL		\$2.00
CASH		\$2.00
GST		\$0.18
CLERK 1	NO.000025	00001

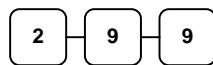
Barcode PLU Entry - Open Price, Single Item

1. Press 1 on the number pad, and then press the **X/TIME** key.



2. Scan barcode of the item.
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.

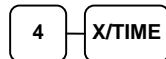


Receipt Example:

THANK-YOU		
CALL AGAIN		
DATE 01/05/2012 TUE	TIME 08:30	
1	@ \$ 2.99	
#1234567890123 T1		\$2.99
ROUND		\$0.01
TOTAL		\$3.00
CASH		\$3.00
GST		\$0.27
CLERK 1	No.000026	00001

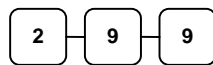
Barcode PLU Entry - Open Price, Multiple Items

1. Press number of items on the number pad, and then press the **X/TIME** key.
For example, for 4 identical items, enter:



2. Scan barcode of the item.
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.



Receipt Example:

THANK-YOU		
CALL AGAIN		
DATE 01/05/2012 TUE	TIME 08:30	
4	@ \$ 2.99	
#1234567890123 T1		\$11.96
ROUND		-0.01
TOTAL		\$11.95
CASH		\$11.95
GST		\$1.09
CLERK 1	No.000027	00001

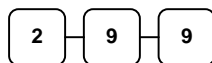
Barcode PLU Entry - Preset Price Override, Single Item

1. Press 1 on the number pad, and then press the **X/TIME** key.



2. Scan barcode of the item.
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.

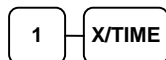


Receipt Example:

THANK-YOU		
CALL AGAIN		
DATE 01/05/2012 TUE	TIME 08:30	
1	@ \$ 2.99	
#3210987654321 T1		\$2.99
ROUND		\$0.01
TOTAL		\$3.00
CASH		\$3.00
GST		\$0.27
CLERK 1	No.000028	00001

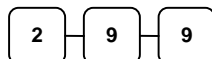
Barcode PLU Entry - Preset Price Override, Multiple Items

1. Press 1 on the number pad, and then press the **X/TIME** key.



2. Scan barcode of the item.
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.



5. For additional identical items, press more **PLU** key(s).



Receipt Example:

THANK-YOU		
CALL AGAIN		
DATE 01/05/2012 TUE	TIME 08:30	
1	@ \$ 2.99	
#3210987654321 T1		\$2.99
#3210987654321 T1		\$2.99
#3210987654321 T1		\$2.99
#3210987654321 T1		\$2.99
ROUND		-0.01
TOTAL		\$11.95
CASH		\$11.95
GST		\$1.09
CLERK 1	No.000029	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	01/05/2012 TUE	TIME 08:30
DRINK T1		\$1.00
LARGE		
DRINK T1		\$1.25
PLU2 T1		\$1.50
TOTAL		\$3.75
CASH		\$3.75
GST		\$0.34
CLERK 1	No.000030	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 2 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.

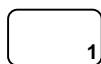
See "**System Options**" in the "**Program Mode Programming**" chapter to set how the price level keys operate.

Pop-Up Price Level Keys

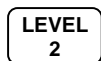
For example: PLU 1 is DRINK and price level 1 is \$1.00 and price level 2 is \$2.00 as large.

1. Press a preset PLU key.

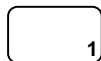
For example, press PLU **1** programmed with a price of \$1.00 for price level 1.



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	01/05/2012 TUE	TIME 08:30
DRINK T1		\$1.00
DRINK T1		\$2.00
PLU2 T1		\$1.50
TOTAL		\$4.50
CASH		\$4.50
GST		\$0.41
CLERK 1	No.000031	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	01/05/2012 TUE	TIME 08:30
PLU1		\$1.00
PROMO		
PLU1		
TOTAL		\$0.00
CASH		\$0.00
CLERK 1	No.000032	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 finalise. 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.
2. Enter the item or items that are wasted.
3. Press the **WASTE** key again to total the wasted items:

WASTE

WASTE

Receipt Example:

THANK-YOU		
CALL AGAIN		
DATE	01/05/2012 TUE	TIME 08:30
WASTE		
PLU1		\$1.25
PLU2		\$1.50
WASTE		
TOTAL		\$2.75
CLERK 1	No.000033	00001

KBD SHIFT (*ER-420M only*)

The KBD SHIFT key allows you to expand the NLU keys on the keyboard. You can use this key by 3 levels.

Level 1 : NLU key(1~12) * 1;

Level 2 : NLU key(1~12) * 2;

Level 3 : NLU key(1~12) * 3;

1. Press the NLU key.

For example, enter:

12

2. Enter the level number (1~3); press the **KBD SHIFT** key.

For example, enter:

2 KBD SHIFT

3. Press the same NLU key.

For example, enter:

12

Receipt Example:

THANK-YOU CALL AGAIN		
DATE 01/15/2003 WED	TIME 08:33	
PLU 12		\$1.00
PLU 24		\$2.00
TOTAL		\$3.00
CASH		\$3.00
CLERK 1	No.000011	00001

Not Found PLU function (*ER-230 only*)

The “Not Found PLU” feature is used when a new item which is not yet been programmed is registered. When the operator decided to register that item, choices between **Quick Entry**, input the price of the item and assign it the same descriptor and properties of another PLU, or **Detail Entry**, enter the descriptor and tax status independently are available. This provides a simple mechanism for building an item file.

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**.

Quick Entry

1. When “**NO7 FOuNd**” (NOT FOUND) appears on display, press **1** to start Not Found PLU Entry Procedure (or press **0** to Stop (discard the registration of the item)).



2. The “**P**” (PRICE) appears on display, input the **price** and press **X/TIME** key. *Do not use the decimal key.*




NOTE: Despite the Price Level setting in **S-Mode**, **MEMORY ALLOCATION -> 7. PRICE LEVEL**, Not Found PLU procedure only requires price of **Price Level 1** to be entered.

3. The “**PLu**” (PLU) appears on the display, to **copy from an existing item**,

- Press the PLU on the keyboard, or



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

Enter the PLU#, → 
up to 15 digits

- **For a barcode item, scan the barcode.**

4. The new item is created and registered as the selected product.

Detail Entry

- When “**NO7 FOUnd**” (NOT FOUND) appears on display, press **1** to start Not Found PLU Entry Procedure (or press **0** to Stop (discard the registration of the item)).



- The “**P**” (PRICE) appears on display, input the **price** and press **X/TIME** key. *Do not use the decimal key.*



NOTE: Despite the Price Level setting in **S-Mode**, **MEMORY ALLOCATION -> 7. PRICE LEVEL**, Not Found PLU procedure only requires price of **Price Level 1** to be entered.

- The “**PLu**” (PLU) appears on the display, to **program new information for the PLU**, press **PLU** function key.



- The “**dEC**” (DESCRIPTOR) appears on the display, if you are programming using alpha overlay, type up to 12 descriptors on the overlay and press the **X/TIME** key,

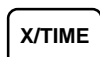
Type up to 12 descriptor keys →

or,

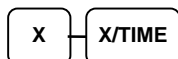
If you are programming using descriptor codes, enter up to 12 three-character codes and press the **X/TIME** key.

Enter up to 12 three-digit character codes →

If you do not want to enter any description, press **X/TIME** key and go to next step.



- The “**7**” (TAX) appears on the display, ready to enter the Tax information, Please refer to the table below to select the proper Tax Type, then press **X/TIME** key.



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

- The new item is registered with the description and price entered, and tax status selected.

NOTE: All Not Found PLUs are default to link to **Group 1**.

Percent Key Operations

A total of five % functions are available. Up to 3 % keys are located on the default keyboard depend on cash register model. Your keyboard may be different. More or less % keys may be located on the keyboard, or they may be located on one of the function look up menu keys.

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

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

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	01/05/2012 TUE	TIME 08:30
PLU2 T1		\$10.00
% 1		-10.000%
AMOUNT T1		-1.00
TOTAL		\$9.00
CASH		\$9.00
GST		&0.82
CLERK 1	No.000034	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	01/05/2012 TUE	TIME 08:30
PLU2 T1		\$10.00
% 1		-33.333%
AMOUNT T1		-3.33
ROUND		-0.02
TOTAL		\$6.65
CASH		\$6.65
GST		\$0.61
CLERK 1	No.000035	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 items you wish to sell.
2. Press the **SUBTL** key:

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

4. The surcharge is automatically added.

Receipt Example:

THANK-YOU		
CALL AGAIN		
DATE 01/05/2012 TUE	TIME 08:30	
PLU2 T1		\$10.00
% 1		-15.000%
AMOUNT T1		-1.50
TOTAL		\$8.50
CASH		\$8.50
GST		\$0.77
CLERK 1	NO.000036	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 **SUBTL** key:

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

4. The surcharge is automatically added.

Receipt Example:

THANK-YOU		
CALL AGAIN		
DATE 01/05/2012 TUE	TIME 08:30	
PLU2 T1		\$10.00
% 1		-15.000%
AMOUNT T1		-1.50
TOTAL		\$8.50
CASH		\$8.50
GST		\$0.77
CLERK 1	NO.000037	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 **SUBTL** key is pressed,
- You may be allowed to enter multiple discounts, but you must press the **SUBTL** key before each discount entry, or
- You may be allowed to enter multiple discounts, without first pressing **SUBTL**.

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

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

SUBTL

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

For example:

2 0 0 % 1

4. The discount is subtracted.

Receipt Example:

THANK-YOU CALL AGAIN		
DATE 01/05/2012 TUE	TIME 08:30	
PLU2 T1		\$10.00
% 1		-2.00
TOTAL		\$8.00
CASH		\$8.00
GST		\$0.73
CLERK 1	No.000038	00001

Dollar Amount Discount on Item

When programmed as "amount", "item", "open" and "negative", a % key will reduce a discount 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:

2 0 0 % 1

3. The discount is automatically subtracted.

Receipt Example:

THANK-YOU CALL AGAIN		
DATE 01/05/2012 TUE	TIME 08:30	
PLU1 T1		\$10.00
% 1		-2.00
TOTAL		\$8.00
CASH		\$8.00
GST		\$0.73
CLERK 1	No.000039	00001

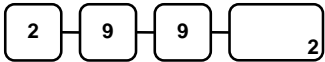
Return Merchandise Registrations

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	01/05/2012 TUE	TIME 08:30
RETURN *****		
PLU2 T1		-2.99
ROUND		-0.01
TOTAL		-3.00
CASH		-3.00
GST		-0.27
CLERK 1	No.000040	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:

**ERROR
CORR**

Receipt Example:

THANK-YOU CALL AGAIN		
DATE 01/05/2012 TUE	TIME 08:30	
PLU1 T1		\$2.29
PLU2		\$1.29
ERRCORR	-----	
PLU2		-1.29
ROUND		\$0.01
TOTAL		\$2.30
CASH		\$2.30
GST		\$0.21
CLERK 1	No.000041	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:**

VOID

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

2 9 9 2

Receipt Example:

THANK-YOU CALL AGAIN		
DATE 01/05/2012 TUE	TIME 08:30	
PLU2		\$1.29
PLU1 T1		\$2.29
VOID	-----	
PLU2		-1.29
ROUND		\$0.01
TOTAL		\$2.30
CASH		\$2.30
GST		\$0.21
CLERK 1	No.000042	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 01/05/2012 TUE	TIME 08:30	
PLU1 T1		\$2.29
PLU2		\$1.29
CANCEL *****		
CLERK 1	NO.000043	00001

Void Mode Operations

You can use the **VOID** Mode to correct any complete transaction. To correct any transaction:

1. Turn the control lock to the **VOID-Mode**.
2. Enter the transaction you wish to correct exactly as it was entered originally in the **REG** Mode. 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 01/05/2012 TUE	TIME 08:30	
VOID MODE *****		
PLU1 T1		-2.29
PLU2		-1.29
ROUND		-0.02
TOTAL		-3.60
CASH		-3.60
GST		-0.21
CLERK 1	NO.000044	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**:

#/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 01/05/2012 TUE	TIME 08:30	
NO SALE -----		
CLERK 1	No.000045	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:

1 2 3 4

3. Press **#/NS**:

#/NS

4. Press **CHECK**:

CHECK

Receipt Example:

THANK-YOU		
CALL AGAIN		
DATE 01/05/2012 TUE	TIME 08:30	
PLU1 T1		\$2.99
NON-ADD#	1234	
TOTAL		\$2.99
CHECK		\$2.99
GST		\$0.27
CLERK 1	No.000046	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**)

RA1

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

1 0 0 0 CASH

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

1 0 0 0 CHECK

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

1 0 0 0 CHARGE
1

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

RA1

Receipt Example:

THANK-YOU		
CALL AGAIN		
DATE	01/05/2012 TUE	TIME 08:30
RA1		
CASH		\$10.00
CHECK		\$10.00
CHARGE1		\$10.00
RA1		\$30.00
CLERK 1	NO.000047	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**)

PO1

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

1 0 0 0 CASH

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

1 0 0 0 CHECK

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

1 0 0 0 CHARGE
1

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

PO1

Receipt Example:

THANK-YOU		
CALL AGAIN		
DATE	01/05/2012 TUE	TIME 08:30
PO1		
CASH		-10.00
CHECK		-10.00
CHARGE1		-10.00
PO1		-30.00
CLERK 1	No.000048	00001

Subtotaling a Sale

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

SUBTL

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

Eat In/Take Out/Drive Thru Sales (not applicable to *ER-230*)


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

These keys will also print the description at the top of a KP docket.

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**:

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

Receipt Example:

THANK-YOU		
CALL AGAIN		
DATE	01/05/2012 TUE	TIME 08:30
PLU2		\$7.96
ROUND		-0.01
TOTAL		\$7.95
CASH		\$7.95
CLERK 1	No.000050	00001

Totaling a Check Sale

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

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

Receipt Example:

THANK-YOU		
CALL AGAIN		
DATE	01/05/2012 TUE	TIME 08:30
PLU2		\$7.96
TOTAL		\$7.96
CHECK		\$7.96
CLERK 1	No.000051	00001

Tendering a Cash Sale

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

For example, for \$20.00 enter:

2 0 0 0

3. Press **CASH**:

CASH

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

Receipt Example:

THANK-YOU CALL AGAIN		
DATE	01/05/2012 TUE	TIME 08:30
PLU1 T1		\$2.99
PLU1 T1		\$2.99
4	@ \$ 1.99	
PLU2		\$7.96
ROUND		\$0.01
TOTAL		\$13.95
CASH		\$20.00
CHANGE		\$6.05
GST		\$0.54
CLERK 1	NO.000052	00001

Tendering a Check Sale

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

For example, for \$20.00 enter:

2 0 0 0

3. Press **CHECK**:

CHECK

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

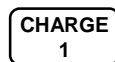
Receipt Example:

THANK-YOU CALL AGAIN		
DATE	01/05/2012 TUE	TIME 08:30
PLU1 T1		\$2.99
PLU1 T1		\$2.99
4	@ \$ 1.99	
PLU2		\$7.96
TOTAL		\$13.94
CHECK		\$20.00
CHANGE		\$6.06
GST		\$0.54
CLERK 1	NO.000053	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:



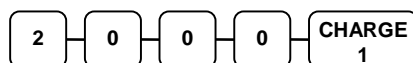
Receipt Example:

THANK-YOU CALL AGAIN		
DATE	01/05/2012 TUE	TIME 08:30
PLU1	T1	\$2.99
PLU1	T1	\$2.99
4	@ \$ 1.99	
PLU2		\$7.96
TOTAL		\$13.94
CHARGE1		\$13.94
GST		\$0.54
CLERK 1	No.000054	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	01/05/2012 TUE	TIME 08:30
PLU1	T1	\$2.99
PLU1	T1	\$2.99
4	@ \$ 1.99	
PLU2		\$7.96
TOTAL		\$13.94
CHARGE1		\$20.00
CHANGE		\$6.06
GST		\$0.54
CLERK 1	No.000055	00001

Cash Out within a Charge (EFTPOS) Sale

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	01/05/2012 TUE	TIME 08:30
PLU1	T1	\$2.99
PLU1	T1	\$2.99
4	@ \$ 1.99	
PLU2		\$7.96
TOTAL		\$13.94
CASH OUT		\$20.00
EFTPOS		\$33.94
CHANGE		\$20.00
GST		\$0.54
CLERK 1	No.000056	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 0 0 0

2. Press **CHKCASH**:

CHK
CASH

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

Receipt Example:

THANK-YOU		
CALL AGAIN		
DATE 01/05/2012 TUE	TIME 08:30	
CHKCASH		
CHECK		\$20.00
CASH		-20.00
CLERK 1	No.000057	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**:

1 0 0 0 CASH

3. The display will indicate the \$10.00 cash tender and the \$10.00 total still due.
4. Enter the amount of check tendered by the customer.

For example, enter \$10.00 and press **CHECK**:

1 0 0 0 CHECK

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

Receipt Example:

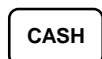
THANK-YOU		
CALL AGAIN		
DATE 01/05/2012 TUE	TIME 08:30	
PLU2		
TOTAL		\$20.00
CASH		\$10.00
TOTAL		\$10.00
CHECK		\$10.00
CLERK 1	No.000058	00001

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.

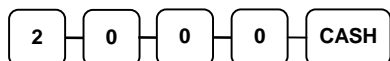
1. Register the items you wish to sell.

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	01/05/2012 TUE	TIME 08:30
PLU1 T1		\$2.00
CASH		\$2.12
GST		\$0.18
CLERK 1	No.000059	00001

Currency Conversion

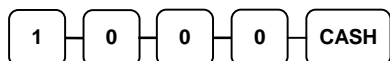
If you normally accept currency from neighboring nations, you can program to convert the subtotal of a sale to the equivalent cost in the foreign currency. You can set up four separate conversion functions for different foreign currencies. To do this, you need to program the conversion factor. For example, 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	01/05/2012 TUE	TIME 08:30
PLU1 T1		\$2.00
TOTAL		\$2.12
CONV 1		¥2.90
CHANGE RATE	@1.3720	
HOME AMT.		\$10.00
CHANGE		\$5.17
GST		\$0.12
CLERK 1	No.000060	00001

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

Check Track System (*Account Management*) (not applicable to *ER-230*)

Overview

The *Sam4S ER-3xx, ER-4xx and ER-52xx Electronic Cash Registers* have a **Check Track System** for Account Management. Two types of the Check Track system are available, **Soft Check** and **Hard Check**. The maximum number of account is **500**.

When **Soft Check** is used, transaction detail is recorded in register's memory until the account is paid off and closed. It is suitable for short term accounts, like Restaurant Billing (Table Tracking) or Clerk Interrupt, where number of entries of a transaction is relatively small (**maximum 100 lines**).

For **Hard Check**, cash register only records account number and balance (balance forward). Detail of the transaction is printed either through internal receipt printer or external printer (receipt printer or slip printer), where the **slip printer** is recommend.

To switch between Soft Check and Hard Check, please see **Service Mode, Memory Allocation Programming**. (**Warning! Modifying Memory Allocation will reset all programming that has been done on the machine!**)

There are two different ways to use this Check Track System, **Clerk Interrupt** or **Table Management**. To switch between **Clerk Interrupt** and **Table Management**, please see **System Option #26-1 in Program Mode Programming, System Option Programming**.

There is an **Open Check Report** to find out how many checks/accounts is currently open (includes both **Clerk Interrupt** and **Table Management**). However, when using **Clerk Interrupt**, the clerk who has unfinalised sales will be unable to check the report. Please see **X/Z Mode, Report Table** for detail.

Clerk Interrupt

When **Clerk Interrupt** is chosen, a second clerk is allowed to access the register by signing in his/her account to **interrupt the current clerk**. The **Clerk Interrupt** has to work with **Soft Check**, therefore the transaction details of **interrupted clerk** will be recorded in the register's memory and recalled after the **interrupted clerk** signs back in.

When using **Clerk Interrupt**, all unfinished Clerk Interrupt transactions recorded will be cleared by **Z Financial Report**. **System Option - #32-2 (for ER-3xx and ER-4xx) or #32-1 (for ER-52xx) Allow Z Financial Report with Open Clerk Interrupt Sales** - can be set to **NO** to prevent that happening. See **Program Mode Programming, System Option Programming** for detail.

To Enter Clerk Interrupt System (To Exit Table Management system)

1. Program Clerk Secret Code. See “**Program 800 - Secret Code Programming**” to program Clerk Secret Code.
2. Set **System Option #2** to a value of **1** (Clerk Sign On Method is **Code Entry**).
3. Set **System Option #26-1** to a value of **1** (**Use Clerk Interrupt**).

You can also setup the options below to refine the Clerk Interrupt procedure.

1. Set **System Option #3** to a value of **1** (Clerks are **Pop-up**) for clerks to sign-off automatically at the end of transaction.
2. Set **Print Option #9-1** to a value of **1** (**Not to Print Receipt When Sign On/Off**)

1. Clerk 1 sign-on by enter his clerk number then **CLERK** key

1 — **CLERK**

2. PLU 1 has been registered, then is interrupted by Clerk 2 by enter his clerk number then **CLERK** key

2 — **CLERK**

3. Clerk 2 register the transaction, then finalise the transaction with **CASH** key

CASH

4. Clerk 1 sign back on

1 — **CLERK**

5. Continue the transaction, then finalise the transaction with **CASH** key.

CASH

Receipt Example:

```

THANK-YOU
CALL AGAIN
DATE 01/05/2012 TUE    TIME 08:30

=====
CLERK LOG IN
=====
CHECK 1                                01
CLERK LOG IN TIME                08.30
CLERK 1      No.000061      00001

```

```

THANK-YOU
CALL AGAIN
DATE 01/05/2012 TUE    TIME 08:30

PLU1 T1                                $2.00
** CLERK INTERRUPT **
GST                                $0.18
TOTAL                                $2.00
CLERK 1      No.000062      00001

```

```

THANK-YOU
CALL AGAIN
DATE 01/05/2012 TUE    TIME 08:30

=====
CLERK LOG IN
=====
CHECK 2                                02
CLERK LOG IN TIME                08.30
CLERK 2      No.000063      00001

```

```

THANK-YOU
CALL AGAIN
DATE 01/05/2012 TUE    TIME 08:30

PLU2 T1                                $2.99
ROUND                                $0.01
TOTAL                                $3.00
CASH                                $3.00
GST                                $0.27
CLERK 2      No.000064      00001

```

```

THANK-YOU
CALL AGAIN
DATE 01/05/2012 TUE    TIME 08:30

CLERK TOTAL                                $2.00
PLU3 T1                                $5.00
TOTAL                                $7.00
CASH                                $7.00
GST                                $0.64
CLERK 1      No.000065      00001

```

Table Management

If **Table Management** is preferred, it can be used for **short term** account management such as **Restaurnt Billing, Lay By** or **Bar Tab** when based on **Soft Check** and the whole transaction has **less than 200 lines** record; or **long term** account management like **Service Station** or **Caravan Park** when based on **Hard Check** and the transaction details is printed out from internal printer or external receipt or slip printer.

Function keys used for Table Management are:

	Function Key	Soft Check	Hard Check	Common Options*
Basic	Check #	✓	✓	One check for each table? Check # assigned by register automatically?
	Service	✓	✓	Assign com port number to print when Hard Check.
	Print Check	✓		Automatic service check? Print check on receipt?
Partly Payment	Finalise	✓	✓	Require to close the check?
Advance	Table	✓	✓	Print to remote printer?
	Guest	✓	✓	Print to kitchen printer?
	Tip	✓	✓	

*For detail of options available, please see **Program Mode Programming, Function Key Programming**.

To Enter Table Management system (To Exit Clerk Interrupt System)

1. Set **System Option #26-1** to a value of **0** (Use Table Management).
2. Set **System Option #2** to a value of **0** (Clerk Sign On Method is **Push Entry**).

