

SHARP®

ELECTRONIC CASH REGISTER
ELEKTRONISCHE REGISTRIERKASSE
CAISSE ENREGISTREUSE ELECTRONIQUE
CAJA REGISTRADORA ELECTRONICA
ELEKTRONISCHE KASSA

MODEL
MODELL
MODELE
MODELO
MODEL

XE-A303

INSTRUCTION MANUAL
BEDIENUNGSANLEITUNG
MANUEL D'INSTRUCTIONS

MANUAL DE INSTRUCCIONES
GEBRUIKSAANWIJZING



With Quick Start Guide
Mit Schnellstartanleitung
Avec Guide de démarrage rapide
Con Guía de inicio rápido
Met Gids voor snel starten

CAUTION:

The cash register should be securely fitted to the supporting platforms to avoid instability when the drawer is open.

CAUTION:

The socket-outlet shall be installed near the equipment and shall be easily accessible.

VORSICHT:

Die Netzsteckdose muß nahe dem Gerät angebracht und leicht zugänglich sein.

ATTENTION:

La prise de courant murale devra être installée à proximité de l'équipement et devra être facilement accessible.

AVISO:

El tomacorriente debe estar instalado cerca del equipo y debe quedar bien accesible.

VARNING:

Det matande vägguttaget skall placeras nära apparaten och vara lätt åtkomligt.

LET OP:

Het stopcontact dient in de buurt van de kassa en gemakkelijk toegankelijk te zijn.

CAUTION:

For a complete electrical disconnection pull out the mains plug.

VORSICHT:

Zur vollständigen elektrischen Trennung vom Netz den Netzstecker ziehen.

ATTENTION:

Pour obtenir une mise hors-circuit totale, débrancher la prise de courant secteur.

AVISO:

Para una desconexión eléctrica completa, desenchufar el enchufe de tomacorriente.

VARNING:

För att helt koppla från strömmen, dra ut stickproppen.

LET OP:

Trek de stekker uit het stopcontact indien u de stroom geheel wilt uitschakelen.

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.

Warnung

Dies ist eine Einrichtung der Klasse A. Diese Einrichtung kann im Wohnbereich Funkstörungen verursachen; in diesem Fall kann vom Betreiber verlangt werden, angemessene Maßnahmen durchzuführen und dafür aufzukommen.

Avertissement

Ceci est un produit de Classe A. Dans un environnement domestique ce produit risque de provoquer une interférence radio, auquel cas l'utilisateur sera obligé d'observer les mesures adéquates.

Advertencia

Este es un producto de la clase A. En un ambiente doméstico es posible que este producto cause radiointerferencia. En este caso se solicita al usuario que tome medidas adecuadas.

Contact the following for the CE mark.

SHARP ELECTRONICS (Europe) GmbH
Sonninstraße 3, D-20097 Hamburg

INTRODUCTION

Thank you very much for your purchase of the SHARP Electronic Cash Register, Model XE-A303. Please read this manual carefully before operating your machine in order to gain full understanding of functions and features. Please keep this manual for future reference. It will help you if you encounter any operational problems.

CAUTION!

Be sure to initialize the cash register before you start operating the cash register. Otherwise, distorted memory contents and malfunction of the cash register will occur. For this procedure, please refer to page 9.

IMPORTANT

- **Be very careful when removing and replacing the printer cover, as the cutter mounted on it is very sharp.**
- **Install the cash register in a location not subject to direct sunlight, unusual temperature changes, high humidity or splashing water.**
Installation in such locations could cause damage to the cabinet and the electronic components.
- **Never operate the register with wet hands.**
The water could seep into the interior of the register and cause component failure.
- **When cleaning your register, use a dry, soft cloth. Never use solvents, such as benzine and/or thinner.**
The use of such chemicals will lead to discolouration or deterioration of the cabinet.
- **The register plugs into any standard wall outlet (official (nominal) voltage).**
Other electrical devices on the same electrical circuit could cause the register to malfunction.
- **For complete electrical disconnection, disconnect the main plug.**

PRECAUTION

This Electronic Cash Register has a built-in memory protection circuit which is operated by rechargeable batteries.

As you know, all batteries will, in time, dissipate their charge even if not used. Therefore to insure an adequate initial charge in the protection circuit, and to prevent any possible loss of memory upon installation, it is recommended that each unit be allowed to recharge for a period of 24 to 48 hours prior to use. Also note that if the rechargeable batteries have been discharged completely, your cash register will be automatically initialized when you turn on the power.

In order to charge the batteries, the machine must be plugged in and the mode switch must be in a position other than “⏻”. This recharging precaution can prevent unnecessary initial service calls.

CONTENTS

INTRODUCTION	1
IMPORTANT	1
PRECAUTION	1
CONTENTS	2

Part1 QUICK START GUIDE

STEP1 PARTS AND THEIR FUNCTIONS	5
1 External View	5
2 Printer	5
3 Mode Switch and Mode Keys	6
4 Keyboard	6
5 Displays	7
6 Drawer Lock Key	7
STEP2 PREPARING THE CASH REGISTER	8
1 Installing the Cash Register	8
2 Initializing the Cash Register	9
3 Installing Paper Rolls	10
STEP3 BASIC FUNCTION PROGRAMMING	12
1 Abbreviations and Terminology	12
2 Prior to Programming	12
Procedure for programming	12
Description of special keys	12
Guidance for text programming	13
3 Language Selection	14
4 Date and Time Programming	14
5 Tax Programming	15
6 Department Programming	16
7 PLU (Price Look-Up) and Subdepartment Programming	22
8 Text Programming	25
Clerk names	25
Logo messages	25
9 Programming Other Necessary Items	27
STEP4 BASIC SALES ENTRY	28
1 Basic Sales Entry Example	28
2 PLU Entry	29
STEP5 CORRECTION	30
1 Cancellation of the Numeric Entry	30
2 Correction of the Last Entry (direct void)	30
3 Correction of the Next-to-last or Earlier Entry (indirect void)	31
4 Subtotal Void	32
5 Correction of Incorrect Entries not Handled by the Direct or Indirect Void Function	32
STEP6 FULL SALES REPORT (Z REPORT)	33

Part2 FOR THE OPERATOR

OTHER BASIC SALES ENTRIES	36
1 Additional Information for BASIC SALES ENTRY	36
2 Error Warning	36
3 Item Entries	37
Single item entries	37
Repeat entries	38
Multiplication entries	39
Split pricing entries	39
Single item cash sale (SICS) entry	40
4 Displaying Subtotals	40
5 Finalization of Transaction	41
Cash or cheque tendering	41
Cash or cheque sale that does not require tender entry	41
Credit sale	42
Mixed-tender sale	42
6 Computation of VAT (Value Added Tax)/tax	42
VAT/tax system	42
OPTIONAL FEATURES.....	44
1 Auxiliary Entries.....	44
Percent calculations (premium or discount)	44
Deduction entries.....	44
Refund entries	45
Non-add code number entries and printing	45
2 Auxiliary Payment Treatment	46
Currency exchange	46
Received-on-account entries.....	47
Paid-out entries	47
No sale (exchange)	47
Cashing a cheque.....	47
3 Automatic Sequence Key (AUTO1 AUTO2 key) Entries.....	48
4 Overlapped Clerk Entries	48

Part3 FOR THE MANAGER

PRIOR TO PROGRAMMING	49
Procedure for programming.....	49
Guidance messages.....	49
Entering character codes with numeric keys on the keyboard	50
Alphanumeric character code table	51
AUXILIARY FUNCTION PROGRAMMING	52
1 Miscellaneous Key Programming.....	52
Programming for 	52
Programming for %1 and %2	55
Programming for EX	58
Programming for RA, RCPTPO, CH1, CH2, CR1 and CR2	60
Function parameters for TL/NS	63
2 Other Text Programming.....	64
Foreign currency symbol	64
Domestic currency symbol	64
Training mode text.....	65
Function text	65

ADVANCED FUNCTION PROGRAMMING	67
1 Register Number and Consecutive Number Programming	67
2 Various Function Selection Programming 1	68
Function selection for miscellaneous keys	68
Print format	69
Receipt print format	69
Other programming	70
3 Various Function Selection Programming 2	75
Power save mode	75
Logo message print format	76
Clerk code assignment	76
Entry digit limit for cash in drawer (CID)(sentinel)	76
Entry digit limit for cheque cashing	77
Entry digit limit for cheque change	77
Thermal printer density	77
Training clerk specification for training mode	77
AUTO key programming - Automatic sequence key	78
4 EURO Programming	79
5 Reading Stored Programs	80
TRAINING MODE	83
READING (X) AND RESETTING (Z) OF SALES TOTALS	84
CCD -Compulsory Cash/cheque Declaration-	89
OVERRIDE ENTRIES	90
CORRECTION AFTER FINALIZING A TRANSACTION (Void mode).....	90
EURO MIGRATION FUNCTION	91
OPERATOR MAINTENANCE.....	94
1 In Case of Power Failure	94
2 In Case of Printer Error	94
3 Cautions in Handling the Printer and Recording Paper.....	94
4 Replacing the Paper Roll.....	95
5 Removing a Paper Jam.....	96
6 Cleaning the Printer (Print Head / Sensor / Roller)	96
7 Removing the Till and the Drawer	97
8 Opening the Drawer by Hand	97
9 Before Calling for Service.....	98
Error message table	98
SPECIFICATIONS	99

Part1 QUICK START GUIDE

STEP 1 PARTS AND THEIR FUNCTIONS

1 External View

■ Front view

Operator display

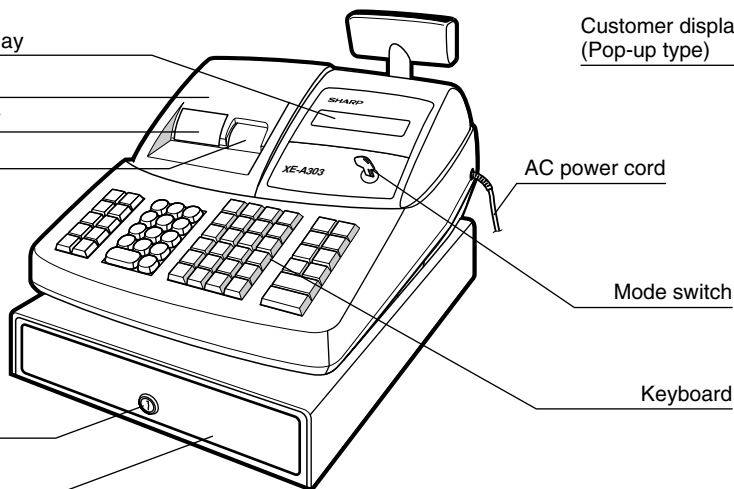
Printer cover

Receipt paper

Journal paper

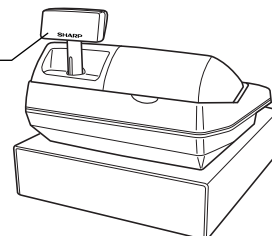
Drawer lock

Drawer



■ Rear view

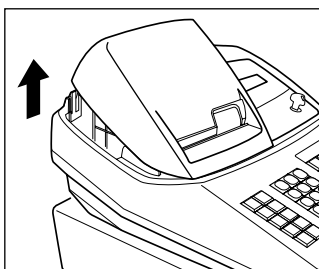
Customer display
(Pop-up type)



Mode switch

Keyboard

2 Printer



The printer is a receipt/journal dual station type thermal printer, therefore it does not require any type of ink ribbon or cartridge.

Lift the rear of the printer cover to remove. To re-install, hook the pawls on the cabinet and close.

Caution: The paper cutter is mounted on the printer cover. Be careful not to cut yourself.

Paper roll cradle
(Receipt side)

Print roller release
lever (Receipt side)

Print roller arm
(Receipt side)

Paper positioning
guides

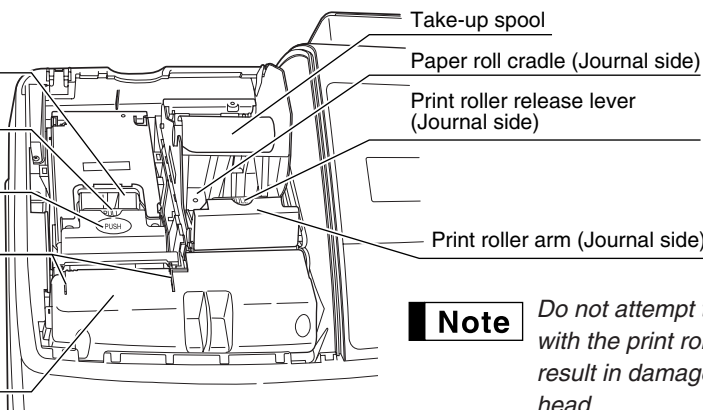
Inner cover

Take-up spool

Paper roll cradle (Journal side)

Print roller release lever
(Journal side)

Print roller arm (Journal side)

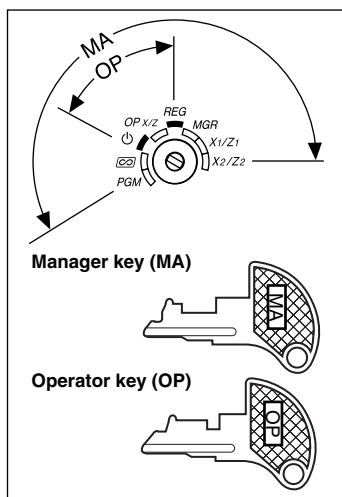


Note

Do not attempt to remove the paper roll with the print roller arm locked. This may result in damage to the printer and print head.

3 Mode Switch and Mode Keys

The mode switch can be operated by inserting one of the two supplied mode keys - manager (MA) and operator (OP) keys. These keys can be inserted or removed only in the "REG" or "⏻" position.



The mode switch has these settings:

- ⏻ :** This mode locks all register operations. (AC power turns off.)
No change occurs to register data.
- OP X/Z:** To take individual clerk X or Z reports, and to take flash reports. It can be used to toggle receipt state "ON" and "OFF" by pressing the **RCPT/PO** key.
- REG:** For entering sales.
- PGM:** To program various items.
- ∞ :** Enters into the void mode. This mode allows correction after finalizing a transaction. In this mode, the back light of the operator display turns red.
- MGR:** For manager's entries. The manager can use this mode for an override entry.
- X1/Z1:** To take the X/Z report for various daily totals.
- X2/Z2:** To take the X/Z report for periodic (weekly or monthly) consolidation.

4 Keyboard

Keyboard layout

Keyboard layout

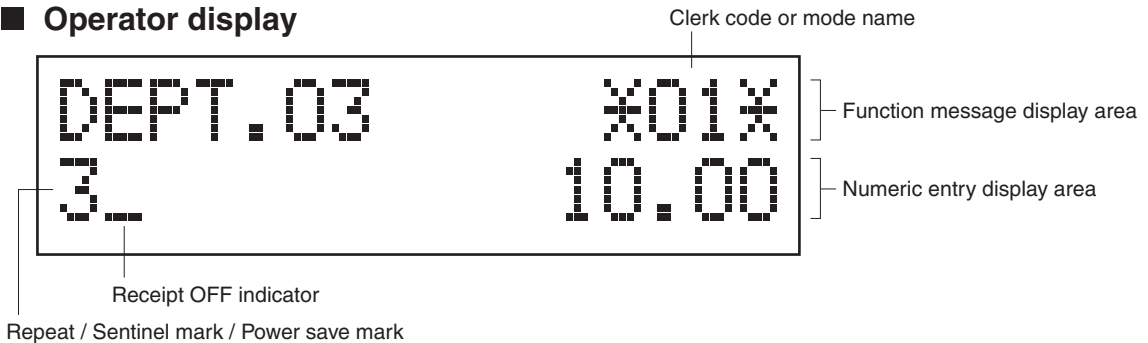
↑ RECEIPT	↑ JOURNAL			PLU /SUB	DEPT #	DEPT SHIFT	CLK#	AUTO 1	AUTO 2	
RA !	%1 /	⊗	•	CL	25 5 A	30 10 F	35 15 K	40 20 P	VAT U	EX X
RCPT /PO _	%2 NUMBER	7	8	9	24 4 B	29 9 G	34 14 L	39 19 Q	CR2 V	CH2 Y
∞ DC	RF SHIFT	4	5	6	23 3 C	28 8 H	33 13 M	38 18 R	CR1 W	CH1 Z
ESC BS	⊖ SPACE	1	2	3	22 2 D	27 7 I	32 12 N	37 17 S	#/TM/ST	
		0		00	21 1 E	26 6 J	31 11 O	36 16 T	TL/NS	

Key names

↑ RECEIPT	Receipt paper feed key	⊗	Multiplication key	AUTO 1	AUTO 2	Automatic sequence keys
↑ JOURNAL	Journal paper feed key	•	Decimal point key	EX		Foreign currency exchange key
RA	Received-on account key	CL	Clear key	VAT		Value added tax key
RCPT /PO	Receipt print/Paid-out key	00	0 ~ 9	CR1	CR2	Credit 1 and 2 keys
∞	Void key			CH1	CH2	Cheque 1 and 2 keys
ESC	Escape key	PLU /SUB	PLU/Subdepartment key	#/TM/ST		Non-add code/Time display /Subtotal key
%1 %2	Percent 1 and 2 keys	DEPT #	Department code entry key	TL/NS		Total/No sale key
RF	Refund key	DEPT SHIFT	Department shift key			
⊖	Discount key	CLK#	Clerk code entry key			
		21 1 ~ 20 40	Department keys			

5 Displays

Operator display



- **Clerk code or Mode name**

The mode you are in is displayed. When a clerk is assigned, the clerk code is displayed in the REG or OP X/Z mode. For example, "X01X" is displayed when clerk 01 is assigned.

- **Repeat mark**

The number of repeats is displayed, starting at "2" and incremental with each repeat. When you have registered ten times, the display will show "0". (2 → 39 → 0 → 1 → 2...)

- **Sentinel mark**

When amount in the drawer reaches the amount you preprogrammed, the sentinel mark "X" is displayed to advice you to remove the money to a safe place.

- **Power save mark**

When the cash register goes into the power save mode, the power save mark (decimal point) lights up.

- **Function message display area**

Item labels of departments and PLU/subdepartments and function texts you use, such as %1, (-) and CASH are displayed. For the details of function texts, please refer to page 66.

When an amount is to be entered or entered, "AMOUNT" is displayed: When an amount is to be entered, ----- is displayed at the numeric entry display area with "AMOUNT". When a preset price has been set with "Open & Preset" selected in department programming, the preset price is displayed at the numeric entry display area with "AMOUNT".

- **Numeric entry display area**

Numbers entered using numeric keys are displayed here.

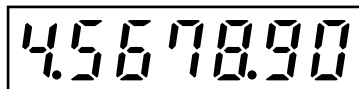
Date and time display

Date and time appear on the display in the OP X/Z, REG, or MGR mode. In the REG or MGR mode, press the #/TM/ST key to display the date and time.

Error message

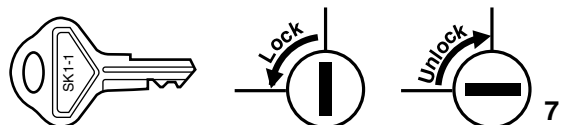
When an error occurs, the corresponding error message is displayed in the function message display area. For details of error messages, please refer "Error message table" on page 98.

Customer display (Pop-up type)



6 Drawer Lock Key

This key locks and unlocks the drawer. To lock it, turn 90 degrees counterclockwise. To unlock it, turn 90 degrees clockwise.



STEP 2

PREPARING THE CASH REGISTER

Unpack the cash register and make sure all accessories are included. For details of accessories, please refer to "SPECIFICATIONS" section on page 99.

For installing the cash register, find a stable surface near an AC outlet where the cash register will not subject to water sources or direct sunlight.

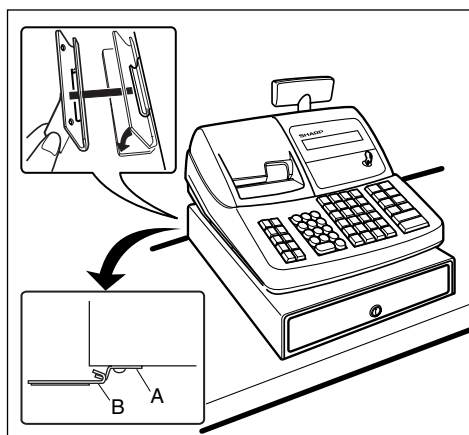
For preparing the cash register, please follow the three steps shown below; "1 Installing the Cash Register" on page 8, "2 Initializing the Cash Register" on page 9, and "3 Installing Paper Rolls" on page 10.

1 Installing the Cash Register

Install the cash register using the fixing angle bracket provided with the register according to the following instruction. The fixing angle bracket prevents the register from moving when the drawer opens. By hooking the register on the bracket, you can secure the register to the position.

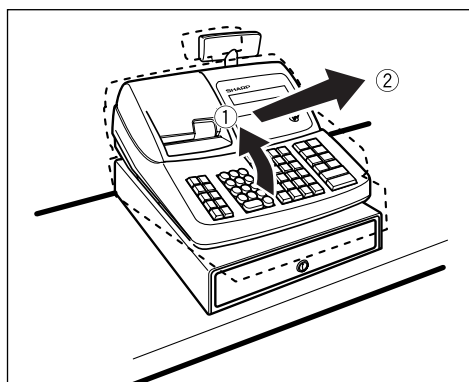
How to install the fixing angle bracket

1. Thoroughly clean the location where the fixing angle bracket (B) is to be placed.
2. Peel off the adhesive tape on the fixing angle bracket.
3. Hook the angle bracket onto the hook (A) that is located at the bottom rear of the register.
4. Firmly stick the fixing angle bracket to the table surface that your cleaned above.



How to remove the register from the fixing angle bracket

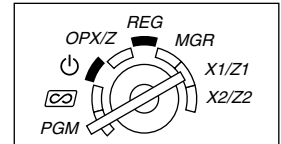
1. Lift up the front of the register and pull the register towards you.



2 Initializing the Cash Register

In order to operate the cash register properly, you must initialize it before operating for the first time. Follow this procedure.

1. Make sure the power cord plug is **not** inserted into the AC outlet.
2. Insert the manager (MA) key into the mode switch and turn it to the PGM position.
3. While holding down both the  key and the  key, insert the plug into the AC outlet. The buzzer will sound three times and “*** MRS. ***” will be displayed.
4. The cash register has now been initialized. The register display will now show “0.00” with “PGM”.



*** MRS. ***

PGM
0.00

Note

If the buzzer does not sound when the plug is inserted, the initialization has not been done successfully. (This will occur when the voltage is high because you operated the cash register before starting initialization.) Wait at least ten seconds after pulling out the plug and initialize the cash register again.

Caution

The cash register has a built-in memory protection circuit which is operated by rechargeable batteries. Since the rechargeable batteries have been discharged, please charge the batteries for one or two days before using the cash register for the first time. To charge the batteries, set the mode switch to a position other than “P” with the power cord plugged into the AC outlet. Unless the batteries have been charged, all of the programmed data and sales data is not saved.

Note

If you press a key by mistake, an error message such as “HEAD UP” or “PAPER EMPTY” may be displayed. Press the  key to clear message after installing paper rolls.

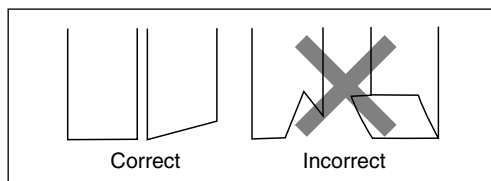
3 Installing Paper Rolls

Precaution: The paper cutter is mounted on the printer cover. Take caution when removing and installing the cover.

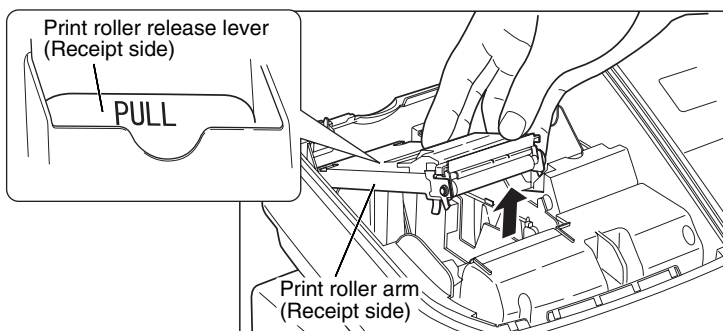
The register can print receipts and journals. For the printer, you must install the paper rolls (receipt and journal paper rolls) provided with the register.

Install the paper rolls according to the procedure shown below with the power cord connected and the mode switch set to the REG position:

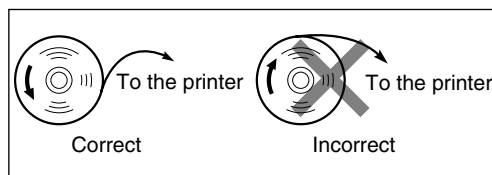
1. Cut off approximately one revolution of each paper roll. Make sure each paper end is cut as per the diagram.



