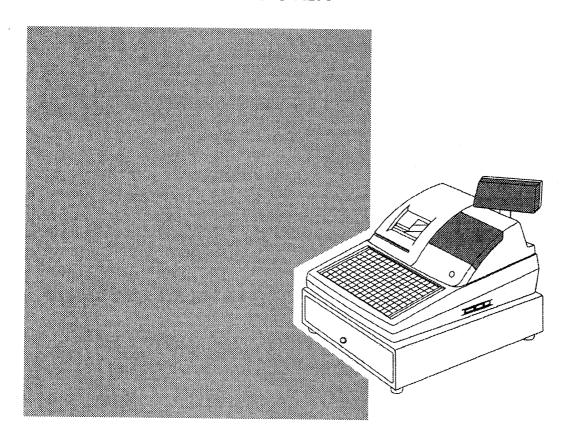
ER-5100



ELECTRONIC CASH REGISTER



Programming & Operating Manual

All specifications are subject to change without notice.

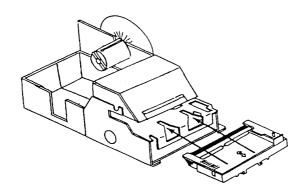
UNPACKING AND STARTING UP

STEP 1 UNPACKING THE CASH REGISTER

- (1) Unpack and unwrap your cash register.
- (2) The following items are in the packing.
 - 2 paper rolls
 - 1 rewind spindle
 - 1 ribbon cartridge
- (3) Remove cardboard protectors from the cash drawer.

STEP 2 INSERTING THE PRINTER RIBBON CARTRIDGE

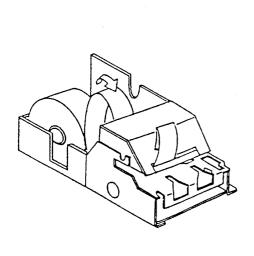
- (1) Locate the printer cover key. The printer cover key is the smallest on the key ring.Insert this key into the printer cover lock. Turn the key and then remove the printer cover.
- (2) Locate the ribbon cartridge as shown in the illustration.
- (3) Insert the ribbon cartridge and press firmly into the place.Remove any slack in the ribbon by rotating the cartridge knob counter-clockwise.



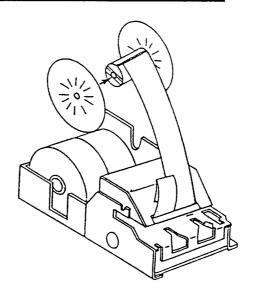
STEP 3 PUTTING THE PAPER IN THE PRINTER STEP 3.1 LOADING THE DETAIL PRINTER

- (1) Plug the cash register's power cord into the properly grounded wall socket.
- (2) Place the key marked 'REG' into the control lock and turn to the "REG" position.
- (3) Locate the black plastic rewind spindle in the Styrofoam.
- (4) As you face the keyboard, notice two plastic trays at the bottom of the printer compartment.Place one of the paper rolls into the tray on the right.Make sure the paper will unwind from the bottom of the roll.
- (5) Fold back about 6 inches of paper and insert the folded end of the tape into the feed slot just in front of the paper tray at the rear of the printer.
- (6) Press the "DETAIL FEED" key on the keyboard until the edge has fed through the printer. Run $6 \sim 8$ inches of paper through the printer.
- (7) Hold the black rewind spindle with the gear to the right and the shaft to the left. Insert the end of the paper into the slot on the shaft of the rewind spindle. Wind the spindle several times to be sure that the paper will stay on the spindle.
- (8) Slide the axle of the rewind spindle (between the gear and the shaft) into the notch of the printer housing.
- (9) **Press** the "**DETAIL FEED**" key several times again to make sure that the paper moves properly through the printer.

NOTE: The socket-outlet shall be near the equipment and it shall be easy accessible.



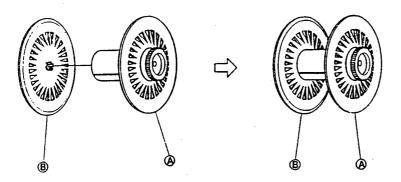




* LOADING RECEIPT PAPER *

< THE FABRICATION OF REWIND SPINDLE >

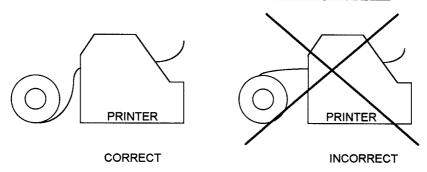
- (1) Locate the black plastic rewind spindle (A) in the Styrofoam.
- (2) Locate the black plastic rewind spindle (B) in the manual bag.
- (3) Fabricate the black plastic rewind spindle (A) and (B) as shown in the illustration.



STEP 3.2 LOADING THE RECEIPT PRINTER

- (1) Place the other paper rolls into the small tray on the left.Make sure the paper will unwind from the bottom of the roll.
- (2) Fold back about 6 inches of paper and insert the folded end of the tape into the feed slot just in front of the paper tray at the rear of the printer.
- (3) **Press** the "**RECEIPT FEED**" key on the keyboard until the paper comes through the printer. Run 3 ~ 4 inches of paper through the printer.
- (4) Replace the printer cover and make sure that the receipt paper comes out through the opening in the printer cover.

NOTE: Do not pull the paper back through the printer as this may damage it.



STEP 4 CLEARING THE RAM (RANDOM ACCESS MEMORY)

- (1) Unplug the cash register.
- (2) Locate the control lock key marked 'C'.
- (3) Insert the key into the control lock and turn clockwise, past the "P" position to the "SERVICE MODE" position.

This position is not marked on the control lock, but the 'C' key can travel to this position.

(4) Hold down the "00" key on the keyboard.
While holding the "00" key down, plug the cash register's power cord into properly grounded wall socket.

Continue to hold the "00" key down until the receipt printer stops printing and the display shows 0.00.

!! The cash register is now ready to operate. !!

WARNING: Clearing the RAM is essential before you program the cash register for the first time.

However once the cash register is programmed and operated,

clearing the RAM will cause all programs and totals to be lost.

WARNING: Do not open the printer cover while operating the cash register.

Do not operate the cash register without the ribbon cartridge.

NOTE: When you firstly configure the cash register, it is recommended that the register remains powered on in the "REG" mode for at least 24 hours.

This allows the Ni-Cad battery, which maintains the memory of the machine while the power is off, to charge completely.

TABLE OF CONTENTS

UNPACKING AND STARTING UP	1
FEATURES	9
KEYBOARD LAYOUT	10
FUNCTION KEY DESCRIPTION	11
CONTROL LOCK	13
CONTROL KEYS	13
DISPLAY	14
DISPLAY SYMBOLS	14
PROGRAMMING NOTE	16
1 SERVICE MODE PROGRAMMING	16
1.1 RAM CLEARING	16
1.1.1 INITIAL CLEAR	16
1.1.2 CLEARING TOTALS FROM MEMORY	17
1.2 SETTING THE DEPARTMENTS ORDER	18
2 P MODE PROGRAMMING	19
2.1 DATE & TIME PROGRAMMING	19
2.1.1 DATE PROGRAMMING	19
2.1.2 TIME PROGRAMMING	19
2.2 REGISTER NUMBER PROGRAMMING	19
2.3 TAX PROGRAMMING	20
2.4 VAT RATE PROGRAMMING	20
2.5 DEFAULT LEVEL PROGRAMMING	21
2.6 CLERK SECRET CODE & DRAWER ASSIGNMENT PROGRAMMING	21
2.7 DESCRIPTOR PROGRAMMING	22
2.7.1 PROGRAMMING	22
2.7.2 DESCRIPTOR PROGRAMMING EXAMPLES	23
2.7.3 DESCRIPTOR PROGRAMMING SCAN	24
2.8 DEPARTMENT PROGRAMMING	25
2.8.1 DEPARTMENT STATUS PROGRAMMING	25
2.8.2 DEPARTMENT PRICE OR HALO PROGRAMMING	26
2.8.3 DEPARTMENT PROGRAMMING EXAMPLES	27
2.8.4 DEPARTMENT PROGRAMMING SCAN	29
2.9 PLU PROGRAMMING	30
2.9.1 PLU PROGRAMMING	30
2.9.2 PLU PROGRAMMING EXAMPLES	32
2.0.2 DILLEDOCRAMMING COAN	

2.9.4 PLU LINK PROGRAMMING	
2.9.5 REMOVING OR DELETING A PLU	
2.10 % KEY PROGRAMMING	
2.10.1 % KEY PROGRAMMING	
2.10.2 % CALCULATION ROUNDING FACTOR	
2.11 CASH/TEND KEY PROGRAMMING	
2.12 CHECK KEY PROGRAMMING	
2.13 CHARGE KEY PROGRAMMING	
2.14 PRESET CASH KEY PROGRAMMING	36
2.15 CASH IN DRAWER LIMIT PROGRAMMING	36
2.16 CURRENCY CONVERSION KEY PROGRAMMING	37
2.17 EUROPEAN ROUNDING PROGRAMING	37
2.18 SYSTEM OPTION PROGRAMMING	38
2.19 PARAMETERS PROGRAM SCAN	43
OPERATING NOTE	44
1 CLERK SIGN ON	44
1.1 IN CASE OF 4 CLERKS (SYSTEM OPTION 28's VALUE 'C' = 0)	44
1.1.1 PUSH BUTTON SIGN ON	44
1.1.2 SECRET CODE SIGN ON	44
1.2 IN CASE OF 15 CLERKS (SYSTEM OPTION 28's VALUE 'C' = 4)	44
1.2.1 PUSH BUTTON SIGN ON	44
1.2.2 SECRET CODE SIGN ON	45
2 CLERK SIGN OFF	45
2.1 IN CASE OF 4 CLERKS (SYSTEM OPTION 28's VALUE 'C' = 0)	45
2.2 IN CASE OF 15 CLERKS (SYSTEM OPTION 28's VALUE 'C' = 4)	45
3 REAL CLERK KEY ENTRY	45
4 CLEARING AN ERROR CONDITION	45
5 NO SALE OPERATION	46
6 NON-ADD NUMBER ENTRIES	46
7 PRICE INQUIRY OPERATION	46
8 DEPARTMENT ENTRIES	47
8.1 OPEN DEPARTMENT ENTRIES	47
8.2 PRESET DEPARTMENT ENTRIES	48
8.3 GALLONAGE DEPARTMENT ENTRIES	49
9 PLU (PRICE LOOK UP) ENTRIES	49
9.1 OPEN PLU ENTRIES	49
9.2 PRESET PLU ENTRIES	51

	9.3	PLU TO PLU CHAIN OPERATION	52
	9.4	PLU ENTRIES BY CODE	52
10	SI	NGLE ITEM DEPARTMENT OR PLU ENTRIES	53
	10.1	SINGLE ITEM PRESET ENTRIES	53
	10.2	SINGLE ITEM OVERRIDE ENTRIES	53
11	CC	MPUTATION OF VAT (Value Added Tax)	53
	11.1	INCLUSIVE VAT SYSTEM	53
	11.2	EXCLUSIVE VAT SYSTEM	54
12	%	KEY ENTRIES	55
	12.1	PERCENT RATE DISCOUNT / SURCHARGE	55
	12.	1.1 ITEM DISCOUNT / SURCHARGE	55
	12.	1.2 SALE DISCOUNT / SURCHARGE	55
	12.2	AMOUNT DISCOUNT / SURCHARGE	56
	12.2	2.1 ITEM DISCOUNT / SURCHARGE	56
	12.2	2.2 SALE DISCOUNT / SURCHARGE	56
13	ME	RCHANDISE RETURN OPERATION	57
14	VO	DID OPERATION	57
	14.1	VOID OF A LAST ITEM ENTRY (ERROR CORRECT)	57
	14.2	VOID OF A PREVIOUS ITEM ENTRY	57
	14.3	VOID OUTSIDE OF A SALE	58
	14.4	CANCEL (VOID 4)	58
		D CHECK OPERATION	59
16	TE	NDERING OPERATION	59
		CASH TENDERING	59
	16,2	PRESET CASH TENDERING	60
		CHECK TENDERING	60
		CHARGE TENDERING	61
		SPLIT TENDERING	61
		TENDERING WITH CURRENCY CONVERSION	62
		POST TENDERING	62
		T IN / TAKE OUT / DRIVE THRU OPERATION	63
		ECK CASHING	63
		CEIVED ON ACCOUNT OPERATION	64
		ID OUT OPERATION	64
		BLE MANAGEMENT	65
		TRANSACTION	65
		CONSOLIDATED RECEIPT PRINTING	65
		SHIER OVERLAP	68

22.1 TRANSACTION	68
22.2 CONSOLIDATED RECEIPT PRINTING	68
23 PRINTING A BUFFERED RECEIPT OPERATION	71
24 VALIDATION OPERATION	72
25 RECEIPT MESSAGE PRINTING OPERATION	73
25.1 PREAMBLE MESSAGE	73
25.2 POSTAMBLE MESSAGE	73
26 TRAIN MODE	73
REPORT AND BALANCING	74
1 REPORT MODES	75
2 CASH DECLARATION	75
3 REPORTS	76
3.1 OPEN TABLE (OR OPEN CLERK) REPORT	76
3.2 FINANCIAL REPORT	77
3.3 TIME REPORT	80
3.4 PLU REPORT	81
3.5 FROM / TO PLU REPORT	81
3.6 IN-DRAWER REPORT	82
3.7 DAILY SALES REPORT	82
3.8 INDIVIDUAL CLERK REPORT	83
3.9 FROM / TO DEPARTMENT REPORT	85
3.10 DEPARTMENT REPORT	85
TROUBLE SHOOTING	86
MEMORY PROTECTION BATTERY	86
SPECIFICATION	86
APPENDIX	87
1 CHARACTER CODE TABLE	87
2 ALPHA-NUMERIC KEYBOARD LAYOUT	88
3 COMMUNICATION INTERFACE	89
3.1 PIN DESCRIPTION FOR SERIAL INTERFACE	89
3.2 CABLE SPECIFICATION	89
4 COMMUNICATION WITH PC	90
5 PRINTING ON THE ROLL PRINTER	90
6 SCALE	9
6.1 DIRECT SCALE ENTRY	9
6.2 MANUAL WEIGHT ENTRY	9

FEATURES

- Two-station printer with one-line validation capability.
- * Front and rear (pop-up) displays.
- 6-position control locks.
- * 24 hour time clock with automatic date change.
- * 321 departments (3 level system).
- * 1000 open or preset PLUs.
- 4 push-button clerks and 15 soft clerks with separate report totals.
- * 4 VAT or straight percentage TAX.
- * CANCEL function.
- Post tendering.
- Preset cash tendering.
- * Table management / Cashier overlap
- * Management reports.
 - Daily and period-to-date financial, time, PLU, clerk and department report.
 - Daily sales report.
 - Open table (or Open clerk) report.
 - Optional compulsory cash declaration.
- * Train mode.
- * Cash drawer compulsory.
- * Receipt on/off function.
- * Communication
 - Download the programming contents from PC, Upload the programming contents and reports to PC.
 - Slip printer
 - Kitchen printer
 - Scale

CLERK 4	PAID	OUT	CHARGE	-	CHARGE	7	CHECK)((PRESET)	CASH	CASH)(PRESET	CASH	SUBTL	CASH/ TEND
CLERK 3	RECD	ACCT	EAT	Z	TAKE	P)	THRU	$\Big)\Big($	VATIME		თ)((و	က	·
CLERK	CHECK	TENDER	ADO	CHECK	OO NO	-	CONS)(8)(ð	2	8
CLERK	MDSE	RETURN	(Sign			ANCE E	sn/#)((a v a l c)(_	4	-	°
VALID	RECEIPT		()	1	LEVEL	-	LEVEL		(LEVEL	e)	PRICE SION		CHECK	#	8	% 2
8		8		- 28		Ē	5			103				165	106	(107)
		8		8		Б	8			8				8	8	(76
82		<u>ور</u>		8		8	- S			æ		3		88	8	(28
		8		5		72	7			73	-			75	76	
88				8		9	G			ß		3		88		(29
8		9		8		51	2			33	ì	B)		55	28	(25)
8		38		8		4	Ę			\$	-	1		45		47
80		82		8		3	,			33	7	3)(35	8	37
RECEIPT		19		R		21	8			R	7	F)		25	8	$\begin{pmatrix} & & \\ & & \end{pmatrix}$
DETAIL				=		12) (14	ţ			16	17	18
RECEIPT				2			,			5				7		
							 			-		_			 	

KEYBOARD LAYOUT

FUNCTION KEY DESCRIPTION

LEVEL 1 ~ 3

#/NS

MDSE RETURN

rononon ne	DESCRIPTION
<u>KEY</u>	DESCRIPTION
1, 2 9, 0, 00	Use these numeric keys for all numeric entries on the cash register.
ADD CHECK	Use this key to combine individual guest checks that will be tendered together.
CANCEL	Use this key to cancel the present incomplete transactions without updating the departments, PLUs or function key totals.
CASH/TEND	Use this key to finalize a sale paid with cash. Enter the amount tendered before pressing the "CASH/TEND" key for change calculation.
CHARGE 1, 2	Use these keys to finalize a sale paid with a charge account. Over tendering is not allowed when you finalize with the "CHARGE" key.
CHECK	Use this key to finalize a sale that is paid by check.
CHECK#	Use this key to specify the table number on table management.
CHECK TENDER	Use this key to tender a table as open status.
CLEAR	Use this key to clear the incorrect entries made on the 10 numeric keys and error conditions.
CLERK 1, 2, 3, 4	Use these four keys to log on clerks for operation and reports. A clerk must be logged on before the cash register will operate.
CONV 1, 2	Use these keys to convert a home currency to the equivalent of another country's currency. These keys are allowed after the "SUBTL" key, convert and re-display the subtotal at a preprogrammed exchange rate. Tendering is allowed after using the currency conversion function. The change amount is calculated in home currency. The amount of foreign currency tendered is stored in a separated total on the financial report, but not added to the drawer total.
DECIMAL (.)	Use this key for decimal multiplication.
DEPARTMENTS	Use these keys to make entries during a sale.
DETAIL FEED	Press this key to advance the detail tape.
DRIVE THRU	Use this key for a sale that will be driven through.
EAT IN	Use this key for a sale that will be ate in restaurant or etc.