Soft Check Tracking - (Restaurant Style Billing)

Opening a Soft Check

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

1 2 3 **CHECK#**

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

CHECK#

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

3 **TABLE**

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

2 **GUEST**

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

SERVICE

Receipt Example:

THANK-YOU	
CALL AGAIN	
DATE 01/05/2012 TUE	TIME 08:30
CHECK #	#123
PBAL	\$0.00
TABLE	#3
GUEST	#2
CHICKEN	\$7.00
STEAK	\$10.00
SERVICE	\$17.00
BFWD	\$17.00
CLERK 1	No.000066 00001

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

Adding to a Soft Check

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

1	2	3	CHECK#
---	---	---	--------

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

3	TABLE
---	-------

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

SERVICE

Receipt Example:

THANK-YOU CALL AGAIN		
DATE 01/05/2012 TUE	TIME 08:30	
CHECK #	#123	
PBAL	\$17.00	
TABLE	#3	
GARLIC BREAD	\$2.00	
SERVICE	\$2.00	
BFW	\$19.00	
CLERK 1	No.000067	00001

Printing a Soft Check

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

1	2	3	CHECK#
---	---	---	--------

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

3	TABLE
---	-------

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

PRINT CHECK

Receipt Example:

THANK-YOU CALL AGAIN		
DATE 01/05/2012 TUE	TIME 08:30	
CHECK #	#123	
PBAL	\$19.00	
TABLE	#3	
CHICKEN	\$7.00	
STEAK	\$10.00	
GARLIC BREAD	\$2.00	
SERVICE	\$0.00	
BFW	\$19.00	
CLERK 1	No.000068	CHK # : 1 00001

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

Paying a Soft Check without Payment Key required to Close Check

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

1 2 3 CHECK#

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

3 TABLE

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

SUBTL

3 0 0 TIP

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

2 5 0 0 CASH

Receipt Example:

THANK-YOU	
CALL AGAIN	
DATE 01/05/2012 TUE	TIME 08:30
CHECK #	#123
PBAL	\$19.00
TABLE	#3
TIP	\$3.00
CHECKS PAID	\$22.00
CASH	\$25.00
CHANGE	\$3.00
	CHK # : 2
CLERK 1	NO.000069 00001

Taking Deposits or Account Payments with Payment Key required to Close Check

Taking Deposits or Account Payments, can only be done when the Payment key is programmed as “**Required to Close Check=YES**”. See “**Function Key Programming - Payment**” in “**Program Mode Programming**”.

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

1 2 3 **CHECK#**

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

3 **TABLE**

2. To enter a Deposit or Account payment, simply enter the amount given and press the tender type followed by the **SERVICE** key:

1 5 0 0 **CASH**

SERVICE

Receipt Example:

THANK-YOU	
CALL AGAIN	
DATE 01/05/2012 TUE	TIME 08:30
CHECK #	#123
PBAL	\$19.00
TABLE	#3
CASH	\$15.00
SERVICE	\$0.00
BFWD	\$4.00
	CHK # : 2
CLERK 1	No.000070 00001

Paying a Soft Check with Payment Key required to Close Check

Taking Deposits or Account Payments, can only be done when the Payment key is programmed as “**Required to Close Check=YES**”. See “**Function Key Programming - Payment**” in “**Program Mode Programming**”.

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

1 2 3 **CHECK#**

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

3 **TABLE**

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

SUBTL

3 0 0 **TIP**

3. Press the **PAYMENT** key then enter amount tendered as you would normally tender a transaction, with **CASH**, **CHECK**, or one of the **CHARGE** keys. If the tender is greater than the balance due, change is displayed.

PAYMENT

7 0 0 **CASH**

Receipt Example:

THANK-YOU	
CALL AGAIN	
DATE 01/05/2012 TUE	TIME 08:30
CHECK #	#123
PBAL	\$4.00
TABLE	#3
TIP	\$3.00
CHECKS PAID	\$22.00
TOTAL	\$22.00
CASH	\$7.00
	CHK # : 2
CLERK 1	NO.000071 00001

Hard Check Tracking - (Monthly Account Style Billing)

Opening a Hard Check

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

1	2	3	CHECK#
---	---	---	--------

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

CHECK#

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

SERVICE

Receipt Example:

THANK-YOU CALL AGAIN		
DATE 01/05/2012 TUE	TIME 08:30	
CHECK #	#123	
PBAL	\$0.00	
CHICKEN	\$7.00	
STEAK	\$10.00	
SERVICE	\$17.00	
BFW	\$17.00	
CLERK 1	NO.000072	00001

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

Adding to a Hard Check

1. Enter the number of the guest check, press the **CHECK #** key:
2. Register the next items you wish to sell.
3. To total the posting, press **SERVICE**:

1	2	3	CHECK#
---	---	---	--------

SERVICE

Receipt Example:

THANK-YOU CALL AGAIN		
DATE 01/05/2012 TUE	TIME 08:30	
CHECK #	#123	
PBAL	\$17.00	
GARLIC BREAD	\$2.00	
SERVICE	\$2.00	
BFW	\$19.00	
CLERK 1	NO.000073	00001

Paying a Hard Check without Payment Key required to Close Check

1. Enter the number of the guest check, press the **CHECK #** key:
2. Pay the balance, as you would normally tender a transaction, with **CASH**, **CHECK**, or one of the **CHARGE** keys. If the tender is greater than the balance due, change is displayed.

1 2 3 CHECK#

2 5 0 0 CASH

Receipt Example:

THANK-YOU	
CALL AGAIN	
DATE 01/05/2012 TUE	TIME 08:30
CHECK #	#123
PBAL	\$19.00
CHECKS PAID	\$22.00
CASH	\$25.00
CHANGE	\$3.00
	CHK # : 2
CLERK 1	No.000074 00001

Taking Deposits or Account Payments with Payment Key required to Close Check

Taking Deposits or Account Payments, can only be done when the Payment key is programmed as “**Required to Close Check=YES**”. See “**Function Key Programming - Payment**” in “**Program Mode Programming**”.

1. Enter the number of the guest check, press the **CHECK #** key:
2. Enter the amount given and press the tender type followed by the **SERVICE** key.

1 2 3 CHECK#

1 5 0 0 CASH

SERVICE

Receipt Example:

THANK-YOU	
CALL AGAIN	
DATE 01/05/2012 TUE	TIME 08:30
CHECK #	#123
PBAL	\$19.00
CASH	\$15.00
BFW	\$4.00
	CHK # : 2
CLERK 1	No.000075 00001

Paying a Hard Check with Payment Key required to Close Check

Taking Deposits or Account Payments, can only be done when the Payment key is programmed as “**Required to Close Check=YES**”. See “**Function Key Programming - Payment**” in “**Program Mode Programming**”.

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

1 2 3 **CHECK#**

2. Press the **PAYMENT** key then enter amount tendered as you would normally tender a transaction, with **CASH**, **CHECK**, or one of the **CHARGE** functions. If the tender is greater than the balance due, change is displayed.

PAYMENT

7 0 0 **CASH**

Receipt Example:

THANK-YOU		
CALL AGAIN		
DATE 01/05/2012 TUE	TIME 08:30	
CHECK #	#123	
PBAL		\$4.00
CHECKS PAID		\$22.00
CASH		\$7.00
CHANGE		\$3.00
	CHK #	: 2
CLERK 1	No.000076	00001

Sample of Hard Check postings printed on an optional CBM-820 printer

Example **without** Payment Key Required to Close Check:

DATE	01/05/2012	TUE
CHECK #	#123	
PBAL	\$0.00	
CHICKEN	\$7.00	
STEAK	\$10.00	
SERVICE	\$17.00	
BFW	#17.00	
No.000067 REG 01 CLERK 1	TIME 08:30	
DATE	01/05/2012	TUE
CHECK #	#123	
PBAL	\$17.00	
GARLIC BREAD	\$2.00	
SERVICE	\$2.00	
BFW	#19.00	
No.000068 REG 01 CLERK 1	TIME 08:30	
DATE	01/05/2012	TUE
CHECK #	#123	
PBAL	\$19.00	
CHECKS PAID	\$22.00	
CASH	\$25.00	
CHANGE	\$3.00	
No.000069 REG 01 CLERK 1	TIME 08:30	

Example **with** Payment Key Required to Close Check (**Allows Part Payment**):

DATE	01/05/2012	TUE
CHECK #	#123	
PBAL	\$0.00	
CHICKEN	\$7.00	
STEAK	\$10.00	
SERVICE	\$17.00	
BFW	#17.00	
No.000067 REG 01 CLERK 1	TIME 08:30	
DATE	01/05/2012	TUE
CHECK #	#123	
PBAL	\$17.00	
GARLIC BREAD	\$2.00	
SERVICE	\$2.00	
BFW	#19.00	
No.000068 REG 01 CLERK 1	TIME 08:30	
DATE	01/05/2012	TUE
CHECK #	#123	
PBAL	\$19.00	
CASH	\$15.00	
SERVICE	\$0.00	
BFW	#4.00	
No.000069 REG 01 CLERK 1	TIME 08:30	
DATE	01/05/2012	TUE
CHECK #	#123	
PBAL	\$4.00	
CHECKS PAID	\$22.00	
CASH	\$25.00	
CHANGE	\$3.00	
No.000070 REG 01 CLERK 1	TIME 08:30	

NOTE: If Date is not printing on the slip, please refer to **“Print Option Programming” option #27-2 in “Program Mode Programming”**.

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 "**saleable**" status enabled, also the **SCALE** function key has to be assigned on the keyboard..

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

SCALE

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:

3 **0** **0**

4. Press a PLU.

For example, press PLU 1:

1

Receipt Example (New format):

THANK-YOU		
CALL AGAIN		
DATE 01/05/2012 TUE	TIME 08:30	
PLU1		\$4.50
1.500kg @ \$3.00/kg		
TOTAL		\$4.50
CASH		\$4.50
CLERK 1	No.000077	00001

Receipt Example (Original Format):

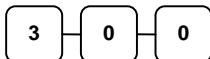
THANK-YOU		
CALL AGAIN		
DATE 01/05/2012 TUE	TIME 08:30	
1.500 kg @\$3.00/kg		
PLU1		\$4.50
TOTAL		\$4.50
CASH		\$4.50
CLERK 1	No.000077	00001

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.

For example, press PLU 1:



Receipt Example (New format):

THANK-YOU CALL AGAIN		
DATE 01/05/2012 TUE	TIME 08:30	
PLU1		\$4.50
1.500kg @ \$3.00/kg		
TOTAL		\$4.50
CASH		\$4.50
CLERK 1	No.000078	00001

Receipt Example (Original Format):

THANK-YOU CALL AGAIN		
DATE 01/05/2012 TUE	TIME 08:30	
1.500 kg @\$3.00/kg		
PLU1		\$4.50
TOTAL		\$4.50
CASH		\$4.50
CLERK 1	No.000078	00001

Tare Weight Entry

TARE 1 has been programmed as **0.010kg**. Please see **Program 1400 - Scale Tare Weight Programming in Program Mode programming - Miscellaneous Programming** for detail. The **TARE** and **SCALE** function keys have to be assigned on the keyboard and the PLU must have "saleable" status enabled.

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

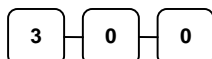


3. Press the **SCALE** key.



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.

For example, press PLU 1:



Receipt Example (New format):

THANK-YOU CALL AGAIN		
DATE 01/05/2012 TUE	TIME 08:30	
PLU1		\$4.47
1.490kg @ \$3.00/kg		
ROUND		-0.02
TOTAL		\$4.45
CASH		\$4.45
CLERK 1	No.000079	00001

Receipt Example (Original Format):

THANK-YOU CALL AGAIN		
DATE 01/05/2012 TUE	TIME 08:30	
1.490 kg @\$3.00/kg		
PLU1		\$4.47
ROUND		-0.02
TOTAL		\$4.45
CASH		\$4.45
CLERK 1	No.000079	00001

Manual Tare Weight Entry

The **TARE** and **SCALE** function keys have to be assigned on the keyboard. The **TARE** function key must have “#5 IS MANUAL TARE” set to **Y**. The PLU must have “**saleable**” status enabled.

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

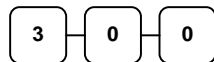


3. Enter the weight of the tare.
For example, enter **.01**, press the tare key:

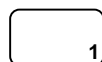


4. Press the **SCALE** key.
5. Note that the weight, less the tare weight, is displayed on the screen. Enter the price per **kilo** on the number pad. *Do not use the decimal key.*

For example, for \$3.00, enter:



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



Receipt Example (New format):

THANK-YOU		
CALL AGAIN		
DATE 01/05/2012 TUE	TIME 08:30	
PLU1		\$4.47
1.490kg @ \$3.00/kg		
ROUND		-0.02
TOTAL		\$4.45
CASH		\$4.45
CLERK 1	No.000080	00001

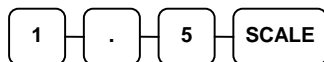
Receipt Example (Original Format):

THANK-YOU		
CALL AGAIN		
DATE 01/05/2012 TUE	TIME 08:30	
1.490 kg @\$3.00/kg		
PLU1		\$4.47
ROUND		-0.02
TOTAL		\$4.45
CASH		\$4.45
CLERK 1	No.000080	00001

Manual Weight Entry

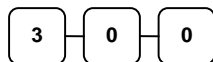
Operators can make manual weight entries if the item has been programmed to accept them. You must use the decimal key to enter fractional manual weights. The **SCALE** function key has to be assigned on the keyboard with “**KEY IS MAN. ENTRY** (weight is entered manually)” set to **Y**. The **SCALE** function keys have to be assigned on the keyboard and the PLU must have “**saleable**” status enabled.

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.

For example, press PLU 1:



Receipt Example (New format):

THANK-YOU		
CALL AGAIN		
DATE 01/05/2012 TUE	TIME 08:30	
PLU1		\$4.50
1.500kg MANUAL WT.	@ \$3.00/kg	
TOTAL		\$4.50
CASH		\$4.50
CLERK 1	No.000081	00001

Receipt Example (Original Format):

THANK-YOU		
CALL AGAIN		
DATE 01/05/2012 TUE	TIME 08:30	
1.500 kg MANUAL WT. @\$3.00/kg		
PLU1		\$4.50
TOTAL		\$4.50
CASH		\$4.50
CLERK 1	No.000081	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 (include **X1** and **X2** reports) in **X** Mode, which read totals without resetting
- **Z** reports (include **Z1** and **Z2** reports) in **Z** Mode, 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 **X1** reports.

Some reports also provide identical but separate *period to date* (**X2** and **Z2**) 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 report (**X2** and **Z2**) totals are updated each time a **Z1** report is completed.

When register is operating, **X1** and **Z1** reports are updated at the same time, after **Z1** reports are made, the records are forwarded and updated to **X2** and **Z2** reports at the same time, and **X1** and **Z1** reports are reset to zero. When **Z2** reports are made, the records in **X2** and **Z2** reports are reset to zero.

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 which 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" (*All Models*) and "Electronic Journal Table" (*for ER-230, ER-380, ER-380M and ER-390M only*).
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	X1	X	1 - SUBTL
		Z1	Z	1 - SUBTL
		X2	X	201 - SUBTL
		Z2	Z	201 - SUBTL
Time	2	X1	X	2 - SUBTL
		Z1	Z	2 - SUBTL
		X2	X	202 - SUBTL
		Z2	Z	202 - SUBTL
All PLU	3	X1	X	3 - SUBTL
		Z1	Z	3 - SUBTL
		X2	X	203 - SUBTL
		Z2	Z	203 - SUBTL
All Clerk	4	X1	X	4 - SUBTL
		Z1	Z	4 - SUBTL
		X2	X	204 - SUBTL
		Z2	Z	204 - SUBTL
Group	5	X1	X	5 - SUBTL
		Z1	Z	5 - SUBTL
		X2	X	205 - SUBTL
		Z2	Z	205 - SUBTL
All STOCK	6	X1	X	6 - SUBTL
		Z1	Z	6 - SUBTL
Daily Sales	8	X2	X	208 - SUBTL
		Z2	Z	208 - SUBTL
Individual Clerk Report	9	X1	X	9-SUBTL-##-CLERK-##-CLERK
		X2	X	209-SUBTL-##-CLERK-##-CLERK
Open Table REPORT TABLE (exclude ER-230)	11	X1	X	11 - SUBTL
		Z1	Z	11 - SUBTL
From/To PLU	13	X1	X	13 - SUBTL - ^ - PLU - ^ - PLU
		X2	X	213 - SUBTL - ^ - PLU - ^ - PLU
From/To STOCK	14	X1	X	14 - SUBTL - ^ - PLU - ^ - PLU
DRAWER TOTAL	111	X1	X	111 - SUBTL

* # starts from 01 and the Maximum number depends on the maximum number of clerk set in **S-Mode, Memory Allocation.**

^ # is up to 15 digits for PLU number.

Electronic Journal Table

(for ER-230, ER-380, ER-380M and ER-390M only)

Report Type	Report Number	Report Mode	Control Lock Position	Key Sequence
PRINT ALL EJ	300	X	X	300 - SUBTL
PRINT EJ CASH	301	X	X	301 - SUBTL
PRINT EJ CHECK	302	X	X	302 - SUBTL
PRINT EJ MISC/T	303	X	X	303 - SUBTL
PRINT EJ %	304	X	X	304 - SUBTL
PRINT EJ RA/PO	305	X	X	305 - SUBTL
PRINT EJ RETURN	306	X	X	306 - SUBTL
PRINT EJ EC/VOID	307	X	X	307 - SUBTL
PRINT EJ NO SALE	308	X	X	308 - SUBTL
PRINT EJ CANCEL	309	X	X	309 - SUBTL
PRINT EJ BY CLERK	4xx*	X	X/Z	4xx* - SUBTL
EJ RESET (No Printing)	399	Z	Z	399 - SUBTL

* xx starts from 01 and the Maximum number depends on the maximum number of clerk set in **S-Mode, Memory Allocation.**

Reset Hard Check Line # (not applicable to *ER-230*)

If you want to change hard check line # to specific value, follow below sequence in **Z-Mode**.

Program 10 - Reset Hard Check Line # Programming

1. Reset **All** Hard Check Line #.



2. Reset **an Individual** Hard Check Line #.



This resets the auto line find function on the slip printer.

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.

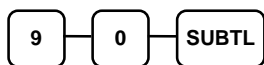
Either way you choose to enter cash, the register will compare your declaration with the expected cash and check in drawer totals and print the over or short amounts on the report.

Program 90 - Cash Declaration Programming

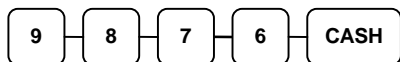
For example:

1. Turn the control lock to the **X-Mode** or **Z-Mode**
Switch to **X-Mode** or **Z-Mode** by press **MODE** function key. (For **ER-230**)
(depending upon the type of report you are taking.)

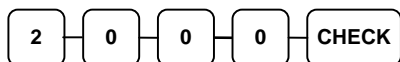
2. Press the **SUBTL** key.



3. Enter the total of cash.



4. Enter the total of checks.



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



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

Service Mode Programming

Overview

The following procedures are done from the Service Mode menu:

- *Memory All Clear (Clear All Memory back to factory default)*
- *Program 1x - Self Tests*
- *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 All Clear

Before you use your *Sam4S Electronic Cash Register* for the first time, you must perform a memory all clear to insure that all totals and counters are cleared and that the default program is installed.

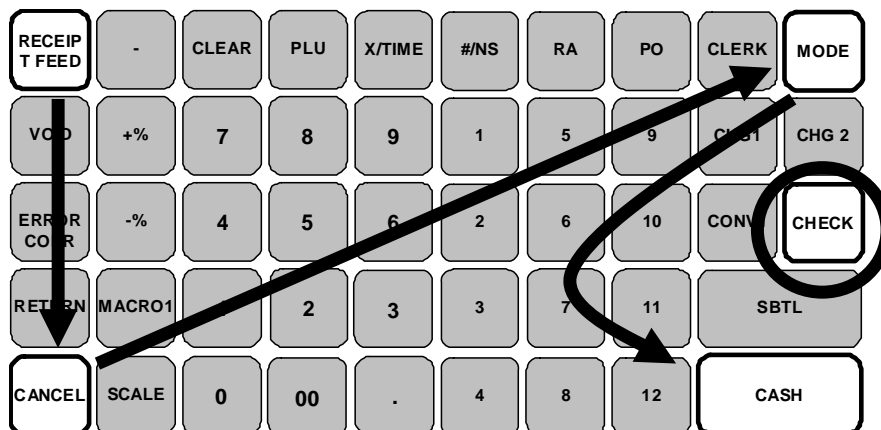
CAUTION: The procedures described in this area are security sensitive. Clearing all or parts of the memory may cause damage or loss to the program. Do not share this information with unauthorized users and distribute the special SERVICE-Mode key only to those you may want to perform these functions.

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

ER-230 Memory All Clear (RAM All Clear)

To Perform a Memory All Clear (reset memory completely - ER-230 only):

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



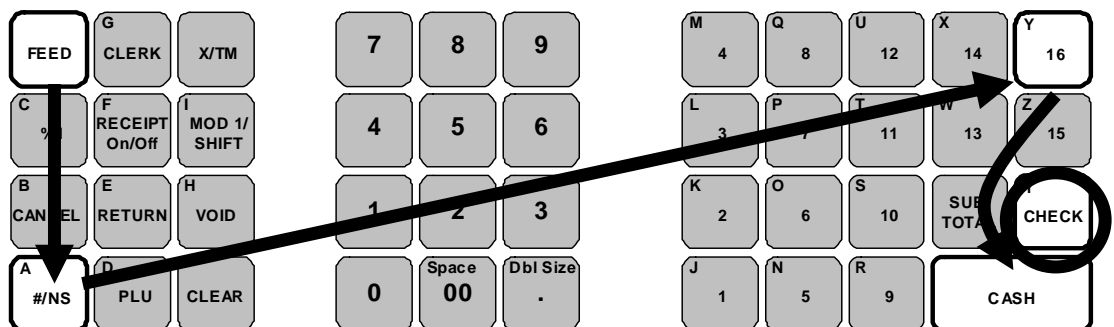
6. Display will show "===== " while proceeding.
7. When memory is cleared, the register prints a message "RAM ALL CLEAR OK!"

ER-380/M, ER-390M, ER-420M, ER-430M, ER-52xx/M Memory All Clear (RAM All Clear)

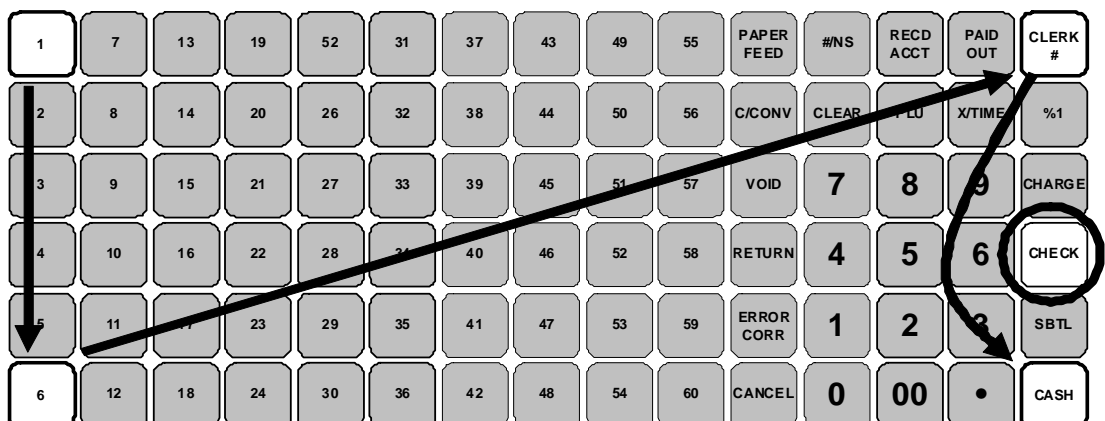
To Perform a Memory All Clear (reset memory completely - all other models):

1. Turn the power switch located on the right side of the register to the **OFF** position.
2. Turn the control lock to the **S-Mode** (one passed PGM-Mode as a **hidden position**).
3. Press and hold the button position where the **CHECK** button (circled button) is located on the default keyboard layout.
4. Continue to hold the **CHECK** button while turning the power switch to the **ON** position.
5. After hear BEEP, release the **CHECK** button.
6. Please see below for detail of each model:

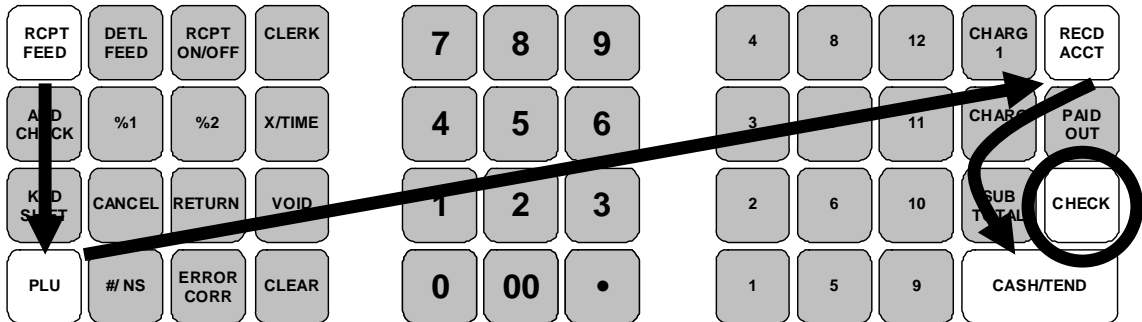
For ER-380 and ER-380M, press the **upper left button (FEED)** of the keyboard, then the **lower left button (#/NS)**, then the **upper right button (PLU 16)**, and finally press the **lower right button (CASH)**.



