



IP-EMZ

Service Manual [2nd Edition]

COUNTRY: CAN. USA. EU.



IMPORTANT

- Read this manual thoroughly, and do not perform installation, operation, maintenance, or inspection unless you fully understand all of the contents.
- Keep this manual in a safe place where you can refer to it easily while installing, operating, and carrying out maintenance or inspections.

ISHIDA CO., LTD.

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REVISION HISTORY

Edition	Date	Description
1	Sep. 2008	1 st edition
2	Apr. 2021	Revised "Chapter 7 Maintenance"

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IMPORTANT NOTICE

This manual explains the procedures to perform installation, operation, service, or maintenance of the machine.

Those who handle the machine must be aware of the hazards involved. These dangers may not be obvious, so it is imperative to follow the instructions detailed in this manual when installing, operating, inspecting, or servicing the machine. Therefore, we recommend that you thoroughly read and understand this manual before installing, operating, inspecting, or servicing the machine, and keep this manual in a safe place where you can refer to it whenever necessary.

ISHIDA is not liable for any damage, loss or injury that results from incorrect operation, insufficient caution, unauthorized modifications to the machine, or failure to follow the instructions contained in this manual.

In the recent weighing industry, the latent hazards involved with handling the machine have increased due to new materials, new processing methods, and higher processing speeds, and it is impossible to predict all of the possible dangers.

Likewise, there are far too many operations which cannot or should not be performed to fully describe all of them in the manual. Please assume that any handling or operation not specifically described in this manual should never be performed.

Safety countermeasures should be carefully considered and implemented before performing any installation, operation, inspection, or maintenance procedure not specifically described in this manual or indicated on the machine itself.

CHANGE IN SPECIFICATIONS

Machine specifications and accessories may be changed at any time due to improvements or other reasons. Consult with your ISHIDA representative at any time to confirm the actual specifications of the purchased machine.

ERRORS AND OMISSIONS

The information in this manual has been carefully checked and is believed to be accurate. However, please understand that the descriptions in this manual may not agree with the actual machine due to machine improvements. The information is subject to change without prior notice in the future. ISHIDA assumes no responsibility for clerical, typographical or proofreading errors, or omissions.

LIMITATIONS OF LIABILITY

ISHIDA assumes no responsibility for special, indirect, or consequential damages, loss of profits or commercial loss in any way connected with the machine, whether such claim is based on contract, warranty, negligence, or strict liability.




ISHIDA shall assume responsibility for problems with the machine or the system based on an individual maintenance contract. However, ISHIDA shall not be responsible for secondary problems.

ISHIDA assumes no responsibility for the user's programming of this machine, or any consequence thereof. In no event shall ISHIDA be responsible for warranty, repair, or other claims regarding the machine unless ISHIDA's analysis confirms that the machines were properly handled, stored, installed, and maintained and not subject to contamination, abuse, misuse, or inappropriate modification or repair.

PRECAUTION SYMBOLS

This machine is manufactured for use according to proper procedures by a qualified operator and only for the purposes described in this manual.

Warning symbols in this manual are divided into three categories, depending on the level of danger, or seriousness of potential injury. The definition of each of these warnings and precautions is shown below. Failure to heed these warnings or precautions may result in bodily injury or damage to the machine.

 DANGER	Indicates information that, if not heeded, is likely to result in loss of life or serious injury.
 WARNING	Indicates information that, if not heeded, could possibly result in loss of life or serious injury.
 CAUTION	Indicates information that, if not heeded, could result in relatively serious or minor injury, damage to the machine, or faulty operation.

SAFETY CONSIDERATIONS

This service manual contains information necessary for servicing the machine. To ensure the safety and long operating life of this machine, it is important to observe the following precautions:

- **Servicing is to be done by qualified service personnel only**
These service instructions are for use by qualified service personnel who fully understand the potential hazards involved. To avoid any possible danger, do not perform any service procedures unless qualified to do so.
- **Perform only the specified service procedures**
To ensure personal safety, do not perform any service procedures that are not specifically mentioned in this manual.
- **Avoid servicing while power is being supplied**
The power supply to the machine is disconnected only when the electrical plug is removed from the electrical outlet. For protection against electrical shock, remove the plug before performing any servicing to the machine. Servicing the machine while power is being supplied and opening or removing covers or enclosures should be avoided as much as possible. When servicing cannot be performed by any other means, service personnel should take precautions against the danger of electrical shock or other potential hazards involved.
- **Take precaution against residual electrical charge hazard**
Capacitors inside the machine may still hold an electrical charge even after power is disconnected.
- **Use the same type of fuses and components for replacement parts**
To avoid the potential hazards involved, do not replace fuses or components with types other than those specified in the parts list for this machine.

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1 INSTALLATION

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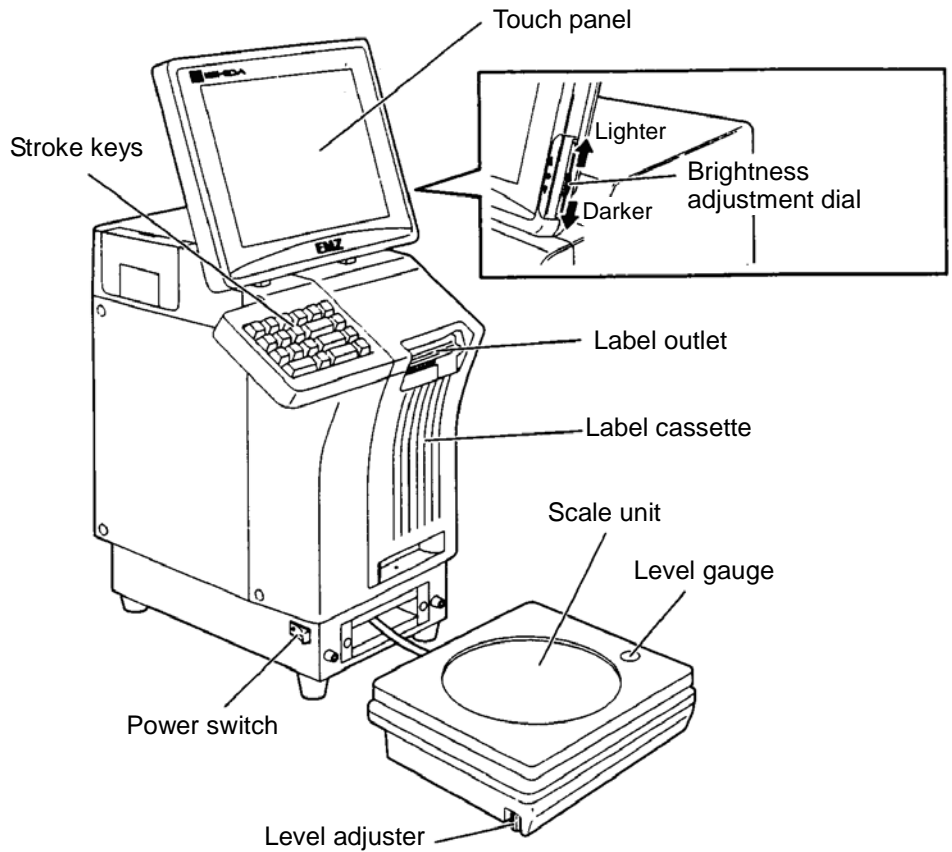
1.1 SPECIFICATIONS

No.	Item	Specifications
1	Operating environment	
1.1	Temperature range	-5°C - 40°C (23°F – 104°F)
1.2	Operating humidity	20% - 85% (Non condensing)
2	Outer dimensions	
2.1	Main body	W285 × D368 × H645mm (11.2 × 14.5 × 25.4)
2.2	Scale unit	W300 × D270 × H88mm (11.8 × 10.6 × 3.5)
3	Mass	
3.1	Main body	19kg (41.8 lbs)
3.2	Scale unit	6kg (13.2 lbs)
4	Power supply	CAN, USA: AC110-120V 50/60Hz 4A EU: AC230V 50/60Hz 4A
5	Weighing capacity	CAN: 6kg/15kg Graduation: 0.002kg (0 –6kg),0.00 5kg (6- 15kg) 15lb/30lb Graduation: 0.005lb (0 – 15lb),0.01lb (15 – 30lb) USA: 15lb/30lb Graduation: 0.005lb (0 – 15lb),0.01lb (15 – 30lb) EU: 3kg/6kg Graduation: 0.001kg (0 –3kg),0.00 2kg (3- 6kg)
6	Weighing accuracy	1/3000
7	Display unit	10.4-inch TFT color liquid crystal VGA with backlight (640 × 480 dots)
8	Printing method	Direct thermal method
9	Thermal head	LH4114K (TDK) 3-inch (640 dots), 8 dots/mm
10	Print speed	100mm/sec
11	Effective print size	78mm
12	Label size	
12-1	Label width	30 - 80mm
12-2	Label length	30 - 150mm
12-3	Backing paper width	32 - 82mm
13	Label diameter	
13-1	Core inner diameter	φ 76mm
13-2	Max. outer diameter	φ 2240mm
14	Keys	
14-1	Touch panel	212mm × 159mm
14-2	Stroke key	24 keys
15	I/O	Ethernet:1ch RS-232C:2ch PCMCIA:2ch I2NET:2ch(ISHIDA Original Protocol)
16	Program storage medium	
16-1	Flash ROM (1MB)	Boot program
16-2	Compact Flash (32MB)	OS + Application program
17	Memory capacity	*The registration number varies depending on the total memory capacity.
17-1	PLU master	511 characters, 4,000 PLUs, 5 prices
17-2	Additive master	511 characters, 9,999 additives
17-3	POP master	39 characters, 999 POPs
17-4	Comment master	511 characters, 99 comments
17-5	Origin master	39 characters, 9,999 origins
17-6	Storage temperature master	119 characters, 99 temperatures
17-7	Storage method master	119 characters, 99 methods
17-8	Free master 1	511 characters, 99 messages
17-9	Free master 2	511 characters, 99 messages
17-10	Free master 3	511 characters, 99 messages