Use these keys to make department level.

Use this key to return merchandise outside of a sale. MDSE RETURN activity reports to a total on the financial report.

Use this key to open the cash drawer outside of a sale or to enter numbers that appear on the receipt and detail tapes but do not affect the sale total.

KEY

DESCRIPTION

% 1, % 2

Use these keys to register discount and surcharge.

Depending on programming, these keys can be used to register percent or amount

and added to an item or entire sale.

PLU

Use this key to register a Price Look Up (PLU).

PAID OUT

Use this key to register media removed from the cash drawer. (= Paid Out)

PRESET CASH

Use this key to finalize a sale paid with cash.

These keys are preset amount cash tendering keys which have programmable values. By pressing this key at the end of a transaction, the preset amount is automatically tendered and the sale is finalized as a cash transaction.

PRICE INQ.

Use this key to know a HALO or preset amount of a department or PLU.

(= Price Inquiry)

RECD ACCT

Use this key to register cash and check added to the cash drawer.

(= Received Account)

RECEIPT

Use this key to issue the buffered receipt.

RECEIPT FEED

Press this key to advance the customer's receipt tape.

RECEIPT ON/OFF

Use this key to turn the receipt printer on or off. When the 'RECEIPT OFF' sign is

illuminated on the display panel, the receipt printer will be turned off.

SUBTL

Use this key to display a subtotal.

TAKE OUT

Use this key for a sale that will be taken out.

TAX

Use this key to breakdown the amount due including value added tax

or to shift the tax status of a particular department or PLU.

VALID

Use this key to print one line validation on a check or slip.

VOID

Use this key to correct entries before a sale is finalized.

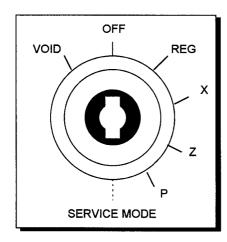
X/TIME

Use this key for multiplication, split pricing and triple multiplication.

CONTROL LOCK

POSITION	USE
VOID	Void outside of a sale.
OFF	The cash register will not operate.
REG	All normal operations.
Х	To issue X level reports.
	Also used for manager control of voids & merchandise return.
z	To issue Z level reports.
	To reset totals to zero.
P	To program the ECR (Electronic Cash Register)

CONTROL KEYS



'REG' key : "OFF" ~ "REG"

'VD' key : "VOID" ~ "X"

'Z' key : "VOID" ~ "Z"

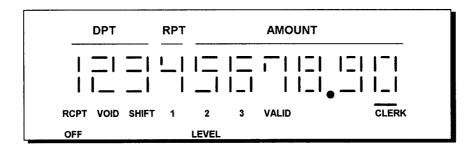
'P' key : "VOID" ~ "P"

'C' key : All position

DISPLAY

This cash register has a front (or operator) display and a pop up display.

The front display has a indicator lights. These lights provide only the operator with information about the operation of the cash register.



DISPLAY SYMBOLS

- C Indicates that the amount displayed is a due as change.
- Indicates that the amount displayed is a **total**.
- Indicates that the amount displayed is negative.

This symbol shows directly in front of negative amount.

- S Indicates that the amount displayed is a subtotal.
- Indicates that a table on table management or a clerk on cashier overlap is temporarily finalized as open status.
- S P Indicates that validation is required.
- P P Indicates paper jam.

Please turn the power off and remove the paper in the printer, turn the power on again.

P E Indicates paper ending.

Please remove the printer cover and replace the paper.

And press the "CLEAR" key to print continually.

CL	Indicates that a clerk must be signed on for operating in the 'X' or 'Z' mode.
E 1	Indicates an error condition. Press the "CLEAR" key to clear this condition.
E 2	Indicates that the cash drawer must be closed.
E 4	Indicates that NON-ADD NUMBER should be entered.
E 5	Indicates that the ADD CHECK operation must be performed.
E 6	Indicates that the cash declaration operation must be performed.
E 7	Indicates that EAT-IN / TAKE-OUT / DRIVE-THRU procedure must be performed before tendering.
E 8	Indicates that now a table is open.
E 9	Indicates that all the open tables or clerks must be finalized.
E10	Indicates that the sale data is too big.
	Please issue all Z report. ('100' - 'SUBTL' in Z mode)
E 1 1	Please issue all Z report. ('100' - 'SUBTL' in Z mode) Indicates that the scale runtime over.
E 1 1	Indicates that the scale runtime over.
E 1 1	Indicates that the scale runtime over. Indicates that the scale is not measurable things on the scale. Indicates that the open drawer warning tone sounds by the open drawer alarm.

PROGRAMMING NOTE

This ECR (Electronic Cash Register) 's programming is easy.

In this manual, the programming steps are explained with flow chart boxes.

Each box represents a key on the keyboard.

The flow chart shows each key stroke you need to complete the programming.

Enter the keys in the flow chart from left to right.

DEFAULT PROGRAM: This machine arrives with a default or "generic" program already installed.

Program options are set to 0(zero), unless otherwise noted, which means the machine is operational right out-of-the-box.

1 SERVICE MODE PROGRAMMING

Service mode programming is the initial programming that is required when the register is new "out-of-the-box".

Service mode programming is also used to return the register to this condition.

1.1 RAM CLEARING

1.1.1 INITIAL CLEAR

Keyboard lock-ups and constant error conditions may be cleared by the following procedure.

This procedure will not effect register programming, or clear previously stored totals in RAM memory.

- (1) Turn the keylock to the 'P' position and press the "SUBTL" key.
- (2) While holding the "SUBTL" key down, power the register off, and back on.

Continue to hold the "SUBTL" key down until the receipt printer stops printing and the display shows 0.00.



* INITIAL CLEAR *

1.1.2 CLEARING TOTALS FROM MEMORY

A. ALL MEMORY RAM CLEAR

All programming and totals are cleared.

Use this procedure the first time when the cash register is programmed.

B. RESET ALL TOTALS & COUNTERS

All totals and counters are cleared. (Consecutive NO., Z-Counter, Grand total)
This procedure will not effect register programming.

C. RESET GRAND TOTAL ONLY

The Grand total is only cleared.

- (1) Unplug the cash register.
- (2) Insert lock key marked 'C' into the control lock and turn clockwise, past the position marked 'P', to the 'SERVICE MODE' (Master Clear position). This position is not marked on the control lock, but the 'C' key will travel to this position.
- (3) Choose the desired operation from those listed below.
 While holding the SPECIFIED key down, plug-in the cash register.

Continue to hold the specified key down until the receipt printer stops printing and the display shows 0.00.

KEY	TYPE
00	ALL MEMORY RAM CLEAR
CHECK	RESET ALL TOTALS & COUNTERS
CASH/TEND	RESET GRAND TOTAL ONLY

DATE 12.25.'96 WED

RESET ALL CNT/TOTAL!

CLERK 00 NO.000001

TIME 19:03:10 0000

DATE 12.25.'96 WED

RESET GRAND TOTAL!

CLERK 00 ND.000002
TIME 19:03:17 0000

^{*} ALL MEMORY RAM CLEAR *

^{*} RESET ALL TOTALS & COUNTERS *

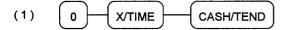
^{*} RESET GRAND TOTAL ONLY *

1.2 SETTING THE DEPARTMENTS ORDER

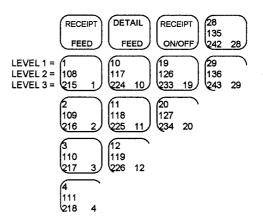
The presence of shift keys for levels 1, 2 & 3 allow three "stacking" department to a key position.

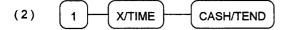
This gives 107 department key locations three levels each, or 321 departments in all.

The way that setting the department order is two.

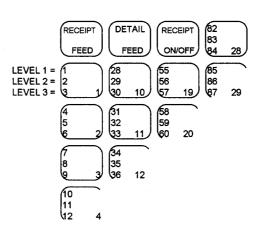


- = Default department order system
- Departments 1 ~ 107 will occupy key positions 1 ~ 107, level 1.
 Departments 108 ~ 214 will occupy key position 1 ~ 107, level 2, and so on.





Department key position number 1 will be occupied by department 1, 2 and 3 on levels 1, 2 and 3.
 Department key position number 2 will be occupied by department 4, 5 and 6 on levels 1, 2 and 3....

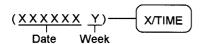


2 P MODE PROGRAMMING

2.1 DATE & TIME PROGRAMMING

2.1.1 DATE PROGRAMMING

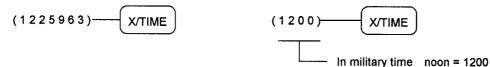
- (1) Enter the date in the form of MM DD YY or DD MM YY or YY MM DD and week.
 (The order of date is set by SYSTEM OPTION ADDRESS 25: Page 40)
- (2) Press the "X/TIME" key.



2.1.2 TIME PROGRAMMING

- (1) Enter standard military time in the form of HH MM.
- (2) Press the "X/TIME" key.
- EX) 25 DECEMBER 1996, WEDNESDAY

12:00 noon



midnight = 0000

1:30 PM = 1330

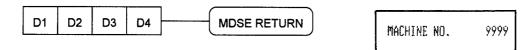
and so on.

# WEEK	. 1	ABLE #	
WEEK VALUE	Ξ:		
SUNDAY	0	THURSDAY	4
MONDAY	1	FRIDAY	5
TUESDAY	2	SATURDAY	6
WEDNESDAY	3		

DATE 12.25.'96 WED TIME 12:00

2.2 REGISTER NUMBER PROGRAMMING

- (1) Enter the register number up to 4 digits.
- (2) Press the "MDSE RETURN" key.



2.3 TAX PROGRAMMING

You can program 4 tax rates on this cash register.

This cash register can calculate tax by two methods:

A. VAT (Value Added Taxes): Inclusive VAT

B. Straight percentage taxes : Exclusive VAT

IMPORTANT: To program tax as INCLUSIVE, set SYSTEM OPTION ADDRESS 4 to 0. To program tax as EXCLUSIVE, set SYSTEM OPTION ADDRESS 4 to 1.

NOTE: If you clear RAM, the machine has the INCLUSIVE TAX SYSTEM.

2.4 VAT RATE PROGRAMMING

- (1) Press the VAT number (1, 2, 3 or 4) and the "TAX" key.
- (2) Enter the percentage of tax from the numeric key pad.

You must use the decimal (.) key.

EX) 10 % tax by entering : 1 0 . 0 0 0 6.25 % tax by entering : 6 . 2 5 0

NOTE: You must enter 3 number after the decimal key.

(3) Press the "SUBTL" key.

If you want to use the TAX ROUNDING SYSTEM, refer to SYSTEM OPTION ADDRESS 38

2.5 DEFAULT LEVEL PROGRAMMING

The default level programming is the "top" or "surface" level returned to after each department when options are set for pop-up levels. (Refer to SYSTEM OPTION ADDRESS 57, Page 42)

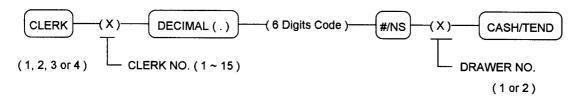


2.6 CLERK SECRET CODE & DRAWER ASSIGNMENT PROGRAMMING NOTE: If you want to use 15 clerks system, you should set the SYSTEM OPTION ADDRESS 28 to 4 (Page 40).

When you want to use the CLERK CODE SYSTEM, you should set the SYSTEM OPTION ADDRESS 28.

This programming assigns a clerk code number to each clerk. The code number is used by the clerk to log on for operations.

- (1) Press the one of "CLERK (1, 2, 3 or 4)" keys. Any clerk key makes no difference.
- (2) Press the clerk number (1 ~ 15) and press the "DECIMAL POINT (.)" key.
- (3) Enter the clerk secret code up to 6 digits, and then press the "#/NS" key.
- (4) Press the *drawer number '1' or '2'* and then press the "CASH/TEND" key to finalize the clerk programming.

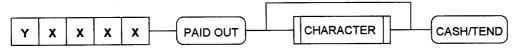


NOTE: Default drawer assignment for all clerks is drawer 1.

2.7 DESCRIPTOR PROGRAMMING

You can program descriptors for each DEPARTMENT, PLU, CLERK, DEPARTMENT GROUP, SOME FUNCTION KEYS and RECEIPT MESSAGE using the following programming procedure.

2.7.1 PROGRAMMING

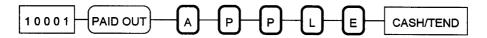


NOTE: Refer to "ALPHA-NUMERIC KEYBOARD LAYOUT" (Page 88) for entering characters.

