## SHARP.

## ELECTRONIC CASH REGISTER

## MODEL <br> ER-A440S

INSTRUCTION MANUAL


## CAUTION:

The cash register and the remote drawer should be securely fitted to the supporting platforms to avoid instability when the drawers are 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.

## 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.

This equipment complies with the requirements of Directives 89/336/EEC and 73/23/EEC as amended by 93/68/EEC.
Dieses Gerät entspricht den Anforderungen der EG-Richtlinien 89/336/EWG und 73/23/EWG mit Änderung 93/68/EWG.
Ce matériel répond aux exigences contenues dans les directives 89/336/CEE et 73/23/CEE modifiées par la directive 93/68/CEE.
Dit apparaat voldoet aan de eisen van de richtlijnen 89/336/EEG en 73/23/EEG, gewijzigd door 93/68/EEG.
Dette udstyr overholder kravene i direktiv nr. 89/336/EEC og 73/23/EEC med tillæg nr. 93/68/EEC. Quest' apparecchio è conforme ai requisiti delle direttive 89/336/EEC e 73/23/EEC, come emendata dalla direttiva 93/68/EEC.


Este equipamento obedece às exigências das directivas 89/336/CEE e 73/23/CEE, na sua versão corrigida pela directiva 93/68/CEE.
Este aparato satisface las exigencias de las Directivas 89/336/CEE y 73/23/CEE, modificadas por medio de la 93/68/CEE.
Denna utrustning uppfyller kraven enligt riktlinjerna 89/336/EEC och 73/23/EEC så som komplette ras av 93/68/EEC.
Dette produktet oppfyller betingelsene i direktivene 89/336/EEC og 73/23/EEC i endringen 93/68/EEC. Tämä laite täyttää direktiivien 89/336/EEC ja 73/23/EEC vaatimukset, joita on muutettu direktiivillä 93/68/EEC.

## INTRODUCTION

Thank you very much for your purchase of the SHARP Electronic Cash Register, Model ER-A440S. 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.

## IMPORTANT

- Install your register in a location that is not subject to direct sunlight, unusual temperature changes, high humidity or exposure to water sources and keep away from heat and magnetic sources.
Installation in such locations could cause damage to the cabinet and the electronic components.
- The register should not be operated by an individual 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 discoloration 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.

- If the register malfunctions, call your local dealer for service - do not try to repair the register yourself.
- For a complete electrical disconnection, pull out the mains 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 by the customer. In order to charge the batteries, the machine must be plugged in. This recharging precaution can prevent unnecessary initial service calls.

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## EXTERNAL VIEW

## Front view



## Rear view



## PRINTER

## INSTALLING AND REMOVING THE PRINTER COVER



When removing the printer cover, lift up its rear. When installing the printer cover, hook it on the pawls on the cabinet and shut it.


## - Paper release lever

Used to load or unload the machine with paper roll (receipt and journal paper). Keep the lever down to take in or out the paper roll.

## KEYBOARD

## 1 Standard keyboard layout

| $\underset{\text { Receipt }}{\text { A }}$ | Jounal | \# | CL | 7 | 8 | 9 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| RCPT | $\Theta$ | NS | * | 4 | 5 | 6 |
| \%1 | PO | RA | AUTO | 1 | 2 | 3 |
| \%2 | RF | $\infty$ | $\begin{gathered} \text { AUTO } \\ 2 \end{gathered}$ | 0 | 00 | - |


| $\begin{array}{\|l\|} \hline \text { PLU/ } \\ \text { SUB } \end{array}$ | EAN | AMT | INQ | VAT | $\underset{\#}{\mathrm{CASH}}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 5 | 10 | 15 | 20 | EX1 | EX2 |
| 4 | 9 | 14 | 19 | CR1 | CR2 |
| 3 | 8 | 13 | 18 | CH1 | CH 2 |
| 2 | 7 | 12 | 17 | ST |  |
| 1 | 6 | 11 | 16 | TL |  |

Note
All the keys but the receipt paper feed and journal paper feed keys can be re-positioned. If you want to change the layout, contact your dealer.



These key numbers are used for positioning of department keys and direct PLU keys. Refer to pages 41 and 49. This layout can be changed by your dealer.


## KEYS AND SWITCHES

## 1 Mode switch and mode keys

The mode switch can be operated by inserting one of the three supplied mode keys - manager (MA), submanager (SM), and operator (OP) keys. These keys can be inserted or removed only when the switch is in the "REG" or " $\downarrow$ " position.


The mode switch has these settings:
$৬: \quad$ This mode locks all register operations.
No change occurs to register data.
OP X/Z: This setting allows cashiers/clerks to take X or Z reports for their sales information. (This setting may be used only when your register has been programmed for "OP X/Z mode available" in the
 PGM2 mode.) It can also be used for displaying the time and printing the employee arrival and departure times. And it can be used to toggle receipt state "ON" and "OFF" by pressing the BCOT key.
REG: For entering sales
PGM1: To program those items that need to be changed often: e.g., unit prices of departments or PLUs, and percentages
PGM2: To program all PGM1 items and those items that do not require frequent changes: e.g., date, time, or a variety of register functions
MGR: For manager's and submanager's entries
The manager can use this mode to make entries that are not permitted to be made by cashiers - for example, after-transaction voiding and override entry.
$\mathbf{X 1 / Z 1 : ~ T o ~ t a k e ~ t h e ~} X / Z$ report for various daily totals
X2/Z2: To take the X/Z report for various periodic (weekly or monthly) consolidation

## 2 Drawer lock key

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


Operator display


Customer display (Pop-up type)


Amount: Appears in the far-right eight (max.) positions.
Cashier code: Appears in the second and third positions (two digits).
Clerk code: Appears in the second and third positions (two digits) with " C " in the fifth position.
Number of repeats for repetitive registrations:
The number of repeats is displayed, starting at " 2 " and incremented with each repeat. When you have registered ten times, the display will show "0."
Example: $(2 \rightarrow 3 \rightarrow 4 \cdots \cdots \rightarrow 0 \rightarrow 1 \rightarrow 2 \cdots)$

## Receipt function status:

The indicator "_" appears in the ninth position when the receipt function is put in the OFF status.
Time: Appears in the second to sixth positions (using 24-hour format) in the OP X/Z, REG, or MGR mode. In the REG, or MGR mode, press the \# key to display the time.

## ■ Machine state symbols

$\square: \quad$ Appears in the tenth place during programming.
E: Appears in the tenth place when an error is detected.

- (Floating): Appears when a minus department, PLU/subdepartment or EAN entry is made or when a discount, refund, or void entry is made.
$\square: \quad$ Appears in the tenth place when the subtotal is displayed or when the amount tendered is smaller than the sale amount.
I: Appears in the tenth place when the EX1 through EX4 key is pressed to calculate a subtotal in foreign currency.
$F: \quad$ Appears in the tenth place when a transaction is finalized by pressing the $\mathrm{TL}, \mathrm{CA}_{2}, \mathrm{CH} 1$ through CH4, or CR1 through CR4 key.
$\underline{L}$ : Appears in the tenth place when the change due amount is displayed or when the cash/cheque declaration is compulsory.
II: Appears in the tenth place when the validation printing is compulsory.
$\Delta: \quad$ Appears in the tenth place when the $\infty$ key is pressed in the MGR mode, indicating the entry into the VOID mode. While your register is in the VOID mode, this symbol continues to be in the display except when department codes, PLU codes, EAN codes or subtotals are displayed. Also appears when a subtotal void is made.
- : Appears right below the tenth place when the cash in drawer amount exceeds a programmed sentinel amount. The sentinel check is performed for the total cash in drawer.
Also appears right below the eighth place when the VAT shift is effective.


## PRIOR TO PROGRAMMING

## 1 General instructions

This chapter illustrates how to program your cash register.
All the programming items can be programmed by the Job-Code-Based Programming described later. However, your machine allows you to program some items using the Direct Programming, which does not require you to enter the job code.

## Job-Code-Based Programming

## Simplified procedure


(Job 'code)

## Direct Programming

Sample procedure

(Object key)

## 2 How to program alphanumeric characters

You can program alphanumeric characters for departments, PLUs, EANs, functions and so on in the character entry mode.
There are two ways for programming characters: using character keys on the keyboard and entering character codes with numeric keys on the keyboard.

## ■ Using character keys on the keyboard

Enter a character according to the position of the figure shown below.

[Ex.]

－Numerals，letters and symbols are programmable simply by pressing the corresponding keys．
－Characters may only be entered in single size or in double size．By default，the single－size character mode is selected．To enter a character in double size，press the（DC）key before you enter the corresponding character．

## Example To program the word＂SHARP＂in double size，do the following key－in．

$$
\begin{array}{llllll}
(\mathrm{DC}) & \mathrm{S} & (\mathrm{DC}) & \mathrm{H} & (\mathrm{DC}) & \mathrm{A} \\
(\mathrm{DC}) & \mathrm{R} & (\mathrm{DC}) & \mathrm{P} \\
\hline
\end{array}
$$

－Letters of alphabets＂A＂through＂$Z$＂，＂$\varnothing$＂and＂Æ＂are possible to be entered in lower case or in upper case．By default，the upper－case letter mode is selected．To enter a character in lower case，press the［（bHT）key before you enter the character．To return to the upper－case letter mode，press the（sHf）key again．

## Example To program the word＂Sharp＂，do the following key－in．


－Symbols and special letters are programmable by using the（sh rF）key．To enter a character，press the（shlन－2） key before you enter the corresponding character．

## Example To program letters＂\＃Ä Å＂with the letter＂\＃＂being double size



## Editing the characters

You can edit the characters you entered．Pressing a character key replaces the current character with a new one．To edit the characters，use the（（8xacic）key．
（⿷匚⿱口⿰口口⿻上丨又心（x）：Backs up the cursor，erasing the character to the left．

## ■ Entering character codes

－Numerals，letters and symbols are programmable by entering character codes and the 00 key．See the alphanumeric character code table on the next page．In this way，you can program characters other than the characters on the programming key sheet．

$$
X X X \longrightarrow 00 \quad X X X: \text { Character code (3 digits) }
$$

－Double－size characters can be made by entering the character code 253.

## Example

To program the word＂SHARP＂with the letter＂S＂being double size


## Alphanumeric character code table

| Code | Character |
| :---: | :---: |
| 001 | á |
| 002 | â |
| 003 | ê |
| 004 | ̂̂ |
| 005 | ì |
| 006 | í |
| 007 | ô |
| 008 | ó |
| 009 | û |
| 010 | ú |
| 011 | œ |
| 012 | ú |
| 013 | ú |
| 014 | ¢ |
| 015 | ó |
| 016 | $\Lambda$ |
| 017 | $\Psi$ |
| 018 | $\Gamma$ |
| 019 | － |
| 020 | $\Omega$ |
| 021 | $\Delta$ |
| 022 | $\Theta$ |
| 023 | 河 |
| 024 | П |
| 025 | $\Sigma$ |
| 026 | Y |
| 027 | Ф |
| 028 | Ú |
| 029 | Ú |
| 030 | Ó |
| 031 | Ó |
| 032 | （space） |
| 033 | ！ |
| 034 | ＂ |
| 035 | \＃ |
| 036 | \＄ |
| 037 | \％ |
| 038 | \＆ |
| 039 | ， |
| 040 | （ |
| 041 | ） |
| 042 | ＊ |
| 043 | ＋ |
| 044 | ， |
| 045 | － |


| Code | Character | Code | Character |
| :---: | :---: | :---: | :---: |
| 046 | ． | 091 | Ä |
| 047 | 1 | 092 | Ö |
| 048 | 0 | 093 | Ü |
| 049 | 1 | 094 | $\wedge$ |
| 050 | 2 | 095 | － |
| 051 | 3 | 096 | ， |
| 052 | 4 | 097 | a |
| 053 | 5 | 098 | b |
| 054 | 6 | 099 | C |
| 055 | 7 | 100 | d |
| 056 | 8 | 101 | e |
| 057 | 9 | 102 | f |
| 058 | ： | 103 | g |
| 059 | ； | 104 | h |
| 060 | ＜ | 105 | i |
| 061 | ＝ | 106 | j |
| 062 | ＞ | 107 | k |
| 063 | ？ | 108 | I |
| 064 | ＠ | 109 | m |
| 065 | A | 110 | n |
| 066 | B | 111 | 0 |
| 067 | C | 112 | p |
| 068 | D | 113 | q |
| 069 | E | 114 | r |
| 070 | F | 115 | S |
| 071 | G | 116 | t |
| 072 | H | 117 | u |
| 073 | I | 118 | v |
| 074 | J | 119 | w |
| 075 | K | 120 | x |
| 076 | L | 121 | y |
| 077 | M | 122 | z |
| 078 | N | 123 | \｛ |
| 079 | O | 124 | ｜ |
| 080 | P | 125 | \} |
| 081 | Q | 126 | B |
| 082 | R | 127 | ¢ |
| 083 | S | 128 | ！！ |
| 084 | T | 129 | 1 |
| 085 | U | 130 | 2 |
| 086 | V | 131 | 3 |
| 087 | W | 132 | 4 |
| 088 | X | 133 | 1／2 |
| 089 | Y | 134 | F／T |
| 090 | Z | 135 | $\leftarrow$ |


| Code | Character |
| :---: | :---: |
| 136 | $\rightarrow$ |
| 137 | $\cdots$ |
| 138 | $\leadsto$ |
| 139 | 4 |
| 140 | － |
| 141 | F |
| 142 | T |
| 143 | $\downarrow$ |
| 144 | ç |
| 145 | － |
| 146 | ¿ |
| 147 | Ù |
| 148 | à |
| 149 | $\ldots$ |
| 150 | $\varnothing$ |
| 151 | Å |
| 152 | $\square$ |
| 153 | é |
| 154 | è |
| 155 | Pt |
| 156 | i |
| 157 | N |
| 158 | ò |
| 159 | £ |
| 160 | ¥ |
| 161 | － |
| 162 | 「 |
| 163 | 」 |
| 164 | － |
| 165 | ． |
| 177 | Á |
| 178 | Í |
| 180 | $\overline{\mathrm{A}}$ |
| 181 | $\overline{\mathrm{a}}$ |
| 182 | $\overline{\mathrm{E}}$ |
| 183 | $\overline{\mathrm{e}}$ |
| 184 | T |
| 185 | i |
| 186 | $\bar{U}$ |
| 187 | $\bar{u}$ |
| 188 | N |
| 189 | ṇ |
| 190 | Č |
| 191 | Ş |
| 192 | C |


| Code | Character |
| :---: | :---: |
| 193 | i |
| 194 | G |
| 195 | S |
| 196 | G |
| 197 | $\dot{\mathrm{g}}$ |
| 198 | K |
| 199 | k |
| 200 | L |
| 201 | I |
| 202 | Ž |
| 203 | D |
| 204 | đ |
| 205 | C |
| 206 | ć |
| 207 | $€$ |
| 208 | P |
| 209 | － |
| 210 | ě |
| 211 | s |
| 212 | č |
| 213 | ž |
| 214 | ý |
| 215 | u̇ |
| 216 | n̆ |
| 217 | $\sim$ |
| 218 | ＇ |
| 219 | r＇ |
| 224 | ＊ |
| 225 | § |
| 226 | $\varnothing$ |
| 227 | － |
| 228 | $\uparrow$ |
| 229 | ］ |
| 230 | ［ |
| 231 | ＂ |
| 232 | ä |
| 233 | ö |
| 234 | ü |
| 235 | æ |
| 236 | å |
| 237 | É |
| 238 | ñ |
| 253 | ＊（DC） |
|  |  |
|  |  |

[^0]
## PROGRAMMING

Your machine allows you to program in two modes: PGM1 and PGM2. The PGM1 mode is for programming those items that need to be changed often: unit prices of departments/PLUs/EANs and percentages. The PGM2 mode is used for programming all PGM1-mode programs and those items that require less frequent changes: date, time, tax rate, and the functions of each key. We describe below the programming or setting procedures of various items.
Program every item necessary for your store following the appropriate procedures.

* To set the mode switch to the PGM1 position, use the manager or submanager key; and to set to the PGM2 position, use the manager key.


## - Preparations for Programming

1. Plug your machine into a standard wall outlet.
2. Put the manager or submanager key in the mode switch and turn it to the PGM1 or PGM2 position depending upon the programming you are about to do.
3. Check to see whether both journal and receipt rolls are present in the machine. If they are missing, install journal and receipt paper rolls correctly referring to the procedure in "4. Installing and removing the paper roll" under "OPERATOR MAINTENANCE".
4. Program necessary items into your machine.

## Direct Programming

## 1 Setting the date and time

## - Date PGM 2

Enter the day (one or two digits), month (two digits), and year (two digits) in this sequence.

## Procedure



Date (five or six digits)

## Example

$\qquad$
260801 \#

Print


## Time PGM2

Set the time using the 24 -hour format. For example, when the time is set to $2: 30 \mathrm{AM}$, enter 230 ; and when it is set to 2:30 PM, enter 1430. Once you set the time, the internal clock unit will continue to run as long as the built-in battery is alive and update the date (day, month, year) properly.

## Procedure



## Example Setting the time as 2:30 PM (14:30)



## 2 Programming for departments

Your machine is equipped with 20 standard departments and up to 50 optional departments.
Your machine allows you to perform the following programming for each department:
■ Unit price PGM 1 PGM 2

## Procedure



To program for another dept.
*1 Department code: 1 to 50
*2 Unit price: max. six digits (9999.99)

## Example Programming the unit price 10.00 for department 1

1. Press the department 1 key.

- The current unit price will be displayed.

2. Enter the unit price " 1000 ."
3. Press the ST key to program this setting.
4. Press the $T L$ key to finalize the programming and generate a programming report.

1000

010.00
$01 \quad 1000$

| 02 | 0.00 |
| :--- | :--- |

TL

## Print

| AFMME: |  | - Dept. code |
| :---: | :---: | :---: |
| $\Gamma$ |  |  |
| D01 | 10.00 | - Unit price |
| CT, CI | 601 |  |
| 0000003 | 0.0018 |  |

## - Functional selection PGM2

## Procedure




## Tax status

- The tax system of your machine has been factory-set to automatic VAT1-6. If you desire to select any of automatic tax 1-6, manual VAT1-6, manual VAT1, manual tax 1-6, and the combination of the automatic VAT 1-3 and the automatic tax 4-6, consult your dealer.
- When the combination of the automatic VAT1-3 and automatic tax 4-6 system is selected, one of the VAT1(G), VAT2(F) and VAT3(E) can be selected in combination with tax 4-6.
Example: $B C D E F G=100100,110100,111010$
Normal department/SICS (Single Item Cash Sale) / SIF (Single Item Finalization)
- If an entry of a department programmed for SICS is made first, the sale will be finalized 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 key is pressed.
- Whenever a sale is made to a department set for SIF, the sale is finalized as soon as the department key is pressed.
HALO (High Amount Lockout)
- You can set an upper limit amount (HALO) for each department. The limit is effective for the REG-mode operations and can be overridden in the MGR mode.
- IJ is the same as $1 \times 10^{\text {J }}$.

For example, presetting 14 (100.00) here means that amount entries of up to 100.00 are allowed in the REG mode. When you preset 18, however, the upper limit amount is 999999.99.

## Example Programming for department 4 as follows: $A=0, B=0, C=0, D=0, E=0, F=0, G=1, H=0, I=9$ and

 $\mathrm{J}=5$.1. Press the department 4 key twice.

ABCDEFGHIJ


- The current parameter setting will be displayed.

2. Set the parameters as follows:

- You can change the value at the blinker.

Go to the desired position with the following keys:

| - ${ }^{\text {a }}$....Moves the blinker to the right. | -0, 000000018 | 0-otion 00000018 |
| :---: | :---: | :---: |
| $00 . \cdots \cdots \cdots$ Moves the blinker to the left. | 0:ƠO:0000000 | -0, 000000018 |
| - Enter the figure. | 0000001095 | $0000001099: \frac{5}{2}$ |
| Press the $\otimes$ key to program this setting. | $\otimes$ | -0, 000000018 |

4. Press the TL key to finalize the programming and generate a programming report.


## 3 Price lookup (PLU) programming

A PLU code can be up to six digits (free code).
■ Unit price PGM 1 PGM 2

## Procedure


*Unit price: max. six digits (9999.99)

## Example Programming the unit price 1.25 for PLU code 1

1. Enter the PLU code " 1 " and press the PLUSUB key.

1 PLUSUB 125
2. Enter the unit price " 125 ."
3. Press the $\triangle T$ key to program this setting. ST
$000001 \quad 0.00$
$000001 \quad 125$
0000020.00
4. Press the $T L$ key to finalize the programming and generate a programming report.

TL
0.00

Print

|  |  | -PLU code |
| :---: | :---: | :---: |
| P000001(01) | 100 |  |
|  | 1.25 | -Unit price |
| FL000001 | CO |  |
| 002 |  |  |

## Functional selection

## Procedure



| Item | Selection: | Entry: |
| :---: | :---: | :---: |
| A Sign (plus/minus) | Plus | 0 |
|  | Minus | 1 |
| B VAT6 or TAX6 | No | 0 |
|  | Yes | 1 |
| C VAT5 or TAX5 | No | 0 |
|  | Yes | 1 |
| D VAT4 or TAX4 | No | 0 |
|  | Yes | 1 |
| E VAT3 or TAX3 | No | 0 |
|  | Yes | 1 |
| $\bar{F} \quad$ VAT2 or TAX2 | No | 0 |
|  | Yes | 1 |
| G VAT1 or TAX1 | No | 0 |
|  | Yes | 1 |
| H Mode | Prohibit mode | 0 |
|  | Subdepartment mode | 1 |
|  | PLU mode | 2 |
|  | PLU/subdepartment mode | 3 |
|  | Delete mode | 4 |

## Sign (plus/minus)

The function of every PLU/subdepartment varies according to the combination of its sign and the sign of its associated department as follows:

| Sign |  | Function of PLU/subdepartment |
| :---: | :---: | :--- |
| DepartmentPLU/ <br> subdepartment |  |  |
| + | + | Serves as a normal plus PLU/subdepartment |
| - | - | Serves as a normal minus PLU/subdepartment |
| + | - | Accepts store coupon entries, but not split-pricing entries |
| - | + | Not valid; not accepted |

## Tax status

- The tax system of your machine has been factory-set to automatic VAT1-6. If you desire to select any of automatic tax 1-6, manual VAT1-6, manual VAT1, manual tax 1-6, and the combination of the automatic VAT 1-3 and the automatic tax 4-6, consult your dealer.
- When the combination of the automatic VAT1-3 and automatic tax 4-6 system is selected, one of the VAT1(G), VAT2(F) and VAT3(E) can be selected in combination with tax 4-6. Example: BCDEFG=100100, 110100, 111010
- A PLU not programmed for any of these tax statuses is registered depending on the tax status of the department which the PLU belongs to.