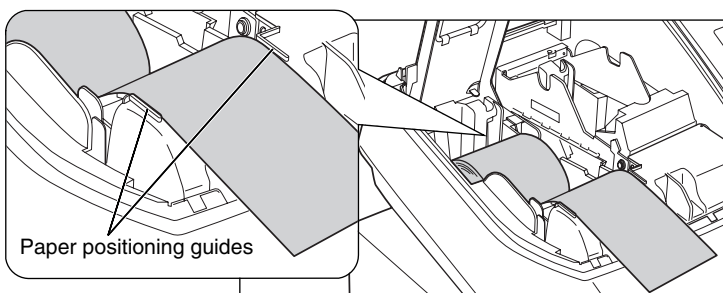
2. Lift up the print roller release lever (indicated as "PULL" on it) of the receipt side to unlock and open the print roller arm.



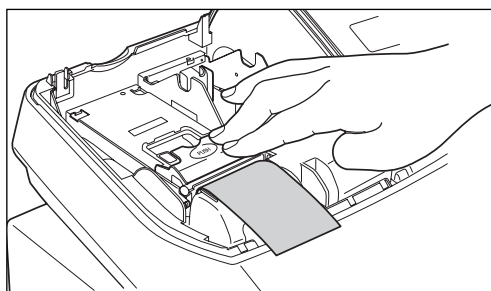
3. Set a paper roll in the paper roll cradle of the receipt side as per the diagram.



4. Feed the end of the paper along with the paper positioning guides as per the diagram.



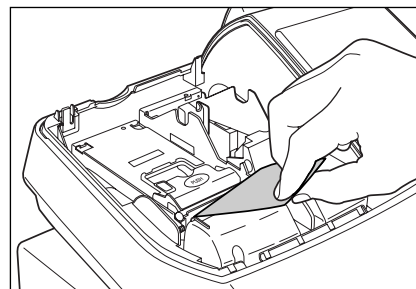
5. While holding down the paper, slowly close the print roller arm of the receipt side, and push down the "PUSH"-indicated part of the arm until you hear a click locking the arm. Make sure securely you push down the center of the wing part of the arm as per the diagram. The paper will be fed automatically.



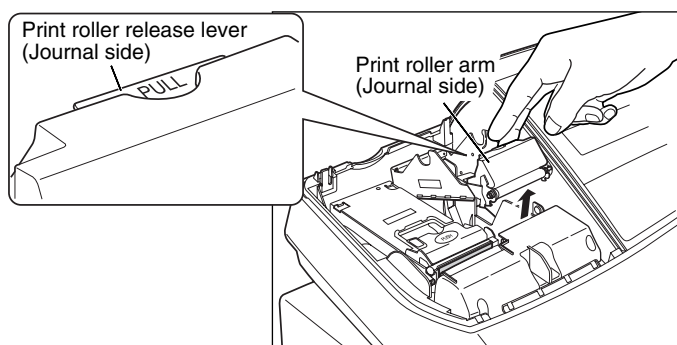
Note

If the print roller arm is not securely locked, printing is not done right. If this problem occurs, open the arm, and close the arm as instructed above.

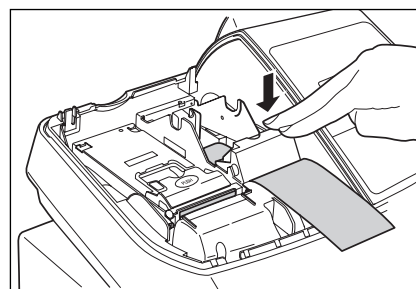
- 6.** Cut off the excess paper using the edge of the inner cover.



- 7.** Lift up the print roller release lever (indicated as "PULL" on it) of the journal side to unlock and open the print roller arm. Then, set a paper roll in the paper roll cradle of the journal side as per the diagram in the Step 3.

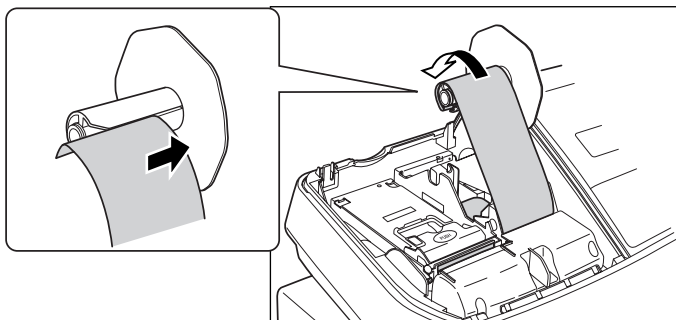


- 8.** While holding down the paper, slowly close the print roller arm of the journal side, and push down the arm until you hear a click locking the arm. Make sure securely you push down the center of the wing part of the arm as per the diagram. The paper will be automatically fed.



- 9.** Insert the end of the paper into the slit in the spool. (Press the  key to feed more paper if required.)

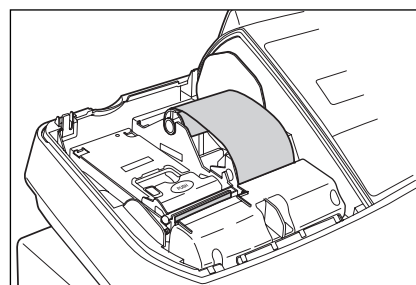
- 10.** Wind the paper two or three turns around the spool shaft.



- 11.** Set the spool on the bearing, and press the  key to take up excess slack in the paper.

- 12.** Replace the printer cover.

- 13.** Press the  key to make sure the paper end comes out of the printer cover and clean paper appears.



STEP 3

BASIC FUNCTION PROGRAMMING

Before starting sales entries, you must first program necessary items so the cash register suits your sales needs. In this manual, there are three sections, **BASIC FUNCTION PROGRAMMING (pages 12-27) where required items must be programmed**, **AUXILIARY FUNCTION PROGRAMMING (pages 52-66)** where you can program for more convenient use of keys on the keyboard, and **ADVANCED FUNCTION PROGRAMMING (pages 67-82)** where various optional programming features are provided. Find the appropriate features for your needs, and make the necessary programming.

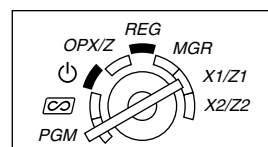
1 Abbreviations and Terminology

- Dept.: Department; a category for merchandise classifications. Every sales item should belong to a department.
- PLU: Price Look Up; a category for merchandise classifications. PLUs are used to call up preset prices by a code entry.
- VAT: Value Added Tax
- X report: Report to read sales data
- Z report: Report to read and reset sales data

2 Prior to Programming

■ Procedure for programming

1. Check to see whether both journal and receipt rolls are present in the machine. If there is not enough paper on a roll, replace it with a new one (refer to "Replacing the Paper Roll" on page 95 for the replacement).
2. Put the manager key in the mode switch and turn it to the PGM position.
3. Program necessary items into the cash register.
Every time you program an item, the cash register will print the setting. Please refer to print samples in each section.
4. If necessary, issue programming reports for your reference.



- Note**
- On the key operation example shown in the programming details, numbers such as "22082007" indicates the parameter which must be entered using the corresponding numeric keys.
 - Asterisks in the tables shown in the programming details indicate default settings.

■ Description of special keys

0, 1 to 9	Numerical key	Used for numerical number entry.
00	Double-zero key	Used for parameter entry and character code entry.
CL	Clear key	Used for cancel entry.
.	Point key	Used for decimal point entry and right moving entry (as right cursor key).
⊗	Multiplication key	Used for left moving entry (as left cursor key).
#/TM/ST	Subtotal key	Used for data decision entry.
TL/NS	Finalization key	Used for programming termination entry.

■ Guidance for text programming

The register allow you to program texts for department item names (page 16), PLU/subdepartment item names (page 22), function texts (page 65), clerk names (page 25), logo messages (page 25), foreign and domestic currency symbols (page 64), and training mode texts (page 65).

There are two ways for programming text; using character keys on the keyboard or entering character codes with numeric keys on the keyboard. For the latter way, refer to "Entering character codes with numeric keys on the keyboard" on page 50.

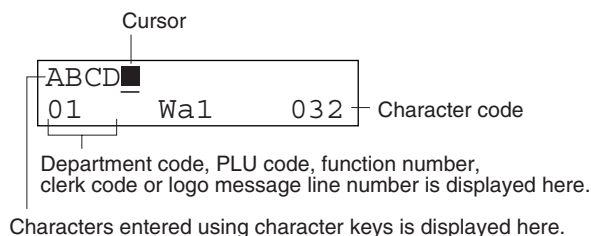
Using character keys on the keyboard

You can enter characters according to the small figures printed in the lower right position of the tops. For the layout, please refer to "Keyboard" section on page 6.

The following are used as control keys for character entry:

- SHIFT** Toggles between upper-case and lower-case letters. By default, the upper-case letter is selected. Once the **SHIFT** key is pressed, you are locked in for entering lower-case letters. "a" is displayed when lower-case letters entry is selected as shown in the operator display example below.
- NUMBER** Press the **NUMBER** key to enter numeric characters. For example to enter "1", press the **NUMBER** and **1** key. If you press the **1** key without pressing the **NUMBER** key, the cash register goes to character codes entry mode.
Once the **NUMBER** key is pressed, you are locked in for entering numeric characters. "1" is displayed when numeric characters entry is selected.
- DC** Toggles between single-size and double-size characters. By default, the single-size character is selected. Once the **DC** key is pressed, you are locked in for entering double size characters. "W" is displayed when double-size characters entry is selected as shown in the operator display example below.
- BS** Backs up the cursor, erasing the character to the left.

Operator display (Example)



Example

To program the word "Clerk01" with the letter "C" being double size.

To make the letter "C" double size character

DC **C**

=C 01 W 032

To make character size return to normal size

DC

=C 01 032

To toggle the characters to lower-case letters

SHIFT

=C 01 a 032

L **E** **R** **K**

=Clerk 01 a 032

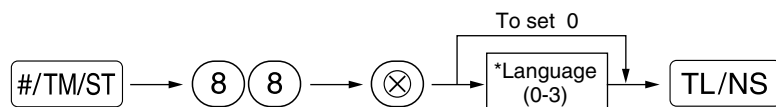
To enter numbers

NUMBER **0** **1**

=Clerk01 01 a1 032

3 Language Selection

Procedure



*Language: 0: English 1: German 2: French 3: Spanish
By default, English is set.

Key operation example

#/TM/ST 88 ⊗

0 TL/NS

Operator display

LANGUAGE CHANGE
88

THANK YOU
0

Print

PGM
#88 0

Caution

When you change the language, the texts such as clerk names (page 25), logo messages (page 25) and function texts (page 65), which you programmed, will be reset to the default settings. The language selection must be made before programming clerk names, logo messages and function texts.

4 Date and Time Programming

■ Date

For setting the date, enter the date in 8 digits using the day-month-year (DD/MM/YYYY) format, then press the #/TM/ST key.

Procedure

Date(DD/MM/YYYY) → #/TM/ST

Key operation example

22082007
(22 August, 2007)

#/TM/ST

Operator display

PGM
22082007

PGM
0.00

Print

PGM
22/08/2007 — Date

■ Time

For setting the time, enter the time in 4 digits using the 24-hour format. For example, when the time is set to 2:30 AM, enter 230; and when it is set to 2:30 PM, enter 1430.

Procedure

Time(max. 4 digits in 24-hour format) → #/TM/ST

Key operation example

1430

#/TM/ST

Operator display

PGM
1430

PGM
0.00

Print

PGM
14:30 — Time

5 Tax Programming

If you program the VAT/tax, the cash register can calculate the sales tax. In the VAT system, the tax is included in the price you enter in the register, and the tax amount is calculated when tendered according to the VAT rate programmed. In the tax system, the tax is calculated when tendered according to the tax rate programmed, and added to the price. The cash register can provide totally 6 kinds of VAT/tax systems (automatic VAT1-4, automatic tax 1-4, manual VAT 1-4, manual VAT 1, manual tax 1-4, and automatic VAT1 and automatic tax 2-4 systems) and 4 kinds of rates. By default, the cash register is pre-programmed as automatic VAT1-4 system.

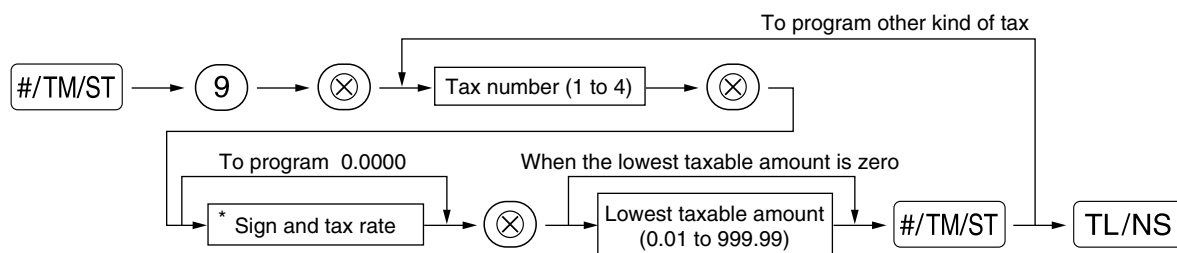
When you program tax rate(s) and taxable status for each department (by default, VAT1/tax1 is set to taxable.), tax will be automatically added to sales of items assigned to the department according to the programmed tax status for the department and the corresponding tax rate(s).

For details of the tax systems, refer to "Computation of VAT (Value Added Tax)/tax" section on page 42. To change the tax system, please refer to "Other programming" of "Various Function Selection Programming 1" section (Job code 69) on page 74.

■ Tax rate programming

The percent rate specified here is used for tax calculation on taxable subtotals.

Procedure



*Sign and tax rate: XYYY.YYYY

Tax rate=0.0000 to 100.0000

Sign -/+ = 1/0

For entering tax number, sign and tax rate and lowest taxable amount, the register displays guidance messages, "ENTER TAX NO.", "ENTER TAX RATE", and "ENTER LOWER TAX" respectively.

Key operation example

#/TM/ST 9 ⊗

2 ⊗

7 ⊗

#/TM/ST

TL/NS

Operator display

TAX RATE PROG.	9
ENTER TAX NO.	0.00
ENTER TAX RATE	2 0.00
ENTER LOWER TAX	2 0.00
ENTER TAX NO.	0.00
PGM	0.00

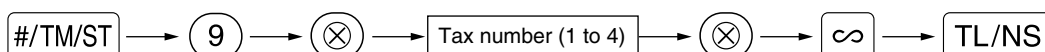
Print

PGM	
T2	7.0000%
	0.00

Note

- The lowest taxable amount is valid only when you select add on tax system. If you select VAT (Value added system), it is ignored.
- If you make an incorrect entry before pressing the third (⊗) key in programming a tax rate, cancel it with the (CL) key.
- You do not need to enter the trailing zeros of the tax rate (after the decimal point), but you do need to enter the decimal for fractions.
- If you select VAT system, the sign which you program is ignored.

To delete a tax rate, use the following sequence:

Procedure

6 Department Programming

Merchandise can be classified into a maximum of 99 departments. Items sold using the department keys can later be printed on a report shown as the quantities sold and sales amounts classified by department. The data is useful for making purchasing decisions and other store operations.

Each department also needs to belong to one of the following groups. Plus or minus attribute of a department is determined by which group it belongs to.

Group no.

- Groups 1 to 9 : Positive (+) normal dept.
- Group 10 : Negative (-) normal dept.
- Group 11 : Positive (+) hash dept.*
- Group 12 : Negative (-) hash dept.*

***Hash department**

Hash departments allow you to separate special sales from ordinary merchandise sales. The sales of hash departments do not affect the sales grand totals.

Default setting for the VAT/tax statuses and Group no. are listed below.

Dept. code:	VAT/tax status:	Group no.
Dept. 1-10	VAT 1	1
Dept. 11-20	VAT 2	1
Dept. 21	VAT 1	10
Dept. 22-99	VAT 1	1

Procedure**Note**

- To keep current setting on each programming, press the (#/TM/ST) key when the corresponding guidance message is firstly displayed.
- When pressing the (TL/NS) key in the middle of procedure, the programming will terminate and the data you entered before the press of (TL/NS) is saved.
- When pressing the (CL) key twice in the middle of procedure, the programming will terminate and the data you entered before pressing the (CL) key twice is NOT saved.
- When pressing the PLU, (⊖), (%1), (%2), (EX), (RA), (RPT/P0), (CH1), (CH2), (CR1) or (CR2) key in the middle of procedure except while entering texts or prices, the programming will move to the pressed key programming.

Key operation

Operator display

1. Specify the department code.

- (1) For dept. 1 through 20, press the department key.
 For dept. 21 through 40, press the **DEPTSHIFT** key, and then press the department key.
 Or enter dept. code using numeric key, and then press the **DEPT#** key.
 On the upper line of the display, immediately after displaying the current text data, guidance message for the next step will be displayed.
 On the lower line of the display, the corresponding dept. key code you entered will be displayed.

26
6

DEPT . 06	0.00
06	

↓

ENTER [00] KEY	0.00
06	

2. Text programming (Press **#/TM/ST** to skip. / Press **TL/NS** to terminate.)

- (1) Press **(00)** key to enter text programming.
 On the upper line of the display, immediately after displaying guidance message, the current text data will be displayed.
 On the lower line of the display, the character code corresponding to the first character of the text data will be displayed.

(00)

ENTER TEXT	0.00
06	

↓

DEPT . 06	0.68
06	

- (2) Enter an item name.

A maximum of 16 characters can be entered.
 Please refer to "Guidance for text programming" on page 13 for entering the item name.
 When you start entering a character, the current text data will be overwritten by new data.
 Use the **SPACE** and **BS** keys to delete unnecessary text data.
 Pressing the **(•)** and **(⊗)** key moves the cursor to the right and left respectively.

BOOK **SPACE** **SPACE** **SPACE**

BOOK	—	0.32
06		

- (3) Press the **#/TM/ST** key to register the item name.
 On the upper line of the display, guidance message for the next step will be displayed.
 On the lower line of the display, the current setting will be displayed.

#/TM/ST

PRICE	0.00
06	

3. Unit price programming (Press #/TM/ST to skip. / Press TL/NS to terminate.)

- (1) Enter a unit price using numeric keys.

300

PRICE	
06	300

A maximum of 6 digits can be set.

Default setting is 0.

- (2) Press the #/TM/ST key to register the unit price.

#/TM/ST

DEPT	ENTRY	TYPE
06	OPEN &	PRESET

On the upper line of the display, guidance message for the next step will be displayed.

On the lower line of the display, the current setting will be displayed.

4. Entry type programming (Press #/TM/ST to skip. / Press TL/NS to terminate.)

- (1) Press 00 key 3 times to display "PRESET".

00 00 00

DEPT	ENTRY	TYPE
06		PRESET

Each time 00 key is pressed, the display shows "INHIBITED", "OPEN", "PRESET" and "OPEN & PRESET" in this order.

Default setting is "OPEN".

When the unit price is changed from the default setting ("0") in step 3, "OPEN & PRESET" will be displayed first.

However, when the default setting is not changed, "OPEN" will be displayed first.

- (2) Press the #/TM/ST key to register the entry type.

#/TM/ST

SELECT OF TAX1	
TAX1	YES

On the upper line of the display, guidance message for the next step will be displayed.

On the lower line of the display, the current setting will be displayed.

5. VAT/tax 1 status programming (Press #/TM/ST to skip. / Press TL/NS to terminate.)

- (1) Go to (2) when the VAT/tax 1 status does not need to be changed from "TAX1 YES". Otherwise, press

00 key to display "TAX1 NO".

Each time 00 key is pressed, the display shows "TAX1 NO" and "TAX1 YES" alternately.

Choose "YES" for taxable and "NO" for non-taxable.

Default setting is "YES" for dept. code 1 to 10 and 21 to 99, and "NO" for dept. code 11 to 20.

When any entry of a taxable department is made in a transaction, tax is automatically computed according to the associated tax rate as soon as the transaction is completed.

- (2) Press the **#/TM/ST** key to register the setting.
 On the upper line of the display, guidance message for the next step will be displayed.
 On the lower line of the display, the current setting will be displayed.

#/TM/ST

SELECT OF TAX2	
TAX2	NO

6. VAT/tax2 status programming (Press **#/TM/ST** to skip. / Press **TL/NS** to terminate.)

- (1) Go to (2) when the VAT/tax 2 status does not need to be changed from "TAX2 NO". Otherwise, press **(00)** key to display "TAX2 YES".
 Each time **(00)** key is pressed, the display shows "TAX2 YES" and "TAX2 NO" alternately.
 Default setting is "NO" for dept. code 1 to 10 and 21 to 99, and "YES" for dept. code 11 to 20.

- (2) Press the **#/TM/ST** key to register the setting.
 On the upper line of the display, guidance message for the next step will be displayed.
 On the lower line of the display, the current setting will be displayed.

#/TM/ST

SELECT OF TAX3	
TAX3	NO

7. VAT/tax3 status programming (Press **#/TM/ST** to skip. / Press **TL/NS** to terminate.)

- (1) Go to (2) when the VAT/tax 3 status does not need to be changed from "TAX3 NO". Otherwise, press **(00)** key to display "TAX3 YES".
 Each time **(00)** key is pressed, the display shows "TAX3 YES" and "TAX3 NO" alternately.
 Default setting is "NO".

- (2) Press the **#/TM/ST** key to register the setting.
 On the upper line of the display, guidance message for the next step will be displayed.
 On the lower line of the display, the current setting will be displayed.

#/TM/ST

SELECT OF TAX4	
TAX4	NO

8. VAT/tax4 status programming (Press **#/TM/ST** to skip. / Press **TL/NS** to terminate.)

- (1) Go to (2) when the VAT/tax 4 status does not need to be changed from "TAX4 NO". Otherwise, press **(00)** key to display "TAX4 YES".
 Each time **(00)** key is pressed, the display shows "TAX4 YES" and "TAX4 NO" alternately.
 Default setting is "NO".

- (2) Press the **#/TM/ST** key to register the setting.
 On the upper line of the display, guidance message for the next step will be displayed.
 On the lower line of the display, the current setting will be displayed.

#/TM/ST

REGIST. TYPE	
06	NORMAL

9. Registration type programming (Press #/TM/ST to skip. / Press TL/NS to terminate.)

- (1) Go to (2) when the registration type does not need to be changed from "NORMAL". Otherwise, press 00 key to display "SICS".
Each time 00 key is pressed, the display shows "SICS" and "NORMAL" alternately.
Choose "SICS" for single item cash sale and "NORMAL" for normal sale.
Default setting is "NORMAL".
If an entry of a department programmed for SICS is made first, the sale will be finalized as a cash sale as soon as the department key is pressed. If the entry is made after entering a department not programmed for SICS, the sale will not be finalized until the TL/NS key is pressed.

- (2) Press the #/TM/ST key to register the setting.
On the upper line of the display, guidance message for the next step will be displayed.
On the lower line of the display, the current setting will be displayed.

#/TM/ST

GROUP NO.	
06	01

10. Group No. programming (Press #/TM/ST to skip. / Press TL/NS to terminate.)

- (1) Enter a group no. for the department using numeric keys.
Choose a group from groups 1 to 9 for normal positive department, group 10 for negative normal department, group 11 for positive hash department, and group 12 for negative hash department.
Default setting is group 1 for dept. code 1 to 20 and 22 to 99, and group 10 for dept. code 21.

1

GROUP NO.	
06	1

- (2) Press the #/TM/ST key to register the setting.
On the upper line of the display, guidance message for the next step will be displayed.
On the lower line of the display, the current setting will be displayed.

#/TM/ST

LIMIT DIGITS	
06	8

11. Entry digit limit programming (Press #/TM/ST to skip. / Press TL/NS to terminate.)

- (1) Enter entry digit limit using numeric key.
The entry digit limit can be set up to 8.
Default setting is 8.

7

LIMIT DIGITS	
06	7

- (2) Press the **#/TM/ST** key to register the setting.

On the upper line of the display, immediately after displaying the current text data for the next department, guidance message will be displayed.
On the lower line of the display, the corresponding department code will be displayed.

The dept. code is automatically incremented for a new department key programming, and ready for text programming for the incremented dept. code.

#/TM/ST

DEPT. 07	0.00
07	

↓

ENTER [00] KEY	0.00
07	

To program for the incremented dept. code, return to the step 2.

When you want to program for other than incremented dept. code, return to the step 1.

12. Terminate programming

- (1) Press the **TL/NS** key to terminate department code programming.

TL/NS

PGM	0.00
-----	------

Print

PGM	T1	072	From left, ABC
D06			
BOOK			
G01		3.00	

Group no. Tax status Unit price
Item name

Item:	Selection:	Print:
A SICS/Normal	Normal*	0
	SICS	1
B Entry digit limit		0-8(default:8)
C Type of unit price entry	Open and preset	3
	Preset only	2
	Open only*	1
	Inhibit department key	0

7 PLU (Price Look-Up) and Subdepartment Programming

The PLU function allows speedy key entries whereby a price is automatically called up when a code is entered. The subdepartment is a kind of "open PLU", which requires you to enter a price after the PLU code is entered. A maximum of 1800 PLU/subdepartment settings are possible. Each one belongs to a department and acquires the department's parameters (tax status, SICS and entry digit limit).

The cash register is preprogrammed so all 1800 codes are assigned as positive PLUs associated with department 1 and preset unit price "0".