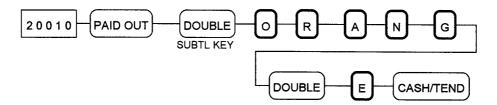
STANDARD	ADDRESS	NUMBER	CHARACTER	REMARKS
DESCRIPTOR	Y	XXXX	LENGTH	
DEPARTMENT	1	0001 ~ 0321	12 CHAR.	
PLU	2	0001 ~ 1000	12 CHAR.	
CLERK	3	0001 ~ 0015	12 CHAR.	
GROUP0	3	0 0 1 6	12 CHAR.	
GROUP1	3	0 0 1 7	12 CHAR.	
GROUP2	3	0 0 1 8	12 CHAR.	
GROUP3	3 3 3 3 3 3 3	0 0 1 9	12 CHAR.	
GROUP4	3	0 0 2 0	12 CHAR.	i
GROUP5	3	0 0 2 1	12 CHAR.	
GROUP6	3	0 0 2 2	12 CHAR.	
GROUP7	3	0 0 2 3	12 CHAR.	
GROUP8	3	0 0 2 4	12 CHAR.	
.GROUP9		Q025	12CHAR	
CASH	3	0 0 2 6 0 0 2 7	12 CHAR.	
CHECK	3 3 3 3 3 3 3 3	0 0 2 7	12 CHAR.	
CHG1	3	0 0 2 8	12 CHAR.	
CHG2	3	0 0 2 9	12 CHAR.]
CHANGE	3	0 0 3 0	12 CHAR.	
TOTAL	3	0 0 3 1	12 CHAR.	
RECD ACCT	3	0 0 3 2	12 CHAR.	
PAID OUT	3	0 0 3 3	12 CHAR.	
NON-ADD#	3	0 0 3 4	12 CHAR.	
ADD CHECK	3	0 0 3 5	12 CHAR.	
NO SALES	3 3	0 0 3 6	12 CHAR.]
ERR CORRECT	3	0 0 3 7	12 CHAR.	
PREV VOID	3	0 0 3 8	12 CHAR.	
RETURN	3	0 0 3 9	12 CHAR.	
ALL CANCEL	3	0 0 4 0	12 CHAR.	
% 1	3	0 0 4 1	12 CHAR.	
% 2	3	0 0 4 2	12 CHAR.	
CONV 1	3	0 0 4 3	12 CHAR.	
CONV 2	3 3 3 3 3 3 3	0 0 4 4	12 CHAR.	
EAT-IN	3	0 0 4 5	12 CHAR.	
TAKE-OUT	3	0 0 4 6	12 CHAR.	
DRIVE-THRU	3	0 0 4 7	12 CHAR.	
RCPT MSG	4	0001 ~ 0004	21 CHAR.	PREAMBLE
RCPT MSG	4	0005 ~ 0006	21 CHAR.	POSTAMBLE

2.7.2 DESCRIPTOR PROGRAMMING EXAMPLES

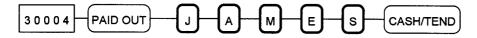
(1) DEPT.1 = APPLE



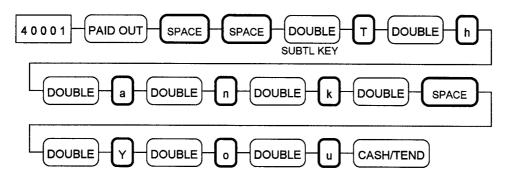
(2) PLU 10 = ORANGE



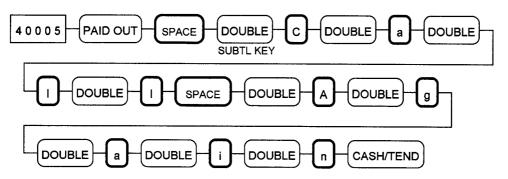
(3) CLERK 4 = JAMES



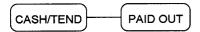
(4) PREAMBLE MESSAGE LINE 1 = Thank You



(5) POSTAMBLE MESSAGE LINE 1 = Call Again



2.7.3 DESCRIPTOR PROGRAMMING SCAN



DESCRIPTOR SCAN		
EPT.1:APPLE	——— Dept. descriptor	CASH :
LULAR PERALATE	Function key descriptor	CHECK :
LU10: ORANGE	PLU descriptor	CHG1 :
LERK1:	Clerk descriptor	CHG2 :
LERK2:	oron according	CHANGE :
LERK3:		1
LERK4: JAMES		R/A : P/O :
LERKS:	·	NON-ADD#:
LERKS:		ADD CHK:
LERK7:		NO SALES:
LERK8:		ERR CORR:
LERK9:		PREV VD:
LERK10:		RETURN :
LERK11:		CANCEL :
LERK12:		% 1 :
LERK13:		7.2
LERK14:		CONV 1
LERK15:		CONV 2 :
ROUPO :	Group descriptor	EAT-IN:
ROUP1:		TAKE-OUT:
GROUP2:	· ·	DR-THRU:
GROUP3:		DN PRIO :
GROUP4:	Receipt preamble —	Thank You
GROUPS:		THOUSE TOO
GROUP6:		
ROUP7:		
GROUP8:	Receipt postamble -	Call Again
GROUP9:		
		MR and one has his the fire that the fire the time and the may are the time of
		CLERK 00 NO.00006

2.8 DEPARTMENT PROGRAMMING

* HASH Department *

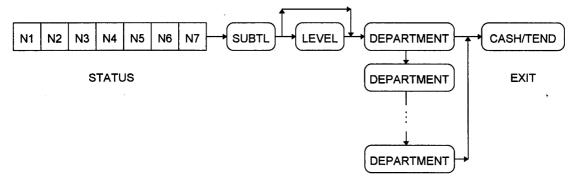
- Typically HASH department may be used to register items such as delivery charges or lottery sales that a merchant may not want to appear in accumulated sales totals.
- Sales registered into HASH department do not add to the grand total, gross sales total and may also be programmed not to add to the net sales total.
- HASH departments add to the total of each sale and therefore are included in all media and the drawer totals. Like normal departments, HASH departments also add to a total of all HASH departments and PLUs on the financial report.
- SYSTEM OPTION ADDRESS 10 is used to select whether HASH department totals add to the net sales total or not.

2.8.1 DEPARTMENT STATUS PROGRAMMING

A. PROGRAMMING OPTION

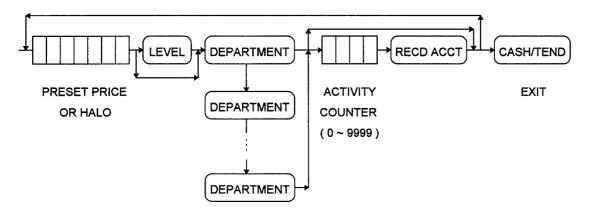
PROGRAMMING OPTION	VALUE			OPTION DIGIT
Department GROUP NO.	0 ~ 9			N 1
Resettable counter, counter will increase.	0			
Nonresettable counter, counter will increase.	. 1			N 2
Resettable counter, counter will decrease.	2			
Nonresettable counter, counter will decrease.	3			
HASH department feature	а	YES = 1	NO = 0	
GALLONAGE department feature	b	YES = 2	NO = 0	N3=a+b+c
NON-ADD NUMBER compulsory	С	YES = 4	NO = 0	
Department is NEGATIVE.	а	YES = 1	NO = 0	
Department is SINGLE ITEM.	b	YES = 2	NO = 0	N4=a+b+c
VALIDATION compulsory	С	YES = 4	NO = 0	
Department is OPEN (HALO).	0			
Department is PRESET.	1			N 5
Department is DISABLED.	2			
Department is <i>not taxable</i> .	0			
Department is taxable by VAT 1.	1			
Department is taxable by VAT 2.	2			N 6
Department is taxable by VAT 3.	3			
Department is taxable by VAT 4.	4			
Department is taxable by VAT 1 & 3.	5			
Department is printed on KITCHEN PRINTER	а	YES = 1	NO = 0	N 7

B. PROGRAMMING



2.8.2 DEPARTMENT PRICE OR HALO PROGRAMMING

A zero amount entry for open department will set the HALO (High Amount Lock Out) at the maximum seven digits (99999.99) for standard department, and five digits (99.999) for gallonage department. Zero preset departments are allowed.



2.8.3 DEPARTMENT PROGRAMMING EXAMPLES

- A. DEPARTMENT STATUS PROGRAMMING
- EX 1) Program 'DEPT 1' and 'DEPT 2'. 'DEPT 1' and 'DEPT 2' are VAT 1 and KP items.



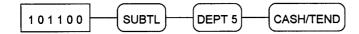
EX 2) Program 'DEPT 3' so it is a PRESET department, VAT 2 and a KP item.



EX 3) Program 'DEPT 4' so it is a PRESET, SINGLE ITEM department and VAT 3.



EX 4) Program 'DEPT 5' so it is a NEGATIVE PRESET and NON TAX with nonresettable and increasing counter.



EX 5) Program 'DEPT 6' so it is a PRESET, VAT 1 & 3 and a KP item.



EX 6) Program 'DEPT 214' so it is a GALLONAGE and NON TAX.



EX 7) Program 'DEPT 321' so it is accumulated to GROUP 7 and HASH, PRESET and VAT 4. 'DEPT 321' is a KP item.



B. DEPARTMENT PRICE OR HALO PROGRAMMING

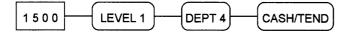
EX 1) Program 'DEPT 1' and 'DEPT 2'. 'DEPT 1' and 'DEPT 2' have a @99.99 HALO.



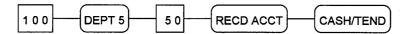
EX 2) Program 'DEPT 3', 'DEPT 6' and 'DEPT 321'. These departments have a price @10.00.



EX 3) Program 'DEPT 4' so it has a price @15.00.



EX 4) Program 'DEPT 5' so it has a price @1.00 and activity counter is 50.



EX 5) Program 'DEPT 214' so it has a price @1.399 (Gallonage Price).



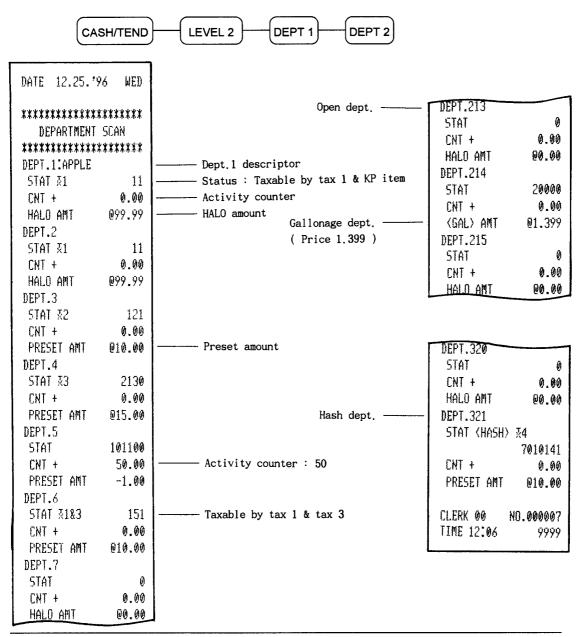
2.8.4 DEPARTMENT PROGRAMMING SCAN

- (1) Press the "CASH/TEND" key.
- (2) Press the first "DEPARTMENT" key you want to scan.
- (3) Press the last "DEPARTMENT" key you want to scan.

If you want to scan only one department, press the same "DEPARTMENT" key twice.

NOTE: The first department number < The last department number

EX) To scan dept. 108 ~ 109



2.9 PLU PROGRAMMING

HASH PLU's operation is the same as HASH department operation.

PLU is registered by sequential index (1 ~ 1000) or by PLU code (1 ~ 99999999) that you program.

(SYSTEM OPTION ADDRESS 9, Page 38)

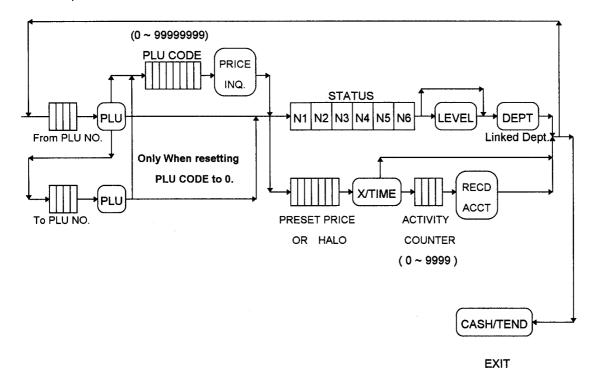
2.9.1 PLU PROGRAMMING

A. PROGRAMMING OPTION

PROGRAMMING OPTION	VALUE			OPTION DIGIT
Resettable counter, counter will increase.	0			
Nonresettable counter, counter will increase.	1			N 1
Resettable counter, counter will decrease.	2			
Nonresettable counter, counter will decrease.	3			
HASH PLU feature	а	YES = 1	NO = 0	
GALLONAGE PLU feature	b	YES = 2	NO = 0	N 2 = a + b + c
NON-ADD NUMBER compulsory	С	YES = 4	NO = 0	
PLU is NEGATIVE.	а	YES = 1	NO = 0	
PLU is SINGLE ITEM.	b	YES = 2	NO = 0	N3=a+b+c
VALIDATION compulsory	С	YES = 4	NO = 0	
PLU is OPEN (HALO).	0			
PLU is PRESET.	1			N 4
PLU is DISABLED.	2			
PLU is not taxable.	0			
PLU is taxable by VAT 1.	1			
PLU is taxable by <i>VAT</i> 2.	2			N 5
PLU is taxable by <i>VAT</i> 3.	3			
PLU is taxable by VAT 4.	4			
PLU is taxable by VAT 1 & 3.	5			
PLU is printed on KITCHEN PRINTER	а	YES = 1	NO = 0	N 6

B. PROGRAMMING

A zero amount entry for open PLU will set the HALO (High Amount Lock Out) at the maximum seven digits (99999.99) for standard PLU, and five digits (99.999) for gallonage PLU. Zero preset PLUs are allowed.



NOTE: From PLU NO. $(1 \sim 1000) \leq \text{To PLU NO.} (1 \sim 1000)$

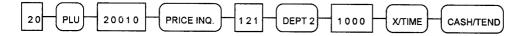
2.9.2 PLU PROGRAMMING EXAMPLES

IMPORTANT: If PLU is not linked to department, PLU registration is not allowed.

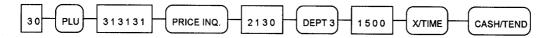
EX 1) Program 'PLU 10' so it is VAT 1 and a KP item. It has a @99.99 HALO and linked to 'DEPT 1'. Its code is '12345678'.



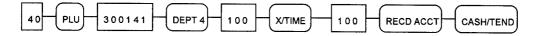
EX 2) Program 'PLU 20' so it is VAT 2 and a KP item. It has a PRESET price @10.00 and linked to 'DEPT 2'. Its code is '20010'.



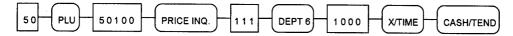
EX 3) Program 'PLU 30' so it is VAT 3, SINGLE ITEM and has a PRESET price @15.00 and linked to 'DEPT 3'. Its code is '313131'.



EX 4) Program 'PLU 40' so it is VAT 4 and a KP item. It has a PRESET price @1.00 and linked to 'DEPT 4', initial activity counter is 100 with nonresettable, decreasing status.



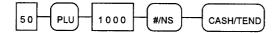
EX 5) Program 'PLU 50' so it is VAT 1 and a KP item. It has a PRESET price @10.00 and linked to 'DEPT 6'. Its code is '50100'.



EX 6) Program 'PLU 1000' so it is VAT 1 and a KP item. It has a PRESET price @5.00 and linked to 'DEPT 108'.



EX 7) Link 'PLU 1000' to 'PLU 50'. (Refer to next page '2.9.4 PLU LINK PROGRAMMING')

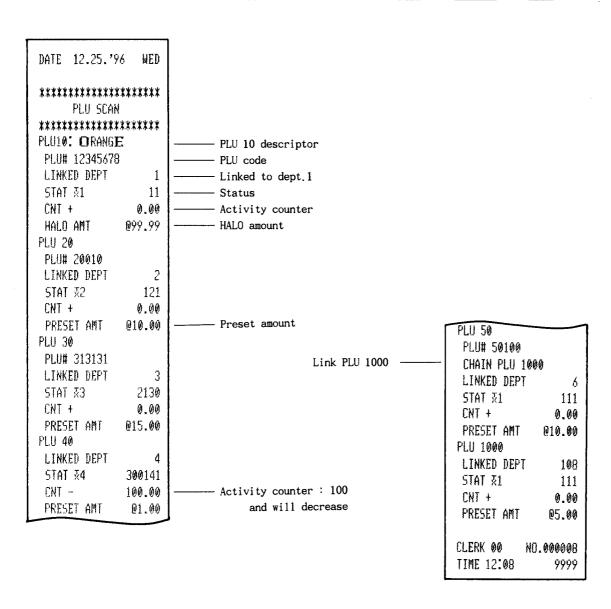


2.9.3 PLU PROGRAMMING SCAN

- (1) Press the "CASH/TEND" key,
- (2) Enter the number of the first PLU you want to scan, and press the "PLU" key.
- (3) Enter the number of the last PLU you want to scan, and press the "PLU" key.