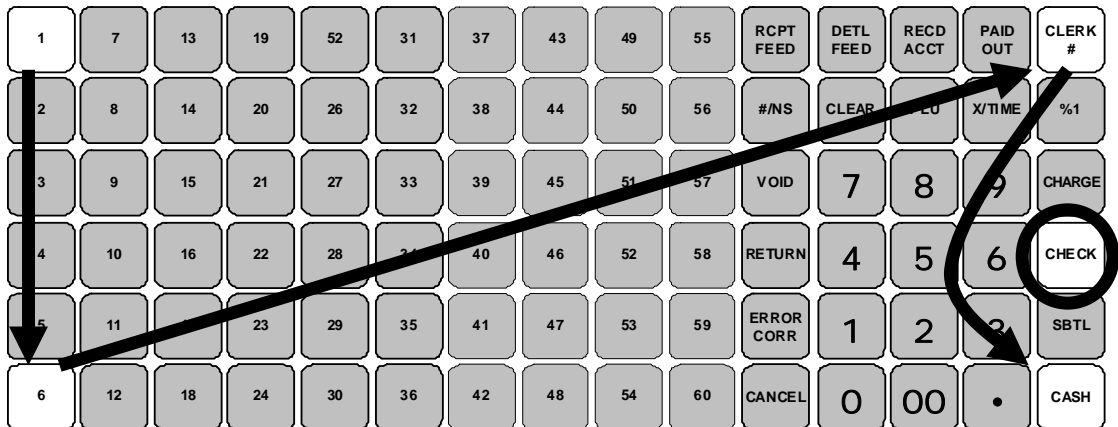
For ER-390M, press the **upper left button (PLU 1)** of the keyboard, then the **lower left button (PLU 6)**, then the **upper right button (CLERK #)**, and finally press the **lower right button (CASH)**.



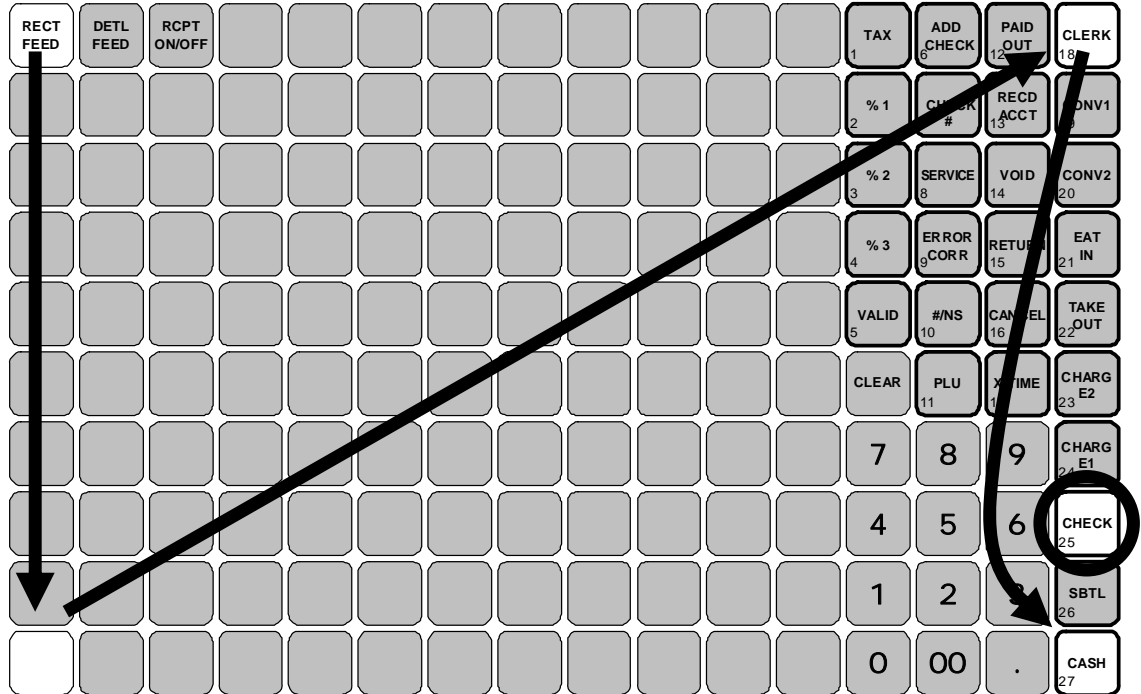
For **ER-420M**, press the **upper left button** (RCPT FEED) of the keyboard, then the **lower left button** (PLU), then the **upper right button** (RECD ACCT), and finally press the **lower right button** (CASH/TEND).



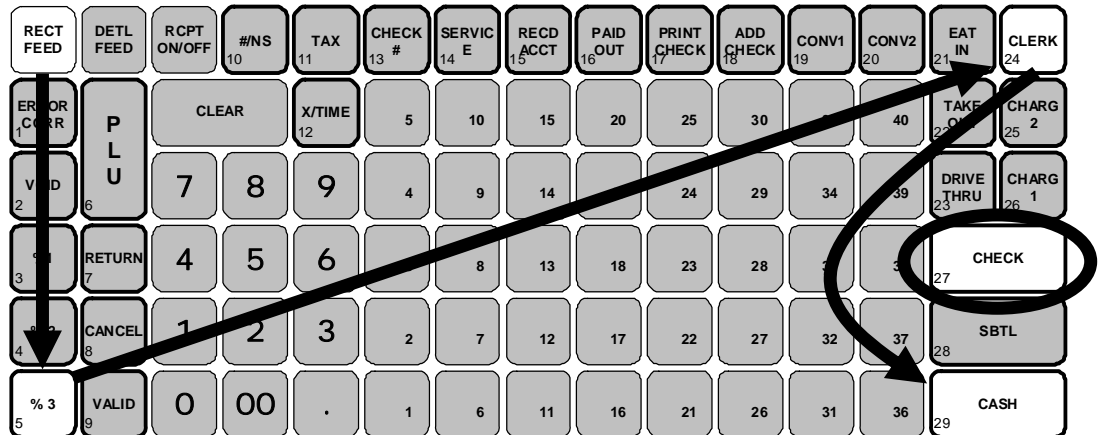
For **ER-430M**, press the **upper left button** (PLU 1) of the keyboard, then the **lower left button** (PLU 6), then the **upper right button** (CLERK #), and finally press the **lower right button** (CASH/TEND).



For **ER-5200/ER-5200M**, press the **upper left button (RECT FEED)** of the keyboard, then the **lower left button (PLU 9)**, then the **upper right button (CLERK)**, and finally press the **lower right button (CASH)**.



For **ER-5240/ER-5240M** press the **upper left button (RECT FEED)** of the keyboard, then the **lower left button (%3)**, then the **upper right button (CLERK)**, and finally press the **lower right button (CASH)**.

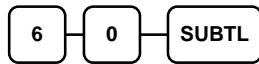


7. When memory is cleared, the register prints a message **“RAM ALL CLEAR OK!”**
8. The display now shows **SERVICE MODE CLOSED**. The RAM Clear procedure is complete.

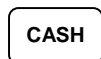
NOTE: Please see **Clerk Sign-On/Sign-Off** for detail when **CLOSE** appear on the display.

Memory Allocation Scan

1. Turn the control lock to the **S-Mode** to scan the allocated memory.
Switch to **S Mode** by press **MODE** function key to scan the allocated memory. (For **ER-230**)
2. Enter **6 0**, press the **SUBTL** key.



3. Press **CASH** key.



PC Online Mode

In *Sam4S 230, 3xx, 4xx and 52xx Electronic Cash Registers*, 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.

Self Tests

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

1. Turn the control lock to the **S-Mode** to scan the allocated memory.
Switch to **S Mode** by press **MODE** function key to scan the allocated memory. (For **ER-230**)
2. Enter the test number from the chart below and press the **SBTL** key.

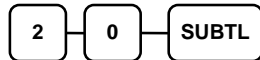


Test	Key Sequence	Results/Instructions
Printer	10 SUBTL	The receipt printer generates a printer test pattern and the drawer will open at the end of the test.
Display	11 SUBTL	Displays illuminate a test pattern.
Keyboard	12 SUBTL	Press any key. The key's current function is displayed. Turn key lock to end the test.
Mode Lock	13 SUBTL	Turn the mode lock to display the lock position. Return the key to S to end the test.
RS232C Port	14 SUBTL	Loop back connector must be connected. Displays "232 Port Good" if successful; displays "232 Port No Good" and sounds an error if unsuccessful (or if loop back is not connected).
Endless Printing	15 SUBTL 16 SUBTL	The receipt prints a sample ticket and opens the cash drawer. The print is repeated until the key lock is turned.

Clear All Sales Totals

Program 20 - Clear All Sales Totals

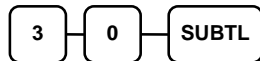
1. Turn the control lock to the **S-Mode**.
Switch to **S Mode** by press **MODE** function key. (For **ER-230**)
2. To **Clear All Sale Totals**, enter **2 0**, and then press the **SUBTL** key.



Clear Grand Total

Program 30 - Clear Grand Total

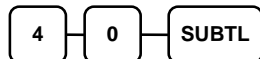
1. Turn the control lock to the **S-Mode**.
Switch to **S Mode** by press **MODE** function key. (For **ER-230**)
2. To **Clear Grand Total**, enter **3 0**, and then press the **SUBTL** key.



Clear / Delete PLU File

Program 40 - Clear / Delete PLU File

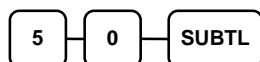
1. Turn the control lock to the **S-Mode**.
Switch to **S Mode** by press **MODE** function key. (For **ER-230**)
2. To **Clear / Delete PLU File**, enter **4 0**, and then press the **SUBTL** key.



EPROM Information

Program 50 - EPROM Information

1. Turn the control lock to the **S-Mode**.
Switch to **S Mode** by press **MODE** function key. (For **ER-230**)
2. To **Scan EPROM Information**, enter **5 0**, and then press the **SUBTL** key.



Memory Allocation

The memory allocation program determines how memory is divided to support the following features:

1. PLUs - You must allocate a minimum number of PLUs which match the number of NLU in your ECR. Please refer to the table of step 4 on the next page for maximum number of PLU for your model. The maximum number of PLU is based on **full load memory**. Please contact your dealer for detail.

2. Clerks - You must allocate at least **1 clerk**, with a maximum of 99.

NOTE: you also must allocate at least one guest check for each clerk.

3. Groups - You must allocate at least **1 group**, with a maximum of 99.
4. Guest Checks - You must allocate number of Guest Check to match number of clerk. Otherwise, you can allocate a maximum of 500 hard or soft checks. The maximum number of Guest Checks is based on **full load memory**.
5. Soft Check Lines - You can allocate a maximum of **100 lines** per check
6. Check Type - Select hard or soft checks.
7. Levels - Allocate one or two price levels.
8. Mix & Match Discount Tables - Default is 10 you can allocate a minimum of 0 to a maximum of 100.
9. Electronic Journal (for **ER-230** and **ER-3xx** only) - Default is 3000 lines; maximum is 12000 (for **ER-230**) and 15000 (for **ER-3xx**) lines.

Important Memory Allocation Notes

1. Memory variable maximums are theoretical. For example, if all other variables are at or near zero, then you may allocate more PLUs.

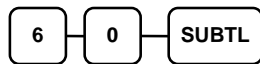
NOTE: check memory, especially **soft check** memory, and **clerk memory** consume considerable memory.

2. Using the clerk interrupt feature requires allocation of at least one guest check for each clerk and sufficient soft check lines to support the interrupted transaction (i.e. if soft check lines allocated is 20, a transaction with up to 20 lines can be interrupted.) See **System Option** address #26 to select clerk interrupt operations instead of table management (check tracking) operations.

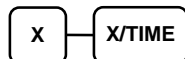
NB. This will clear the Memory!

Program 60 - Memory Allocation Programming

1. Turn the control lock to the **S-Mode**.
Switch to **S** Mode by press **MODE** function key. (For *ER-230*)
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.

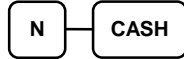


X	MEMORY ITEM
1	PLU
2	CLERK
3	GROUP
4 *	CHECK#
5 *	SOFT CHECK LINE
6 *	CHECK TYPE : Hard (1), Soft (0)
7	PRICE LEVEL
8	MIX AND MATCH
9	ELECTRONIC JOURNAL (<i>ER-230</i> and <i>ER-3xx</i> Series only)

* Not Applicable on *ER-230*

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

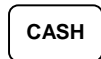
See the example data table below



MEMORY ITEM	N
PLU	50 (Max. 5000 for <i>ER-230</i>) 300 (Max. 5,000 for <i>ER-3xx</i>) 1,000 (Max 9,000 for <i>ER-4xx</i>) 1,000 (Max 15,000 for <i>ER-52xx</i>)
CLERK	5 (Max.99 for <i>ER-230</i>) 15 (Max. 99 for <i>ER-3xx</i> , <i>ER-4xx</i> , and <i>ER-52xx</i>)
GROUP	5 (Max. 99 for <i>ER-230 EPROM v1.002</i> and earlier) 20 (Max. 99) => for <i>ER-230 EPROM v1.003</i> and later and <i>ER-3xx</i> , <i>ER-4xx</i> and <i>ER-52xx</i>)
CHECK # *	(For <i>ER-3xx</i>) 15 (Max. 500) (For <i>ER-4xx</i> and <i>ER-52xx</i>) 20
SOFT CHECK LINE *	(For <i>ER-3xx</i>) 30 (Max. 100) (For <i>ER-4xx</i> and <i>ER-52xx</i>) 50
CHECK TYPE *	0 (Soft Check), 1 (Hard Check)
PRICE LEVEL	1 (Max. 2)
MIX AND MATCH	10 (Max. 100)
ELECTRONIC JOURNAL	3000 (300 <i>EPROM v1.002</i> and earlier) (Max. 12000 for <i>ER-230</i>) 3000 (Max. 15000) (for <i>ER-3xx</i>)

※Default values have been highlighted in **bold** print * Not Applicable on *ER-230*

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



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.

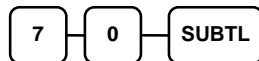
Program 70 - Function Key Assignment Programming

Please note the following limitations:

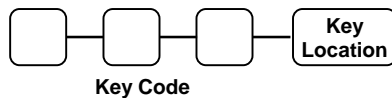
- If you assign a duplicate of a function code, the duplicate will function exactly as the original - you will not get separate totals and counters on reports for the duplicated key.
- You can reassign keys only in locations that are programmable. See “Keyboard”, where the key locations that may be programmed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

To Assign a Function Key to a Location:

1. Turn the control lock to the **S-Mode**.
Switch to **S Mode** by press **MODE** function key. (For **ER-230**)
2. Enter **7 0**, and then press the **SUBTL** 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 finalise key assignment program.



Function Key Codes - ER-230

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	CHECKCASHING	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		

Function Key Codes - All Other ER Models

ER-380 / ER-380M / ER52xx / ER52xxM		ER-390M / ER-430M		ER-420M	
Code	Function	Code	Function	Code	Function
1 117	NLU 1 NLU 117	1 100	NLU 1 NLU100	1 50	NLU 1 NLU 50
118 119	RESERVED RESERVED	101 119	RESERVED RESERVED	51 119	RESERVED RESERVED

Code	Function	Code	Function	Code	Function	Code	Function
1 119	<i>Please see above</i>	144	CHARGE 3	170	MACRO 1	196	SBTL
		145	CHARGE 4	171	MACRO 2	197	SCALE
120	Numeric 1	146	CHARGE 5	172	MACRO 3	198	SERVICE
121	Numeric 2	147	CHARGE 6	173	MACRO 4	199	TABLE #
122	Numeric 3	148	CHARGE 7	174	MACRO 5	200	TARE
123	Numeric 4	149	CHARGE 8	175	MACRO 6	201	TAKE OUT
124	Numeric 5	150	CHECK CASHING	176	MACRO 7	202	TAX EXEMPT
125	Numeric 6	151	ENDORSE	177	MACRO 8	203	TAX SHIFT 1
126	Numeric 7	152	CHEQUE TEND	178	MACRO 9	204	TAX SHIFT 2
127	Numeric 8	153	CHECK #	179	MACRO 10	205	TAX SHIFT 3
128	Numeric 9	154	CLEAR (ESC)	180	RETURN	206	TAX SHIFT 4
129	Numeric 0	155	CLERK #	181	MOD 1	207	TIP
130	Numeric 00	156	CURR. CONV. 1	182	MOD 2	208	VOID
131	DECIMAL	157	CURR. CONV. 2	183	MOD 3	209	WASTE
132	#/NS	158	CURR. CONV. 3	184	MOD 4	210	VALIDATION
133	%1	159	CURR. CONV. 4	185	MOD 5	211	PAYMENT
134	%2	160	DRIVE THRU	186	P/BAL	212	RECEIPT ON/OFF
135	%3	161	EAT-IN	187	PAID OUT 1	213	DETAIL FEED (Two Printer Stations Models only)
136	%4	162	ERR CORRECT	188	PAID OUT 2		
137	%5	163	F/S SHIFT	189	PAID OUT 3	214	INACTIVE
138	XTIME	164	F/S SUB	190	RECEIPT FEED	215	NON ADD
139	ADD CHECK	165	F/S TEND	191	PRINT CHECK	216	PRICE INQUIRY
140	CANCEL	166	GUEST	192	PROMO	217	CASH OUT
141	CASH	167	PLU	193	REC ON ACCT 1	218	KBD SHIFT (ER-420M only)
142	CHARGE 1	168	LEVEL 1	194	REC ON ACCT 2		
143	CHARGE 2	169	LEVEL 2	195	REC ON ACCT 3		

Function Key Codes - For Earlier Released *ER380 ER380M*

Code	Function	Code	Function	Code	Function	Code	Function
1 12	NLU 1 NLU 12	37	CHARGE 1	63	LEVEL 1	89	REC ON ACCT 2
		38	CHARGE 2	64	LEVEL 2	90	REC ON ACCT 3
13	RESERVED	39	CHARGE 3	65	MACRO 1	91	SBTL
14	RESERVED	40	CHARGE 4	66	MACRO 2	92	SCALE
15	Numeric 1	41	CHARGE 5	67	MACRO 3	93	SERVICE
16	Numeric 2	42	CHARGE 6	68	MACRO 4	94	TABLE #
17	Numeric 3	43	CHARGE 7	69	MACRO 5	95	TARE
18	Numeric 4	44	CHARGE 8	70	MACRO 6	96	TAKE OUT
19	Numeric 5	45	CHECK CASHING	71	MACRO 7	97	TAX EXEMPT
20	Numeric 6	46	ENDORSE	72	MACRO 8	98	TAX SHIFT 1
21	Numeric 7	47	CHECK TEND	73	MACRO 9	99	TAX SHIFT 2
22	Numeric 8	48	CHECK #	74	MACRO 10	100	TAX SHIFT 3
23	Numeric 9	49	CLEAR (ESC)	75	RETURN	101	TAX SHIFT 4
24	Numeric 0	50	CLERK #	76	MOD 1	102	TIP
25	Numeric 00	51	CURR. CONV. 1	77	MOD 2	103	VOID
26	DECIMAL	52	CURR. CONV. 2	78	MOD 3	104	WASTE
27	#/NS	53	CURR. CONV. 3	79	MOD 4	105	VALIDATION
28	%1	54	CURR. CONV. 4	80	MOD 5	106	PAYMENT
29	%2	55	DRIVE THRU	81	P/BAL	107	RECEIPT ON/OFF
30	%3	56	EAT-IN	82	PAID OUT 1	108	INACTIVE
31	%4	57	ERR CORRECT	83	PAID OUT 2	109	NON ADD
32	%5	58	F/S SHIFT	84	PAID OUT 3	110	PRICE ENQUIRY
33	XTIME	59	F/S SUB	85	RECEIPT FEED		
34	ADD CHECK	60	F/S TEND	86	PRINT CHECK		
35	CANCEL	61	GUEST	87	PROMO		
36	CASH	62	PLU	88	REC ON ACCT 1		

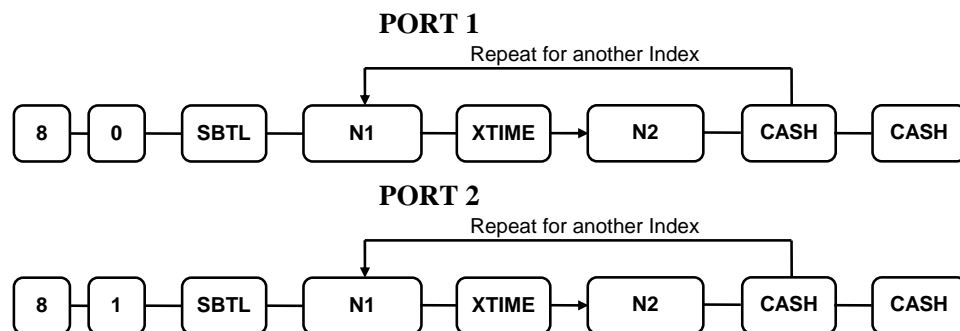
*(From ER380 EPROM v2.1 and earlier & ER380M V1.8 and earlier)

RS-232 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 80/81 - RS232C Serial ports Communication Options

1. Turn the control lock to the **S-Mode**.
Switch to **S Mode** by press **MODE** function key. (For *ER-230*)
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 (except *ER-380*).
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



RS-232 Option Chart

N1	OPTION	N2	VALUE
1	Baud Rate	0	9600 BPS
		1	1200 BPS
		2	2400 BPS
		3	4800 BPS
		4	19200 BPS
2	Parity	0	NONE
		1	ODD
		2	EVEN
3	Data Bits	0	8 BITS
		1	7 BITS
4	Stop Bits	0	1 BIT
		1	2 BIT
5	Device Function (Port1 is set to 1 PC as default; Port2 is set to 0 NONE as default)	0	NONE
		1	PC
		2	SCALE
		3^	RJ* / CCTV
		4	REMOTE PRINTER
		6	SCANNER
		7^	COIN
		8	EFT
		9^	POLE
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^	Print Line On Guest Check	0 – 50 0 – 100 #	0 (Preset “0” equals to 30 lines)
10	Scale Type	0	NCI
		1	CAS

N1	OPTION	N2	VALUE
11	Printer Type (SAM4S ELLIX 10, ELLIX 20 and SRP-270 are added and replace from 1 to 3)	0	NONE
		1	SAM4S ELLIX 10 SAMSUNG SRP-100
		2	SAM4S ELLIX 20 SRP-250
		3	SRP-270 SRP-300
		4	SRP-350
		5	CITIZEN3550/3551
		6	CITIZEN810
		7	CITIZEN230
		8	EPSON TMT88-2
		9	EPSON U200
		10	EPSON U295
		11	EPSON U300
		12	EPSON U325
		13	EPSON U375
		14	STAR SP-200
		15	STAR SP-298
		16	STAR SP-300
		17	STAR TSP-200
12 [^]	Pole Display	0	EPSON
		1	ICD
13	EFT Type	0	EFT GLED
		1	EFT INGE
		2	RESERVED
		3	TYRO EFTPOS
		4	EFT NZINGE
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

[^]Not Available on **ER-230**

*Remote Journal Printer

[#] Apply to **ER-420M** EPROM v2.5, **ER-430M** EPROM v2.7, **ER-52xx** v5.8R and **ER-52xx/M** v 5.8R

Load Receipt Images

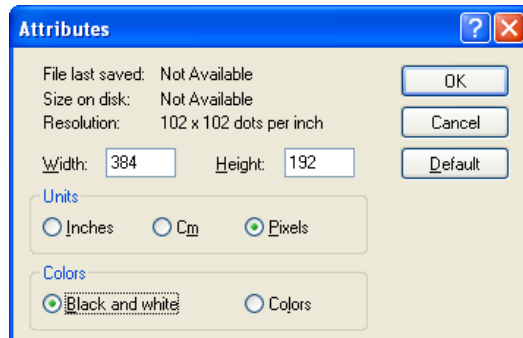
You can load a preamble (*ER-230, ER-3xx, ER-4xx and ER-52xx/M*) and postamble (*ER-4xx and ER-52xx/M*) images for receipt. Before loading, the images must be converted by the PC Utility to .img format. After conversion, they can be loaded directly by connecting a PC to the cash register via PC Utility described here.