Procedure

Note

- To keep current setting on each programming, press the **[#/TM/ST]** key when the corresponding guidance message is firstly displayed.
- When pressing the **[TL/NS]** key in the middle of procedure, the programming will terminate and the data you entered before the press of **[TL/NS]** is saved.
- When pressing the **[CL]** key twice in the middle of procedure, the programming will terminate and the data you entered before pressing the **[CL]** key twice is NOT saved.
- When pressing the department, **[⊖]**, **[%1]**, **[%2]**, **[EX]**, **[RA]**, **[RCPTPO]**, **[CH1]**, **[CH2]**, **[CR1]** or **[CR2]** key in the middle of procedure except while entering texts or prices, the programming will move to the pressed key programming.

Key operation

Operator display

1. Specify the PLU code.

- (1) Enter PLU code using numeric key, and then press the **[PLU/SUB]** key.

On the upper line of the display, immediately after displaying the current text data, guidance message for the next step will be displayed.

On the lower line of the display, the corresponding PLU code you entered will be displayed.

71 **[PLU/SUB]**

PLU.0071	0.00
0071	
↓	
ENTER [00] KEY	
0071	0.00

2. Text programming (Press **[#/TM/ST]** to skip. / Press **[TL/NS]** to terminate.)

- (1) Press **[00]** key to enter text programming.

On the upper line of the display, immediately after displaying guidance message, the current text data will be displayed.

On the lower line of the display, the character code corresponding to the first character of the text data will be displayed.

[00]

ENTER TEXT	0.00
0071	
↓	
PLU.0071	
0071	080

- (2) Enter an item name.

A maximum of 16 characters can be entered.

Please refer to "Guidance for text programming" on page 13 for entering the item name.

When you start entering a character, the current text data will be overwritten by new data.

Use the **[SPACE]** and **[BS]** keys to delete unnecessary text data.

Pressing the **[•]** and **[⊗]** key moves the cursor to the right and left respectively.

MELON **[SPACE]** **[SPACE]** **[SPACE]**

MELON	—	032
0071		

- (3) Press the **#/TM/ST** key to register the item name.
 On the upper line of the display, guidance message for the next step will be displayed.
 On the lower line of the display, the current setting will be displayed.

#/TM/ST

PRICE	
0071	0.00

3. Unit price programming (Press **#/TM/ST** to skip. / Press **TL/NS** to terminate.)

- (1) Enter a unit price using numeric keys.
 A maximum of 6 digits can be set.
 For a subdepartment, set the limit amount of unit price entry.
 Default setting is 0.

500

PRICE	
0071	500

- (2) Press the **#/TM/ST** key to register the unit price.
 On the upper line of the display, guidance message for the next step will be displayed.
 On the lower line of the display, the current setting will be displayed.

#/TM/ST

ENTER DEPT#	
0071	01

4. Associated dept. programming (Press **#/TM/ST** to skip. / Press **TL/NS** to terminate.)

- (1) Enter an associated dept. code using numeric key.
 Default setting is dept. 1.
 For deleting PLU, enter 0 instead of an associated dept. code.

1

ENTER DEPT#	
0071	1

- (2) Press the **#/TM/ST** key to register the associated dept. code.
 On the upper line of the display, guidance message for the next step will be displayed.
 On the lower line of the display, the current setting will be displayed.

#/TM/ST

SIGN	
0071	(+)

5. Sign programming (Press **#/TM/ST** to skip. / Press **TL/NS** to terminate.)

- (1) Go to (2) when the sign does not need to be changed from "(+)". Otherwise, press **(00)** key to display "(-)".
 Each time **(00)** key is pressed, the display shows "(-)" and "(+)" alternately.
 Choose "(+)" for positive entry and "(-)" for negative entry.
 Default setting is "(+)" for all 1800 PLU codes.

- (2) Press the **#/TM/ST** key to register setting.
 On the upper line of the display, guidance message for the next setting will be displayed.
 On the lower line of the display, the current setting will be displayed.

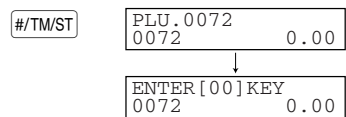
#/TM/ST

ENTER PLU TYPE	
0071	PLU

6. Function programming (Press #/TM/ST to skip. / Press TL/NS to terminate.)

- (1) Go to (2) when the function does not need to be changed from "PLU". Otherwise, press 00 key to display "SUBDEPT".
Each time 00 key is pressed, the display shows "SUBDEPT" and "PLU" alternately.
Choose "PLU" for using the PLU code as PLU and "SUBDEPT" for using the PLU code as subdepartment.
Default setting is "PLU".

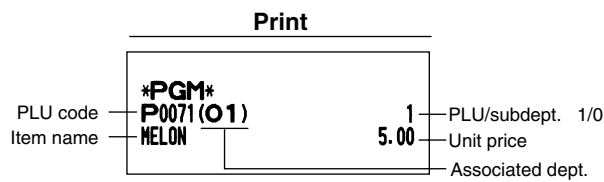
- (2) Press the #/TM/ST key to register the setting.
On the upper line of the display, immediately after displaying the current text data for the next PLU, guidance message will be displayed.
On the lower line of the display, the corresponding PLU code will be displayed.
The PLU code is automatically incremented for a new PLU programming, and ready for text programming for the incremented PLU code.



To program for the incremented PLU code, return to the step 2.
When you want to program for other than incremented PLU code, return to the step 1.

7. Terminate programming

- (1) Press the TL/NS key to terminate PLU programming.



Sign

- In case negative is programmed for a PLU/subdepartment whose associated department is positive department, the PLU/subdepartment serves as a coupon PLU/subdepartment, and split price entry is disallowed for the PLU/subdepartment. It is invalid to program positive for a PLU/subdepartment whose associated department is negative.

8 Text Programming

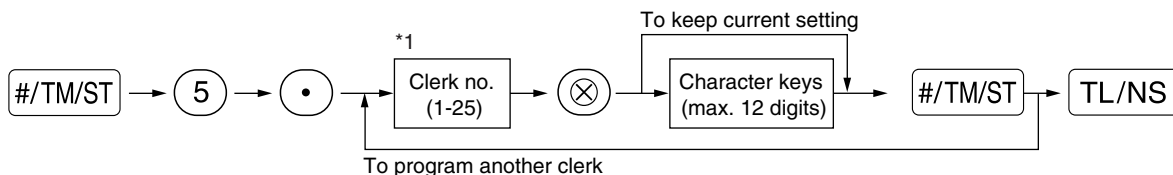
Please refer to "Guidance for text programming" on page 13 as for how to entering characters.

When you press an appropriate number key (job code number) and press the $\odot$ key for text entry just after you start programming with the $\#/TM/ST$ key, the cash register will automatically be ready for text entry.

Then a little after displaying guidance message indicating what programming you are in, the register may ask you to enter the first parameter. Referring to the corresponding "Procedure", enter a parameter and start character entries.

■ Clerk names (12 digits)

Procedure



Key operation example

$\#/TM/ST$ 5 $\odot$

1 $\otimes$

DAVID $\square$ $\square$ $\square$ $\square$ *2

$\#/TM/ST$

TL/NS

Operator display

CLERK NAME PROG.	5
ENTER CLERK NO.	0.00
CLERK 01	067
DAVID	— 032
CLERK NAME PROG.	0.00
ENTER CLERK NO.	0.00
PGM	0.00

Print

PGM	01
C#01 DAVID	

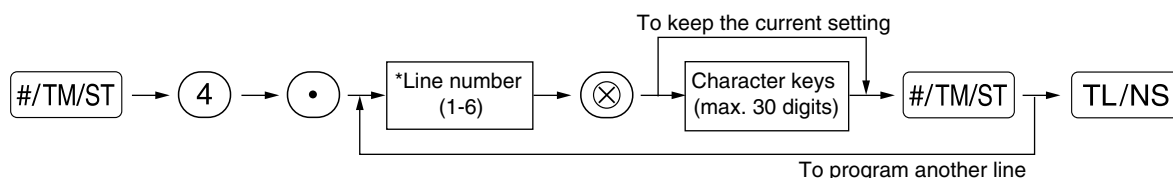
*1 For clerk no. 1 to 4, the names "CLERK 01" to "CLERK 04", are automatically assigned respectively by default. You also need to assign clerk codes for each clerk. By default, clerk codes 1 to 4 are programmed for clerk no. 1 to 4. For clerk no. 5 through 25, refer to "Clerk code assignment" on page 76.

*2 Use the $\square$ and $\square$ keys to delete unnecessary text data as necessary.

■ Logo messages (6 lines and 30 digits for each line)

The register can print programmed messages on every receipt. On the standard model, a 6-line logo message is printed on the receipt. If you want to print in other logo message format, please change the format. For the programming details, refer to page 76. The options are listed below:

Procedure



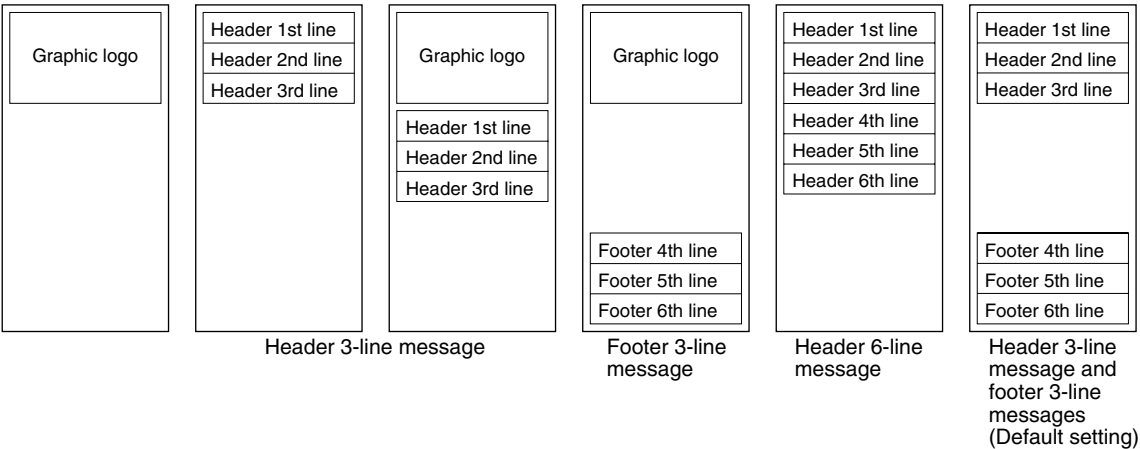
* "Header 3-line message" type: 1 to 3

"Footer 3-line message" type : 4 to 6

"Header 6-line message" type: 1 to 6

"Header 3-line and footer 3-line message" type: 1 to 6 (1 to 3 as header, 4 to 6 as footer)

Logo message print format (6 types)



To print the logo message “THANK YOU” using double sized characters and centering on the third line.

Key operation example	Operator display	Print
#/TM/ST 4 ●	LOGO TEXT PROG. 4	*PGM* THANK YOU
	ENTER LINE NO. 0.00	
3 ⊗	$\overline{3}$ =X=E=-=A 032	
SPACE SPACE SPACE SPACE SPACE SPACE	3 — =X=E=-=A 032	
DC	3 $\overline{W}$ =X=E=-=A 032	
THANK SPACE YOU	H=A=N=K= =Y=O=U 3 $\overline{W}$ 032	
DC	H=A=N=K= =Y=O=U 3 032	
SPACE SPACE SPACE SPACE SPACE SPACE	K= =Y=O=U — 3	
#/TM/ST	LOGO TEXT PROG. 0.00	
	ENTER LINE NO. 0.00	
TL/NS	PGM 0.00	

- Note
- A 6-line logo message is preprogrammed when shipped. Please start entering from the first line when you first program a logo message.
 - The preprogrammed messages are displayed for each line in the logo message programming. In the example above, "XE-A303" is displayed. Please overwrite the preprogrammed message entering your desired one when programming.

9 Programming Other Necessary Items

Decimal point position (tab) setting for domestic currency

By default, "2" is selected. When your country has a different tab setting, you must change the setting. Please refer to "Other programming" of "Various Function Selection Programming 1" (Job code 61) on page 70.

Rounding system

When your country has a special rounding system, such as Australia, Switzerland, Norway, Sweden, Denmark and South Africa, you must change the setting to suit your country. For the setting for Australia, Switzerland, Norway and South Africa, please refer to "Other programming" of "Various Function Selection Programming 1" (Job code 67) on page 72. For the setting for Sweden and Denmark, please refer to "Other programming" of "Various Function Selection Programming 1" (Job code 69) on page 74.

STEP 4

BASIC SALES ENTRY

1 Basic Sales Entry Example

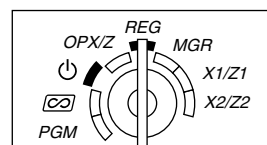
Listed below is a basic sales entry example when selling items by cash. For operation details, please refer to "Additional Information for BASIC SALES ENTRY" on page 36.

Mode switch setting

1. Turn the mode switch to the REG position.

Clerk assignment

2. Enter your clerk code. (For example, clerk code is 1. Press the **1** and **CLK#** key in this order.) The clerk codes 1 to 4 can be assigned by default.



Item entries

3. Enter the price for the first department item. (For example, for 15.00, enter **1****5****00**, and press the appropriate department key.)

For department 21 to department 40, press the **DEPTSHIFT** key first before pressing the department key.

For department 41 and above, enter the department code using numeric keys and press the **DEPT#** key, then enter the price and press the **DEPT#** key again.

4. Repeat step 3 for all department items.

Displaying subtotals

5. Press the **#/TM/ST** key to display the amount due.

Finalizing the transaction

6. Enter the amount received from the customer. (You can omit this step if the amount tendered is the same as the subtotal.)
7. Press the **TL/NS** key, and the change due is displayed and the drawer is opened.
8. Tear off the receipt and give it to the customer with his or her change.
9. Close the drawer.

Key operation example

Clerk assignment → **1** **CLK#**

Item entries { **1500** **1**²¹
2300 **2**²²

Displaying subtotal → **#/TM/ST**

Amount tendered → **4000**

Finalizing the transaction → **TL/NS**

Operator display

DAVID	*01*
-01-	
DEPT. 01	*01*
15.00	
DEPT. 02	*01*
23.00	
SUBTOTAL	*01*
38.00	
	01
	4000
CHANGE	*01*
2.00	

Receipt print

SHARP PRESENTS THE XE-A303		Logo message (Header)
22/08/2007 14:33	01	Date/Time/Clerk code
000000#000055	DAVID	Register number/Consecutive number/Clerk name
DEPT. 01	*15.00	Items
DEPT. 02	*23.00	Price
SUBTOTAL	*38.00	
TAX1 ST	*38.00	
VAT 1	*5.24	
NET 1	*32.76	
ITEMS	20	Total quantity
***TOTAL	*38.00	Total amount
CASH	*40.00	Cash tendering/amount received
CHANGE	*2.00	Change
SHARP IS THE BEST		Logo message (Footer)

(In this example, tax system is set to automatic VAT 1 and the tax rate is set to 16.00%.)

2 PLU Entry

Enter a PLU code using numeric keys and press the **PLU/SUB** key.

Key operation example		Operator display	Receipt print
Item entries	1 PLU/SUB	PLU.0001 *01* 1.50	PLU.0001 *1.50
	71 PLU/SUB	PLU.0071 *01* 15.00	PLU.0071 *15.00
	141 PLU/SUB	PLU.0141 *01* 36.20	PLU.0141 *36.20
	TL/NS	CASH *01* 52.70	ITEMS 30 CASH *52.70

STEP 5 CORRECTION

You can correct entries you mistakenly made in several ways, such as using the void $\square$ key, or making entries in the void mode. This section explains how to make such entries.

Note The back light of the operator display turns red when you make the following entries:

- Void entries
- Subtotal void entries
- Refund entries
- Entries in the void mode
- The second press of $\square$ for error escape

1 Cancellation of the Numeric Entry

If you make an incorrect numeric entry, you can clear the entry by pressing the $\square$ key only before pressing a department key, PLU/subdepartment key, the $\square$ key, the $\square$ key, the $\square$ key, the $\square$ key or the $\square$ key. In this operation, the back light of the operator display does not turn red.

2 Correction of the Last Entry (direct void)

If you make an incorrect entry relating to a department, PLU/subdepartment, percentage ($\square$ and $\square$), discount ($\square$) or refund, you can void this entry by pressing the $\square$ key immediately after the incorrect entry.

Key operation example	Operator display	Receipt print
1250 $\square$	DEPT.06 *01* 12.50	DEPT.06 *12.50
$\square$	DEPT.06 *01* -12.50	DEPT.06 -12.50
2 $\square$	PLU.0002 *01* 1.50	PLU.0002 *1.50
$\square$	PLU.0002 *01* -1.50	PLU.0002 -1.50
600 $\square$	DEPT.08 *01* 6.00	DEPT.08 *6.00
$\square$	%1 *01* -0.90	%1 -15.00%
$\square$	%1 *01* 0.90	%1 -0.90
1 $\square$	PLU.0001 *01* 3.28	PLU.0001 *3.28
28 $\square$	(-) *01* -0.28	(-) -0.28
$\square$	(-) *01* 0.28	(-) *0.28
250 $\square$	DEPT.06 *01* -2.50	DEPT.06 R-2.50
$\square$	DEPT.06 *01* 2.50	DEPT.06 R*2.50
$\square$	CASH *01* 9.28	ITEMS CASH *9.28

3 Correction of the Next-to-last or Earlier Entry (indirect void)

You can void any incorrect department entry, PLU/subdepartment entry or item refund entry made during a transaction if you find it before finalizing the transaction (e.g. pressing the **TL/NS** key). This function is applicable to department, PLU/subdepartment and refund entries only.

Press the **∞** key just before you press a department key, **DEPT#** key or **PLU/SUB** key. For the refund indirect void, press the **∞** key after you press the **RF** key.

Key operation example

Operator display

Receipt print

1310 **6**²⁶

1755 **7**²⁷

10 **PLU/SUB**

12 **PLU/SUB**

250 **RF** **6**²⁶

Correction of a department entry → 825 **7**²⁷

Correction of a PLU entry → 1310 **∞** **6**²⁶

Correction of a refund entry → 12 **∞** **PLU/SUB**

250 **RF** **∞** **6**²⁶

TL/NS

DEPT.06	*01*
	13.10
DEPT.07	*01*
	17.55
PLU.0010	*01*
	7.15
PLU.0012	*01*
	3.60
DEPT.06	*01*
	-2.50
DEPT.07	*01*
	8.25
DEPT.06	*01*
	-13.10
PLU.0012	*01*
	-3.60
DEPT.06	*01*
	2.50
CASH	*01*
	32.95

DEPT.06	*13.10
DEPT.07	*17.55
PLU.0010	*7.15
PLU.0012	*3.60
DEPT.06	R-2.50
DEPT.07	*8.25
DEPT.06	00 -13.10
PLU.0012	00 -3.60
DEPT.06	R 00 *2.50

ITEMS	30
CASH	*32.95

4 Subtotal Void

You can void an entire transaction. Once subtotal void is executed, the transaction is aborted and the register issues a receipt. This function does not work when more than 30 items have been entered.

Key operation example	Operator display	Receipt print
1310 2 ²²	DEPT.02 *01* 13.10	DEPT.02 *13.10 DEPT.02 *13.10 DEPT.06 *17.55 PLU.0010 *7.15 PLU.0035 *10.00 SUBTOTAL *60.90 SBTL ^m -60.90 ***TOTAL *0.00
2 ²²	DEPT.02 *01* 2 13.10	
1755 6 ²⁶	DEPT.06 *01* 17.55	
10 PLU/SUB	PLU.0010 *01* 7.15	
35 PLU/SUB	PLU.0035 *01* 10.00	
Subtotal void {	#/TM/ST	
	SUBTOTAL *01* 60.90	
	∞	
	01 0.00	
	#/TM/ST	
	***TOTAL *01* 0.00	

5 Correction of Incorrect Entries not Handled by the Direct or Indirect Void Function

Any errors found after the entry of a transaction has been completed or during an amount tendered entry cannot be voided. These errors must be corrected by the manager.

The following steps should be taken:

1. If making the amount tendered entry, finalize the transaction.
2. Make correct entries from the beginning.
3. Hand the incorrect receipt to the manager for its cancellation.

STEP 6

FULL SALES REPORT (Z REPORT)

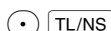
For reading and resetting the sales data, use the resetting function (Z). Resetting prints all sales information and clears the entire memory except for the GT1 through GT3, Training GT, reset count, and consecutive number.

For more information about resetting (Z) of sales totals, refer to "READING (X) AND RESETTING (Z) OF SALES TOTALS" on page 84.

Full sales report

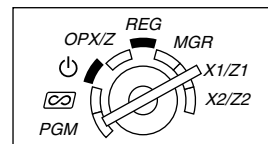
Put the manager key in the mode switch and turn it to the X1/Z1 position.

Key operation



Operator display

X1Z1
0.00



Sample report

Z1		Mode title*1
	Z1 0002	Reset counter
GT1	*00000001215.03	Net grand total (GT2-GT3)
GT2	*00000001505.60	Grand total of plus registration
GT3	-00000000290.57	Grand total of minus registration
TR	*00000000000.00	Grand total of training mode registration
* DEPT *		
D01	21 Q	Dept. code
DEPT. 01	*101.00	Sales q'ty
	19.42%	Sales amount
D02	16 Q	Percentage of sales amount of group total
DEPT. 02	*68.85	
	13.24%	
D50	18 Q	
DEPT. 50	*117.00	
	22.50%	
GROUP1	63 Q	Group1 total
	*520.10	
	89.29%	
GROUP9	8 Q	
	*62.40	
	10.71%	
*DEPT TL	71 Q	"+" dept. counter and total
	*582.50	
	100.00%	
D96	4 Q	
DEPT. 96	-40.00	
D97	3 Q	
DEPT. 97	-15.00	
DEPT (-)	7 Q	"-" dept. counter and total
	-55.00	
D98	2 Q	
DEPT. 98	*10.80	
*HASH TL	2 Q	Hash "+" dept. counter and total
	*10.80	
D99	1 Q	
DEPT. 99	-11.00	
HASH (-)	1 Q	Hash "-" dept. counter and total
	-11.00	
*TRANS *		

*TRANS. *		
(-)	1 Q	Subtotal ⊖ counter and total
	-3.00	
%1	1 Q	Subtotal percent counter and total
	-0.69	
%2	1 Q	
	-0.46	
NET 1	*523.35	Net sales total
TAX1 ST	*523.15	Taxable 1 total
VAT 1	*72.16	VAT 1 total
TAX2 ST	*166.85	
VAT 2	*10.92	
TAX3 ST	*166.85	
VAT 3	*8.70	
TAX4 ST	*166.85	
VAT 4	*9.44	
TTL TAX	*101.22	Tax total
NET	*422.13	Net total without tax
(-)	1 Q	Item ⊖ counter and total
	-1.00	
%1	1 Q	Item percent counter and total
	-3.45	
%2	1 Q	
	-0.45	
CP PLU	1 Q	Coupon PLU counter and total
	-1.00	
REFUND	1 Q	Refund counter and total
	*2.50	
REG	1 Q	REG mode void counter and total
	*32.00	
VOID MODE	1 Q	Void mode transaction counter and total
	*10.00	
MGR	1 Q	Manager item void counter and total
	*10.00	
SBTL	1 Q	Subtotal void counter and total
	*45.60	
HASH	1 Q	Hash void counter and total
	*11.00	
HASH RF	1 Q	Hash refund counter and total
	*5.40	

(Continued to the next page)

NO SALE	1 Q		No-sales counter
***RA	1 Q		
		*48.00	} Received on account counter and total
***PO	1 Q		
		*23.00	} Paid out counter and total
CA/CHK	1 Q		
		*10.00	} Cash cheque counter and total
GUEST	20 Q		Customer counter
PAID TL		*524.20	Paid total
AVE.		*26.21	Paid total average per customer
CASH	10 Q		
		*242.90	} Cash counter and total
CHECK1	2 Q		
		*20.00	} Cheque1 sales counter and total
CHECK2	1 Q		
		*23.00	
CREDIT1	1 Q		
		*32.00	} Credit1 sale and tendering counter and total
CREDIT2	1 Q		
		*46.00	
EXCH1	1 Q		
		US \$9.40	} Exchange counter and total (in preset rate entry)
DOM. CUR1		*10.00	Domestic currency
EXCH2	2 Q		
		95.63	} Exchange manual rate entry counter and total
DOM. CUR2		*75.00	
EX1 CHK	1 Q		
		US \$30.08	} Exchange check (in preset rate entry)
DOM. CUR1		*32.00	
EX1 CR	1 Q		
		US \$43.71	} Exchange credit (in preset rate entry)
DOM. CUR1		*46.50	
***CID		*254.70	Cash in drawer
*CH ID		*53.00	Cheque in drawer
CA/CH ID		*307.70	Cash + cheque in drawer
CHK/CG		*3.20	Change total for cheque tendering

*1: When you take X1 report, "X1" is printed.

*2: Printed in the Z1 report only.

*3: When "Memory of difference due to rounding" is set to "yes" the following is displayed here. For changing the setting, refer to "Other programming" (job code 67).

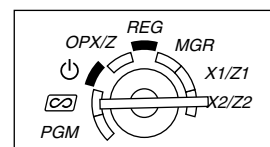
DIFFER	*0.01
--------	-------

*4: When manual tax 1-4 system or auto tax 1-4 system is selected, the following is displayed here. For changing the setting, refer to "Other programming" (job code 69).

NET2	*524.39	Sales total including tax
------	---------	---------------------------

■ Periodic consolidation

Put the manager key in the mode switch and turn it to the X2/Z2 position.