NOTE: The first PLU number < The last PLU number

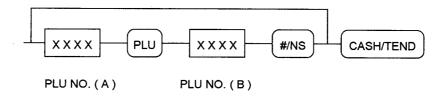




2.9.4 PLU LINK PROGRAMMING

This programming is used to link two or more PLUs.

The second PLU (B) will be automatically registered when the first PLU (A) is registered.



2.9.5 REMOVING OR DELETING A PLU

In order to "de-activate" a PLU, or "remove" its status and linked department.

Deleted or inactivated PLUs will not be allowed to register.

- (1) Enter the PLU number (1 ~ 1000), and press the "PLU" key.
- (2) Press the "VOID" key.

NOTE: PLUs with a total may not be removed (or deleted).

Issue the PLU report in "Z" mode before removing any PLU with a total.



2.10 % KEY PROGRAMMING

This cash register has two % keys.

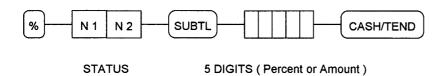
2.10.1 % KEY PROGRAMMING

A. PROGRAMMING STATUS

PROGRAMMING OPTION		VALUE		OPTION DIGIT
% key is	POSITIVE (SURCHARGE)	а	1	
	NEGATIVE (DISCOUNT)		0	N1=a+b
	OPEN	b	2	
	PRESET		0	
% key is	SALE	а	1	
	ITEM		0	
	AMOUNT	b	2	N 2 = a + b + c
	PERCENTAGE		0	
	INACTIVE	С	4	
	ACTIVE		0	

B. PROGRAMMING

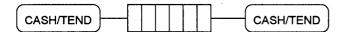
- (1) Press the "%" key to be programmed.
- (2) Enter the status from the above table and press the "SUBTL" key.
- (3) Enter the percentage or amount up to 5 digits and press the "CASH/TEND" key. Decimal point is fixed at three places.
- EX) Percent Rate : 10 % would be 1 0 0 0 0 5.6 % would be 5 6 0 0



2.10.2 % CALCULATION ROUNDING FACTOR

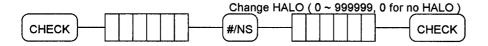
Refer to SYSTEM OPTION ADDRESS 38 (Page 41)

2.11 CASH/TEND KEY PROGRAMMING



Tendering HALO (0 ~ 999999, 0 for no HALO)

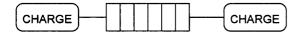
2.12 CHECK KEY PROGRAMMING



Tendering HALO (0 ~ 999999, 0 for no HALO)

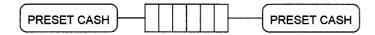
2.13 CHARGE KEY PROGRAMMING

This cash register has two charge keys.



Tendering HALO (0~999999, 0 for no HALO)

2.14 PRESET CASH KEY PROGRAMMING



Desired amount ($0 \sim 999999$)

2.15 CASH IN DRAWER LIMIT PROGRAMMING



Total amount of cash and checks

allowed to be in the cash drawer at one time. ($0 \sim 99999999$)

NOTE: If the cash-in-drawer limit is exceeded, an error tone will sound.

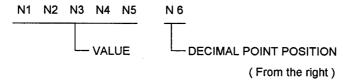
The "CLEAR" key will stop the error tone.

2.16 CURRENCY CONVERSION KEY PROGRAMMING

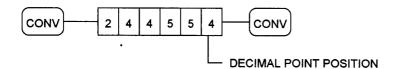
This cash register has two conversion key.

The foreign exchange rate is determined on a six-digit code entered.

Numbers N1 \sim N5 are the numeric value of the exchange rate, number N6 sets the decimal point position (0 \sim 5).

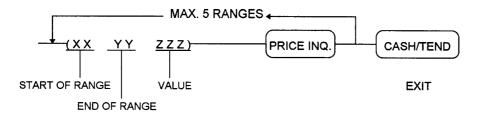


EX) £ 1.00 = 2.4455 DM

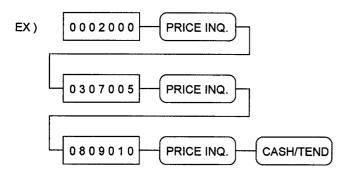


2.17 EUROPEAN ROUNDING PROGRAMMING

If you use the European rounding, after programming the European rounding, set the SYSTEM OPTION ADDRESS 40 to 1.(Page 41)



NOTE: The last end of range should be 9 or 99.



2.18 SYSTEM OPTION PROGRAMMING



ADDRESS

STATUS

NOTE : Address 1 ~ 9 should not be entered 01 ~ 09, enter single digit 1 ~ 9.

The value "0" is default status.

ADDRESS	OPTION	VALUE		STATUS	
1	Subtotal without tax will be printed on the receipt & journal. Does not require press of the "SUBTL" key.	а	YES = 1 NO = 0	а	
2	Tax amount charged will be printed on the receipt at finalization.	а	YES = 1 NO = 0		
	The printed tax amount on receipt at finalization is combined = * Itemized tax printing lists each rate separately, itemized = while combined tax printing lists the total of all taxes. Tax print (first option) must be set to "YES" to allow this option.	b	2 0	SUM = a + b + c	
	Print taxable totals.	C	YES = 4 NO = 0		
3	Tax symbol is printed for item.	а	YES = 0 NO = 1	SUM	
	VAT percent rate is printed.	b	YES = 2 NO = 0	= a + b + c	
	Net sale amount is printed. (Only inclusive VAT)	С	YES = 4 NO = 0		
4	Tax is figured by inclusive VAT . Tax is figured by exclusive VAT .	а	0 1	а	
5	Cash declaration is compulsory before X/Z reports.	а	YES = 1 NO = 0	SUM	
	Cash drawer does not open when reports are run.	b	YES = 2 NO = 0	= a + b	
6	GRAND total is not printed on financial report.	а	YES = 1 NO = 0	а	
7	Skip media totals with zero activity on financial report.	а	YES = 0 NO = 1	SUM	
	GROSS total is not printed on financial report.	b	YES = 2 NO = 0	=a+b+c	
	MODE VOID and RETURN are not printed on financial report.	С	YES = 4 NO = 0		
8	Consecutive number resets after Z1 financial report.	a	YES = 1 NO = 0	SUM	
	GRAND total resets after Z1 financial report.	b	YES = 2 NO = 0	= a + b + c	
	Print full clerk report. (See a clerk report section.)	С	YES = 4 NO = 0		
9	PLU is registered by code = sequential index (1 ~ 1000) =	а	1 0	а	
10	HASH department and PLU operations add to NET sales.	а	YES = 1 NO = 0	SUM	
	Print PLUs and DEPT.s with zero totals on report	b	YES = 2 NO = 0	= a + b + c	
	Print sales rate on DEPT. / PLU reports.	С	YES = 4 NO = 0		

ADDRESS	OPTION		VALUE	STATUS
11	Disable department / PLU preset/HALO override	а	YES = 1	
			NO = 0	SUM
	Allow 8-digit DEPT. and PLU amount entry.	b	YES = 2	= a + b
			NO = 0	
12	Negative and zero sales total are not allowed.	а	YES = 1	
			NO = 0	SUM
	Inhibit printing of positive DEPT. and PLU entries on journal.	b	YES = 2	= a + b
	·		NO = 0	
13	Allow the post tender function.	а	YES = 1	а
			NO = 0	
14	VOID function is only allowed in the 'X' control lock position.	а	YES = 1	
	·		NO = 0	SUM
	Compulsory validation on VOID function.	b	YES = 2	1
			NO = 0	=a+b+c
	VOID function is inactive.	С	YES = 4	1
		1	NO = 0	
15	CANCEL function is only allowed in the 'X' control lock position.	а	YES = 1	
	,	-	NO = 0	SUM
	CANCEL function is inactive.	ь	YES = 2	= a + b
		~	NO = 0	
16	RETURN function is only allowed in the 'X' control lock position.	а	YES = 1	
	The form to the district in the X control look position.	~	NO = 0	SUM
	Compulsory validation on RETURN function.	Ь	YES = 2	00.00
	compared y validation on the folder fallotton.	"	NO = 0	= a + b + c
	RETURN function is inactive.	-	YES = 4	4.5.0
	TETOTAL ISHOUGH IS MAGUITO.	"	NO = 0	
17	% key function is only allowed in the 'X' control lock position.	a	YES = 1	
''	76 key randion is only anowed in the X control lock position.	ď	NO = 0	SUM
	Compulsory validation on % key function.	Ь	YES = 2	SOW
	Compulsory validation on 76 key function.	0	NO = 0	= a + b + c
	% key function is inactive.	<u> </u>		- a + b + C
	n key fullction is mactive.	C	YES = 4	
18	DECD ACCT & DAID OUT are only allowed	 	NO = 0	
10	RECD ACCT & PAID OUT are only allowed	a	YES = 1	CUM
	in the 'X' control lock position.	 	NO = 0	SUM
	Compulsory validation on RECD ACCT & PAID OUT.	b	YES = 2	= a + b + c
	DECD ACCT & DAID OUT one impediate	<u> </u>	NO = 0	-атртс
	RECD ACCT & PAID OUT are inactive.	C	YES = 4	
40	OUTOV OAOUNO : III III III III III III III III I		NO = 0	
19	CHECK-CASHING is only allowed in the 'X' control lock position.	a	YES = 1	
	Owners to the state of the stat	<u> </u>	NO = 0	SUM
1	Compulsory validation on CHECK-CASHING.	b	YES = 2	
İ	OHEOK OVORNO:		NO = 0	=a+b+c
	CHECK-CASHING is inactive.	С	YES = 4	
	V.P.L.O.	<u> </u>	NO = 0	
20	Validation amount is amount tendered =	а	1	
	amount of sale =	<u> </u>	0	SUM
	Allow multiple validations.	þ	YES = 2	= a + b
			NO = 0	
21	Allow multiple buffered receipts.	а	YES = 1	
			NO = 0	SUM
	Buffered receipt is issued on the "RECEIPT ON" position.	b	YES = 2	
		L_	NO = 0	= a + b + c
1	When pushing the "#/NS" key to open the drawer,	С	YES = 4	
	receipt ticket is not issued.		NO = 0	

ADDRESS	OPTION	OPTION V		STATUS	
22	Print the "CASH" when only SINGLE ITEM is registered.	а	YES = 1		
			NO = 0	SUM	
	Print sale item no.	b	YES = 2 NO = 0		
				=a+b+c	
	Subtotal is printed when the "SUBTL" key is pressed.	С	YES = 4		
			NO = 0		
23	Inhibit TIME print on receipt and journal.	а	YES = 1		
			NO = 0	SUM	
	Inhibit MACHINE NO. print on receipt and journal.	b	YES = 2		
			NO = 0	=a+b+c	
	Inhibit Z REPORT ISSUING COUNTER print	C	YES = 4		
	on receipt and journal.	ļ	NO = 0		
24	Inhibit DATE print on receipt and journal.	а	YES = 1		
			NO = 0	SUM	
	Inhibit CONSECUTIVE NO. print on receipt and journal.	b	YES = 2	= a + b	
			NO = 0		
25	The date format is Month, Day and Year =	а	0		
	* Same in validation Day, Month and Year =		1	а	
	Year, Month and Day =		2		
26	Decimal for print and display : No decimal =	а	1		
	Set at one place =		2	а	
	Set at three places =		3		
	Set at two places =		0		
27	Enter the HDLO (High Digit Lock Out) 0.01 ~ 0.09 =	а	1		
	for the total amount allowed for RECD ACCT 0.01 ~ 0.99 =		2		
	& PAID OUT transactions. 0.01 ~ 9.99 =	l	3		
	0.01 ~ 99.99 =		4	a	
	0.01 ~ 999.99 =		5		
	0.01 ~ 9999.99 =		6		
	0.01 ~ 99999.99 =		7		
28	Clerks are Pop-up =	а	1		
20	Stay-down =	-	Ò	SUM	
	Secret sign-on code =	b	2	1	
	Push button =	~	ا آ	= a + b + c	
	15 Clerks =	С	4	1	
	4 Clerks =	ľ	Ιö	i	
29	Allow clerk change without clerk sign-off operation.	a	YES = 1	а	
25	Allow clerk change without clerk sign-on operation.	١٣	NO = 0	"	
30	Select the currency logo. Default =	а	0	а	
30			CODE	<u> </u>	
04	Other logos (Refer to page 87 : "CHARACTER CODE TABLE")	_	YES = 1		
31	Disable NON-ADD NUMBER function.	а	NO = 0	а	
20	Disable NO CALE function	1_	YES = 1		
32	Disable NO SALE function.	а	NO = 0	SUM	
	I-LILIANO CALE Offen MON ADD MUMBED onto	-	YES = 2	SOIVI	
	Inhibit NO SALE after NON-ADD NUMBER entry.	b	NO = 0	=a+b+c	
	Enforce NON ADD NUMBED onto at the beginning of sele	-			
	Enforce NON-ADD NUMBER entry at the beginning of sale.	C	YES = 4		
	Number of distance in distance ADD AUTOPD	1	NO = 0		
33	Number of digits required for NON-ADD NUMBER entry.	а	0	a	
	('0' allows any length, 1 ~ 8 digits)	 _ 	1~8		
34	ADD CHECK advances the consecutive no. at final tender only.	a	YES = 1	6	
		L	NO = 0	SUM	
	Compulsory validation on ADD CHECK.	b	YES = 2	= a + b	
		1	NO = 0	I	

ADDRESS	OPTION	VALUE		STATUS	
35	Compulsory drawer is disabled.	а	YES = 1	01114	
	Validation sensor is activated.	b	NO = 0 YES = 2	J SUM	
	Paper sensor is activated.	-	NO = 0 YES = 4	=a+b+c	
		Ľ	NO = 0		
36	Open drawer alarm is activated.	а	YES = 1 NO = 0	а	
37	The number of seconds before the open drawer warning tone sounds. (default = 30 sec.)	a	0~99		
-38	% and tax calculation will round up at 0.50 =	a	0	a	
	always round up = always round down =	1	1 2	a	
39	Rounding factor for split pricing, triple & decimal multiplication	1			
	calculation will round up at 0.50 =	а	0		
	always round up = always round down =		1 2	а	
40	European round is activated.	а	YES = 1	а	
41	X/TIME operation is split pricing =	а	NO = 0 0	а	
- 40	triple multiplication =	Ĺ	1	•	
42	"PRICE INQ." key is used as "SCALE" key.	а	YES = 1 NO = 0	SUM	
	Allow manual entry of weight.	b	YES = 2		
	Weight symbol for manual entry is kg =	c	NO = 0	= a + b + c	
43	Ib = Only stamp will be printed on the receipt. =	а	0	_	
	Both stamp & preamble message will be printed on the receipt.=	a	1	а	
	Only preamble message will be printed on the receipt.		2		
44	Postamble message will be printed on the receipt.	а	YES = 1 NO = 0	SUM	
	Preamble message will be not printed on the slip printer.	b	YES = 2		
	Postamble message will be not printed on the slip printer.	c	NO = 0 YES = 4	= a + b + c	
45	Train mode	_	NO = 0 YES = 1		
40		а	NO = 0	SUM	
	Train mode title is not printed on the receipt during train mode.	b	YES = 2 NO = 0	=a+b+c	
	Cash drawer does not open during train mode.	С	YES = 4	-a , b + C	
40	T-LL		NO = 0		
46	Table management = Cashier overlap =	а	0 1	а	
47	Consolidated receipt on table management or cashier	а	0	а	
	overlap is only printed on the receipt of ECR. Consolidated receipt on table management or cashier		1		
	overlap is printed on the receipt of ECR and the slip printer.		_		
	Consolidated receipt on table management or cashier overlap is only printed on the slip printer.		2		
48	Slip operation =	а	0	а	
48	Slip operation = KP operation =	а	0 1 YES = 1	a	
	Slip operation = KP operation = Amount tender is compulsory on "CASH/TEND" tendering.	а	1 YES = 1 NO = 0	a SUM	
	Slip operation = KP operation =		1 YES = 1		