NOTE: After loading the images, you need to revise Print Options #21, #22 and #30 (#21 and #27 on *ER-230*) to activate the customise image printing.

Preparing a Graphic Logo Bitmap

The image must be black/white (monochrome); **384 x 192 pixels for 57mm** wide paper, **288 x 192 for 44mm** wide paper, and 10 Kbytes or less in size.

1. Open MS Paint.
2. Open the image file you wish to use.
3. Choose **Attributes** from the **Image** menu. The **Attributes** dialog box displays.

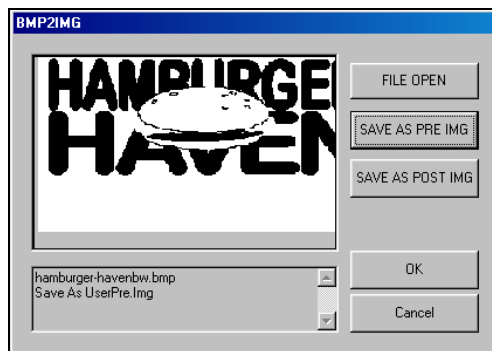


4. The image dimensions must be no larger than 384 pixels wide by 192 pixels high (for 57mm wide paper) or 288 pixels wide by 192 pixels high (for 44mm wide paper). If the image size in pixels is greater than the maximum, you must resize your image.
 - a. Click OK to exit the Attributes dialog.
 - b. Select your image. (Choose **Select All** from the **Edit** menu.)
 - c. Using the handles of the selected image, resize the image. Keep the image in the upper left corner of the screen.
 - d. Choose **Attributes** from the **Image** menu. The **Attributes** dialog box displays again. Enter 384/288 in the **Width** field; enter 192 in the **Height** field; select **Pixels** as the unit. Click **OK** to exit the dialog box.
 - e. Your image will be cropped to the 384 x 192 pixel or 288 x 192 pixel size. If you cropped part of the image you wish to keep, you can undo (Ctrl + Z) and try again. You may have to experiment a bit to resize the image inside the 384 x 192 pixel or 288 x 192 pixel limit.
5. After the image is sized, select **Black and white** in the **Attributes** dialog.

6. Save your image as type “Monochrome Bitmap (*.bmp,*.dib)” and confirm that the size is 10k or less. If you resized your original image, you may wish to rename when you save, so that you preserve a copy of the original image.

Use the PC Utility to Convert the Image

1. Install the *PC Utility* on your PC.
2. At your PC, start the PC Utility. The **Store Setting** dialog box displays.
3. If you are starting the PC Utility for the first time, you must define a store name, or if a store is already defined, you can select the store from the drop down list. After the store is defined or selected, click **Close**. The PC Utility program starts.
4. Move the .bmp logos you wish to use into the store directory (i.e. C:\ER-230PC\storename.)
5. At the PC Utility, choose **Convert Logo Image** from the **Utility** menu. The Bmp dialog box displays.
6. Click **FILE OPEN**. Select the bitmap image you wish to use from the **Open** dialog and click the **Open** command button.
7. Click the SAVE AS PRE IMG or SAVE AS POST IMG button.



8. When the image is selected, click **OK**. Verify that the message “Save As UserPre.Img” or “Save As UserPost.Img” displays. If the file is too large, and cannot be loaded, the message “File Size Error” displays.
9. Click on **PreAmble Image** (or **PostAmble Image** for available models) from the **DownProgram(PC->ECR)** menu to download the image file to cash register.
10. Refer to Print Option Table, make sure Print Option #21, #22 and #30 (#21 and #27 on **ER-230**) for suitable settings.

Flash ROM Updates

The *ER-230*, *ER-4xx* and *ER-52xx/M* register software is loaded in a Flash ROM (erasable programmable read only memory). This program may occasionally be updated by the manufacturer. Your SAM4s dealer can update the software if necessary.

The Flash ROM can be loaded through a PC Utility or by SD card.

CAUTION: Flash ROM update by either method must be done by a qualified, trained technician. DO NOT POWER OFF OR ABORT any program loading once it has started. Failure to follow the procedures exactly may cause the program to load incompletely and for the register to fail completely.

Flash ROM update by PC Utility

Update Files

To complete the firmware update, you will be supplied with the following files:

- DOWNLOAD.exe (The update utility program)
- Exxxxyyy.bin ("xxx" is the model number and "yyy" is the version number. i.e. E42M22.bin)

PC Connection Cable

YOU MUST USE Port #1. Use the following cable:

- CAB-E661PC9 (Register DB-9M COM 1 to PC DB-9F)

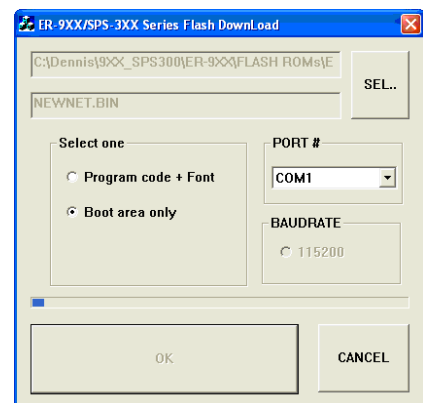
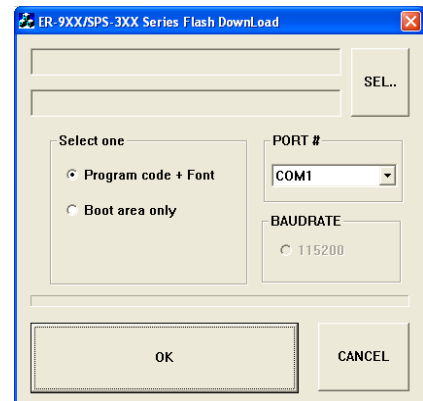
PC Update - Boot Area

Update instructions included with the .bin file will tell whether both Boot Area and Application Area updates are required. In most cases you may be instructed only to update the Application Area.

1. Connect the Serial Cable From ECR to PC.
2. At the register, turn the control lock to the **S** position.
3. Turn the power switch to the **OFF** position.
4. For **ER-230 and ER4xx**, press and hold the **CASH** and **CLERK** keys. (Use the keys in their default locations, the upper-right and lower-right keys on the keyboard.) While continuing to hold the **CASH** and **CLERK** keys, turn the power switch to the **ON** position. (The display will illuminate and the error tone will sound beep-beep-beep in quick succession.) Release the keys.

For **ER-52xx/M**, press and hold the **CASH** keys. (Use the keys in their default locations, the upper-right and lower-right keys on the keyboard.) While continuing to hold the **CASH** keys, turn the power switch to the **ON** position. Release the keys. Then press **CLEAR** key. (The display will illuminate and the error tone will sound beep-beep-beep in quick succession.)

5. At the PC, execute the program "DOWNLOAD.exe". The Download dialog box displays.
6. Select the appropriate com port connection at your PC at the PORT# option buttons.
7. Click **SEL.** find the folder where the update files are located and select correct bin file.
8. Select **Boot Area Only** in the Select One option buttons.
9. Press **OK** Button. The download takes about 30 seconds; the scroll bar will track the progress of the download. At the ECR, the display will flash slowly while the update is taking place.
10. At the PC, the message Completed displays. Click OK and the Download program will close.
11. At the ECR, the display will flash rapidly, indicating the update is complete. Turn the power switch to OFF.

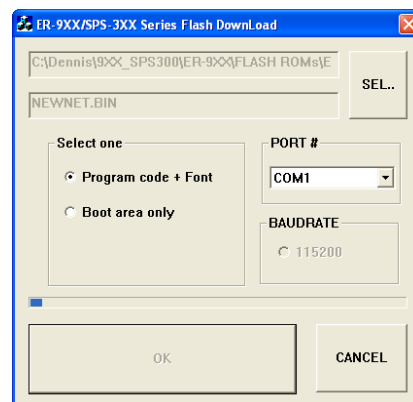


PC Update - Program Area

1. Connect the Serial Cable From ECR to PC.
2. At the register, turn the control lock to the **S** position.
3. Turn the power switch to the **OFF** position.
4. For **ER-230 and ER4xx**, press and hold the **CASH** and **CLERK** keys. (Use the keys in their default locations, the upper-right and lower-right keys on the keyboard.) While continuing to hold the **CASH** and **CLERK** keys, turn the power switch to the **ON** position. (The display will illuminate and the error tone will sound beep-beep-beep in quick succession.) Release the keys.

For **ER-52xx/M**, press and hold the **CASH** keys. (Use the keys in their default locations, the upper-right and lower-right keys on the keyboard.) While continuing to hold the **CASH** keys, turn the power switch to the **ON** position. Release the keys. Then press **CLEAR** key. (The display will illuminate and the error tone will sound beep-beep-beep in quick succession.)

5. At the PC, execute the program "DOWNLOAD.exe". The Download dialog box displays.
6. Select the appropriate com port connection at your PC at the PORT# option buttons.
7. Click **SEL.** find the folder where the update files are located and select correct bin file.
8. Select **Program code** in the Select One option buttons.
9. Press **OK** Button. The download takes about 3½ minutes; the scroll bar will track the progress of the download.
10. The message **Completed** displays. Click **OK** and the Download program will close.
11. The display will flash (Current program is being erased), after a few seconds, the display will continue to flash, but at a slower rate. This continues for about 3 minutes while the new program is being loaded. When the load is complete, a rapid beep-beep-beep will be heard, and the display will flash rapidly. Turn the power switch to **OFF**, the program update is complete.
12. Disconnect the PC cable.
13. Perform a memory all clear on the ECR. The ECR is now ready to program or to load a previously saved end-user program.



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 **PGM-Mode**. 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 Methods

Descriptors are programmable for PLUs, function keys, groups, clerks and the logo/messages. There are two methods available to program descriptors, the *Alpha Overlay* and the *Descriptor Code* Methods. *Alpha Overlay* Method is the default programming method.

To switch between two methods, for *ER-230*, *ER-4xx* and *ER-52xx*, please see *Option #25-1*; for *ER-3xx*, please see *Option #30-3*; of “System Option Programming” in “Program Mode Programming”.

This chapter describes both methods. All *Sam4S 230, 3xx, 4xx and 52xx Series* use *Alpha Overlay* Method by default except *ER-5215/M* uses *Descriptor Code* Method by default and is the only method. *ER-380 EPROM v1.6 and earlier and ER-380M EPROM v1.3 and earlier does not have Overlay method build-in as well*. You can select each method by System option programming.

Alpha Overlay Method

The *Alpha Overlay* layout for each model is shown below. During descriptor programming, the keyboard button function change to the layout.

ER-230 Alpha Keyboard Overlay

Without requirement of using the **symbols** and **European characters** in the descriptions, *Alpha Overlay* Method is an easy and fast method to program a descriptor.

	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		

ER380/380M Alpha Keyboard Overlay

(ER380 EPROM v1.7; ER380M EPROM v1.4)

Without requirement of using the **lower case**, **symbols** and **European characters** in the descriptions, *Alpha Overlay* Method is an easy and fast method to program a descriptor.

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

ER390M Alpha Keyboard Overlay

Without requirement of using the **European characters** in the descriptions, *Alpha Overlay* Method is an easy and fast method to program a descriptor.

										PAPER FEED				
!	@	#	\$	%	^	&	*	()					
Q	W	E	R	T	Y	U	I	O	P		7	8	9	
A	S	D	F	G	H	J	K	L	;		4	5	6	
Z	X	C	V	B	N	M	,	.	/		1	2	3	
+	-	<	>	?	=	CAPS	DOUBLE	SPACE	BACK SPACE		0	00	•	

ER420M Alpha Keyboard Overlay

Without requirement of using the **symbols** and **European characters** in the descriptions, *Alpha Overlay* Method is an easy and fast method to program a descriptor.

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

ER430M Alpha Keyboard Overlay

Without requirement of using the **European characters** in the descriptions, *Alpha Overlay* Method is an easy and fast method to program a descriptor.

										PAPER FEED	JOURNAL FEED			
!	@	#	\$	%	^	&	*	()					
Q	W	E	R	T	Y	U	I	O	P		7	8	9	
A	S	D	F	G	H	J	K	L	;		4	5	6	
Z	X	C	V	B	N	M	,	.	/		1	2	3	
+	-	<	>	?	=	CAPS	DOUBLE	SPACE	BACK SPACE		0	00	•	

ER-5200/ER-5200M Alpha Keyboard Overlay

Without requirement of using the **European characters** in the descriptions, *Alpha Overlay* Method is an easy and fast method to program a descriptor.

!	@	#	\$	%	^	&	*	()	-	+			
Q	W	E	R	T	Y	U	I	O	P	<	>			
A	S	D	F	G	H	J	K	L	;	'	?			
Z	X	C	V	B	N	M	,	.	/	:	=	7	8	9
CAPS	DOUBLE	SPACE	SPACE	SPACE	SPACE	SPACE	CAPS	DOUBLE	BACK SPACE	"		4	5	6
												1	2	3
												0	00	•

ER-5240/ER-5240M Alpha Keyboard Overlay

Without requirement of using the **European characters** in the descriptions, *Alpha Overlay Method* is an easy and fast method to program a descriptor.

					!	@	#	\$	%	^	&	*	()
					Q	W	E	R	T	Y	U	I	O	P
		7	8	9	A	S	D	F	G	H	J	K	L	;
		4	5	6	Z	X	C	V	B	N	M	,		
		1	2	3	-	+	<	>		?	:	=		
		0	00	•	CAPS	DOUBLE	SPACE	DOUBLE	BSPACE	"	.	/		

Descriptor Code Method

If you customize your keyboard by covering key locations, or by installing double or quad size keys, you will need to program descriptors using the *Descriptor Code Method*.

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 *Sam4S 230, 3xx, 4xx and 52xx Electronic Cash Registers* 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.

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 do need to program any of the 4 taxes in the system, a related tax (TAX 1 ~ 4) function key has to be assigned on the keyboard. Please refer to **S-Mode, Function Key Assignment Programming** for detail.
- 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.

Tax Descriptor Related Programming

Function Key Descriptor - Program 80 (PGM-Mode)

- Refer to "Program 80 - Function Key Descriptor"

Financial Report Message - Program 701 (PGM-Mode)

- Refer to "Program 701 - Financial Report Message"

Clerk Report Message - Program 710 (PGM-Mode)

- Refer to "Program 710 - Clerk Report Message"

Straight Percentage Tax Rate Programming

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

Programming Straight Percentage Tax Rates and Status

1. Turn the control lock to the **PGM-Mode**.
Switch to **P** Mode by press **MODE** function key. (For *ER-230*)
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:

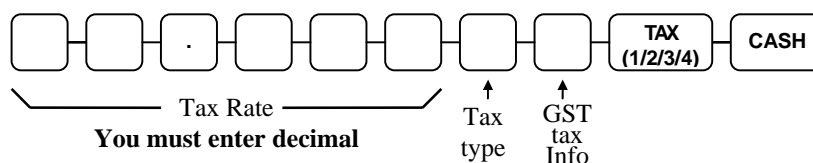
If the tax is a percentage added to the sale (normal add on tax), enter:	0
If the tax is a percentage value added tax (VAT; calculated as part of the sale), enter:	2

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		

1. Press the Tax Shift key for the tax you are programming.
2. 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:

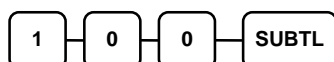
- **Program 100 - PLU Status Programming** determines whether the PLU is open, preset or inactive. Also selected here are tax, food stamp, scale, negative, single item, hash, gallonage, compulsory number entry, compulsory validation, compulsory condiment and print options.
- **Program 110 - PLU Auto Tare Programming** allows you to automatically subtract a pre-programmed tare weight when registering a scale PLU.
- **Program 150 - PLU Group Assignment** allows you to select up to three 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** allows you to designate items eligible for mix and match discounts.

Program 100 - PLU Status Programming

NOTE: PLUs default to Taxable by Rate 1 - Australian GST

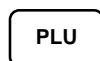
Programming PLU/PLUs Status

1. Turn the control lock to the **PGM-Mode**.
Switch to **P** Mode by press **MODE** function key. (For *ER-230*)
2. To begin the program, enter **1 0 0**, press the **SUBTL** key.



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

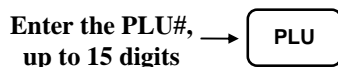
- Press a PLU on the keyboard, or



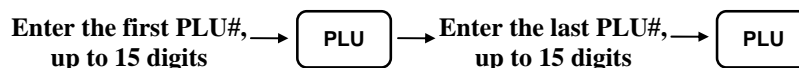
- Press the first PLU in a range of PLUs that are to receive the same setting then press the last PLU, or



- 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 PLU number in the range; press the **PLU** key, or

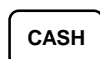


- **For a barcode item, scan the barcode.** (Only for **single** item.)

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**.)



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		
		High Amount Lock Out = No = 1		
	PLU allows override of preset price or HALO (High Amount Lock Out)?	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 N5-3)	Yes = 1 No = 0		
	PLU is a condiment ?	Yes = 2 No = 0		
	Compulsory condiment entry?	Yes = 4 No = 0		

Address	Program Option		Value	=	Sum
N7	Print PLU on receipt ?		Yes = 0 No = 1		
	<i>ER-4xx</i> <i>ER-52xx</i>	Print PLU on detail ?	Yes = 0 No = 2		
	<i>ER-230</i> <i>ER-3xx</i>	Not Used			
	<i>ER-3xx</i> <i>ER-4xx</i> <i>ER-52xx</i>	Print PLU on check ?	Yes = 0 No = 4		
	<i>ER-230</i>	Not Used			
N8	Print item's price on receipt?		Yes = 0 No = 1		
	<i>ER-3xx</i> <i>ER-4xx</i> <i>ER-52xx</i>	Print item's price on check?	Yes = 0 No = 2		
	<i>ER-230</i>	Not Used			
	PLU is disabled PROMO function?		Yes = 4 No = 0		
N9	PLU counter is not reset when a PLU Z report is done?		Yes = 1 No = 0		
	<i>ER-3xx</i> <i>ER-4xx</i> <i>ER-52xx</i>	PLU is preset override in MGR control?	Yes = 2 No = 0		
	<i>ER-230</i>	Not Used			

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

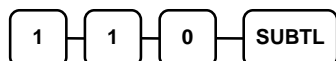
Program 110 - PLU Auto Tare Programming

NOTE: If this program has been performed, please also see **Program 1400 - Scale Tare Weight Programming** in **Program Mode Programming - Miscellaneous Programming** for more detail.

Programming PLU/PLUs Auto Tare

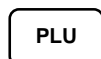
1. Turn the control lock to the **PGM-Mode**.
Switch to **P** Mode by press **MODE** function key. (For *ER-230*)

2. To begin the program, enter **1 1 0**, press the **SUBTL** key



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

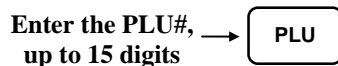
- Press a PLU on the keyboard, or



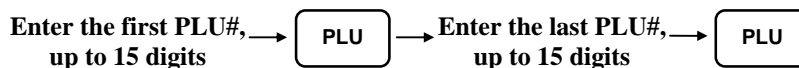
- Press the first PLU in a range of PLUs that are to receive the same setting then press the last PLU, or



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

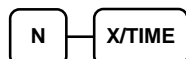


- Enter the number of the first PLU in a range of PLUs that are to receive the same setting; press the **PLU** key. Enter the last PLU number in the range; press the **PLU** key, or



- **For a barcode item, scan the barcode.** (Only for **single** item.)

4. Enter a value (between 1 and 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 PLU Auto Tare, repeat from step 3, or press the **CASH** key to finalise the program



Program 150 - PLU Group Assignment Programming

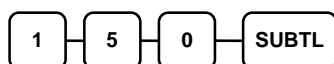
Each PLU may report to any three levels of 20 groups. Group totals appear on reports, so that you can track sales of different types of items. A group can also be used to designate items that are to print on an optional kitchen printer.

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

Programming PLU/PLUs Group Assignment

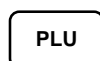
1. Turn the control lock to the **PGM-Mode**.
Switch to **P** Mode by press **MODE** function key. (For *ER-230*)

2. To begin the program, enter **1 5 0**, press the **SUBTL** key.



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

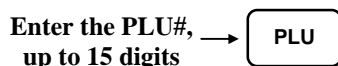
- Press a PLU on the keyboard, or



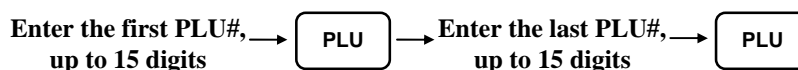
- Press the first PLU in a range of PLUs that are to receive the same setting then press the last PLU, or



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

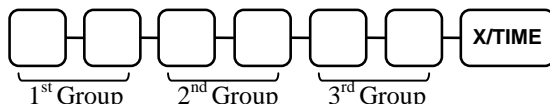


- Enter the number of the first PLU in a range of PLUs that are to receive the same setting; press the **PLU** key. Enter the last PLU number in the range; press the **PLU** key, or

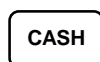


- **For a barcode item, scan the barcode.** (Only for **single** item.)

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 **0 3 0 0 0**. Then press the **X/TIME** key.



5. To program additional PLU Group Assignment, repeat from step 3, or press the **CASH** key to finalise the program.



Program 200 - PLU Price/HALO Programming

NOTE: If Price Level in **S-Mode, Memory Allocation** is set to **2**, the 2nd price level will allocated for **ALL PLUs** and therefore must be programmed as well. Price of level 2 may be \$0.00.
Before changing price, please find out what's the setting for Price Level in **S-Mode, Memory Allocation**.

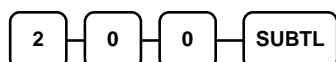
When Price Level is set to **2**, and only one of the levels price is changing, the unchanged price of another level must be entered as well, even the original price of another level is \$0.00.

If a PLU is set open, the number entered will be a HALO (**h**igh **a**mount **l**ock **o**ut). If a PLU is set preset, the amount entered will be a preset price. 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.)