• Full sales report

Key operation

• TL/NS

Operator display

X2Z2
0.00

Sample report

Z2		Mode title*1
	Z1 0002	Reset counter of daily total
	Z2 0002	Reset counter of periodic consolidation
GT1	*00000001215.03	Grand total
GT2	*00000001505.60	
GT3	-00000000290.57	
TR	*00000000000.00	

The subsequent printouts are the same in format as in the X1/Z1 full sales report.

*1: When you take X2 report, "X2" is printed.

*2: Printed in the Z2 report only



• Daily net report

Key operation

• #/TM/ST

Operator display

X2Z2
0.00

Sample report

Z2		Mode title*
* DAILY *		Date
01/01	21 Q	Customer counter
	*87.84	Sales total
02/01	17 Q	
	*70.54	
03/01	19 Q	
	*101.70	
29/01		
	29 Q	
	*131.27	
30/01		
	22 Q	
	*2380.70	
***TOTAL		
	108 Q	Customer total
	*2772.05	Net amount total

*: When you take X report, "X2" is printed instead of "Z2".

Part2 FOR THE OPERATOR

OTHER BASIC SALES ENTRIES

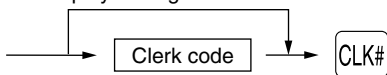
1 Additional Information for BASIC SALES ENTRY

Clerk assignment

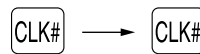
Prior to any item entries, clerks must enter their clerk codes into the register. However, the code entry may not be necessary when the same clerk handles the consecutive transactions. The clerk codes 1 to 4 can be assigned by default.

■ Sign-on (in REG, MGR, mode)

To display the signed-on clerk code



■ Sign-off (in REG, MGR, mode)



Receipt ON/OFF function

When you use the printer to issue receipts, you can disable receipt printing in the REG mode to save paper using the receipt ON/OFF function. To disable receipt printing, press the  key in the OP X/Z position. This key toggles the receipt printing status ON and OFF.

The register will print reports regardless of the receipt state, so the paper roll must be installed.

To issue a receipt when receipt ON/OFF function is set to OFF:

If your customer wants a receipt after you finalized a transaction with the receipt ON/OFF function being OFF status, press the  key. This will produce a receipt. However, if more than 30 items were entered, the receipt will be issued in a summary receipt.

Copy receipt

You can print a copy receipt by pressing the  key when the receipt ON/OFF function is in the “ON” status. To realize this function, you must enable the function. Please refer to page 71 (Job code 63).

Power Save Mode

The register will enter into power save mode when no entries are performed based on the pre-programmed time limit (by default, 30 minutes).

When the register goes to the power save mode, all display lights will turn off except the decimal point at the leftmost position. The register will return to the normal operation mode when any key is pressed or a mode is changed with the mode key. Please note when the register is recovered by a key entry, its key entry is invalid. After the recovery, start the key entry from the beginning.

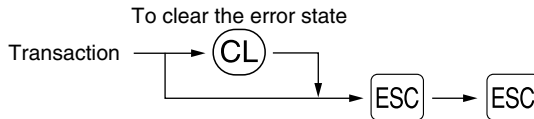
2 Error Warning

In the following examples, your register will go into an error state accompanied with a warning beep and a corresponding error message. Clear the error state by pressing the  key and take the proper action. Please refer to the error message table on page 98.

- Enter over a 32-digit number (entry limit overflow): Cancel the entry and re-enter the correct number.
- An error in key operation: Clear the error and continue operation.
- An entry beyond a programmed amount entry limit: Check to see if the entered amount is correct. If it is correct, it can be rung up in the MGR mode. Contact your manager.
- An including-tax subtotal exceeds eight digits: Delete the subtotal by pressing the  key and press the , , ,  or  key to finalize the transaction.

Error escape function

To quit a transaction due to an error or an unforeseen event, use the error escape function as shown below:



After the second **ESC** key press, the back light of the operator display turns red. The transaction is voided (treated as a subtotal void) and the receipt is issued by this function. If you have already entered a tendered amount, the operation is finalized as a cash sale.

3 Item Entries

Single item entries

1. Department entries

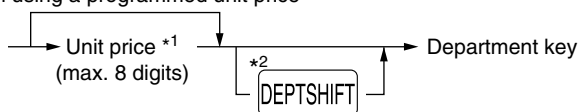
The cash register provides a maximum of 99 departments for a merchandise classification. Group attributes, such as taxable status, are applied to items when they are entered to the departments.

• When using the department keys (for department 1 to 40)

For department 1 to 20, enter a unit price and press a department key. If you use a programmed unit price, press a department key only.

For department 21 to 40, enter a unit price, press the **DEPTSHIFT** key and press a department key. If you use a programmed unit price, press the **DEPTSHIFT** key and press a department key.

When using a programmed unit price



*1 Less than the programmed upper limit amounts
When zero is entered, only the sales quantity is added.

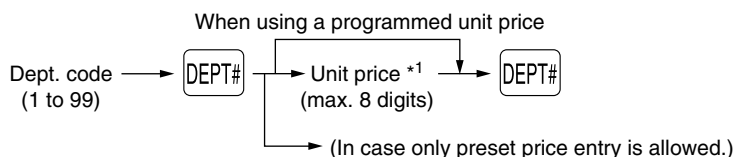
*2 For the departments 21 through 40, press the **DEPTSHIFT** key.

Note

Please note if you press the same key after using the **DEPTSHIFT** key, it acts as a repeat entry. For example, when you register an item of dept. 21 using the **DEPTSHIFT** key and then an item of dept. 1 using the preset unit price, you should use the department code entry key described below for the dept. 1 item. If you just press the **1²¹** key to register dept. 1 item, it will act as a repeat entry of dept. 21 item.

• When using the department code entry key

Enter a department (dept.) code and press the **DEPT#** key, then enter a unit price and press the **DEPT#** key again. If you use a programmed unit price, enter a dept. code and press the **DEPT#** key.



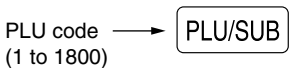
*1 Less than the programmed upper limit amounts
When zero is entered, only the sales quantity is added.

2. PLU/subdepartment entries

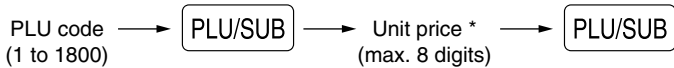
For another merchandise classification, the cash register provides a maximum of 1800 PLUs/subdepartments. PLUs are used to call up preset prices by a code entry. Subdepartments are used to classify merchandise into smaller groups under the departments. Every PLU and subdepartment has a code from 1 to 1800, and should belong to a department to obtain attributes of that department.

By default, the cash register is preprogrammed to PLU mode, and all of the 1800 codes are set to PLU mode and zero for unit price.
For more information on PLU/subdepartment programming, refer to “PLU (Price Look-Up) and Subdepartment Programming” on page 22.

• **PLU entries**

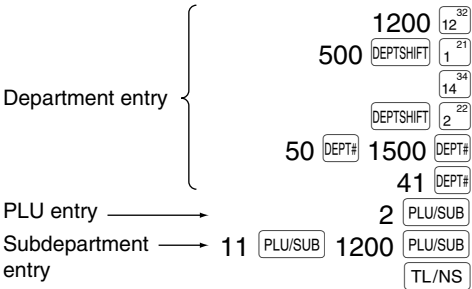


• **Subdepartment (open PLU) entries**



* Less than the programmed upper limit amounts
When zero is entered, only the sales quantity is added.

Key operation example



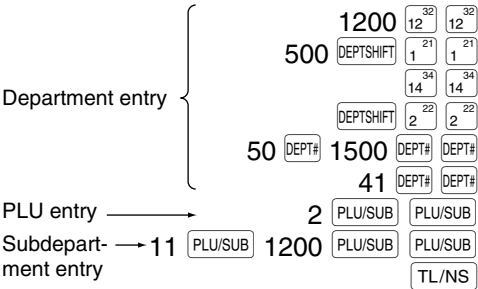
Receipt print

DEPT. 12	*12.00
DEPT. 21	*5.00
DEPT. 14	*8.25
DEPT. 22	*3.25
DEPT. 50	*15.00
DEPT. 41	*2.50
PLU. 0002	*1.50
PLU. 0011	*12.00
ITEMS	8Q
CASH	*59. 50

■ **Repeat entries**

You can use this function for entering a sale of two or more of the same items. Consecutive pressing of a department key, DEPT# key or PLU/SUB key is as shown on key operation example below.

Key operation example



Receipt print

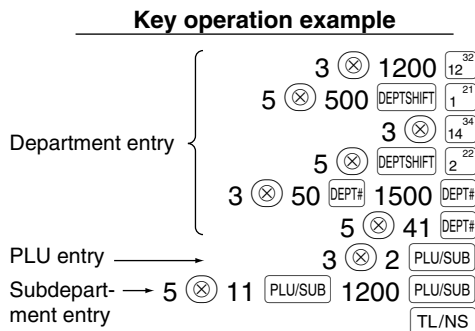
DEPT. 12	*12.00
DEPT. 12	*12.00
DEPT. 21	*5.00
DEPT. 21	*5.00
DEPT. 14	*8.25
DEPT. 14	*8.25
DEPT. 22	*3.25
DEPT. 22	*3.25
DEPT. 50	*15.00
DEPT. 50	*15.00
DEPT. 41	*2.50
DEPT. 41	*2.50
PLU. 0002	*1.50
PLU. 0002	*1.50
PLU. 0011	*12.00
PLU. 0011	*12.00
ITEMS	16Q
CASH	*119. 00

Multiplication entries

When selling a large quantity of items, it is convenient to use the multiplication entry method. Enter quantity using numeric keys and press the $\otimes$ key before starting item entry as shown in the example below.

Note

When programmed to allow fractional quantity entries, you can enter up to four integers and three digit decimal, though the quantity is counted as one for sales reports. To enter a fractional quantity, use the decimal point key between integer and decimal, as $(7) \cdot (5)$ for entering 7.5.

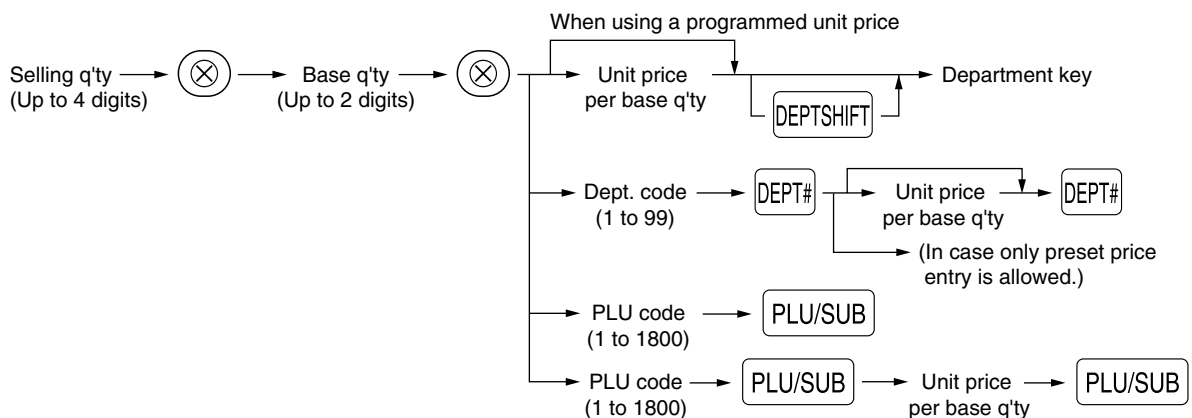


Receipt print

3x 12.00	
DEPT. 12	*36.00
5x 5.00	
DEPT. 21	*25.00
3x 8.25	
DEPT. 14	*24.75
5x 3.25	
DEPT. 22	*16.25
3x 15.00	
DEPT. 50	*45.00
5x 2.50	
DEPT. 41	*12.50
3x 1.50	
PLU. 0002	*4.50
5x 12.00	
PLU. 0011	*60.00
ITEMS	320
CASH	*224.00

Split pricing entries

You will use this function when your customer wants to purchase more or less than the base quantity of a loose item. To make split pricing entries, follow the procedure below:



Note

- If you live in Australia, please change the printing format for this function. Please refer to "Other programming" (Job code 68) of "Various Function Selection Programming 1" on page 73.
- When programmed to allow fractional quantity entries, you can enter up to four integers and three digit decimal. To enter a fractional quantity, use the decimal point key between integer and decimal, as $(7) \cdot (5)$ for entering 7.5.

Key operation example

Department entry { 7 10 600

PLU entry { 8 12 35

Receipt print

7x 10/ 6.00	
DEPT.07	*4.20
8x 12/ 10.00	
PLU.0035	*6.67
ITEMS	20
CASH	*10.87

When Australian printing format is selected

7x 6.00 PER 10	
DEPT.07	*4.20

Single item cash sale (SICS) entry

- This function is useful when a sale is for only one item and is for cash. This function is applicable only to those departments that have been set for SICS or to their associated PLUs or subdepartments.
- The transaction is complete and the drawer opens as soon as you press the department key, key or key.

Key operation example

For finishing the transaction → 250

Receipt print

DEPT.01	*2.50
ITEMS	10
CASH	*2.50

Note

If an entry to a department or PLU/subdepartment set for SICS follows the ones to departments or PLUs/subdepartments not set for SICS, it does not finalize and results in a normal sale.

4 Displaying Subtotals

The subtotal is displayed by pressing the key. When you press it, the subtotal of all entries which have been made is displayed with the function message "SUBTOTAL".

Note

Subtotal will not be printed on a receipt on the current factory setting. If you want to print it, change the setting by programming. Refer to "Receipt print format" (Job code 7) on page 69.

5 Finalization of Transaction

■ Cash or cheque tendering

Press the **#/TM/ST** key to get a subtotal, enter the amount tendered by your customer, then press the **TL/NS** key if it is a cash tender or press a cheque key (**CH1** or **CH2**) if it is a cheque tender. When the amount tendered is greater than the amount of the sale, the register will show the change due amount with the function message "CHANGE". Otherwise the register will show a deficit with the function message "DUE". You now must make a correct tender entry.

Cash tendering

Key operation example

}
1000 **#/TM/ST**
TL/NS

Receipt print

ITEMS	3Q
***TOTAL	*7. 35
CASH	*10. 00
CHANGE	*2. 65

Cheque tendering

Key operation example

}
1000 **#/TM/ST**
CH1

Receipt print

ITEMS	3Q
***TOTAL	*7. 35
CHECK1	*10. 00
CHANGE	*2. 65

■ Cash or cheque sale that does not require tender entry

Enter items and press the **TL/NS** key if it is a cash sale or press a cheque key if it is a cheque sale. The register will display the total sale amount.

Key operation example

300 **6** ²⁰
10 **PLU/SUB**
TL/NS

Receipt print

DEPT. 06	*3. 00
PLU. 0010	*7. 15
ITEMS	2Q
CASH	*10. 15

In the case of cheque 1 sale

ITEMS	2Q
CHECK1	*10. 15

Note

When programmed not to allow "direct non-tender finalization after tendering" (Job code 63, refer to page 71), you must always enter a tender amount.

■ Credit sale

Enter items and press a credit key (**CR1** or **CR2**).

Key operation example

2500 **6**²⁶
3250 **7**²⁷
CR1

Receipt print

DEPT. 06	*25.00
DEPT. 07	*32.50
ITEMS	20
CREDIT1	*57.50

■ Mixed-tender sale

You can perform mixed-tendering of cheque and cash, cash and credit, and cheque and credit.

Key operation example

}
/ TM / ST
950 TL / NS
CR2

Receipt print

ITEMS	30
***TOTAL	*49.50
CASH	*9.50
CREDIT2	*40.00

6 Computation of VAT (Value Added Tax)/tax

■ VAT/ tax system

The cash register may be programmed for the following six VAT/tax systems. The cash register is pre-programmed as automatic VAT 1-4 system.

Automatic VAT 1-4 system (Automatic operation method using programmed percentages)

This system, at settlement, calculates VAT for taxable 1 through 4 subtotals by using the corresponding programmed percentages.

Automatic tax 1-4 system (Automatic operation method using programmed percentages)

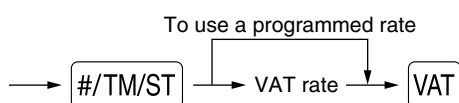
This system, at settlement, calculates taxes for taxable 1 through 4 subtotals by using the corresponding programmed percentages, and also adds the the calculated taxes to those subtotals, respectively.

Manual VAT 1-4 system (Manual entry method using programmed percentages)



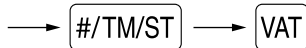
This system provides the VAT calculation for taxable 1 through 4 subtotals. This calculation is performed using the corresponding programmed percentages when the **VAT** key is pressed just after the **#/TM/ST** key.

Manual VAT 1 system (Manual entry method for subtotals that uses VAT 1 preset percentages)



This system enables the VAT calculation for the then subtotal. This calculation is performed using the VAT 1 preset percentages when the **VAT** key is pressed just after the **#/TM/ST** key. For this system, the keyed-in tax rate can be used.

Manual tax 1-4 system (Manual entry method using preset percentages)



This system provides the tax calculation for taxable 1 through 4 subtotals. This calculation is performed using the corresponding programmed percentages when the **VAT** key is pressed just after the **#/TM/ST** key. After this calculation, you must finalize the transaction.

Automatic VAT 1 and automatic tax 2-4 system

This system enables the calculation in the combination with automatic VAT 1 and automatic tax 2 through 4. The combination can be any of VAT1 corresponding to taxable 1 and any of tax 2 through 4 corresponding to taxable 2 through taxable 4 for each item. The tax amount is calculated automatically with the percentages previously programmed for these taxes.

Note

- The tax status of PLU/subdepartment depends on the tax status of the department which the PLU/subdepartment belongs to.
- VAT/tax assignment symbol can be printed at the fixed right position near the amount on the receipt as follows:

VAT1/tax1 —————> A
 VAT2/tax2 —————> B
 VAT3/tax3 —————> C
 VAT4/tax4 —————> D

When the multiple VAT/tax is assigned to a department or a PLU, a symbol of the lowest number assigned to VAT/tax rate will be printed. For programming, please refer to "Various Function Selection Programming 1" (Job code 66) on page 72.

Key operation example

(When the manual
VAT 1-4 system
is selected)

1000 ²¹
 #/TM/ST
 VAT
 TL/NS

Receipt print

DEPT. 01	*10.00
SUBTOTAL	*10.00
TAX1 ST	*10.00
VAT 1	*1.38
NET 1	*8.62
ITEMS	10
CASH	*10.00

OPTIONAL FEATURES

1 Auxiliary Entries

■ Percent calculations (premium or discount)

Your register provides the percent calculation for the subtotal and/or each item entry depending on the programming. Refer to "Programming for [%1] and [%2]" for the programming.

- Percentage: 0.01 to 100.00% (Depending on the programming)

Application of preset rate (if programmed) and manual rate entry are available.

Percent calculation for subtotal

Key operation example

4
 140 ²⁶
 570 ²⁷

 10

Receipt print

4x 1.40	
DEPT. 05	*5.60
DEPT. 07	*5.70
SUBTOTAL	*11.30
	-10%
%1	-1.13
ITEMS	50
CASH	*10.17

Percent calculation for item entries

Key operation example

800 ²⁶
 7 5
 15

(When premium and 15% are programmed for the [%2] key)

Receipt print

DEPT. 06	*8.00
	-7.5%
%1	-0.60
PLU. 0015	*5.00
	15.00%
%2	*0.75
ITEMS	20
CASH	*13.15

■ Deduction entries

Your register allows you to deduct a preset amount or a certain amount manually entered, which are less than a programmed upper limit. These calculations can be after the entry of an item and/or the computation of subtotal depending on the programming. Refer to "Programming for for the programming.

Deduction for subtotal

Key operation example

575 ²⁶
 10

 100

Receipt print

DEPT. 06	*5.75
PLU. 0010	*7.15
SUBTOTAL	*12.90
(-)	-1.00
ITEMS	20
CASH	*11.90

Deduction for item entries

Key operation example

675 ²⁷

(When a deduction amount of 0.75 is programmed.)

Receipt print

DEPT. 07	*6. 75
(-)	-0. 75
ITEMS	10
CASH	*6. 00

Refund entries

For departments 1 to 20, enter the refund amount and press the key, and then press the corresponding department key and for departments 21 to 40, enter the refund amount and press the key, then press the key and press the corresponding department key (when using the preset price, omit entering the amount). In case of department 41 to 99, enter the department code and press key and the key, then enter the refund amount and press the key if necessary.

For a refund of a PLU item, enter the PLU code and press the key, then press the key.

For a refund of a subdepartment item, enter the PLU code and press the key and key, then enter the refund amount and press the key.

Key operation example

250 ²⁶
 41 100
 7
 13
 85 150

Receipt print

DEPT. 06	R-2. 50
DEPT. 41	R-1. 00
-7x 2. 10	
PLU. 0013	R-14. 70
PLU. 0085	R-1. 50
ITEMS	00
CHANGE	*19. 70

Non-add code number entries and printing

You can enter a non-add code number such as a customer's code number and credit card number, a maximum of 16 digits, at any point during the entry of a sale. The cash register will print it at once.

To enter a non-add code number, enter the number and press the key.

Key operation example

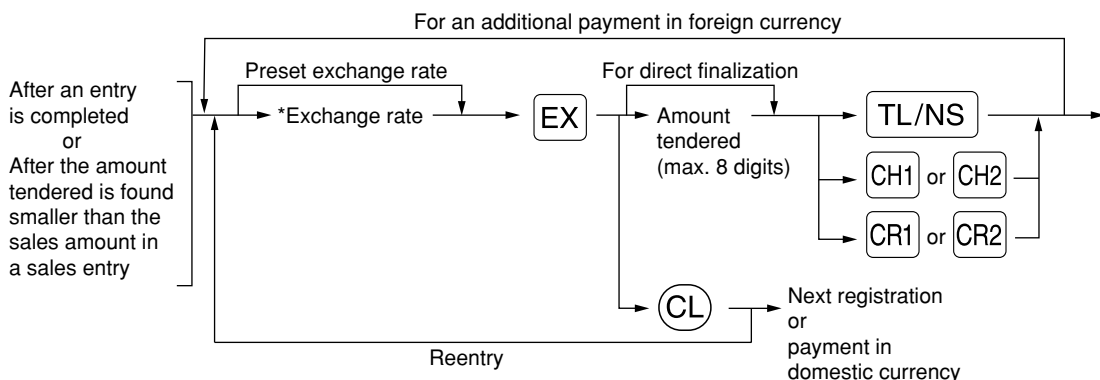
1230
 1500 ²⁶

Receipt print

DEPT. 06	#0000000000001230
	*15. 00
ITEMS	10
CREDIT1	*15. 00

2 Auxiliary Payment Treatment

■ Currency exchange



*Exchange rate: 0.000000 to 999.999999

Note

- Press the **CL** key after pressing the **EX** key to cancel payment in a foreign currency.
- If "Yes" is selected for cheque and credit operation when tendering in foreign currency in EURO programming, you can finalize a sale in foreign currency using the **CH1**, **CH2**, **CR1** or **CR2** key with preset exchange rate operation.
- If programmed, a foreign currency symbol is printed when you use a preset rate. Refer to "Foreign currency symbol" for the programming.
- Refer to "Programming for **EX**" for programming the currency exchange rate.

Applying preset exchange rate

Key operation example

2300 **6**²⁶
4650 **7**²⁷
Currency exchange → **EX**
Amount → 10000 **TL/NS**
tendered in foreign currency
(When a currency exchange rate of 0.939938 is programmed for the **EX** key.)

Receipt print

DEPT. 06	*23.00	
DEPT. 07	*46.50	
ITEMS	20	
***TOTAL	*69.50	Domestic currency
EXCH1	0.939938	Exchange rate
	US \$65.33	Foreign currency
CASH	US \$100.00	
CHANGE	*36.88	Domestic currency

Foreign currency symbol
(Printed if programmed)

Applying manual exchange rate

Key operation example

2300 **6**²⁶
4650 **7**²⁷
Exchange rate → 1 **275** **EX**
10000 **TL/NS**

Receipt print

DEPT. 06	*23.00
DEPT. 07	*46.50
ITEMS	20
***TOTAL	*69.50
EXCH2	1.275
	88.62
CASH	100.00
CHANGE	*8.92

■ Received-on-account entries

When you receive on account from a customer, use the **[RA]** key. For the received-on-account (RA) entry, enter the amount, and press the **[RA]** key.

Note Cash tendering only available for RA operation.

Key operation example

12345 **[#/TM/ST]**
4800 **[RA]**

Receipt print

***RA #0000000000012345
*48.00

■ Paid-out entries

When you pay an amount to a vendor, use the **[RCPT/PO]** key. For the paid-out (PO) entry, enter the amount and press the **[RCPT/PO]** key.

Note Cash tendering only available for PO operation.

Key operation example

54321 **[#/TM/ST]**
2300 **[RCPT/PO]**

Receipt print

***PO #0000000000054321
*23.00

■ No sale (exchange)

When you need to open the drawer with no sale, press the **[TL/NS]** key. The drawer will open and printer will print "NO SALE" on the receipt or journal. If you let the machine print a non-add code number before pressing the **[TL/NS]** key, a no sale entry is achieved and a non-add code number is printed. Refer to "Other programming" (job code 63) for the programming.

