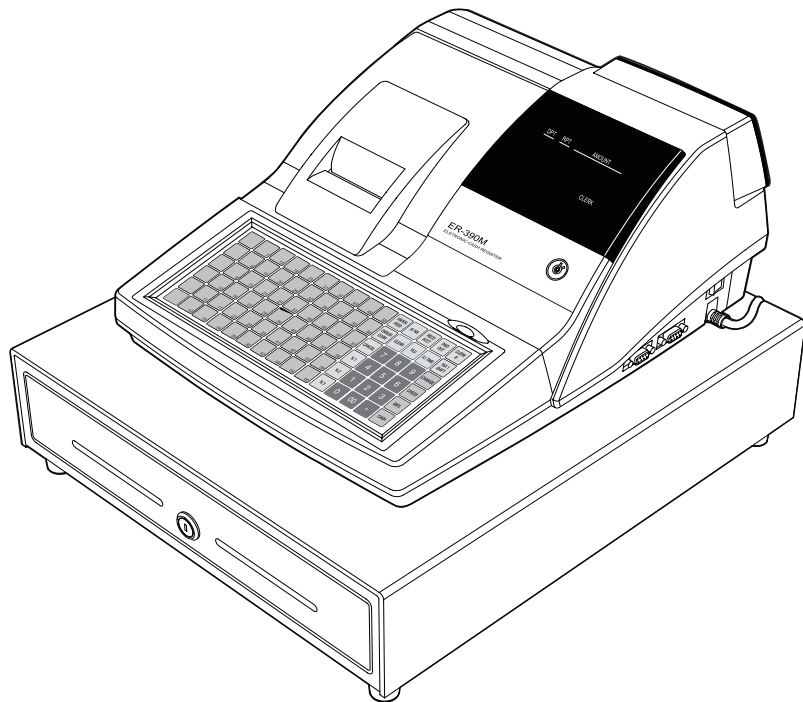


**SAM4S**

---

*ER-390M*

# Operation and Program Manual





All specifications are subject to change without notice

# Precaution Statements

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

## 1-1 Safety Precautions

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

### CAUTION

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

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

Dispose used batteries according to the manufacturer's instructions.

### ATTENTION

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

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

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

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

## 1-2 Servicing Precautions

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

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

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

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

## 1-3 Precautions for Electrostatic Sensitive Devices (ESDs)

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



# Contents

<b>Getting Started</b>	<b>1</b>
About the <i>ER-390M</i> .....	1
Unpacking.....	2
Installing the Paper .....	2
Basic Features and Functions.....	6
Standard Hardware .....	6
Optional Hardware .....	6
Software Features .....	6
Front Display .....	7
Rear Display .....	8
Control Lock.....	11
Keyboards.....	12
Memory Clear .....	13
Memory All Clear .....	13
Initial Clear .....	14
<b>Operating Instructions</b>	<b>15</b>
Function Key Descriptions.....	15
Clerk Sign-On/Sign-Off .....	19
Direct Sign-On.....	19
Coded Sign-On .....	19
Receipt On and Off.....	20
Item Registrations .....	21
Open Keyboard PLU Entry .....	22
Preset Price Keyboard PLU.....	22
Keyboard PLU Repeat Entry .....	23
Keyboard PLU Multiplication .....	24
Keyboard PLU Multiplication with Decimal Point .....	25
Split Pricing (Keyboard PLU) .....	26
Single Item Keyboard PLU .....	27
Open Code Entry PLU.....	28
Preset Price Code Entry PLU .....	28
Code Entry PLU Multiplication.....	29
Code Entry PLU Multiplication with Decimal Point .....	30
Split Pricing Code Entry PLU .....	30
Modifier Key .....	31
Price Level Key .....	32
Promo .....	33
Waste.....	34
Percent Key Operations .....	35
Preset Percent Discount on an Item .....	35
Enter a Percent Discount on an Item .....	36
Percent on Sale Total.....	36

Coupon on Sale (Vendor Coupon).....	37
Item Discount.....	38
Return Merchandise Registrations .....	39
Voids and Corrections.....	40
Error Correction (Void Last Item).....	40
Void Previous Item.....	40
Cancel.....	41
Void Position Operations.....	41
No Sale Operations .....	42
Open Drawer.....	42
Non Add Number .....	42
Received On Account Operations.....	43
Paid Out Operations.....	44
Subtotaling a Sale .....	45
Eat In/Take Out/Drive Thru Sales.....	45
Totaling and Tendering.....	46
Totaling a Cash Sale.....	46
Totaling a Check Sale.....	46
Tendering a Cash Sale .....	47
Tendering a Check Sale.....	47
Totaling a Charge Sale.....	48
Tendering a Charge Sale.....	49
Check Cashing.....	50
Split Tender .....	51
Post Tender.....	52
Currency Conversion.....	53
Table Management and Clerk Interrupt Operations.....	54
Overview .....	54
Soft Check .....	55
Hard Check.....	60
Direct Scale Entry.....	67
Automatic Scale Entry.....	68
Tare Weight Entry .....	68
Manual Tare Weight Entry .....	69
Manual Weight Entry.....	70