Programming PLU/PLUs Price/HALO

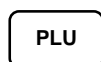
1. Turn the control lock to the **PGM-Mode**.
Switch to **P** Mode by press **MODE** function key. (For **ER-230**)

2. To begin the program, enter **2 0 0**, press the **SUBTL** key.



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

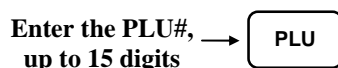
- Press a PLU on the keyboard, or



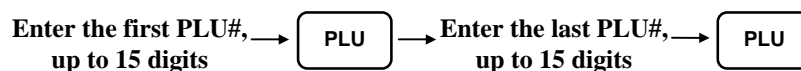
- Press the first PLU in a range of PLUs that are to receive the same setting then press the last PLU, or



- 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 PLU number in the range; press the **PLU** key, or



- For a barcode item, scan the barcode. (Only for **single** item.)

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.

							X/TIME
Price/HALO							

If the PLU **Price Level** is **2**, repeat this for level 2 price (or enter **0** for **\$0.00** price).

							X/TIME
Price/HALO							

5. To program additional PLU Price/HALO, repeat from step 3, or press the **CASH** key to finalise the program.

CASH

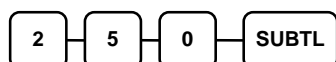
Program 250 - PLU Stock Amount Programming

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 “**Program Mode Programming – System Option Programming**” to set this option.

Programming PLU/PLUs Stock Amount

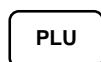
1. Turn the control lock to the **PGM-Mode**.
Switch to **P** Mode by press **MODE** function key. (For **ER-230**)

2. To begin the program, enter **2 5 0**, press the **SUBTL** key.



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

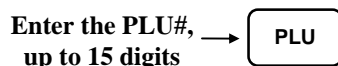
- Press a PLU on the keyboard, or



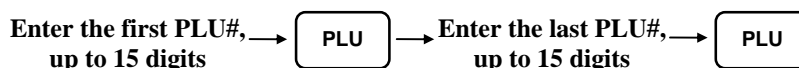
- Press the first PLU in a range of PLUs that are to receive the same setting then press the last PLU, or



- 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 PLU number in the range; press the **PLU** key, or



- **For a barcode item, scan the barcode.** (Only for **single** item.)

4. Enter the stock amount you wish to add (up to six digits. *Please do not use decimal point.* When **1 0 0** is entered, is equals to **1 item**), press the **X/TIME** key.



Stock Amount

5. To program additional PLU Stock Amount, repeat from step 3, or press the **CASH** key to finalise the program.



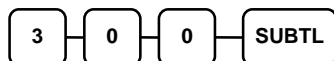
Program 300 - PLU Description Programming

Program descriptions by typing description on the alpha keyboard overlay or by entering three digit alpha character codes. **To describe by three digit alpha character codes you must select 'No' in system option #25(for *ER-3xx* Series)/#30(for *ER-230*, *ER-4xx* and *ER-52xx* Series) (See "System Option Programming). Also see Descriptor Programming Methods for Alpha Overlay and/or Descriptor Code Table.**

Programming PLU Descriptor

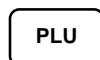
1. Turn the control lock to the **PGM-Mode**.
Switch to **P** Mode by press **MODE** function key. (For *ER-230*)

2. To begin the program, enter **3 0 0**, press the **SUBTL** key.

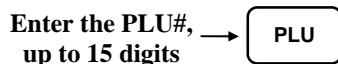


3. Select the PLU you wish to program in one of the following ways:

- Press a PLU on the keyboard, or

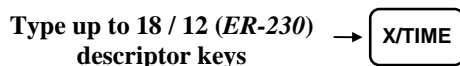


- Enter up to 15 digit number of the PLU and press the **PLU** key, or



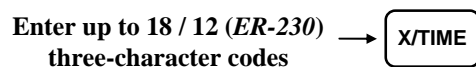
- **For a barcode item, scan the barcode.** (Only for **single** item.)

4. If you are programming using alpha overlay, type up to 18 descriptors on the overlay and press the **X/TIME** key,

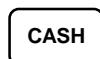


or,

If you are programming using descriptor codes, enter up to 18 three-digit character codes and press the **SUBTL** key.



5. To program additional PLU Descriptor, repeat from step 3, or press the **CASH** key to finalise the program.



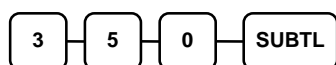
Program 350 - PLU Link Programming

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.

Programming PLU Link

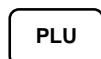
1. Turn the control lock to the **PGM-Mode**.
Switch to **P** Mode by press **MODE** function key. (For **ER-230**)

2. To begin the program, enter **3 5 0**, press the **SUBTL** key.

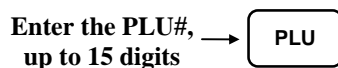


3. Select the PLU you wish to program in one of the following ways:

- Press a PLU on the keyboard, or

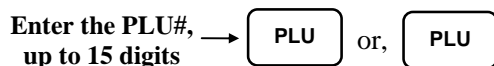


- Enter up to 15 digit number of the PLU and press the **PLU** key, or



- **For a barcode item, scan the barcode.** (Only for **single** item.)

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 PLU Link, repeat from step 3, or press the **CASH** key to finalise the program.

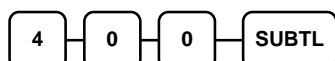


Program 400 - PLU Delete Programming

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

Programming PLU/PLUs Deletion

1. Turn the control lock to the **PGM-Mode**.
Switch to **P** Mode by press **MODE** function key. (For **ER-230**)
2. To begin the program, enter **4 0 0**, press the **SUBTL** key.



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

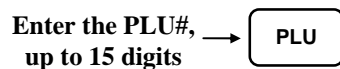
- Press a PLU on the keyboard, or



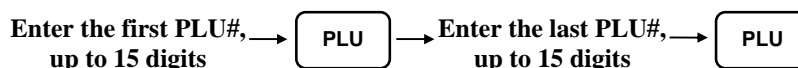
- Press the first PLU in a range of PLUs that are to receive the same setting then press the last PLU, or



- 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 PLU number in the range; press the **PLU** key, or

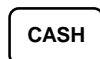


- **For a barcode item, scan the barcode.** (Only for **single** item.)

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



5. To program additional PLU deletion, repeat from step 3, or press the **CASH** key to finalise the program.



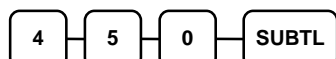
Program 450 - PLU MIX & MATCH Programming

If a PLU is eligible for a mix and match discount, enter the mix and match table for the PLU here.
See “**Mix n Match Discount Programming**” for more information.

Programming PLU Mix and Match

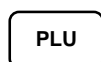
1. Turn the control lock to the **PGM-Mode**.
Switch to **P** Mode by press **MODE** function key. (For *ER-230*)

2. To begin the program, enter **4 5 0**, press the **SUBTL** key.



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

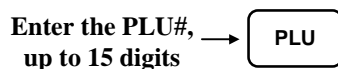
- Press a PLU on the keyboard, or



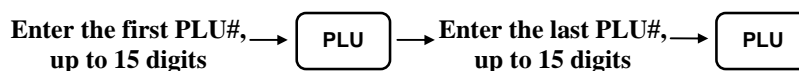
- Press the first PLU in a range of PLUs that are to receive the same setting then press the last PLU, or



- 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 PLU number in the range; press the **PLU** key, or

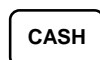


- **For a barcode item, scan the barcode.** (Only for **single** item.)

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



5. To program additional PLU Mix & Match, repeat from step 3, or press the **CASH** key to finalise the program.



System Option Programming

Refer to the “**System Option Table**” to review the system options. Read each option carefully to determine if you wish to make any changes. Default value has been highlighted in **bold** print.

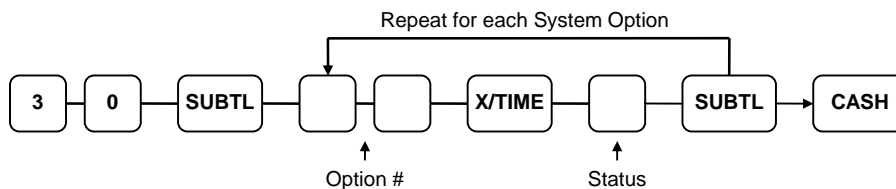
NOTE: Because after Memory All Clear all options settings are automatically set to default, you do not need to program this section unless you wish to change the default status.

Program 30 - System Option Programming

Programming a System Option:

1. Turn the control lock to the **PGM-Mode**.
Switch to **P** Mode by press **MODE** function key. (For *ER-230*)
2. Enter **3 0**, press the **SUBTL** key.
3. Enter a system option address, 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 **SUBTL** 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 (ER-3xx, ER-4xx, ER-52xx/M)

Address	SYSTEM OPTION		VALUE	=	SUM
1	Beeper is active?		Yes = 0 No = 1		
	ER-3xx	Percentage affect to net sale?	Yes = 0 No = 2		
	ER-4xx	Not Used	-		
	ER-52xx	Clerk opt is real clerk key	Yes = 2 No = 0		
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. #24)		Yes = 4 No = 0		
7	Cash Declaration Required before Z Financial report? (Also see Sys Opt #25-3)		Yes = 1 No = 0		
	Allow negative balance sales in the X control lock position only?		Yes = 2 No = 0		
8	Allow zero balance sales in the X control lock position only?		Yes = 1 No = 0		
	Reset Consecutive Number after Z financial report?		Yes = 2 No = 0		
9	Reset Grand Total after Z financial Report?		Yes = 1 No = 0		
	Cash drawer will open when reports are run?		Yes = 0 No = 2		
	Open drawer during training mode?		Yes = 0 No = 4		

Address	SYSTEM OPTION		VALUE	=	SUM
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		
14	Compulsory Eat-in, T-out and D-thru before tendering?		Yes = 1 No = 0		
	Hash is	Normal =	Yes = 0		
		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		
	Printer paper sensor is enabled?		Yes = 0 No = 2		
	Deactivate Split Pricing ?		Yes = 4 No = 0		
18	Allow Direct Multiply ?		Yes = 1 No = 0		
	Inventory (stock) counter programming	Added to current level =	Yes = 2		
		Replaces current level =	No = 0		
19	The number of numeric digits: (0 -14, 0 is no limit for maximum - 15 digits)		0		

Address	SYSTEM OPTION		VALUE	=	SUM
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	Displays add price of linked item?		Yes = 1 No = 0		
	Allow sale when stock reaches “0”?		Yes = 0 No = 2		
	Allow Australian Rounding on subtotal? (NB Turn New Zealand Rounding OFF first)		Yes = 4 No = 0		
22	Allow Australian Rounding on cash? (NB Turn New Zealand Rounding OFF first)		Yes = 1 No = 0		
	Allow Z stock report ?		Yes = 0 No = 2		
23	Training mode		Enter =	Yes = 1	
			Exit =	No = 0	
24	ER-4xx	Not used	-		
	ER-3xx	Enable Electronic Journal (EJ)	Yes = 1 No = 0		
		Prompt operator when EJ buffer is full	Yes = 0 No = 2		
		Stop operations when EJ buffer is full	Yes = 0 No = 4		
	ER-52xx	Activate auto cutter ?	Yes = 1 No = 0		
	ER-52xxM	Activate auto cutter ?	Yes = 1 No = 0		

Address	SYSTEM OPTION		VALUE	=	SUM
25	ER-3xx	Send only negative entries to Electronic Journal	Yes = 1 No = 0		
		Send reset report to Electronic Journal	Yes = 2 No = 0		
		Disable Cash Declaration? (Also see Sys Opt #7-1)	Yes = 4 No = 0		
	ER-4xx ER-52xx	Descriptor PGM Method	Keyboard overlay =	Yes = 0	
			Character code =	No = 1	
			ER-5215/M Character Code (Fixed)	No = 1	
		% function key affect to net sale?		Yes = 0 No = 2	
		Disable Cash Declaration? (Also see Sys Opt #7-1)		Yes = 4 No = 0	
26	(Either table or clerk interrupt)		Table Management =	No = 0	
			Clerk Interrupt =	Yes = 1	
	ER-3xx ER-52xx	VAT shift affect the whole receipt?	Yes = 2 No = 0		
		Not count in memory in void mode?	Yes = 4 No = 0		
27	Disable Price Level keys		Neither =	0	
			Level 1 =	1	
			Level 2 =	2	
28	Price Level is:		Pop-up after item =	0	
			Pop-up after sale =	1	
			Stay-down =	2	
29	Modifier is:		Pop-up after item =	0	
			Pop-up after sale =	1	
			Stay-down =	2	
30	ER-3xx	Use Journal Takeup spool? (Option)	Yes = 0 No = 1		
		Reset GST after service on Hard Check	Yes = 2 No = 0		
		Alpha Overlay for descriptor programming	Yes = 4 No = 0		
	ER-4xx ER-52xx	Embedded price barcode type (0/1/2/3/4/7) (Please see note below)	0		

Address	SYSTEM OPTION		VALUE	=	SUM
31	ER-3xx	Embedded price barcode type (0/1/2/3/4/7) (Please see Note below)	0		
	ER-4xx	Reset GST after service on Hard Check	Yes = 1 No = 0		
	ER-52xx	Enable Keyboard PLU Function	Yes = 1 No = 0		
		Reset GST after service on Hard Check	Yes = 2 No = 0		
		Use Standard Check Digit Calculation	Yes = 0 No = 4		
32	ER-3xx ER-4xx	New Zealand rounding on subtotal (NB Turn AU Rounding OFF first)	Yes = 1 No = 0		
		New Zealand rounding on Cash (NB Turn AU Rounding OFF first)	Yes = 2 No = 0		
		Allow Z Financial Report with Open Clerk Interrupt Sales	Yes = 4 No = 0		
	ER-52xx	Allow Z Financial Report with Open Clerk Interrupt Sales	Yes = 1 No = 0		
		New Zealand rounding on subtotal (NB Turn AU Rounding OFF first)	Yes = 2 No = 0		
		New Zealand rounding on Cash (NB Turn AU Rounding OFF first)	Yes = 4 No = 0		
33	Disable Line Find on Slip Printer		Yes = 1 No = 0		

System Option Table (ER-230)

Address	SYSTEM OPTION (ER-230)		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		

Address	SYSTEM OPTION (ER-230)		VALUE	=	SUM
13	Split price calculations will:	Round up at 0.005 =	0		
		Always round up =	1		
		Always round down =	2		
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 for maximum - 15 digits)		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		

Address	SYSTEM OPTION (ER-230)		VALUE	=	SUM
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		
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 = 0 No = 2		
	Disable Cash Declaration ?		Yes = 4 No = 0		
26	Disable level keys:	Neither =	0		
		Level 1 =	1		
		Level 2 =	2		
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		

Address	SYSTEM OPTION (ER-230)	VALUE	=	SUM
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		
	Active beep sound for saving battery? (EPROM v1.006)	Yes = 4 No = 0		
33	Use Mode password? (WARNING! Set password before turn ON this feature!) (EPROM v1.008)	Yes = 1 No = 0		

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

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**

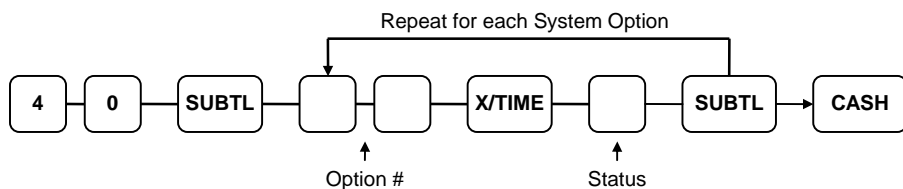
NOTE: Because after Memory All Clear all options settings are automatically set to default, you do not need to program this section unless you wish to change the default status.

Program 40 - Print Option Programming

Programming a Print Option:

1. Turn the control lock to the **PGM-Mode**.
Switch to **P** Mode by press **MODE** function key. (For **ER-230**)
2. Enter **4 0**, press the **SUBTL** key.
3. Enter a print option address, 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 **SUBTL** 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 (ER-3xx, ER-4xx, ER-52xx/M)

Address	PRINT OPTION	VALUE	=	SUM
1	Print media total on clerk report?	Yes = 1 No = 0		
	Print tax symbol?	Yes = 0 No = 2		
2	Void/Return totals will print on the Financial report?	Yes = 0 No = 1		
	Audaction total will print on the Financial report?	Yes = 2 No = 0		
3	Skip media totals with zero activity on the Financial report?	Yes = 0 No = 1		
	Skip media totals with zero activity on the Clerk report?	Yes = 0 No = 2		
	Print Clerk report at the end of the Financial report?	Yes = 4 No = 0		
4	Print PLU sale item number?	Yes = 1 No = 0		
	Print PLU with zero totals on report?	Yes = 2 No = 0		
	Subtotal is printed 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		
6	Print date on receipt?	Yes = 0 No = 1		
	Print time on receipt?	Yes = 0 No = 2		
	ER-3xx ER-52xx Print machine number on receipt?	Yes = 0 No = 4		
7	Print clerk name on receipt?	Yes = 0 No = 1		
	Print Z counter on reports?	Yes = 0 No = 2		
8	Home Currency symbol (see Note 1 below)	\$		

Address	PRINT OPTION		VALUE	=	SUM
9	Print receipt when sign on/off?		Yes = 0 No = 1		
	Print Grand total on the X Financial report?		Yes = 0 No = 2		
	Print Grand total on the Z Financial report?		Yes = 0 No = 4		
10	Print Gross total on the X Financial report?		Yes = 0 No = 1		
	Print Gross total on the Z Financial report?		Yes = 0 No = 2		
11	Print the subtotal without tax on the receipt?		Yes = 1 No = 0		
	Tax amount to print on receipt is:	Combined =	Yes = 2		
		Itemized =	No = 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 NOTE 2 below)	CONV. #1 =	.		
15		CONV. #2 =	.		
16		CONV. #3 =	.		
17		CONV. #4 =	.		
18	Print the Kitchen Printer / Requisition 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		
	Print round amount on the Kitchen Printer / Requisition?		Yes = 4 No = 0		

Address	PRINT OPTION		VALUE	=	SUM	
20	Combine like items on the Kitchen Printer / Requisition?		Yes = 0 No = 1			
	Consolidation of like items on check track?		Yes = 0 No = 2			
	Chooses volume unit When the PLU is gallonage.	Gallons =	0			
		Liters =	4			
21	ER-3xx	Print preamble message on receipt?	Yes = 0 No = 1			
		Print postamble message on receipt?	Yes = 0 No = 2			
22		Print preamble message on guest check?	Yes = 1 No = 0			
		Print postamble message on guest check?	Yes = 2 No = 0			
21	ER-4xx ER-52xx	Print preamble message on receipt?	Yes = 0 No = 1			
		Print postamble message on receipt?	Yes = 0 No = 2			
		Print preamble message on guest check?	Yes = 4 No = 0			
22		Print postamble message on guest check?	Yes = 1 No = 0			
		Print preamble/postamble message on journal receipt?	Yes = 0 No = 2			
23	Print average items per customer on Financial report?		Yes = 0 No = 1			
	Print average sales per customer on Financial report?		Yes = 0 No = 2			
24	Issue a second receipt for the same transaction? (Buffer receipt issue when receipt printer is on) (See System Option #6-3)		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			

Address	PRINT OPTION			VALUE	=	SUM
25	Not print when polling reports? (Note: this setting is equivalent to 'print when polling reports - Yes')			Yes = 1 No = 0		
	Print PLU# on PLU report?			Yes = 2 No = 0		
	Grand total is:		Net sale =	Yes = 4		
			Gross sale =	No = 0		
26	ER-3xx	Not Used				
	ER-4xx ER-52xx	Print Journal font is normal	Small =	No = 0		
			Normal =	Yes = 1		
		Print journal reverse?		Yes = 2 No = 0		
		Journal printer is off?		Yes = 4 No = 0		
27	Send order to the kitchen printer when the SBTL key is pressed?			Yes = 1 No = 0		
	Print date on service on hard check?			Yes = 2 No = 0		
28	Print preamble graphic logo on receipt?			Yes = 1 No = 0		
	Print postamble graphic logo on receipt?			Yes = 2 No = 0		
29	Print preamble graphic logo on the guest check?			Yes = 1 No = 0		
	Print postamble graphic logo on the guest check?			Yes = 2 No = 0		
30	Print pre-logo		Default =	Yes = 0		
			User =	No = 1		
	ER-4xx ER-52xx	Print Post-Logo	Default =	Yes = 0		
			User =	No = 2		
31	Number of Pre-feeding lines. (0 - 5) on receipt			0		
32	Number of Post-feeding lines. (0 - 5) on receipt			0		
33	ER-3xx	Print Format	Receipt =	No = 0		
			Journal =	Yes = 1		
	ER-4xx	Not Used				
	ER-52xx	Print CHECK# Line on the Guest Check		No = 0 Yes = 1		

Address	PRINT OPTION		VALUE	=	SUM
34	ER-3xx ER-4xx	Print CHECK# Line on the Guest Check	No = 0 Yes = 1		

Print Option Table (ER-230)

Address	PRINT OPTION (ER-230)	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)	\$		

Address	PRINT OPTION (ER-230)		VALUE	=	SUM
9	Print receipt when sign on/off ?		Yes = 0 No = 1		
	Print Grand total on the X Financial report ?		Yes = 0 No = 2		
	Print Grand total on the Z Financial report ?		Yes = 0 No = 4		
10	Print Gross total on the X Financial report ?		Yes = 0 No = 1		
	Print Gross total on the Z Financial report ?		Yes = 0 No = 2		
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		

Address	PRINT OPTION (ER-230)		VALUE	=	SUM
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		
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 #25(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 #25 (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 - Function Key Options Programming** is used to set each keys individual options
- **Program 80 - Function Key Descriptor Programming** is used to program a 18 character alpha numeric descriptor. In the case of the **#/No Sale** key, provision is made to program a separate descriptor for the **Non Add #** and **No Sale** functions.
- **Program 90 - Function Key HALO or Percentage Rate Programming** is used to set a high amount limit (HALO). In the case of **Percentage keys (% 1 ~ % 5)**, it is for discount/surcharge rate programming; or conversion rate is programmed in the case of **Currency Conversion (1 ~ 4)**.

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:

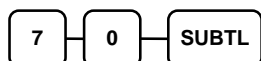
***“Program 701 - Financial Report Message Programming” and
“Program 710 - Clerk Report Message Programming” also.***

Program 70 - Function Key Options Programming

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.

Programming the Function Key Options/Status

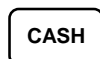
1. Turn the control lock to the **PGM-Mode**.
Switch to **P** Mode by press **MODE** function key. (For *ER-230*)
2. To begin the program, enter **7 0**, press the **SUBTL** key.



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 finalise the program.

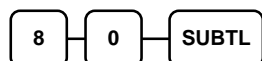


Program 80 - Function Key Descriptor Programming

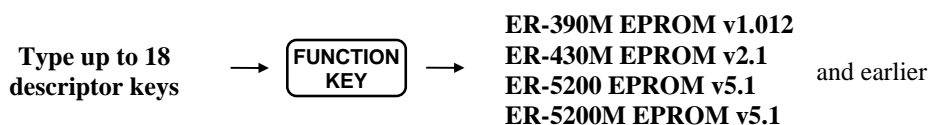
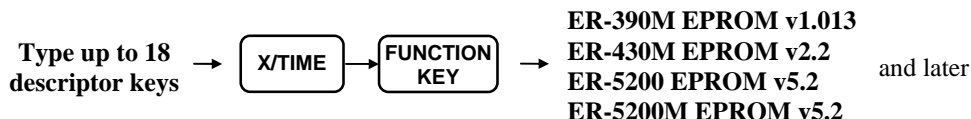
Program descriptions by typing description on the alpha keyboard overlay or by entering three digit alpha character codes. **To describe by three digit alpha character codes you must select 'No' in system option #25(for ER-3xx Series)/#30(for ER-230, ER-4xx and ER-52xx Series)** (See "System Option Programming). Also see **Descriptor Programming Methods for Alpha Overlay** and/or **Descriptor Code Table**.