NO SALE #0000000000045678

■ Cashing a cheque

When you need to cash a cheque, enter the cheque amount and press a cheque key (**[CH1]** or **[CH2]**).

Key operation example

3000 **[CH1]**

Receipt print

CA/CHK *30.00

3 Automatic Sequence Key (AUTO1 AUTO2 key) Entries

You can achieve a programmed transaction simply by pressing the AUTO1 or AUTO2 key. Refer to "AUTO key programming - Automatic sequence key" for the programming.

Key operation example

(AUTO1 = 500 ²⁶6 TL/NS)

Receipt print

DEPT. 06	*5.00
ITEMS	10
CASH	*5.00

4 Overlapped Clerk Entries

This function allows you to switch from one clerk to another and to interrupt the first clerk's entry. So the second clerk can do his or her entry in this mode. To use this function, please change the clerk system to "overlapped clerk" on the programming of job code 65. Please refer to "Other programming" of "Various Function Selection Programming 1" on page 72.

Note

- The overlapped clerk entry is not effective while the tendering sale is going on.
- If any clerk is still making an entry (or has not finalized the transaction yet), the machine does not run in any mode other than REG and MGR and can print no X/Z reports. The error message "CLERK ERR." and the corresponding clerk code(s) are displayed at this time.

Key operation example

1. Clerk code 1 is assigned.

(1 CLK#)
100 ²¹1
360 ²³3
3 ²³3

2. Clerk code 2 is assigned.

(Clerk change: 1 to 2)

2 CLK#
3 ⊗
150 ²²2
TL/NS

3. Clerk code 1 is assigned.

(Clerk change: 2 to 1)

1 CLK#
50 ²¹1
300 ²³3
TL/NS

Comments

The entry by clerk code 1 is started.

The entry by clerk code 2 is started.
(The entry by clerk code 1 is interrupted.)

The transaction by clerk code 2 is finalized.

The entry by clerk code 1 is restarted.

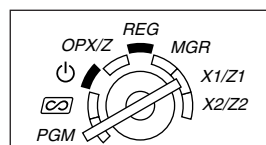
The transaction by clerk code 1 is finalized.

Part3 FOR THE MANAGER

PRIOR TO PROGRAMMING

■ Procedure for programming

1. Check to see whether both journal and receipt rolls are present in the machine. If there is not enough paper on a roll, replace it with a new one (refer to "Replacing the Paper Roll" on page 95 for the replacement).
2. Put the manager key in the mode switch and turn it to the PGM position.
3. Program necessary items into the cash register.
Every time you program an item, the cash register will print the setting. Please refer to print samples in each section.
4. If necessary, issue programming reports for your reference.



- Note**
- On the key operation example shown in the programming details, numbers such as "22082007" indicates the parameter which must be entered using the corresponding numeric keys.
 - Asterisks in the tables shown in the programming details indicate default settings.

■ Guidance messages

Depending on programming items, the register shows guidance messages on the operator display to indicate a programming item you are in, or guidance to enter data, as shown in the examples below.

Your register allows you to program all necessary data in one procedure with the guidance messages for department programming (page 16), PLU (Price Look-Up) and subdepartment programming (page 22), programming for the $\ominus$, $\%1$, $\%2$, EX, RA, RCP/TPO, CH1, CH2, CR1 and CR2 keys (pages 52-62). For their guidance messages, please refer to each section.

Example 1: For key entry type programming

Key operation example	Operator display
Parameter/price entry → 008 $\otimes$ (In case of parameter entry)	PGM 008 ← To repeat (depending on programming)
Press of the subjected key → #/TM/ST • Guidance message is displayed.	PAYMENT KEY PROG 0.00 --- Guidance message is kept displaying until you press the TL/NS key.
To terminate → TL/NS	PGM 0.00

Example 2: Job code type programming (programming starting from the press of #/TM/ST.)

Key operation example	Operator display
Job code entry • Guidance message is displayed.	MACHINE NO. 0.00
Parameter entry	MACHINE NO. 50
Registration of parameter	ENTER [TL/NS] KEY 0.00
To terminate	PGM 0.00

To repeat (depending on programming)
Guidance message is changed after a new job code entry.

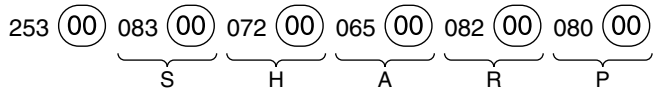
■ Entering character codes with numeric keys on the keyboard

For entering numerals, letters or symbols, enter a character code using numeric keys and press the numeric key 00. For the character codes, please refer to the alphanumeric character code table on the next page. By doing this, you can program characters other than those on the key tops. For entering numerals and letters using character keys, refer to "Using character keys on the keyboard" on page 13.

- Double-size characters can be made by entering the character code 253 or pressing the DC key. "W" is displayed when double-size characters entry is selected as shown in the operator display example below.
- All three digits of the character code MUST be entered (even if it starts with zero).

Key operation example	Operator display
253 00	Cursor 01 W 032 Department code, PLU code, function number, clerk code or logo message line number is displayed here.
065	01 W 065 Character code Characters entered are displayed here.
00	=A 01 W 032 Characters: Indicating double size character of "A"

Example To program the word "SHARP" in double-size characters



■ Alphanumeric character code table

Code	Character	Code	Character	Code	Character	Code	Character	Code	Character
001	á	046	.	091	Ä	136	→	193	ı
002	â	047	/	092	Ö	137	↵	194	Ġ
003	ê	048	0	093	Ü	138	↵	195	Ş
004	î	049	1	094	^	139	◀	196	Ğ
005	ì	050	2	095	—	140	▶	197	ğ
006	í	051	3	096	'	141	F	198	Ɔ
007	ô	052	4	097	a	142	T	199	Ɔ
008	ó	053	5	098	b	143	↓	200	Ł
009	û	054	6	099	c	144	ç	201	Ј
010	ú	055	7	100	d	145	°	202	Ž
011	œ	056	8	101	e	146	ı	203	Đ
012	ŭ	057	9	102	f	147	ù	204	đ
013	ú	058	:	103	g	148	à	205	Č
014	ř	059	;	104	h	149	Æ	206	č
015	ó	060	<	105	i	150	ø	207	€
016	Λ	061	=	106	j	151	Å	208	Ɔ
017	Ψ	062	>	107	k	152	⌘	209	˘
018	Γ	063	?	108	l	153	é	210	ë
019	ˆ	064	@	109	m	154	è	211	š
020	Ω	065	A	110	n	155	Pt	212	č
021	Δ	066	B	111	o	156	i	213	ž
022	Θ	067	C	112	p	157	Ñ	214	ý
023	Ξ	068	D	113	q	158	ò	215	ù
024	Π	069	E	114	r	159	£	216	ň
025	Σ	070	F	115	s	160	¥	217	˘
026	Υ	071	G	116	t	161	◦	218	˘
027	Φ	072	H	117	u	162	Γ	219	ř
028	Ú	073	I	118	v	163	J	224	*
029	Ú	074	J	119	w	164	˘	225	§
030	Ó	075	K	120	x	165	˘	226	Ø
031	Ó	076	L	121	y	177	Á	227	˘
032	(space)	077	M	122	z	178	Í	228	↑
033	!	078	N	123	{	180	Ā	229	]
034	"	079	O	124		181	ā	230	[
035	#	080	P	125	}	182	Ē	231	"
036	\$	081	Q	126	ß	183	ē	232	ä
037	%	082	R	127	¢	184	ī	233	ö
038	&	083	S	128	!!	185	ī	234	ü
039	'	084	T	129	₁	186	Ū	235	æ
040	(	085	U	130	₂	187	ū	236	à
041	)	086	V	131	₃	188	Ŭ	237	É
042	*	087	W	132	₄	189	ŷ	238	ñ
043	+	088	X	133	1/2	190	Č	253	*(DC)
044	,	089	Y	134	F _T	191	Š		
045	-	090	Z	135	←	192	Ç		

*(DC): Double-size character code

 : The shaded characters cannot be correctly displayed; a similar character or a space is displayed instead.

Note The character "!!" (code 128) cannot be displayed (displayed as "!").

AUXILIARY FUNCTION PROGRAMMING

1 Miscellaneous Key Programming

The cash register provides miscellaneous keys such as **⊖**, **%1**, **%2**, **EX**, **RA**, **RCPT/PO**, **CH1**, **CH2**, **CR1**, **CR2** and **TL/NS**. Miscellaneous keys are programmed in one procedure with guidance messages except for the **TL/NS** key.

- Note
 - To keep current setting on each programming, press the **#/TM/ST** key when the corresponding guidance message is firstly displayed.
 - When pressing the **TL/NS** key in the middle of procedure, the programming will terminate and the data you entered before the press of **TL/NS** is saved.
 - When pressing the **CL** key twice in the middle of procedure, the programming will terminate and the data you entered before pressing the **CL** key twice is NOT saved.
 - When pressing the department, **PLU**, **⊖**, **%1**, **%2**, **EX**, **RA**, **RCPT/PO**, **CH1**, **CH2**, **CR1** or **CR2** key in the middle of procedure except while entering texts or prices, the programming will move to the pressed key programming.

■ Programming for **⊖**

Key operation	Operator display
---------------	------------------

1. Specify the key to program.

- (1) Press the **⊖** to enter **⊖** programming.

On the upper line of the display, immediately after displaying "(-) PROGRAMMING", guidance message for the next step will be displayed.

On the lower line of the display, the corresponding function no. will be displayed.

⊖	(-) PROGRAMMING 01 0.00 ENTER [00] KEY 01 0.00
----------	--

2. Text programming (Press **#/TM/ST** to skip. / Press **TL/NS** to terminate.)

- (1) Press **00** key to enter text programming.

On the upper line of the display, immediately after displaying guidance message, the current text data will be displayed.

On the lower line of the display, the character code corresponding to the first character of the text data will be displayed.

00	ENTER TEXT 01 0.00 = (==) 01 040
-----------	--

- (2) Enter the text.

A maximum of 12 characters can be entered.

Please refer to "Guidance for text programming" on page 13 for entering the text.

When you start entering a character, the current text data will be overwritten by new data.

Use the **SPACE** and **BS** keys to delete unnecessary text data.

Pressing the **⬅** and **➡** key moves the cursor to the right and left respectively.

(-) SPACE SPACE	(-) — 01 032
------------------------	-----------------------------

- (3) Press the **#/TM/ST** key to register the text.
 On the upper line of the display, guidance message for the next step will be displayed.
 On the lower line of the display, the current setting will be displayed.

#/TM/ST

ENTER AMOUNT	
01	-0.00

3. Amount programming (Press **#/TM/ST** to skip. / Press **TL/NS** to terminate.)

- (1) Enter the amount using numeric keys.
 A maximum of 6 digits can be set.
 Default setting is 0.

300

ENTER AMOUNT	
01	300

- (2) Press the **#/TM/ST** key to register the amount.
 On the upper line of the display, guidance message for the next step will be displayed.
 On the lower line of the display, the current setting will be displayed.

#/TM/ST

SIGN	
01	(-)

4. Sign programming (Press **#/TM/ST** to skip. / Press **TL/NS** to terminate.)

- (1) Go to (2) when the sign does not need to be changed from "(-)". Otherwise, press **(00)** key to display "(+)".
 Each time **(00)** key is pressed, the display shows "(+)" and "(-)" alternately.
 Choose "(-)" for discount and "(+)" for premium.
 Default setting is "(-)".

- (2) Press the **#/TM/ST** key to register the setting.
 On the upper line of the display, guidance message for the next step will be displayed.
 On the lower line of the display, the current setting will be displayed.

#/TM/ST

ENTRY FOR ITEM	
01	ITEM ENABLE

5. Discount calculation (for the items) programming (Press **#/TM/ST** to skip. / Press **TL/NS** to terminate.)

- (1) Go to (2) when the discount calculation for the items does not need to be changed from "ITEM ENABLE". Otherwise, press **(00)** key to display "ITEM DISABLE".
 Each time **(00)** key is pressed, the display shows "ITEM DISABLE" and "ITEM ENABLE" alternately.
 Default setting is "ENABLE".

- (2) Press the **#/TM/ST** key to register the setting.
 On the upper line of the display, guidance message for the next step will be displayed.
 On the lower line of the display, the current setting will be displayed.

#/TM/ST

ENTRY FOR SBTL	
01	SBTL ENABLE

6. Discount calculation (for the subtotals) programming (Press #/TM/ST to skip. / Press TL/NS to terminate.)

- (1) Go to (2) when the discount calculation for the subtotals does not need to be changed from "SBTL ENABLE". Otherwise, press 00 key to display "SBTL DISABLE".
Each time 00 key is pressed, the display shows "SBTL DISABLE" and "SBTL ENABLE" alternately.
Default setting is "ENABLE".

- (2) Press the #/TM/ST key to register the setting.
On the upper line of the display, guidance message for the next step will be displayed.
On the lower line of the display, the current setting will be displayed.

#/TM/ST

LIMIT DIGITS
018

7. Entry digit limit programming (Press #/TM/ST to skip. / Press TL/NS to terminate.)

- (1) Enter entry digit limit using numeric key.
The entry digit limit can be set up to 8.
Default setting is 8.
The entry digit limit is in effect for the REG mode operations but can be overridden in the MGR mode.
The entry digit limit is represented by the number of allowable digit for the maximum entry amount for discount key. When "0" is set, open price entry is prohibited.

7

LIMIT DIGITS
017

- (2) Press the #/TM/ST key to register the setting.

#/TM/ST

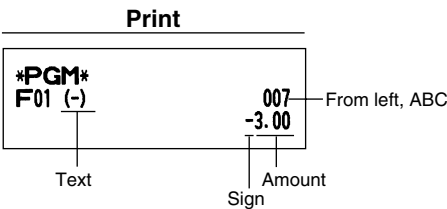
ENTER [TL/NS] KEY
0.00

8. Terminate programming

- (1) Press the TL/NS key to terminate the ⊖ key programming.

TL/NS

PGM
0.00



Item:	Selection:	Print:
A Discount calculation (for the items)	Enable*	0
	Disable	1
B Discount calculation (for the subtotals)	Enable*	0
	Disable	1
C Entry digit limit		0-8(default:8)

■ Programming for [%1] and [%2]

The [%1] key is used as an example below.

Key operation

Operator display

1. Specify the key to program.

- (1) Press the [%1] key to enter [%1] programming.

On the upper line of the display, immediately after displaying "%1 PROGRAMMING", guidance message for the next step will be displayed.

On the lower line of the display, the corresponding function no. will be displayed.

[%1]	%1 PROGRAMMING	
	02	0.00
↓		
ENTER [00] KEY		
	02	0.00

2. Text programming (Press [# / TM / ST] to skip. / Press [TL / NS] to terminate.)

- (1) Press [(00)] key to enter text programming.

On the upper line of the display, immediately after displaying guidance message, the current text data will be displayed.

On the lower line of the display, the character code corresponding to the first character of the text data will be displayed.

[(00)]	ENTER TEXT	
	02	0.00
↓		
=%1		
	02	037

- (2) Enter the text.

A maximum of 12 characters can be entered.

Please refer to "Guidance for text programming" on page 13 for entering the text.

When you start entering a character, the current text data will be overwritten by new data.

Use the [SPACE] and [BS] keys to delete unnecessary text data.

Pressing the [•] and [⊗] key moves the cursor to the right and left respectively.

% [SPACE] [SPACE]	%	
	02	032

- (3) Press the [# / TM / ST] key to register the text.

On the upper line of the display, guidance message for the next step will be displayed.

On the lower line of the display, the current setting will be displayed.

# / TM / ST	ENTER RATE	
	02	-0.00

3. Rate programming (Press [# / TM / ST] to skip. / Press [TL / NS] to terminate.)

- (1) Enter the rate using numeric keys, using a decimal point when setting fractional rates.

The rate can be set from 0.00 to 100.00.

Default setting is 0.

15.00	ENTER RATE	
	02	15.00

- (2) Press the [# / TM / ST] key to register the rate.

On the upper line of the display, guidance message for the next step will be displayed.

On the lower line of the display, the current setting will be displayed.

# / TM / ST	SIGN	
	02	(-)

4. Sign programming (Press #/TM/ST to skip. / Press TL/NS to terminate.)

- (1) Go to (2) when the sign does not need to be changed from "(-)". Otherwise, press 00 key to display "(+)".
- Each time 00 key is pressed, the display shows "(+)" and "(-)" alternately.
- Choose "(-)" for discount and "(+)" for premium.
- Default setting is "(-)".

- (2) Press the #/TM/ST key to register the setting.
- On the upper line of the display, guidance message for the next step will be displayed.
- On the lower line of the display, the current setting will be displayed.

#/TM/ST

ENTRY FOR ITEM
02 ITEM ENABLE

5. Discount calculation (for the items) programming (Press #/TM/ST to skip. / Press TL/NS to terminate.)

- (1) Go to (2) when the discount calculation for the items does not need to be changed from "ITEM ENABLE". Otherwise, press 00 key to display "ITEM DISABLE".
- Each time 00 key is pressed, the display shows "ITEM DISABLE" and "ITEM ENABLE" alternately.
- Default setting is "ENABLE".

- (2) Press the #/TM/ST key to register the setting.
- On the upper line of the display, guidance message for the next step will be displayed.
- On the lower line of the display, the current setting will be displayed.

#/TM/ST

ENTRY FOR SBTL
02 SBTL ENABLE

6. Discount calculation (for the subtotals) programming (Press #/TM/ST to skip. / Press TL/NS to terminate.)

- (1) Go to (2) when the discount calculation for the subtotals does not need to be changed from "SBTL ENABLE". Otherwise, press 00 key to display "SBTL DISABLE".
- Each time 00 key is pressed, the display shows "SBTL DISABLE" and "SBTL ENABLE" alternately.
- Default setting is "ENABLE".

- (2) Press the #/TM/ST key to register the setting.
- On the upper line of the display, guidance message for the next step will be displayed.
- On the lower line of the display, the current setting will be displayed.

#/TM/ST

% HALO PROG.
02 100.00

7. Percent rate limit programming (Press #/TM/ST to skip. / Press TL/NS to terminate.)

- (1) Enter percent rate limit using numeric key.
- The rate limit can be set from 0.00 to 100.00.
- Default setting is 100.00.

90.00

% HALO PROG.
02 90.00

(2) Press the **#/TM/ST** key to register the setting.

In the case of programming for the **%1** key, "%2 PROGRAMMING" will be displayed on the upper line, and the corresponding function no. on the lower line. Go to step 2 to program the **%2** key.
In the case of programming for the **%2** key, the display shows "ENTER[TL/NS]KEY". Go to step 8.

#/TM/ST

%2	PROGRAMMING	
03		0.00

ENTER [00] KEY		
03		0.00

8. Terminate programming

(1) Press the **TL/NS** key to terminate the **%1** key programming.

TL/NS

PGM
0.00

Print

PGM		
F02 %		000
L 90.00%		-15.00%

From left, ABC

Text

Sign

Percent rate

Percentage rate limit

Item:		Selection:	Print:
A	Discount calculation (for the items)	Enable*	0
		Disable	1
B	Discount calculation (for the subtotals)	Enable*	0
		Disable	1
C	Always 0 is printed.		0

■ Programming for EX

1. Specify the key to program.

- (1) Press the EX key to enter EX programming.
- On the upper line of the display, immediately after displaying "EXCHANGE PROG.", guidance message for the next step will be displayed.
- On the lower line of the display, the corresponding function no. will be displayed.

EX	EXCHANGE PROG. 37 0.00 ↓ ENTER [00] KEY 37 0.00
--	--

2. Text programming (Press #/TM/ST to skip. / Press TL/NS to terminate.)

- (1) Press 00 key to enter text programming.
- On the upper line of the display, immediately after displaying guidance message, the current text data will be displayed.
- On the lower line of the display, the character code corresponding to the first character of the text data will be displayed.

00	ENTER TEXT 37 0.00 ↓ EXCH1 37 069
--	--

- (2) Enter the text.
- A maximum of 12 characters can be entered.
- Please refer to "Guidance for text programming" on page 13 for entering the text.
- When you start entering a character, the current text data will be overwritten by new data.
- Use the SPACE and BS keys to delete unnecessary text data.
- Pressing the ◂ and ◃ key moves the cursor to the right and left respectively.

EX SPACE SPACE SPACE	EX — 37 032
--	--

- (3) Press the #/TM/ST key to register the text.
- On the upper line of the display, guidance message for the next step will be displayed.
- On the lower line of the display, the current setting will be displayed.

#/TM/ST	ENTER EX RATE 37 0.000000
---	--

3. Rate programming (Press #/TM/ST to skip. / Press TL/NS to terminate.)

- (1) Enter the rate using numeric keys, using a decimal point when setting fractional rates. 0.939938
- The rate can be set from 0.000000 to 999.999999.
- Default setting is 0.000000.

ENTER EX RATE 37 0.939938
--

- (2) Press the #/TM/ST key to register the rate.
- On the upper line of the display, guidance message for the next step will be displayed.
- On the lower line of the display, the current setting will be displayed.

#/TM/ST	OPEN RATE ENTRY 37 OPEN ENABLE
---	---

4. Open rate entry programming (Press **#/TM/ST** to skip. / Press **TL/NS** to terminate.)

- (1) Go to (2) when the open rate entry does not need to be changed from "OPEN ENABLE". Otherwise, press **00** key to display "OPEN DISABLE". Each time **00** key is pressed, the display shows "OPEN DISABLE" and "OPEN ENABLE" alternately. Default setting is "ENABLE".

- (2) Press the **#/TM/ST** key to register the setting.
On the upper line of the display, guidance message for the next step will be displayed.
On the lower line of the display, the current setting will be displayed.

#/TM/ST

PRESET RATE
37 PRESET ENABLE

5. Preset rate entry programming (Press **#/TM/ST** to skip. / Press **TL/NS** to terminate.)

- (1) Go to (2) when the preset rate entry does not need to be changed from "PRESET ENABLE". Otherwise, press **00** key to display "PRESEST DISABLE". Each time **00** key is pressed, the display shows "PRESET DISABLE" and "PRESET ENABLE" alternately. Default setting is "ENABLE".

- (2) Press the **#/TM/ST** key to register the setting.
On the upper line of the display, guidance message for the next step will be displayed.
On the lower line of the display, the current setting will be displayed.

#/TM/ST

TAB	2
37	

6. Position of decimal point programming (Press **#/TM/ST** to skip. / Press **TL/NS** to terminate.)

- (1) Enter the position of decimal point from right using numeric key.
The position of decimal point from right can be set from 0 to 3.
Default setting is 2.

2

TAB	2
37	

- (2) Press the **#/TM/ST** key to register the setting.

#/TM/ST

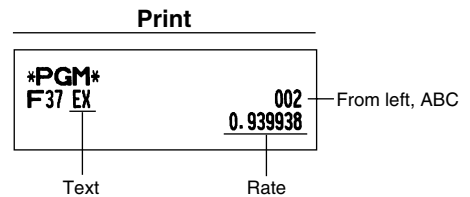
ENTER [TL/NS] KEY
0.00

7. Terminate programming

- (1) Press the **TL/NS** key to terminate the **EX** key programming.

TL/NS

PGM
0.00



Item:	Selection:	Print:
A	Open rate entry	Enable*
		0
B	Preset rate entry	Disable
		1
C		Enable*
		0
		Disable
		1
TAB (position of decimal point from right)		0-3 (default:2)

■ Programming for RA, RCPT/PO, CH1, CH2, CR1 and CR2

The CH1 key is used as an example below.

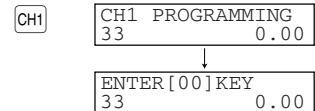
Programming for RA and RCPT/PO, the step 3 and 4 are skipped.

Key operation

Operator display

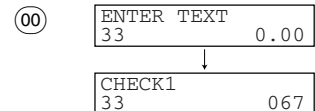
1. Specify the key to program.

- (1) Press the CH1 key to enter CH1 programming.
 On the upper line of the display, immediately after displaying "CH1 PROGRAMMING", guidance message for the next step will be displayed.
 On the lower line of the display, the corresponding function no. will be displayed.



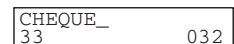
2. Text programming (Press #/TM/ST to skip. / Press TL/NS to terminate.)

- (1) Press 00 key to enter text programming.
 On the upper line of the display, immediately after displaying guidance message, the current text data will be displayed.
 On the lower line of the display, the character code corresponding to the first character of the text data will be displayed.



- (2) Enter the text.
 A maximum of 12 characters can be entered.
 Please refer to "Guidance for text programming" on page 13 for entering the text.
 When you start entering a character, the current text data will be overwritten by new data.
 Use the SPACE and BS keys to delete unnecessary text data.
 Pressing the • and ⊗ key moves the cursor to the right and left respectively.

CHEQUE



- (3) Press the **#/TM/ST** key to register the text.

#/TM/ST

FOOTER PRINT
33

NO

On the upper line of the display, guidance message for the next step will be displayed.

On the lower line of the display, the current setting will be displayed.

3. Footer print on receipt programming (Press **#/TM/ST** to skip. / Press **TL/NS** to terminate.)

- (1) Go to (2) when the footer print on receipt does not need to be changed from "NO". Otherwise, press **(00)** key to display "YES".