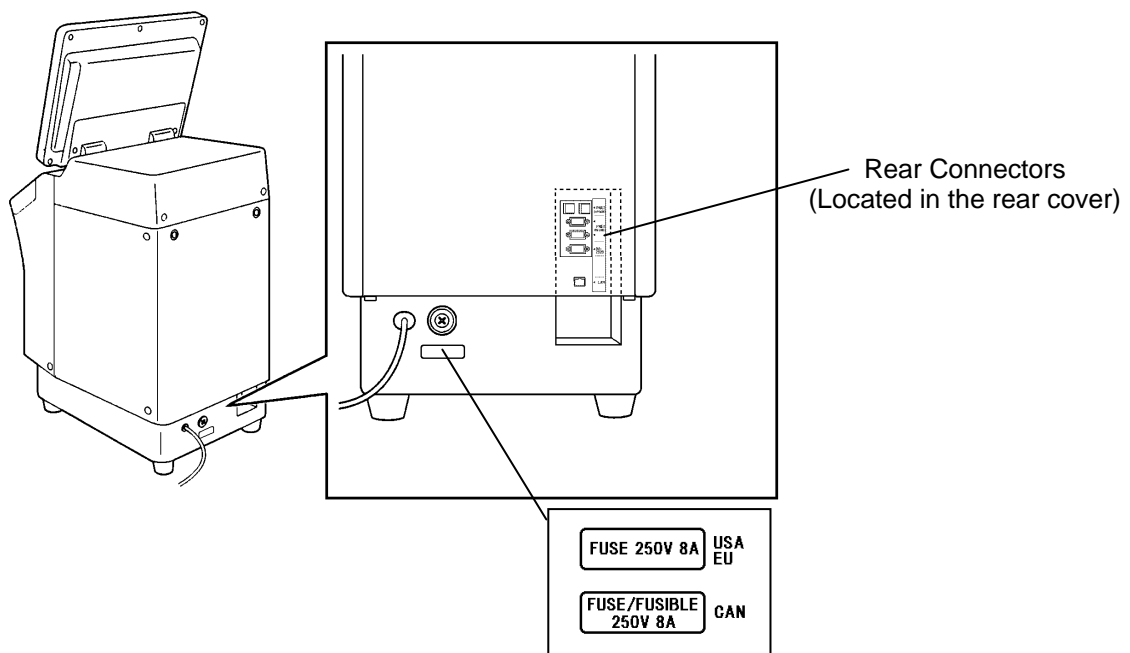
No.	Item	Specifications
17-11	Free master 4	511 characters, 99 messages
17-12	Free master 5	511 characters, 99 messages
17-13	Format master	99 characters, 2,048 bytes/format
17-14	Label master	99 labels
17-15	Department name master	13 characters, 9,999 names
17-16	Group name master	13 characters, 9,999 names
17-17	Class name master	13 characters, 9,999 names
17-18	Sales promotion master	99 images, 99 comments, 999 origins
17-19	Store master	9,999 stores, 48 characters/store name, 48 characters/store address
17-20	Tray master	9,999 trays, 10 characters/tray
17-21	Memo preset keys	56 items (28 items x 2 pages)
17-22	Classification preset keys	36 types (5 ranges/type)
18	Barcode print	
19	POS code system	NON-PLU 13 digits, NON-PLU 8 digits PLU 13 digits, PLU 8 digits
20	POS types	5-digit standard code, 6-digit code including check price, 6-digit code including flag, 5-digit code including check price, 6-digit code + 5-digit price
21	Durability	
21-1	Number of label issues	16.2 million labels.(label length 42mm, 9,000 labels, 360 operation days, 5 years, 721km)
21-2	Printer frame drawer	7,300 times (4 times/day, 360 days x 5 years)
21-3	Display angle adjustment frequency	3,650 times (2 times/day, 360 days x 5 years)
21-4	Volume adjustment frequency	7,300 times (4 times/day, 360 days x 5 years)
21-5	LCD backlight	40,000 hours (10.9 years on the assumption of 10 hours/day)
21-6	Power switch	10,000 times, 6.8 years on the assumption of 4 times/day

1.2 NAME OF EACH PART

1.2.1 FRONT VIEW

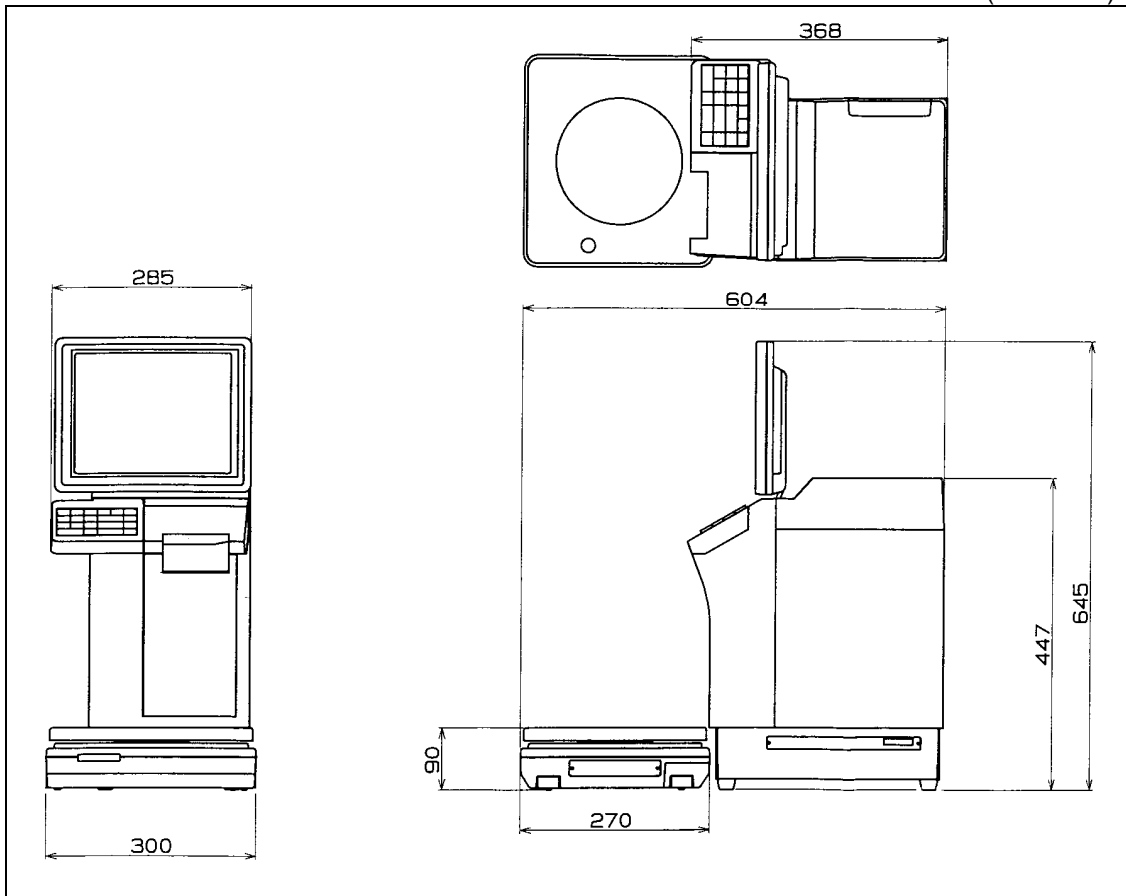


1.2.2 REAR VIEW



1.3 OUTER DIMENSIONS

(Unit: mm)



1.4 PREPARATION FOR INSATALLATION

1.4.1 UNPACKING

Confirm that the following things are packed.

- Main body
- Scale unit
- Grounding cable
- Tool Screw driver(+)
- User's manual
- Weight (500g)
- Cleaning pen

NOTE: Parts are fixed with adhesive tapes so as not to move when transported.
Remove these tapes when unpacking.

1.4.2 THINGS TO BE PREPARED

- Weight (6kg,15kg,30lb)
- IF-21FD
- 3.5-inch 2DD floppy disk in which the user's data is recorded
- I2NET cable (D-sub 9 pin -modular)
- Labels

1.5 PRECAUTIONS FOR INSTALLATION

1.5.1 GENERAL PRECAUTIONS

- **DO NOT PUT HANDS IN THE MACHINE**

When you need to put your hand inside the machine, always push the Emergency Stop Button first. Never put your hand inside the machine.

- **ALWAYS KEEP HANDS AWAY FROM THE MOVING PARTS**

When the power is turned ON, some parts may still move after a commodity or tray has been called, and your hand may get caught in the machine.

- **DO NOT PUT YOUR HAND INSIDE THE POWER SUPPLY UNIT**

There is danger of electric shock if you touch the inside of the Power Supply Unit. Never touch directly or spill water into the unit. Also, never touch the Main Power Switch with wet hands.

- **DO NOT DISASSEMBLE OR MAKE ANY ALTERATIONS TO THE MACHINE**

The machine can be damaged if disassembled incorrectly. Making any alterations without permission, or removing any parts other than those specified, may cause a serious accident or injury.

- **HANDLE WITH CARE AS THIS IS A PRECISION MACHINE**

Bumps or shocks to the machine can cause damage.

1.5.2 MAINTENANCE PRECAUTIONS

- Keep the area around the machine clear of any dust and debris.
- Do not leave screws or other foreign objects in the machine after performing routine maintenance since this can cause major damage to the machine when the electrical switch is turned on.
- Always remove wires by holding the connector and pulling to disconnect. Do not disconnect by pulling on the wires themselves since this may cause a wire to snap or damage the connection.
- Before disassembling or adjusting this machine, make sure you thoroughly understand and follow each step in the order indicated in this manual.

1.5.3 PROHIBITED LOCATIONS


WARNING

Do not install the machine in the following types of places:

- Places subject to high temperatures or high humidity
- Places exposed to direct sunlight
- Places where water or other liquids are easily spilled on the machine
- Places subject to excessive vibration or unstable foundations
- Places exposed to direct cold air from air conditioners or refrigerators
- Places where the floor or foundation is unstable
- Places subject to a lot of dust or dirt
- Places with large voltage fluctuations

1.5.4 PRECAUTIONS FOR POWER SUPPLY


WARNING

Do not use an unspecified power supply.

- Use a power supply with rated voltage ground.
- Prepare a dedicated power source.
A power supply that generates voltage variation may cause a malfunction.
- To avoid any potential electrical shock, securely attach the ground wire to the grounding provision.