ADDRESS	OPTION	VALUE		STATUS	
50	Amount tender is compulsory on "CHECK" tendering.	а	YES = 1		
			NO = 0	SUM	
	Under tendering by "CHECK" is not allowed.	b	YES = 2		
			NO = 0	= a + b + c	
	Validation on "CHECK" tendering is compulsory.	С	YES = 4		
			NO = 0		
51	NON-ADD NUMBER entry is compulsory	a	YES = 1		
	on "CHARGE 1" tendering.		NO = 0	SUM	
	Over tendering by "CHARGE 1" is allowed.	b	YES = 2		
			NO = 0	=a+b+c	
	Validation on "CHARGE 1" tendering is compulsory.	С	YES = 4		
		<u> </u>	NO = 0		
52	NON-ADD NUMBER entry is compulsory	а	YES = 1		
	on "CHARGE 2" tendering.		NO = 0	SUM	
	Over tendering by "CHARGE 2" is allowed.	b	YES = 2		
		<u> </u>	NO = 0	= a + b + c	
	Validation on "CHARGE 2" tendering is compulsory.	C	YES = 4		
		<u> </u>	NO = 0		
53	Clerk key: Button key =	а	0	a	
	Real clerk key =		1		
54	Printer type : No printer =	а	0	а	
	EPSON TM-290 Ⅱ =		1		
	EPSON TM-300(D) =	1	2		
	EPSON TM-T80 =		3		
	CITIZEN iDP 3540/3541 =		4		
	STAR SP200 =		5		
	SAMSUNG SRP-100 =		6	1	
55	Feed line after printing on the roll printer :	а	0 ~ 99	а	
	(Default = 7Line)	1			
56	EAT-IN / TAKE-OUT / DRIVE-THRU procedure compulsory	а	YES = 1	а	
	before tendering.	ŀ	NO = 0		
57	Department LEVEL keys are Stay-down =	а	0	а	
	Item pop-up =	1	1		
	Ticket pop-up =		2		
58	Disable "LEVEL" key : LEVEL 1 =	а	1	SUM	
	LEVEL 2 =	b	2	= a + b + c	
	LEVEL 3 =	С	4		

2.19 PARAMETERS PROGRAM SCAN

CASH/TEND	SUBTL	
DATE 12.25.'96 WED		

MISCELLANEOUS SCAN		

TAX1 RATE 15.000%	——— Tax rate	
TAX2 RATE 10.000%		
TAX3 RATE 8.000%		
TAX4 RATE 5.000%		
Z 1 RATE -10.000Z	% 1 programming	
% 1 STAT 0	o. 0	
% 2 AMT	% 2 programming	
6 C JINI 16		
CASH HALD -0.00	Cash key HALO	
CHECK TND HALD -0.00	Check key tender HALO	
CHECK CNG HALO -0.00	Check key change HALO	
CHG1 HALO •0.00	Charge1 key HALO	
CHG2 HALO -0.00	Charge2 key HALO	
DWR LIMIT AMT -0.00	Cash in drawer limit amount	
CONV1 RATE #2.4455	Currency conversion key programming	
CONV2 RATE #0.00	European Rounding —	EUROPEAN ROUND :
21.1/4		0 - 2 = 0
CLK1 CODE 123456	Clerk secret code	3 - 7 = 5
CLK1 DRAWER 0	Clerk drawer assignment	8 - 9 = 10
CLK2 CODE 234567 CLK2 DRAWER 2	g	
CLK2 DRAWER 2 CLK3 CODE 345678	System option ———	SYSTEM OPN 5 1
CLK3 DRAWER 1		SYSTEM OPN 7 1 SYSTEM OPN 10 4
CLK4 CODE 456789		SYSTEM OPN 10 4 SYSTEM OPN 13 1
CLK4 DRAWER @		SYSTEM OPN 28 2
CLK15 CODE 987654		SYSTEM OPN 47 2
CLK15 DRAWER 1		SYSTEM OPN 54 1
DEFAULT LEVEL 2	Default level	CLERK 00 NO.000010
DEPT LEVEL SYSTEM 0	Dept.level system	TIME 12:10 9999
PRECASH1 AMT •5.00	Preset cash amount	
PRECASH2 AMT -10.00		
PRECASH3 AMT -20.00		

OPERATING NOTE

This section shows you how to operate the cash register during normal use.

The operating steps are explained with flow chart boxes.

Each box represents a key on the keyboard that you should press to complete an operation.

Unless the specified note, the flow charts use the "CASH/TEND" key to finalize the sale.

NOTE: A clerk must be signed on before operation takes place.

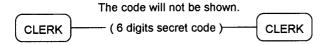
All registrations are made in the "REG" or "VOID" control lock position.

- 1 CLERK SIGN ON
- 1.1 IN CASE OF 4 CLERKS (SYSTEM OPTION 28's VALUE 'C' = 0)
- 1.1.1 PUSH BUTTON SIGN ON

The clerk key (1, 2, 3 or 4) to start operation

1.1.2 SECRET CODE SIGN ON

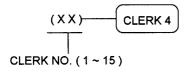
To use this sign on method, SYSTEM OPTION ADDRESS 28 must be set to value 'b'.



The clerk key (1, 2, 3 or 4) to start operation

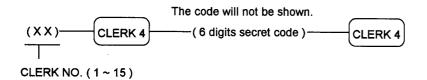
1.2 IN CASE OF 15 CLERKS (SYSTEM OPTION 28's VALUE 'C' = 4)

1.2.1 PUSH BUTTON SIGN ON

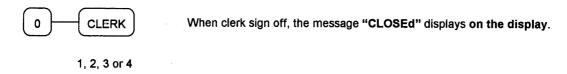


1.2.2 SECRET CODE SIGN ON

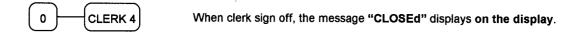
To use this sign on method, SYSTEM OPTION ADDRESS 28 must be set to value 'b'.



- 2 CLERK SIGN OFF
- 2.1 IN CASE OF 4 CLERKS (SYSTEM OPTION 28's VALUE 'C' = 0)



2.2 IN CASE OF 15 CLERKS (SYSTEM OPTION 28's VALUE 'C' = 4)



3 REAL CLERK KEY ENTRY (Optional Device)

If you want to use the real clerk keys, you should set the SYSTEM OPTION ADDRESS 53 to 1.

4 CLEARING AN ERROR CONDITION

If the error tone is ringing, press

There are several error symbols. Refer to 'DISPLAY SYMBOLS' (Page 14)

5 NO SALE OPERATION

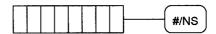
A no sale operation is used to open the cash drawer outside of a sale.

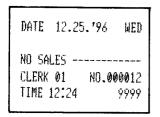
#/NS

6 NON-ADD NUMBER ENTRIES

The "#/NS" key can be used to enter up to eight digits.

This numeric entry will be added to non-add number total.





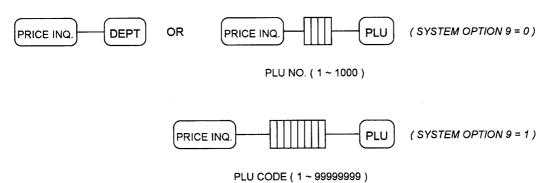
NON-ADD# 12345678

* NO SALE *

* NON-ADD NUMBER *

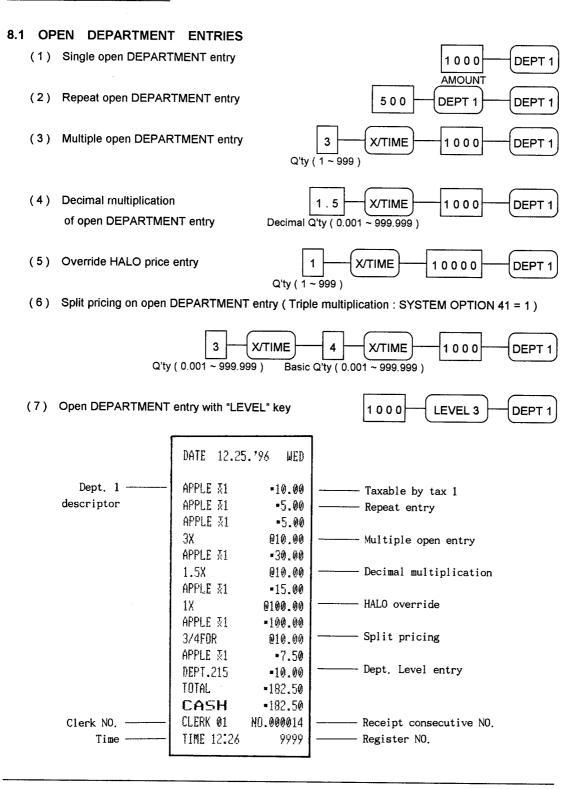
7 PRICE INQUIRY OPERATION

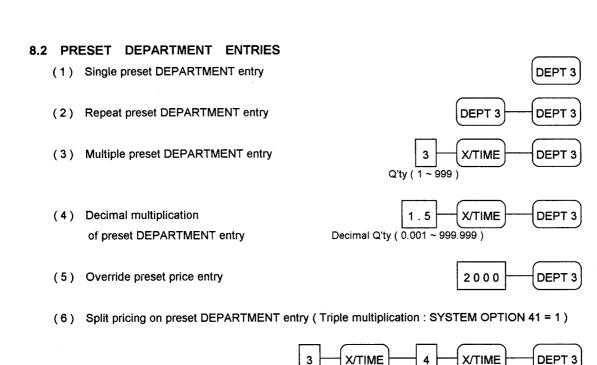
If you want to know the price (preset or HALO) of DEPT. or PLU during registration,

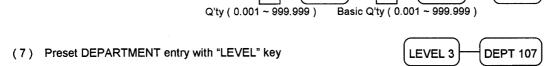


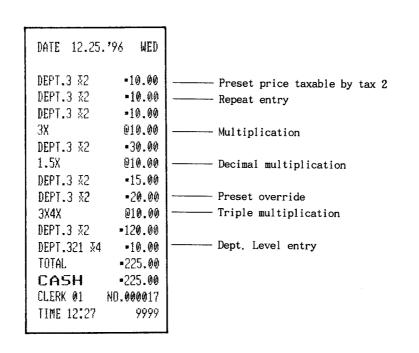
8 DEPARTMENT ENTRIES

NOTE: The present level is 1.









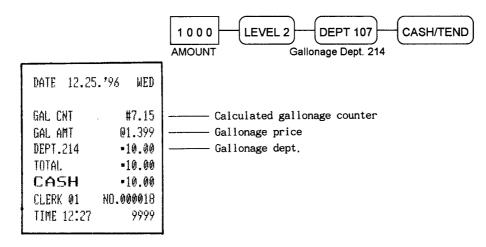
8.3 GALLONAGE DEPARTMENT OPERATION

NOTE: 1) Although gallonage departments are considered open departments,

a price per gallon must be programmed on department programming.

This price is calculated to three decimal points.

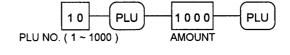
- 2) Although gallonage departments are programmed as a preset price, you must enter amount when gallonage department is registered.
- * Same as gallonage PLU
- EX) DEPARTMENT 214 has been programmed as gallonage department and unit price @1.399.



9 PLU (PRICE LOOK UP) ENTRIES

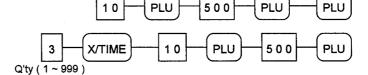
9.1 OPEN PLU ENTRIES

(1) Single open PLU entry

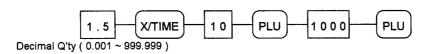


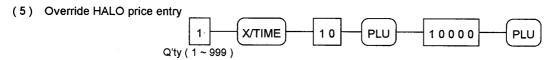
(2) Repeat open PLU entry

(3) Multiple open PLU entry



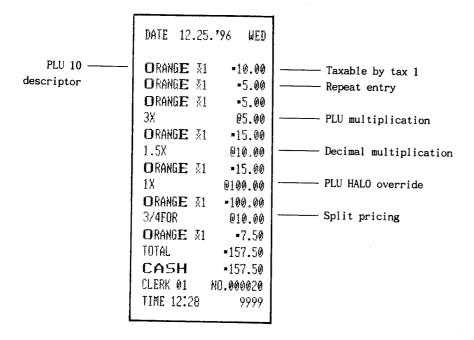
(4) Decimal multiplication of open PLU entry





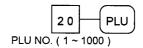
(6) Split pricing on open PLU entry (Triple multiplication: SYSTEM OPTION 41 = 1)





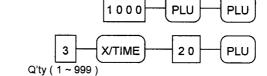
9.2 PRESET PLU ENTRIES

(1) Single preset PLU entry



(2) Repeat preset PLU entry

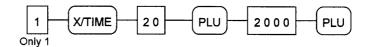
(3) Multiple preset PLU entry



(4) Decimal multiplication of preset PLU entry

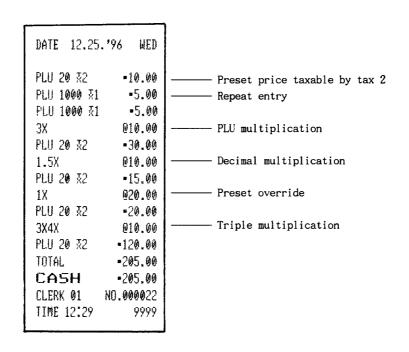


(5) Override preset price entry



(6) Split pricing on preset PLU entry (Triple multiplication: SYSTEM OPTION 41 = 1)



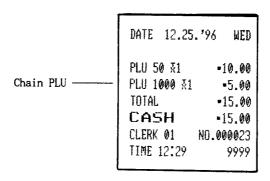


9.3 PLU TO PLU CHAIN OPERATION

All preset PLUs in the same chain (PLU to PLU linking) will be automatically registered when the first PLU of the chain is registered.

If a PLU located in the middle of the chain is registered, the following preset PLUs will be automatically registered.

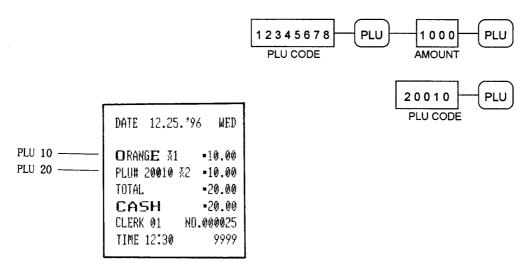
EX) PLU 1000 is linked to PLU 50.



9.4 PLU ENTRIES BY CODE

This cash register can register PLU not only sequential index (1 ~ 1000) but also code up to 8 digits. If you want to register PLU by code, you must program PLU code on PLU programming and set SYSTEM OPTION ADDRESS 9 to 1.

NOTE: PLU entries by code is same to PLU entries by sequential index.



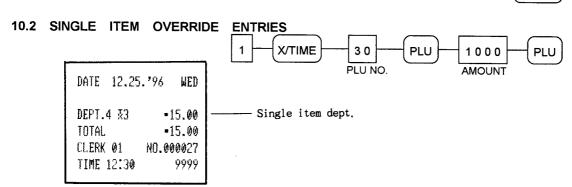
10 SINGLE ITEM DEPARTMENT OR PLU ENTRIES

Single item operation finalizes transaction without tendering key entry.

But the transaction is not finalized when you register another department or PLU before entering single item department or PLU.

10.1 SINGLE ITEM PRESET ENTRIES

DEPT 4



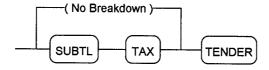
11 COMPUTATION OF VAT (Value Added Tax)

This cash register has four taxes.

NOTE: Refer to SYSTEM OPTION ADDRESS 4 to select inclusive or exclusive VAT.

11.1 INCLUSIVE VAT SYSTEM

(1) Inclusive VAT is used when a tax amount is already included in the item price, and a breakdown of the various tax charged is separated out.



If you set SYSTEM OPTION ADDRESS 3 to value 'c', breakdown will be automatically done.