Each time **(00)** key is pressed, the display shows "YES" and "NO" alternately.

Default setting is "NO".

This programming decides whether or not the machine should print a message at the foot of a receipt when a specified key is used. With regard to programming method of footer logo message, refer to "Logo messages" section on page 25.

- (2) Press the **#/TM/ST** key to register the setting.

#/TM/ST

AMOUNT TENDERED
NON COMPULSORY

On the upper line of the display, guidance message for the next step will be displayed.

On the lower line of the display, the current setting will be displayed.

4. Entry of amount tendered programming (Press **#/TM/ST** to skip. / Press **TL/NS** to terminate.)

- (1) Go to (2) when the entry of amount tendered does not need to be changed from "NON

COMPULSORY". Otherwise, press **(00)** key to display "COMPULSORY".

Each time **(00)** key is pressed, the display shows "COMPULSORY" and "NON COMPULSORY" alternately. In case of **CR1** and **CR2** programming, "INHIBIT" is displayed instead of "NON COMPULSORY".

Default setting is "NON COMPULSORY" or "INHIBIT".

- (2) Press the **#/TM/ST** key to register the setting.

#/TM/ST

LIMIT DIGITS
33

8

On the upper line of the display, guidance message for the next step will be displayed.

On the lower line of the display, the current setting will be displayed.

5. Entry digit limit programming (Press #/TM/ST to skip. / Press TL/NS to terminate.)

(1) Enter entry digit limit using numeric key.

7

LIMIT DIGITS
337

The entry digit limit can be set up to 8.
Default setting is 8.
The entry digit limit is in effect for REG mode operation but can be overridden in the MGR mode.
The entry digit limit is represented by the number of allowable digits for the maximum entry or total amount. When "0" is set, the operation of the corresponding key is prohibited.

(2) Press the #/TM/ST key to register the setting.

#/TM/ST

CH2 PROGRAMMING
340.00

In the case of programming for the CH1 and CR1 keys, "CH2 PROGRAMMING" and "CR2 PROGRAMMING" respectively will be displayed on the upper line, and the corresponding function no. on the lower line. Go to step 2 to program the CH2 and CR2 keys.
In the case of programming for the RA, RCPTPO, CH2 and CR2 keys, the display shows "ENTER[TL/NS]KEY". Go to step 6.

ENTER[00]KEY
340.00

6. Terminate programming

(1) Press the TL/NS key to terminate the CH1 key programming.

TL/NS

PGM
0.00

Print

PGM
F33 CHEQUE007

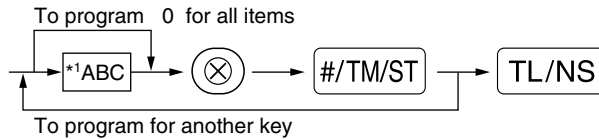
From left, ABC

Text

Item:	Selection:	Print:
A	Footer print	No*
		Yes
B	Amount tendered entry	Non compulsory (for CH1 and CH2)*
		Inhibit (for CR1 and CR2)*
		Compulsory
C	Entry digit limit	0-8 (default:8)

Function parameters for TL/NS

Procedure



*1:Item:	Selection:	Entry:
A Footer printing*	Allow	1
	Disallow*	0
B Amount tendered entry*	Compulsory	1
	Non-compulsory*	0
C Entry digit limit		0-8 (default:8)

Footer printing

- This programming decides whether or not the machine should print a message at the foot of a receipt when the TL/NS key is used. With regard to programming method of footer logo message, refer to “Logo messages” section on page 25.

Amount tendered entry

- You may select amount tendered, compulsory or optional.

Entry digit limit

- Program upper limit entry for total cash amount which can be handled on the register. The entry digit limit is in effect for REG mode operation but can be overridden in the MGR mode. The entry digit limit is represented by the number of allowable digits for the maximum entry or total amount. When “0” is set, the operation of the corresponding key is prohibited.

Key operation example

018 ⊗
#/TM/ST TL/NS

Print

PGM
F32 CASH 018 — From left, ABC

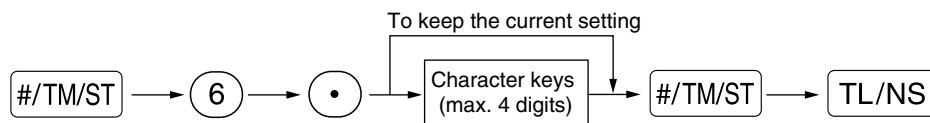
2 Other Text Programming

Please refer to “Guidance for text programming” on page 13 as for how to entering characters.

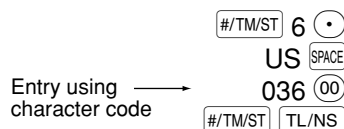
Foreign currency symbol (4 digits)

Foreign currency symbol for the **[EX]** key is printed with a foreign currency exchange amount obtained using a preset rate.

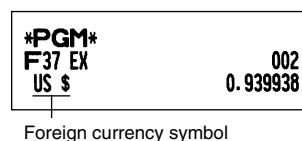
Procedure



Key operation example



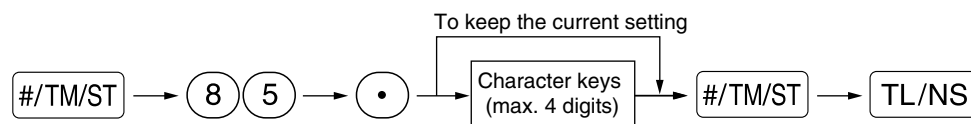
Print



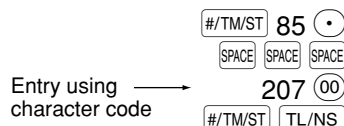
Domestic currency symbol (4 digits)

“*” is set as a default setting. When you want to change the domestic currency symbol, change the setting.

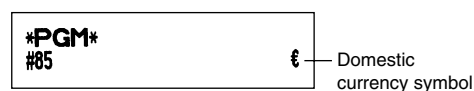
Procedure



Key operation example



Print



Training mode text
(12 digits)

For every receipts issued in the training mode, ****TRAINING**** is printed by default. When you want to change the text, follow the procedure below.

Procedure

Key operation example

Print

Note
The programmed text is printed in double-size characters on the receipts issued in the training mode.

Function text
(12 digits)

Procedure

* Function no.: See “List of function texts” shown on the following page.

Key operation example

Print

(Programming CARD1 for credit 1)

■ List of function texts

Function no.	Key or function	Default setting
1	⊖	(-)
2	%1	%1
3	%2	%2
4	Net 1	NET1
5	Differ	DIFFER
6	Taxable 1 subtotal	TAX1 ST
7	Taxable 2 subtotal	TAX2 ST
8	Taxable 3 subtotal	TAX3 ST
9	Taxable 4 subtotal	TAX4 ST
10	VAT/tax 1	VAT 1
11	VAT/tax 2	VAT 2
12	VAT/tax 3	VAT 3
13	VAT/tax 4	VAT 4
14	Total tax	TTL TAX
15	Net without tax	NET
16	Net 2	NET2
17	Coupon PLU	CP PLU
18	Refund	REFUND
19	Void	∞
20	Void mode total	∞MODE
21	Manager void	MGR ∞
22	Subtotal void	SBTL ∞
23	Hash void	HASH ∞
24	Hash refund	HASH RF
25	No sale	NO SALE
26	RA	***RA
27	PO	***PO
28	Cheque cashing	CA/CHK
29	Customer	GUEST
30	Paid total	PAID TL
31	Average	AVE.
32	Cash	CASH
33	Cheque 1	CHECK1
34	Cheque 2	CHECK2
35	Credit 1	CREDIT1
36	Credit 2	CREDIT2
37	Exchange (Preset rate)	EXCH1
38	Exchange (Open rate)	EXCH2
39	Exchange is	EXCH1 IS
40	Exchange cheque	EX1 CHK
41	Exchange credit	EX1 CR
42	Cash in drawer	**** CID
43	Cash/cheque is	CA/CH IS
44	Cash/cheque in drawer	CA/CH ID

Function no.	Key or function	Default setting
45	Change for cheque	CHK/CG
46	Domestic currency 1	DOM.CUR1
47	Domestic currency 2	DOM.CUR2
48	Dom. currency for EX cheque	DOM.CUR1
49	Dom. currency for EX credit	DOM.CUR1
50	Cheque in drawer	*CH ID
51	Group 1	GROUP1
52	Group 2	GROUP2
53	Group 3	GROUP3
54	Group 4	GROUP4
55	Group 5	GROUP5
56	Group 6	GROUP6
57	Group 7	GROUP7
58	Group 8	GROUP8
59	Group 9	GROUP9
60	(+) Dept total	*DEPT TL
61	(-) Dept total	DEPT (-)
62	Hash (+) dept. total	*HASH TL
63	Hash (-) dept. total	HASH(-)
64	Net 1 (Taxable 1 - VAT/tax 1)	NET 1
65	Net 2 (Taxable 2 - VAT/tax 2)	NET 2
66	Net 3 (Taxable 3 - VAT/tax 3)	NET 3
67	Net 4 (Taxable 4 - VAT/tax 4)	NET 4
68	Subtotal	SUBTOTAL
69	Merchandise subtotal	MDSE ST
70	Total	*** TOTAL
71	Change	CHANGE
72	Sales q'ty	ITEMS
73	Due	DUE
74	CCD	CCD
75	CCD differ	CCD DIF.
76	CCD differ total	DIF. TL
77	Department report title	DEPT
78	Dept. group report title	GROUP
79	PLU report title	PLU
80	Transaction report title	TRANS.
81	Cash in drawer CID report title	TL-ID
82	Clerk report title	CLERK
83	Hourly report title	HOURLY
84	Daily net report title	DAILY
85	Non add symbol (8 chara.)	#
86	Copy receipt title	COPY
87	Exchange (Preset rate) change	EX1 CHG
88	Amount	AMOUNT

ADVANCED FUNCTION PROGRAMMING

1 Register Number and Consecutive Number Programming

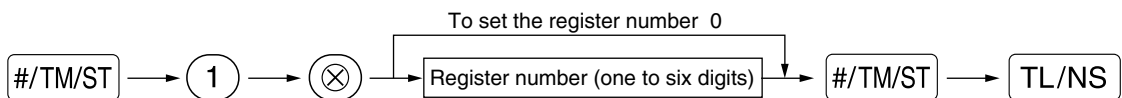
The register number and consecutive numbers are printed on every receipt or journal.

When your store has two or more registers, it is practical to set separate register numbers for identification. The consecutive number is increased by one each time a receipt is issued or when a journal print occurs.

For consecutive number programming, enter a number (max. 6 digits) that is one less than the desired starting number.

■ Register number

Procedure



Key operation example

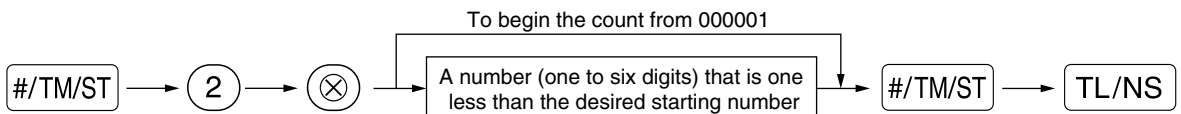
123456 #/TM/ST 1 ⊗
#/TM/ST TL/NS

Print

PGM	
#1	123456 — Register number

■ Consecutive number

Procedure



Key operation example

1000 #/TM/ST 2 ⊗
#/TM/ST TL/NS

Print

PGM	
#2	001000 — Consecutive number

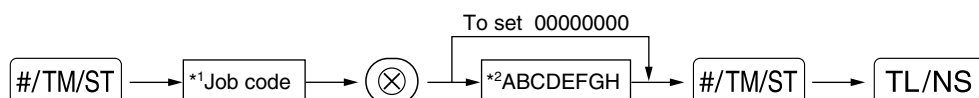
2 Various Function Selection Programming 1

The cash register provides various detailed functions listed below.

- Function selection for miscellaneous keys
- Print format
- Receipt print format
- Others

For this programming, the job code entry style is applied. You can continue programming until you press the **TL/NS** key for the programming described in this section. To continue programming, repeat from a job code entry.

Procedure



*1 Enter job code using numeric keys specified in each section below.

*2 Data entry details are listed on each table in each section below. An asterisk is entered for factory setting.

Example: When programming for job code 5 as ABCDEFGH: 00000100.

Key operation example

00000100

Sequence of key presses: **#/TM/ST**, **5** (with X icon), **TL/NS**.

Print

PGM
#5 00000100

Function selection for miscellaneous keys

Job code: 5

* Item:	Selection:	Entry:
A Paid-out in the REG mode	Enable*	0
	Disable	1
B Received on account in the REG mode	Enable*	0
	Disable	1
C Subtotal void in the REG mode	Enable*	0
	Disable	1
D Indirect void in the REG mode	Enable*	0
	Disable	1
E Direct void in the REG mode	Enable*	0
	Disable	1
F Refund entry in the REG mode	Enable*	0
	Disable	1
G No sale in the REG mode	Enable*	0
	Disable	1
H Fractional quantity entry	Enable (3 digits decimal place)	0
	Disable*	1

■ Print format

Job code: 6

* Item:	Selection:	Entry:
A Always enter 0.		0
B Journal print item selection	All items*	0
	Selected items	1
C Time print on receipts/journals	Yes*	0
	No	1
D Date print on receipts/journals	Yes*	0
	No	1
E Consecutive no. print	Yes*	0
	No	1
F Separator line in reports	One line space	0
	Separator line*	1
G Zero skip in PLU report	No	0
	Yes*	1
H Zero skip in full sales/clerk/hourly/daily net sales reports	No	0
	Yes*	1

Journal print item selection

- When you select "Selected items", positive normal department and positive PLU entries are not printed on the journal printer in the REG mode.

■ Receipt print format

Job code: 7

* Item:	Selection:	Entry:
A Always enter 0.		0
B Always enter 0.		0
C Subtotal print with a press of subtotal key	No*	0
	Yes	1
D Always enter 0.		0
E VAT/tax amount print	Yes*	0
	No	1
F Taxable amount print	Yes*	0
	No	1
G Net amount print	Yes*	0
	No	1
H Purchase no. print	Yes*	0
	No	1

■ Other programming

Note As the guidance messages for other programming, “OTHERS + the lower digit number of job code” is displayed. For example, for job code 61, “OTHERS 1” is displayed as the guidance message.

Job code: 61

* Item:	Selection:	Entry:
A Always enter 0.		0
B Always enter 0.		0
C Negative dept. and PLU/subdept.	Disable	0
	Enable*	1
D Fractional treatment	Round off (4 down, 5 up)*	0
	Raising to unit	1
	Disregarding fractional treatment	2
E Use of (00) key	As 00 key*	0
	As 000 key	1
F Time format	12-hour format	0
	24-hour format*	1
G Date format	Use month-day-year format	0
	Use day-month-year format*	1
	Use year-month-day format	2
H Position of decimal point (from right) (TAB)		0 to 3 (default: 2)

Job code: 62

* Item:	Selection:	Entry:
A Always enter 0.		0
B Error beep for misoperation	Lock error	0
	Misoperation*	1
C Key catch sound	Yes*	0
	No	1
D Buffered keyboard	Yes*	0
	No	1
E Void mode	Enable*	0
	Disable	1
F Printing of void mode in X2/Z2 report	Yes*	0
	No	1
G Printing of void mode in X1/Z1 report	Yes*	0
	No	1
H Addition to the hourly total in VOID mode	No*	0
	Yes	1

Job code: 63

* Item:	Selection:	Entry:
A Receipting at the time of "no sale" entry	Yes*	0
	No	1
B No sale after non-add code entry	Disable	0
	Enable*	1
C Non-add code entry	Enable*	0
	Disable	1
D Copy receipt	No*	0
	Yes	1
E Entry that causes the merchandise subtotal to be smaller than zero	Enable*	0
	Disable	1
F Subtotal entry before tendering	Noncompulsory*	0
	Compulsory	1
G Subtotal entry before direct non-tender finalization	Noncompulsory*	0
	Compulsory	1
H Direct non-tender finalization after tendering	Disable	0
	Enable*	1

Job code: 64

* Item:	Selection:	Entry:
A Printing of GT1 on Z report	Yes*	0
	No	1
B Printing of GT2 on Z report	Yes*	0
	No	1
C Printing of GT3 on Z report	Yes*	0
	No	1
D Printing of Training GT on Z report	Yes*	0
	No	1
E Printing of Z counter on Z report	Yes*	0
	No	1
F Printing of DATA on PLU resetting report	Yes*	0
	No	1
G Resetting of GT1, 2, 3 at the general Z1 report	No*	0
	Yes	1
H OP X/Z report	Enable*	0
	Disable	1

Job code: 65

* Item:	Selection:	Entry:
A Printing of GT1 on X report	No*	0
	Yes	1
B Printing of GT2 on X report	No*	0
	Yes	1
C Printing of GT3 on X report	No*	0
	Yes	1
D Printing of Training GT on X report	No*	0
	Yes	1
E Clerk system	Normal*	0
	Overlapped clerk	1
F Issue of X report before CCD entry in case of CCD compulsory	Disable*	0
	Enable	1
G Locking REG mode entry after individual clerk resetting	Disable*	0
	Enable	1
H CCD compulsory	Noncompulsory*	0
	Compulsory for individual clerk	1
	Compulsory for all clerks	2

Job code: 66

* Item:	Selection:	Entry:
A After transaction receipt	Total only	0
	Details*	1
B Amount printing when PLU unit price is zero	No*	0
	Yes	1
C Conversion SBTL printing of native SBTL	Yes*	0
	No	1
D VAT/tax assignment print	Yes	0
	No*	1
E Always enter 0.		0
F Always enter 0.		0
G Logo text print on journal	No*	0
	Yes	1
H Footer print control	All receipts*	0
	Only on selected function key at the time of finalization	1

Job code: 67

* Item:	Selection:	Entry:
A Rounding amount printing	No*	0
	Yes (for Australian system)	1
B Total amount rounding when a transaction is finalized directly by [CH1], [CH2], [CR1] or [CR2] key	Rounding*	0
	Not rounding (for Australian system)	1
C Rounding up of the unit digit of amount		0 - 9 (default: 0)
D Rounding down of the unit digit of amount		0 - 9 (default: 0)
E Application of rounding	Item and payment*	0
	Payment	1
F Limit of the least significant digit in entering amount of item	Arbitrary*	0
	0 only	1
	0 and 5 only	2
G Memory of difference due to rounding	No*	0
	Yes	1
H Limit of the least significant digit in entering amount of payment	Arbitrary*	0
	0 only	1
	0 and 5 only	2

Rounding amount printing (A)

Total amount rounding when a transaction is finalized directly by CH1, CH2, CR1 or CR2 key(B)

- When you live in Australia, set as shown on the table below for the parameters A and B.

Rounding up of the unit digit of amount (C)**Rounding down of the unit digit of amount (D)**

- Handle C and D as a pair. When you live in Australia, Switzerland, Norway or South Africa, set as shown on the table below for the parameters C and D.

The rounding is performed as follows:

In case C = 0: Unit digit of amount < or = Value of D — rounding down

Value of D < or = Unit digit of amount — rounding to 5

In other cases: Unit digit of amount < or = Value of D — rounding down

Value of D < Unit digit of amount < Value of C — rounding to 5

Value of C < or = Unit digit of amount — rounding up

Application of rounding (E)**Limit of the least significant digit in entering amount of item (F)****Memory of difference due to rounding (G)****Limit of the least significant digit in entering amount of payment (H)**

- When you live in Australia, Switzerland, Norway or South Africa, set as shown on the table below for the parameters E through H.

	CD	E	F	G	H
Switzerland	82	Item & payment	0 and 5 only	No	0 and 5 only
Norway	54	Payment	Arbitrary	Yes	0 only
South Africa	05	Payment	Arbitrary	Yes	0 and 5 only

	A	B	CD	E	F	G	H
Australia	Yes	Not rounding	82	Payment*	Arbitrary	Yes	0 and 5 only

* Applied to payment by cash and change amount.

Job code: 68

* Item:	Selection:	Entry:
A Printing format for split pricing entry	Normal*	0
	Australian format	1
B to H Always enter 0.		0

Job code: 69

* Item:	Selection:	Entry:
A Always enter 0.		0
B Always enter 0.		0
C Always enter 0.		0
D Rounding of foreign currency for EX	Rising to unit*	0
	Round off (4 down/5 up)	1
E Tax system	Auto tax 1-4	0
	Auto VAT 1-4*	1
	Manual VAT 1-4	2
	Manual VAT 1	3
	Manual tax 1-4	4
	Auto VAT 1 & Auto tax 2-4	5
F Tax print when taxable subtotal is zero	No*	0
	Yes	1
G Tax print when tax is zero	Yes*	0
	No	1
H Rounding system	Normal*	0
	Sweden	1
	Denmark	2

Rounding system

- When you live in Sweden or Denmark, change the default setting (H=0) to the corresponding setting.

Job code: 70

* Item:	Selection:	Entry:
A Split pricing counting	Quantity*	0
	Package	1
B to H Always enter 0.		0

Split pricing counting

- When “Quantity” is selected, selling quantity is added to the quantity counter (printed on sales reports), and when “Package” is selected, quantity “1” is always added to the counter regardless a selling quantity.

3 Various Function Selection Programming 2

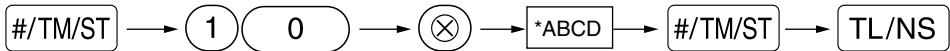
The cash register provides various options so you can use the register to suit your sales needs.

In this section, you can program the following features (parameters within parentheses indicates default setting):

- Power save mode (entering the power save mode after 30 minutes)
- Logo message print format (Header 6-line message)
- Clerk code assignment (Clerk codes 1 to 4 are assigned for clerk numbers 1 to 4 respectively.)
- Entry digit limit for cash in drawer (999999999)
- Entry digit limit for cheque cashing (999999999)
- Entry digit limit for cheque change (999999999)
- Thermal printer density (standard density)
- Training clerk specification (none) - If you specify a clerk number who is trained for use on this cash register, the cash register will go into training mode when the clerk is signed on for sales entries. The sales operations done by the trained clerk do not affect sales totals. For details, refer to TRAINING MODE section.

■ Power save mode

Procedure



* Item:	Selection:	Entry:
A Entering power save mode when time is displayed	Yes*	0
	No	1
B-D Time(min.) to entering power save mode since no operation is made		001-254 or 999 (Default 030)

Note

When 999 is set for B to D, entering into power save mode is inhibited.

Key operation example

0060 #/TM/ST 10 ⊗
#/TM/ST TL/NS

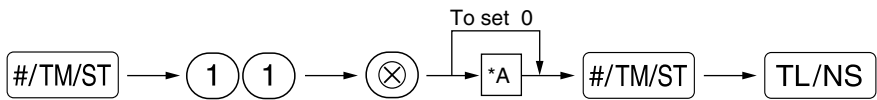
Print

PGM
 #10 0060

■ Logo message print format

You can select the number of lines for your logo message, and the position to print it on receipt.
For details of the logo message type, please refer to “Logo messages” on page 25.

Procedure



- *A: Logo message type
- 0: Header 3-line message without graphic logo
 - 1: Graphic logo only
 - 2: Footer 3-line message with graphic logo
 - 3: Header 6-line message
 - 4: Header 3-line message with graphic logo
 - 5: Header 3-line message and footer 3-line message

Key operation example

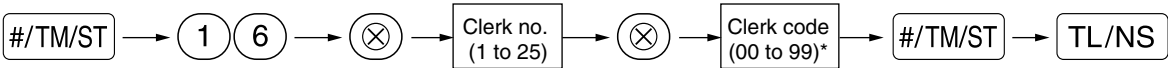
0 #/TM/ST 11 (X) #/TM/ST TL/NS

Print

PGM	
#11	0

■ Clerk code assignment

Procedure



* 00 : Disallows to use the clerk.
By default, clerk codes 1 to 4 are programmed for clerk no. 1 to 4.

Key operation example

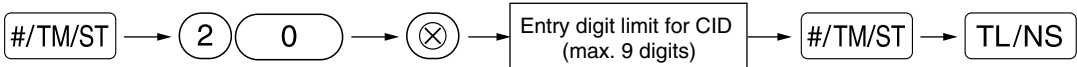
20 (X) 99 #/TM/ST 16 (X) #/TM/ST TL/NS

Print

PGM	
C#20	99

■ Entry digit limit for cash in drawer (CID) (sentinel)

Procedure



Key operation example

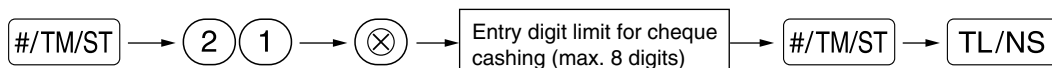
9999 #/TM/ST 20 (X) #/TM/ST TL/NS

Print

PGM	
#20	99. 99

■ Entry digit limit for cheque cashing

Procedure



Key operation example

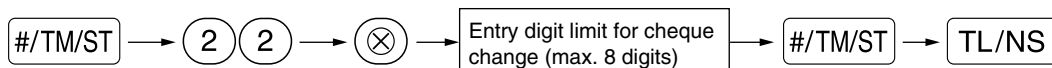
	#/TM/ST	21	⊗
99999	#/TM/ST	TL/NS	

Print

PGM	
#21	999. 99

■ Entry digit limit for cheque change

Procedure



Key operation example

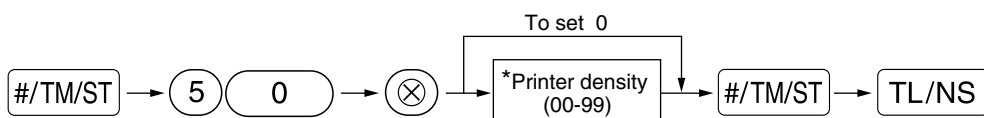
	#/TM/ST	22	⊗
9999	#/TM/ST	TL/NS	

Print

PGM	
#22	99. 99

■ Thermal printer density

Procedure



* 50 (100%) is the default setting. To make the print darker, set a larger number, and to make the print lighter, set a smaller number.