## Mode parameter

- PLU mode: Allows a PLU entry to be made by entering an assigned PLU code and depressing the PLUSUB key.
- Subdepartment mode: Allows a subdepartment entry to be made by entering a unit price, pressing the AMT key, assigned PLU code and then pressing the PLUSUB key.
- PLU/subdepartment mode: Allows PLU entries to be made in both the PLU and subdepartment modes.
- Delete mode: Deletes program data for each PLU.
- Prohibit mode: Prohibits the entry of any assigned PLU code. This mode does not clear the PLU/subdepartment program data.


## Example

1. Enter the PLU code "1"
and press the PLU/SUB key twice.

1 PLUSUB PLUSUB
00000012

ABCDEFGH

2. Set the parameters $A$ to $H$.
-You can go to the desired position with the 00 or $\cdot$ key.
3. Press the $\otimes$ key to program this setting.

4. Press the TL key to finalize the programming and generate a programming report.

TL


Print


## PLU assignment to departments PGM 1 PGM2

## Procedure

$\longrightarrow X X X X X X$

*Department key to be associated with the entered PLU
Note

- The following functions of the PLU depend on the programming for its associated department:
- Grouping (Group 1 through 14)
- SICS (Single Item Cash Sale)/SIF (Single Item Finalization)/Normal
- Item validation print compulsory/non-compulsory
- HALO (high amount lockout)


## Example

Assigning PLU codes 1 and 2 to department 2

1. Enter the PLU code "1"
and press the PLU/SUB key three times.

$$
1 \mathrm{PLUSUB} \mathrm{PLU/SUB} \mathrm{PLU/SUB}
$$

$$
\begin{array}{|llllllll}
\hline 0 & 0 & 0 & 0 & 0 & 1 & & 0
\end{array}
$$

2. Press the department 2 key to assign

PLU code 1 to department 2.
3. Press the department 2 key to assign PLU code 2 to department 2.
4. Press the TL key to finalize the programming and generate a programming report.

TL
Print


## 4 European Article Number(EAN)/Universal Product Code(UPC) programming

- Unit price PGM 1 PGM 2


## Procedure

Scan EAN code

*Unit price: max. six digits (9999.99)
Note

- The entry of a EAN (or UPC) code through the scanner is indicated by $\boxtimes$.

Example Programming the unit price 2.50 for EAN code 5012345678900.

1. Scan the EAN code, or enter the EAN code " 5012345678900 " and press the EAN key.

5012345678900 EAN

| $P$ | 0.00 |
| :--- | :--- |

2. Enter the unit price " 250 ."
3. Press the $S T$ key to program this setting.

| P | 250 |
| :--- | :--- |
| P | 0.00 |

4. Press the TL key to finalize the programming and generate a programming report.

TL

Print


## Functional selection

## Procedure



| Item |  | Selection: | Entry: |
| :---: | :---: | :---: | :---: |
| A | Sign (plus/minus) | Plus | 0 |
|  |  | Minus | 1 |
| B | VAT6 or TAX6 | No | 0 |
|  |  | Yes | 1 |
| C | VAT5 or TAX5 | No | 0 |
|  |  | Yes | 1 |
| $\overline{\text { D }}$ | VAT4 or TAX4 | No | 0 |
|  |  | Yes | 1 |
| $\overline{\mathrm{E}}$ | VAT3 or TAX3 | No | 0 |
|  |  | Yes | 1 |
| F | VAT2 or TAX2 | No | 0 |
|  |  | Yes | 1 |
| G | VAT1 or TAX1 | No | 0 |
|  |  | Yes | 1 |
| H | Delete method <br> (To erase from the EAN file) | Delete in X/Z non-accessed EAN deleting job (\#105 in Z1 mode) | 0 |
|  |  | Inhibit to delete in non-accessed EAN deleting job | 1 |
|  |  | Delete now | 4 |

## Note

## Sign (plus/minus)

The function of every EAN varies according to the combination of its sign and the sign of its associated department as follows:

| Sign |  | Function of EAN |  |
| :---: | :---: | :--- | :---: |
| Department | EAN |  |  |
| + | + | Serves as a normal plus EAN |  |
| - | - | Serves as a normal minus EAN |  |
| + | - | Accepts store coupon entries, but not split-pricing entries |  |
| - | + | Not valid; not accepted |  |

## Tax status

- The tax system of your machine has been factory-set to automatic VAT1-6. If you desire to select any of automatic tax 1-6, manual VAT1-6, manual VAT1, manual tax 1-6, and the combination of the automatic VAT 1-3 and the automatic tax 4-6, consult your dealer.
- When the combination of the automatic VAT1-3 and automatic tax 4-6 system is selected, one of the VAT1(G), VAT2(F) and VAT3(E) can be selected in combination with tax 4-6. Example: $B C D E F G=100100,110100,111010$
- An EAN not programmed for any of these tax statuses is registered depending on the tax status of the department which the EAN belongs to.


## Delete method

- When you select "delete now", the programmed data of the EAN code you specified is deleted with this programming.
- When you select "Delete in X/Z non-accessed EAN deleting job", you can delete EANs that has not been accessed during the period that is programmed in the job \#2029 with the execution of EAN deleting job (\#105 in Z1 mode).


## Example

Programming for EAN code 5012345678900 as follows: $A=0, B=0, C=0, D=0, E=0, F=0, G=1$, and $\mathrm{H}=1$.

1. Scan the EAN code and press the EAN key, or enter the EAN code " 5012345678900 " and press the EAN key twice.


00000011

ABCDEFGH
P OOOOOOOO
2. Set the parameters $A$ to $H$. 00 - You can go to the desired position with the 00 or $\cdot$ key.
3. Press the $\otimes$ key to program this setting.


| $P$ | 0.00 |
| :--- | :--- |

4. Press the $T L$ key to finalize the programming and generate a programming report.



When "delete now" is selected:


## Procedure


*Department key to be associated with the entered EAN
Note - The following functions of the EAN depend on the programming for its associated department:

- Grouping (Group 1 through 14)
- SICS (Single Item Cash Sale)/SIF (Single Item Finalization)/Normal
- Item validation print compulsory/non-compulsory
- HALO (high amount lockout)


## Example Assigning EAN code 5012345678900 to department 2

1. Scan the EAN code and press the EAN key twice, or enter the EAN code "5012345678900" and press the EAN key three times.

5012345678900 EAN EAN EAN

| $P$ | 01 |
| :--- | :--- |

2. Press the department 2 key to assign EAN code 5012345678900 to department 2.
3. Press the $T L$ key to finalize the programming and generate a programming report.


Print


5 Programming for discount keys

- Deduction amount ( $\Theta$ ) PGM 1 PGM 2


## Procedure


*Deduction amount: 0-999999

## Example Assigning " 10.00 " to the $\Theta$ key

1. Press the $\Theta$ key.
2. Enter the deduction amount "1000." 1000
3. Press the $S T$ key to program this setting. ST

| 001 | 0.00 |
| :--- | :--- |
| 001 | 1000 |
| 001 | 10.00 |

4. Press the TL key to finalize the programming and generate a programming report.
0.00

Print


## High amount lockout (HALO) and +/- sign ( $\Theta$ )

## Procedure



* Item:

A $\quad$ Sign (plus/minus)
Selection:
Entry:

| Plus | 0 |
| :--- | :--- |
| Minus | 1 |

B $\quad$ Significant digit for HALO
1 through 9
C Number of zeros to follow the significant digit for HALO

## Note

## HALO (High Amount Lockout)

$B C$ is the same as $B \times 10^{\circ}$.
For example, presetting 14 (100.00) here means that amount entries of up to 100.00 are allowed in the REG mode. When you preset 18, however, the upper limit amount is 999999.99.

## Example

Programming for the $\Theta$ key as follows: $\mathrm{A}=1, \mathrm{~B}=1$, and $\mathrm{C}=3$.

1. Press the $\Theta$ key twice.
2. Set the parameters $A$ to $C$.

- You can go to the desired position with the 00 or $\cdot$ key.

3. Press the $\otimes$ key to program this setting.
$\otimes$

ABC


001
113
4. Press the TL key to finalize the programming and generate a programming report.



6 Programming for percent keys
■ Percent rate (\%) PGM1 PGM2
Procedure


* Percent rate: 0.00-100.00

Note You must use a decimal point when setting percentage rates that are fractional.

## Example

 Assigning $10.25 \%$ to the \% key
## Key operation

(\%1) $10 \bullet 25$ كT

Print


Sign (+/-) (\%) PGM 2

## Procedure



* Item:

A $\quad$ Sign (plus/minus)

Selection:
$\frac{\text { Plus (premium) }}{\text { Minus (discount) }}$

Entry:
0

## Example

Programming minus sign for the \%1 key


## 7 Programming for exchange keys

## - Currency exchange rate (EX) PGM 1 PGM2

Procedure


* Currency exchange rate: 0.000000-999.999999

Note You must use a decimal point when setting conversion rates that are fractional.

## Example Assigning 0.6068 to the Ex1 key



8 Programming for the $\triangle A 2, \triangle B A, \triangle P, C H$ and $C R$ keys

- High amount lockout (HALO) (CA2, $\mathrm{BA}, \mathrm{PO}, \triangle \mathrm{CH}$ and CR ) PGM2


## Procedure



* $A B$ is the same as $A \times 10^{B}$

A: Significant digit (1 through 9)
B: Number of zeros to follow the significant digit (0 through 8)

## Example

Programming a HALO limit of 1000.00 (15) for the CR2 key


## 9 Programming the tax rate

- Tax rate PGM2


## Procedure



* A: Enter a corresponding tax rate number. For example, when you program a tax rate as tax rate 1 , enter " 1 ", and when you program it as tax rate 6 , enter " 6 ".
** Sign and tax rate: XYYY.YYYY
$\square_{\text {Tax rate }}=0.0001$ to 100.0000
Sign $\% /+=1 / 0$
Note
- The lowest taxable amount is valid only when you select add on tax system. If you select VAT (Value added tax) system, it is ignored.
- If you make an incorrect entry before pressing the second $\triangle$ key in programming a tax rate, cancel it with the ©L key; and if you make an error after pressing the second $\otimes$ key, cancel it with the $\triangle T$ key. Then program again from the beginning.
- If you select VAT system, the sign which you program is ignored.


## Example Programming the tax rate $(+4 \%)$ as tax rate 2 with lowest taxable income as 0.12 .

1. Press the VAT key.

VAT
$2 \otimes$
$4 \otimes$
12

| $P$ | 0.00 |
| :--- | :--- |


| $P$ | 0.00 |
| :--- | :--- |

3. Enter the tax rate " $+4 \%$."
4. Enter the lowest taxable amount "12."

## TL

| $P$ | 0.00 |
| :--- | :--- |

5. Press the TL key to finalize the programming and generate a programming report.



## Job-Code-Based Programming

This section illustrates how to program items using job codes. Using job codes allows you to program a wide variety of items in comparison with direct programming.

Start this programming by entering a corresponding job code as shown below.


All the items which can be programmed by the job-code-based programming are listed on this page and the following, and those which can also be programmed by the direct programming are marked with the symbol
" Direct " that follows job codes.

Note
When setting the parameters for a job code, the digit that is blinking is the one that can be changed.
To go to the position of the parameter that you want to change, press either of the following keys :

- Moves the blinker to the right.

00 Moves the blinker to the left.

## 1 Setting the date and time

## Setting the date PGM 22610 Direct

Enter day (one or two digits), month (two digits), and year (two digits) in this sequence.

## Procedure



## Example

Key operation


Print


## Setting the time PGM 2 2611 Direct

Set the time using the 24-hour format. For example, when the time is set to $2: 30 \mathrm{AM}$, enter 230 ; and when it is set to 2:30 PM, enter 1430 .

## Procedure



Key operation


Print


## 2 Setting the register and consecutive numbers

## ■ Setting the register number PGM 26612

When your store has two or more registers, it is practical to set separate register numbers for their identification. You may set them in a maximum of six digits.

## Procedure



## Example

Key operation


Print


## Setting the consecutive number

The consecutive number is increased by one each time a receipt is issued.
Enter a number (one to four digits) that is one less than the desired starting number.

## Procedure



Print


## 3 Programming the tax rate

■ Tax rate PGM 2 2711 Direct

## Procedure


*A: Enter a corresponding tax rate number. For example, when you program a tax rate as tax rate 1 , enter 1 and when you program it as tax rate 6 , enter 6.
** Sign and tax rate: XYYY. YYYY
-Tax rate $=0.0001$ to 100.0000
Sign $1 /+=1 / 0$

## Example

Key operation



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 $\triangle$ key in programming a tax rate, cancel it with the (CL key; and if you make an error after pressing the third $\otimes$ key, cancel it with the ST key. Then program again from the beginning correctly.
- If you select VAT system, the sign which you program is ignored.


## 4 Programming for departments

Your machine is equipped with 20 standard departments and up to 50 optional departments.
Your machine allows you to perform the following programming for each department:

## Functional programming PGM 2110

You can set each department for:

## Compulsory item validation print

If item entries must be validated, program corresponding departments for compulsory item validation print. SICS (Single Item Cash Sale) / SIF (Single Item Finalization)

- SICS

If the first registration is to a department set for SICS, the sale is finalized as soon as the department key is pressed. If the sale is preceded by registrations to departments not set for SICS, a sale to a department set for SICS does not finalize and can be repeated until the TL key is pressed.

- SIF

Whenever a sale is made to a department set for SIF, the sale is finalized as soon as the department key is pressed.

## Type of unit price entry

You may select one of the following four types of unit price entry for each department.

- Open and preset
- Preset only
- Open only
- Inhibit department key


## Procedure




## Tax status PGM 2 2111 Direct

Assign a tax status to each department. When entries are made into taxable departments in a transaction, tax is automatically computed according to the associated tax rate as soon as the transaction is completed.

## Procedure

To program for the dept. other than the following dept.


* Item:

| Item: |  | Selection: | 0 |
| :--- | :--- | :--- | :--- |
| $\mathbf{A}$ | Always enter 0. | Yes | 1 |
| $\mathbf{B}$ | VAT6 or TAX6 | No | 0 |
| $\mathbf{C}$ | VAT5 or TAX5 | Yes | 1 |
|  |  | No | 0 |
| $\mathbf{D}$ | VAT4 or TAX4 | Yes | 1 |
|  |  | No | 0 |
| $\mathbf{E}$ | VAT3 or TAX3 | Yes | 1 |
| F | VAT2 or TAX2 | No | 0 |
| $\mathbf{G}$ | VAT1 or TAX1 | Yes | 1 |

Note

- The tax system of your machine has been factory-set to automatic VAT1-6. If you desire to select any of automatic tax 1-6, manual VAT1-6, manual VAT1, manual tax 1-6, and the combination of the automatic VAT 1-3 and the automatic tax 4-6, consult your dealer.
- When the combination of the automatic VAT1-3 and automatic tax 4-6 system is selected, one of the VAT1(G), VAT2(F) and VAT3(E) can be selected in combination with tax 4-6.
Example: $B C D E F G=100100,110100,111010$

Key operation


Print


## A limit amount (HALO) of entry PGM 2112 Direct

You can set upper limit amounts (HALO: High Amount Lockout) for each department. The limit is effective for the REG-mode operations and can be overridden in the MGR mode. HALO limit is represented by two figures as follows:

## Procedure



* $A B$ is the same as $A \times 10^{B}$.

A: Significant digit (1 through 9)
B: Number of zeros to follow significant digit (0 through 8)
For example, presetting 14 (100.00) here means that amount entries of up to 100.00 are allowed in the REG mode. But when you preset 18, the upper limit amount is 999999.99.


## Alphanumeric characters

You can program a maximum of 16 characters (item label) for each department. (However, the default setting is for a 12-character label.)
Select the characters you want to program, referring to section "2 How to program alphanumeric characters" in chapter "PRIOR TO PROGRAMMING".

## Procedure



## Example

Key operation


Print


## - Unit price PGM 1 PGM 2 1110 Direct

You can program unit prices up to a maximum of six digits (9999.99). Even if a department is not programmed to allow the entry of preset unit prices in functional programming (job 2110), the department is automatically changed to allow the entry of preset unit prices by this programming entry.

## Procedure



Your machine allows you to assign a commission group (1-9) to each department.

## Procedure



* A: Commission group 0-9 ( $0=$ no commission )


## Example

Key operation


Print


## $\square$ Group number PGM2 2116

You can assign departments to a maximum of 14 groups (1 through 14). This programming enables you to take group department sales reports.

## Procedure



Note The standard model provides no hash dept./bottle return dept. If you need them, please consult your dealer.

## Example

Key operation


| Print |  |
| :---: | :---: |
| 4116 4Frave |  |
| D01 | 10.00 |
| Fruits | 001 |
| 000000 | 0 C1L9E |
| Cue | 0.00 |
| DFT.OE | 60. |
| 0000001 | 000418 |

You can assign a department number to each key position. Each key position has a corresponding key number. Departments may be freely selected for the number of department keys and their positions.
To assign the department to a key position, select the key number of the position.
For key number position, refer to section "2 Standard key number layout" in chapter "KEYBOARD".

## Procedure


*1 The key number placement is determined by your local Authorized SHARP Dealer.
*2 $A B$ is a department code.

## Example

Key operation


Print


## 5 Price lookup (PLU) programming

Your machine has two kinds of PLU registration methods.
Direct PLU registration: Accomplished by depressing item key (direct PLU key) directly.
Indirect PLU registration: Accomplished by making an entry of PLU code and pressing the PLUSUB key.
Each PLU requires you to program the following:

## PLU code (six digits)

Associated department
When a PLU is associated with a department, the following functions of the PLU depend on the programming for the corresponding department.

- Grouping (Group 1 through14)
- HALO (only for the subdepartment)
- Single item cash sale/Single item finalization
- Item validation print compulsory/non-compulsory


## Unit price (max. six digits)

You will usually have unit prices programmed for individual PLUs as PLU preset unit prices. If you program unit price " 0 " for a PLU, you can enter only the selling quantity of the PLU, i.e. the PLU can be used only as a counter.

## Base quantity for split-pricing entries - two digits

Program a base quantity for each PLU/subdepartment dedicated to split-pricing entries.

## PLU, subdepartment, PLU/subdepartment, delete, or prohibit mode

- If the PLU mode (i.e. automatic preset unit price entry) is selected, individual PLU entries can be made by entering the assigned code and depressing the PLU/SUB key (or by depressing a direct PLU key without any PLU code entry).
- If the subdepartment mode is selected, the AMT key must be depressed after the price entry followed by the PLU code entry. The entry is finalized by the PLUSUB key depressed.
- If the PLU/subdepartment mode is selected, the entries in both the PLU and subdepartment modes are available.
- If the delete mode is selected, the corresponding program data for each PLU is deleted.
- If the prohibit mode is selected, the assigned PLU code cannot be entered. This mode does not clear the PLU/subdepartment program data.
Sign (+/-)
The function of every PLU/subdepartment varies according to the combination of its sign and its associate department's sign as follows:

| Sign |  | Function of PLU/subdepartment |
| :---: | :---: | :--- |
| Dept. | PLU/subdept. |  |
| + | + | Serves as a normal plus PLU/subdept. |
| - | - | Serves as a normal minus PLU/subdept. |
| + | - | Accepts store coupon entries, but not split-pricing entries. |
| - | + | Not valid; not accepted. |

## Tax status

Item label ( 12 characters) (option: max. 16 characters)
Commission group ( 1 to 9 )

## Link PLU

Any PLU is able to link to any other PLU (e.g. bottle deposit). However, the number of links is a maximum of
5. Even if more than 5 PLUs are linked, the sixth or higher link is not actualized.

## Direct PLU key positioning

For some items, you can program in two ways: programming an individual PLU code and for a range of sequential PLU codes. The procedure marked "For each PLU" shows individual PLU programming. "For a range of PLUs" shows sequential range PLU programming.

## 

## Procedure

## For each PLU



Note As soon as the programming is completed for one PLU, the next PLU code appears in the display.

## For a range of PLUs


*1, 2, 3: 1 to 999999 (free code)
*4: AB: Associated department code

## Example

For each PLU
Key operation


## Key operation



For a range

## of PLUs

$\qquad$

| Key operation |
| :---: |
| $2230 \cdot \otimes$ |
| $11 \otimes 20 \otimes$ |
| 3 ST |
| TL |



| H1200 $\times \mathrm{FGHE}$ |  | -PLU code |
| :---: | :---: | :---: |
| F00000102) | 100 |  |
|  | 0.00 | cat |
| Fi00000 | 0 | Associated dept. |
| 002 |  |  |
| F000002(02) | 100 |  |
|  | 0.00 |  |
| Fluou0e | 00 |  |
| 002 |  |  |

## Procedure



## - Base quantity PGM 1 PGM 21211

## Procedure



## Procedure

## For each PLU



## For a range of PLUs


*1,2,3: 1 through 999999


## Example

## For each PLU

Key operation
$2210 \cdot \otimes$
$1 \otimes 003 \stackrel{\mathrm{ST}}{\mathrm{TL}}$

Print


For a range of PLUs

Key operation


Print


## 

## Procedure

## For each PLU



## For a range of PLUs


*1,2,3: 1 through 999999

| Item: |  | Selection: | Entry: |
| :---: | :---: | :---: | :---: |
| A | Sign (+/-) | Minus PLU | 1 |
|  |  | Plus PLU | 0 |
| B | VAT6 or TAX6 | Yes | 1 |
|  |  | No | 0 |
| C | VAT5 or TAX5 | Yes | 1 |
|  |  | No | 0 |
| D | VAT4 or TAX4 | Yes | 1 |
|  |  | No | 0 |
| E | VAT3 or TAX3 | Yes | 1 |
|  |  | No | 0 |
| F | VAT2 or TAX2 | Yes | 1 |
|  |  | No | 0 |
| G | VAT1 or TAX1 | Yes | 1 |
|  |  | No | 0 |

Note

- The tax system of your machine has been factory-set to automatic VAT1-6. If you desire to select any of automatic tax 1-6, manual VAT1-6, manual VAT1, manual tax 1-6, and the combination of the automatic VAT 1-3 and the automatic tax 4-6, consult your dealer.
- When the combination of the automatic VAT1-3 and automatic tax 4-6 system is selected, one of the VAT1(G), VAT2(F) and VAT3(E) can be selected in combination with tax 4-6. Example: $B C D E F G=100100,110100,111010$
- A PLU not programmed for any of these tax statuses is registered depending on the tax status of the department which the PLU belongs to.