(2) VAT SHIFT

when the "TAX" key is pressed before entering a department or PLU programmed as VAT 1, their tax status shift VAT 1 to VAT 2.

when the "TAX" key is pressed before entering a department or PLU programmed as VAT 1&3, their tax status becomes VAT 1, in that VAT 1 remains unchanged and VAT 3 is deleted.



11.2 EXCLUSIVE VAT SYSTEM

(1) Exclusive VAT is used when a tax amount is not included in the item price, and a tax amount is calculated by a tax rate.

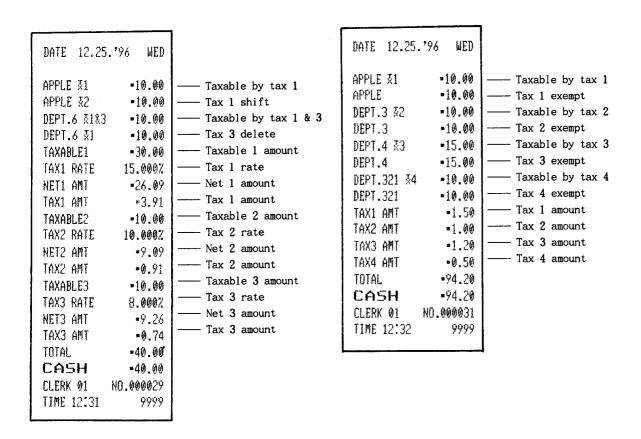
(2) TAX EXEMPT

While the exclusive VAT system is in use, you can exempt a taxable department or PLU from tax.

TAX DEPT. or PLU

* Inclusive VAT *

* Exclusive VAT *



12 % KEY ENTRIES

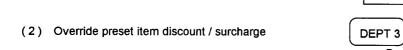
The item discount or surcharge is that discount or surcharge is applied to one item, while the sale discount or surcharge is that discount or surcharge is applied to the entire sale.

NOTE: If you want to sale discount or surcharge you must press the "SUBTL" key before entering the "%" key.

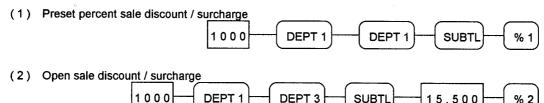
12.1 PERCENT RATE DISCOUNT/SURCHARGE

12.1.1 ITEM DISCOUNT / SURCHARGE

(1) Preset percent item discount / surcharge



12.1.2 SALE DISCOUNT / SURCHARGE



DEPT 3

1000

SUBTL

DEPT 1

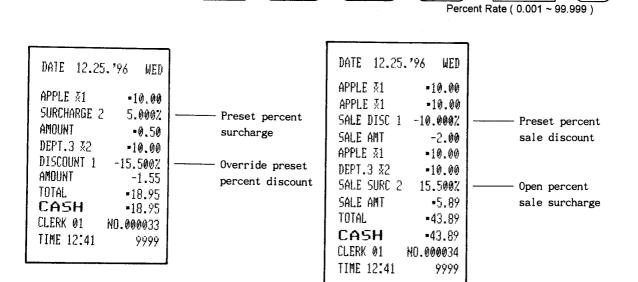
15.500

Percent Rate (0.001 ~ 99.999)

15.500

% 2

% 1

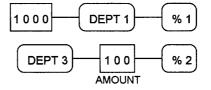


DEPT 1

12.2 AMOUNT DISCOUNT / SURCHARGE

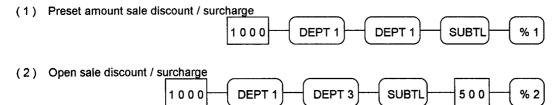
12.2.1 ITEM DISCOUNT / SURCHARGE

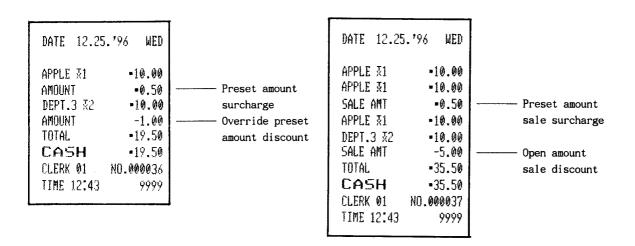
- (1) Preset amount item discount / surcharge
- (2) Override amount item discount / surcharge



AMOUNT

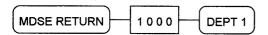
12.2.2 SALE DISCOUNT / SURCHARGE



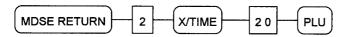


13 MERCHANDISE RETURN OPERATION

A. Merchandise return of a single department or PLU entry



B. Merchandise return of multiple department or PLU entry



C. Merchandise return of the discounted / surcharged item



NOTE: Merchandise return of the negative department or PLU is not allowed, and void of merchandise return entry is not allowed.

DATE 12.25.'96 WE	D
RETURN ************************************	*0 *0 *0 *0 *0 *0 *0 *0 *0 *0 *0 *0 *0 *
CASH -39.00 CLERK 01 NO.000039	
TIME 12:43 9999)

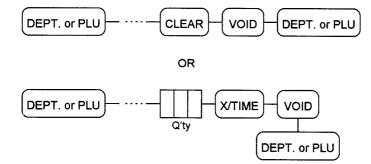
14 VOID OPERATION

14.1 VOID OF A LAST ITEM ENTRY (ERROR CORRECT)

Press the "VOID" key immediately after making an incorrect entry.

14.2 VOID OF A PREVIOUS ITEM ENTRY

You can correct using the "VOID" key at any point during the sale.



DATE 12.25.'90	S WED
APPLE ¾1 ERROR CORRECT - APPLE ¾1 ORANGE ¾1 DEPT.3 ¾2 PREVIOUS VOID - ORANGE ¾1 TOTAL CASH CLERK Ø1 NO. TIME 12:44	-10.00 -10.00 -10.00 -10.00 -10.00 -10.00 000040 9999

14.3 VOID OUTSIDE OF A SALE

If you want to void a number of items of incorrect entries that were not made void during a sale.

- (1) Turn the control lock key to the "VOID" position.
- (2) Make all entries that you want to void in the normal sequence.
- (3) All these items will appear as alternative sign amount.
- (4) All "VOID" position operations maintain their own total on the report.

DATE 12.25	.'96 WED
VOID MODE #3 APPLE #1 DEPT.3 #2 DEPT.4 #3 DEPT.6 #183 TOTAL CASH CLERK #1 TIME 12:44	********* -10.00 -10.00 -15.00 -10.00 -45.00 -45.00 ND.000041 9999

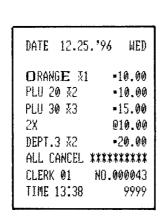
14.4 CANCEL (VOID 4)

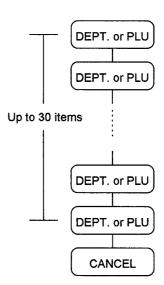
The pressing of the "CANCEL" key during a transaction cancels the entire transaction.

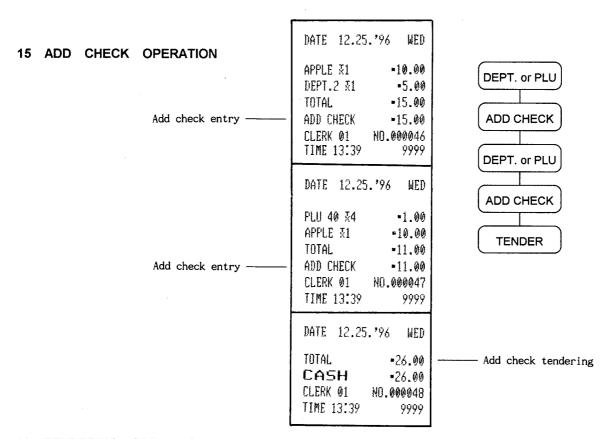
This is not a tendering key!!

Transactions up to thirty items may be canceled.

If a cancel operation is attempted after the entering of more than thirty items, an error will occur.







16 TENDERING OPERATION

CA5H

CLERK 01

TIME 13:39

CHANGE

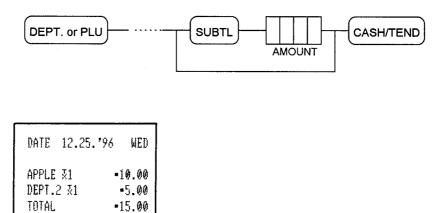
-20.00

-5.00

9999

NO.000049

16.1 CASH TENDERING



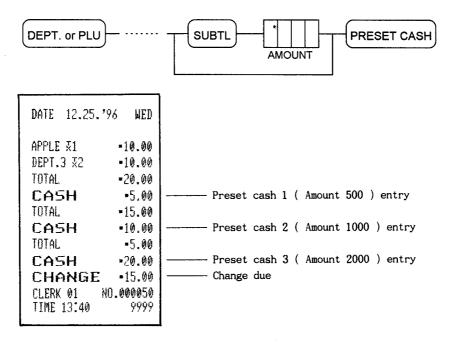
— Change due

- Amount of cash tendered

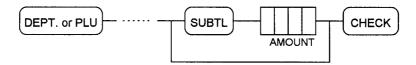
16.2 PRESET CASH TENDERING

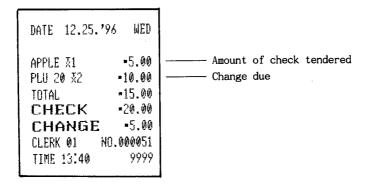
You must program the "PRESET CASH" key.

If you don't program this key, an error will occur when you enter the "PRESET CASH" key.



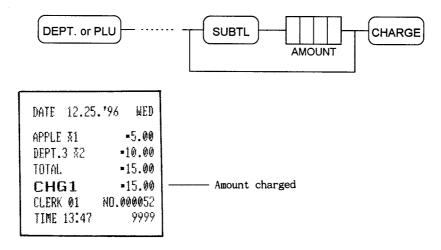
16.3 CHECK TENDERING





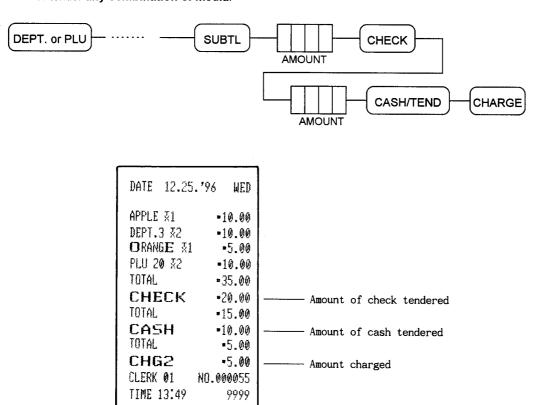
16.4 CHARGE TENDERING

The entering amount of charge must not be more than subtotal amount.



16.5 SPLIT TENDERING

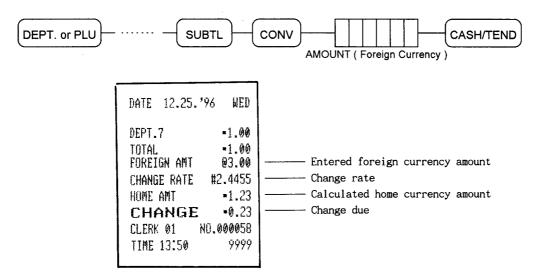
You can tender any combination of media.



16.6 TENDERING WITH CURRENCY CONVERSION

You must program the "CONV" key.

If you don't program this key, an error will occur when you enter the "CONV" key.

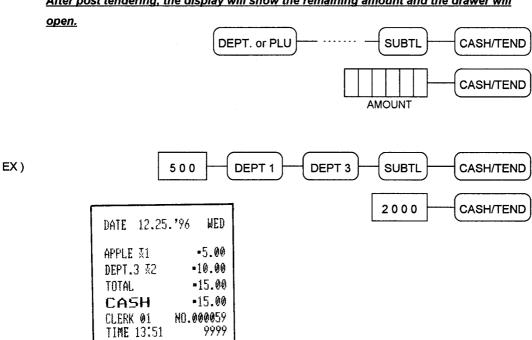


16.7 POST TENDERING

NOTE: If you want to use post tendering function, you must set SYSTEM OPTION ADDRESS 13 to 1 (Page 39).

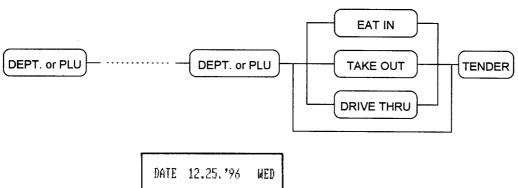
Post tendering function is only allowed on cash transactions.

After post tendering, the display will show the remaining amount and the drawer will



17 EAT IN / TAKE OUT / DRIVE THRU OPERATION

If you press the "EAT IN" or "TAKE OUT" or "DRIVE THRU" key before tendering, each message is printed on the receipt and each total is added to that of the financial report.

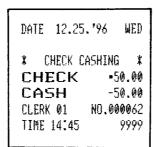


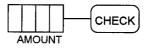
DATE 12.25	.'96 WED
APPLE X1 DEPT.3 X2 DEPT.4 X3 DEPT.5 PLU 40 X4 PLU 50 X1 PLU 1000 X1	-10.00 -10.00 -15.00 -1.00 -1.00 -10.00
EAT-IN ===== TOTAL CASH CLERK 01 TIME 14:45	-50.00 -50.00 ND.000061 9999

18 CHECK CASHING

If a customer wants to cash a check, use this function.

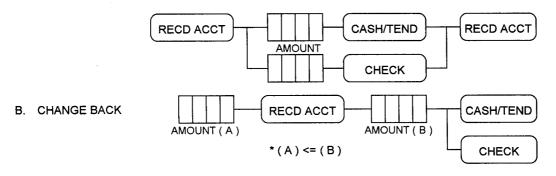
- (1) Enter the amount of check.
- (2) Press the "CHECK" key.





19 RECEIVED ON ACCOUNT OPERATION

A. Use the "RECD ACCT" key to register cash or check that is added to the cash drawer.

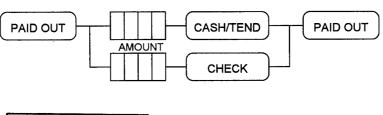


DATE 12.25.'96 WED

RECD ACCT
CASH •1.00
CHECK •2.00
RECD ACCT •3.00
CLERK 01 NO.000063
TIME 14:45 9999

20 PAID OUT OPERATION

Use the "PAID OUT" key to register cash or check that is moved from the cash drawer.



DATE	12.25.	. 196	WED
PAID (CHE CAS PAID (CLERK TIME	CK SH OUT 01	-	3.00 2.50 5.50 0064 9999

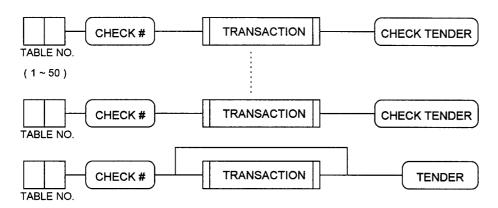
21 TABLE MANAGEMENT

This cash register can support the table management up to 50 lines.

(40 item lines + 10 tendering lines).

NOTE: If you want to use the table management, SYSTEM OPTION ADDRESS 46 must be 0.

21.1 TRANSACTION



21.2 CONSOLIDATED RECEIPT PRINTING

If you want to issue the consolidated receipt about the table to be opened or tendered (by cash or check ...), press the table number and the "CHECK TENDER" key.