Key operation example

	#/TM/ST	50	⊗
70	#/TM/ST	TL/NS	

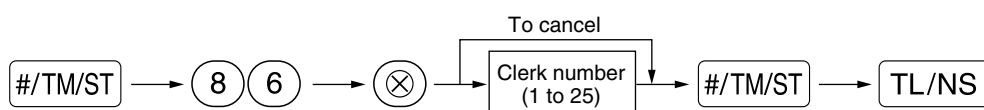
Print

PGM	
#50	70

■ Training clerk specification for training mode

For the details of clerk training, please refer to "TRAINING MODE" on page 83.

Procedure



Key operation example

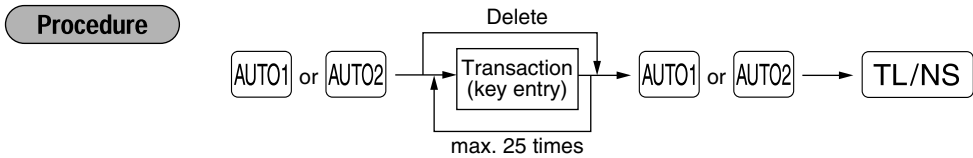
	#/TM/ST	86	⊗
20	#/TM/ST	TL/NS	

Print

PGM	
#86	20

AUTO key programming — Automatic sequencing key

If you program frequently performed transactions or report sequences for the **AUTO1** and **AUTO2** key, you can call those transactions and/or reports simply by pressing the **AUTO1** or **AUTO2** key in key operations.



Programming for **AUTO1**; entering a PLU 2 item and a dept. 6 item (unit price: 1.00)

Key operation example

AUTO setting → 2 **PLU/SUB** 100 **AUTO1** 6 **AUTO1** **TL/NS**

Print

PGM
#01

2
PLU
1
0
0
D06

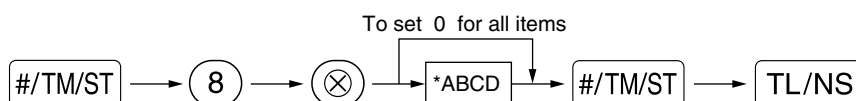
Note When the **AUTO** key has been programmed to execute a report job function, the mode switch must be in the appropriate position (*OPX/Z* for individual clerk reports, *X1/Z1* for daily reports or *X2/Z2* for weekly or monthly reports).

4 EURO Programming

For details of EURO migration operation, please refer to “EURO MIGRATION FUNCTION”.

■ EURO system settings

Procedure



* Item:	Selection:	Entry:
A Printing exchange total amount and change amount on receipt or journal	No*	0
	Yes	1
B Always enter 0.		0
C Cheque and credit operation when tendering in foreign currency	No*	0
	Yes	1
D Exchange calculation method	Multiplication*	0
	Division	1

Printing exchange total amount and change amount on receipt/journal

- Total and change amounts in exchange currency are printed respectively below each of the total and exchange amounts in domestic currency.

Exchange calculation method

- “Division” or “Multiplication” can be selected for the conversion method from domestic currency to exchange currency, and the calculation is performed as follows:

In case that “Division” is selected:

Domestic currency amount ÷ Exchange rate = Exchange amount

In case that “Multiplication” is selected

Domestic currency amount × Exchange rate = Exchange amount

Key operation example

```

  #/TM/ST  8  ⊗
1000  #/TM/ST
          TL/NS
  
```

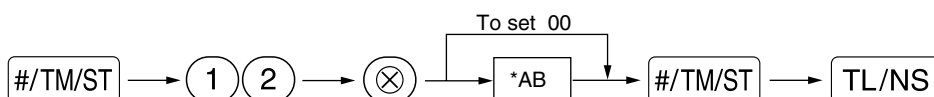
Print

```

*PGM*
#8      1000
  
```

■ Automatic EURO modification operation settings

Procedure



* Item:	Selection:	Entry:
A Converting the preset unit price of Dept./PLU in the automatic modification operation for EURO (job #800 in the X2/Z2 mode)	Yes*	0
	No	1
B Automatic modification operation for EURO (job #800 in the X2/Z2 mode) at the preset date	Compulsory*	0
	Non-compulsory	1

Key operation example

```

  #/TM/ST 12  ⊗
01  #/TM/ST
      TL/NS
  
```

Print

```

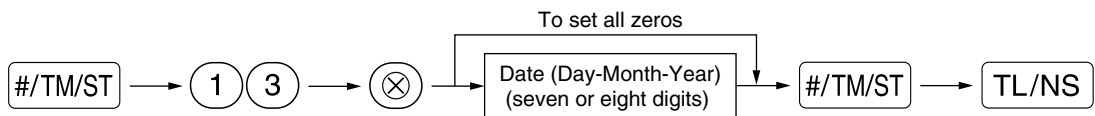
*PGM*
#12    01
  
```

Note

If you have already made the Job #800 operation with the substitution of 3 for “A” in the X2/Z2 mode, this programming is disabled.

■ Date setting for EURO modification operation

Procedure



Key operation example

#/TM/ST 13 ⊗
01072009 #/TM/ST
TL/NS

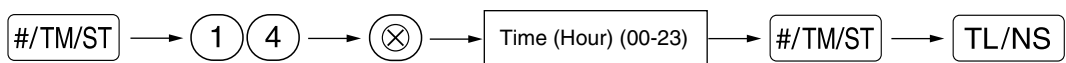
Print

PGM	
#13	01/07/2009

- Note**
- In case you changed the date format using job code 61, follow the format you selected for setting the date.
 - If all zeros are set, this programming is disabled.
 - If you have already made the Job #800 operation with the substitution of 3 for “A” in the X2/Z2 mode, this programming is disabled.

■ Time setting for EURO modification operation

Procedure



Key operation example

#/TM/ST 14 ⊗
10 #/TM/ST
TL/NS

Print

PGM	
#14	10:00

- Note**
- If you have already made the Job #800 operation with the substitution of 3 for “A” in the X2/Z2 mode, this programming is disabled.

5 Reading Stored Programs

The machine allows you to read every program stored in the PGM mode.

■ Key sequence for reading stored program

Report name	Key sequence
Programming report 1	TL/NS
Programming report 2	(2) → TL/NS
Auto key programming report	(1) → TL/NS
Printer density programming report	(3) → TL/NS
Department programming report	(4) → TL/NS
PLU programming report	Start PLU code → (⊗) → End PLU code → PLU/SUB

- Note** To stop reading programming report, turn the mode switch to the MGR position.

Sample printouts

1 Programming report 1

PGM		Mode
F01 (-)	007	Function no.& its text
	-3.00	Function parameters
F02 %	000	Discount amt. w/sign
L 90.00%	-15.00%	Function parameters
F03 %2	000	Percent rate with sign
L100.00%	-0.00%	Percent limit
F04 NET 1		
F05 DIFFER		
F06 TAX1 ST		
F07 TAX2 ST		
F08 TAX3 ST		
F09 TAX4 ST		
F10 VAT 1		
F11 VAT 2		
F12 VAT 3		
F13 VAT 4		
F14 TTL TAX		
F15 NET		
F16 NET2		
F17 CP PLU		
F18 REFUND		
F19 ∞		
F20 ∞ MODE		
F21 MGR ∞		
F22 SBT L ∞		
F23 HASH ∞		
F24 HASH RF		
F25 NO SALE		
F26 ***RA	9	Entry digit limit
F27 ***PO	9	Entry digit limit
F28 CA/CHK		
F29 GUEST		
F30 PAID TL		
F31 AVE.		
F32 CASH	018	Function parameters (A-C)
F33 CHEQUE	007	
F34 CHECK2	008	
F35 CARD1	008	
F36 CREDIT2	008	
F37 EX	002	
US \$	0.939938	Foreign currency symbol/Rate
F38 EXCH2		
F42 ***CID		
F44 CA/CH ID		

F77 DEPT		
F78 GROUP		
F79 PLU		
F80 TRANS.		
F81 TL-ID		
F82 CLERK		
F83 HOURLY		
F84 DAILY		
F85 #		
F86 COPY		
F87 EX1 CHG		
F88 AMOUNT		
SHARP PRESENTS THE XE-A303 SHARP IS THE BEST		Logo Message
#5	00000100	Function selection for miscellaneous keys (A-H)
#6	00000111	Print format (A-H)
#7	00000000	Receipt print format(A-H)
#8	1000	EURO system settings (A-D)
#10	0060	Power save mode(A-D)
#11	5	Logo message print format
#12	01	Automatic EURO modification operation settings (AB)
#13	01/07/2009	Date setting for EURO modification operation
#14	10:00	Time setting for EURO modification operation
#20	99.99	Time setting for EURO modification operation
#21	999.99	Entry digit limit for CID
#22	99.99	Entry digit limit for cheque cashing
#35	007	Entry digit limit for cheque changing
T1	16.0000%	Tax rate
T2	0.00	Min. taxable amount
	7.0000%	
	0.00	
T3	-----	
T4	-----	
C#01 DAVID	01	Clerk name/code
C#02 CLERK 02	02	
C#24	00	
C#25	00	

2 Programming report 2

PGM	
#61	00100112
#62	01000000
#63	01000001
#64	00000000
#65	00000000
#66	10010000
#67	00000010
#68	00000000
#69	00001000
#70	00000000
#71	
GT2	€00000000003.00
#72	
GT3	€00000000000.00
#76	Z1 0000
#77	Z2 0000
#85	€
#86	20
#87	TRAINING
#88	0

Job code
A to H from the left
* Job code #71, 72, 76 and 77 are fixed settings, for which you cannot change the settings.
Domestic currency symbol
Training clerk specification
Training mode text
Language selection

5 Department programming report

	PGM			
Dept. code	D01	T1	083	Dept. function
Dept. text	FRUIT			
Group no.	G01		10.00	Dept. unit price w/sign
	D02	T1	083	
	DEPT. 02			
	G10		-13.10	Minus department
	D03	T1	081	
	DEPT. 03			
	G01		0.00	Tax status
	DEPT. 97			
	G01		0.00	
	D98	T1	081	
	DEPT. 98			
	G01		0.00	
	D99	T1	081	
	DEPT. 99			
	G01		0.00	

Dept. function
Dept. unit price w/sign
Minus department
Tax status

3 Auto key programming report

PGM	
#01	
	2
	PLU
	1
	0
	0
	D06
#02	

6 PLU programming report

	PGM		
		0001-0015	Range
PLU code	P0001 (03)	1	Mode parameter
PLU text	MELON	1.25	Unit price
	P0002 (01)	0	
	PLU. 0002	2.15	
	P0003 (32)	1	
	PLU. 0003	-0.15	Associated dept. code
	PLU. 0014	1.00	
	P0015 (01)	1	
	PLU. 0015	1.50	

Range
Mode parameter
Unit price
Associated dept. code

4 Printer density programming report

PGM	
#50	70
	10 : 0123456789AB
	20 : 0123456789AB
	30 : 0123456789AB
	40 : 0123456789AB
	50 : 0123456789AB
	60 : 0123456789AB
	70 : 0123456789AB
	80 : 0123456789AB
	90 : 0123456789AB

Entered value
Printer density
Printing density example

TRAINING MODE

The training mode is used when the operator or the manager practices register operations.

When a clerk in training is selected, the machine automatically enters the training mode. To specify a clerk to be trained, refer to "Training clerk specification for training mode" in "ADVANCED FUNCTION PROGRAMMING" in page 77.

The training operation is valid only in REG, MGR and  mode.

The corresponding clerk memory is only updated in the training mode.

Key operation example

A clerk set in training → 20 
 1000 
 3 
 3 


Print

01/01/2000 0:27	20
123456#001050	CLERK 20
TRAINING	
DEPT. 05	*10.00
3x 24.00	
DEPT. 03	*72.00
ITEMS	40
CASH	*82.00

READING (X) AND RESETTING (Z) OF SALES TOTALS

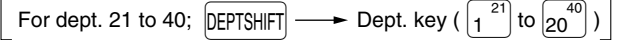
- Use the reading function (X) when you need to take a reading of sales information entered since the last reset. You can take this reading any number of times. It does not affect the register's memory.
- Use the resetting function (Z) when you need to clear the register's memory. Resetting prints all sales information and clears the entire memory except for the GT1 through GT3, Training GT, reset count, and consecutive number.

1 Summary of Reading (X) and Resetting (Z) Reports

X1 and Z1 reports: Daily sales reports

X2 and Z2 reports: Periodic (monthly) consolidation reports

When you take an X or Z report, turn the mode switch to the appropriate position referring to the column of "Mode switch position" shown on the table below, and use the following corresponding key sequence.

Item	Mode switch position			Key operation
	OPX/Z	X1/Z1	X2/Z2	
Flash report: (Only display) To clear the display, press the  key or turn the mode switch to another position.	X	—	—	Dept. code →  : Department sales total    key: Amount of cash in drawer  key: Sales total
Full sales report	—	X1, Z1	X2, Z2	Reading:  Resetting:  → 
Department report	—	X1	X2	Reading: 
Individual group total report on department	—	X1	X2	Reading: Group number →  → 
Full group total report on department	—	X1	X2	Reading:  →  → 
PLU report by designated range	—	X1, Z1	X2, Z2	Reading:  →  →  →  Resetting:  →  →  →  → 
PLU report by associated department	—	X1	X2	Reading: Associated dept. code →  → 
Transaction report	—	X1	X2	Reading:  → 

Item	Mode switch position			Key operation
	OPX/Z	X1/Z1	X2/Z2	
Total in drawer report	—	X1	X2	Reading:  → 
Individual clerk report	X, Z	—	—	Reading:  Resetting:  →  (The report of the current clerk)
Full clerk report	—	X1, Z1	X2, Z2	Reading:  Resetting:  → 
Hourly report (full)	—	X1, Z1	—	Reading:  Resetting:  → 
Hourly report (by range)	—	X1	—	Reading: Start time (hour) →  → End time (hour) → 
Daily net sales report	—	—	X2, Z2	Reading:  Resetting:  → 

Note

- When both sales quantities and sales amounts are zero, printing is skipped. If you do not want to skip, change the programming. (Refer to “Print format” of “Various Function Selection Programming 1”.)
- “X” represents read symbol and “Z” represents reset symbol in the reports.
- To stop reading and resetting the PLU sales report, turn the mode switch to the MGR position. The data will not be erased when you reset.
- The drawer does not open when you take X/Z reports.
The drawer can be opened by pressing the TL/NS key to remove the till after closing your business.
- When printing is performed continuously, the printing may be intermitted several seconds. After the intermission, the printing will be restarted.

2 Daily Sales Totals

For the sample reports of the full sales and periodic consolidation report, refer to "FULL SALES REPORT (Z REPORT)" on page 33.

Individual group total report on department

• Sample report

X1		Mode title
* GROUP *		Report title
D01	15 Q	
DEPT. 01	*114.00	
D02	7 Q	
DEPT. 02	*63.00	
D18	6 Q	
DEPT. 18	*21.42	
D19	4 Q	
DEPT. 19	*17.20	
GROUP1	41 Q	} Group 1 total
	*280.62	

Department report

• Sample report

X1		Mode title
* DEPT *		Report title
D01	15 Q	
DEPT. 01	*114.00	
	43.98%	
D02	7 Q	
DEPT. 02	*63.00	
	24.31%	
D19	4 Q	
DEPT. 19	*17.20	
	6.64%	
GROUP1	35 Q	
	*259.20	
	86.00%	

GROUP9	2 Q	
	*9.20	
	3.05%	

*DEPT TL	44 Q	
	*301.40	
	100.00%	

D50	2 Q	
DEPT. 50	-16.80	
D96	1 Q	
DEPT. 96	-10.00	
D97	2 Q	
DEPT. 97	-25.00	
DEPT (-)	5 Q	
	-51.80	

D98	4 Q	
DEPT. 98	*20.03	
*HASH TL	4 Q	
	*20.03	

D99	2 Q	
DEPT. 99	-22.00	
HASH (-)	2 Q	
	-22.00	

Full group total report on department

Sample report

X1		Mode title
* GROUP *		Report title
GROUP1	41 Q	} Group 1 total
	*280.62	
	86.93%	
	3 Q	
GROUP2	*15.00	
	4.65%	
GROUP9		
	2 Q	
	*9.20	
	2.85%	
*DEPT TL	50 Q	
	*322.82	
	100.00%	
DEPT (-)		
	5 Q	
	-51.80	
*HASH TL		
	4 Q	
	*20.03	
HASH (-)		
	2 Q	
	-22.00	

PLU report by associated department

Sample report

X1		Mode title
* PLU *		Report title
DEPT.01	DO1	Associate dept. code
PLU.0001	10 Q	} Sales q'ty and total
P0001	*30.00	
PLU.0002	7 Q	
P0002	*31.50	
PLU.0003	7 Q	
P0003	*37.10	
PLU.0010	6 Q	
P0010	*38.40	
PLU.0011	8 Q	
P0011	*40.00	
PLU.0013	3 Q	
P0013	-6.00	
PLU.0015	5 Q	
P0015	*12.50	
PLU.0035	8 Q	
P0035	*36.80	
***TOTAL		
	54 Q	
	*220.30	

Transaction report

Sample report

X1		Mode title
* TRANS. *		Report title
*DEPT TL	103 Q	
	*545.12	
DEPT (-)	5 Q	
	-51.80	
*HASH TL	4 Q	
	*20.03	
HASH (-)	2 Q	
	-22.00	
NET 1		
	*493.32	
NET		
	*493.32	
(—)		
	1 Q	
	-1.00	



From here this report shows the same transaction data as when a full sales report is run.

PLU report by designated range

Sample report

X1		Mode title*
* PLU *		Report title
	0001-0015	Range
PLU code	P0001	} Sales q'ty and total
Item label	PLU.0001	
	10 Q	
	*30.00	
	P0002	
	7 Q	
	*31.50	
	P0003	
	7 Q	
	*37.10	
	P0010	
	6 Q	
	*38.40	
	P0011	
	8 Q	
	*40.00	
	P0013	
	3 Q	
	-6.00	
	P0015	
	5 Q	
	*12.50	
***TOTAL		
	46 Q	
	*183.50	} Range sum

*: When you take Z1 report, "Z1" is printed.

Total in drawer report

Sample report

X1		Mode title
* TL-ID *		Report title
***CID	*294.35	Cash in drawer
*CH ID	*116.50	Cheque in drawer
CA/CH ID	*410.85	Cash plus cheque in drawer
CHK/CG	*2.00	Change total for cheque tendering

■ Individual clerk report

• Sample report

OPX		Mode title
* CLERK *		Report title
O1 #01	CLERK 01	Clerk no. /code
GUEST	22 Q	Clerk name
PAID TL	*478.95	Customer counter
AVE.	*21.77	Sales total
		Average
S	3 Q	
	*9.00	
S MODE	1 Q	
	*10.00	
MGR 00	1 Q	
	*10.00	
SBTL 00	1 Q	
	*5.63	
***RA	1 Q	
	*48.00	
***PD	1 Q	
	*23.00	
CA/CHK	2 Q	
	*20.00	
CASH	14 Q	
	*334.35	
CHECK1	4 Q	
	*71.50	
CHECK2	2 Q	
	*17.10	
CREDIT1	1 Q	
	*13.00	
CREDIT2	1 Q	
	*25.00	
EXCH1	1 Q	
	9.40	
DOM. CUR1	*10.00	
EXCH2	1 Q	
	12.75	
DOM. CUR2	*10.00	
****CID	*337.35	
*CH ID	*108.60	
CA/CH ID	*445.95	
CHK/CG	*2.00	

■ Hourly report

• Sample report

X1		Mode title*
HOURLY		Report title
10:00	10 Q	Customer counter
	*47.41	Sales total
11:00	8 Q	
	*52.70	
12:00	10 Q	
	*135.30	
17:00	10 Q	
	*150.14	
18:00	10 Q	
	*164.74	

*: When you take Z1 report, "Z1" is printed.

When you take an hourly report by range, a report of the specified range of time (hour) is printed.

■ Full clerk report

The printout occurs in the same format as in the sample report of individual clerk, but all clerk's sales data and total of all clerks are printed in the order of clerk number (from #1 to #25).

CCD -Compulsory Cash/cheque Declaration-

You can make mandatory the declaration of the cash/cheque amount in the drawer before outputting clerk Z report.

If your register is programmed for compulsory cash/cheque declaration (CCD), a clerk must first count and declare the cash and cheque amounts (of domestic and foreign currency) in the drawer before the clerk can output a clerk report. The procedure for outputting a CCD report is shown below.

Type of compulsory cash/cheque declaration

- Compulsory declaration prior to individual clerk resetting
- Compulsory declaration prior to full clerk resetting

Note

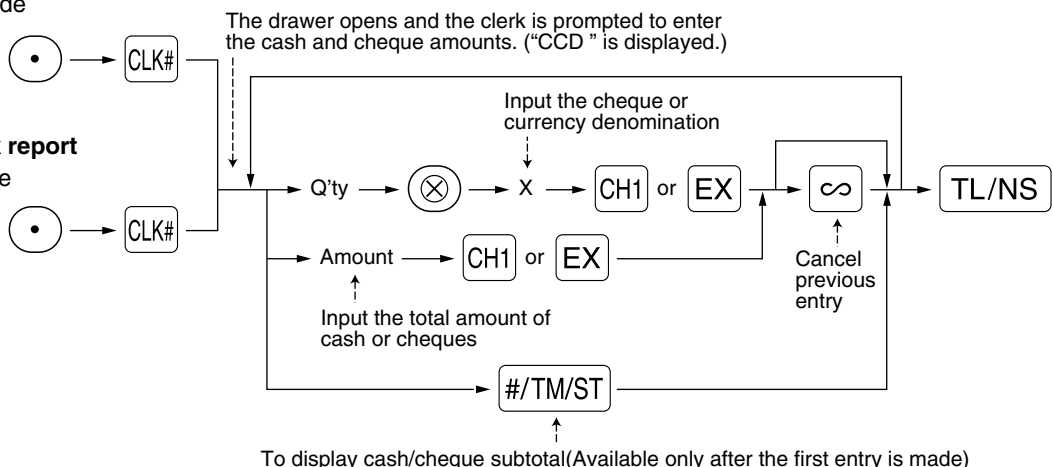
When cash/cheque declaration is compulsory, flash report are not available.

• Individual clerk report (Currently assigned clerk's declaration and report)

OP X/Z mode

• Full clerk report

X1/Z1 mode



CH1 : When inputting the cash and/or cheque amount in the drawer

EX : When inputting the amount of a foreign currency obtained in the sales by preset rate calculation in the drawer

OPZ		
* CCD *		
CA/CH IS		*30.00
EXCH1 IS		9.40

* CLERK *		
O1 #01	CLERK 01	
GUEST	8 Q	
PAID TL		*80.00
AVE.		*10.00

∞	2 Q	
		*7.50
∞ MODE	1 Q	
		*10.00
MGR ∞	1 Q	
		*10.00
SBTL ∞	1 Q	
		*38.00

CASH	2 Q	
		*5.00
CHECK1	1 Q	
		*10.00
	1 Q	

} CCD entry amount

CHECK1	1 Q		
		*10.00	
CHECK2	1 Q		
		*15.00	
CREDIT1	1 Q		
		*10.00	
CREDIT2	1 Q		
		*20.00	
EXCH1	1 Q		
		9.40	Currency exchange 1
EXCH1 IS		9.40	Exchange 1 (preset rate) total declared
CCD DIF.		0.00	Difference
DOM. CUR1		*10.00	
EXCH2	1 Q		
		12.75	
DOM. CUR2		*10.00	

*- *CID		*5.00	Cash in drawer to be obtained
*CH ID		*25.00	Cheque in drawer
CA/CH ID		*30.00	Cash/cheque in drawer
CA/CH IS		*30.00	Cash+cheque total declared
CCD DIF.		*0.00	Difference
DIF. TL		*0.00	Total of difference

OVERVERRIDE ENTRIES

Programmed limit for functions (such as for maximum amounts) can be overridden by making an entry in the MGR mode.

Procedure

- Turn the mode switch to the MGR position.
- Make an override entry.

Example

In this example, the register has been programmed not to allow discounts entries over 1.00.

Key operation example

REG mode	1500	
entries	250	...Error

Turn the mode switch to the MGR position.

250

Return the mode switch to the REG position.