## Example

## For each PLU

| Key operation |
| :---: |
| $2211 \boxed{\bullet}$ |
| $2 \boxed{\otimes} 0000001$ |
| 0000000 |
| ST |
| TL |

Print


## For a range of PLUs

| Key operation |
| :---: |
| $2232 \cdot \otimes$ |
| $11 \otimes 20 \otimes$ |
| 0000001 ST |
| TL |

Print


## - Alphanumeric characters PGM 22214

You can program a maximum of 16 characters (item label) for each PLU or subdepartment. (However, the default setting is for a 12 -character label.) Select the characters you want to program, referring to section " 2 How to program alphanumeric characters" in chapter "PRIOR TO PROGRAMMING".

## Procedure



Assigning of PLUs to commission groups
You can assign PLUs (or subdepartments) to commission groups.

## Procedure

For each PLU


## For a range of PLUs


*1,2,3: 1 through 999999
*A : Commission group 0-9 (0=no commission)

## Example

## For each PLU

Key operation


Print

| \#2, xFguta |  |
| :---: | :---: |
| F00001.02 | 700 |
| T1 | 1.25 |
| MTLK | Ci |
| 003 |  | group number

$\qquad$

For a range of PLUs

Key operation


| Key operation |
| :---: |
| $2235 \cdot \otimes$ |
| $12 \otimes 14 \otimes$ |
| 1 ST |
| TL |

## Procedure



Note - To program this function, please consult your dealer.

- PLU codes must have already been defined.


## Example

Key operation


Print


## ■ Direct PLU key positioning PGM $2 \boldsymbol{2 2 1 9}$

You can assign a PLU code to each key position. PLUs may be selected for the number of direct PLU keys and their positions. For key number positions, refer to section "2 Standard key number layout" in the chapter "KEYBOARD".

## Procedure



To program for the key number other than the following key number

* The key number placement is determined by your local Authorized SHARP Dealer.


## Example

Key operation


Print


6 European Article Number (EAN) or Universal Product Code (UPC) programming

## ■ EAN or UPC code

Your machine can transact the following codes:

- UPC-A (Number system character: 0, 2, 3 ,4) •UPC-E •EAN-8 •EAN-13

For the codes used in-store marking, there are two types of PLU type (treated as a code like PLU code) and Non-PLU type (price/quantity information is included in the code).
When a code is non-PLU type, the price/quantity in the code is read for sales entry (in case of quantity, "quantity multiplys preset unit price" is processed to obtain price.)

## UPC-A

- Number system character: 0 <used in the source marking>
- Number system character: 3 <used as NDC or HRI>

For entry, a full 12 digits number or 11 digits number (omitting the check digit) must be entered.


- Number system character: 2 <ln-store marking Non-PLU type> You can program the format by the job \#2025.
- Number system character: 4 <In-store marking PLU type>


For entry, a full 12 digits number, 11 digits number (omitting the check digit), or a leading zero plus 12 digits number must be
 entered.(Any numbers are allowed for the digits marked with *, and on the recipt/journal, non-PLU type code is printed like $2020008^{* * * * ~(* * * *: ~ p r i c e ~ i n f o r m a t i o n) .) ~}$

## UPC-E

- UPC-E is a zero-surpressed version of UPC-A that conforms to the UPC-E Standards. This code is used for marking small package.

For entry, a 6 digits number or a leading zero plus 6 digits number must be entered.

## EAN 8

- Ordinary EAN-8 code (flag: neither 0 nor 2 ) <used in the source marking>

For entry, a full 8 digits number must be entered.

- Internal code (flag 2) <in-store marking non-PLU short type> Program the format by the job \#2025.
- Internal code (flag 0 ) <in-store marking PLU short type>

For entry, a full 8 digits number must be entered. On the receipt/journal, non-PLU type code is printed like 208**** (****: price/quantity information)

## EAN-13

- Ordinary EAN-13 code (used in the source marking)
- Specific EAN-13 code (flag 977, 978, 979) (used in the source marking: ISBN, ISSN)


For entry, you must enter a full of 13 digits number.

- Internal code (used in the in-store marking, the flag character number: 20 thru 29 and 02) Program the format by the job\# 2025.

- EAN press code (used for press articles)

For a press article, you must use a 13 digits number EAN code plus a 2 digit or 3 digit add-on code, though your register can register 13 digits number EAN code without an add-on code.

Note
The format for press articles is decided unique by each country. For the formats for other countries than the ones shown below, please ask your dealer.

## German type 1

Currency for price is DEM. (The price is not converted automatically according to EURO status.)

## German type 2

(EURO code - Use this code from January
2002)

Currency for price is EURO.


## Sweden

Currency for price is SKR.


|  | 7 3 | 8 |  |  |  |  |  |  |  | Add-on code) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |

Note

- The availability of these press codes on your register depends on the programming (job \#2035)
- Since the price in a press code is read for sales entries, and the currency is decided by the code, note that the code you enter for sales matches your domestic currency.


## Add-on code

UPC-A and EAN-13 may be followed by a two digits number or a five digits number as add-on code, excepting UPC-A without a check digit plus two or five digits add-on code.
Therefore, the total number of digits enterable for sales entries are as shown below:

| Code entry | No add-on code | 2-digit add-on code | 5-digit add-on code |
| :---: | :---: | :---: | :---: |
| UPC-A | 12 | 14 | 17 |
| UPC-A w/leading zero | 13 | 15 | 18 |
| UPC-A w/o check digit | 11 | - | - |
| UPC-E | 6 | - | - |
| EAN-8 | 8 | - | - |
| EAN-13 | 13 | 15 | 18 |

Note
Your register automatically judge the add-on code in an EAN code entered from the total number of digits and the flag.

## EAN/UPC programming

Each EAN or UPC (hereinafter referred to as EAN) requires you to program the following.

- EAN code (max. 13 digits)
- Associated department (1-50)

When an EAN is associated with a department, the following functions of the EAN depend on the programming for the department.

- Grouping (Group 1 through14)
- HALO (only for the subdepartment)
- Single item cash sale/Single item finalization
- Item validation print compulsory/non-compulsory

EAN code delete method
You can program how you delete EAN codes; deleting in the programming, inhibit deleting, or deleting the EAN codes that have not been accessed for a certain period, which can be programmed (up to 99 days) when you execute \#105 in Z1 mode.
Unit price (max. six digits)
Base quantity for split-pricing entries
Sign (+/-)
Tax status
If you do not program tax status for a EAN, the tax status of the EAN follows to the status of the associated department.
Item label (12 characters) (option max. 16 characters)
Commission group (1-9)
EAN link

System programming for EAN function
Delete period for non-accessed EAN codes
Non-PLU code format
Type of press code
Price entry method for press code
Label of record in EAN file

## Procedure



## Example

Key operation


Print



## Procedure



## Example

Key operation


## Base quantity PGM 1 PGM 2 1011

## Procedure



## Example

Key operation


Print


## Procedure



* Delete method

4: Delete now
1: Inhibit to delete in non-accessed EAN deleting job (\#105 in Z1 mode)
0 : Delete in non-accessed EAN deleting job (\#105 in Z1 mode)
With the execution of<None> EAN deleting job, you can delete EANs that has not been accessed during the period that is programmed in the job \#2029.

## Example

Key operation


Print


When "delete now" is selected:

## \#O10 FFGME

5012345678900

## Sign (+/-) and tax status PGM 2011 Direct

## Procedure



| Item: |  | Selection: | Entry: |
| :---: | :---: | :---: | :---: |
| A | Sign (+/-) | Minus PLU | 1 |
|  |  | Plus PLU | 0 |
| B | VAT6 or TAX6 | Yes | 1 |
|  |  | No | 0 |
| C | VAT5 or TAX5 | Yes | 1 |
|  |  | No | 0 |
| D | VAT4 or TAX4 | Yes | 1 |
|  |  | No | 0 |
| E | VAT3 or TAX3 | Yes | 1 |
|  |  | No | 0 |
| F | VAT2 or TAX2 | Yes | 1 |
|  |  | No | 0 |
| G | VAT1 or TAX1 | Yes | 1 |
|  |  | No | 0 |

Note

- The tax system of your machine has been factory-set to automatic VAT1-6. If you desire to select any of automatic tax 1-6, manual VAT1-6, manual VAT1, manual tax 1-6, and the combination of the automatic VAT 1-3 and the automatic tax 4-6, consult your dealer.
- When the combination of the automatic VAT1-3 and automatic tax 4-6 system is selected, one of the VAT1(G), VAT2(F) and VAT3(E) can be selected in combination with tax 4-6. Example: $B C D E F G=100100,110100,111010$
- An EAN not programmed for any of these tax statuses is registered depending on the tax status of the department which the EAN belongs to.


## Example

Key operation
$2011-\otimes$
5012345678900 ® 0000001

TL

Print


You can program a maximum of 16 characters (item label) for each EAN. (However, the default setting is for a 12 -character label.) Select the characters you want to program, referring to section " 2 How to program alphanumeric characters" in chapter "PRIOR TO PROGRAMMING".

## Procedure



## Example

Key operation | 2014 | $\bullet$ |
| ---: | ---: |
|  | $\otimes$ |
| 5012345678900 | $\otimes$ |
| APPLE | $\boxed{S T}$ |
|  |  |
|  |  |
| TL |  |

Print


## - Assigning of EANs to commission groups PGM2 2015

You can assign EANs to commission groups.

## Procedure


*A : Commission group 0-9 (0=no commission)


## Procedure



* The programed number of link PLUs is shown on the display like "P1". (Incremented one every time you program a linked PLU.)

Note

- To program this function, please consult your dealer.
- EAN code and PLU code must have been already defined.



## - Delete period for non-accessed EAN codes

You can delete the EAN codes which have not been accessed during the period you set in this program when you execute the job \#105 in Z1 mode when you set "Delete in X/Z non-accessed EAN deleting job" in the EAN delete method (\#2010).

## Procedure



* When you select " 00 " for the period, no EAN code is deleted by the X/Z non-accessed EAN deleting job even if you programmed "Delete in X/Z non-accessed EAN deleting job" in the job \#2010.

Key operation



The register allows you to specify the Non-PLU code format (flag code: 2, 02, 20 -29).
The format data is as follows:


## Procedure



*3: When you select Dept. code, the sales are counted up as the sales of the department (associated department assignment is ignored.), and when you select PLU code, the sales are counted up as the sales of the PLU code, while they are counted up as EAN sales for sales reports.
*4: When you select quantity, the sales amount is calculated as follows: quantity x unit price programmed in \#1010.

## Example



Key operation


Print


## Press code functional programming

## Procedure


*1 Type of prefix code
1: German type 1 (prefix code: 434/439)
2: U.K. (prefix code: 988/989)
3: French (prefix code: 378/379)
4: Sweden (prefix code: 7388)
5: German type 2 (prefix code: 414/419)

| Item: |  | Selection: | Entry: |
| :---: | :---: | :---: | :---: |
| A | Type of code | Normal EAN code | 0 |
|  |  | Press code | 1 |
| B | Price entry method for press code*3 | Using the encoded price | 0 |
|  |  | Using the EAN programmed price in the job \#1010 | 1 |
|  |  | Compulsory | 2 |
| C | Label of record in EAN file*3*4 | Prefix only | 0 |
|  |  | Prefix + article code | 1 |

*3: This setting is valid only when "press code" is set for item A.
*4: Select "prefix only" when you want to summarize the sales of items having press codes by category.
Select "prefix + article code" when you want to summarize the sales of items having press codes by each item.

## Example

Key operation


Print


## 7 Programming for miscellaneous keys

Only function keys which you have programmed on the keyboard will allow the programming.

## $\square$ Programming the rate ( $\%$, Ex, commission) and the deduction ( $\Theta$ ) PGM 1 <br> PGM 21310 Direct

You can program percent rates, currency exchange rates, deduction amounts and commission rates.

## Procedure


*1: Function no.

1. For the

2: For the $\Theta_{2}$ key
8: For the \%4 key
78: For the commission sale 4
3: For the $\Theta 3$ key 53: For the Ex2 key
52: For the Ex1 key
79: For the commission sale 5
80: For the commission sale 6
4: For the $\Theta 4$ key 54: For the Ex3 key
81: For the commission sale 7
5: For the \%1 key
75: For the commission sale 1
82: For the commission sale 8
6: For the \%2 key 76: For the commission sale 2
83: For the commission sale 9
7: For the $\%$ key 77: For the commission sale 3
*2: Rate or amount
0 - 999999 (Deduction amount)
0.00 - 100.00 (\% rate)
0.000000 - 999.999999 (Currency exchange rate)
0.00 - 999.99 (Commission rate)

Note

- When you introduce EURO, set the EURO conversion rate on the Ex1 key for the period 1 and the period 2.
- You must use a decimal point when setting percentage rates that are fractional.


## Example

Key operation



Programming the number of digits after decimal point for exchange keys

Note When you introduce EURO on your register, this setting for the EX1 is automatically programmed by execution of Job \#800.

## Procedure


*: Function no.
52: For the EX1 key
54: For the EX3 key
53: For the Ex2 key
55: For the EX4 key

Example
Key operation
Print



## Currency description text programming

You can program a maximum of 4 characters for each of the EX1 through Ex4 keys.
Procedure

*: Function no.
52: For the EX1 key 54: For the EX3 key
53: For the EX2 key 55: For the Ex4 key

Example

Key operation


Print


You can assign a number of the drawer which opens when one of the following operations is performed.

- One of Ex1 through Ex4 is pressed without any entry.
- A transaction is completed with a payment entry of foreign currency.
- An X/Z report is issued.


## Procedure


*Drawer no.:
0 : Inhibit (No drawer opens.)
1: Drawer no. 1
2: Drawer no. 2

## Example

Key operation


Print

## $4260 \times 5 \mathrm{Bm}=2$

Note To perform this programming, an optional drawer must be connected with your register.

- A limit amount (HALO) of entry ( $\Theta, \boxed{R A}, \boxed{P O}$ ) PGM $2 \times 2312$ Direct

The HALO limit is in effect for the REG-mode operations but can be overridden in the MGR mode. The HALO limit is represented by two figures as follows:

## Procedure


*1: Function no.
1: For the $\Theta$ key 37: For the RA key
2: For the $\Theta_{2}$ key 38: For the RA2 key
3: For the $\Theta 3$ key 39: For the $P 0$ key
4: For the $\Theta 4$ key 40: For the PO2 key
*2: $A B$ is the same as $A \times 10^{B}$.
A: Significant digit (0 through 9)
B: Number of zeros to follow significant digit (0 through 8)
For example, presetting 13 (10.00) here means that amount entries of up to 10.00 are allowed in the REG mode. When you press 18, however, the upper limit amount is 999999.99.

## Example

Key operation


Print

## H2SL XFGME*

Fout -71
$5 \quad-10.00$
1.13 HALO limit
+/- sign (\%, $\Theta$ ) PGM 2 2311 Direct
Programming of the +/- sign assigns the premium or discount function for each key.

## Procedure


*1: Function no.

| 1: For the | $\Theta$ key | 5: For the | \%1) |
| :---: | :---: | :---: | :---: |
| 2: For the | O2 key | 6: For the | \%2 |
| 3: For the | O3 key | 7: For the | \%3 k |
| 4: For the | O4 key | 8: For the | \%4 |

*2:

| Item: | Selection: | Entry: |
| :--- | :--- | :---: |
| A $\quad+-$ sign | + (premium) sign | 0 |
| B to G Always enter 0. | - (discount) sign | 1 |

## Example

Key operation


Print


Item \%
Select this when a percent calculation is desired for the individual department and PLU.
Subtotal \%
Select this when a percent calculation is desired for subtotals.

## Procedure


*1: Function no.
5: For the \%1 key
6: For the \%2 key
7: For the \%3 key
8: For the \%4 key
*2: A
0: Subtotal \%
1: Item \%

## Example

Key operation



## Percent rate limitation (\%) PGM $2 \quad 2313$

You can program the upper limit of percent rates for percent entries.
(Percent entries that exceed the upper limit may be overridden in the MGR mode.)

## Procedure


*1: Function no.
5: For the \%1 key
6: For the $\% 2$ key
7: For the $\% 3$ key
8: For the \%4 key
*2: Rate
$0.00-100.00$ (Entering 0.00 inhibits the open percent rate entry.)

Key operation


Print


Item $\Theta$ or subtotal $\Theta$ selection ( $\Theta$ ) $\quad$ PGM $2 \quad 2316$
Item $\Theta$
Select this when a deduction calculation is desired for the individual department and PLU.
Subtotal $\Theta$
Select this when a deduction calculation is desired for subtotals.

## Procedure


*1: Function no.
1: For the $\Theta$ key
2: For the $\Theta 2$ key
3: For the $\Theta_{3}$ key
4: For the $\Theta_{4}$ key
*2: A
0 : Subtotal $\Theta$
1: Item $\Theta$

## Example

Key operation



## 8 Programming for the $\mathrm{TL}, \mathrm{CAR}^{2}, \mathrm{CHH}_{1}$ through $\mathrm{CH4}$, and $\mathrm{CR1} 1$ through $\mathrm{CR4} 4$ keys

## - Functional programming PGM2 2320

You can set each media for:

## Footer printing

This programming decides whether or not your machine should print a message at the foot of a receipt when a specified media key is used.

## Non-add code compulsory

You can enforce the non-add code entry when a media entry is accepted.

## Change enable (over-tender)

Either change enable or disable can be selected for a corresponding media key.

## Compulsory validation print

If media entries must be validated, set the corresponding media for compulsory validation print.

## Drawer open

You can program each media key to or not to open the drawer.

## Amount tendered compulsory

You may select amount tendered compulsory or optional for the TL , CA 2 and CH 1 through CH 4 keys.
You may select amount tendered compulsory or inhibited for the CR11 through CR4 keys.

## Procedure


*1: Function no.

| 42: For the | TL | key | 46: For the | $\mathrm{CH}_{3}$ | key | 50: For the |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 43: For the | CA2 | key | 47: For the | CH4 | key | 51: For the |
| 44: For the | $\mathrm{CHH}^{\text {che }}$ | key | 48: For the | CR1 | key |  |
| 45: For the |  | key | 49: For the |  | key |  |


| *2 Item: |  | Selection: | Entry: |
| :---: | :---: | :---: | :---: |
| A | Always enter 0 . |  | 0 |
| B | Footer print | Yes | 1 |
|  |  | No | 0 |
| c | Non-add code | Compulsory | 1 |
|  |  | Non-compulsory | 0 |
| D | Change due | Disable | 1 |
|  |  | Enable | 0 |
| E | Validation print | Compulsory |  |
|  |  | Non-compulsory | 0 |
| F | Drawer open | No | 1 |
|  |  | Yes | 0 |
| G | Amount tendered entry | Compulsory | 1 |
|  |  | Non-compulsory for TL, CA2 or CH1 through CH 4 keys | 0 |
|  |  | Inhibit for the CR1 through CR4 keys | 0 |

Key operation
$50 \otimes 0000001$

Print


■ High amount lockout (HALO) for cheque change, cheque cashing, and cash in drawer PGM 2321
You can program the upper limit amounts for cheque change, cheque cashing, and cash in drawer.

## Procedure


*1: Function no.
41: For cheque cashing
66: For cheque change
63: For cash in drawer (Sentinel)
*2: Limit amount
0 through 999999.99
(Cheque change and cheque cashing)
0 through 9999999.99 (Cash in drawer)

## Example

Key operation


Print


■ High amount lockout (HALO) of entry for media keys PGM $2 \times 232$ Direct
The HALO limit is in effect for REG-mode operations but can be overridden in the MGR mode. The HALO limit is represented by two figures as follows:

## Procedure


*1: Function no.
42: For the TL key
43: For the CA2 key
44: For the CH1 key
45: For the CH 2 key
46: For the CH 3 key
47: For the CH4 key
*2: $A B$ is the same as $A \times 10^{3}$.
A: Significant digit (1 through 9)
B: Number of zeros to follow significant digit (0 through 8)

When you press 18 , however, the upper limit amount is 999999.99.

## Example

Key operation


Print


## 9 Programming of function text

## Programming PGM 2314

You can program a maximum of 8 characters for each function key and other functions using the table on the following pages. Select the characters you want to program referring to section " 2 How to program alphanumeric characters" in chapter "PRIOR TO PROGRAMMING."

## Procedure



* Function no.: See "List of function texts" on the following pages.