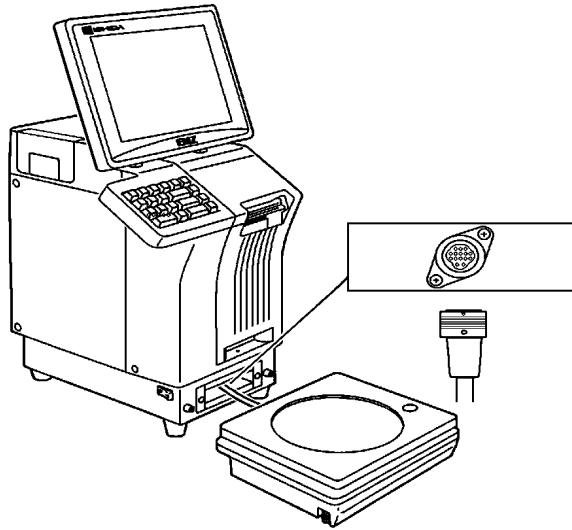
1.6 HARDWARE INSTALLATION

1. Install the main body to be able to see the display clearly and perform the key operation easily.

2. Connect the cable of the scale unit with the main body.

CAUTION

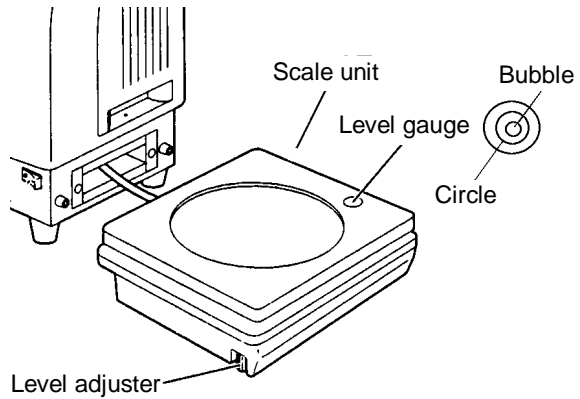
Connection or separation in the power-on state may cause damage.



3. Turn the level adjuster so that the unit is horizontally installed. To install the scale unit horizontally, turn the level adjuster until the bubble locates at the center of circle of the level gauge.

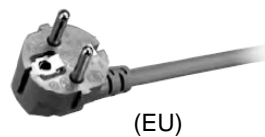
CAUTION

If this adjustment is not performed accurately, a weighing error may occur.



4. Make sure that the machine is grounded at the power supply outlet.

5. Insert the power plug into the outlet.



7. When connecting other devices, connect them according to the following.
- | | |
|--|--------------------------------|
| Other machine of the master/satellite system I2NET (INLINE) (Dsub 9 pin) | |
| Optional printer..... | I2NET (OPTION1) (Modular jack) |
| IF-21FD..... | I2NET (INLINE) (Dsub 9 pin) |
| Journal printer | RS-232C |

8. Fix the harnesses.

NOTE:

Nylon clamps to fix harnesses are not attached. Prepare the nylon clamps beforehand with their sizes according to the number of the connected harnesses.

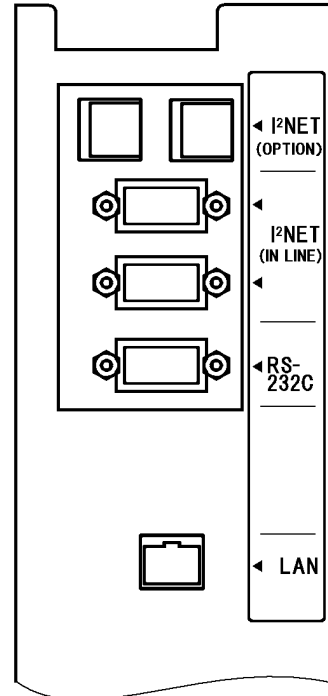


Fig.1 Rear Connectors
(Located in the rear cover)

9. Load labels to be used by the user. Refer to “Label Replacement” in the User’s Manual.

1.7 FINALIZING INSTALLATION

Weighing check

Span check

6kg:

Place the 6kg weight on the weighing platter and confirm that the displayed weight is within $\pm 1d$ (2g).

15kg:

Place the 15kg weight on the weighing platter and confirm that the displayed weight is within $\pm 1d$ (5g).

30lb:

Place the 30lb weight on the weighing platter and confirm that the displayed weight is within $\pm 1d$ (0.01lb).

Four corner check

6kg:

Place weights (Approximately 3kg but not heavier) on the center and four corners of the weighing platter, and confirm that the difference between the center and four corners is within $\pm 1d$ (1g).

15kg:

Place weights (Approximately 6kg but not heavier) on the center and four corners of the weighing platter, and confirm that the difference between the center and four corners is within $\pm 1d$ (2g).

30lb:

Place weights (Approximately 15lb but not heavier) on the center and four corners of the weighing platter, and confirm that the difference between the center and four corners is within $\pm 1d$ (0.005lb).

Operation check

Call up a product, place a load on the weighing platter, and issue a label.
After issuing the label, clear the result.

Set content save

Connect the IF-21FD and save the settings.

Operation explanation

Explain the operation method and precautions to the user.

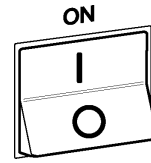
A graphic for Chapter 2. It features a grey square on the left containing the white number '2'. To its right is a large black rectangle with the words 'SETUP MODE' written in white, bold, sans-serif capital letters.

Contents

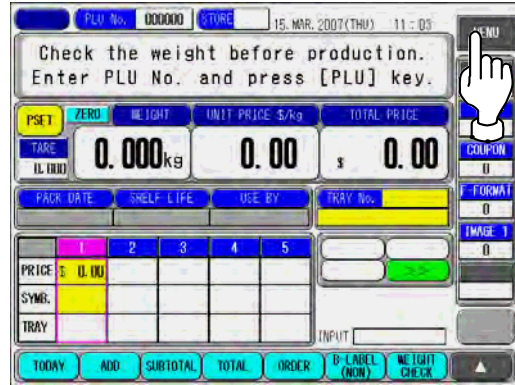
- 2.1 SETUP MENU ENTRY 2
- 2.2 SETUP MENU 3
- 2.3 EXPIRY DATE SETTING 5
- 2.4 PASSWORD SETTING 8
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- 2.15 PLU OPERATION SETTING 26
- 2.16 ERROR SETTING 27
- 2.17 PRINT SELECT SETTING 28

2.1 SETUP MENU ENTRY

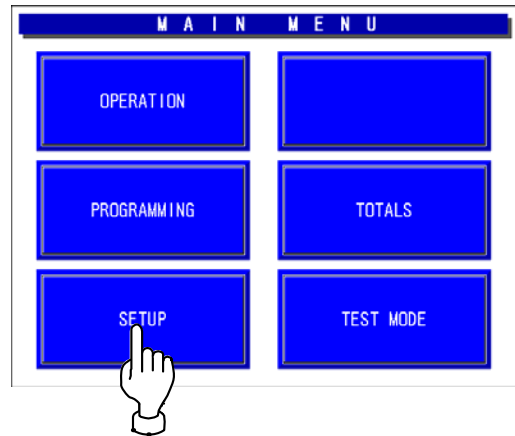
1. Turn on the Main Power Switch.



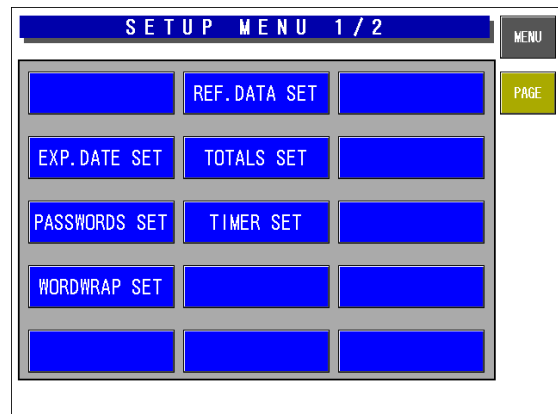
2. Press the [MENU] button on the initial screen.



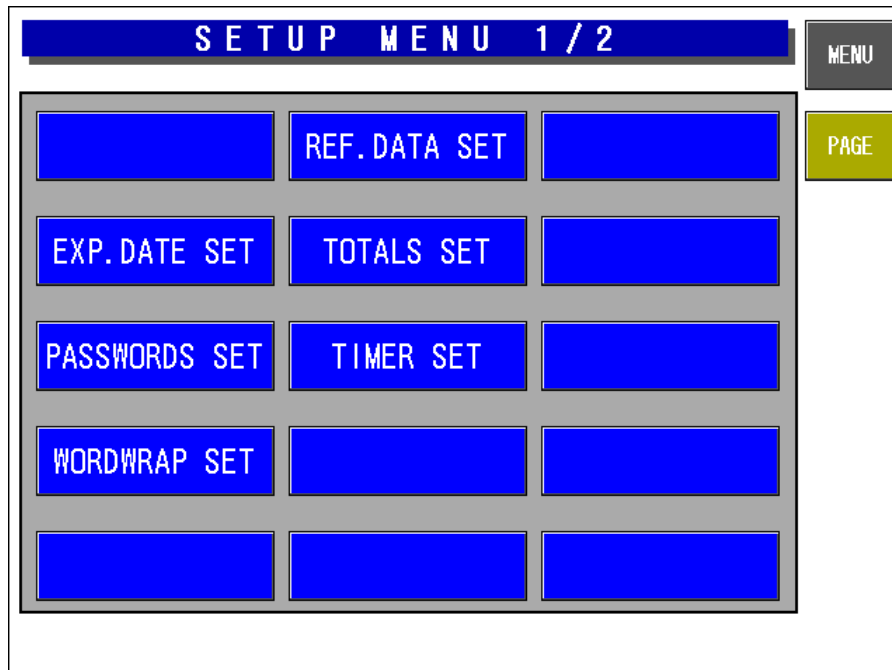
3. Press the [SETUP] button to display the Setup Menu screen.