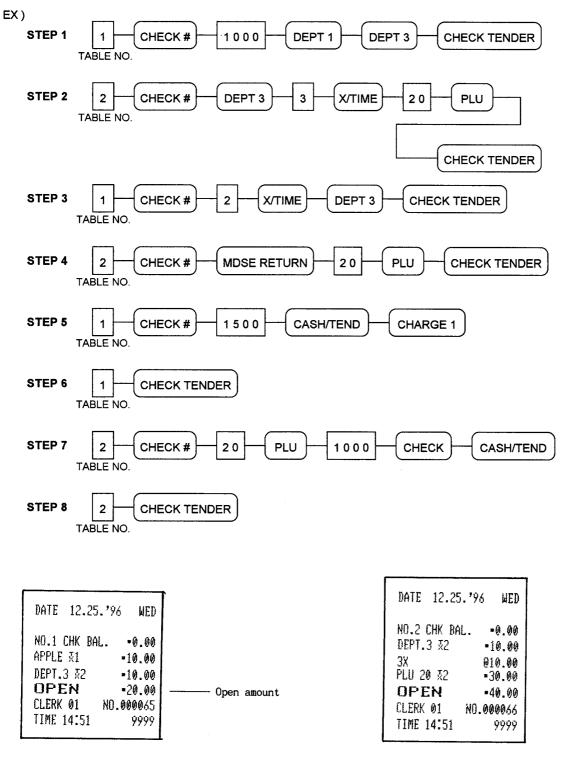
NOTE: If you set the SYSTEM OPTION 47 to 0, the consolidated receipt is only printed on the receipt of ECR.

If you set the SYSTEM OPTION 47 to 1, the consolidated receipt is printed on the receipt of ECR and the slip printer.

If you set the SYSTEM OPTION 47 to 2, the consolidated receipt is only printed on the slip printer.

NOTE : If you set the SYSTEM OPTION ADDRESS 48 to 0, when table management, the transaction will be printed on the slip printer.

(Refer to SYSTEM OPTION ADDRESS 54 (Page 42) to select the printer type.)



* STEP 1 *

* STEP 2 *

DATE 12.25.'96 WED

NO.1 CHK BAL. •20.00
2X 010.00
DEPT.3 %2 •20.00
OPEN •40.00
CLERK 01 NO.00067
TIME 14:52 9999

NO.2 CHK BAL. -40.00
RETURN **************
PLU 20 X2 -10.00
OP'EN -30.00
CLERK 01 NO.00068
TIME 14:52 9999

* STEP 3 *

* STEP 4 *

DATE 12.25.'96 WED NO.1 CHK BAL. -40.00 TOTAL -40.00 CASH *15.00 TOTAL -25.00 CHG1 -25.00 CLERK 01 NO.000069 TIME 14:52 9999

Consolidated -Thank You TABLE NO. # O1 receipt APPLE T1 **10.00** 38 @10.00 **DEPT.3 T2 \$30.00** TOTAL **40.00** CASH **15.00** CHG1 **25.00** CLERK OI 12.25.'96 14:52 9999 000069 Call Asain

* STEP 5 *

* STEP 6 (SLIP PRINTING) *

DATE 12.25.'96 WED NO.2 CHK BAL. -30.00 PLU 20 X2 -10.00 TOTAL -40.00 CHECK -10.00 TOTAL -30.00 CASH -30.00 CLERK 01 NO.000070 TIME 14:53 9999

Consolidated - receipt

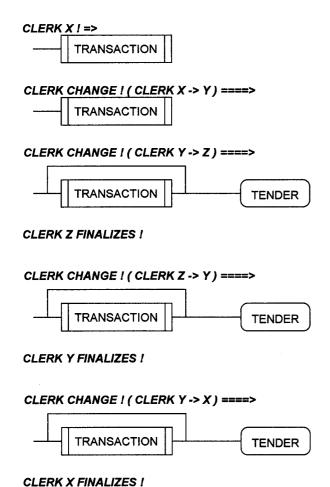
Thank You TABLE NO. # 02 DEPT.3 T2 **10.00** 3% @10.00 PLU 20 T2 **\$30,00** TOTAL **40.00** CHECK **#**10.00 CASH **\$30.00** CLERK 01 12.25.'96 14:53 9999 000070 Call Again

* STEP 7 *

* STEP 8 (SLIP PRINTING) *

NOTE: If you want to use the cashier overlap, SYSTEM OPTION ADDRESS 46 must be 1. If you set SYSTEM OPTION ADDRESS 29 to 1, clerk change can be made without clerk sign-off operation.

22.1 TRANSACTION



22.2 CONSOLIDATED RECEIPT PRINTING

If you want to issue the consolidated receipt about the clerk to be opened or tendered (by cash or check ...), press the clerk number and the "CHECK TENDER" key.



NOTE: If you set the SYSTEM OPTION 47 to 0, the consolidated receipt is only printed on the receipt of ECR.

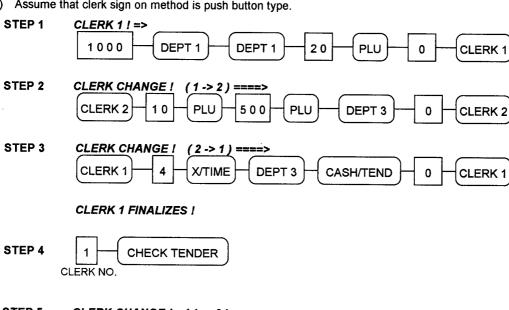
if you set the SYSTEM OPTION 47 to 1, the consolidated receipt is printed on the receipt of ECR and the slip printer.

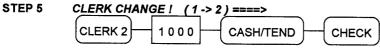
If you set the SYSTEM OPTION 47 to 2, the consolidated receipt is only printed on the slip printer.

NOTE: If you set the SYSTEM OPTION ADDRESS 48 to 0, when cashier overlap, the transaction will be printed on the slip printer.

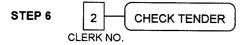
(Refer to SYSTEM OPTION ADDRESS 54 (Page 42) to select the printer type.)

EX) Assume that clerk sign on method is push button type.





CLERK 2 FINALIZES!



DATE 12.25.'96 WED DATE 12.25.'96 APPLE X1 -10.00 ORANGE X1 APPLE X1 -10.00 DEPT.3 X2 -10.00 PLU 20 X2 -10.00 CHG-CLERK -15.00 CHG-CLERK -30.00 Open amount CLERK 02 NO.000073 NO.000072 CLERK 01 TIME 14:54 TIME 14:54 9999

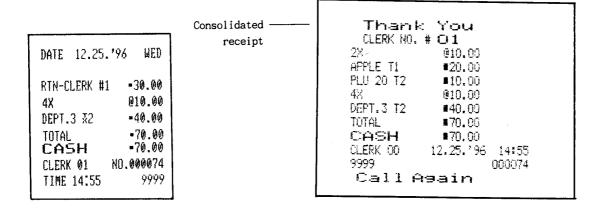
* STEP 1 *

* STEP 2 *

WED

-5.00

9999



* STEP 3 *

* STEP 4 (SLIP PRINTING) *

```
DATE 12.25.'96
               WED
                                                Thank You
                      Consolidated -
                                                CLERK NO. # 02
                           receipt
                                              ORANGE TI
                                                             ₽5.00
RTN-CLERK #2
             -15.00
                                              DEPT.3 T2
                                                            10.00
TOTAL
             -15.00
                                              TOTAL
                                                            ■15.00
CASH
             -10.00
                                              CASH
                                                            ■10.00
TOTAL
              -5.00
                                              CHECK
                                                             45.00
CHECK
              -5.00
                                              CLERK 02
                                                          12.25.'96 14:56
CLERK 02
          NO.000075
                                              9999
                                                                   000075
TIME 14:55
              9999
                                               Call Again
```

* STEP 5 *

* STEP 6 (SLIP PRINTING) *

23 PRINTING A BUFFERED RECEIPT OPERATION

If a customer requests a receipt after a sale has been finalized and the "RECEIPT ON/OFF" key was in the 'OFF' position during a sale, the press of the "RECEIPT" key will issue a buffered receipt. (Up to 70 lines: 50 item lines + 20 tendering lines)

If more than 50 entries are made in the sale, the cash register will issue a stub receipt only, show the total net sale and correct the tax totals and payment tendered.

NOTE: The "RECEIPT ON/OFF" key must be used on "REG / VOID" position and can't be used during transactions.

Press the "RECEIPT ON/OFF" key once to change its status.

When the "RECEIPT ON/OFF" sign is illuminated on the display panel, the receipt printer will be turned off.

Refer to SYSTEM OPTION ADDRESS 21 (Page 39)

24 VALIDATION OPERATION

First of all, place a check or slip into the slot below the receipt / detail printer.

Upon pressing of the "VALID" key, validation will be performed on department and PLU entries, RECD ACCT & PAID OUT operation, % key entries, merchandise return, voids and tendering operations.

If an operation is programmed as "Validation Compulsory", the cash register will not operate until validation is completed and the message "S P" will appear on the display.

If any other operations are attempted before validation, an error will occur.

Refer to SYSTEM OPTION ADDRESS 20 (Page 39)

* SAMPLE VALIDATION RECEIPTS *

* Date (b) = SYSTEM OPTION ADDRESS 25 = 1 (DD/MM/YY). (Page 40)

a = Clerk number.

b = Date.

c = Time.

d = Receipt consecutive number.

e = Registration step.

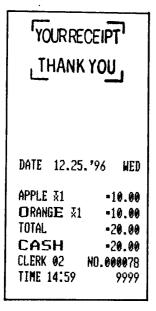
f = Validated transaction content.

^{*} Date (b) = SYSTEM OPTION ADDRESS 25 = 2 (YY/MM/DD). (Page 40)

25 RECEIPT MESSAGE PRINTING OPERATION

25.1 PREAMBLE MESSAGE

If you want to print the receipt preamble messages on the receipt, you must program SYSTEM OPTION ADDRESS 43 (Page 41) after programming the preamble message descriptors.



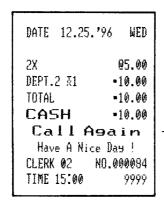


Thank You SAMSUNG CASH REGISTER ER-51 SERIES
DATE 12.25.'96 WED
APPLE X1 -10.00
ORANGE X1 -10.00
TOTAL -20.00
CASH •20.00
CLERK 02 NO.000082

- * SYSTEM OPTION 43 = 0 *
- SYSTEM OPTION 43 = 1 *
- SYSTEM OPTION 43 = 2 *

25.2 POSTAMBLE MESSAGE

If you want to print the receipt postamble messages on the receipt, you must program SYSTEM OPTION ADDRESS 44 (Page 41) after programming the postamble message descriptors.



- Postamble message

26 TRAIN MODE

If you want to operate the train mode, you must program SYSTEM OPTION ADDRESS 45.

Refer to SYSTEM OPTION ADDRESS 45 (Page 41)

NOTE: During the training mode, the journal paper will be not printed.

REPORT AND BALANCING

REPORT	REPORT NO.	REPORT TYPE	KEY LOCK	KEY SEQUENCE
FINANCIAL	1	X .	х	1 SUBTL
		z	z	1 SUBTL
		X2	х	201 SUBTL
		Z2	Z	201 SUBTL
TIME	2	×	×	2 SUBTL
		z	z	2 SUBTL
		X2	Х	202 SUBTL
		Z2	Z	202 SUBTL
PLU	3	×	X	3 SUBTL
		Z	Z	3 SUBTL
		X2	Х	203 SUBTL
		X2	Z	203 SUBTL
IN-DRAWER	4	Х	Х	4 SUBTL
DAILY SALES	5	X2	Х	205 SUBTL
		Z2	Z	205 SUBTL
OPEN TABLE	6	×	Х	6 SUBTL
(or OPEN CLERK)				
INDIVIDUAL CLERK		×	X	SUBTL CLERK
		z	Z	SUBTL CLERK
		X2	Х	20 SUBTL CLERK
		Z2	Z	20 SUBTL CLERK
FROM/TO DEPT		x	Х	FROM DEPT. KEY
				TO DEPT. KEY
FROM/TO PLU		x	Х	FROM XXXX (PLU NO.) PLU
				TO XXXX (PLU NO.) PLU
DEPARTMENT	30	×	Х	30 SUBTL
		z	Z	30 SUBTL
		X2	X	230 SUBTL
		Z2	Z	230 SUBTL

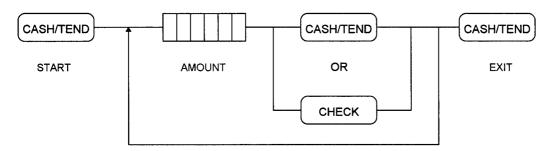
1 REPORT MODES

REPORT TYPE	TOTALS	Z Counter	REMARKS
Х	Not reset	Not advance	
Z	Reset to '0'	Advance	
X2 ·	Not reset	Not advance	Period-to-date report
Z2	Reset to '0'	Advance	Period-to-date report

NOTE: If you don't want to open the drawer when the reports are run, set SYSTEM OPTION ADDRESS 5 to value 'b'. (Page 38)

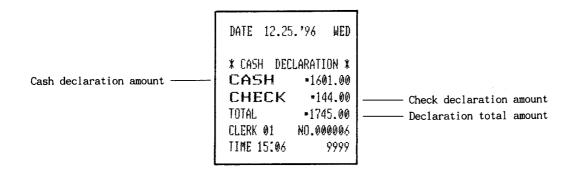
2 CASH DECLARATION

If the compulsory cash declaration is programmed (SYSTEM OPTION ADDRESS 5), the cash declaration must be performed in "X / Z" mode prior to taking X / Z reports.



NOTE: After doing cash declaration in the 'X / Z' mode, if you turn the control key to any other position except the 'X / Z', the cash declaration function will be lost.

So if you want to print the reports, you should perform the cash declaration again.



- 3 REPORTS
- 3.1 OPEN TABLE (or OPEN CLERK) REPORT

NOTE: If you operate table management (SYSTEM OPTION ADDRESS 46 = 0),

open table report will be issued,

while if you operate cashier overlap (SYSTEM OPTION ADDRESS 46 = 1),

open clerk report will be issued.

NOTE: If open table (or clerk) exists, the reports in 'Z' mode will not be issued and an error tone will sound ('E9').

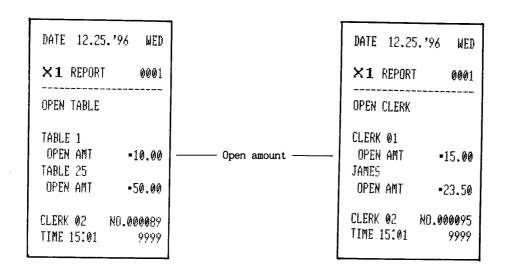
So if you want to issue the reports in 'Z' mode, you must finalize the open table (or clerk).