## Example

Key operation
Print

$$
48 \otimes \text { VISA }
$$

## - List of function texts

| Function no. | Key or function | Default setting | Function no. | Key or function | Default setting |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | $\Theta 1$ | (-)1 | 48 | Credit 1 | CREDIT1 |
| 2 | $\Theta 2$ | (-)2 | 49 | Credit 2 | CREDIT2 |
| 3 | $\Theta 3$ | (-)3 | 50 | Credit 3 | CREDIT3 |
| 4 | $\Theta 4$ | (-)4 | 51 | Credit 4 | CREDIT4 |
| 5 | \%1 | \%1 | 52 | Exchange 1 | EXCH1 |
| 6 | \%2 | \%2 | 53 | Exchange 2 | EXCH2 |
| 7 | \%3 | \%3 | 54 | Exchange 3 | EXCH3 |
| 8 | \%4 | \%4 | 55 | Exchange 4 | EXCH4 |
| 9 | Differ | DIFFER | 56 | Exchange 1 is | EXCH1 IS |
| 10 | Taxable 1 subtotal | TAX1 ST | 57 | Exchange 2 is | EXCH2 IS |
| 11 | Taxable 2 subtotal | TAX2 ST | 58 | Exchange 3 is | EXCH3 IS |
| 12 | Taxable 3 subtotal | TAX3 ST | 59 | EX1 check sale | EX1 CHK |
| 13 | Taxable 4 subtotal | TAX4 ST | 60 | Domestic currency for EX1 check sale | DOM.CUR1 |
| 14 | Taxable 5 subtotal | TAX5 ST | 61 | EX1 credit sale | EX1 CR. |
| 15 | Taxable 6 subtotal | TAX6 ST | 62 | Domestic currency for EX1 credit sale | DOM. CUR |
| 16 | VAT/tax 1 | VAT 1 | 63 | Cash in drawer | ****CID |
| 17 | VAT/tax 2 | VAT 2 | 64 | Cash/cheque is | CA/CH IS |
| 18 | VAT/tax 3 | VAT 3 | 65 | Cash/cheque in drawer | CA/CH ID |
| 19 | VAT/tax 4 | VAT 4 | 66 | Change for cheque | CHK/CG |
| 20 | VAT/tax 5 | VAT 5 | 67 | Customer | GUEST |
| 21 | VAT/tax 6 | VAT 6 | 68 | Order total | ORDER TL |
| 22 | Net 1 | NET1 | 69 | Paid total | PAID TL |
| 23 | Net 2 | NET2 | 70 | Domestic currency 1 | DOM.CUR1 |
| 24 | Coupon-like PLU | CP PLU | 71 | Domestic currency 2 | DOM.CUR2 |
| 25 | Refund | REFUND | 72 | Domestic currency 3 | DOM.CUR3 |
| 26 | Void | $\infty$ | 73 | Domestic currency 4 | DOM.CUR4 |
| 27 | Void mode total | ¢ MODE | 74 | Cheque in drawer | *CH ID |
| 28 | MGR void | MGRes | 75 | Commission sale 1 | COM.SAL1 |
| 29 | Subtotal void | SBTL $<$ | 76 | Commission sale 2 | COM.SAL2 |
| 30 | Hash void | HASHCs | 77 | Commission sale 3 | COM.SAL3 |
| 31 | Hash refund | HASH RF | 78 | Commission sale 4 | COM.SAL4 |
| 32 | VAT shift | VAT SFT | 79 | Commission sale 5 | COM.SAL5 |
| 33 | VAT/tax delete | TAX DELE | 80 | Commission sale 6 | COM.SAL6 |
| 34 | VP counter | VP CNT | 81 | Commission sale 7 | COM.SAL7 |
| 35 | No sale | NO SALE | 82 | Commission sale 8 | COM.SAL8 |
| 36 | Guest check counter | G.C. CNT | 83 | Commission sale 9 | COM.SAL9 |
| 37 | RA | ***RA | 84 | Non commission sale | NON.COM |
| 38 | RA2 | ***RA2 | 85 | (+) Dept total | *DEPT TL |
| 39 | PO | ***PO | 86 | (-) Dept total | DEPT (-) |
| 40 | PO2 | ***PO2 | 87 | Hash (+) total | *HASH TL |
| 41 | Cheque cashing | CA/CHK | 88 | Hash (-) total | HASH (-) |
| 42 | Cash | CASH | 89 | Bottle return (+) total | *BTTL TL |
| 43 | Cash 2 | CASH2 | 90 | Bottle return (-) total | BTTL (-) |
| 44 | Cheque 1 | CHECK | 91 | Net 1 (Taxable 1 - VAT/tax 1) | NET 1 |
| 45 | Cheque 2 | CHECK2 | 92 | Net 2 (Taxable 2 - VAT/tax 2) | NET 2 |
| 46 | Cheque 3 | CHECK3 | 93 | Net 3 (Taxable 3-VAT/tax 3) | NET 3 |
| 47 | Cheque 4 | CHECK4 | 94 | Net 4 (Taxable 4 - VAT/tax 4) | NET 4 |


| Function <br> no. | Key or function | Default <br> setting |
| :---: | :--- | :--- |
| 95 | Net 5 (Taxable 5 - VAT/tax 5) | NET 5 |
| 96 | Net 6 (Taxable 6 - VAT/tax 6) | NET 6 |
| 97 | Subtotal | SUBTOTAL |
| 98 | Merchandise subtotal | MDSE ST |
| 99 | Difference subtotal | DIFF ST |
| 100 | Total | *** TOTAL |
| 101 | Change | CHANGE |
| 102 | Sales q'ty | ITEMS |
| 103 | Link PLU and EAN link subtotal | ITEM ST |
| 104 | Copy receipt title | COPY |
| 105 | Guest check copy title | G.C COPY |
| 106 | Average | AVE. |
| 107 | Group 1 for departments | GROUP01 |
| 108 | Group 2 for departments | GROUP02 |
| 109 | Group 3 for departments | GROUP03 |
| 110 | Group 4 for departments | GROUP04 |
| 111 | Group 5 for departments | GROUP05 |
| 112 | Group 6 for departments | GROUP06 |
| 113 | Group 7 for departments | GROUP07 |
| 114 | Group 8 for departments | GROUP08 |
| 115 | Group 9 for departments | GROUP09 |
| 116 | CCD | CCD |
| 117 | CCD differ | CCD DIF. |
| 118 | CCD differ total | DIF. TL |
| 119 | Order total-Paid total | O - P |
| 120 | Total tax | TTL TAX |


| Function <br> no. | Key or function | Default <br> setting |
| :---: | :--- | :--- |
| 121 | Net without tax | NET |
| 122 | Commission amount 1 | COM.AMT1 |
| 123 | Commission amount 2 | COM.AMT2 |
| 124 | Commission amount 3 | COM.AMT3 |
| 125 | Commission amount 4 | COM.AMT4 |
| 126 | Commission amount 5 | COM.AMT5 |
| 127 | Commission amount 6 | COM.AMT6 |
| 128 | Commission amount 7 | COM.AMT7 |
| 129 | Commission amount 8 | COM.AMT8 |
| 130 | Commission amount 9 | COM.AMT9 |
| 131 | Commission amount total | COM.TTL |
| 132 | Department report title | DEPT |
| 133 | Group report title | GROUP |
| 134 | PLU report title | PLU |
| 135 | Transaction report title | TRANS. |
| 136 | Total in drawer report title | TL-ID |
| 137 | Clerk report title | CLERK |
| 138 | Cashier report title | CASHIER |
| 139 | Hourly report title | HOURLY |
| 140 | Daily net report title | DAILY |
| 141 | PLU zero sales report title | ZERO SAL |
| 142 | PLU price category report title | CATEGORY |
| 143 | Commission sales report title | SALES |
| 144 | EAN report title | EAN |
| 145 | EAN price change | PR.CHNG |
| 146 | Non accessed EAN report title | NO ACCES |

## 10 Cashier and clerk programming

## $\square$ Cashier code PGM 1 PGM $2>1500$

You can assign a cashier code to each cashier. (If the cashier's file is upgraded, a maximum of 99 cashiers can be programmed. Consult your dealer.)

## Procedure



* Programming cashier code "0" inhibits entries of the cashier code.


## Example

Key operation



## - Cashier name PGM1 PGM2 1514

You can program a maximum of 8 characters (cashier name) for each cashier. Select the characters you want to program referring to section "2 How to program alphanumeric characters" in chapter "PRIOR TO PROGRAMMING."

## Procedure


*: A cashier code you have programmed for the cashier by job code 1500


## Functional programming for cashiers PGM 2.2510

## Procedure


*: A cashier code you have programmed for the cashier by job code 1500


## Example

Key operation


Print


## Clerk code PGM 1 PGM 21400

You can assign a clerk code to each of 99 clerks. The standard machine has no clerk function. If you need this function, consult your dealer.

## Procedure


*: Programming clerk code " 0 " inhibits entries of the clerk code.


## Clerk name PGM 1 PGM 21414

You can program a maximum of 8 characters (clerk name) for each clerk. Select the characters you want to program referring to section "2 How to program alphanumeric characters" in chapter "PRIOR TO PROGRAMMING."

## Procedure


*: A clerk code you have programmed for the clerk by the job code 1400

## Example

Key operation
Print
$11 \otimes$ NILS $\begin{array}{r}1414 \\ \\ \\ \\ \\ \\ \\ \\ \\ \hline\end{array}$


## 11 Programming various functions

## ■ Programming for optional feature selection PGM 22616

OP X/Z mode availability
When a cashier needs to take the cashier/clerk $X$ or $Z$ report, he or she will use the $O P X / Z$ mode. This programming determines whether he or she will be allowed to use this mode.

Note
You can take cashier/clerk $X$ and $Z$ reports in the $X 1 / Z 1$ mode regardless of the above programming.

Paid out in the REG-mode
Refund key in the REG-mode
Direct void in the REG-mode
Indirect void in the REG-mode
Subtotal void in the REG-mode
Refund validation printing
First item direct void
Printing of the number of purchased items
Journal print form
You may choose either of the following forms.

- Detailed journal print that shows the details of all entries - the same information as printed on the receipt.
- Summary journal print that shows information about all entries other than normal department entries (entries into " + " departments and their associated " + " PLUs).


## Item validation print

Validation print for $\Theta$ entry
Zero skip for various reports
VAT/tax amount, taxable amount and net amount printing on the receipt/journal
VAT shift type
VAT shift by cashier: VAT shift is performed by the operation of a cashier who has been assigned to do the VAT shift operation (Refer to job\# 2510).
VAT shift by shift key: VAT shift is performed by pressing the VAT shift key.

## No sale in REG-mode

Finalization when the subtotal amount is zero in the REG mode
Exchange 1 calculation method (for EURO settings)
When you do not introduce EURO, keep the default setting (multiplication).
When you introduce EURO, this setting is automatically set by the operation of job \#800.
The calculation method is as follows:
In case that "Division" is selected for the period 1,
Domestic currency amount (national currency amount) $\div$ Exchange 1 rate (EURO conversion rate) $=$ Exchange 1 amount (EURO amount)
In case that "Multiplication" is selected for the period 2,
Domestic currency amount (EURO amount) $\times$ Exchange 1 rate (EURO conversion rate) $=$ Exchange 1 amount (national currency amount)
Printing of the exchange 1 total amount and change amount on the receipt/journal
Total and change amounts in exchange 1 currency are printed respectively below each of the total and exchange amounts in domestic currency.
When you introduce EURO, this setting is automatically set by the operation of job \#800 as follows:
On the period 1, EURO amount converted from national currency is printed below the national currency, and on the the period 2, national currency converted from EURO amount is printed.
Validation printing of the exchange 1 total amount
Exchange 1 amount converted from total sales amount can be printed on the validation print for total amount when cash, cheque or credit amount tender is performed.
When you introduce EURO, this setting is automatically set by the operation of job \#800.

## Cash/credit operation for exchange 1

You can set whether you receive foreign currency (exchange 1) amount by cheque or credit or not. Credit counting when received-on-account/paid out finalized with the credit key
Separator line in the report
Link PLU printing on the receipt
EAN learning function
Price change for EAN entry in REG-mode
Treatment of EAN 8 code (200XXXXC/D)
Treatment of EAN 13 code (2XXXXXXXXXXXC/D)
Price entry after ISBN or ISSN
Entry of EAN with add-on code when the EAN ADD-ON file is full

## Procedure



| Item: |  | Selection: | Entry: |
| :---: | :---: | :---: | :---: |
| A | OP X/Z mode | Enable | 0 |
|  |  | Disable | 1 |
| B | Paid-out in REG-mode | Enable | 0 |
|  |  | Disable | 1 |
| c | Always enter 0 . |  | 0 |
| D | Refund key entry in the REG-mode | Enable | 0 |
|  |  | Disable | 1 |
| E | Direct void in the REG-mode | Enable | 0 |
|  |  | Disable | 1 |
| F | Indirect void in the REG-mode | Enable | 0 |
|  |  | Disable | 1 |
| G | Subtotal void in the REG-mode | Enable | 0 |
|  |  | Disable | 1 |
| H | Refund validation printing | Non-compulsory | 0 |
|  |  | Compulsory | 1 |


**P: 3
*

| Item: |  | Selection: | Entry: |
| :---: | :---: | :---: | :---: |
| A | Zero skip in EAN report | Yes | 0 |
|  |  | No | 1 |
| B | Zero skip in clerk report | Yes | 0 |
|  |  | No | 1 |
| C | Zero skip in cashier report | Yes | 0 |
|  |  | No | 1 |
| D | Zero skip in transaction report | Yes | 0 |
|  |  | No | 1 |
| E | Zero skip in department report | Yes | 0 |
|  |  | No | 1 |
| F | Zero skip in PLU report | Yes | 0 |
|  |  | No | 1 |
| G | Zero skip in hourly report | Yes | 0 |
|  |  | No | 1 |
| H | Zero skip in daily net report | Yes | 0 |
|  |  | No | 1 |

**P: 4

| Item: |  | Selection: | Entry: |
| :---: | :---: | :---: | :---: |
| A and B Always enter 0. |  |  | 0 |
| C | VAT/tax amount printing on the receipt/journal | Yes | 0 |
|  |  | No | 1 |
| D | Taxable amount printing on the receipt/journal | Yes | 0 |
|  |  | No | 1 |
| E | Net amount printing on the receipt/journal | Yes | 0 |
|  |  | No | 1 |
| F to H | Always enter 0. |  | 0 |
| *P: 5 |  |  |  |
| Item: |  | Selection: | Entry: |
| A to C | Always enter 0. |  | 0 |
| D | VAT shift type | By cashier | 0 |
|  |  | By shift key | 1 |
| E to H | Always enter 0. |  | 0 |

**P: 6 (ABCDEFGH: Always enter 0.)
**P: 7
*

| Item: | Selection: | Entry: |
| :--- | :--- | :--- |
| $\mathbf{A}$ and $\mathbf{B}$ Always enter 0. | 0 |  |
| $\mathbf{C}$ | No sale in REG-mode | Enable |
| Disable | 0 |  |
| $\mathbf{D}$ | Finalization in the REG-mode | Enable |
|  | when the subtotal amount is zero | Disable |
| E to $\mathbf{H}$ | Always enter 0. |  |

**P: 8 (ABCDEFGH: Always enter 0.)
**P: 9
*

| Item: |  | Selection: | Entry: |
| :---: | :---: | :---: | :---: |
| A | Always enter 0 . |  | 0 |
| B | Exchange 1 calculation method | Multiplication | 0 |
|  |  | Division | 1 |
| C | Cheque/credit operation for exchange 1 | No | 0 |
|  |  | Yes | 1 |
| D | Printing exchange 1 total amount and change | No | 0 |
|  | amount on receipt and journal | Yes | 1 |
| E | Printing exchange 1 total amount on validation | No | 0 |
|  | printing | Yes | 1 |
| F to H | Always enter 0. |  | 0 |

Note The items B, D and E are automatically set by the operation of job \#800.
**P: 10

| Item: | Selection: | Entry: |  |
| :--- | :--- | :--- | :--- |
| $\mathbf{A}$ and $\mathbf{B}$ | Always enter 0. | 0 |  |
| $\mathbf{C}$ | Learning function for EAN entry | Yes | 0 |
|  |  | No | 1 |
| $\mathbf{D}$ to $\mathbf{H}$ | Always enter 0. |  | 0 |

**P: 11 (ABCDEFGH: Always enter 0.)
**P: 12
*

| Item: | Selection: | Entry: |  |
| :--- | :--- | :--- | :---: |
| A to $\mathbf{G}$ | Always enter 0. | 0 |  |
| H | Price change for EAN entry in REG-mode | Enable | 0 |

**P: 13
*

| Item: |  | Selection: | Entry: |
| :---: | :---: | :---: | :---: |
| A | Credit counting when received-on-account/paid out is finalized with the credit key | Yes | 1 |
|  |  | No | 0 |
| B | Separator line in the report | Separator line | 1 |
|  |  | 1 line space | 0 |
| C | Way to print the information for the link PLU/EAN link on the receipt | Leading link PLU/EAN with total amount | 1 |
|  |  | Detailed information | 0 |
| D and E | Always enter 0. |  | 0 |
| F | Treating the EAN8 code (200XXXXC/D) as PLU type (XXXX:PLU code) | No | 1 |
|  |  | Yes | 0 |
| G | Treatment of the EAN13 code (2XXXXXXXXXXXC/D) | Dept. code | 1 |
|  |  | PLU code | 0 |
| H | Price entry after ISBN or ISSN | Inhibited | 1 |
|  |  | Compulsory | 0 |

**P: 14

| Item: | Selection: | Entry: |  |
| :--- | :--- | :--- | :--- |
| $\mathbf{A}$ | Always enter 0. |  | 0 |
| $\mathbf{B}$ | Entry of EAN with add-on code when EAN | Continued | 0 |
|  | ADD-ON file is full | Inhibited | 1 |
| $\mathbf{C}$ to $\mathbf{H}$ | Always enter 0. |  | 0 |

## Example

Key operation

$3 \otimes$|  | 2616 | $\bullet$ |
| :--- | :--- | :--- |
|  | $\otimes 0000010$ | $\boxed{S T}$ |
|  |  |  |
|  |  |  |

Print


## - Programming the limit on the number of times of validation printing and

 feed line after printing of a difference subtotal PGM2 2615
## Procedure



* A: Validation printing counter (1 through 9 times)

To inhibit validation printing, enter 0.
B: Feed lines after printing of difference subtotal (0 through 9)


## ■ Programming alarm length of time with drawer opening PGM2 2617

If the drawer still remains open when a specified length of time has elapsed, your machine gives the alarm.
Procedure


## Example

Key operation
$2617 \underset{30}{\bullet}$

Print
4217 Primmze

## 030

## Note

Your machine starts to monitor how long the drawer is kept open the moment the drawer is opened at the end of a transaction in the REG/VOID mode. It stops the time monitoring when a valid key (except the VP and BCOT keys) is pressed for the next transaction. It restarts the time monitoring after that transaction is ended. You can stop the buzzer alarm by closing the drawer. No key entries can be made while the buzzer is sounding.

## - Programming of print messages PGM 2614

Your register can print programmed messages for customers on every receipt.

## 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)
A maximum of 6 lines are available. The type of printing "header 3 -line message" is available for the standard model. The line numbers you select are according to the four types of printing: default setting, "header 3-line message" type, "footer 3 -line message" type, "header 6-line message" type and "header 3 -line and footer 3 -line message" type. If you want to change the type of printing, please consult your dealer.
Select the characters you want to program, referring to section " 2 how to program alphanumeric characters" in chapter "PRIOR TO PROGRAMMING."


## Example <br> To program the following logo messages by using 3 lines: <br> === YOUR === <br> == STORE == <br> MESSAGE


(spare): Space key)

## - Selection of X1/Z1 and X2/Z2 reports

 to be printed in the stacked report sequenceYour register is equipped with the stacked report printing function that enables multiple X/Z reports to be printed in sequence with only a single request, up to maximum of 15 reports*. This function continuously prints a maximum of 15 kinds of reports with a single operation.

## Procedure



To cancel the stacked report sequence


To repeat*
*: Maximum 70 steps are programmable. "1 step" means the memory size used for one no-range type job no. The range type job no. needs " 8 steps".

Job code numbers to be used are as follows.
*1
*2

| Job no. | Report | Available mode | Range parameter |
| :---: | :--- | :--- | :--- |
| 00 | General report |  |  |
| 07 | EAN zero sales report | X1/X2 mode only |  |
| 09 | Full EAN report |  |  |
| 10 | Full department report | X1/X2 mode only |  |
| 13 | Full department group report | X1/X2 mode only |  |
| 20 | PLU report |  | *3 Start PLU code/end PLU code (1 through 999999) |
| 27 | PLU zero sales report | X1/X2 mode only |  |
| 29 | PLU price category report | X1/X2 mode only | *3 Start price amount/end price amount |
| 30 | Transaction report | X1/X2 mode only |  |
| 31 | Total in drawer report | X1/X2 mode only |  |
| 32 | Commission sales report |  |  |
| 40 | Full clerk report |  |  |
| 50 | Full cashier report |  |  |
| 60 | Hourly sales information | Range report is available | *3 Start time/end time (0 through 2330) |
| 70 | Daily net report | X1/X2 mode only |  |

*3: Both range setting and full setting are allowed.

## Note <br> When $Z$ of stacked report is initiated, $X$ only reports will be skipped.



You can set the time range for an hourly report.

## Procedure


*A: Time range
To set the time range to 30 minutes (in the 24 -hour system), enter 0 .
To set the time range to 60 minutes (in the 24 -hour system), enter 1.
BC: Starting time (hour $=00$ to 23)

## Example

Key operation


Print

## \#219 MFGME

Note To perform this setting, an hourly Z report (\# 160) must be done.

## RS-232C channel assignment

Your machine is equipped with two RS-232C interfaces. If you use the on-line communication function and/or the barcode reader, the channel number of each RS-232C interface must be programmed by using the following procedure.
To realize the on-line communication and/or to use the barcode reader, consult your dealer.

## Procedure



| *P: 1 |  |  |  |
| :---: | :---: | :---: | :---: |
| ** Item: |  | Selection: | Entry: |
| A | Channel no. for the ON-LINE communication | Not connected | 0 |
|  |  | Standard port 2 | 1 |
|  |  | Standard port 1 | 8 |
| B to D | Always enter 0. |  | 0 |

*P: 2

| $* *$ | Selection: | Entry: |  |
| :--- | :--- | :--- | :--- |
| A | Channel no. for the barcode reader | Not connected | 0 |
|  |  | Standard port 2 | 1 |
|  | Standard port 1 | 8 |  |
| B to D | Always enter 0. |  | 0 |

*P: 3 (ABCD: Not used. Always enter 0.)
Note
Never enter any number other than 0,1 and 8.

## Example

Key operation


Print


## Barcode reader programming PGM 2691

## Procedure



| * Item: | Selection: | Entry: |  |
| :--- | :--- | :--- | :---: |
| $\mathbf{A}$ | Data bit | 7 bits | 1 |
| B | Parity bit | 8 bits | 0 |
|  |  | Non parity | 2 |
| Odd parity | 1 |  |  |
| C | Stop bit | Even parity | 0 |
| D | Transmission speed | 1 bit | 1 |
|  |  | 2 bits | 0 |


| Example | Key operation | Print |  |
| :---: | :---: | :---: | :---: |
|  | $\begin{array}{r} 2691 \bullet \otimes \\ 1110 \triangle \square \end{array}$ | H269 MFGMEs |  |
|  |  |  |  |

## ■ Secret codes to control access to PGM1 mode, X1/Z1 mode and X2/Z2

 $\begin{array}{lllll}\text { mode PGM } 2630 & 2631 & 2632\end{array}$You must enter a secret code according to the following procedure before performing any PGM1-mode, X1/Z1mode or X2/Z2-mode operation when a secret code has been set for that specific mode operation.