4. The Setup Menu screen appears.

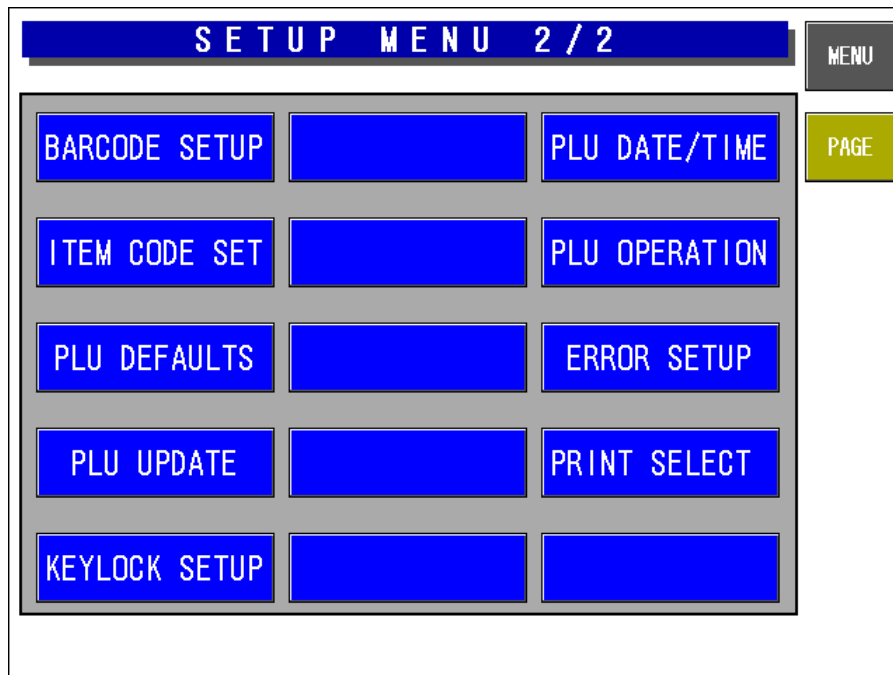


2.2 SETUP MENU



Setup Menu Screen (1/2)

Buttons/Display Fields	Function
Expiry Date Set	Changes to the Expiry Date Setting screen. Set the expiry text change days, cutoff date text, and pack date text.
Password Set	Changes to the Password Setting screen. Set the password for entering Registration, Setup, Total, and Subtraction modes.
Word-wrap Set	Changes to the Word-wrap Width Setting screen. Set the text width in 0.1mm increments for PLU name, Message, etc. for an automatic linefeed.
Reference Data Set	Changes to the Reference Data Setup screen. Specify the operation when "Refer" is selected in the PLU registration, and set the reference data.
Total Set	Changes to the Total Add Setting screen. <ul style="list-style-type: none"> ▪ Set whether or not to add the data to totals. ▪ Set a maximum of 20 target commodities to be added to hourly totals. ▪ Set the weight data type (fixed weight, actual weight) when a fixed price commodity is added to totals.
TIMER Set (Only EU)	
MENU	Changes to the first screen of the Setup Menu.
PAGE	Turns over the screen.



Setup Menu Screen (2/2)

Buttons/Display Fields	Function
Barcode Setup	Changes to the Barcode Setting screen. Set the POS type, POS system, and POS flag (system reference data).
Item Code Set	Changes to the Item Code Setting screen. Assign the classification code (position/digit number) in an item code, and set the code position and the digit number for a barcode.
PLU Defaults	Changes to the PLU Default Data Setting screen display. Set the default master data when newly created in the PLU registration.
PLU Update	Changes to the PLU Update screen. Perform the batch data changing process for the master data of existing commodities.
Key Lock Setup	Changes to the Key Lock Setup screen. Set the key lock password, and the key lock availability for each item.
PLU Date/Time	Changes to the PLU Date/Time Setting screen. Set the pack date holding function, accrued pack date processing, and time rounding.
PLU Operation	Changes to PLU Operation Setting screen. Set the number of digits for calling a PLU code, register code, wrapping mode, unit price holding function, and shop change processing.
Error Setup	Changes to the Error Setup screen. Set the processing procedure when a PLU code is not found, the price data is "0", a PLU in which the tare weight is not registered is called, or the head failure is detected.
Print Select	Changes to the Print Select screen. <ul style="list-style-type: none"> ▪ Set whether to print the barcode on the top of the tray when two labels are issued, and the barcode is set to print on the bottom label. ▪ It is referred when "System Reference" is set in the barcode print selection when two labels are issued in the store master registration.
MENU	Changes to the first screen of the Setup Menu.
PAGE	Turns over the screen.

2.3 EXPIRY DATE SETTING

Note: This function does not use, In the case of 6 or more characters of the date title. The title of the date is using the [UNIT TYPE =FIXED Character] of a label format.

EXPIRY DATE SETTING MENU

1. Set the SWITCH DAYS.
The number of days set is BEFORE SWITCH.
2. If it's necessary to change BEFORE/AFTER SWITCH, and/or letters, choose one and then use the EDIT key to edit them.

SWITCH DAYS
5 DAY(S) SET

BEFORE SWITCH	SHELF LIFE	EDIT
AFTER SWITCH	SHELF LIFE	
PACK DATE	PACK DATE	

INPUT

Expiry Date Setting Screen

LETTER NAME (BEFORE) RETURN

USE BY

ERASE

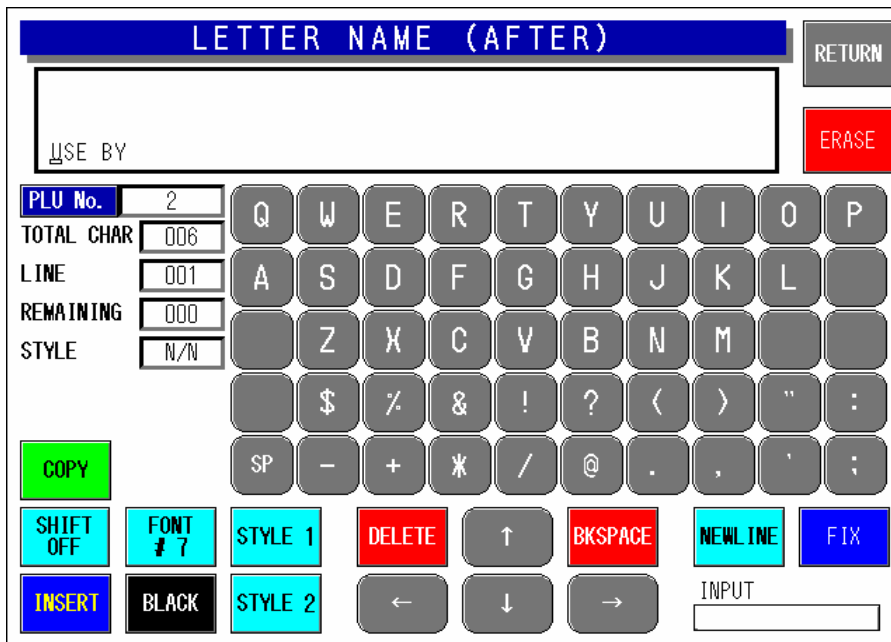
PLU No. 1
TOTAL CHAR 006
LINE 001
REMAINING 000
STYLE N/N

COPY

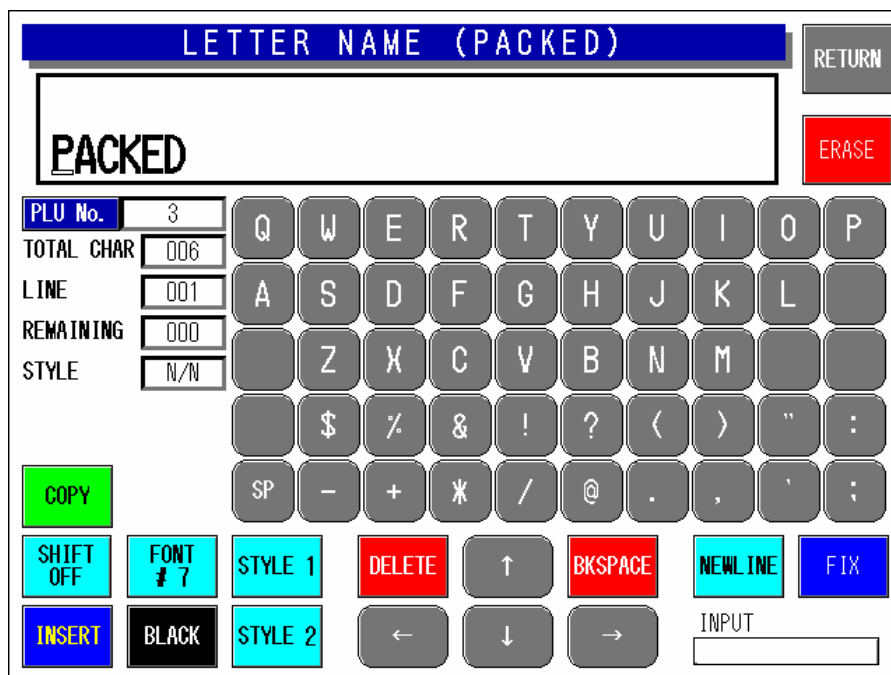
SHIFT OFF FONT # 7 STYLE 1 DELETE ↑ BKSPACE NEWLINE FIX

INSERT BLACK STYLE 2 ← ↓ → INPUT

Text Edit (Before) Screen



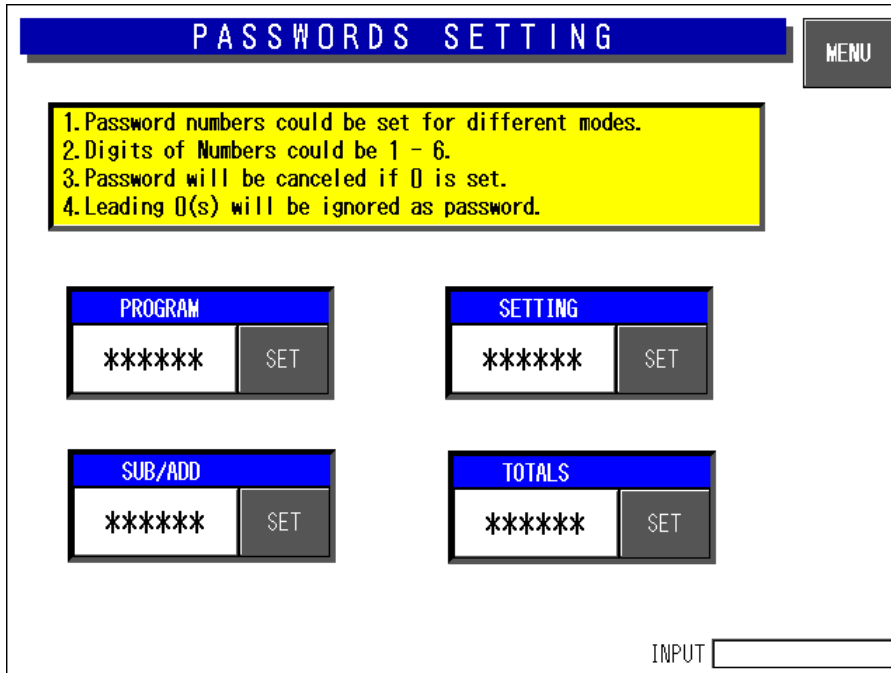
Text Edit (After) Screen



Text Edit (Packed) Screen

Buttons/Display Fields	Function
MENU	Changes to the first screen of the Setup Menu.
Switch Days	Press the [SET] button after numeric entry (0-99) to set the entered data as switching days. When the expiry date is same as or before the "Switch Days", the text in the "Before Switch" field is printed. When "0" is set in this field, switching does not happen and the text in the "Before Switch" field is printed.
Before Switch	Selects "Before Switch" field and the field color changes yellow. Press the [EDIT] button to display the text edit screen. Up to 6 characters can be registered.
After Switch	Selects "After Switch" field and the field color changes yellow. Press the [EDIT] button to display the text edit screen. Up to 6 characters can be registered.
Pack Date	Selects "Pack Date" field and the field color changes yellow. Press the [EDIT] button to display the text edit screen. Up to 6 characters can be registered.