Programming the Function Key Descriptor

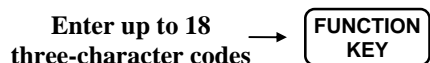
1. Turn the control lock to the **PGM-Mode**.
Switch to **P Mode** by press **MODE** function key. (For *ER-230*)
2. To begin the program, enter **8 0**, press the **SUBTL** key.



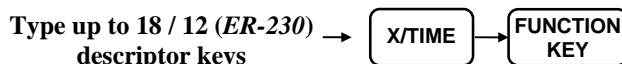
3. If you are programming *ER-390M*, *ER-430M* and *ER-5200/ER-5200M*



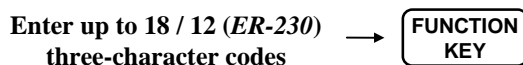
or,



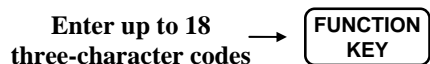
If you are programming *ER-230*, *ER-380* (EPROM v1.7 and later), *ER-380M* (EPROM v1.4 and later), *ER-420M* and *ER-5240/ER-5240M*,



or,



If you are programming *ER-380* (EPROM v1.6 and earlier), *ER-380M* (EPROM v1.3 and earlier) and *ER-5215/ER-5215M*,



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



NOTE: The **MACRO (1 - 10)** function keys descriptor is programmed with **Programmed 711**. Please refer to **Miscellaneous Programming - Macro Name Programming**.

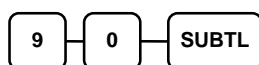
Program 90 - Function Key HALO or Percentage Rate Programming

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.

Programming the Function Key Descriptor

1. Turn the control lock to the **PGM-Mode**.
Switch to **P** Mode by press **MODE** function key. (For *ER-230*)

2. To begin the program, enter **9 0**, press the **SUBTL** key.



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



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

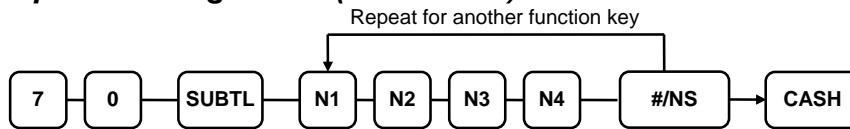


5. To program additional function keys, repeat from step 2, or press the **CASH** key to finalise the program.



#/NS (Non Add#/No Sale)

Options - Program 70 (PGM-Mode)



Address	OPTION	VALUE	=	SUM
N1	No Sale is inactive?	Yes = 1 No = 0		
	<i>ER-3xx</i> <i>ER-4xx</i> <i>ER-52xx</i> Key is active in X control lock position only?	Yes = 2 No = 0		
	<i>ER-230</i> Reserved			
	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
(See next page for Descriptor and HALO programmings)

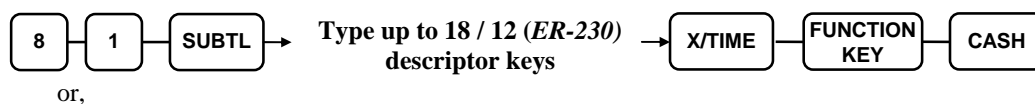
Descriptor - Programs 80 (PGM-Mode) for No Sale

- Refer to “Program 80 - Function Key Descriptor”

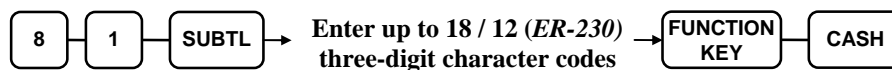
Descriptor - Programs 81 (PGM-Mode) for Non Add#

If you are programming using alpha overlay, type up to 18 descriptors on the overlay and press the **X/TIME** key and then press the function key you are programming.

NOTE: As you are entering descriptors only the last 16 descriptors will display.

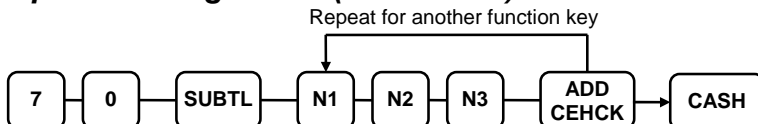


If you are programming using descriptor codes, enter up to 18 three-character codes and press the function key you are programming key.



ADDCHK (Add Check - Cafeteria Tray Total)

Options - Program 70 (PGM-Mode)



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 preamble/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

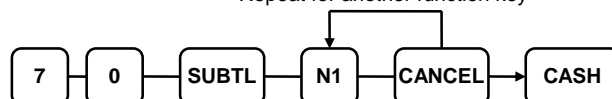
Descriptor - Program 80 (PGM-Mode)

- Refer to “**Program 80 - Function Key Descriptor**”

CANCEL (Cancel a Sale)

Options - Program 70 (PGM-Mode)

Repeat for another function key



Address	OPTION	VALUE	=	SUM
N1	Key is inactive?	Yes = 1 No = 0		
	<i>ER-3xx</i> <i>ER-4xx</i> <i>ER-52xx</i> Key is active in X control lock position only?	Yes = 2 No = 0		
	<i>ER-230</i> Reserved			
	Validation is compulsory?	Yes = 4 No = 0		

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

Descriptor - Program 80 (PGM-Mode)

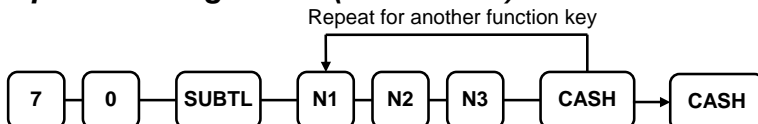
- Refer to “Program 80 - Function Key Descriptor”

HALO - Program 90 (PGM-Mode)

- Refer to “Program 90 - Function Key HALO”

CASH (Cash Tender)

Options - Program 70 (PGM-Mode)



Address	OPTION	VALUE	=	SUM
N1	Amount tender is compulsory?	Yes = 1 No = 0		
	ER-3xx ER-4xx ER-52xx Allow over tendering and under tendering in X control lock position only?	Yes = 2 No = 0		
	ER-230 Reserved			
	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 (PGM-Mode)

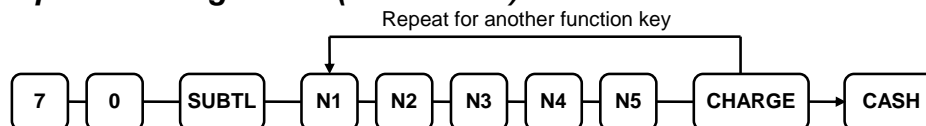
- Refer to “Program 80 - Function Key Descriptor”

HALO - Program 90 (PGM-Mode)

- Refer to “Program 90 - Function Key HALO”

CHARGE (1 ~ 8) (Miscellaneous Tender)

Options - Program 70 (PGM-Mode)



Address	OPTION	VALUE	=	SUM
N1	Amount tender is compulsory?	Yes = 1 No = 0		
	<i>ER-3xx</i> <i>ER-4xx</i> <i>ER-52xx</i> Allow over tendering and under tendering in X control lock position only?	Yes = 2 No = 0		
	<i>ER-230</i> Reserved			
	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; except <i>ER-380</i> (0-1))	0		

※Default values have been highlighted in **bold** print
(See next page for Descriptor and HALO programmings)

Descriptor - Program 80 (PGM-Mode)

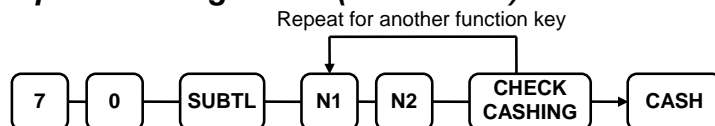
- Refer to “**Program 80 - Function Key Descriptor**”

HALO - Program 90 (PGM-Mode)

- Refer to “**Program 90 - Function Key HALO**”

CHKCASH (Check (Cheque) Cashing)

Options - Program 70 (PGM-Mode)



Address	OPTION	VALUE	=	SUM
N1	Key is inactive?	Yes = 1 No = 0		
	ER-3xx ER-4xx ER-52xx Key is active in X control lock position only?	Yes = 2 No = 0		
	ER-230 Reserved			
	Validation is compulsory?	Yes = 4 No = 0		

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

Descriptor - Program 80 (PGM-Mode)

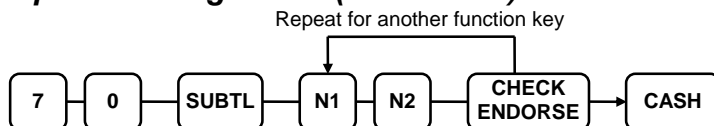
- Refer to “Program 80 - Function Key Descriptor”

HALO - Program 90 (PGM-Mode)

- Refer to “Program 90 - Function Key HALO”

CHKENDOR (*Check (Cheque) Endorsement*)

Options - Program 70 (PGM-Mode)



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		

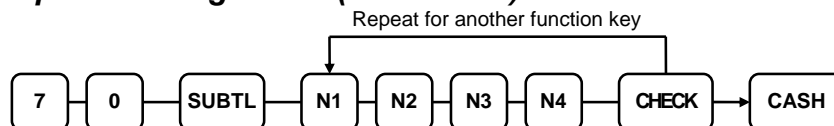
※Default values have been highlighted in **bold** print

Descriptor - Program 80 (PGM-Mode)

- Refer to “**Program 80 - Function Key Descriptor**”

CHECK (*Cheque* - Check (*Cheque*) Tender)

Options - Program 70 (PGM-Mode)



Address	OPTION	VALUE	=	SUM
N1	Amount tender is compulsory?	Yes = 1 No = 0		
	ER-3xx ER-4xx ER-52xx Allow over tendering and under tendering in X control lock position only?	Yes = 2 No = 0		
	ER-230 Reserved			
	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 (PGM-Mode)

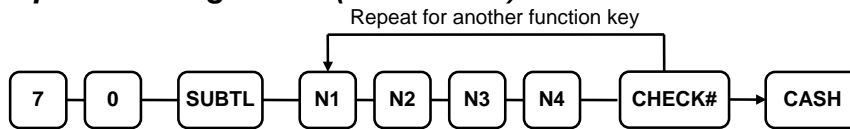
- Refer to “Program 80 - Function Key Descriptor”

HALO - Program 90 (PGM-Mode)

- Refer to “Program 90 - Function Key HALO”

CHECK # (for Soft/Hard Check - Bill or Account) (Exclude ER-230)

Options - Program 70 (PGM-Mode)



Address	OPTION	VALUE	=	SUM
N1	Key is inactive?	Yes = 1 No = 0		
	Required at Start of Sale?	Yes = 2 No = 0		
	Opening clerk has exclusive access?	Yes = 4 No = 0		
N2	Check track # and balance will print on receipt?	Yes = 0 No = 1		
	Check track # and balance will print on remote?	Yes = 0 No = 2		
	Allow only one check per table?	Yes = 4 No = 0		
N3	Check# is automatically assigned by register?	Yes = 1 No = 0		
	PBAL Key is used as Drive thru recall key?	Yes = 2 No = 0		
N4	Length of Check (0-9; 0 is no limit for maximum - 10 digits)	0		

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

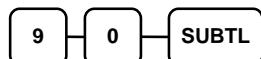
Descriptor - Program 80 (PGM-Mode)

- Refer to “**Program 80 - Function Key Descriptor**”

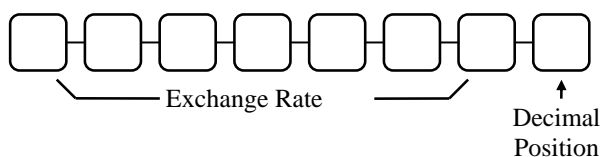
CONV (1 ~ 4) (Currency Conversion)

Currency Conversion Rate - Program 90 (PGM-Mode)

1. Turn the control lock to the **PGM-Mode**.
Switch to **P** Mode by press **MODE** function key. (For *ER-230*)
2. To begin the program, enter **9 0**, press the **SUBTL** 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.



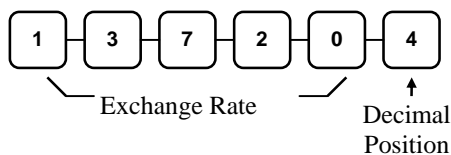
5. To program additional function keys, repeat from step 3, or press the **CASH** key to finalise the program.



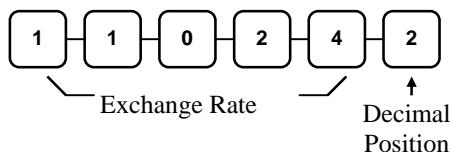
Currency Exchange Rate Programming Examples

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).

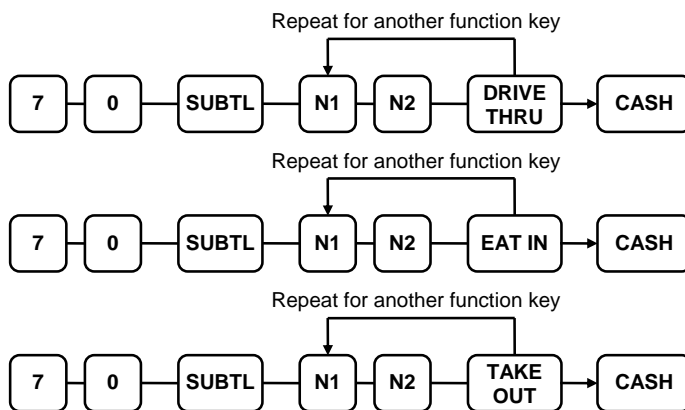


The US dollar (home currency) is worth 110.24 Japanese Yen (foreign currency).



DVTHR (Drive Through) / EATIN (Eat In) / TKOUT (Take Out) (Exclude ER-230)

Options - Program 70 (PGM-Mode)



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

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

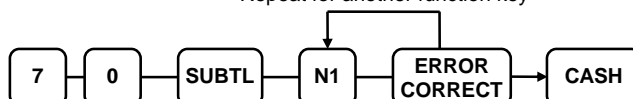
Descriptor - Program 80 (PGM-Mode)

- Refer to “Program 80 - Function Key Descriptor”

ERRCORR (Error Correct)

Options - Program 70 (PGM-Mode)

Repeat for another function key



Address	OPTION	VALUE	=	SUM
N1	Key is inactive?	Yes = 1 No = 0		
	ER-3xx ER-4xx ER-52xx	Key is active in X control lock position only?	Yes = 2 No = 0	
	ER-230	Reserved		
	Validation is compulsory?	Yes = 4 No = 0		

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

Descriptor - Program 80 (PGM-Mode)

- Refer to “Program 80 - Function Key Descriptor”

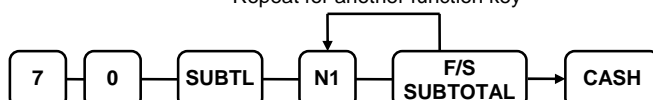
HALO - Program 90 (PGM-Mode)

- Refer to “Program 90 - Function Key HALO”

F/S SUB (Food Stamp Subtotal)

Options - Program 70 (PGM-Mode)

Repeat for another function key



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

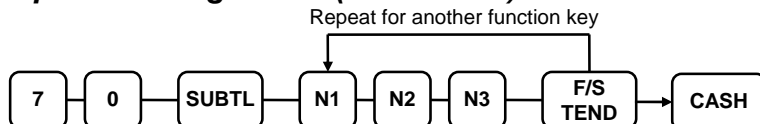
※Default values have been highlighted in **bold** print

Descriptor - Program 80 (PGM-Mode)

- Refer to “Program 80 - Function Key Descriptor”

F/S TEND (Food Stamp Tender)

Options - Program 70 (PGM-Mode)



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 (PGM-Mode)

- Refer to “Program 80 - Function Key Descriptor”

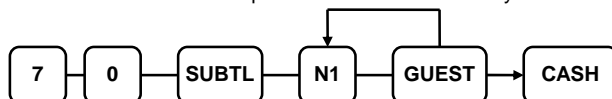
HALO - Program 90 (PGM-Mode)

- Refer to “Program 90 - Function Key HALO”

GUEST (Guest # - Bill or Account) (Exclude ER-230)

Options - Program 70 (PGM-Mode)

Repeat for another function key



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

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

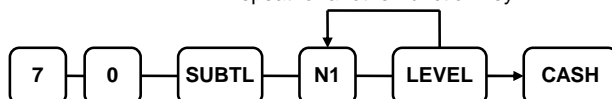
Descriptor - Program 80 (PGM-Mode)

- Refer to “Program 80 - Function Key Descriptor”

LEVEL1 - 2 (Price Levels)

Options - Program 70 (PGM-Mode)

Repeat for another function key



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 (PGM-Mode)

- Refer to “Program 80 - Function Key Descriptor”

MACRO (1 ~ 10) (Multiple Key Stroke Programmable Key)

Options - Program 70 (PGM-Mode)

Repeat for another function key



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

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

Descriptor - Program 711

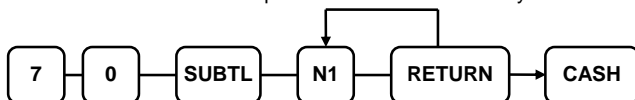
- Refer to “**Program 771 - Macro Name Programming**” in **Macro Name Programming**

* New feature added on **ER-380/M v3.3; ER-390/M v1.012; ER-420M v2.1; ER-430M v2.1** and **ER-52xx/M v5.1**

RETURN (Merchandise Return)

Options - Program 70 (PGM-Mode)

Repeat for another function key



Address	OPTION	VALUE	=	SUM
N1	Key is inactive?	Yes = 1 No = 0		
	ER-3xx ER-4xx ER-52xx Key is active in X control lock position only?	Yes = 2 No = 0		
	ER-230 Reserved			
	Validation is compulsory?	Yes = 4 No = 0		

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

Descriptor - Program 80 (PGM-Mode)

- Refer to “**Program 80 - Function Key Descriptor**”

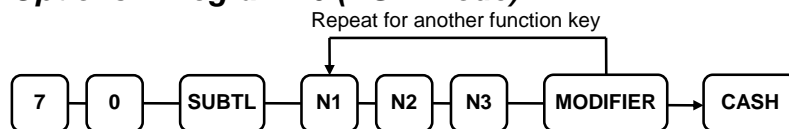
HALO - Program 90 (PGM-Mode)

- Refer to “**Program 90 - Function Key HALO**”

MOD (1 ~ 5) (Modifier)

NOTE: See example on the following page.

Options - Program 70 (PGM-Mode)



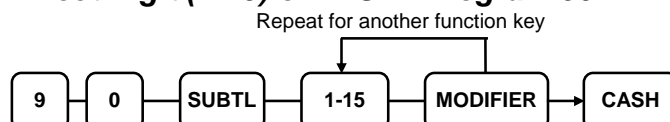
Address	OPTION		VALUE	=	SUM
N1	<i>ER-3xx</i> <i>ER-4xx</i> <i>ER-52xx</i>	Key is active in X control lock position only?	Yes = 1 No = 0		
	<i>ER-230</i>	Reserved			
	Modify PLU#?		Yes = 2 No = 0		
N2	Print modifier descriptor on the guest check?		Yes = 1 No = 0		
	Print modifier descriptor on the receipt?		Yes = 2 No = 0		
N3	Value of affected digit (0-9)		1		

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

Descriptor - Program 80 (PGM-Mode)

- Refer to “Program 80 - Function Key Descriptor”

Affect Digit (1-15) of PLU# - Program 90



Modifier Key Programming Example

Selling soft drinks in different sizes is an excellent modifier application. For example, a restaurant sells Coke, Sprite and Root Beer in 3-sizes: small, medium & large.

If the PLU number assignment is:

PLU #1= **Coke**

PLU #2= **Sprite**

PLU #3= **Root Beer**

You may choose to modify the 4th digit of the PLU number with the digit 1 for small, 2 for medium and 3 for large. (Always count right-to-left to determine the PLU digit#.)

When the 4th digit is modified to a value of 1, and the Small modifier key is pressed before the Root Beer key, the registration of PLU #1003 results.

PLU digit 8 7 6 5 **4** 3 2 1

↓

0 0 0 0 **1** ← 0 0 3 New PLU #

To complete the application, set modifier programming options as shown:

Modifier Name	Affected Digit (Program 90)	Value of Affected Digit (Program 70, option N3)
Small	4	1
Medium	4	2
Large	4	3

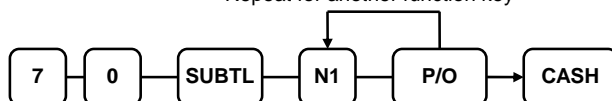
The following PLUs will be programmed:

PLU Number	Item
1001	Small Coke
1002	Small Sprite
1003	Small Root Beer
2001	Medium Coke
2002	Medium Sprite
2003	Medium Root Beer
3001	Large Coke
3002	Large Sprite
3003	Large Root Beer

PO (1 ~ 3) (Paid Out)

Options - Program 70 (PGM-Mode)

Repeat for another function key



Address	OPTION	VALUE	=	SUM
N1	Key is inactive?	Yes = 1 No = 0		
	ER-3xx ER-4xx ER-52xx Key is active in X control lock position only?	Yes = 2 No = 0		
	ER-230 Reserved			
	Validation is compulsory?	Yes = 4 No = 0		

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

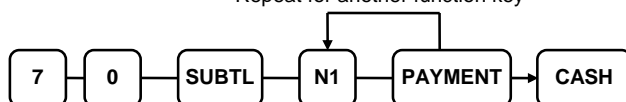
Descriptor - Program 80 (PGM-Mode)

- Refer to “Program 80 - Function Key Descriptor”

PAYMENT (Close Account - Bill or Account) (Exclude ER-230)

Options - Program 70 (PGM-Mode)

Repeat for another function key



Address	OPTION	VALUE	=	SUM
N1	Required to close check?	Yes = 1 No = 0		

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

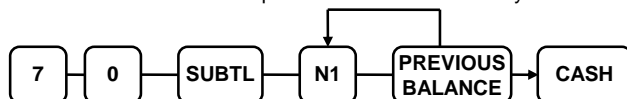
Descriptor - Program 80 (PGM-Mode)

- Refer to “Program 80 - Function Key Descriptor”

PBAL (*Previous Balance - Bill or Account*) (*Exclude ER-230*)

Options - Program 70 (PGM-Mode)

Repeat for another function key



Address	OPTION	VALUE	=	SUM
N1	Previous balance may be entered at any time?	Yes = 1 No = 0		
	Previous balance required at the start of the sale?	Yes = 2 No = 0		
	<i>ER-230</i> <i>ER-3xx</i>	Not Used		
	<i>ER-4xx</i> <i>ER-52xx</i>	Print on Guest Check (Soft) and Hard Check? (added on ER-420M v2.5; ER-430M v2.7; ER-52xx/M EPROM v5.8)	Yes = 4 No = 0	

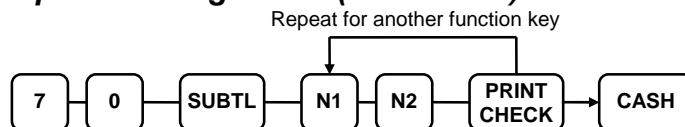
※Default values have been highlighted in **bold** print

Descriptor - Program 80 (PGM-Mode)

- Refer to “Program 80 - Function Key Descriptor”

PRINT CHK (*Print Check*, for Soft Check - Bill or Account) (Exclude ER-230)

Options - Program 70 (PGM-Mode)



Address	OPTION	VALUE	=	SUM
N1	Enter Port Number. (Zero if the check will print on the receipt printer) (0-2; except ER-380 : (0-1))	0		
N2	Automatically Service Check?	Yes = 1 No = 0		
	Print Check on Receipt	Yes = 2 No = 0		
	Skip printing consecutive # on the guest check?	Yes = 4 No = 0		