## Operating

## Procedure

$$
\text { TL } \rightarrow \underset{\text { Max. } 4 \text { digits }}{\text { Secret code }} \rightarrow \text { TL }
$$

Note
Once a secret code is entered, it does not need to be entered again unless the mode switch setting is changed and any operation, such as a sales registration, reporting, or programming, is performed.

## Programming

## Procedure



* 2630 for the PGM1 mode 2631 for the X1/Z1 mode 2632 for the X2/Z2 mode


## Example

Key operation
$2631-\otimes$
1234 TL

Print
\#263 (5PGMz

If you program frequently performed transactions or report sequences for the AUTO keys, you can call those transactions and/or reports simply by pressing the corresponding AUTO keys in key operations. This programming can be done when your machine is in the $\mathrm{X} 2 / \mathrm{Z} 2$ mode.

## Procedure



## Example Programming for Auro key and Aro key as follows:

Auro); entering a PLU 2 item (programmed unit price: 1.50 ) and a dept. 6 item (unit price: 1.00) AUTO); selling a dept. 7 item (programmed unit price: 5.00) for cash


## 12 Reading stored programs

Your machine allows you to read every program stored in the PGM1 and PGM2 modes.

## Program details and procedures for their reading

|  | Program for: | Mode switch position | Job code no. | Procedure | Related PGM1 PGM2 job code nos. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | Departments | PGM2 or PGM1 | 1100 |  | $\begin{aligned} & 1110,2110, \\ & 2111,2112, \\ & 2114,2115, \\ & 2116 \end{aligned}$ |
| 2 | PLUs/ subdepartments | PGM2 or PGM1 | 1200 |  | $\begin{aligned} & 1200,1210, \\ & 1211,2210, \\ & 2211,2214, \\ & 2215,2230, \\ & 2231,2232, \\ & 2235 \end{aligned}$ |
| 3 | Key nos. for departments and PLUs | PGM2 | 2119 | $\longrightarrow 2119 \longrightarrow \otimes \longrightarrow \mathrm{TL}$ | 2119, 2219 |
| 4 | Link PLUs | PGM2 | 2220 |  | 2220 |
| 5 | EANs | PGM1 or PGM2 | 1000 |  | $\begin{aligned} & 1000,1010 \\ & 1011,2010 \\ & 2011,2014 \\ & 2015 \end{aligned}$ |
| 6 | EANs function | PGM2 | 2025 | $\longrightarrow 2025 \longrightarrow \otimes \rightarrow \mathrm{TL}$ | $\begin{aligned} & \text { 2025, 2029, } \\ & 2035 \end{aligned}$ |
| 7 | EAN link | PGM2 | 2030 | $\longrightarrow 2030 \longrightarrow \otimes \longrightarrow \mathrm{TL}$ | 2030 |
| 8 | Cashiers | PGM2 or PGM1 | 1500 | $\longrightarrow 1500 \longrightarrow \otimes \longrightarrow \mathrm{TL}$ | $\begin{aligned} & 1500,1514, \\ & 2510 \end{aligned}$ |
| 9 | Clerks | PGM2 or PGM1 | 1400 | $\longrightarrow 1400 \longrightarrow \otimes \longrightarrow \mathrm{TL}$ | 1400, 1414 |
| 10 | Function preset 1 | PGM2 or PGM1 | 1300 | $\longrightarrow 1300 \longrightarrow \otimes \rightarrow$ TL | $\begin{aligned} & \text { 1310, } 2311, \\ & 2312,2313, \\ & 2314,2315, \\ & 2316,2320, \\ & 2321,2322, \\ & 2330,2334 \end{aligned}$ |
| 11 | Function preset 2 | PGM2 | 2600 | $\longrightarrow 2600 \longrightarrow \otimes$ TL | $\begin{aligned} & 2614,2615, \\ & 2616,2617, \\ & 2619,2620, \\ & 2630,2631, \\ & 2632,2680, \\ & 2690,2691 \end{aligned}$ |


| Program for: |  | Mode <br> switch <br> position | Job <br> code no. | Procedure | Related PGM1/ <br> PGM2 job <br> code nos. |
| :--- | :--- | :---: | :---: | :---: | :---: | :---: |
| $\mathbf{1 2}$ | Tax rates | PGM2 | 2700 | $\longrightarrow 2700 \longrightarrow \otimes \longrightarrow T$ | 2711 |
| 13 | Auto keys | PGM2 | 2900 | $\longrightarrow 2900 \longrightarrow \otimes \longrightarrow T$ | 2900 |

## - Sample printouts

## 1 Reading of programmed items for departments (Reading in the PGM1 and PGM2 modes)

2 Reading of programmed items for PLUs/subdepartments
(Reading in the PGM1 and PGM2 modes)


[^1]3 Reading of programmed key nos. for departments and PLUs
(Reading in the PGM2 mode)


4 Reading of programmed items for link PLUs (Reading in the PGM2 mode)


5 Reading of programmed items for EANs (1) (Reading in the PGM1 and PGM2 modes)


* When you take this report in the PGM1 mode, the PGM2 indication is replaced by a "PGM1".

Note
The EAN codes are printed out in the sequence shown below.

| EAN-13 |
| :--- |
| EAN-8 |
| In-store marking PLU short type |
| In-store marking Non-PLU short type |
| UPC-A |
| UPC-E |

6 Reading of programmed items for EANs (2)
(Reading in the PGM2 mode)

| 31/08/01 18:15 11 |  |  |
| :---: | :---: | :---: |
| 123456 \#506 MAPER |  |  |
| 11 NILS |  |  |
| H025 $\mathrm{xFGMO}^{\text {a }}$ |  |  |
| H20s |  |  |
| 20.5 | 540012 | - Non-PLU format |
| 024 | 450012 | setting |
| 22 | 241002 |  |
| \#2029 | 60 | -Delete period |
| \#0,5 |  |  |
| 1 | 111 | Press code |
| 2 | 001 | function |
| 3 | 001 |  |
| 4 | 001 |  |
| 5 | 001 |  |

7 Reading of programmed items for EAN link (Reading in the PGM2 mode)


8 Reading of programmed items for cashiers
(Reading in the PGM1 and PGM2 modes)


* When you take this report in the PGM1 mode, the PGM2 indication is replaced by a "PGM1".


## 9 Reading of programmed items for clerks

(Reading in the PGM1 and PGM2 mode)


* When you take this report in the PGM1 mode, the PGM2
indication is replaced by a "PGM1".

10 Reading of programmed items for functions - 1 (Reading in the PGM1 and PGM2 modes)

| 31/08/01 18:18 <br> 12346 \#1509 <br> 11 HILS | $11$ <br> MADER | -Mode switch position* |
| :---: | :---: | :---: |
| \#1300 $\times \mathrm{F} \cdot \mathrm{GH}=$ |  |  |
| F001 -1 |  |  |
| I | $-10.00$ |  |
|  | Li3 |  |
| F002 - - |  |  |
| 5 | $-0.100$ |  |
|  | 418 |  |
| Fobser |  |  |
| 5 | -5.00\% |  |
|  | L100.00\%: |  |
| F006 |  |  |
| I | $-10.00 \%$ |  |
|  | L100.00\% |  |
| F010 TAK1 ST |  |  |
| FU11 TAR ST |  |  |
| FU12 TAMS 5 T |  |  |
| F013 TAK4 5 T |  |  |
| F014 TAK ST |  |  |
| F015 TARS 51 |  |  |
| F016 vat 1 |  |  |
| F017 VAT 2 |  |  |
| F018 UAT 3 |  |  |
| F019 UAT 4 |  |  |
| F000 VAT 5 |  |  |
| FG2I UAT 6 |  |  |
| FOE HET 1 |  |  |
| FDE3 HETE |  |  |
| FO24 CF FUU |  |  |
| FOES REFIND |  |  |
| F026 w |  |  |
| Foz wo MIDE |  |  |
| F028 min |  |  |
| F029 SETL 0 |  |  |
| Fu30 minch un |  |  |
| FOSL HASH Pf |  |  |
| FUE UAT SFT |  |  |
| FGBS TAY DELE |  |  |
| FOS4 UP CMT |  |  |

* When you take this report in the PGM1 mode,
the PGM2 indication is replaced by a "PGM1".

FOSE WD SALE
FOB6 G.C. CNT
F037 Men Lie
FOBE MARE L1S
F03 Mer Li8
F040 MFDC L1E
F04 CA/CH:
999999.79

FIM CAGH L16
000000
FO4 CHSHE LI8
0000000
FO44 CHECK 118
0000000
FO45 CHECK $L 18$
0000000
FO46 CHECK Lis
0000000
F047 CHECK4 L1S
0000000
FO46 CREDITI Li8
0000000
FO49 CREDTR L18
0000000
FOSO CREDITS L18
0000000
F051 CEDIT4 L18
0000000
FOSE EXCH: OM
01.955830

F053 Exhe
F054 ${ }^{2} \mathrm{EXCH}$
20.00000

F055 EXCH
2
FOSG EMCHL 15
FOG7 ERHE IS
FODG EKCHS IS
F059 El CHI
Fug DUH.CUR
Fu61 EXi CR
FOE DOH.CLI 1
F063 $\because \mathrm{FACD}$
9999997.99

FO64 CA/CH IS F065 CA/CH 10

To be continued on the next page

| F066 CHi/ $/ \mathrm{Cg}$ |  |
| :---: | :---: |
|  | 979797.97 |
| F067 GUEST |  |
| F06E Dfder il |  |
| F069 Faid Tl |  |
| FO70 DIM,CIR 1 |  |
| FO71 DOM. Cure |  |
| FOR DOM Curs |  |
| F073 00m.CUF4 |  |
| F074 XCH 10 |  |
| FOTS COM. SAL 1 |  |
|  | $0.00 \%$ |
| F076 CIH. SAL 2 |  |
|  | 0.00\% |
| FO77 COM. SAL |  |
|  | 0.00\% |
| Fo78 CIM. 59.4 |  |
|  | $0.00 \%$ |
| FO79 CIM. 6 ALS |  |
|  | 0.00\% |
| F080 CIH.SAl 6 |  |
|  | 0,00\% |
| FOE1 CIM. SAL 7 |  |
|  | 0.00\% |
| Fuge com sald |  |
|  | 0.00\% |
| F0e3 CIM. SAl 9 |  |
|  | $0.00 \%$ |
| FOB4 HLTM COM. |  |
| F085 xDEPT TL |  |
| FUEG DEFT ${ }^{\text {a }}$ - |  |
| Fuby xhat TL |  |
| Fobs haghi-9 |  |
| F089 ABTL TL |  |
| F090 ETti $(-)$ |  |
| FG91 WET 1 |  |
| FOF NET 2 |  |
| F093 UET3 |  |
| FO94 NET 4 |  |
| F0\% HET 5 |  |
| FOP6 HET 6 |  |
| F097 Sumtath |  |
| F096 MDCE ST |  |
| F100 Mettial |  |
| Fior chame |  |
| Fiue ITEM |  |
| F103 ITEM ST |  |
| Fi04 CuFsm |  |

F105 G.C CDF
F 106 GVE.
F107 GRDFOL
F108 GROFO2
F109 GRTUFOS
F110 GRDUP04
Fill GRDFOS
F112 GRLIFO
F113 GRDLFO7
F114 GeuFus
F115 GRTLFO
Fil6 COD
F117 CDD DIF.
F118 DIF. TL
F119 D-F.
F120 TIL TAK
F121 HET
FLC CIFAMM1
F12S CIM.AMT2
Fi24 CDM.AMTS
F125 CIm. AmT4
F126 CMH.AMTS
F127 CIM. AMT6
F128 CIM. AMT
F129 CDM.AMT8
F1.30 CLit. AMTY
FIBI COM.TTL
FIS DEFT
F13 GROL
FiS4 FLu
Fing Trans.
Fibe TL-TD
$F 177$ CLERK
FIBE CASHIER
Fisg Hourty
F140 DAIL
F14. ZEFI SAL
Fi42 Gategify
F143 ghles
F144 EAM
F145 Pr.CHHG
F146 NO ACOES

11 Reading of programmed items for functions - 2 (Reading in the PGM2 mode)

| $\begin{aligned} & 31 / 08 / 0116: 17 \\ & 123456 \text { H1508 } \\ & 11 \text { HLLS } \end{aligned}$ | MAER |  |
| :---: | :---: | :---: |
| \#2600 $\times$ FGME* |  |  |
| H2614 |  | Print message |
| $==$ ALEFE $=$ |  |  |
| $=5 \mathrm{TEE}=$ |  |  |
| TESSAGE |  |  |
| H2615 | 10 |  |
| \#2616 |  | -Line feed for differ ST |
| 01 | 00000000 |  |
| 02 | 00000000 |  |
| 03 | 00000000 |  |
| 04 | 00000000 |  |
| 05 | 00010000 |  |
| 06 | 00000000 |  |
| 07 | 00000000 |  |
| 08 | 0000000 | Optional feature selection |
| 09 | 00100000 |  |
| 10 | 00000000 |  |
| 11 | 00000000 |  |
| 12 | 00000000 |  |
| 17 | 00000100 |  |
| 1.4 | 00000000 |  |
| \#617 | 000 | -Drawer open alarm time |
| \#619 | 000 | -Hourly report format/start |
| 4260 |  | hour |
|  | 10 | \}Stacked report |
|  | 13 |  |
| \#2630 | 000 |  |
| \#2631 | 0000 | $\}$ Secret code |
| 426 C | 0000 |  |
| \#280 | 0 | Drawer no. for the drawer |
| \#269 |  | for foreign currency |
| 1 | 000 |  |
| 2 | 0000 | \}RS-232C channel data |
| 3 | 000 |  |
| 4291 | 1110 | -Barcode reader programming |

12 Reading of programmed tax rates
(Reading in the PGM2 mode)

| $31708 / 0180511$ |  |  |
| :---: | :---: | :---: |
| 123456 11464 | Marer |  |
| 114145 |  |  |
| H2700 $\times$ Grax |  |  |
| TAX | $5.0000 \%$ | Tax rate |
|  | 0 nL | -Lowest taxable |
| TARE | 4,0000\% |  |
|  | 0.12 |  |
| TARS | \% $0000 \%$ |  |
|  | 0.20 |  |
| T014 | --7- |  |
| Tavs | $\cdots$ |  |
| TAM | --- |  |

13 Reading of programmed items for auto keys (Reading in the PGM2 mode)


## 13 Training mode

The training mode is used when the operator or the manager practices register operations.
When a cashier set in training is selected, the machine automatically enters the training mode. When a cashier not set in training is selected, the machine automatically enters the ordinary REG mode. (For programming, consult your dealer.)

The training operations is valid only in REG, MGR and VOID mode.
The corresponding cashier memory is updated in the training mode. Other memories are not updated.

Key operation


Print

```
31/08/01 14:47
                                    03
```


W EETH

Trand

38 24,00


BAH
5 P

## 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 resetting. 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 and training GT, reset count, and consecutive number.


## Summary of reading ( $X$ ) and resetting $(Z)$ reports and the key operations to obtain the reports

X1 and Z1 reports: Daily sales reports
X 2 and Z 2 reports: Periodic (monthly) consolidation reports

| Item | Mode switch position |  | Job <br> code | Key operation |
| :---: | :---: | :---: | :---: | :---: |
|  | X1/Z1 | X2/Z2 |  |  |
| Flash report: <br> (Only display) <br> To clear the display, press the CL key or turn the mode switch to another position. | X1 | - | - | $\text { Dept. key ( } 1 \text { to } 50 \text { ) }$ <br> Dept. code $\longrightarrow \underset{\neq \text { DEPT }}{\ddagger}$ : Department total amount |
|  |  |  |  | $\otimes$ key: Amount of cash in drawer |
|  |  |  |  | ST key: Sales total |
| Full reading and resetting | X1, Z1 | X1, Z1 | 100 |  |
|  |  | X2, Z2 | 200 |  |
| Individual clerk reading and resetting | X1, Z1 | X1, Z1 | 141 |  |
|  |  | X2, Z2 | 241 |  |
|  | <OP X/Z> X, Z |  | 41 |  |
| Individual cashier reading and resetting | X1, Z1 | X1, Z1 | 151 |  |
|  |  | X2, Z2 | 251 |  |
|  | <OP X/Z> X, Z |  | 51 |  |
| Full clerk reading and resetting | X1, Z1 | X1, Z1 | 140 |  |
|  |  | X2, z 2 | 240 |  |
| Full cashier reading and resetting | X1, Z1 | X1, Z1 | 150 |  |
|  |  | X2, Z2 | 250 |  |
| Full department reading | X1 | X1 | 110 | $\begin{aligned} & 110 \\ & 210 \end{aligned} \otimes \otimes \mathrm{TL}$ |
|  |  | X 2 x 1 | 210 |  |
| Individual group reading | X1 | X 1 <br> X 2 | 112 212 1 | $\begin{aligned} & 112 \\ & 212 \end{aligned} \otimes \text { Group no. } \longrightarrow \mathrm{TL}$ |
| Full group reading | X1 | X1 $\times 2$ | 113 | $\begin{aligned} & 113 \\ & 213 \end{aligned} \mathbb{T L}$ |



| Item | Mode switch position |  | Job code | Key operation |
| :---: | :---: | :---: | :---: | :---: |
|  | X1/Z1 | X2/Z2 |  |  |
| Reading of EANs whose sales amounts are zeros (by associated department) | X1 | X 1 X 2 | 107 207 | $\begin{aligned} & 107 \\ & 207 \end{aligned} \otimes \text { Dept. code } \longrightarrow \mathrm{TL}$ |
| Transaction reading | X1 | X 1 X 2 | 130 230 | $\begin{aligned} & 130 \\ & 230 \end{aligned} \longrightarrow \otimes \longrightarrow \mathrm{TL}$ |
| Total in drawer | X1 | X1 | 131 | $\begin{aligned} & 131 \\ & 231 \end{aligned} \otimes \otimes \longrightarrow \mathrm{TL}$ |
| Reading and resetting of hourly sales information |  | Z1 | 160 | * Enter the time in the 24-hour system. |
| Reading and resetting of a stacked report | X1, Z 1 | $\mathrm{X} 1, \mathrm{Z} 1$ $\mathrm{X} 2, \mathrm{Z2}$ | 190 290 |  |
| Reading and resetting of the daily net totals |  | X2, Z2 | 270 |  |

Note
Individual and full clerk reading and resetting are available only in the cashier and clerk system. In the factory setting, the register provides the "cashier only" system. So, if you want to change the system, consult your dealer.

Non-accessed EAN deleting

| Item | Mode switch position |  | Job code | Key operation |
| :---: | :---: | :---: | :---: | :---: |
|  | X1/Z1 | X2/Z2 |  |  |
| Reading of non-accessed EANs | X1 |  | 105 | $105 \longrightarrow \otimes \mathrm{TL}$ |
| Deleting of non-accessed EANs | Z1 |  | 105 |  | related data files) themselves will be deleted.

## 2 Daily sales totals

## ■ Full reading and resetting of sales totals

You can take $X$ and $Z$ reports in the $X 1 / Z 1$ mode. The use of the decimal key $(\square)$ determines when the report will actually reset the sales totals.



| EEFUND | $\begin{array}{r} 140 \\ \times 81.20 \end{array}$ | \}Refund counter and total |
| :---: | :---: | :---: |
| 4 | $\begin{array}{r} 16 a \\ x 7.50 \end{array}$ | \}REG-mode void counter and total |
| \% MDOE | $\begin{array}{r} 20 \\ \times 88.15 \end{array}$ | \}Void-mode transaction counter and total |
| Mos a | $\begin{array}{r} 30 \\ \times \operatorname{4eg} .5 \end{array}$ | \}Manager item void counter and total |
| SETL | $\begin{array}{r} 30 \\ \times 0 \mathrm{x} .00 \end{array}$ | \}Subtotal void counter and total |
| HASH | $\begin{array}{r} 10 \\ \times 10.00 \end{array}$ | \} Hash item void counter and total |
| HMEH RF | $\begin{array}{r} 10 \\ \times 10.00 \end{array}$ | \}Hash item refund counter and total |
| UF Cht | 20 | - Validation print counter |
| WL SALE | 10 | - No-sale (exchange) counter |
| G.C. CHT | 10 | -Gest check copy counter |
| GUEST | 118 Q | -Customer counter |
| GRDEF TL | 9200.08 | - Order total |
| FAID TL | *201.58 | - Paid total |
| AEE. | +18.66 | -Paid total average per costomer |
| ■-F' | 348.50 | - Order total - paid total |
| Mrin | $\begin{array}{r} 20 \\ \times 5.00 \end{array}$ | \}Received on account counter and total |
| $\cdots \mathrm{ARA} 2$ | $\begin{array}{r} 10 \\ \times 0.00 \end{array}$ |  |
| MPPC | $\begin{array}{r} 10 \\ \times 10.00 \end{array}$ | \}Paid out counter and total |
| M APD | $\begin{array}{r} 10 \\ \times 15.00 \end{array}$ |  |
| CA/CH: | $\begin{array}{r} 20 \\ 90.00 \end{array}$ | \}Cheque cashing counter and total |
| CAH | $\begin{array}{r} 910 \\ \times 1548.17 \end{array}$ | \}Cash counter and total |
| CASHE | $\begin{array}{r} 30 \\ \times 1.25 \end{array}$ |  |
| CHECK | $\begin{array}{r} 30 \\ \times 35.00 \end{array}$ | \}Cheque 1 sales counter and total |
| CHECK2 | $\begin{array}{r} 10 \\ 4300 \end{array}$ |  |
| Checrs | $\begin{array}{r} 16 \\ x 13 \\ \hline \end{array}$ |  |
| CHECK4 | $\begin{array}{r} 20 \\ \times 0.00 \end{array}$ |  |
| CREDTI | $\begin{array}{r} 20 \\ 800.00 \end{array}$ | \}Credit 1 sale and tendering counter and total |
| CREOIT | $\begin{array}{r} 10 \\ +56.25 \end{array}$ |  |

To be continued on the next page

| CREDITS | $\begin{array}{r} 10 \\ 98.00 \end{array}$ |  |
| :---: | :---: | :---: |
| Creita | 10 |  |
|  | $\times 6.00$ |  |
| EMCH: | $\begin{array}{r} 50 \\ \text { anTy.00 } \end{array}$ | Exchange 1 counter and total |
| DEM, CUE1 | \%20.2 |  |
| EK1 CHI | $\frac{10}{10}$ | Exchange 1 cheque 1-4 counter and total |
| DOM.CUR1 | $\times 5.56$ | Exchange 1 cheque 1-4 total in domestic currency |
| EXI OR |  | \}xchange 1 credit $1-4$ counter and total |
| DIFAREI | 748.60 | Exchange 1 credit 1-4 total in domestic currency |
| EMCHE | 10 |  |
|  | 23.47 |  |
| DOM.CIFS | 812.00 |  |
| EMCH | 10 |  |
|  | 45.08 |  |
| DDmadis | \% 2.00 |  |
| ECH4 | 20 |  |
|  | 140.00 |  |
| DUM.CUR 4 | $\times 123.93$ |  |
| Macto | $\times 1451.40$ | -Cash in drawer |
| FCH ID | 4166.56 | -Cheque in drawer |
| CA/CH ID | $\times 1617.96$ | Cash + cheque in drawer |
| $\mathrm{CHM} / \mathrm{CG}$ | 811.46 | -Change total for cheque tendering |

## ■ Cashier reading and resetting

Using this function, you can take X and Z reports for individual cashiers or all cashiers.