## **X Mode 71**

Introduction.....	71
X Reports .....	72
Running a Report - General Instructions .....	72
Report Table .....	73
Cash Declaration.....	75

## **Service Mode Programming 76**

Overview.....	76
Memory Allocation Scan .....	77
Pc Online Mode .....	77
Memory Allocation.....	78
Clear Total.....	79
Clear Grand Total .....	79
Clear PLU File.....	79
EPROM Information.....	79
Function Key Assignment Programming .....	80

Function Key Codes .....	81
RS-232 Communication Options .....	82

**Program Mode Programming 85**

Default Programming.....	85
Descriptor Programming.....	85
Tax Programming .....	86
Straight Percentage Tax Rate Programming .....	86
PLU Programming.....	88
Program 100 – PLU Status Programming .....	89
Program 110 – PLU Auto Tare Programming.....	92
Program 150 – PLU Group Assignment.....	93
Program 200 – PLU Price/HALO Programming.....	94
Program 250 – PLU Stock Amount Programming .....	95
Program 300 – PLU Description Programming.....	96
Program 350 – PLU Link Programming.....	97
Program 400 – PLU Delete Programming.....	98
Program 450 – PLU MIX & MATCH Programming.....	99
System Option Programming.....	100
System Option Table .....	101
Print Option Programming.....	104
Print Option Table .....	105
Function Key Programming .....	109
Program 70 - Function Key Options.....	110
Program 80 - Function Key Descriptor.....	111
Program 90 - Function Key HALO .....	112
ADD CHECK.....	113
CANCEL.....	114
CASH.....	115
CHARGE1-8 .....	116
CHEQUE.....	117
CHECK CASHING.....	118
CHECK ENDORSEMENT .....	119
CHECK # .....	120
CURRENCY CONVERSION.....	121
DRIVE THRU / EAT IN / TAKE OUT .....	122
ERROR CORRECT .....	123
F/S TEND.....	124
GUEST .....	125
LEVEL1-2.....	125
#/NS.....	126
RETURN.....	127
MODIFIER 1-5 .....	128
PAYMENT.....	129
PBAL.....	129
PROMO.....	130
PAID OUT1-3 .....	131
PRINT CHECK.....	132
RECD ON ACCT1-3.....	133
SCALE .....	134
SERVICE .....	135
SUBTOTAL.....	136
TARE .....	137
TAX EXEMPT.....	138

TIP .....	139
VALIDATE .....	140
VOID .....	141
WASTE .....	142
%1- %5 .....	143
Clerk Programming.....	145
Program 800 - Secret Code Programming .....	146
Program 801 - Drawer Assignment & Training Clerk .....	147
Program 810 – Clerk Description Programming .....	148
Mix & Match Programming.....	149
Program 600 - Trip Level Programming.....	150
Program 601 - Price Programming .....	150
Program 610 - Mix & Match Description Programming .....	151
Group Programming .....	152
Miscellaneous Programming.....	154
Macro Key Sequence Programming .....	154
Logo Description Programming.....	155
NLU Code Number Programming .....	161
Cash-In-Drawer Limit Programming .....	162
Check Change Limit Programming.....	163
Date and Time Programming.....	164
Scale Tare Weight Programming.....	165
Machine Number Programming.....	166
Program Scans .....	167

**Sample Reports 169**

Financial.....	169
Time .....	173
PLU.....	174
Clerk .....	175
Individual Clerk .....	176
Groups.....	177
Stock .....	178
Open Check.....	179



This is a “Table of Contents preview” for quality assurance

The full manual can be purchased from our store:

[https://the-checkout-tech.com/manuals/samsung/ER-390M operating programming man](https://the-checkout-tech.com/manuals/samsung/ER-390M%20operating%20programming%20manual/)

And our free Online Keysheet maker:

<https://the-checkout-tech.com/Cash-Register-Keysheet-Creator/>

[HTTPS://THE-CHECKOUT-TECH.COM](https://THE-CHECKOUT-TECH.COM)