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

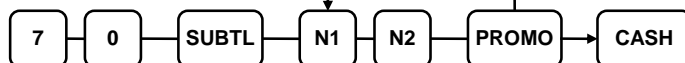
Descriptor - Program 80 (PGM-Mode)

- Refer to “**Program 80 - Function Key Descriptor**”

PROMO (*Promotion*)

Options - Program 70 (PGM-Mode)

Repeat for another function key



Address	OPTION	VALUE	=	SUM
N1	Key is inactive?	Yes = 1 No = 0		
	ER-3xx ER-4xx ER-52xx	Key is active in X control lock position only?	Yes = 2 No = 0	
	ER-230	Reserved		
	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

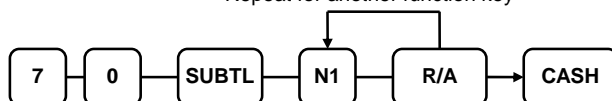
Descriptor - Program 80 (PGM-Mode)

- Refer to “**Program 80 - Function Key Descriptor**”

RA (1 ~ 3) (Received on Account)

Options - Program 70 (PGM-Mode)

Repeat for another function key



Address	OPTION	VALUE	=	SUM
N1	Key is inactive?	Yes = 1 No = 0		
	ER-3xx ER-4xx ER-52xx Key is active in X control lock position only?	Yes = 2 No = 0		
	ER-230 Reserved			
	Validation is compulsory?	Yes = 4 No = 0		

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

Descriptor - Program 80 (PGM-Mode)

- Refer to “Program 80 - Function Key Descriptor”

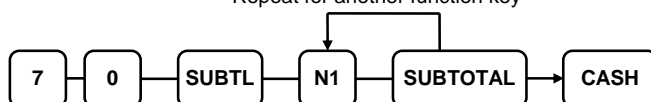
HALO - Program 90 (PGM-Mode)

- Refer to “Program 90 - Function Key HALO”

SUBTOTAL

Options - Program 70 (PGM-Mode)

Repeat for another function key



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

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

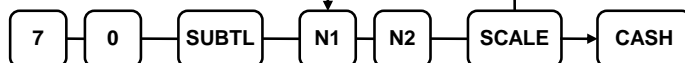
Descriptor - Program 80 (PGM-Mode)

- Refer to “Program 80 - Function Key Descriptor”

SCALE

Options - Program 70 (PGM-Mode)

Repeat for another function key



Address	OPTION		VALUE	=	SUM
N1	Key is inactive?		Yes = 1 No = 0		
	ER-3xx ER-4xx ER-52xx	Key is active in X control lock position only?	Yes = 2 No = 0		
	ER-230	Reserved			
	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		

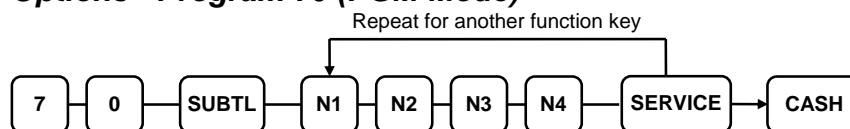
※Default values have been highlighted in **bold** print

Descriptor - Program 80 (PGM-Mode)

- Refer to “Program 80 - Function Key Descriptor”

SERVICE (New Balance, for Soft/Hard Check - Bill or Account) (Exclude ER-230)

Options - Program 70 (PGM-Mode)



Address	OPTION	VALUE	=	SUM
N1	Compulsory non-add number before this key is used?	Yes = 1 No = 0		
	Print on receipt?	Yes = 0 No = 2		
	Allow negative balance in X control lock position only?	Yes = 4 No = 0		
N2	Calculate tax 1?	Yes = 0 No = 1		
	Calculate tax 2?	Yes = 0 No = 2		
	Calculate tax 3?	Yes = 0 No = 4		
N3	Calculate tax 4?	Yes = 0 No = 1		
	Validation is compulsory?	Yes = 2 No = 0		
N4	Enter the port number if you are using a hard check system. (0-2; except ER-380 : (0-1))	0		

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

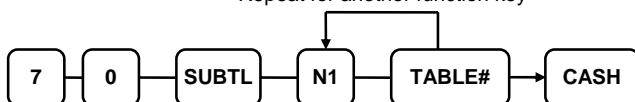
Descriptor - Program 80 (PGM-Mode)

- Refer to “Program 80 - Function Key Descriptor”

TABLE (Table #, for Soft/Hard Check - Bill or Account) (Exclude ER-230)

Options - Program 70 (PGM-Mode)

Repeat for another function key



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

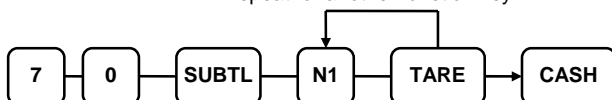
Descriptor - Program 80 (PGM-Mode)

- Refer to “Program 80 - Function Key Descriptor”

TARE

Options - Program 70 (PGM-Mode)

Repeat for another function key



Address	OPTION	VALUE	=	SUM
	Key is inactive?	Yes = 1 No = 0		
	<i>ER-3xx</i> <i>ER-4xx</i> <i>ER-52xx</i> Key is active in X control lock position only?	Yes = 2 No = 0		
	<i>ER-230</i> Reserved			
	Using tare number five to manually enter a tare weight?	Yes = 4 No = 0		

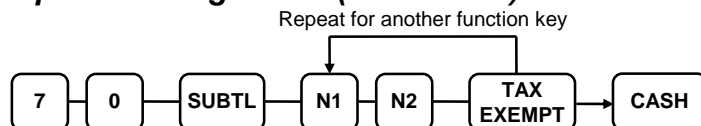
※Default values have been highlighted in **bold** print

Descriptor - Program 80 (PGM-Mode)

- Refer to “Program 80 - Function Key Descriptor”

TAX EXEMPT (*Tax Exempt*)

Options - Program 70 (PGM-Mode)



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		

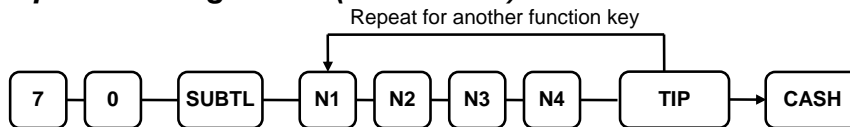
※Default values have been highlighted in **bold** print

Descriptor - Program 80 (PGM-Mode)

- Refer to “Program 80 - Function Key Descriptor”

TIP (for Soft/Hard Check - Bill or Account) (Exclude ER-230)

Options - Program 70 (PGM-Mode)



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

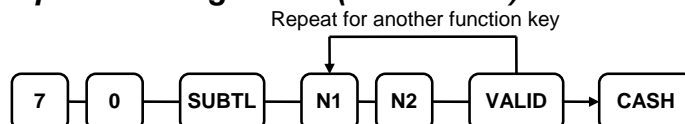
※Default values have been highlighted in **bold** print

Descriptor - Program 80 (PGM-Mode)

- Refer to “**Program 80 - Function Key Descriptor**”

VALIDATION

Options - Program 70 (PGM-Mode)



Address	OPTION	VALUE	=	SUM
N1	Enter Port Number. Enter 0 (zero) if validation is not used. (0-2; except ER-380 : (0-1))	0		
N2	Key is inactive?	Yes = 1 No = 0		
	Allow multiple validations?	Yes = 2 No = 0		

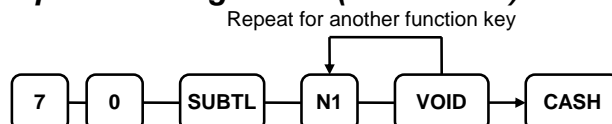
※Default values have been highlighted in **bold** print

Descriptor - Program 80 (PGM-Mode)

- Refer to “Program 80 - Function Key Descriptor”

VOID (Void Previous Item)

Options - Program 70 (PGM-Mode)



Address	OPTION	VALUE	=	SUM
N1	Key is inactive?	Yes = 1 No = 0		
	ER-3xx ER-4xx ER-52xx Key is active in X control lock position only?	Yes = 2 No = 0		
	ER-230 Reserved			
	Validation is compulsory?	Yes = 4 No = 0		

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

Descriptor - Program 80 (PGM-Mode)

- Refer to “Program 80 - Function Key Descriptor”

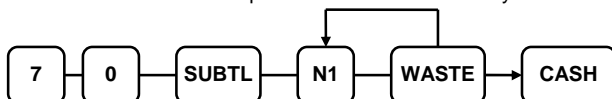
HALO - Program 90 (PGM-Mode)

- Refer to “Program 90 - Function Key HALO”

WASTE

Options - Program 70 (PGM-Mode)

Repeat for another function key



Address	OPTION	VALUE	=	SUM
N1	Key is inactive?	Yes = 1 No = 0		
	ER-3xx ER-4xx ER-52xx	Key is active in X control lock position only?	Yes = 2 No = 0	
	ER-230	Reserved		
	Validation is compulsory?	Yes = 4 No = 0		

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

Descriptor - Program 80 (PGM-Mode)

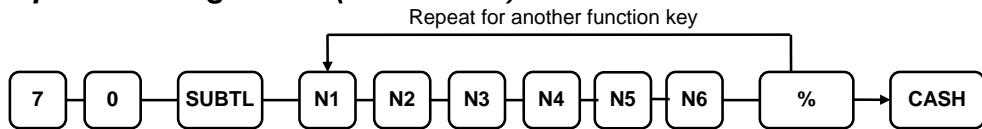
- Refer to “Program 80 - Function Key Descriptor”

HALO - Program 90 (PGM-Mode)

- Refer to “Program 90 - Function Key HALO”

% (1 ~ 5) (Discounts or Surcharges)

Options - Program 70 (PGM-Mode)



Address	OPTION		VALUE	=	SUM
N1	Apply an:		Amount =	1	
			Percentage =	0	
	Key is inactive?		Yes = 2 No = 0		
	ER-3xx ER-4xx ER-52xx	Key is active in X control lock position only?	Yes = 4 No = 0		
	ER-230	Reserved			
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		

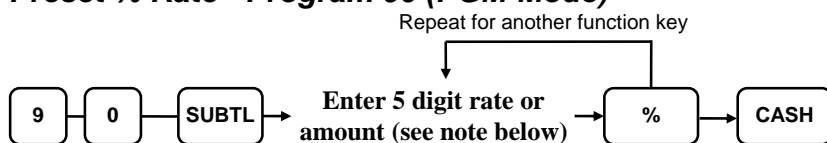
Address	OPTION	VALUE	=	SUM
N6	Allow % key preset override active in X control lock position only?	Yes = 1 No = 0		
	Validation is compulsory?	Yes = 2 No = 0		

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

Descriptor - Program 80 (PGM-Mode)

- Refer to “Program 80 - Function Key Descriptor”

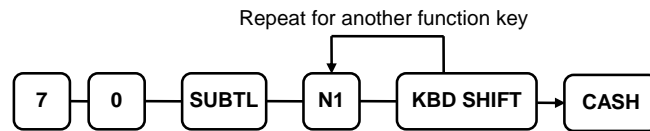
Preset % Rate - Program 90 (PGM-Mode)



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.**

KBD SHIFT (*ER-420M only*)

Options - Program 70 (PGM-Mode)



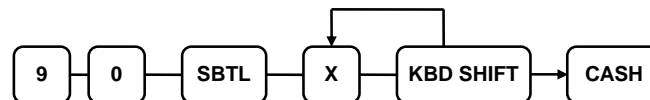
Address	OPTION	VALUE	=	SUM
N1	KBD Shift is:	Pop up	0	
		Stay down	1	
	Key is active in X control lock position only?	Yes = 2 No = 0		

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

Descriptor - Program 80 (PGM-Mode)

- Refer to “**Program 80 - Function Key Descriptor**”

HALO - Program 90 (PGM-Mode)



This will enable the shift to move the PLU on the NLU by this number. I.e. If NLU has PLU#1 and you program X = 12 above, the KBD Shift will put PLU #13 on keyboard level 2, and PLU #25 on Shift 3. **The maximum number for X is 18.**

Mix & Match Programming

Retailers often offer discounts when multiples of different items are purchased. For example, the offer: “save \$5 on any three bottles of wine” can be handled by a mix and match discount. The *Sam4S ER-230, ER-3xx, ER-4xx and ER-52xx Electronic Cash Registers* can accommodate up to 99 different mix and match discounts. See **Service Mode Programming, Program 60 - Memory Allocation** for detail.

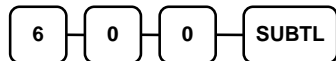
Mix & Match Tables have the following programming options. These options are set through separate programs:

- **Program 600 - Trip Level Programming** sets the number of items that must be purchased to receive the discount.
- **Program 601 - Price Programming** sets the amount of the discount.
- **Program 610 - Mix & Match Description Programming** allows you to set a unique, up to 18 characters descriptor for Mix & Match discount.

Program 600 - Trip Level Programming

Programming the Number of Item Purchased

1. Turn the control lock to the **PGM-Mode**.
Switch to **P** Mode by press **MODE** function key. (For *ER-230*)
2. To begin the program, enter **6 0 0**, press the **SUBTL** key.



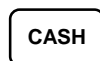
3. Enter the number of the M&M table you wish to program; press the **X/TIME** key.



4. Enter a level of up to 3 digits (The Maximum Level you can enter is **200**) press the **SUBTL** key.



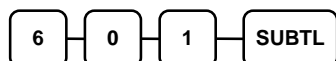
5. To program additional Mix & Match Discount **Trip Level**, repeat from step 3, or press the **CASH** key to finalise the program.



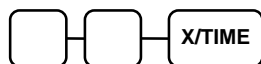
Program 601 - Price Programming

Programming the Discount Dollar Amount

1. Turn the control lock to the **PGM-Mode**.
Switch to **P** Mode by press **MODE** function key. (For *ER-230*)
2. To begin the program, enter **6 0 1**, press the **SUBTL** key.



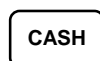
3. Enter the number of the M&M table you wish to program; press the **X/TIME** key.



4. Enter a Discount Dollar Amount (up to 4 digits, *Do Not Use Decimal Point*); press the **SUBTL** key.




5. To program additional Mix & Match Discount **Price**, repeat from step 3, or press the **CASH** key to finalise 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 describe by three digit alpha character codes you must select 'No' in system option #25(for ER-3xx Series)/#30(for ER-230, ER-4xx and ER-52xx Series) (See "System Option Programming). Also see Descriptor Programming Methods for Alpha Overlay and/or Descriptor Code Table.**

Programming the Mix & Match Descriptor

1. Turn the control lock to the **PGM-Mode**.
Switch to **P Mode** by press **MODE** function key. (For *ER-230*)
2. To begin the program, enter **6 1 0**, press the **SUBTL** key.


```
graph LR; 6[6] --> 1[1]; 1 --> 0[0]; 0 --> SUBTL[SUBTL]
```
3. Enter the number of the M&M table you wish to program; press the **X/TIME** key.


```
graph LR; B1[ ] --> B2[ ]; B2 --> XTIME[X/TIME]
```
4. If you are programming using alpha overlay, type up to 18 descriptors on the overlay and press the **SUBTL** key,
Type up to 18 / 12 (ER-230) descriptor keys → 
or,
If you are programming using descriptor codes, enter up to 18 three-digit character codes and press the **SUBTL** key.
Enter up to 18 / 12 (ER-230) three-character codes → 
5. To program additional Mix & Match Discount **Descriptor**, repeat from step 3, or press the **CASH** key to finalise the program.



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*** determines which cash drawer will be opened for each.
- ***Program 810 - Clerk Description Programming*** allows you to set a unique, up to 18 character (for **ER-230**, 12 characters), descriptor for each clerk

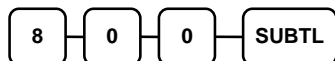
NOTE: Before attempting any programming, all clerks must first be signed off in REG mode.

Program 800 - Secret Code Programming

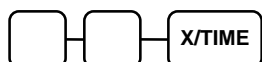
Programming the Clerk Secret Code

1. Turn the control lock to the **PGM-Mode**.
Switch to **P** Mode by press **MODE** function key. (For *ER-230*)

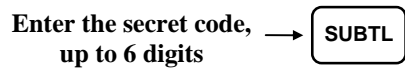
2. To begin the program, enter **8 0 0**, press the **SUBTL** key.



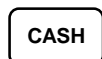
3. Enter the number of the clerk you wish to program; press the **X/TIME** key.



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



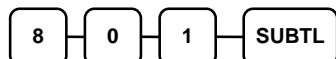
5. To program additional Clerk **Secret Code**, repeat from step 3, or press the **CASH** key to finalise the program.



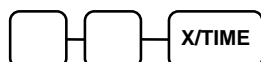
Program 801 - Drawer Assignment & Training Clerk Programming

Programming the Drawer Assignment & Training Clerk

1. Turn the control lock to the **PGM-Mode**.
Switch to **P** Mode by press **MODE** function key. (For **ER-230**)
2. To begin the program, enter **8 0 1**, press the **SUBTL** 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 **SUBTL** key.



Address	OPTION	VALUE	=	SUM
N1	ER-230 ER-3xx ER-4xx	Drawer assignment (0: default drawer, 1: no drawer)	0*	
	ER-52xx	Drawer assignment (0: default drawer, 1:second drawer, 2: no drawer)		
N2	Train Clerk	Yes = 1 No = 0		

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

5. To program additional Clerk **Drawer Assignment & Training Clerk**, repeat from step 3, or press the **CASH** key to finalise the program.



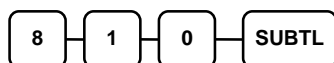
NOTE: When set to '**0**' for default drawer, will show '**1**' on the Program Scan - Clerk Scan,
'**1**' will show '**2**', '**2**' will show '**0**'.

Program 810 - Clerk Description Programming

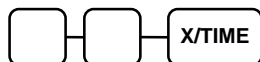
Program descriptions by typing description on the alpha keyboard overlay or by entering three digit alpha character codes. **To describe by three digit alpha character codes you must select 'No' in system option #25(for ER-3xx Series)/#30(for ER-230, ER-4xx and ER-52xx Series) (See "System Option Programming). Also see Descriptor Programming Methods for Alpha Overlay and/or Descriptor Code Table.**

Programming the Clerk Descriptor

1. Turn the control lock to the **PGM-Mode**.
Switch to **P** Mode by press **MODE** function key. (For **ER-230**)
2. To begin the program, enter **8 1 0**, press the **SUBTL** 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 18 descriptors on the overlay and press the **SUBTL** key,

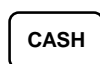
Type up to 18 / 12 (**ER-230**) descriptor keys → SUBTL

or,

If you are programming using descriptor codes, enter up to 18 three-digit character codes and press the **SUBTL** key.

Enter up to 18 / 12 (**ER-230**) three-character codes → SUBTL

5. To program additional Clerk **Descriptor**, repeat from step 3, or press the **CASH** key to finalise the program.



Group Programming

Up to 99 Group totals are available to accumulate totals of individual PLUs that are assigned to each group. Numbers of group can be modified in **Service Mode Programming, Program 60 - Memory Allocation**. Each PLU can be assigned to one, two or three different groups. (See **Program Mode Programming, Program 150 - PLU Group Assignment**. However, **only** the Group assigned as the **first group** will have an effect on the **Kitchen Printing** programming as assigned.

- **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

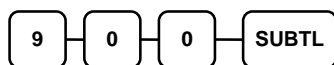
Group Programming includes two different parts - Group Status and Kitchen Printing Routing.

“Group Total is Added to the Total of All Groups on the Group Report?” is default to YES. However, when a PLU is assigned to **more than one group**, this option has to be reviewed carefully to avoid duplication in the Group Report figure.

Programming the Group Status and KP

1. Turn the control lock to the **PGM-Mode**.
Switch to **P** Mode by press **MODE** function key. (For *ER-230*)

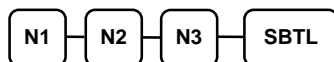
2. To begin the program, enter **9 0 0**, press the **SUBTL** key.



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



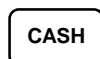
4. Enter an option digit from the table below, press the **SUBTL** key.



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 (<i>not available on ER-380</i>)	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 finalise the program.

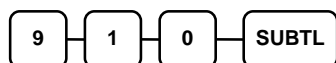


Program 910 - Group Descriptors Programming

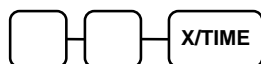
Program descriptions by typing description on the alpha keyboard overlay or by entering three digit alpha character codes. **To descript by three digit alpha character codes you must select ‘No’ in system option #25(for *ER-3xx* Series)/#30(for *ER-230*, *ER-4xx* and *ER-52xx* Series) (See “System Option Programming). Also see Descriptor Programming Methods for Alpha Overlay and/or Descriptor Code Table.**

Programming the Group Descriptor

1. Turn the control lock to the **PGM-Mode**.
Switch to **P** Mode by press **MODE** function key. (For *ER-230*)
2. To begin the program, enter **9 1 0**, press the **SUBTL** 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 18 descriptors on the overlay and press the **SUBTL** key,

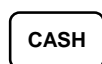
Type up to 18 / 12 (*ER-230*) descriptor keys → SUBTL

or,

If you are programming using descriptor codes, enter up to 18 three-digit character codes and press the **SUBTL** key.

Enter up to 18 / 12 (*ER-230*) three-character codes → SUBTL

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



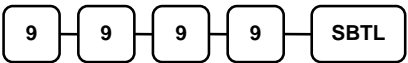
Miscellaneous Programming

Program 9999 - Mode Key Password Programming (For *ER-230 EPROM v1.008 and later only*)

A password can be programmed for the mode switch key. This provides security to avoid unauthorised operator to access other mode. To activate this feature, please set option #33 “Mode Password Function” to YES in System Option. Please see “**System Option Programming**” in “**Program Mode Programming**” for detail.

WARNING: Please Program a password before activate this feature.

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



3. Enter a password (up to **4** digits); press the **X/TIME** key.

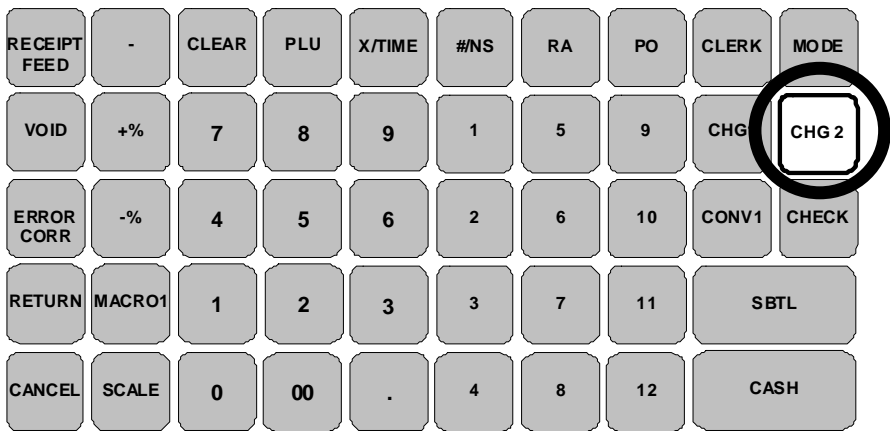


4. Press **CASH** key to finalise the program.



Use Password to Change Mode

1. Switch to the mode you wish to enter by press **MODE** function key.
2. Press the **CHG2** key (the key located under **MODE** key as **circled** in the example), enter password, then press **CHG2** key again.



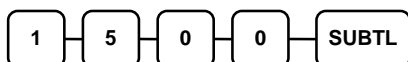
Program 1500 - Macro Key Sequence Programming

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.)

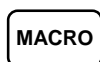
Note: On **ER-230**, the Macro Keys do not work in **Z-Mode**.

To Program a Macro

1. Turn the control lock to the **PGM-Mode**.
Switch to **P** Mode by press **MODE** function key. (For **ER-230**)
2. To begin the program, enter **1 5 0 0**, press the **SUBTL** key.



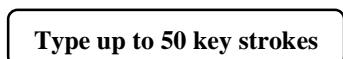
3. Press the **Macro** key that you wish to program.