## Individual cashier reading and resetting

Note
The OP X/Z-mode reading and resetting is allowed only when your machine has been programmed for "OP X/Z mode available" in the PGM2 mode.

- Sample X report

| $\begin{aligned} & 31 / 08 / 0121: 15 \\ & 123456 \text { H1677 } \\ & 11 \text { NILS } \end{aligned}$ | 11 |
| :---: | :---: |
|  | maver |
|  |  |
| $\# 151 \times 1 \%$ |  |
| MCASHIEE * |  |
| O1CSFS 11 | Heyer |
| Grder Tl | $\times 1866.63$ |
| FAID TL | $\times 1638.13$ |
| AUE. | $\because 0.20$ |
| FEFIUN | 140 |
|  | \%81. 20 |
| $\theta$ | 160 |
|  | F70.78 |
| 4 PMDE | 10 |
|  | 969.50 |
| mige | 20 |
|  | 869.50 |
| SETL $\because$ | 20 |
|  | $\times 191.00$ |
| G.C. CHT | 10 |
| GUEST | 910 |
| Fren | 20 |
|  | $\times 3.00$ |
| MARAR | 10 |
|  | 420.00 |
| MFlolill | 10 |
|  | 810.00 |
| Maple | 10 |
|  | $\times 15.00$ |
| CA/CHE | 20 |
|  | $\times 50.00$ |
| C.ASH | 640 |
|  | 31184.72 |
| CASH2 | 30 |
|  | 221.25 |
| CHECK | 30 |
|  | $\times 5.00$ |
| CHECR | 10 |
|  | 815.00 |

To be continued on the next page

- Sample Z report


The subsequent printout occurs in the same format as in the sample $X$ report.

| CHECK | 10 |
| :---: | :---: |
|  | 43.56 |
| CHECK4 | 28 |
|  | \%0.00 |
| CREDIT | 20 |
|  | 850.00 |
| CNEDIT2 | 10 |
|  | 96.35 |
| CREDIT | 10 |
|  | צ28.00 |
| CFEDIT4 | 10 |
|  | P6.00 |
| ERCH1 | 50 |
|  | 0M397.00 |
| DIM. CUR 1 | \%20.28 |
| EK1 CHI | 10 |
|  | DT50.00 |
| DIM. CUE 1 | Y25.56 |
| EH Cl | 20 |
|  | 0m95.06 |
| DLM. CUE 1 | 848.60 |
| ESCH2 | 10 |
|  | 23.47 |
| DOM. CUR 2 | 天12.00 |
| EXCHS | 10 |
|  | 45.08 |
| DOM.CIES | *3.00 |
| EXCH4 | 29 |
|  | 140.00 |
| DOM. OLF 4 | 2123.93 |
| $\cdots \mathrm{MCLD}$ | 91087.95 |
| YH 10 | $\times 166.56$ |
| $\mathrm{CH} / \mathrm{CH}$ ID | $\times 1254.51$ |
| CHK/CG | 戒1.46 |

Full cashier reading and resetting


The subsequent printout occurs in the same format as in the sample reports of individual cashier reading and resetting, and sales data for cashiers print in this sequence.

## ■ Clerk reading and resetting

Using this function, you can take X and Z reports for individual clerks or all clerks.

## Individual clerk reading and resetting

Note
The OP X/Z-mode reading and resetting is allowed only when your machine has been programmed for "OP X/Z mode available" in the PGM2 mode.

## - Sample X report

| 31/00/01 2241 11 |  |  |
| :---: | :---: | :---: |
| 123456 \#1667 | Maver |  |
| 11 HILS |  |  |
| \#141 $\times 8 \mathrm{x}$ |  |  |
| \%CEEX |  | Clerk no./clerk code |
| 01CLIEIE | MILS | -Clerk name |
| WOEE 71 | W236.23 | -Order total |
| COH:50LI | Y52.75 | - Commission sales |
| OHM. SPL 2 | $\times 1116.71$ | 1 total amount |
| DTM. Pli $4^{4}$ | $\times 74.3$ |  |
| OM. SAL | $\times 58.41$ |  |
| CIM. SCLG | 24.85 |  |
| Cam. 51.7 | 81.00 |  |
| CIM. SAR | \% $\% 4.54$ |  |
| CWM.EAL. 7 | \%113.30 |  |
| WWH CIM. | $\times 10649.35$ | - Non-commission |

- Sample Z report

| 31/06/01 2702 |  |
| :---: | :---: |
| 12356 \#1681 | Hater |
| 11 HILS |  |
| \#14 : X 1 \# |  |
| $x$ CIEER $x$ |  |

## Full clerk reading and resetting



The subsequent printout occurs in the same format as in the reports of individual clerk reading and resetting, and sales data for clerks print in this sequence.

[^2]
## - Reading and resetting of hourly sales information

You can take $X$ and $Z$ reports for sales totals and transaction (customer) counters for 48 half hours, or 24 hours. If both quantity and amount are zero, their print is skipped.

- Sample X report

| 31/06/01 21:57 | HMPE ${ }^{11}$ |
| :---: | :---: |
| 12345641652 |  |
| 12 EETH |  |
| \#160 9-1\% |  |
| \% HILRTY \% |  |
| 7800 | 00 |
|  | 30.00 |
| AVE: | \%0.m |
| 78.30 | 20 |
|  | $\times 64.50$ |
| AVE. | \%2.25 |
| SETmTA. | $2 \square$ |
|  | \%64,50 |
| $8: 00$ | 50 |
|  | \%2. 50 |
| AVE.8.50 | $\times 14.50$ |
|  | 30 |
|  | \%76.15 |
| AVE. | \%5. 38 |
| SUETITAL | 80 |
|  | $\times 148.65$ |


| 1.760 | 30 | -Customer counter |
| :---: | :---: | :---: |
|  | \%1.00 | Sales total |
| AVE. | $\times 7.00$ | - Average sales amount per customer |
| 17:30 | 110 |  |
|  | 8277.41 |  |
| AVE. | \%5.22 |  |
| subtutal | 140 |  |
|  | \%98.41 |  |
| 1800 | 90 |  |
|  | $\times 75.72$ |  |
| AVE:18.30 | 98.41 |  |
|  | 110 |  |
|  | 8196.80 |  |
| QUE: | 817.89 |  |
| SUBTITAL | 200 |  |
|  | +272.52 |  |

## ■ Full department reading

| 31／08／01 20.56 | MAME | Sales q＇ty and total | $\mathrm{me}=$ | 2.0000 |
| :---: | :---: | :---: | :---: | :---: |
| 123456 W162 |  |  | DFT： | x＋2．00 |
| 12 EETH |  |  | Den | 4.0000 |
|  |  |  |  |  | $-1.08$ |
| 4110 $x-\frac{1}{4}$ |  |  | HMSHC－3 | 6.0000 |
|  |  |  |  | $815.42$ |
| Drid | 126.5630 |  |  | 人1342 |
| Hoooot． | \％688．51 |  | $\square \pm$ | ． 000 |
|  | $4.60 \%$ | Ratio of dept． 1 sales | DFTa | －60．00 |
| D日要 <br> DFT． $\mathrm{D}_{4}$ | 17．0000 | amount to＂+ ＂ dept．total | WTIL TL | $7.0000$ |
|  | $\times 670.45$ |  | \％1． | $-60.00$ |
|  | $4.90 \%$ |  |  |  |
| Mram <br> DFT．DE | 61.0000 |  | Fir ${ }^{\text {E }}$ | 7．000 0 |
|  | $\times 1.314 .11$ |  | DFTa者晋 | ¢005．26 |
|  | 82． $66 \%$ |  | BTIL - － | 7 D 000 |
|  |  |  |  | $\times 50.26$ |
| पT9 | 28.5000 |  |  |  |
| DFT． DP | \％e3．00 |  |  |  |
|  | 0．61． |  |  |  |
| Drumod | 37.0630 |  |  |  |
|  | X 368781 |  |  |  |
|  | $52.82 \%$ |  |  |  |
| BHz | 3570000 |  |  |  |
| DFT， $\mathrm{TI}=$ | $\times 10970.25$ |  |  |  |
|  | $100.00 \%$ |  |  |  |
| Gmupo | 357．000 0 |  |  |  |
|  | 大10980．25 |  |  |  |
|  | $42.18 \%$ |  |  |  |
| YOEF TL | 757.0630 |  |  |  |
|  | Y5\％15．09 |  |  |  |
|  | $100.00 \%$ |  |  |  |
| Den | 3.0000 |  |  |  |
| DFT，\＃ C | －3500 |  |  |  |
| DEFT－ | 3.000 |  |  |  |
|  | －35．00 |  |  |  |
| DHI <br> DFTn $-\frac{1}{}$ 基 <br> Shat Ti． | 30．000 0 |  |  |  |
|  | 人1．50 |  |  |  |
|  | 30.0000 |  |  |  |
|  | 31．50 |  |  |  |

Individual group reading

| $\begin{aligned} & 31 / 06 / 012100 \\ & 123466462 \\ & 12 \mathrm{GTH} \end{aligned}$ | Mouce ${ }^{11}$ |  |
| :---: | :---: | :---: |
| \#12 x- <br> : GRILF $\%$ |  |  |
| mL | 126.5630 |  |
| FLonoou1 | 7658.51 |  |
| 以T4 | 17.000 0 |  |
|  | $\times 670.45$ |  |
| DPA | 61.0000 |  |
| DFT.ES | 711314.11 |  |
| TTE | 22.0000 |  |
| DFT. CH | 8550.65 |  |
| LTT | 72.0000 |  |
| DPTMT7 | $\times 477.00$ |  |
| DTE | 50.0000 |  |
| DFT. $\mathrm{DS}^{\text {S }}$ | $\times 1.9 .29$ |  |
| DपF | 20.5000 |  |
| DFT"TIT | 883.80 |  |
| GNOUT1 | $\begin{aligned} & 37.0630 \\ & 31367.81 \end{aligned}$ | $\} \begin{aligned} & \text { Group } 1 \text { sales q'ty and } \\ & \text { total }\end{aligned}$ |

Full group reading

| $\begin{aligned} & 81 / 08 / 012.100 \\ & 12556 \text { H164 } \\ & 12 \mathrm{EETH} \end{aligned}$ | 11 <br> MaER |  |
| :---: | :---: | :---: |
| 4113 x- <br> x GRUF x <br> GROUPOL <br> GRUPO | 37.0638 स1367.81 5.52 37.0008 $\$ 10900.25$ 42.18 ; | $\}$ Group 1 sales q'ty and |
| XDET TL | $\begin{array}{r} 757,0680 \\ \times 0915.09 \\ 100.00 \% \end{array}$ |  |
| DET -- | $\begin{array}{r} 3.0000 \\ -5.00 \end{array}$ |  |
| MACH TL | 30.0000 <br> x.50 |  |
| HACl(-- | $\begin{array}{r} 6.0000 \\ \times 15.42 \end{array}$ |  |
| SETTL TL | $\begin{array}{r} 7.0000 \\ -60.00 \end{array}$ |  |
| ETTL -9 | $\begin{aligned} & 7.0000 \\ & \times 505.26 \end{aligned}$ |  |

## - Reading and resetting of sales information for a range of PLUs/subdepartments

This function provides you with $X$ and $Z$ reports for sales information of a certain range of PLUs/subdepartments. You must enter the start and end PLU/subdepartment code of the range. Of course, the range may represent all of the PLUs/subdepartments in your register.

- Sample X report

- Sample Z report

The subsequent printout occurs in
format as in the sample $X$ report.
- Reading of sales information on PLUs/subdepartments associated with an individual department



## Reading of PLUs/subdepartments

 whose sales amounts are zeros

- Reading of PLU/subdepartments whose sales amounts are zeros (by associated department)

| 31/08/01 21:06 1234561267 12 EETH | MAYER |
| :---: | :---: |
|  |  |
| DFT.OI <br> F.000009 <br> FLomong | DO1 |

## Reading of sales information for the price amount range of PLUs/subdepartments

| ```31/08/01 2145 12456 #167 12 ETH``` | 11 <br> MPER |  |
| :---: | :---: | :---: |
| $4129 \quad 8 \mathrm{~A} x$ PGAETIN: $0.00-$ | $9797.79$ | -Price amount |
| F000001 | 12 E 0000 | range <br> Sales q'ty |
| Flomoun | Y727.25 | $\int$ Sales q'ty |
| F00002 | 7.0000 |  |
| Flonoue | $\times 10.50$ |  |
| Fooone | 1.0000 |  |
| Flou0003 | 90,00 |  |
| F000006 | 3.0630 |  |
| P1000006 | $\times 18.38$ |  |
| F900080 | 3.0000 |  |
| FL000080 | +21.50 |  |
| F0000\% | 2.0000 |  |
| FL000090 | $\times 10.38$ |  |

## －Reading and resetting of sales information for EANs

－Sample X report


## －Sample Z report

```
31/08/01 21:46 11
123456 #1655 HHUER
12 EETH
#107 人工1关
#EfM
```

The subsequent printout occurs in the same format as in the sample $X$ report．

The EAN codes are printed out in the sequence shown below．

| EAN－13 |
| :--- |
| EAN－8 |
| In－store marking PLU short type |
| In－store marking Non－PLU short type |
| UPC－A |
| UPC－E |

## ■ Reading and resetting of sales information for EANs associated with an individual department

- Sample X report

- Sample Z report


Reading of EANs whose sales amounts are zeros

■ Reading of EANs whose sales amounts are zeros (by associated department)

| 31/08/01 21:26 | 11 |
| :---: | :---: |
| 12346 \#1641 | HAYER |
| 12 EETH |  |
| \#107 x-1\% |  |
| $\triangle$ Efin $x$ |  |
| \% ZEFL SAL天 |  |
| $5045678912304 \%$ |  |
| DHITH |  |
| $5067891234506 \%$ |  |
| CHEFRY |  |
| $5078912345606 \#$ |  |
| FADISH |  |
| 5099876543024 |  |
| Marigu |  |

Reading of commission sales information

## Transaction reading

```
31/06/01 21:44 11
123456 W1644 MavR
12 ETH
#170 M4y%
* TROWG:
```

Total in drawer reading

| 31/08/01 21:43 | 11 |  |
| :---: | :---: | :---: |
| $123456 \$ 1643$ | MAIER |  |
| 12 EETH |  |  |
| \#131 $\times 1 \times$ |  |  |
| $\cdots \mathrm{TL}-\mathrm{ID}$ |  |  |
| ETCH1 | 50 | Exchange 1 counter |
|  | DA397.00 | -Currency |
| DIT. CUEL | +20.28 | exchange 1 total |
| EKL CHE | 10 | Domestic |
|  | D+50.00 | currency for |
| DOM, CuR | +25. 56 | exchange 1 |
| ESI CR | 20 |  |
|  | 0495.06 |  |
| ODM. CHF 1 | $\times 48.60$ |  |
| Evite | 10 |  |
|  | 23.47 |  |
| DIM, CUF2 | $\times 1.00$ |  |
| EYCHS | 10 |  |
|  | 45.08 |  |
| Dam. Cut | \$3.00 |  |
| EXCH4 | 20 |  |
|  | 140.00 |  |
| DTM. COF 4 | $\times 123.93$ |  |
| MxMCo | $\times 1451.40$ | -Cash in drawer |
| Mn IO | M166.56 | -Cheque in drawer |
| $\mathrm{CA} / \mathrm{CH} \mathrm{H}$ | $\times 1617.76$ | -Cash/Cheque |

## - Reading and resetting of a stacked report

You can print multiple X1/Z1 reports in sequence at a time. In this case, you need to program in advance what X1/Z1 reports should be printed in the stacked report sequence.

Note
The following job code numbers alone can be used for stacked report printing.
Job code number: 100, 107, 109, 110, 113, 120, 127, 129, 130, 131, 132, 140, 150, 160 Refer to "Selection of X1/Z1 and X2/Z2 reports to be printed in the stacked report sequence" for details.

## Deleting of non-accessed EANs

- Sample X report (Reading)

- Sample Z report (Deleting)


The subsequent printout occurs in the same format as in the sample $X$ report.
*: When there is any sales data of the EAN for \#209 report, the data is printed here.
When you delete the EAN in Z1 mode under the this situation, the data for \#209 is also deleted.

## 4 Periodic consolidation

Your register allows you to take consolidation $X$ and $Z$ reports of a chosen period (normally one week or a month).

## ■ Generality

The periodic reading or resetting reports are the same in format as those in the $\mathrm{X} 1 / \mathrm{Z} 1$ report for daily total except job code no. (\#2xx) and mode indication ("X2" or "Z2".)

- Sample X report


The subsequent printouts are the same in format as those in the $X / Z$ report for daily total.

- Reading and resetting of the daily net totals

| 31/06/70 20:4 | 11 |
| :---: | :---: |
| W546 W1094 | Haver |
| 11 WILS |  |
| Wen xax |  |
| * WALH \% |  |
| 01/0e | 998 |
|  | M5erob |
| W.oe | 92 |
|  | 456500 |
| W/me | 10 E |
|  | 9606.77 |
| 14/08 | \%0 |
|  | 4498.2 |
| -5/os | 84 |
|  | \%561.50 |
| $9 / 08$ | 81.8 |
|  | W01.41 |
| 30/0e | 91.0 |
|  | 7497.2 |
| Metter | 2047 |
|  | xtres.e |



## Reading and resetting of a stacked report

You can print multiple X1/Z1 reports in sequence at a time.
In this case, you need to program in advance what X1/Z1 reports should be printed in the stacked report sequence.

The following job code numbers alone can be used for stacked report printing.
Job code number: 200, 207, 209, 210, 213, 220, 227, 229, 230, 231, 232, 240, 250, 270
Refer to "Selection of X1/Z1 and X2/Z2 reports to be printed in the stacked report sequence" for details.

# COMPULSORY CASH/CHEQUE DECLARATION 

If you want to make mandatory the declaration of the cash and cheque amount in the drawer before outputting cashier $\mathbf{Z}$ reports, consult your dealer and have your register programmed for compulsory cash/cheque declaration.
If your register is programmed for compulsory cash/cheque declaration (CCD), a cashier must first count and declare the cash and cheque amounts (of domestic and foreign currency) in the drawer, before he or she can output a cashier report. The procedure for outputting a CCD report is shown below.

## Types of compulsory cash/cheque declaration

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


## Note

- Compulsory cash/cheque declaration is available in the above two types. You can choose either of these. Consult your dealer for details.
- When cash/cheque declaration is compulsory, flash reports are not available.


## Key operation

After the first TL key is pressed, the register prompts the cashier to input the cash and cheque accounts for both domestic and foreign currency. The cashier can simply input the total amounts of each currency unit, or the number of bills or coins of each denomination of each currency unit.

- Individual cashier report

\# :When inputting the cash or cheque amount (domestic currency) in the drawer
Ex1 to Ex3 :When inputting the amount of a foreign currency in the drawer



## PROGRAMMING FOR EURO

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 the operation of Job \#800 in X2/Z2 mode. However, there are several options you must set depending on your needs.

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 |
| - EURO | Exchange 1 | Domestic currency | Domestic currency |
| National currency (DM, F, etc.) | Domestic currency | Exchange 1 |  |
| $\stackrel{\gtrless}{\sim}$ Foreign currency | Exchange 2 to Exchange 4 | Exchange 2 to Exchange 4 | Exchange 1 to Exchange 4 |

## Receipt samples:



## - Automatic modification of register system for introduction of EURO X2/Z2 800

To make your register correspond to the introduction of EURO, your register system can be automatically modified when the procedure shown below is executed in the $\mathrm{X} 2 / \mathrm{Z} 2$ mode. According to the steps of the introduction, you can make your register correspond to EURO.

## Procedure


*A=1: Applicable for the period 1
*A=2: Applicable for the period 2
*A=3: Applicable for the period 3

- You can perform the each operation only once with the substitution of " $A=1$ ", " $A=2$ " and " $A=3$ ". If you performed the operation with the substitution of " $A=2$ " first, you cannot perform the operation with the substitution of " $A=1$ ". If you performed the operation with the substitution of " $A=3$ " first, you cannot perform the operation with the substitution of " $A=1$ " and " $A=2$ ".

The details of the register system modification are as follows:

## When " 1 " is substituted to " $A$ ":

1. Issuing a general $Z 1$ report (Job \#100)
2. Issuing a general $Z 2$ report (Job \#200)
3. Setting "Yes" for a PGM function "Printing exchange 1 total amount and change amount on receipt and journal" (Job \#2616)
4. Setting "Yes" for a PGM function "Printing exchange 1 total amount on validation printing" (Job \#2616)
5. Setting "Division" for a PGM function "Exchange 1 calculation method" (Job \#2616)
6. Setting the EURO symbol (€) for the currency description text (Job \#2334), and setting " 2 " for the number of digits after decimal point (Job \#2330) of exchange 1
7. Setting the round-off function enable for currency exchange

After the execution of the procedure with the substitution of "1", treat EURO as foreign currency using Exchange 1 (Ex1).