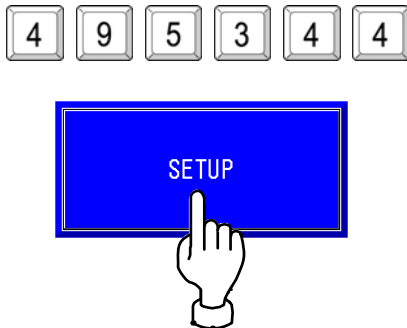
2.4 PASSWORD SETTING



Password Setting Screen

Buttons/Display field	Function
MENU	Changes to the first screen of the Setup Menu.
Password	Set the password data by pressing this button after 6-gigit numeric entry. Press this button after "000000" entry to cancel the password and the mode selection. Only one password can be registered.
Mode Selection Buttons	Press the desired button(s) to select the mode that requires the password entry. The selected mode button becomes blue.

When you have forgotten the password.



2.5 WORDWRAP WIDTH SETTING

WORD WRAP WIDTH SETTING

1. Input number then push the "SET" button.
 2. Be sure to input a 3~4 digit number.
 Note:For 60mm and 64mm Set as 600.

<div style="background-color: #000080; color: white; text-align: center; padding: 2px; font-weight: bold;">PLU NAME</div> <div style="display: flex; justify-content: space-between; padding: 2px;"> 570 <input type="button" value="SET"/> </div>	
<div style="background-color: #000080; color: white; text-align: center; padding: 2px; font-weight: bold;">EXTRA MSG2 WIDTH</div> <div style="display: flex; justify-content: space-between; padding: 2px;"> 200 <input type="button" value="SET"/> </div>	<div style="background-color: #000080; color: white; text-align: center; padding: 2px; font-weight: bold;">EXTRA MSG3 WIDTH</div> <div style="display: flex; justify-content: space-between; padding: 2px;"> 200 <input type="button" value="SET"/> </div>
<div style="background-color: #000080; color: white; text-align: center; padding: 2px; font-weight: bold;">EXTRA MSG2 PITCH</div> <div style="display: flex; justify-content: space-between; padding: 2px;"> 2 <input type="button" value="SET"/> </div>	<div style="background-color: #000080; color: white; text-align: center; padding: 2px; font-weight: bold;">EXTRA MSG3 PITCH</div> <div style="display: flex; justify-content: space-between; padding: 2px;"> 2 <input type="button" value="SET"/> </div>

INPUT

Word-wrap Width Setting Screen

Buttons/Display Fields	Function
MENU	Changes to the first screen of the Setup Menu.
PLU Name	Enter a numeric value (1-9999) and press the [SET] button to set the entered value (unit: 0.1mm) as a word-wrap width value.
Extra Message 1,2 Width	Enter a numeric value (1-9999) and press the [SET] button to set the entered value (unit: 0.1mm) as a word-wrap width value.
Extra Message 1,2 Pitch	Enter a numeric value (1-99) and press the [SET] button to set the entered value (unit: 0.1mm) as a gap between characters.

2.6 REFERENCE DATA SETUP

REFERENCE DATA SETUP 1 / 2									
PACK DATE PRINT	YES	NO							
SELL BY DATE PRINT	YES	NO							
SHELF LIFE (days)	0								
USE BY DATE PRINT	YES	NO							
USE BY DATE (days)	0								
			PACK TIME PRINT	YES	NO				
			PACK TIME FLAG	Design	Clock				
			SB TIME PRINT	YES	NO				
			SB TIME FLAG	Design	Relate				
UNIT TYPE	oz	lb	kg	g	PC.	BOX	BUNDLE	PACK	CUT
	SLICE	CUP	PKT	BAG	BUNCH	BOTTLE	LB	NO PRN	
INPUT <input style="width: 100px;" type="text"/>									

Reference Data Setup 1/2 Screen

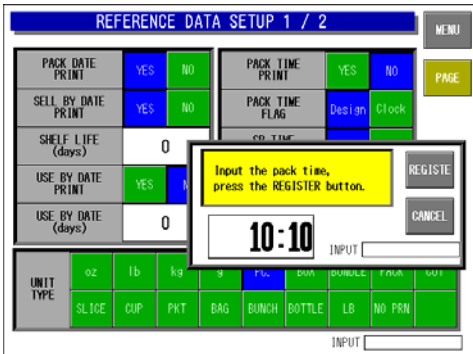
[CAN, USA]

REFERENCE DATA SETUP 2 / 2									
OPEN PRICE SELECT	ON	OFF							
STANDARD TARE	0.000 lb								
LOGO #1	0								
LOGO #2	0								
LOGO #3	0								
SAFE HANDLING IMAGE No.	0								

[EU]

REFERENCE DATA SETUP 2 / 2									
OPEN PRICE SELECT	ON	OFF			USE BY DATE PRINT	YES	NO		
STANDARD TARE	0,000 kg		USE BY TYPE	DAY	MONTH				
LOGO #1	0		USE BY DATE	0					
LOGO #2	0								
LOGO #3	0								
INPUT <input style="width: 100px;" type="text"/>									

Reference Data Setup 2/2 Screen

Buttons/Display Fields	Function
MENU	Determines the settings and returns to the first screen of the Setup Menu.
PAGE	Turns over the screen.
Pack Date Print	Press "YES" or "NO" to set whether to print the Pack Date or not. This setting is effective only when "REFER" is specified by the Pack Date Print setting in the PLU registration.
Sell By Date Print	Press "YES" or "NO" to set whether to print the Sell By Date or not. This setting is effective only when "REFER" is specified by the Sell By Date Print setting in the PLU registration.
Shelf Life (days)	Enter a numeric value (0-9999) and press this field to set the entered value as the Shelf Life data. This setting is effective only when "REFER" is specified by the Shelf Life Date Print setting in the PLU registration.
Use By Date Print	Press "YES" or "NO" to set whether to print the Use By Date or not. This setting is effective only when "REFER" is specified by the Use By Date Print setting in the PLU registration.
Use By Date (days)	Enter a numeric value (0-9999) and press this field to set the entered value as the Use By Date data. This setting is effective only when "REFER" is specified by the Use By Date print setting in the PLU registration.
Pack Time Print	Press "YES" or "NO" to set whether to print the Pack Time or not. This setting is effective only when "REFER" is specified by the Pack Time Print setting in the PLU registration.
Pack Time Flag	Specify the pack time to be used. Clock: Use the system clock. Designated: Use the time designated on the following screen. 
Sell By Time Print	Press "YES" or "NO" to set whether to print the Pack Time or not. This setting is effective only when "REFER" is specified by the Pack Time Print setting in the PLU registration.
Sell By Time Flag	Not used
Unit Type	Set the unit type of quantity data for fixed price items. This setting is effective only when "REFER" is specified by the Unit Type setting in the PLU registration.
Open Price Select	Select whether or not to allow price change in Normal Mode. This setting is effective only when "REFER" is specified by the Open Price setting in the PLU registration.
Standard Tare	Set the standard tray weight. Enter a numeric value (max. 3 digits) and press this field, then the entered data becomes the standard tray weight. This setting is effective only when "REFER" is specified by the Forced Tare setting in the PLU registration.
Logo #1, #2, #3	Enter a numeric value (max. 3 digits) and press this field, then the entered data becomes the logo data. This setting is effective only when "REFER" is specified by the Logo setting in the PLU registration.
Safe Handling image No.	Enter a numeric value (max. 3 digits) and press this field. This setting is effective only when "REFER" is specified by the Logo setting in the PLU registration.
USE BY DATE PRINT/TYP/& DATE	Press "YES" or "NO" to set whether to print the title "USE By DATE" or not. Select "day" or "month", in the case of printing "USE By DATE". Enter a "Use By Date" numeric value and press this field.

2.7 TOTAL ADD SETTING

TOTAL ADD SETTING

- * Select ADD or NON ADD for each totals.
- * Select the weight addition mode of fixed price PLU.
- * Press [SPECIFY] key to designate PLU for the total time zone is possible. (Designation screen is displayed.)
- * Daily Total Auto Clear: YES clears daily total when 1st power on