A. X open table (or clerk) report (Key lock: 'X')

6 SUBTL

* SAMPLE OPEN TABLE REPORT *

* SAMPLE OPEN CLERK REPORT *



3.2 FINANCIAL REPORT

A. X financial report (Key lock : 'X')

1 SUBTL

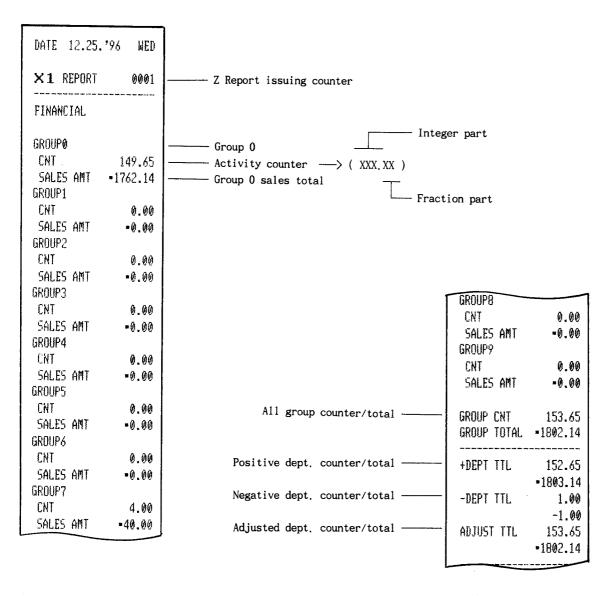
B. Z financial report (Key lock : 'Z')

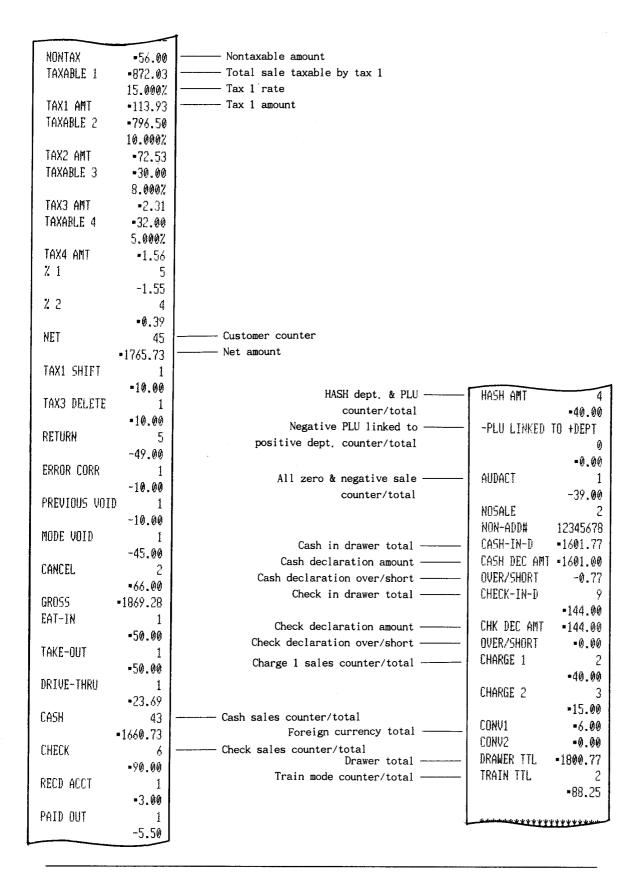
C. X2 financial report (Key lock : 'X')

201 SUBTL

D. Z2 financial report (Key lock : 'Z')

* SAMPLE FINANCIAL REPORT *





CLERK Ø1 NET NOSALE	37 •1597.23 2
CLERK 02 NET NOSALE	? •145.00 0
CLERK 03 NET NOSALE	•0.00 0
JAMES NET NOSALE	1 •23.50 0
CLERK 05 NET NOSALE	0.00 0.00
CLERK 06 NET NOSALE	-0.00 0
CLERK 07 NET NOSALE	0 -0.00 0
CLERK 08 NET NOSALE	-0.00 0
CLERK 09 NET NOSALE	-0.00 0
CLERK 10 NET NOSALE	0 •0.00
CLERK 11 NET NOSALE	0 •0.00 0
CLERK 12 NET NOSALE	0 •0.00 0

Clerk's customer counterClerk's net amountClerk's nosale counter

CLERK 13	0
NET	-0.00
NO5ALE	0
CLERK 14	0
NET	-0.00
NOSALE	0
CLERK 15	0
NET	-0.00
NOSALE	0
*******	*****
GRAND	
	•1869,28

CLERK 01

TIME 15:07

GRAND total -

NO.000007

9999

3.3 TIME REPORT

A. X time report (Key lock : 'X')

B. Z time report (Key lock : 'Z')

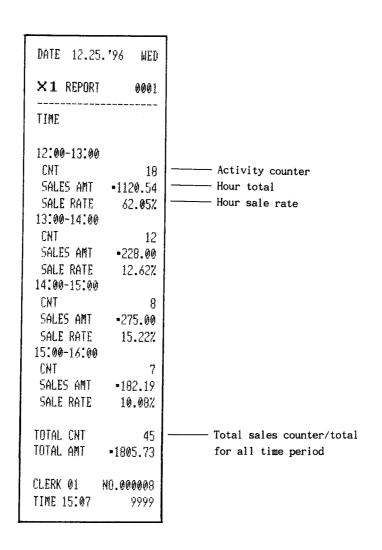
C. X2 time report (Key lock : 'X')

D. Z2 time report (Key lock : 'Z')

2 SUBTL

202 SUBTL

* SAMPLE TIME REPORT *



3.4 PLU REPORT

A. X PLU report (Key lock: 'X')

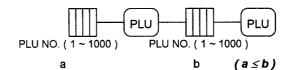
B. Z PLU report (Key lock: 'Z')

C. X2 PLU report (Key lock: 'X')

D. Z2 PLU report (Key lock: 'Z')

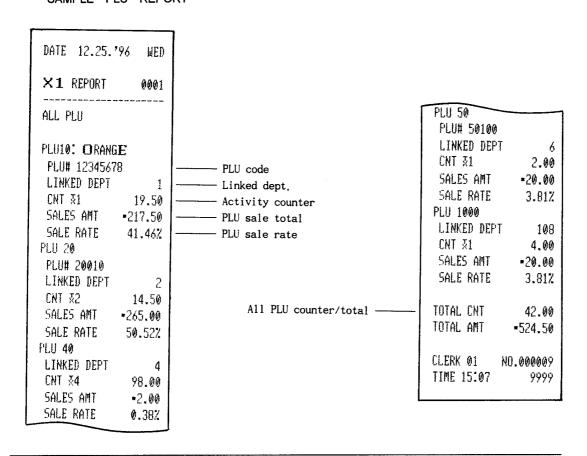
3.5 FROM / TO PLU REPORT

A. X from / to PLU report (Key lock : 'X')



NOTE: If you press the "CASH/TEND" key during issuing the PLU or FROM/TO PLU report, the report will be finished after printing TOTAL COUNT and TOTAL AMOUNT.

* SAMPLE PLU REPORT *



3.6 IN-DRAWER REPORT

A. X in-drawer report (Key lock : 'X')

4 SUBTL

3.7 DAILY SALES REPORT

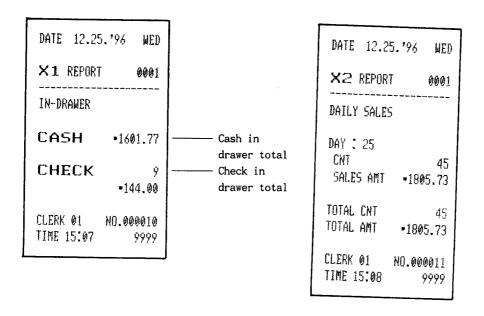
A. X2 daily sales report (Key lock : 'X')

B. Z2 daily sales report (Key lock : 'Z')

2 0 5 SUBTL

* SAMPLE IN-DRAWER REPORT *

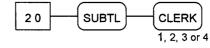
* SAMPLE DAILY SALES REPORT *



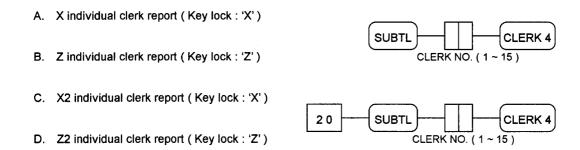
3.8 INDIVIDUAL CLERK REPORT

3.8.1 IN CASE OF 4 CLERKS (SYSTEM OPTION 28'S VALUE 'C' = 0)

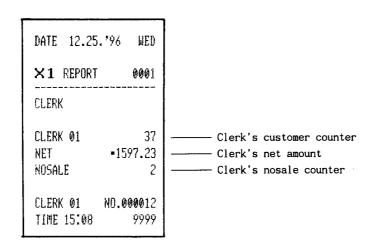
- A. X individual clerk report (Key lock : 'X') SUBTL CLERK B. Z individual clerk report (Key lock : 'Z') 1, 2, 3 or 4
- C. X2 individual clerk report (Key lock : 'X')
- D. Z2 individual clerk report (Key lock : 'Z')



3.8.2 IN CASE OF 15 CLERKS (SYSTEM OPTION 28's VALUE 'C' = 4)



* SAMPLE INDIVIDUAL CLERK REPORT *



* OPTIONAL FULL CLERK REPORT (SYSTEM OPTION 8) *

DATE 12.2	5.'96 WED
×1 REPOR	T 0001
CLERK	
CLERK 01 NET	37 •1597.23
NONTAX	-56.00
TAXABLE 1	•713.53
TAX1 AMT	•93.26
TAXABLE 2	•786.50
TAX2 AMT	•71.62
TAXABLE 3	•30.00
TAX3 AMT	•2.31
TAXABLE 4	- 32.00
TAX4 AMT	•1.56 5
4 1	-1.55
1 % 2	-1.33
1	•0.39
RETURN	5
	-49.00
ERROR CORR	1
	-10.00
PREVIOUS VO	ID 1
	-10.00
MODE VOID	1
CAUCH	-45.00
CANCEL	2
RECD ACCT	•66.00
NEED HELF	-3.00
PAID OUT	-3.00
	-5.50
CASH-IN-D	•1438.27
CHECK-IN-D	8
	-139.00

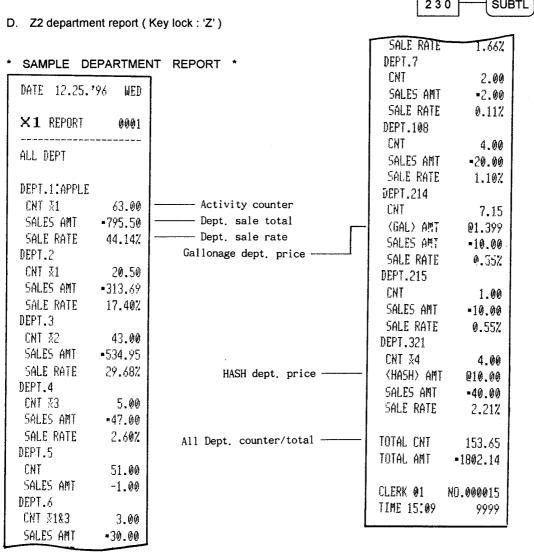
	_
CHARGE 1	2
	-40.00
CHARGE 2	3
1	-15.00
CONV1	•6.00
CONV2	-0.00
DRAWER TTL	•1632.27
TRAIN TTL	2
	•88.25
NOSALE	2
	•
CLERK 01	NO.000014
TIME 15:09	9999

3.9 FROM / TO DEPARTMENT REPORT

3.10 DEPARTMENT REPORT



C. X2 department report (Key lock : 'X')



TROUBLE SHOOTING

Check the following items if the cash register does not work correctly !!

- * Is the power cord plugged into the main socket correctly?
- Is the wall outlet supplying power?
 Try plugging in another appliance.
- * Is the control lock in the correct position?
- * Did you change the position of the control lock during registration of the transaction?

 If you set the control lock to another position while registration is in progress, an error will occur.

 Return to the previous control lock position and press the correct keys to finalize the original transaction before changing the control lock setting.

MEMORY PROTECTION BATTERY

Totaled sales and other items are protected during power failures by a built in memory protection battery.

The memory protection battery is charging when the power is on and discharging when the power is off. This cause the capacity of the battery to decrease after about one year of use.

A label on the back of the cash register shows the normal service period of the battery installed in your cash register.

NOTE: A weak battery has the potential of losing valuable transaction data.

SPECIFICATION

POWER	AC 230 V , 50 Hz					
CABINET	ABS (V0)					
PRINTER	ERP-300V (2 STATION DOT-MATR	ERP-300V (2 STATION DOT-MATRIX PRINTER)				
DISPLAY	FRONT 10 DIGITS / REAR 10 DIGIT	FRONT 10 DIGITS / REAR 10 DIGITS				
DRAWER	METAL (8 COINS / 4 BILLS)					
WEIGHT	15.0 Kg					
DIMENSION	SET = 374 (W) x 458 (D) x 195 (H) DRAWER = 400 (W) x 450 (D) x 111 (H)					
	(Including foot)					
USAGE CONDITION	TEMPERATURE : 0 $^{\circ}$ ~ 40 $^{\circ}$ HUMIDITY : 10 % ~ 90 %					
NOISE	UNDER 70 dB					

APPENDIX

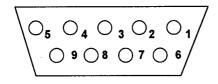
1 CHARACTER CODE TABLE

CHAR	á	à	â	ä	å	Ä	A	é	è	ê
CODE	001	002	003	004	005	006	007	008	009	010
CHAR	ë	É	í	ì	î	ï	ĺ	ñ	Ñ	ó
CODE	011	012	013	014	015	016	017	018	019	020
CHAR	ò	ô	ö	Ö	ú	ù	ü	û	Ü	æ
CODE	021	022	023	024	025	026	027	028	029	030
CHAR	ß	SPACE	!	"	#	\$	%	&	,	(
CODE	031	032	033	034	035	036	037	038	039	040
CHAR)	*	+	,	-		1	0	1	2
CODE	041	042	043	044	045	046	047	048	049	050
CHAR	3	4	5	6	7	8	9	:	;	<
CODE	051	052	053	054	055	056	057	058	059	060
CHAR	=	>	?	@	Α	В	С	D	E	F
CODE	061	062	063	064	065	066	067	068	069	070
CHAR	G	Н	l	J	к	L	М	N	0	Р
CODE	071	072	073	074	075	076	077	078	079	080
CHAR	Q	R	S	Т	U	V	w	х	Y	z
CODE	081	082	083	084	085	086	087	088	089	090
CHAR	Æ	Pt	f	¢	£	Ft	а	b	С	d
CODE	091	092	093	094	095	096	097	098	099	100
CHAR	е	f	g	h	i	j	k	I	m	n
CODE	101	102	103	104	105	106	107	108	109	110
CHAR	0	р	q	r	s	t	u	v	w	х
CODE	111	112	113	114	115	116	117	118	119	120
CHAR	у	z								
CODE	121	122								

2 ALPHA-NUMERIC KEYBOARD LAYOUT

3 COMMUNICATION INTERFACE

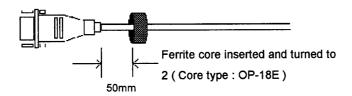
3.1 PIN DESCRIPTION FOR SERIAL INTERFACE



SERIAL PORT

SERIAL PORT				
PIN NO. SIGNAL				
1	Not connect			
2	RXD			
3	TXD			
4	DTR			
5	GND			
6	Not connect			
7	Not connect			
8	Not connect			
9	Not connect			

3.2 CABLE SPECIFICATION



CABLE FOR SERIAL PORT

4 COMMUNICATION WITH PC

This cash register can communicate with PC.

The programming contents are downloaded from PC and uploaded to PC.

The reports are uploaded to PC.

To communicate with PC,

- (1) Turn the control lock key to the "SERVICE MODE".
- (2) Press the "RECD ACCT" key. The message "--OnLinE--" will be shown on the display.

NOTE: If you want to escape from "online" mode, press the "CLEAR" key.

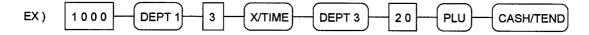
5 PRINTING ON THE ROLL PRINTER

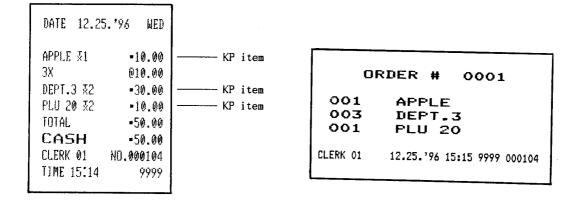
If you want to print the sale items on the roll printer, set the SYSTEM OPTION ADDRESS 48 to 1.

And then, the sale items will be printed on the roll printer when tendering.

Refer to SYSTEM OPTION ADDRESS 54 (Page 42) to select the printer type.

NOTE: If the roll printer is disconnected, the contents will be printed on the receipt.



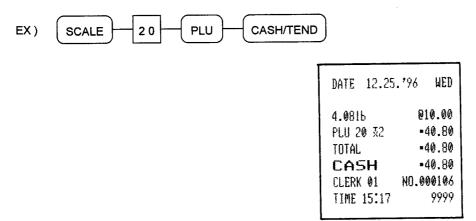


6 SCALE

If you want to operate **the scale**, set the **SYSTEM OPTION ADDRESS 42** to **1**. And then you can use the "PRICE INQ." key as the "SCALE" key.

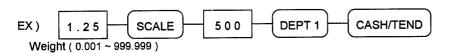
6.1 DIRECT SCALE ENTRY

When product is placed on the scale and the "SCALE" key is pressed, the weight will be appear on the display.



6.2 MANUAL WEIGHT ENTRY

If you want to make manual weight entries, set the SYSTEM OPTION ADDRESS 42's value 'b'.



DATE	12.25	.'96 WED
1.251 APPLE TOTAL CAS CLERK TIME	전 5 H	95.00 -6.25 -6.25 -6.25 NO.000108 9999