## When " 2 " is substituted to " $A$ ":

1. Issuing a general Z 1 report (Job \#100)
2. Issuing a general $Z 2$ report (Job \#200)
3. Resetting GT1, GT2, GT3 and training GT
4. Converting the unit prices of Dept, PLU and EAN to EURO currency.
5. Setting "Yes" for a PGM function "Printing exchange 1 total amount and change amount on receipt and journal" (Job \#2616)
6. Setting "Yes" for a PGM function "Printing exchange 1 total amount on validation printing" (Job \#2616)
7. Setting "Multiplication" for a PGM function "Exchange 1 calculation method" (Job \#2616)
8. Changing the domestic currency symbol to the EURO symbol ( $€$ ) and setting the number of digits after decimal point of the domestic currency to 2
9. For the setting of the currency description text and the number of digits after decimal point of exchange 1 , the ones thet had been set to the domestic currency are set. (Job \#2330 and \#2334)
10. Setting the round-off function enable for currency exchange

After the execution of the procedure with the substitution of " 2 ", treat EURO as domestic currency, and national currency as foreign currency using Exchange 1 (Ex1).
With the execution of the procedure with the substitution of " 2 ", your domestic currency becomes EURO. While unit prices of departments, PLUs and EANs are automatically converted to EURO currency, you must change the rates or amounts for the miscellaneous keys so that they are based on amounts in EURO.

When " 3 " is substituted to " $A$ ":

1. Issuing a general $Z 1$ report (Job \#100)
2. Issuing a general $Z 2$ report (Job \#200)
3. Resetting GT1, GT2, GT3 and training GT
4. Converting the unit prices of Dept, PLU and EAN to EURO currency.
5. Setting "No" for a PGM function "Printing exchange 1 total amount and change amount on receipt and journal" (Job \#2616)
6. Setting "No" for a PGM function "Printing exchange 1 total amount on validation printing" (Job \#2616)
7. Setting "Multiplication" for a PGM function "Exchange 1 calculation method" (Job\#2616)
8. Changing the domestic currency symbol to the EURO symbol and setting the number of digits after decimal of the domestic currency to 2
9. Setting the round-off function enable for currency exchange

Note
When the operation is performed from the status of substitution "1", and when any special setting has been applied for the rounding system to make it suit your domestic (national) currency, the setting is cancelled to make it suit your new domestic currency, EURO.

After the execution of the procedure with the substitution of " 3 ", treat EURO as domestic currency.
When the operation with the substitution of " 2 " has been performed already, " 3 . Resetting GT1, GT2, GT3 and training GT" is not executed.
When the operation with the substitution of " 1 " or " 2 " has been performed already, the currency symbol of exchange key is overwritten with a space.

## Optional programming for the introduction of EURO PGM 1 PGM 2

Programming relating with the function of exchange $1($ Exil $)$ cannot be changed automatically with the execution of Job \#800 described in the previous section. After the execution on each period, conduct the following programming depending on your needs.

## Programming for Exchange 1 (Exi)

## Currency exchange rate (Job \#1310)

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

## Cheque/credit operation (Job \#2616)

## Assigning the drawer number to the drawer for foreign currency (Job \#2680)

It may be convenient to have two drawers for EURO (as domestic currency) and national currency (as the foreign currency set in exchange 1) when both of these currencies are co-existing (period 2). In this case, conduct this programming.

## OVERRIDE ENTRIES

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

## Procedure

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

## Example

On this example, the register has been programmed not to allow deduction entries over 2.00 .


Return the mode switch to the REG position.

# CORRECTION AFTER FINALIZING A TRANSACTION (AFTER GENERATING A RECEIPT) 

When you need to void incorrect entries that cashiers cannot correct (incorrect entries that are found after finalizing a transaction or cannot be corrected by direct or indirect void), follow this procedure in the MGR mode.

1. Turn the mode switch to the MGR position.
2. Press the $\infty$ key to put your register in the VOID mode.
3. Repeat the entries that are recorded on an incorrect receipt. (All data for the incorrect receipt are removed from register memory; the voided amounts are added to the void register totalizer.)


## Note

Your machine leaves the VOID mode whenever a transaction is canceled (i.e. finalized in the VOID mode.) To void additional transactions repeat steps 2. and 3. above.

## PRIOR TO ENTRIES

## 1 Preparations for entries

Before registrations, insert the operator key into the mode switch and turn it to the REG position and check the following items:

## ■ Receipt and journal paper rolls

If the receipt and journal paper rolls are not set in the machine or there are low rolls, install new ones according to section "4. Installing and removing the paper rolls" under "OPERATOR MAINTENANCE."

## Receipt ON/OFF function

You can disable receipt printing in the REG mode to save paper using the receipt function. To disable receipt printing, press the Gcci key in the OP X/Z position. This key toggles the receipt printing status ON and OFF. To check the receipt printing status, turn the mode switch to the OP X/Z position or press the CL key in the REG mode. When the function is in the OFF status, the receipt off indicator " "" illuminates.

## Note

Your register will print reports regardless of the receipt state. This means that the receipt roll must be installed even when the receipt state is "OFF".

## Cashier and clerk assignment

Prior to any item entries, cashiers must enter their cashier codes into the register, and may also be required to enter a clerk code. However, these code entries may not be necessary when the same cashier or clerk code is used in the next transaction.
Cashier codes and clerk codes are available in two variants: Variant 1, in which they are displayed ("-00-" to "-99-"), and Variant 2 , in which they are not displayed (always "-00-").
When the cashier or clerk code is assigned by the following procedure, the register prints the two-digit cashier code or clerk code (variant 2: "** ") and the cashier or clerk name both on the receipt and journal for every transaction.

All of these settings depend on how the register has been programmed. For the selection of these settings, consult your local dealer.


## Procedure

## Cashier assignment

■ Sign-on


Sign-off
Variant 1 / Variant 2 :


Note The real cashier key system is also available. In this system put one of the 1 through 15 keys in the cashier switch to sign on. If you want to choose this system, consult your dealer.

## Clerk assignment

Sign-on


Sign-off
Variant 1 / Variant 2 :


- On the current factory setting, only the entry of the cashier code is required. When cashier \& clerk codes entries are desirable for your register, consult your dealer.
- If you want to enter cashier and/or clerk codes before every transaction, consult your dealer.
- For the display type selection of cashier code and clerk code, "Variant 1" has been preset. For the selection of "Variant 2," consult your dealer.
- Clerk can be changed during the transaction. Consult your dealer.


## 2 Error warning

In the following examples, your register will go into an error state accompanied with a warning beep and the error symbol " $E$ " on the display. Clear the error state by pressing the $C L$ key and take proper action.
Please refer to the error code table on page 158.

- When you enter an over 32-digit number (entry limit overflow): Cancel the entry and re-enter a correct number.
-When you make an error in key operation: Clear the error and continue operation.
- When you make 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.
- When an including-tax subtotal exceeds eight digits: Delete the subtotal by pressing the $C L$ key and press the TL , (CA2), CH 11 through (CH4), or (CR11 through (CR4 key to finalize the transaction.


## ENTRIES

## 1 Item entries

## Single item entries

## Procedure

## Department entries (direct department entries)

Enter a unit price and press a department key. If you use a programmed unit price, press a department key only.


Note
When those departments for which the unit price has been programmed as zero (0) are entered, only the sales quantity is added.

## Department entries (indirect department entries)


*Less than the programmed upper limit amounts

## PLU entries (indirect PLU entries)

Enter a PLU code and press the PLUSUB key.


## Note

When those PLUs for which the unit price has been programmed as zero (0) are entered, only the sales quantity is added.

## Subdepartment (open PLU) entries

*Less than the programmed upper


## PLU entries (direct PLU entries)

When using a programmed price


## EAN entries



* After scanning a EAN code or pressing the EAN key, you may be requested to enter a unit price with the display "------". In this case, enter the priceand press the ААМТ key.

Key operation


Print

| DFT.OS | *12.00 |
| :---: | :---: |
| DFT.OE | \%.00 |
| DFT.OES | 2.00 |
| DFT.OS | \%.80 |
| FL000002 | \%1.50 |
| FL000011 | \%12.00 |
| FL000008 | \%.50 |
| $5012345678900 \mathrm{\#}$ |  |
| AFFLE | 2. 50 |
| CASH E4 | 5.30 |

## ■ Repeat entries

You can use this function for entering a sale of two or more same items.


## Example

Key operation


Print

| DFT.OE | \%2.00 |
| :---: | :---: |
| DFT.CIS | *2.00 |
| DTT.OS | 2.00 |
| DFT.OS | *6.80 |
| DFT.OS | *6.80 |
| Flou0010 | *7.15 |
| FL000010 | $\times 7.15$ |
| FL000010 | $\times 7.15$ |
| FL000051 | *2.80 |
| FL000051 | *2.80 |
| FL000060 | *5.00 |
| FLom0060 | \%5.00 |
| $5012345678900 \%$ |  |
| AFFLE | 2. 2.50 |
| 5012345678900\# |  |
| AFFLE | 2. 50 |
| DFT.O2 | *6.00 |
| DFT.OE | *6.00 |
| DFT.OE | *6.00 |
| CASH 大79-65 |  |

## Multiplication entries

Use this feature entry method when you need to enter two or more same items.
This feature helps when you sell a large quantity of items or need to enter quantities that contain decimals.

## Procedure



- After scanning an EAN code or pressing the EAN key, you may be requested to enter a unit price with the display "------". In this case, enter the unit price and press the AMTT key.
- Q'ty: Up to four digits integer + three digits decimal
- Unit price: Less than a programmed upper limit
- Q'ty x unit price: Up to eight digits


## Example

Key operation

| Department entry (direct) | $7 \longdiv { \cdot 5 } \underset { 1 6 5 } { \bullet 8 }$ |
| :---: | :---: |
| Department | $2 \otimes$ |
| entry | 250 |
| (indirect) | 5 (0ep |
|  | 15 ® |
| PLU entry | 13 PLUSUB |
| Direct PLU | $8 \cdot 25 \otimes$ |
| Subdepartment | $3 \otimes$ |
| entry | 100 AM |
|  | 60 PlU/SUB |
| EAN entry | $5 \otimes$ |
| EAN entry | 5012345678900 EAN |

Print

| 7.5. 1.65 |  |
| :---: | :---: |
| DFT.OS | 212.38 |
| $2 \times 2.50$ |  |
| DFT.DS | \%5.00 |
| 15 N 2.10 |  |
| Flomoti3 | 331.50 |
| $8.25 \times 3.00$ |  |
| FL000058 | P24.75 |
| $3 \times 1.00$ |  |
| FL000060 | *3.00 |
| $5 \times 2.50$ |  |
| $5012345678900 \#$ |  |
| AFPLE | $\times 12.50$ |
| CASH 28 | -13 |

## Successive multiplication entries

This function is practical for example when you enter a sale of items sold by area (square meter).

## Procedure



- After scanning an EAN code or pressing the EAN key, you may be requested to enter a unit price with the display "------". In this case, enter the unit price and press the AMT key.
- Length or width: up to seven digits (4-digit integer + 3-digit decimal)
- Unit price: less than a programmed upper limit
- Length x Width x Unit price: up to eight digits

Note
For actual use of this function, consult your dealer.

## Example

Key operation


Print

| 3. $4 \times 4.00$ |  |
| :---: | :---: |
| DFT.OS | *48.00 |
| 1.5×2.5× 3.00 |  |
| FL000008 | 211.25 |
| $1.75 \times 1.75 \times 6.00$ |  |
| FL000006 | *18.38 |
| $4 \times 5 \times 5.00$ |  |
| 5n99887654302\# |  |
|  | *100.00 |
| CASH 大17 | 7.65 |

## Split-pricing entries

You will use this function when your customer wants to purchase items normally sold in bulk.

## Procedure



- After scanning an EAN code or pressing the EAN key, you may be requested to enter a unit price with the display "------". In this case, enter the unit price and press the AMT key.
- Selling quantity: Up to four digits integer + three digits decimal
- Base quantity: Up to two digits (integer)

Note For actual use of this function, consult your dealer.

## Example

Key operation


Print

| $7 \times 10 / 6.00$ |  |
| :--- | :--- |
| DFT.O7 | $* 4.20$ |
| $8 \times 5 / 3.00$ |  |
| FLOO005 | $* 4.80$ |
| $5 \times 6 / 8.75$ |  |
| $5045678912304 \#$ |  |
|  |  |
| CASH | $\times 1.30$ |

## ■ Single item cash sale (SICS)/single item finalize (SIF) entries

## SICS entries

- This function is useful when a sale is for only one item and is for cash; such as a pack of cigarettes. This function is applicable only to those departments that have been set for SICS or to their associated PLUs, subdepartments or EANs.
- The transaction is finalized and the drawer opens as soon as you press the department key, [OPTT key, PLUSUB key, the direct PLU key or EAN key.


## Example

Key operation

| For finishing |
| :--- |
| the transaction |

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

## SIF entries

- If an entry to a department, PLU/subdepartment or EAN set for SIF follows the ones to departments or PLUs/subdepartments not set for SIF, the transaction is finalized immediately as a cash sale.
- Like the SICS function, this function is available for single-item cash settlement.


## Example <br> Key operation <br> 17458 1500 <br> For finishing <br> the transaction <br> Link PLU/EAN link entries

Print 9

Operation is the same as the one for normal PLU/EAN. The print of a link PLU/EAN link entry on the receipt varies according to the PGM2 programming (\#2616).

## Printing detailed information

When a leading link PLU/EAN is entered, each amount and text of the leading link PLU/EAN and the linked PLUs, and their total amount are printed automatically.

## Example (In case of link PLU)



## Printing leading link PLU/EAN and total sales amount

When a leading link PLU/EAN is entered, only the leading link PLU/EAN's text and the total sales amount (the sum of prices for the leading link PLU/EAN and the linked PLUs) are printed.

## Example

(In case of link PLU)

Key operation
21 PLUSUB

Print


If a discount entry is made for a link PLU/EAN link, the discount amount is calculated based on the total sales amount. The discount itself is given to the leading link PLU/EAN.

## EAN learning function

When you enter or scan an undefined code, you are required to enter its unit price and the associated department. The code, associated department and unit price entered are stored in the EAN file and used for future EAN sales entries.

Note - When there is no capacity remained in the file, the data is not stored in the file.

- For the text for the EAN code, the text of its associated department is applied.
- You can use the EAN learning function in the training mode. This may be convenient to practice the scanning system.


## Procedure



* Press the function (deletion by executing \#105 in Z1 mode).


| Example Key operation |  | Print |
| :---: | :---: | :---: |
|  | 4 EAN |  |
| "-- -------" is displayed. $\longrightarrow$ | $\begin{array}{r} 750 \\ 5 \\ \hline \end{array}$ | $5056789123404 \#$ <br> DFT.OS $\quad 7.50$ |
|  | TL | $\mathrm{CASH} \times \mathrm{CH}-50$ |

## ■ Price inquiry (view) function (for EANs)

You can use this function when you want to know the unit price of the EAN item during transaction in the REG/MGR mode.

## Procedure


*1: Press the $C L$ key to cancel the the inquiring (view) mode.
*2: Press the AMT key when you want to register the unit price of the EAN displayed.
*3: You can change the unit price temporarily at MGR mode. The unit price which is programmed in PGM mode is not changed (Price override entry).


## Example

Key operation


Print

| FL000005 | $* 200$ |
| :--- | ---: |
| $5089123456708 \#$ |  |
| GRAFE | $* 5.20$ |
| CASH | 72.20 |

## Price change function (for EANs)

Note To use this function, consult your dealer.
You can use this function when you need to change the unit price or associated department of an EAN item in REG/MGR mode.
There are two method for change:

1. Price change mode

You can change the preset price and/or the associated department of an EAN code without entering PGM mode.
2. Changing price during a transaction

When you has found a wrong EAN price and/or associated department upon transaction, you can correct them at the time of transaction. With the entry of new price and/or associated department, the preset price and/or associated department is automatically changed to the new price and/or associated department.

Note
For the Non-PLU type EAN codes having price info. and press codes, the prices in the codes has the priority over the preset prices. So, for these codes, a changed price is valid only when price change is executed.

## Procedure

## Price change mode



## Changing price during a transaction

Scan EAN code


## Example

- Price change mode

| Key operation | Print |
| :---: | :---: |
|  | EPR.CHHG DEFTOR 5087654321106\# GRANGE |

- Changing a price during a transaction

- When an undefined code is entered in the price change mode, the register goes to an error status.
- When you press the fanded key during a transaction, the EAN entry is voided of the 1st depression of the farel key, then you are allowed to enter a correct price and/or associated department.
- When an associated department is changed, the item label for the department will be also changed automatically to the item label of new associated department.
- For the repeat entry, use the सerex key.


## 2 Displaying subtotals

Your machine provides the following two types of subtotals:

## $\square$ Normal subtotal

This is a subtotal which is displayed by pressing the ST key. When you press it, the subtotal of all entries which have been made is displayed and the symbol " $\square$ " will light up in the display.

## Example

Key operation


Print

| DTT. DI | Y1.00 |
| :---: | :---: |
| DPTn $\mathrm{Di}=$ | 81.00 |
| DT, ME | 87.00 |
| Ent | x9 mim |

## Note

Subtotal will not be printed on a receipt on the current factory setting. If you want to print it, consult your dealer.

## - Difference subtotal (Differ ST)

This is a subtotal which is printed by pressing the transaction.
When you press it first, the difference subtotal of all entries which have been made is displayed and printed. If you press it second, you will get the difference subtotal of entries which have been made after you last got it. Taxes are calculated each time you press the according to the programming (job \#2616).

| Example | Key operation | Print |  |
| :---: | :---: | :---: | :---: |
|  | 1009 |  |  |
|  | 2002 | DFT.OT | 81.00 |
|  | 200 | DPT, ${ }^{\text {ate }}$ | \% 200 |
|  | 7003 | DIFP ST | \%600 |
|  |  | DFT, LT | \%7.00 |
|  |  | DTF ST | \%7.00 |
|  |  | CAH | . OC |

## 3 Finalization of transaction

## ■ Cash or cheque tendering

Press the ST key to get a subtotal, enter the amount tendered by your customer, then press the TL or $\mathrm{CA}_{2}$ key if it is a cash tender or press one of the $\widehat{\mathrm{CH} 1}$ through $\widehat{\mathrm{CH} 4} \mathrm{key}$ if it is a cheque tender. When the amount tendered is greater than the amount of the sale, your register will show the change due amount and the symbol " $L$ " will light up. Otherwise your register will show a deficit and the symbol "a" will light up. Make a correct tender entry.

## Example

Cash tendering


Cheque tendering $\qquad$


Mixed tendering (cheque + cash)

## Example

Key operation


Print

| mtutal | 大14 56 |
| :---: | :---: |
| CHEX | +10.00 |
| CABH | *5.00 |
| CHPNEE | 30.44 |

## - Cash or cheque sale that does not need any tender entry

Enter items and press the TL or CA 2 key if it is a cash sale or press one of the CH 1 through CH 4 if it is a cheque sale. Your register will display the total sale amount.

## Example

Key operation

$$
\begin{array}{r}
300 \quad 6 \\
10 \begin{array}{r}
\text { PLU/SUB } \\
\mathrm{TL}
\end{array}
\end{array}
$$

Print


In the case of cheque sale

$$
\text { CHEC } \quad \angle 1 O-15
$$

## - Credit sale

Enter items and press the corresponding credit keys (CR11 through CR44).

## Example

Key operation


Print

```
DFT,OT
CRDITL FET 5D
```

Amount tendering operations (i.e., change calculations) can be achieved by the CR1 through CR4 key when a PGM2 programming allows them.

Mixed-tender sale (cash or cheque tendering + credit tendering)

## Example

Key operation



Note
Press one of the CH through (CH4 keys or the CR11 through ©R44 keys in place of the TL key when your customer makes payment in cheques or by credit account.

## 4 Computation of VAT (Value Added Tax)/tax

## ■ VAT/ tax system

The machine may be programmed for the following six tax systems by your dealer.
Automatic VAT 1-6 system (Automatic operation method using programmed percentages) This system, at settlement, calculates VAT for taxable 1 through 6 subtotals by using the corresponding programmed percentages.

Automatic tax 1-6 system (Automatic operation method using programmed percentages)
This system, at settlement, calculates taxes for taxable 1 through 6 subtotals by using the corresponding programmed percentages, and also adds the the calculated taxes to those subtotals, respectively.

## Manual VAT 1-6 system (Manual entry method using programmed percentages)

## Procedure



This system provides the VAT calculation for taxable 1 through 6 subtotals. This calculation is performed using the corresponding programmed percentages when the vaT key is pressed just after the ST key.

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

## Procedure



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 ST key. For this system, the keyed-in tax rate can be used.

## Manual tax 1-6 system (Manual entry method using preset percentages)

## Procedure



This system provides the tax calculation for taxable 1 through 6 subtotals. This calculation is performed using the corresponding programmed percentages when the VAT key is pressed just after the ST key. After this calculation, you must finalize the transaction.

## Automatic VAT 1-3 and automatic tax 4-6 system

This system enables the calculation in the combination with automatic VAT 1 through 3 and automatic tax 4 through 6 . The combination can be any of VAT1 through VAT3 corresponding to taxable 1 through taxable 3 and any of tax 4 through 6 corresponding to taxable 4 through taxable 6 for each item. The tax amount is calculated automatically with the percentages previously programmed for these taxes.

Note

- A PLU/EAN not programmed for any of the tax statuses is registered depending on the tax status of the department which the PLU/EAN belongs to.
- VAT/tax assignment can be printed at the fixed right position near the amount on the receipt as follows:


When the multiple VAT/tax is assigned to a department, a PLU or an EAN, a smaller number of the VAT/tax will be printed. For details, contact your authorized SHARP dealer.


## - VAT shift entries

This feature is intended to shift the tax status of a particular department (PLU or EAN) programmed for taxable 1 or taxable 1 and taxable 3.

1. When the VAT shift entry is made for a particular department, PLU or EAN programmed for taxable 1, their tax status shifts to taxable 2.
2. When this entry is made for a particular department (PLU or EAN) programmed for taxable 1 and taxable 3, the tax status "taxable 1" remains unchanged, but the other "taxable 3" is ignored.

## Procedure

Press the $\underset{\text { vAAT }}{\text { SAFT }}$ to activate the VAT shift prior to entering department(s), PLU(s) or EAN(s) concerned.