MENU

Daily Total

NON ADD
ADD

Accumulative Total

NON ADD
ADD

Time Zone Total

NON ADD
ADD

Tray Total

NON ADD
ADD

Periodical Total

NON ADD
ADD
USA

Daily Total Auto Clear

NO
YES

Fixed Pri PLU Weight Addition Mode

FIXED WEIGHT
REAL WEIGHT

ITEM SPECIFY

Total Add Setting Screen

TIME ZONE SET FOR INDIV. PLU

PLU LIST	
000001	TEST ITEM 0001
000002	TEST ITEM 0002
000003	TEST ITEM 0003

INDIVIDUAL PLU BY TIME ZONE	

CONFIRM
CANCEL

ADD
DELETE

Press [ADD] key to register the selected PLU. INPUT

Time Zone Set for Individual PLU Screen

2-12

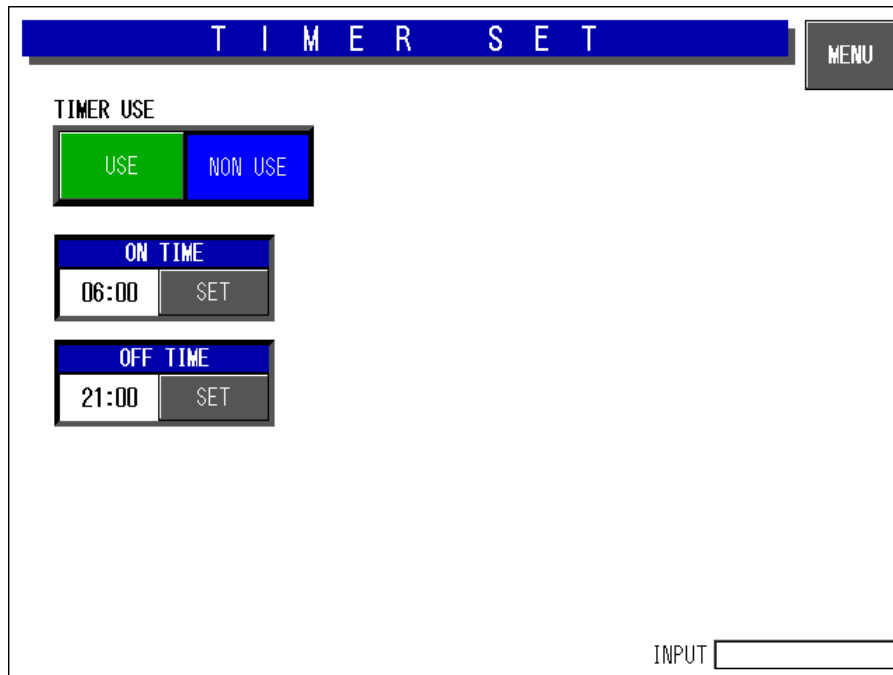
IP-EMZ Service Manual

Buttons/Display Fields	Function
MENU	Determines the settings and returns to the first screen of the Setup Menu.
Daily Total	Select whether or not to add the data to Daily Total. The selected button color will change to blue. This is not displayed at a satellite machine in master/satellite specification.
Accumulative Total	Select whether or not to add the data to Accumulative Total. The selected button color will change to blue. This is not displayed at a satellite machine in master/satellite specification.
Periodical Total	Select whether or not to add the data to Periodical Total. The selected button color will change to blue. This is not displayed at a satellite machine in master/satellite specification.
Time Zone Total	Select whether or not to add the data to Time Zone Total. The selected button color will change to blue. This is not displayed at a satellite machine in master/satellite specification.
Daily Total Auto Clear	Select whether or not to clear Daily Total when turning off the machine. The selected button color will change to blue. This is not displayed at a satellite machine in master/satellite specification.
Tray Total	Select whether or not to add the data to Tray Total. The selected button color will change to blue. This is not displayed at a satellite machine in master/satellite specification.
Fixed Price PLU Weight Addition Mode	Select to add either "Fixed Weight" or "Real Weight" for a fixed price item to total. The selected button color will change to blue.
ITEM SPECIFY	Displays the Time Zone Set For Individual PLU screen.
CONFIRM	Determines the settings and returns to the Total Add Setting Screen. Clears the existing Daily PLU Time Zone Total.
CANCEL	Cancel the settings and returns to the Total Add Setting Screen.
ADD	Add a commodity to target commodities by pressing this button after selecting the desired PLU or entering the PLU number.
DELETE	Delete a commodity from target commodities by pressing this button after selecting the PLU to be deleted.

2.8 TIMER SET

Only EU specifications

The seal heater of Wrap-mini-EMZ is controlled. IP-EMZ does not function.



Timer Set Screen

2.9 BARCODE SETUP

After this, it is SETUP MENU 2/2.
[9][9][9] > [PAGE]

The Barcode Setup Screen displays the following configuration options:

- NON-PLU13**: Value 02, SET button
- PLU13**: Value 49, SET button
- NON-PLU8**: Value 2, SET button
- PLU8**: Value 49, SET button

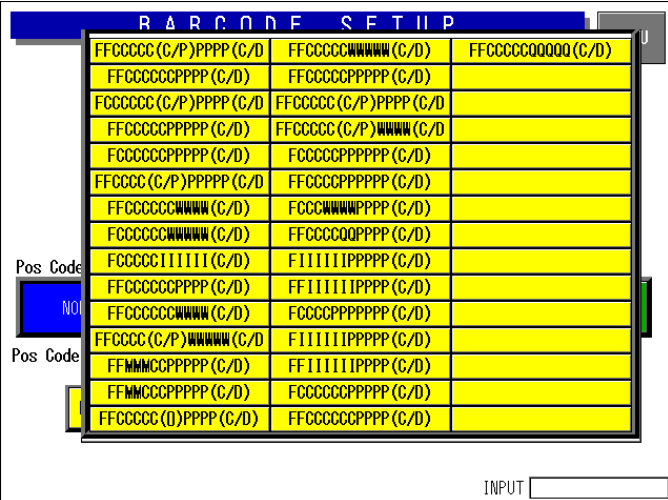
Pos Code Type: A row of four buttons: NON-PLU13 (blue), NON-PLU8 (green), PLU13 (green), and PLU8 (green).

Pos Code Kind: A yellow button labeled **BARCODE FORMAT** with the value **1:FFCCCC(C/P)PPPP(C/D)**.

INPUT: An empty text box at the bottom right.

Barcode Setup Screen

Buttons/Display Fields	Function
MENU	Determines the settings and returns to the first screen of the Setup Menu.
Non PLU 13	This is referred when "System" is set in the flag reference of the PLU registration and the code type is set as "Non PLU 13". The set flag data is displayed. Enter a numeric value (max. 2 digits) and press the [SET] button to set the entered data as a flag data.
Non PLU 8	This is referred when "System" is set in the flag reference of the PLU registration and the code type is set as "Non PLU 8". The set flag data is displayed. Enter a numeric value (max. 2 digits) and press the [SET] button to set the entered data as a flag data.
PLU 13	This is referred when "System" is set in the flag reference of the PLU registration and the code type is set as "PLU 13". The set flag data is displayed. Enter a numeric value (max. 2 digits) and press the [SET] button to set the entered data as a flag data.
PLU 8	This is referred when "System" is set in the flag reference of the PLU registration and the code type is set as "PLU 8". The set flag data is displayed. Enter a numeric value (max. 2 digits) and press the [SET] button to set the entered data as a flag data.
POS Code Type	Select the code type to be referred to when the code type is set as "Refer" in the PLU master file. Press the desired button to select among Non PLU 13, Non PLU 8, PLU 13, and PLU 8.

Buttons/Display Fields	Function
POS Code Kind	<p>Select the code kind to be referred to when the code kind is set as "Refer" in the PLU master file.</p> <p>Press the desired field to select among 31 different kinds.</p> 

2.10 ITEM CODE SETTING

Item Code Setting Screen

Buttons/Display Fields	Function
MENU	Determines the settings and returns to the first screen of the Setup Menu.
Code Digit Display	The set digit(s) is displayed.
Classification Code Select	Select one of code types "Department Code" "Group Code" and "Section Code" of which code digit(s) is displayed.
Classification Code Digit Set	Set the code digit position (max. 4 digits) for the selected code type by pressing the contiguous fields.
JAN Code Select	Select one of code types "JAN 8" and "JAN 13" of which code digit(s) is displayed.
JAN Code Digit Set	Set the code digit position (max. 8 digits) for the selected code type by pressing the contiguous fields.

2.11 PLU DEFAULT DATA SETTING

PLU DEFAULT DATA SETTING 1

MENU
PAGE

Set the default data to be used when a new PLU is created.

SALES MODE	0:WEIGH	TARE (0~9.995)	0.000	BARCODE TYPE	0:REFER
PRICE	0.00	TARE 2 (0~9.995)	0.000		
MARKDOWN FLAG	0:NORMAL	PACK DATE PRINT	0:REFER	POS FLAG	02
MARKDOWN AMOUNT	0.00	SB DATE PRINT	0:REFER	BARCODE	000000000
FIXED WEIGHT(oz)	0	SHELF LIFE (days)	1	OPEN PRICE	0:REFER
PACK QUANTITY	0	USE BY PRINT	0:REFER	FORCED TARE	0:REFER
NUTRITION NO.	0	USE BY (days)	0	PROP. TARE (0~50.0)	0.0%

INPUT

PLU Default Data Setting 1 Screen

PLU DEFAULT DATA SETTING 2

MENU
PAGE

Set the default data to be used when a new PLU is created.

EXTRA MESSAGE 1	0	FREE MESSAGE 1	0	COUPON MESSAGE	0
EXTRA MESSAGE 2	0	FREE MESSAGE 2	0	LOGO #1 (0~999)	0
EXTRA MESSAGE 3	0	FREE MESSAGE 3	0	LOGO #2 (0~999)	0
PACK TIME PRINT	0:REFER	FREE MESSAGE 4	0	LOGO #3 (0~999)	0
PACK TIME DATA	--:--	FREE MESSAGE 5	0	LABEL FORMAT	0
SB TIME PRINT	0:REFER			SECOND LABEL	1:YES
SB TIME DATA	--:--	POP MESSAGE	0	2nd LABEL FORMAT	0

INPUT

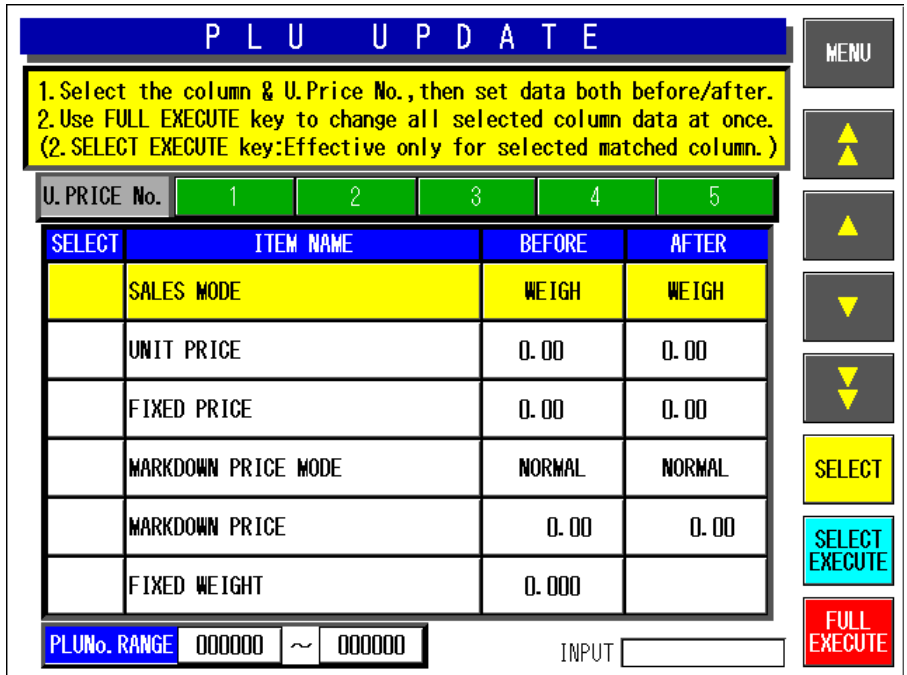
PLU Default Data Setting 2 Screen

PLU DEFAULT DATA SETTING 3					
Set the default data to be used when a new PLU is created.					
DEPARTMENT	0	TRAY No.	0	LABELING MODE	1:AUTO LAB
GROUP	00	WRAP MODE	1:WRAP/LAB		
ITEM CODE	00000000	INFEEED SPEED	1:HIGH SPE		
UNIT TYPE	0:REFER	WRAP SPEED	0:TRAY REF		
UPPER WT. LIMIT	0.000	LABEL ROTATION	0:NORMAL L		
LOWER WT. LIMIT	0.000	TRAY VOLUME	0:NO VOLUM		
SH IMAGE No(0~999)	0	AUTO DETECTION	2:AUTO TRA		
INPUT <input type="text"/>					