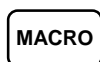
4. (Except **ER-230**) First, you must change the Mode Key. **Default** Mode is **PGM** Mode. You must set the key lock to the position where you wish the macro to set the register (**REG**, **X** or **Z**.) For example, if you wish the macro to set the key lock to **X** to run a report, turn the key lock to **X**. When used in the **REG** position, the macro will set the register to **X** and run the report **without** turning the Mode Key.

NOTE: A **Manager Require** option for a Macro key is on its own status. Please see **Program Mode Programming → Function key Programming → MACRO 1 ~ 10** for detail.

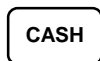
5. Type up to 50 key strokes



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



7. To program additional MACRO key sequence, repeat from step 3, or press the **CASH** key to finalise 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

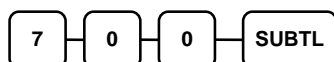
Program descriptions by typing description on the alpha keyboard overlay or by entering three digit alpha character codes. **To describe by three digit alpha character codes you must select 'No' in system option #25(for ER-3xx Series)/#30(for ER-230, ER-4xx and ER-52xx Series) (See "System Option Programming). Also see Descriptor Programming Methods for Alpha Overlay and/or Descriptor Code Table.**

Programming the Receipt/Check/Endorsement Message

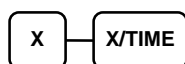
A preamble message of up to six lines can be printed at the top of each receipt; a postamble message of up to six lines can be printed at the bottom of each receipt; a endorsement message of up to ten lines can be printed when a check is endorsed on an optional slip printer. Each line can consist of up to **32** characters for *Sam4S 230, 3xx and 52xx Series* and **24** characters for *Sam4S 4xx Series* Electronic Cash Registers.

1. Turn the control lock to the **PGM-Mode**.
Switch to **P** Mode by press **MODE** function key. (For *ER-230*)

2. To begin the program, enter **7 0 0**, press the **SUBTL** 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	X	Message Line
1	1 st line of Preamble	9	3 rd line of Postamble	17	5 th line of Endorsement
2	2 nd line of Preamble	10	4 th line of Postamble	18	6 th line of Endorsement
3	3 rd line of Preamble	11	5 th line of Postamble	19	7 th line of Endorsement
4	4 th line of Preamble	12	6 th line of Postamble	20	8 th line of Endorsement
5	5 th line of Preamble	13	1 st line of Endorsement	21	9 th line of Endorsement
6	6 th line of Preamble	14	2 nd line of Endorsement	22	10 th line of Endorsement
7	1 st line of Postamble	15	3 rd line of Endorsement		
8	2 nd line of Postamble	16	4 th line of Endorsement		

4. If you are programming using alpha overlay, type up to 32 descriptors on the overlay and press the **SUBTL** key.

Type up to 32 / 24 (*ER-4xx*)
descriptor keys → **SUBTL**

or,

If you are programming using descriptor codes, enter up to 18 three-digit character codes and press the **SUBTL** key.

Enter up to 32 / 24 (*ER-4xx*)
three-character codes → **SUBTL**

5. To program additional Logo Descriptor, repeat from step 3, or press the **CASH** key to finalise the program.



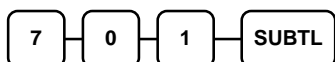
Program 701 - Financial Report Message Programming

Program descriptions by typing description on the alpha keyboard overlay or by entering three digit alpha character codes. **To describe by three digit alpha character codes you must select 'No' in system option #25(for ER-3xx Series)/#30(for ER-230, ER-4xx and ER-52xx Series) (See "System Option Programming).** Also see **Descriptor Programming Methods for Alpha Overlay** and/or **Descriptor Code Table**.

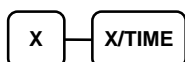
Programming the Financial Report Message

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").

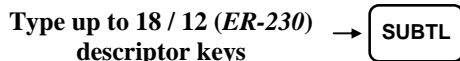
1. Turn the control lock to the **PGM-Mode**.
Switch to **P** Mode by press **MODE** function key. (For **ER-230**)
2. To begin the program, enter **7 0 1**, press the **SUBTL** key.



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

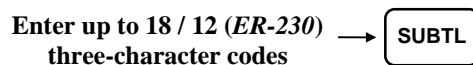


4. If you are programming using alpha overlay, type up to 18 descriptors on the overlay and press the **SUBTL** key



or,

If you are programming using descriptor codes, enter up to 18 three-digit character codes and press the **SUBTL** key.



5. To program additional Financial Report Message, repeat from step 3, or press the **CASH** key to finalise the program.



Financial Report Message

X	Message Line	X	Message Line	X	Message Line
1	+PLU TTL	29	CREDIT TAX4	57	CHG7-IN-D
2	-PLU TTL	30	FD/S CREDIT	58	CHG8-IN-D
3	ADJUST TTL	31	RETURN	59	CHG1 SALES
4	NONTAX	32	ERROR CORR	60	CHG2 SALES
5	GST SALES	33	PREVIOUS VD	61	CHG3 SALES
6	TAX2 SALES	34	VOID MODE	62	CHG4 SALES
7	TAX3 SALES	35	CANCEL	63	CHG5 SALES
8	TAX4 SALES	36	GROSS SALES	64	CHG6 SALES
9	GST	37	CASH SALES	65	CHG7 SALES
10	TAX2	38	CHECK SALES	66	CHG8 SALES
11	TAX3	39	R/A 1	67	FOREIGN 1
12	TAX4	40	R/A 2	68	FOREIGN 2
13	XMPT1 SALES	41	R/A 3	69	FOREIGN 3
14	XMPT2 SALES	42	P/O 1	70	FOREIGN 4
15	XMPT3 SALES	43	P/O 2	71	DRWR TTL
16	XMPT4 SALES	44	P/O 3	72	PROMO
17	EATIN TTL	45	HASH TTL	73	WASTE
18	TAKEOUT TTL	46	AUDACTION	74	TIP
19	DRTHRU TTL	47	NOSALE	75	TRAIN TTL
20	% 1	48	CASH-IN-D	76	BAL FORWARD
21	% 2	49	CHECK-IN-D	77	GUESTS
22	% 3	50	FD/S-IN-D	78	P/BAL
23	% 4	51	CHG1-IN-D	79	CHECKS PAID
24	% 5	52	CHG2-IN-D	80	SERVICE
25	NET SALE	53	CHG3-IN-D	81	MIX&MATCH
26	CREDIT GST	54	CHG4-IN-D	82	ROUND TTL
27	CREDIT TAX2	55	CHG5-IN-D	83	CASH OUT
28	CREDIT TAX3	56	CHG6-IN-D		

Financial Report Message (ER-230)

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

Program 710 - Clerk Report Message Programming

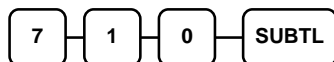
Program descriptions by typing description on the alpha keyboard overlay or by entering three digit alpha character codes. **To describe by three digit alpha character codes you must select 'No' in system option #25(for ER-3xx Series)/#30(for ER-230, ER-4xx and ER-52xx Series) (See "System Option Programming).** 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. Turn the control lock to the **PGM-Mode**.
Switch to **P** Mode by press **MODE** function key. (For *ER-230*)

2. To begin the program, enter **7 1 0**, press the **SUBTL** 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 18 descriptors on the overlay and press the **SUBTL** key

Type up to 18 / 12 (*ER-230*)
descriptor keys → SUBTL

or,

If you are programming using descriptor codes, enter up to 18 three-digit character codes and press the **SUBTL** key.

Enter up to 18 / 12 (*ER-230*)
three-character codes → SUBTL

5. To program additional Clerk Report Message, repeat from step 3, or press the **CASH** key to finalise the program.



Clerk Report Message

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

Clerk Report Message (ER-230)

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

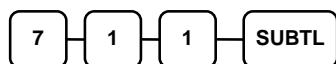
Program 711 - Macro Name Programming

Program descriptions by typing description on the alpha keyboard overlay or by entering three digit alpha character codes. **To descript by three digit alpha character codes you must select ‘No’ in system option #25(for *ER-3xx* Series)/#30(for *ER-230*, *ER-4xx* and *ER-52xx* Series) (See “System Option Programming). Also see **Descriptor Programming Methods for Alpha Overlay** and/or **Descriptor Code Table**.**

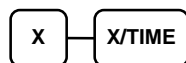
Programming the Macro Name

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. Turn the control lock to the **PGM-Mode**.
Switch to **P** Mode by press **MODE** function key. (For *ER-230*)
2. To begin the program, enter **7 1 1**, press the **SUBTL** key.



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



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

4. If you are programming using alpha overlay, type up to 18 descriptors on the overlay and press the **SUBTL** key

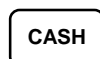
Type up to 18 / 12 (*ER-230*) descriptor keys → SUBTL

or,

If you are programming using descriptor codes, enter up to 18 three-digit character codes and press the **SUBTL** key.

Enter up to 18 / 12 (*ER-230*) three-character codes → SUBTL

5. To program additional **MACRO** name, repeat from step 3, or press the **CASH** key to finalise the program.



Program 1000 - NLU Code Number Programming

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

On the default keyboard, each model of *Sam4S ER-230, ER-3xx, ER- 4xx and ER-52xx Electronic Cash Registers* has different amount of NLU keys build in and assigned on the default keyboard layout.

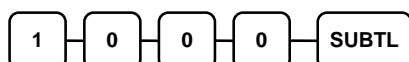
Model	NLU available	NLU on Default Keyboard	Model	NLU available	NLU on Default Keyboard
ER-230	50	12	ER-430M	100	60
ER-380/M	117	16	ER-5200/M	117	117
ER-390M	100	60	ER-5240/M	117	40
ER-420M	50	12(36)/16(48)	ER-5215/M	117	15

The PLU# assigned to the NLU key is the same after **RAM All Clear**, i.e. NLU key #1 is assigned by PLU #1. However, with this program, you can assign any PLU number you wish to any one of the possible NLU keys.

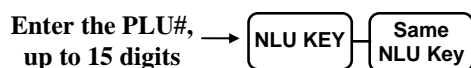
NOTE: For *ER-420M*, Numbers in the bracket is when using **KBD Shift** function key up to 3 keyboard levels.

Programming the NLU Code Number

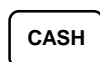
1. Turn the control lock to the **PGM-Mode**.
Switch to **P** Mode by press **MODE** function key. (For *ER-230*)
2. To begin the program, enter **1 0 0 0**, press the **SUBTL** key.



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. To program additional NLU Code Number, repeat from step 3, or press **CASH** to finalise the program



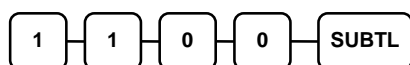
Program 1100 - Cash-In-Drawer Limit Programming

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. Turn the control lock to the **PGM-Mode**.
Switch to **P** Mode by press **MODE** function key. (For *ER-230*)

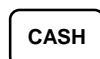
2. To begin the program, enter **1 1 0 0**, press the **SUBTL** key.



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 finalise the program.



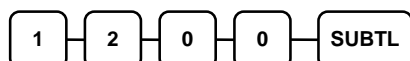
Program 1200 - Check Change Limit Programming

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.

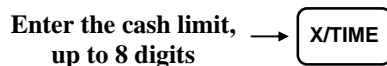
Programming the Check Change Limit

1. Turn the control lock to the **PGM-Mode**.
Switch to **P** Mode by press **MODE** function key. (For *ER-230*)

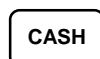
2. To begin the program, enter **1 2 0 0**, press the **SUBTL** key.



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 finalise the program.



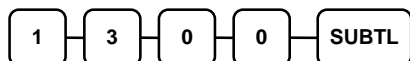
Program 1300 - Date and Time Programming

Use this program to set the clock and calendar on your *Sam4S ER-230, ER-3xx, ER- 4xx and ER-52xx Electronic Cash Registers*. The date changes automatically. After initial setting, time changing will probably be required only for beginning and ending daylight savings time.

Programming the Date and Time

1. Turn the control lock to the **PGM-Mode**.
Switch to **P** Mode by press **MODE** function key. (For *ER-230*)

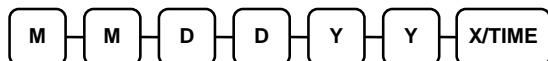
2. To begin the program, enter **1 3 0 0**, press the **SUBTL** key.



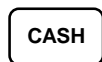
3. Enter time in military standard time (based on 24 hours), must be four digits (i.e. 1300 hours = 1:00 PM); press the **X/TIME** key.



4. Enter the date in MM (month) DD (day) and YY (year) format. Press the **X/TIME** key:



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



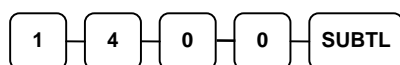
Program 1400 - Scale Tare Weight Programming

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.)

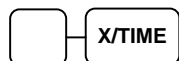
Programming the Scale Tare Weight

1. Turn the control lock to the **PGM-Mode**.
Switch to **P** Mode by press **MODE** function key. (For *ER-230*)

2. To begin the program, enter **1 4 0 0**, press the **SUBTL** 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 **SUBTL** key.



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

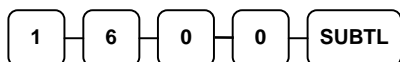


Program 1600 - Machine Number Programming

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. Turn the control lock to the **PGM-Mode**.
Switch to **P** Mode by press **MODE** function key. (For *ER-230*)
2. To begin the program, enter **1 6 0 0**, press the **SUBTL** key.



3. Enter a machine number (up to 5 digits); press the **X/TIME** key.



4. Press the **CASH** key to finalise the program.



Program Scans

Since much time and energy has been invested in the planning and programming of your *Sam4S ER-230, ER-3xx, ER-4xx and ER-52xx Electronic Cash Registers*, 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

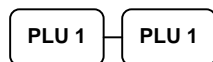
1. Turn the control lock to the **PGM-Mode**.
Switch to **P Mode** by press **MODE** function key. (For *ER-230*)
2. To print a program scan, enter **1 5**, press the **SUBTL** key.



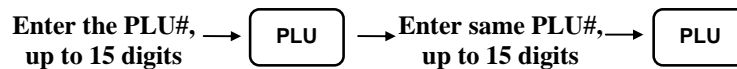
3. In this step, there are three different ways to scan program information. One is PLU, the other is Macro, and the third is Others.

PLU PROGRAM SCAN

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



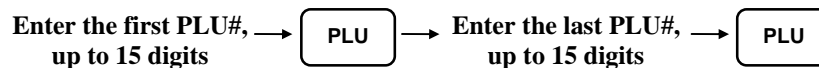
- To read single PLU program information, enter the number (1-1000) of the PLU and press the same number and PLU key.



- Press a PLU key on the keyboard.

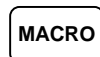


- To read multiple PLU program information, enter the first number (1-1000) and press PLU key. Press the last number (1-1000) and press PLU key



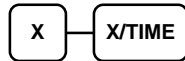
MACRO PROGRAM SCAN

- To read MACRO information, press the MACRO key to be scanned, to scan different MACRO key, please repeat this step,



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

NOTE: When **X** is **4** for function key scan, please press the function key you want to scan after **X/TIME** button. When features on **more than one function keys** are going to be scanned, repeat “**4** then **X/TIME**” followed with next function key.

4. Press the **CASH** key to finalise the program.



Sample Reports

Financial

X or Z report	DATE 15/01/2003 WED TIME 13:32	Current Stock count
Total and count of all positive PLUs	X 1 REPORT 00001	
Total and count of all Negative PLUs	-----	
	FINANCIAL	
	+PLU TTL 179.56	
	\$288.60	
	-PLU TTL 10	
	-20.00	
Total of +PLU and -PLU sales	ADJST TTL 189.56	
	\$268.60	

Total of Non-taxable sales	NONTAX \$30.47	
PLU number	GST SALES \$153.60	
	TAX2 SALES \$11.92	
	TAX3 SALES \$16.77	
	TAX4 SALES \$31.89	
	GST \$10.00	
	TAX2 \$1.21	
	TAX3 \$1.18	
Number of items sold in all groups.	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	
	EATIN TTL 1	
	\$10.12	
Total sales for each type of destination	TAKEOUT TTL 2	
	\$40.77	

continued . . .

Total sales for each type of destination

Total and count for each % function key (i.e. discounts & coupons)

Net Sales

Credited tax for each tax. (Tax is credited for negative taxable sales, i.e. mdse return transactions.)

Food stamp change credited to sales

Total and count for each type of transaction correction.

Gross Sales

Totals and counters for CASH and CHECK sales

Total and count for each type R/A (received on account) and P/O (paid out) key.

continued from previous page

DRTHRU TTL	1
	\$3.04
ITEM DISC.	3
	-0.48
SALE DISC.	2
	-5.22
SALE SURCH.	3
	\$3.23
% 4	0
	\$0.00
% 5	0
	\$0.00
NET SALE	26
	\$281.18
CREDIT GST	4
	-1.11
CREDIT TAX2	1
	-0.23
CREDIT TAX3	2
	-0.89
CREDIT TAX4	1
	-0.39
FD/S CREDIT	0
	\$0.23
RETURN	33
	-59.73
ERROR CORR	2
	-4.00
PREVIOUS VD	1
	-1.50
VOID MODE	-2
	-6.40
CANCEL	2
	\$16.00
GROSS SALES	\$375.63
CASH SALES	13
	\$133.49
CHECK SALES	1
	\$23.05
R/A 1	1
	\$145.00
R/A 2	0
	\$0.00

continued . . .

Total and count for each type R/A (received on account) and P/O (paid out) key.

Total and count of items sold with HASH status.

Count of No Sales.

Total of numbers entered into the non-add key

Total and count of expected CASH, CHECK in drawer

Total and count for each CHARGE in drawer.

Total and count for each CHARGE key.

continued from previous page

R/A 3	0
	\$0.00
P/O 1	1
	-140.00
P/O 2	0
	\$0.00
P/O 3	0
	\$0.00
HASH TTL	0
	\$0.00
NOSALE	4
NON ADD #	547
CASH-IN-D	14
	\$269.99
CHECK-IN-D	3
	-108.45
FD/S-IN-D	2
	\$21.00
CHG1-IN-D	0
	\$0.00
CHG2-IN-D	1
	\$8.43
CHG3-IN-D	1
	\$8.52
CHG4-IN-D	2
	-1.60
CHG5-IN-D	1
	\$2.67
CHG6-IN-D	2
	\$13.09
CHG7-IN-D	0
	\$0.00
CHG8-IN-D	1
	\$0.00
CHG1 SALES	0
	\$0.00
CHG2 SALES	1
	\$8.43
CHG3 SALES	1
	\$8.52
CHG4 SALES	2
	-1.60
CHG5 SALES	1
	\$2.67

continued . . .

continued from previous page

Total and count for each CHARGE key.	CHG6 SALES	2	
		\$13.09	
	CHG7 SALES	0	
		\$0.00	
Total for each Foreign currency in drawer.	CHG8 SALES	1	
		\$3.04	
Total of CASH, CHECKS and CHARGES in drawer.	FOREIGN 1	0.00	
	FOREIGN 2	0.00	
	FOREIGN 3	0.00	
	FOREIGN 4	0.00	
Total and count for PROMO,WASTE and TIPS.	DRWR TTL	\$216.69	
	PROMO	1	
		\$1.50	
Number of transactions and total activity in Training Mode	WASTE	8	
		\$12.50	
	TIPS	0	
		\$0.00	
Total and count of all balances serviced	TRAIN TTL	5	
		\$62.59	
Total number of guests served	BAL FORWARD	4	
		\$88.13	
Total and count of balances entered into PBAL key	GUESTS	5	
	P/BAL	4	
Total and count of balances paid		\$0.00	
	CHECKS PAID	2	
Total and count of items serviced		\$18.64	
	SERVICE	4	
		\$88.13	
	MIX&MATCH	0	
		\$0.00	
	ROUND TTL	0	
		\$0.00	
	CASH OUT	0	
		\$0.00	
	AVG ITEM/CUST	7.29	
	AVG \$/CUST	\$10.81	

Average number if items per customer, and average dollar sales per customer	GRAND	\$375.63	
	ETHAN	000209	00000
Grand total			

Time

Time Period	
Number of Transactions	
Net sales in this period.	
Percentage of total sales	
Number of Transactions all periods	
Net sales in all periods.	

DATE 15/01/2003 WED	TIME 15:48
X 1 REPORT	00001

TIME	
13:00-13:59	
CNT	17
SALES AMT	\$183.85
SALES RATE	65.39%
14:00-14:59	
CNT	9
SALES AMT	\$97.33
SALES RATE	34.61%

TOTAL CNT	26
TOTAL AMT	\$281.18
ETHAN	000236 00000

PLU

PLU number

PLU Descriptor

Count and sales total.

Percentage of total sales (optional)

```

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
  
```

Total activity for all PLUs

Total sales for all PLUs.

Clerk

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

Clerk Name

Number of Transactions

Net sales for this clerk

Drawer total for this clerk

DATE 15/01/2003 WED TIME 15:36

X 1 REPORT 00001

ALL CLERK

ETHAN

NET SALE 10

\$155.23

DRWR TTL \$109.81

ZACH

NET SALE 5

\$45.14

DRWR TTL \$43.22

ANNA

NET SALE 4

\$78.75

DRWR TTL \$67.03

LAURA

NET SALE 2

\$0.00

DRWR TTL \$18.64

PEGGY

NET SALE 0

\$0.00

DRWR TTL \$0.00

MOLLY

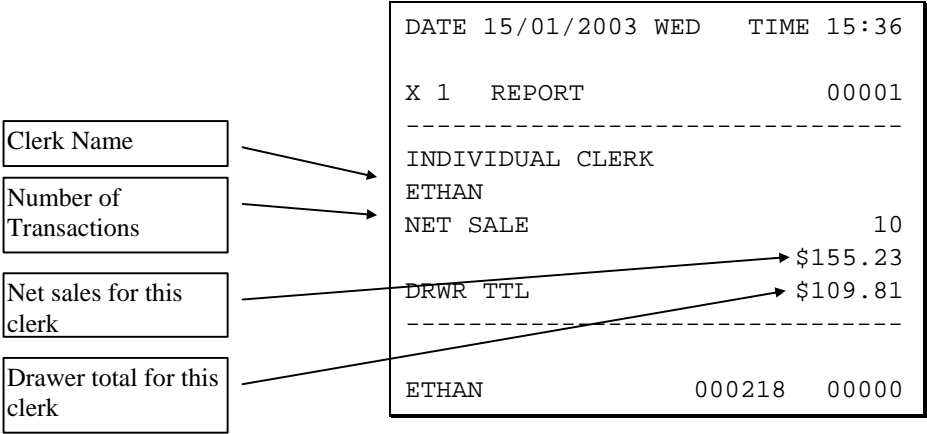
NET SALE 5

\$2.06

DRWR TTL -22.01

ETHAN 000218 00000

Individual Clerk



Groups

Group Descriptor	DATE 15/01/2003 WED	TIME 15:34
Number of items sold in this group	X 1 REPORT	00001
Net sales for this group	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

Number of items sold in all groups.	TOTAL CNT	189.56
Net sales for all groups.	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
```

Open Check

Open check number
and balance.

Clerk responsible
for the check.

```
DATE 15/01/2003 WED    TIME 15:59
X 1  REPORT                      00001
-----
OPEN CHECK
CHECK : 3                      $24.07
TABLE : 0
MOLLY
CHECK : 4                      $45.42
TABLE : 0
ETHAN
CHECK : 5                      $24.50
TABLE : 0
ETHAN
CHECK : 6                      $28.33
TABLE : 0
ETHAN
ETHAN                      000243  00000
```

Revision: 1.7 (Aug13)

Match: ER-230 JK68-60969M(Rev.01)r3
ER-380/M JK68-60962Q(Rev.01)r3
ER-390M JK68-60692J(Rev.01)r3
ER-420M JK68-60694P(Rev.02)r3
ER-430M JK68-60694I(Rev.01)r3
ER-5200/M JK68-60953L(Rev.00)r4