\section*{Example <br> Key operation <br> (When the manual VAT 1-6 system is selected.) 550 <br>  <br> Print <br> | DFT. $0^{4}$ | \%5.50 |
| :---: | :---: |
| SUETDTAL | \%. 50 |
| TARE ST | *5. 50 |
| VAT 2 | $\times 0.21$ |
| WET 2 | \%5.29 |
| CASt | \% 5 - 50 |

## 5 Auxiliary entries

## - Percent calculations (premium or discount)

- Your register provides the percent calculation for the subtotal or each item entry depending on the programming.
- Percentage: 0.01 to $99.99 \%$


## Percent calculation for the subtotal

## Example

Key operation


Print

| 481.40 |  |
| :---: | :---: |
| DFT, CH | Y5.60 |
| DFT. Dit | 82.25 |
| DFT, पi | $\times 2.25$ |
| SUETITAL | $\times 10.10$ |
|  | $-10.00 \%$ |
| \%nd | $-1.01$ |
| EmSH | $37^{4}$ |

## Percent calculation for item entries



## Deduction entries

Your register allows you to deduct a certain amount less than a programmed upper limit after the entry of an item or the computation of subtotal depending on the programming.

## Deduction for the subtotal

## Example <br> Key operation <br> 

Print

| DFT. MS | \%5.75 |
| :---: | :---: |
| P100000 | 87.50 |
| $4-9$ | -1.00 |
| CaH | 2 |

## Deduction for item entries

## Example

Key operation


Print

| DPTn $\mathrm{Ca}^{7}$ | 88.75 |
| :---: | :---: |
| a-3 | $-0.75$ |
| 5 Ach | Y |

## Refund entries

For a refund entry, press the RF key just before you press a department key, ${ }^{[0 \mathrm{EPT}}$ key, direct PLU key, PLUSUB key or EAN key to finalize a transaction. The operation before pressing the RF key is the same as the one of normal operation. For example, if a refund item is the one entered into a department, enter the amount of the refund, then press the RF key and the corresponding department key in this order; if an item entered into a PLU is returned, enter the corresponding PLU code, then press the RF and PLU/SUB keys, and if a refund item is the one entered into an EAN, press the RF key, scan the EAN code and press the EAN key.

Key operation


Print

| DFT.O6 | R-2.50 |
| :---: | :---: |
| DFT.OS | F-3.00 |
| -7x 2.10 |  |
| Flon0013 | 8-14.70 |
| $5089123456708 \#$ |  |
| GRAPE | 5-5.20 |
| CHiplige | K25-40 |

## Printing of non-add code numbers

Enter a non-add code number such as a customer's code number and credit card number within a maximum of 16 digits and press the \# key at any point during the entry of a sale. Your register will print it at once.

## Example

Key operation


Print

```
#00000000012%0
DFTME Y5.00
WEDTL *HEMDO
```


## 6 Payment treatment

## ■ Currency exchange

Your register allows payment entries of foreign currency. Pressing one of the Ex1 through Ex4 key creates a subtotal in foreign currency. Cash alone can be handled after currency exchange.

## Procedure


*Exchange rate: 0.000000 to 999.999999
Note When the amount tendered is short, the deficit is shown in domestic currency.


Manual exchange rate - EX4 (The EX4 key can be used only for the manual entry of an exchange rate.)

Key operation


Print

| DTT.OS | *23.00 |
| :---: | :---: |
| DFT.07 | \%46.50 |
| METDTAL <br> EMCH | *67-50 |
|  | 1.0190 |
|  | 70.82 |
| CASH | 100.00 |
| CHANGE | \%28.63 |

Received on account entries

## Procedure



## Example

Key operation

$$
\begin{array}{r|r|}
12345 & \# \\
4800 & \begin{array}{r}
\mathrm{RA} \\
\hline \mathrm{CH} 1 \\
\hline
\end{array} \\
\hline
\end{array}
$$

Print

```
#000000100012845
CHECK
    MEA *48.00
```


## Paid out entries

## Procedure



```
#000000000006%69
CHECN
NAFL
                                    Y0.00
```


## - No sale (exchange)

Simply press the NS key without any entry. The drawer will open and the printer will print "NO SALE" on both the journal and the receipt. If you let your machine print a non-add code number before pressing the NS key, a no sale entry is achieved with a non-add code number printed.

H0000000000045678
WU SALE

## Cashing a cheque

Enter the cheque amount, then press one of the CH 1 through $\mathrm{CH}_{4}$ key.

## Procedure



## Example

Key operation


Print

```
#00000000000799
CA/CHK\(\times 30.00\)
```


## 7 Automatic sequencing key (ATV) key) entries

You can achieve a programmed transaction simply by pressing a corresponding automatic sequencing key.

## Example ( $\left.{ }^{\text {AUTO }}=5007 \mathrm{TL}\right)$

Key operation
${ }_{2}$

Print


## CORRECTION

## 1 Correction of the last entry (direct void)

If you make an incorrect entry relating to a department, PLU/subdepartment, EAN, percentage (\%1 through \%4) , deduction ( $\Theta$ through $\Theta 4$ ) or refund, you can void this entry by pressing the $\infty$ key immediately after the incorrect entry.

## Example

Key operation


Print

| DFT.OE. | 812.50 |
| :---: | :---: |
| DFT.OES | n-12.50 |
| FL00000 | $\times 1.50$ |
| FL000002 | n-1.50 |
| 5012345678900\% |  |
| AFFLE | *2.50 |
| 5012345678900 H |  |
| AFPLE | $n-2.50$ |
| DPT.OB | *6.00 |
|  | $-15.00 \%$ |
| 22 | -0.90 |
| E2 | $0 \times 0.90$ |
| DFT. 09 | +8.28 |
| $\underline{c}-1$ | -0.28 |
| 01 | $0 \times 0.28$ |
| OFT.OS | F-2.50 |
| OT.OE | Fux. 50 |
| CASH | K7 - 2 |

## 2 Correction of the next-to-last or earlier entries (indirect void)

With the $\infty$ key, you can void any incorrect positive department, PLU/subdepartment or EAN entry made during a transaction if you find it before finalizing the transaction (e.g. pressing the TL key). This function is applicable to plus department, PLU/subdepartment and EAN entries only.

| Example | Key operation | Print |
| :---: | :---: | :---: |
|  |  |  |

## 3 Subtotal void

You can void an entire transaction. Once subtotal void is executed, the transaction is aborted and the register issues a receipt.

## Example <br> Key operation <br>  <br> 4 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 you are making the amount tendered entry, finalize the transaction.
2. Make correct entries from the beginning.
3. Hand the incorrect receipt to your manager for its cancellation.

## SPECIAL PRINTING FUNCTIONS

## 1 Copy receipt printing

If your customer wants a receipt after you have finalized a transaction with the receipt function being in the "OFF" status (no receipting), press the Bcop key. This will produce a receipt. Your register can also print a copy receipt when the receipt function is in the "ON" status.

Note
Pressing the ${ }_{\text {ncop }}$ key in the OP X/Z mode before registration toggles the status "ON" and "OFF".

Example Printing a copy receipt after making the entries shown below with the receipt function being in the "OFF" status

| Key operation |  | Print |
| :---: | :---: | :---: |
| $\begin{array}{r\|r\|} 850 & 2 \\ 3 & \otimes \\ 150 & 1 \\ \hline \mathrm{TL} \\ \hline \end{array}$ | Print on the |  |
| For receipting $\rightarrow$ ACOT | $\begin{aligned} & \text { Print on the } \\ & \text { receipt } \end{aligned}$ |  |

When the receipt function is in the "ON" status and you press the RCOF key to make a second copy


## 2 Guest check copy

You can use this function when you want to take a copy of guest check.
Press the coorv key and make a desired entry.

## Procedure



When the receipt ON/OFF function is in the "OFF" status

Note The guest check copy has nothing to do with the memory.

## Example

Key operation


Print


## 3 Validation printing function

Your cash register can perform a validation printing.

## - Validation slip setting and printing

Insert a validation slip into the printer with its printed face to the front of the machine (see the figure below), then press the vp key.


Note To insure proper validation, insert the slip securely until it stops.

■ Validation printing examples

## Validation printing of item entries

## Example <br> -Department entry



- PLU entry

| $31 / 08 / 01$ | $1116: 35$ | FL000001 |  |
| :---: | :---: | :---: | :---: |

- EAN entry

| $31 / 08 / 01$ | $1116: 38$ | AFFLE |
| :--- | :--- | :--- |

- Deduction entry $(\Theta$ through $\Theta 4)$

| $31 / 08 / 01$ | 1116226 | (-9 |  |
| :--- | :--- | :--- | :--- |

- Refund entry

| $31 / 08 / 01$ | $1116: 32$ | DFT.חD |  |
| :---: | :---: | :---: | :---: |

- Item percent entry (\%1 through \%4)

| $31 / 08 / 01$ | $1116: 32$ | -1.91 |
| :--- | :--- | :--- | :--- |

- Void entry


Validation printing after the finalization of a transaction


TL or CA2 key
-When an amount tendered entry is made
-When no amount tendered entry is made $\mathrm{CHI}_{1}$ to CH 4 key
-When an amount tendered entry is made -When no amount tendered entry is made -When a check cashing operation is made
CR11 to CR4 key
RA key
RA2 key
PO key
PO2 key

Transaction symbol
*** TOTAL
CASH or CASH2

CHECK or CHECK2 to CHECK4 Amount tendered
CHECK or CHECK2 to CHECK4 Sales amount CA/CHK
CREDIT1 to CREDIT4
*** RA
*** RA2
*** PO
*** PO2

Amount
Sales amount
Sales amount Amount tendered Sales amount
Amount received on account Amount received on account
Amount paid out
Amount paid out

Validation printing of the training mode


Note

- When you make an entry for which compulsory validation printing has been programmed, the " $L \mathbf{U}$ " will light up in the display. Carry out the validation printing successively until the " $\sqcup$ '" goes off (or by the programmed number of times) while replacing validation slips. You cannot proceed to any further entry unless this printing is completed.
- Programmed compulsory validation printing can be overridden by performing the following operation depending upon your initial program setup.

1. Turn the mode switch to the "MGR" position.
2. $\bullet \rightarrow \mathrm{VP}$

## ■ Validation slip specification

Make validation slips according to the following specification. The use of any slips other than specified causes the printer to malfunction.

- Type of paper: plain paper
- Paper thickness: 0.07 to 0.14 mm
- Paper width: 130 mm or more
- Paper height: 70 mm or more
- Print position



## 4 Printing of the employee arrival and departure times

The register allows the cashier to print the employee arrival and departure times, etc. using the validation printing function.

1. Turn the mode switch to the "OP X/Z" position.
2. Put a card into the paper chute and perform the following key operation.

- Arrival time

Numeric key $1 \rightarrow$ VP

- Departure time

Numeric key $2 \rightarrow$ VP
3. Sample printout


## OVERLAPPED CASHIER ENTRY

This function allows you to switch from one cashier to another and to interrupt the first cashier's entry. So the second cashier can do his or her entry in this mode. For actual use of this function, consult your dealer.

## Example

Cashier 1: Entry started
Cashier 2: Cashier change (1 to 2), interrupt initiated
Cashier 2: Transaction finished (2)
Cashier 1: Cashier change (2 to 1), entry restart
Note •When the cashier and clerk system is applied for your register, you cannot operate the overlapped cashier entry.

- The overlapped cashier entry is not effective while the tendering sale is going on.
- If any cashier 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 code "E22" and the corresponding cashier code(s) are displayed at this time.


## Key operation

1. Cashier 1 is assigned.

| $(1)$ |
| ---: |
| 100 |
| 100 |
| 360 |

2. Cashier 2 is assigned.

$$
\begin{aligned}
& 2 \\
& 3 \otimes \\
& 150
\end{aligned}
$$

3. Cashier 1 is assigned.

|  | The entry by cashier 1 is restarted. |
| :--- | :--- |
| 100 | 1 |
| 360 |  |
| TL |  |
|  |  |

## 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 returned to the normal state of 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.)


## 2 In case of printer's motor locking

If the printer's motor happens to lock, the printing stalls, the register will continuously start an intermittent beeping tone. If this occurs, please follow the procedure below.

1. Unplug the power cord from the outlet.
2. Insure the printer is clear of any obstructions (e.g paper jams, etc).
3. Plug the power cord into the outlet. The following format appears in the display.
"--------_"
4. Feed the receipt and journal paper to the proper position.
5. Press the CL key.
6. The register prints the power failure symbol and continues printing.

## 3 Paper roll near-end sensing function (only for the journal paper) <option>

When the journal paper roll comes near the end or is not loaded, the machine senses this condition and sounds an alarm, displaying the error code "E04". At this time, clear the alarm with the CL key and replace the paper roll as soon as possible. The following entry can be made after clearing the alarm. However, since this function works each time one transaction is completed, the alarm sound will be emitted again as the following transaction is completed unless the paper roll is replaced.

- The sensing position depends upon the size of the paper tube. Therefore, it is advisable to use paper rolls - whose paper tube is 18 mm in O.D. and 12 mm in I.D. - specified by SHARP.
- If the sensing occurs too early or late, contact your dealer.



## 4 Installing and removing the paper roll

## ■ Recording paper specifications

Be sure to use paper rolls specified by SHARP.
The use of any other paper rolls than specified could cause paper jamming, resulting in register malfunction.

## Paper specification

Paper width:

$$
44.5 \pm 0.5 \mathrm{~mm}
$$

Max. outside diameter: 80 mm
Weight:
Quality:
Paper tube:
$52.3-64.0 \mathrm{~g} / \mathrm{m}^{2}$
bond paper
18 mm

## - Be sure to set paper roll(s) prior to using your machine, otherwise it may cause a malfunction.

Install the paper roll in the printer. Be careful then to set the roll and cut the paper end correctly.

## (How to set the paper roll)


(How to cut the paper end)


To release the paper, press the paper release lever down. It is also used for removing a paper jam. The method for removing a paper jam is described in "Removing a paper jam" later in this section.

## - Installing the paper roll

Installing the receipt paper roll


1. Turn the mode switch to the "REG" position with the AC cord connected.
2. Remove the printer cover.
3. Set the paper roll correctly and drop it into the printer.
4. Press the receipt paper release lever down and insert the paper end into the paper chute of the printer.
5. Pull the paper end that has come out of the printer, holding down the lever.
6. Advance the paper by a required length by pressing the receipt paper feed key.
7. Replace the printer cover.

Installing the journal paper roll


1. Turn the mode switch to the "REG" position with the AC cord connected.
2. Remove the printer cover.
3. Set the paper roll correctly and drop it into the printer.
4. Press the journal paper release lever down, insert the paper end that has come out of the printer into the slit in the paper take-up spool, wind it two or three turns around spool shaft.
5. Set the spool on the bearing.
6. Replace the printer cover.

## Note

## Make sure the ink ribbon cassette has been mounted on the printer when installing the receipt

 paper roll or the journal paper roll.
## Removing the paper roll

When a red dye appears on the paper roll, it is time to replace the existing paper roll. Replace the paper roll with a new one.

## Removing the receipt paper roll



1. Remove the printer cover.
2. Press and hold the receipt paper release lever down and remove the existing paper roll from the paper roll location.

Note Be sure to pull the roll in the direction of the arrow.

Removing the journal paper roll


1. Remove the printer cover.
2. Press the journal paper feed key to advance the paper by several lines and then cut it.

3. Remove the paper roll from the take-up spool.

## Removing a paper jam

1. Remove the printer cover.
2. Pressing the receipt and journal paper release levers at the same time, lift part ©A) up. (See the drawing below.)
3. Remove the paper jam.
4. Replace part (A) gently.
5. Reset the paper roll correctly following the steps shown in "Installing the paper roll".
6. Replace the printer cover.


5 Installing the ink ribbon cassette


1. Remove the printer cover.
2. Rotate the knob on the ink ribbon cassette in the direction of the arrow to stretch the ribbon tight.
3. Put the ink ribbon cassette in the location indicated in the figure at left and fix it by using the right and left guides.
4. Rotate the knob two or three turns in the direction of the arrow to make sure it rotates smoothly. Also, make sure the ribbon is not folded.
5. To remove the cassette, lift it up.

## Precautions:

- Be sure to use an ink ribbon cassette specified by SHARP. The use of any ink ribbon cassettes other than specified could cause troubles in the printer.
- After opening the parcel, be careful not to make the surface of the ink ribbon dirty, and install it soon.
- If you preserve the ink ribbon cassette for a long time, the ink will be dry and the ink ribbon cassette's life will be shortened. Please use it soon. If you do not use it soon, put it in an airtight receptacle and preserve it in a cool and dark place.

6 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 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.


## 7 Opening the drawer by hand

The drawer automatically opens in the usual way. However, when power failure is encountered or the machine becomes out of order, slide the lever located on the machine bottom toward the rear. (See the figure below.) The drawer will not open, if it is locked with a drawer lock key.


## 8 Installing the fixing angle bracket

To prevent the register from moving when the drawer opens, the fixing angle bracket is supplied with the register. By attaching the bracket to the table where the register is installed, you can hook the register on this bracket and secure the register to its 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.

## 9 Before calling for service

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

| Fault | Checking |
| :---: | :---: |
| (1) The display won't be illuminated even when the mode switch is turned to any other position than " ${ }^{\circ}$ ". | - Is power supplied to the electric outlet? <br> - Is the power cord plug out or loosely connected to the electrical outlet? |
| (2) The display is illuminated, but the whole machine refuses registrations. | - Is a cashier code assigned to the register? <br> - Is a clerk code assigned to the register? <br> - Is the mode switch set properly at the "REG" position? |
| (3) No receipt is issued. | - Is the receipt paper roll properly installed? <br> - Is there a paper jam? <br> - Is the receipt function in the "OFF" status? |
| (4) No journal paper is taken up. | - Is the take-up spool installed on the bearing properly? <br> - Is there a paper jam? |
| (5) Printing is unusual. | - Is the ink ribbon cassette installed properly? <br> - Is the ink ribbon life completed? |

## Error code table

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

| Error <br> code | Error status |  |
| :--- | :--- | :--- |
| E01 | Registration error | Make a correct key entry. |
| E02 | Misoperation error | Make a correct key entry. |
| E03 | Undefined code is entered. | Enter a correct code, or declare it by the programming. |
| E04 | Journal paper is nearly empty. | Replace a journal paper roll with a new one. |
| E05 | Secret code error | Enter a correct secret code. |
| E07 | Memory is full. | Expand the file within a capacity of memory. |
| E11 | Compulsory depression of the ST <br> finalization | key for direct |
| E12 | Compulsory tendering | Make a tendering operation. |
| E22 | Overlapped cashier error |  |
| E23 | Cashier resetting over error | Enter a non-add code. |
| E31 | Compulsory non-add code entry | Make a cashier code entry. |
| E32 | No entry of your cashier code | Change a cashier after finalizing the transaction. |
| E33 | The current cashier code should not be changed. |  |
| E34 | Overflow limitation error | Make a registration within a limit of entry. |
| E35 | The open price entry is inhibited. | Make a preset price entry. |
| E36 | The preset price entry is inhibited. | Make an open price entry. |
| E37 | The direct finalization is inhibited. | Make a tendering operation. |
| E39 | Power-off during validation printing | Print a validation again. |
| E58 | Undefined clerk code is entered | Enter a correct clerk code |
| E67 | Registration buffer is full. |  |
| E76 | The drawer is still opened. | Close the drawer. |

## LIST OF OPTIONS

For your register, the following options are available.
For details, contact your dealer.
-RAM memory chip model ER-03RA
-Remote drawer model ER-05DW
-Till model ER-58CC and till cover model ER-03CV
-Key kit models
By using the following key kits, you can change the keyboard layout of your register including the expansion of the number of departments.

ER-11KT7: 30 regular size key kits
ER-12KT7: $301 \times 2$ size key kits
ER-22KT7: $102 \times 2$ size key kits
ER-11DK7G: 30 regular size dummy key kits
ER-51DK7G: $105 \times 1$ size dummy key kits
-Hand scanner model ER-A6HS1

## SPECIFICATIONS

| Model: | ER-A440S |
| :---: | :---: |
| Dimensions: | 355 (W) $\times 424$ (D) $\times 308$ (H) mm |
| Weight: | 12.9 kg |
| Power source: | Official (nominal) voltage and frequency |
| Power consumption: | Stand-by 11.5W |
|  | Operating 42W (max.) |
| Working temperature: | $0^{\circ} \mathrm{C}$ to $40^{\circ} \mathrm{C}$ |
| Electronics: | LSI (CPU) etc. |
| Built-in battery: | Rechargeable battery, memory holding time about 1 month (with fully charged built-in battery, at room temperature) |
| Display: |  |
| Operator display: | 7-segment display (10 positions) |
| Customer display: | 7-segment display (7 positions) |
| Printer: |  |
| Type: | 2-station serial dot-matrix (7x7 font) printer |
| Printing speed: | Approx. 3.0 lines/second |
| Printing capacity: | 24 digits each for receipt and journal paper |
| Other functions: | - Logo message function |
|  | - Receipt (ON-OFF) function, journal selective function |
|  | - Receipt and journal independent paper feed function |
|  | - Validation printing function |
| Ink ribbon: | Color: Purple (single color) |
| (Cassette type) | Width: 13 mm |
|  | Length: 9 meters |
| Paper roll: | Width: $44.5 \pm 0.5 \mathrm{~mm}$ |
|  | Max. diam.: 80 mm |
|  | Weight: $52.3-64.0 \mathrm{~g} / \mathrm{m}^{2}$ (bond paper) |
| Cash drawer: | 5 slots for bill and 8 for coin denominations |
| Accessories: | Manager key 2 |
|  | Submanager key 2 |
|  | Operator key 2 |
|  | Drawer lock key 2 |
|  | Ink ribbon cassette 1 |
|  | Paper roll 2 |
|  | Take-up spool 1 |
|  | Fixing angle bracket 1 |
|  | Instruction manual 1 copy |

[^3]
## FOR CUSTOMERS IN U.K.

## IMPORTANT

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

BLUE:
BROWN:

## Neutral

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 $\mathbf{L}$ 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 recommendons 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.


## Miijöskydd

Denna produkt nöddrivs av batteri.
Vid batteribyte skall följande iakttagas:

- 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.


## SHARP

## SHARP CORPORATION

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[^0]:    ＊（DC）：Double－size character code

[^1]:    * When you take this report in the PGM1 mode, the PGM2 indication is replaced by a "PGM1".

[^2]:    * When you take these reports in the OP X/Z mode, the $X$ report shows an "OP X" and the $Z$ report shows an "OP Z".

[^3]:    * Specifications and appearance subject to change without notice for improvement.