PLU Default Data Setting 3 Screen

Buttons/Display Fields	Function
MENU	Determines the settings and returns to the first screen of the Setup Menu.
PAGE	Turns over the screen.
Default Data Setting Items	Each button color has its meaning: <ul style="list-style-type: none"> ● Background→Green: Unit price master data, Blue: PLU master data ● Characters→Black: Requires numeric entry, White: Make a selection

2.12 PLU UPDATE SETTING



PLU Update Screen

Buttons/Display Fields	Function
MENU	Determines the settings and returns to the first screen of the Setup Menu.
▲ ▼ ▲ ▼	Changes to the previous or next screen.
▲ ▼	Moves the cursor up or down.
SELECT	Selection can be made for items to be collectively changed. Master data at the cursor position is selected. When selected, "●" is displayed in the selected field at the cursor position on the list. Selection cannot be made when no data is set in "After" field.
SELECT EXECUTE	Executes changes in "After" field for the selected items only to the PLU master file of which "Before" data matches.
FULL EXECUTE	Executes changes in "After" field for the selected items only to all PLU master files.
Unit Price No.	Select the desired unit price master file among "1" through "5".
Item Name	The name of master item to be collectively changed is displayed. (See the master name list below)
Before	Data can be set in this field when pressed after numeric entry. Selection items appear when pressed without numeric entry.
After	Data can be set in this field when pressed after numeric entry. Selection items appear when pressed without numeric entry.
PLU No. Range	Specifies the PLU range to be collectively changed.

Master Name	Before / After Data Range	Default Value
Sales Mode	Weigh / Non-Weigh / Weigh & Fixed Price	Weigh
Unit Price	0.00 - 999.99	0.00
Fixed Price	0.00 - 999.99	None
Markdown Price Mode	Refer to "PLU Data Registration" in Programming Mode.	Normal
Markdown Price	Depending on "Markdown Price Mode"	0.00
Fixed Weight	0.000 - 99.999	0.000
Pack Quantity	0 - 999	0
Tare	0.000 - 5.998	0.000
Pack Data Print	Refer / Yes / No	Refer
Sell-By Data Print	Refer / Yes / No	Refer
Shelf Life Time	1 day - 9999 day(s)	1 day(s)
Use-By Print	Refer / Yes / No	Refer
Use-By (day)	0 day(s)	0 day(s)
Barcode Type	Refer / Non-PLU 13 / Non-PLU 8 / PLU 13/ PLU 8	Refer
POS Flag	00 - 99	02
POS Code	0000000000 - 9999999999	0000000000
Open Price	Refer / Prohibit / Allow	Refer
Forced Tare	Refer / Yes / No	Refer
Extra Message 1	0 - 999999	0
Extra Message 2	0 - 999999	0
Extra Message 3	0 - 999999	0
Pack Time Print	Refer / Yes / No	Refer
Pack Time Mode	Refer / Designate / Clock	Refer
Pack Time Data	0:00 - 23:59	0:00
Sell-By Time Print	Refer / Yes / No	Refer
Sell-By Time Mode	Refer / Relative	Refer
Use-By Time	0 hour(s) - 9999 hour(s)	0 hour
Free 1 No.	0 - 999999	0
Free 2 No.	0 - 999999	0
Free 3 No.	0 - 999999	0
Free 4 No.	0 - 999999	0
Free 5 No.	0 - 999999	0
POP No.	0 - 999	0
Coupon Message	0 - 999999	0
Image 1 No.	0 - 999	0
Image 2 No.	0 - 999	0
Image 3 No.	0 - 999	0
Label Format	0 - 999	0
Second Label	Yes / No	YES
Second Label Format	0 - 99	0
Item Code	00000000 - 99999999	00000000
Unit Type	Refer to "PLU Data Registration" in Programming Mode.	Refer
Upper Weight Limit	0.000 - 99.999	0.000
Lower Weight Limit	0.000 - 99.999	0.000
Tray No.	0 - 9999	0
Wrapping Mode	Wrap & Label / Label / Wrap	Wrap & Label
Infeed Speed	High Speed / Medium Speed / Low Speed	High Speed
Wrapping Speed	Tray Refer / High Speed / Medium Speed / Low Speed	Tray Refer
Label Rotation	Normal Label / Horizontal Label / Vertical Label	Normal Label
Tray Volume	No Volume / Low Volume / Medium Volume / High Volume	No Volume
Auto Detection	Auto Tray / Tray Designate	Auto Tray
Labeling Mode	Auto Label / Manual Label	Auto Label

2.13 KEY LOCK SETTING

KEYLOCK SETTING

MENU

UNLOCK PASSWORD

PAGE

FUNCTION	NUM FUNCTION	TOUCH PANEL	STROKE KEY
----------	--------------	-------------	------------

AUTO	NONE	DELETE	NONE	TotalModif	NONE
ADD	NONE	DEL PLU(S)	NONE	ERROR LOG	NONE
Weigh/F.Pr	NONE	ORDER	NONE	TODAY	NONE
B-Label Typ	NONE	WeightChec	NONE	SubLabelPR	NONE
RUN TOTAL	NONE	B-LABEL PR	NONE	EyeCatchPR	NONE
TOTALS	NONE	F-LABEL PR	NONE	BAR YES/NO	NONE

FUNCTION	1 / 2	INPUT <input style="width: 50px;" type="text"/>
----------	-------	---

Key Lock Setting 1/5 Screen

KEYLOCK SETTING

MENU

UNLOCK PASSWORD

PAGE

FUNCTION	NUM FUNCTION	TOUCH PANEL	STROKE KEY
----------	--------------	-------------	------------

One/TwoCol	NONE				
CALCULATOR	NONE				
F-Label Typ	NONE				
CASE WT.	NONE				

FUNCTION	2 / 2	INPUT <input style="width: 50px;" type="text"/>
----------	-------	---

Key Lock Setting 2/5 Screen

KEYLOCK SETTING

UNLOCK PASSWORD: 0000

FUNCTION NUM FUNCTION TOUCH PANEL STROKE KEY

POP	NONE	B-LabelFrm	NONE	FREE MSG4	NONE
COUPON	NONE	IMAGE 1 No	NONE	FREE MSG5	NONE
EXT MSG 3	NONE	IMAGE 2 No	NONE	% TARE	NONE
EXT MSG 2	NONE	FREE MSG1	NONE	IMAGE 3 No	NONE
EXT MSG 1	NONE	FREE MSG2	NONE	SH IMAGE N	NONE
F-LabelFrm	NONE	FREE MSG3	NONE		

NUM FUNC 1 / 1 INPUT

Key Lock Setting 3/5 Screen

KEYLOCK SETTING

UNLOCK PASSWORD: 0000

FUNCTION NUM FUNCTION TOUCH PANEL STROKE KEY

LINE STATE	NONE	DATE AREA	NONE		
PLU No.	NONE	M PRICE	NONE		
STORE	NONE	TRAY AREA	NONE		
ITEM AREA	NONE	5PRICE	NONE		
MEMO	NONE	ACT MODE	NONE		
WT/PRICE	NONE				

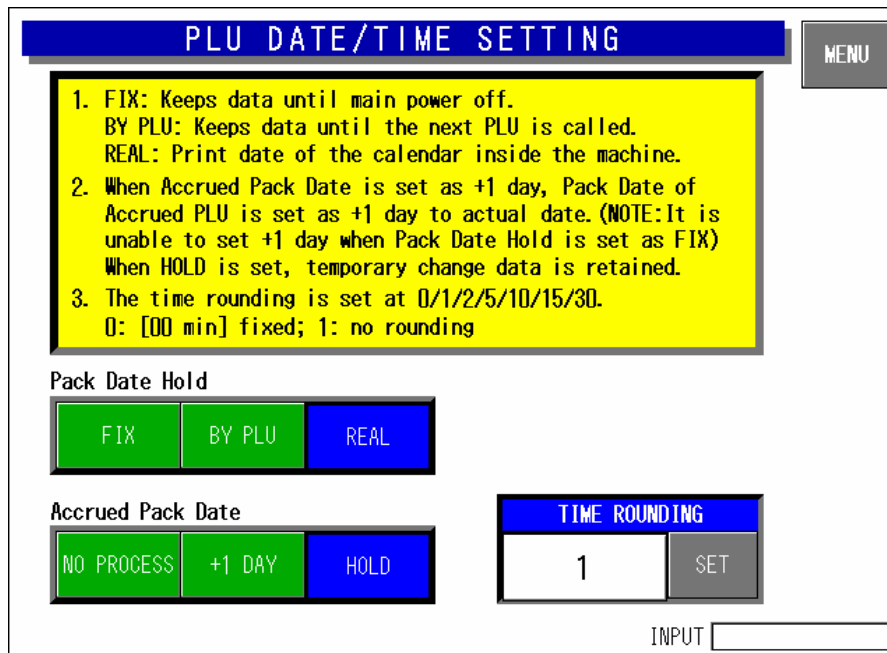
TOUCH PANEL 1 / 1 INPUT

Key Lock Setting 4/5 Screen

Key Lock Setting 5/5 Screen

Buttons/Display Fields	Function
MENU	Determines the settings and returns to the first screen of the Setup Menu.
PAGE	Turns over the screens.
Unlock Password	Press this field after numeric entry (4 numeric digits) to set a password to make "Key Unlock" of a function key effective.
Key Lock Objective Group	Select one of the following key groups: <ul style="list-style-type: none"> • Function key group • Numeric function key group • Touch panel key group • Stroke key group
Key Lock Items	Select "Yes" to lock the key, or "None" not to lock the key.