Print

DEPT. 03	*15.00
(→)	-2.50
ITEMS	10
CASH	*12. 50

CORRECTION AFTER FINALIZING A TRANSACTION (Void mode)

When you need to void incorrect entries that clerks cannot correct (incorrect entries found after finalizing a transaction or cannot be corrected by direct or indirect void), follow this procedure:

- Turn the mode switch to the position using the manager key (MA), to enter into the void mode. In the void mode, the back light of the operator display turns red.
- Repeat the entries that are recorded on an incorrect receipt. (All data on the incorrect receipt is removed from register memory; the voided amounts are added to the void mode transaction totalizer.)

Incorrect receipt

DEPT. 04	*10.00
DEPT. 03	*1.50
ITEMS	20
CASH	*11. 50

Cancellation receipt

	* MODE	*
DEPT. 04	*10.00	
DEPT. 03	*1.50	
ITEMS	20	
CASH	*11. 50	

EURO MIGRATION FUNCTION

Note

- EURO programming described in this section are for users in the countries which will join to the members of the European Currency Union, not for the users in the countries already have joined the Union.

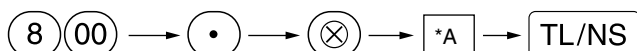
Your register can be modified to correspond with each period set for the introduction of EURO, and in your register each currency is treated as shown on the table below depending on which period you are in. Basically your register can be automatically modified to correspond to the introduction of EURO by executing automatic EURO modification operation shown below in the X2/Z2 mode. However, there are several options you must set depending on your needs. So, please carefully conduct necessary settings.

How currencies are treated in your register

	Period 1	Period 2	Period 3
	After the introduction of EURO, and before EURO banknotes and coins begin to circulate	After EURO banknotes and coins begin to circulate, and before national currency is withdrawn from circulation. (Co-existence of EURO and national currency)	After the national currency is withdrawn from circulation
Currency	EURO	Exchange key (Preset rate entry)	Domestic currency
	National currency	Domestic currency	Exchange key (Preset rate entry)
	Foreign currency	Exchange key (Manual rate entry)	Exchange key

Automatic EURO modification operation

Make sure the mode switch is in the X2/Z2 mode first, then perform the following procedure. Please note that you can perform each operation only once with the substitution of "A=1", "A=2" and "A=3". For example if you performed the operation with the substitution of "A=2" first, you cannot perform the operation with the substitution of "A=1".



*A=1: Applicable for period 1

*A=2: Applicable for period 2

*A=3: Applicable for period 3

The details of the register system modification are as shown below:

Items	A=1 (EURO status 1)	A=2 (EURO status 2)	A=3 (EURO status 3)
General Z1 report	Issue	Issue	Issue
General Z2 report	Issue	Issue	Issue
GT memories (GT1, GT2, GT3 and Training GT)	-	Clear	Clear*1
Conversion of preset prices of Dept./PLU	-	Yes	Yes*1
Conversion of entry digit/amount limit	-	Yes	Yes*1
Exchange amount printing for total and change	Yes	Yes	No
Exchange calculation method	Division	Multiplication	Multiplication
Domestic currency symbol	-	[EURO]	[EURO]
Domestic currency decimal point position	-	2	2
Exchange currency symbol	[EURO]	Previous domestic currency symbol	-*2
Exchange currency decimal point position	2	Previous domestic currency decimal point position	-
Rounding system (Denmark/Sweden/Normal)	-	Normal	Normal*1
Rounding up/down of the unit digits of amount	-	No	No*1
Lowest digit entering limitation of item	-	Arbitrary	Arbitrary*1
Lowest digit entering limitation of payment	-	Arbitrary	Arbitrary*1
Memory of difference due to rounding	-	No	No*1
Rounding of exchange currency	Round off (4 down/5 up)	Round off	Round off

• The item marked with “-” remains the same as the previous data.

*1: When you perform from EURO status 2, previous data remains unchanged.

*2: When you perform from EURO status 1 or 2, “space” is set.

IMPORTANT

- Conversion of the preset unit prices of departments and PLUs

Note that the conversion rate of the preset rate of the **[EX]** key is applied for the conversion, and the method is set to “division”. When the conversion is performed, the message “PRICE CONVERTED” will be printed on the #800 report.

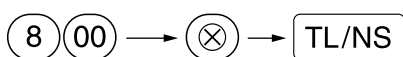
- After the execution of the procedure with “A=1”, treat EURO as foreign currency using the exchange key **[EX]** with the preset rate entry. Set the EURO conversion rate as the currency exchange rate for the exchange key.
- After the execution of the procedure with “A=2”, treat EURO as domestic currency, and national currency as foreign currency using the exchange key **[EX]** with the preset rate entry. Set the EURO conversion rate as the currency exchange rate for the exchange key.
- As for the percent rate for **[%1]**, **[%2]** and **[⊖]**, the automatic conversion is not made. So, when your domestic currency becomes EURO, you must change these settings so that they are base on EURO currency.

Note

You can manually make these settings. For programming details, please refer to “EURO Programming” section.

Checking the current EURO status

You can check the EURO status currently set on the cash register. Set the manager key (MA) to the X2/Z2 position, and perform the following sequence. The current EURO status will be printed on the receipt/journal.



Optional Programming for the Introduction of EURO

Some programming relating with the function of exchange key (EX) cannot be changed automatically with the execution of modification operation described in the previous section. After the execution on each period, conduct the following programming depending on your needs.

Programming for Exchange Key (EX)

Currency exchange rate

For period 1 and period 2, set the EURO conversion rate.

For programming details, refer to “Programming for EX” on page 58.

Exchange rate entry selection

When you treat EURO currency in the exchange key, you must apply preset rate entry. So, make enable for preset rate entry for period 1 and period 2. For programming details, refer to “Programming for EX” on page 58.

Cheque/credit operation

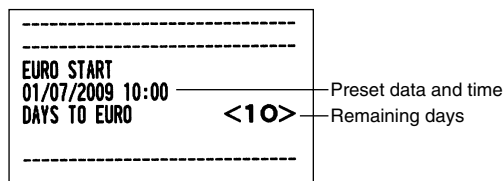
For period 1 and period 2, enable cheque/credit operation when tendering in foreign currency so that you can treat cheque and credit for EURO currency and national currency. For programming details, refer to “EURO system settings” on page 79.

Setting the date and time when the automatic modification operation for EURO should be executed

Selection of compulsory/non-compulsory of execution of the automatic modification operation for EURO

You can program the scheduled date and time to execute the automatic EURO modification operation.

From ten days before the preset date, the remaining days are printed at the bottom of the daily full resetting (Z1) report as follows.



When the above-mentioned preset date and time has come, and also when you start an entry in the REG/MGR mode, the error message “EURO CHANGE” is displayed. You cannot make any operation in the REG/MGR mode until you execute the automatic modification operation for EURO (job #800) in the X2/Z2 mode. You can program so that you can make entries in the REG/MGR mode even when the error message is displayed.

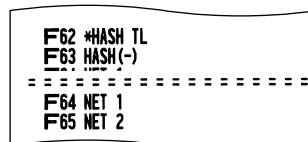
Date and time setting will be reset after the execution of the automatic modification operation and you can program again the date and time for the next automatic modification operation.

OPERATOR MAINTENANCE

1 In Case of Power Failure

When power is lost, the machine retains its memory contents and all information on sales entries.

- When power failure is encountered in register idle state or during an entry, the machine returns to normal operation after power recovery.
- When power failure is encountered during a printing cycle, the register prints "===== " and then carries out the correct printing procedure after power recovery. (See the sample print.)



F62 *HASH TL
F63 HASH (-)
=====
F64 NET 1
F65 NET 2

2 In Case of Printer Error

If the printer runs out of paper, the printer will stall, and "PAPER EMPTY" will appear on the display. Key entries will not be accepted. Refer to section 4 in this chapter, install a new roll, then press the **CL** key. The printer will print the power failure symbol and resume printing.

If the print roller arm comes up, the printer stalls, "HEAD UP" will appear on the display. Key entries will not be accepted. Push down the arm until it is securely locked, then press the **CL** key. The printer will print the power failure symbol and resume printing.

3 Cautions in Handling the Printer and Recording Paper

■ Cautions in handling the printer

- Avoid dusty and humid environments, direct sunlight and iron powder. (A permanent magnet and electromagnet are used in this machine.)
- Never pull the paper when the print roller arm is locked. First lift up the arm, and then remove the paper.
- Never touch the surface of the print head and print roller.

■ Cautions in handling the recording paper (thermal paper)

- Use only the paper specified by SHARP.
- Do not unpack the thermal paper until you are ready to use it.
- Avoid heat. The paper will color at around 70°C.
- Avoid dusty and humid storage places. Avoid direct sunlight.
- The printed text on the paper can discolor under conditions of high humidity and temperature, exposure to the direct sunlight, contact with glue, thinner or a freshly copied blueprint, and heat caused by friction from scratching or other such means.
- Be very careful when handling the thermal paper. If you want to keep a permanent record, copy the printed text with a photocopier.

4 Replacing the Paper Roll

Be sure to use paper rolls specified by SHARP.

The use of any other paper rolls other than those specified could cause paper jamming, resulting in register malfunction.

Paper specification

Paper width: 57.5 ± 0.5 mm

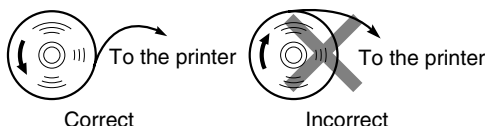
Max. outside diameter: 80 mm

Quality: Thermal paper

- **Be sure to set the paper roll prior to using your machine, otherwise it may cause a malfunction.**

Install the paper roll in the printer. Be careful to set the roll correctly.

(How to set the paper roll)

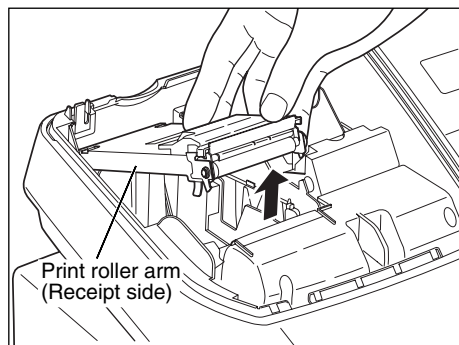


■ Removing the paper roll

When a red dye appears on the paper roll, it is time to replace it. Replace the paper roll with a new one. If you plan on not using the register for an extended period of time, remove the paper roll, and store it in an appropriate place.

Caution: The paper cutter is mounted on the printer cover. Be careful not to cut yourself.

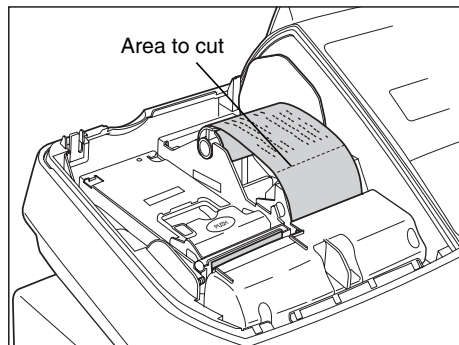
Removing the receipt paper roll:



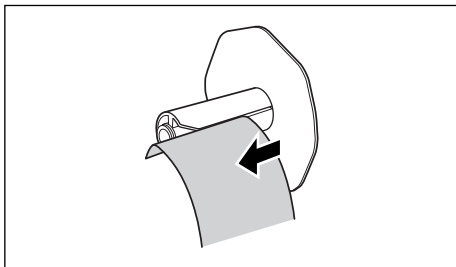
1. Remove the printer cover.
2. Lift up the print roller release lever (indicated as "PULL" on it) of the receipt side to unlock and open the print roller arm.
3. Remove the paper roll from the paper roll cradle of the receipt side.

Note Do not pull the paper through the printer.

Removing the journal paper roll:



1. Turn the mode switch to a position other than "⏻" with the power cord connected.
2. Remove the printer cover.
3. Press the  key to advance the journal paper until its printed part is out of the way.
4. Cut the paper and remove the take-up spool.
5. Lift up the print roller release lever (indicated as "PULL" on it) of the journal side to unlock and open the print roller arm.
6. Remove the paper roll from the paper roll cradle of the journal side.



7. Remove the printed journal roll from the take-up spool.

Note

Do not pull the paper through the printer.

■ Installing the paper roll

For information on how to install paper rolls, refer to "Installing Paper Rolls" on page 10.

Caution: The paper cutter is mounted on the printer cover. Be careful not to cut yourself.

5 Removing a Paper Jam

Caution: The paper cutter is mounted on the printer cover. Be careful not to cut yourself. Never touch the print head immediately after printing, as the head may still be hot.

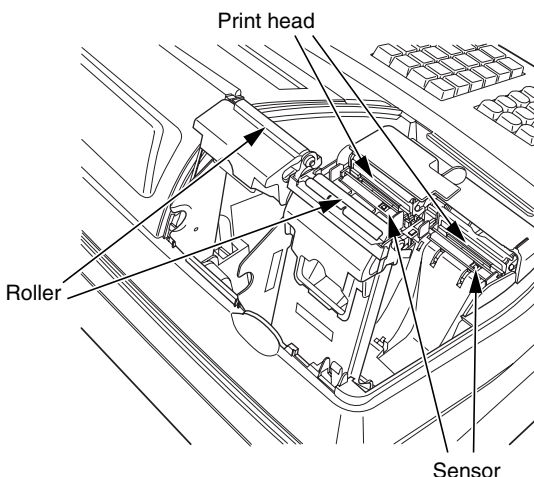
1. Remove the printer cover.
2. Lift up the print roller release lever to unlock and open the print roller arm.
3. Remove the paper jam. Check for and remove any shreds of paper that may remain in the printer.
4. Reset the paper roll correctly by following the steps in "Installing Paper Rolls" on page 10.

6 Cleaning the Printer (Print Head / Sensor / Roller)

When the printed text is getting dark or faint, paper dust may be stuck to the print head, sensor and/or roller. Clean them as follows:

Caution:

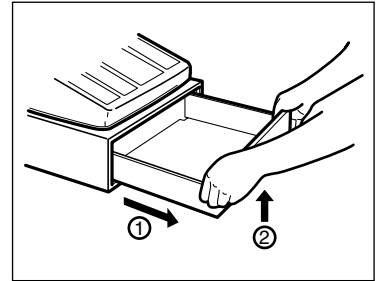
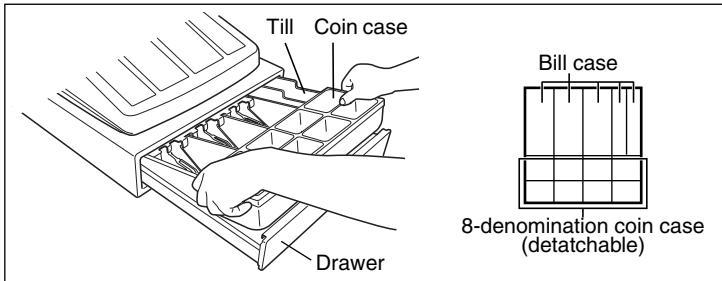
- **Never touch the print head with a tool or anything hard as it may damage the head.**
- **The paper cutter is mounted on the printer cover. Be careful not to cut yourself.**



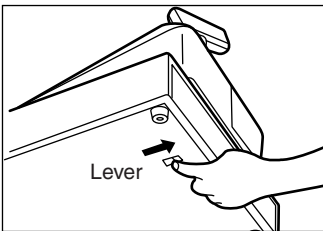
1. Turn the mode switch to the "⏻" position.
2. Remove the printer cover.
3. Lift up the print roller release lever to unlock and open the print roller arm.
4. Remove the paper roll referring to the "Removing the paper roll" section.
5. Clean the print head with a cotton swab or soft rag moistened with ethyl alcohol or isopropyl alcohol. Clean the roller and the sensor in the same manner.
6. Reset the paper roll correctly by following the steps in "Installing Paper Rolls" on page 10.

7 Removing the Till and the Drawer

The till in the register is detachable. After closing your business for the day, remove the till from the drawer and keep the drawer open. The 8-denomination coin case is also detachable from the till. To detach the drawer, pull it forward fully with the till removed, and remove it by lifting it up.



8 Opening the Drawer by Hand



The drawer automatically opens. However, when a power failure occurs or the machine becomes out of order, slide the lever located on the bottom of the machine in the direction of the arrow. (See the diagram at the left.) The drawer will not open if it is locked with the key.

9 Before Calling for Service

The malfunctions shown in the left-hand column below, labelled “Fault,” do not necessarily indicate functional faults of the machine. It is therefore advisable to refer to “Checking” shown in the right-hand column before calling for service.

Fault	Checking
(1) The display shows symbols that do not make sense.	• Has the machine been initialized properly as shown in "PREPARING THE CASH REGISTER" on page 8? (Note that initialization clears all the data and programmed settings stored in memory.)
(2) The display won't illuminate even when the mode switch is turned to any other position than "⏻".	• Is power supplied to the electrical outlet? • Is the power cord plug out or loosely connected to the AC outlet?
(3) The display is illuminated, but the whole machine refuses registrations.	• Is a clerk code assigned to the register? • Is the mode switch set properly at the "REG" position?
(4) No receipt is issued.	• Is the paper roll properly installed? • Is there a paper jam? • Is the receipt function in the "OFF" status? • Is the print roller arm securely locked?
(5) No journal paper is taken up.	• Is the take-up spool installed on the bearing properly? • Is there a paper jam?
(6) Printing is unusual.	• Is the print roller arm securely locked? Open the print roller arm, and lock the arm by following the instruction of installation. • Is the paper roll properly installed? • Are the print head/sensor/roller clean?
(7) Continuous printing stops.	• Display shows "→ → → →". Printing will automatically restart after several seconds.

■ Error message table

When the following error messages are displayed, press the  key and take a proper action according to the table below.

Error message	Error status	Action
ENTRY ERROR	Registration error	Make a correct key entry.
MISOPERATION	Misoperation error	Make a correct key entry.
NO RECORD	Undefined code is entered.	Enter a correct code.
MEMORY FULL	Memory is full (in the AUTO key programming)	Program the AUTO key within 25 steps.
SBTL COMPUL.	Compulsory depression of the  key for direct finalization	Press the  key and continue the operation.
TEND COMPUL.	Compulsory tendering	Make a tendering operation.
NOT ASSIGNED	No entry of a clerk code	Make a clerk code entry.
OVER LIMIT.	Overflow limitation error	Make a registration within a limit of entry.
INH. OPEN PR	The open price entry is inhibited.	Make a preset price entry.
INH. UNIT PR	The preset price entry is inhibited.	Make an open price entry.
NOT NON-TEND	The direct finalization is inhibited.	Make a tendering operation.
BUFFER FULL	Subtotal void is not allowed.	Finalize the transaction, and correct the wrong entries in the  mode.
HEAD UP	Print roller arm is lifted up.	Make sure the print roller arm is surely rocked.
PAPER EMPTY	Receipt or journal paper roll is not installed or empty.	Install a receipt or journal paper.
EURO CHANGE	EURO modification operation must be executed	Execute EURO modification operation (Job code 800).
CLERK ERR.	Overlapped clerk error	Complete the overlapped transaction under way.

SPECIFICATIONS

Model:	XE-A303		
Dimensions:	355 (W) x 430 (D) x 312 (H) mm		
Weight:	11.5 kg		
Power source:	Official (nominal) voltage and frequency		
Power consumption:	Stand-by: 10W (When the official voltage is 220 to 230 V)		
	Stand-by: 11W (When the official voltage is 230 to 240 V)		
	Operating: 46W (When the official voltage is 220 to 230 V)		
	Operating: 46W (When the official voltage is 230 to 240 V)		
Working temperature:	0 °C to 40 °C		
Electronics:	LSI (CPU) etc.		
Display:			
Operator display:	Dot matrix display (16 positions and 2 lines)		
Customer display:	7-segment display (7 positions)		
Printer:			
Type:	2-station thermal printer		
Printing speed:	Approx. 17 lines/second		
Printing capacity:	30 digits each for receipt/journal paper		
Other functions:	• Graphic logo printing function • Logo message function • Receipt (ON-OFF) function • Receipt and journal independent paper feed function		
Paper roll:	Width: 57.5 ± 0.5 mm Max. diam.: 80 mm Quality: High quality (0.06 to 0.08 mm thickness)		
Cash drawer:	5 slots for bill and 8 for coin denominations		
Accessories:	Manager key 2 Operator key 2 Drawer lock key 2 Paper roll 2 Take-up spool 1 Fixing angle bracket 1 set Instruction manual 1 copy "Where to Find" sheet 1 copy		

* Specifications and appearance subject to change without notice for improvement.

Use these labels with the department keys. Write department names on the labels and attach them to the department keys by first removing the transparent key covers. (Please make a copy of this page.)

Example:

21	
Candy	
Danish	
1	E

25	
5	A

30	
10	F

35	
15	K

40	
20	P

22	
2	D

27	
7	I

32	
12	N

37	
17	S

24	
4	B

29	
9	G

34	
14	L

39	
19	Q

21	
1	E

26	
6	J

31	
11	O

36	
16	T

23	
3	C

28	
8	H

33	
13	M

38	
18	R



Attention: Your product is marked with this symbol. It means that used electrical and electronic products should not be mixed with general household waste. There is a separate collection system for these products.

A. Information on Disposal for Users (private households)

1. In the European Union

Attention: If you want to dispose of this equipment, please do not use the ordinary dust bin!

Used electrical and electronic equipment must be treated separately and in accordance with legislation that requires proper treatment, recovery and recycling of used electrical and electronic equipment.

Following the implementation by member states, private households within the EU states may return their used electrical and electronic equipment to designated collection facilities free of charge*. In some countries* your local retailer may also take back your old product free of charge if you purchase a similar new one.

*) Please contact your local authority for further details.

If your used electrical or electronic equipment has batteries or accumulators, please dispose of these separately beforehand according to local requirements.

By disposing of this product correctly you will help ensure that the waste undergoes the necessary treatment, recovery and recycling and thus prevent potential negative effects on the environment and human health which could otherwise arise due to inappropriate waste handling.

2. In other Countries outside the EU

If you wish to discard this product, please contact your local authorities and ask for the correct method of disposal.

For Switzerland: Used electrical or electronic equipment can be returned free of charge to the dealer, even if you don't purchase a new product. Further collection facilities are listed on the homepage of www.swico.ch or www.sens.ch.

B. Information on Disposal for Business Users.

1. In the European Union

If the product is used for business purposes and you want to discard it:

Please contact your SHARP dealer who will inform you about the take-back of the product. You might be charged for the costs arising from take-back and recycling. Small products (and small amounts) might be taken back by your local collection facilities.

For Spain: Please contact the established collection system or your local authority for take-back of your used products.

2. In other Countries outside the EU

If you wish to discard of this product, please contact your local authorities and ask for the correct method of disposal.

FOR CUSTOMERS IN U.K.

IMPORTANT

The wires in this mains lead are coloured in accordance with the following code:

BLUE:	Neutral
BROWN:	Live

As the colours of the wires in the mains lead of this apparatus may not correspond with the coloured markings identifying the terminals in your plug proceed as follows.

The wire which is coloured **BLUE** must be connected to the terminal which is marked with the letter **N** or coloured black.

The wire which is coloured **BROWN** must be connected to the terminal which is marked with the letter **L** or coloured red.

The apparatus must be protected by a 3A fuse in the mains plug or distribution board.

CAUTION: DO NOT CONNECT THE LIVE (BROWN) WIRE OR THE NEUTRAL (BLUE) WIRE TO THE EARTH TERMINAL OF YOUR 3-PIN MAINS PLUG.

Environment Protection

The device is supported by a battery. To dispose the battery safely to protect the environment, please note the following points:

- Take the used battery to your local waste depot, dealer or customer service centre for recycling.
- Do not throw the used battery into fire, into water or into the household waste!

Umweltschutz

Das Gerät wird durch eine Batterie gestützt. Um die Batterie sicher und umweltschonend zu entsorgen, beachten Sie bitte folgende Punkte:

- Bringen Sie die leere Batterie zu Ihrer örtlichen Mülldeponie, zum Händler oder zum Kundenservice-Zentrum zur Entsorgung.
- Werfen Sie die leere Batterie niemals ins Feuer, ins Wasser oder in den Hausmüll.

Protection de l'environnement

L'appareil est supporté sur pile. Afin de protéger l'environnement, nous vous recommandons de traiter la pile usagée la façon suivante:

- Apporter la pile usagée à votre centre de traitement des ordures ménagères le plus proche ou, à votre revendeur ou, au service après-vente, pour recyclement.
- Ne jamais jeter la pile usagée dans une source de chaleur, dans l'eau ou dans les vide-ordures.

Miljöskydd

Denna produkt nöddrivs av batteri.

Vid batteribyte skall följande iakttas:

- Det förbrukade batteriet skall inlämnas till er lokala handlare eller till kommunal miljöstation för återinssamling.
- Kasta ej batteriet i vattnet eller i hushållssoporna. Batteriet får ej heller utsättas för öppen eld.

Bescherming van het milieu

Deze kassa gebruikt een batterij. Bescherm het milieu en gooi een gebruikte batterij op de juiste manier weg. Let op de volgende punten:

- Breng een lege batterij naar de lokale verzamelplaats voor klein chemisch afval, terug naar de winkel of gooi in een batterijbak.
- Gooi een gebruikte batterij niet in een vuur of water en gooi niet met het gewone huisafval weg.

Geräuschpegel L_{PA}: 62,3 dB
Gemessen nach EN ISO 7779:2001

SHARP

SHARP ELECTRONICS (Europe) GmbH
SonninstraÙe 3, D-20097 Hamburg

SHARP CORPORATION