2.14 PLU DATE/TIME SETTING



PLU Date/Time Setting Screen

Buttons/Display Fields	Function
MENU	Determines the settings and returns to the first screen of the Setup Menu.
Pack Date Hold	Select one of the following items: <ul style="list-style-type: none"> • Fix: Pack date and time which have been set after the power was turned on will be held until the power will be turned on again, or data will be changed. When "+1 Day" is selected in the Accrued Pack Date, the date changes to holding condition. • By PLU: Pack date and time at the time of PLU call is held until next PLU is called. • Real: Pack date and time are printed when the label is printed.
Accrued Pack Date	Select one of the following items: <ul style="list-style-type: none"> • No process: Temporary change data is canceled when next PLU is called and becomes the date of that day. • +1 day: The pack date will become the date added by one day to that day. When "Fix" is selected in the Pack Date Hold, this selection cannot be made. • Hold: Data that has been changed temporarily as an accrued pack date will be held until next PLU is called.
Time Rounding	Select one of the following items: <ul style="list-style-type: none"> • 0: 00 minute fixed • 1: No rounding • 2: Touch panel key group • 5: 05 minutes • 10: 10 minutes • 15: 15 minutes • 30: 30 minutes

2.15 PLU OPERATION SETTING

PLU OPERATION SETTING

1. Unit Price and Printer Change Selection is effective only when Store Selection is YES.
2. FIX: Keeps data until main power off.
BY PLU: Keeps data until the next PLU is called.
3. Unit Price Call Sel: Set Default Unit Price No. at PLU calling.

PLU Digit

4 DIGIT
6 DIGIT
8 DIGIT

Reg. Code HOLD

FIX
BY PLU

Wrapping Mode HOLD

FIX
BY PLU

Unit Price Call Selection

U.Price No.1
LAST U.PRICE

Store Selection

NO
YES

Unit Price Selection

NO
YES

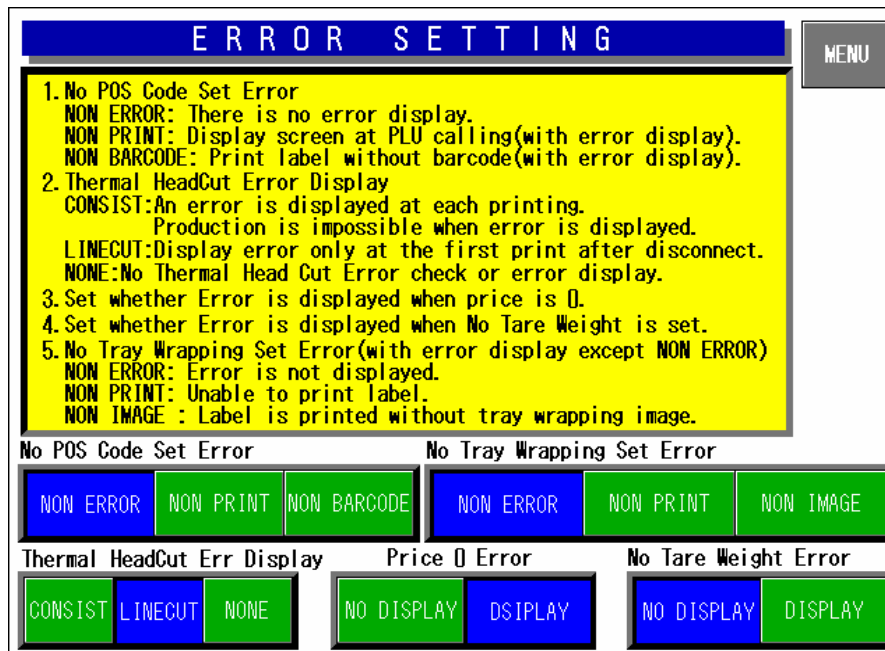
Printer Change Selection

BY STORE
BY EYECATCH

PLU Operation Setting Screen

Buttons/Display Fields	Function
MENU	Determines the settings and returns to the first screen of the Setup Menu.
PLU Digit	Select the number of digits (4/6/8) when calling a PLU.
Store Selection	Select whether or not to call a store in the normal mode.
Unit Price Selection	Select whether or not to fix the Unit Price No. that is set to the called store.
Register Code Hold	Select one of the following items to hold the register code: <ul style="list-style-type: none"> • Fix: The register code which has been set after the power was turned on will be held until the power will be turned on again, or data will be changed. • By PLU: The register code will be updated every time the PLU is called.
Wrapping Mode Hold	Select one of the following items to hold the wrapping mode: <ul style="list-style-type: none"> • Fix: The wrapping mode which has been set after the power was turned on will be held until the power will be turned on again, or data will be changed. • By PLU: The wrapping mode will be updated every time the PLU is called.
Printer Change Selection	When the machine is set as "Store change available", select one of the following items to determine the printer changing method: <ul style="list-style-type: none"> • By Store: This is effective only when the machine is set as "Store change available", the printer number registered in the store master file is given priority. • By Eye-catch: The printer is selected according to the eye-catch (label print pattern).
Unit Price Call Selection	Perform the holding selection for the Unit Price No. in the normal mode. <ul style="list-style-type: none"> • Unit Price No.1: The Unit Price No.1 is always selected when any PLU is called. • Last Unit Price: The Unit Price No. which was processed last is memorized, and it will be called when the PLU is called next time.

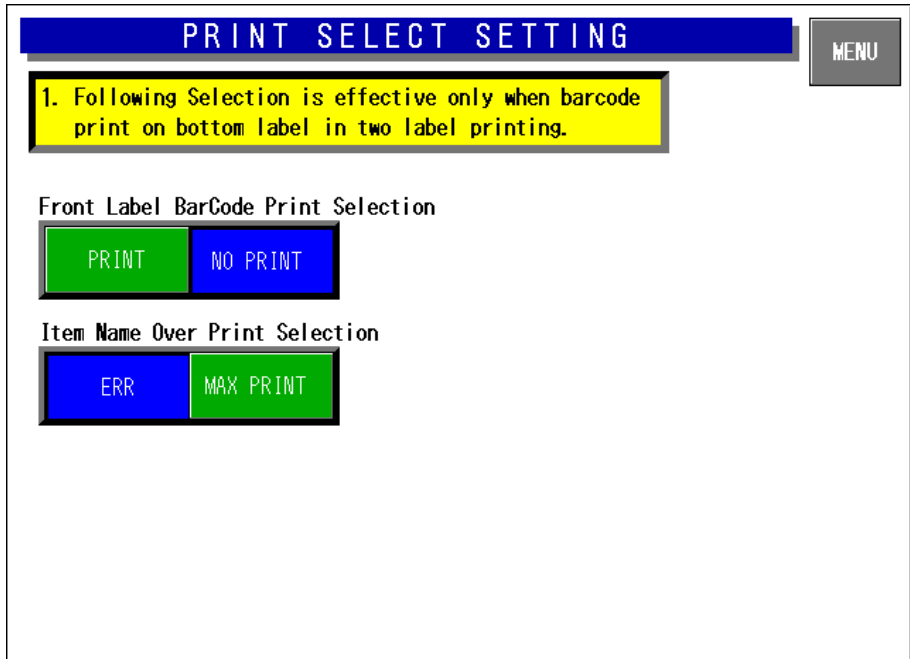
2.16 ERROR SETTING



Error Setting Screen

Buttons/Display Fields	Function
MENU	Determines the settings and returns to the first screen of the Setup Menu.
No POS Code Set Error	Select one of the following items to determine the procedure when calling a PLU of which POS code is not set. <ul style="list-style-type: none"> • Non Error: No error screen appears. • Non Print: An error screen appears. When the error screen is released, calling the PLU will be canceled. • Non Barcode: An error screen appears. When the error screen is released, the barcode will be blanked on the label.
Price 0 Error	Select whether or not to display an error screen when "0" price is entered.
Thermal Head Cut Error Display	Select one of the following items to determine the procedure when a head failure occurs. <ul style="list-style-type: none"> • Consistent: An error screen always appears once a failure occurs. • Line Cut: An error screen appears when a failure occurs. • None: No error screen appears.
No Tare Weight Error	Select whether or not to display an error screen when printing is performed without tare weight setting.
No Tray Wrapping Set Error	Select one of the following items to determine the procedure when no tray wrapping is set. <ul style="list-style-type: none"> • Non Error: No error screen appears even when the tray wrapping image is not set. • Non Print: Even after the error screen is released, it appears every time until the tray wrapping image is normally set. Operation is prohibited when the tray wrapping image is not set. • Non Image: An error screen appears when the tray wrapping image is not set. After the error screen is released, it will not appear until next call.

2.17 PRINT SELECT SETTING



Buttons/Display Fields	Function
MENU	Returns to the first screen of the Setup Menu.
Front Label Barcode Print Selection	This function is effective only when two labels are issued, and the bottom label type is selected to print the barcode. Select whether or not to print the barcode on the first label. (See the table below)
Item Name Over Print Selection	Select one of the following items to determine an expansion error procedure. <ul style="list-style-type: none"> • Error: Output the expansion error, and stop processing. • Max. Print: Expand to a maximum and print within the range.

■ When front label barcode is printed (PLU master file)

Bottom Label Type	Front Label Barcode Print Selection			
	Print		No print	
	Front	Bottom	Front	Bottom
None	○	-	○	-
Barcode	○	○	×	○
Additive	○	×	○	×
Barcode + Additive	○	○	×	○
Collective display	○	-	○	-
Collective display + Barcode	○	○	×	○
Collective import	○	-	○	-
Collective import + Barcode	○	○	×	○

○: With barcode print ×: Without barcode print

■ When front label barcode is not printed (PLU master file)

Bottom Label Type	Front Label Barcode Print Selection			
	Print		No print	
	Front	Bottom	Front	Bottom
None	×	-	×	-
Barcode	×	○	×	○
Additive	×	×	×	×
Barcode + Additive	×	○	×	○
Collective display	×	-	×	-
Collective display + Barcode	×	○	×	○
Collective import	×	-	×	-
Collective import + Barcode	×	○	×	○

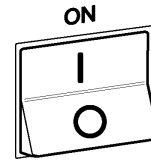
3

TEST MODE**Contents**

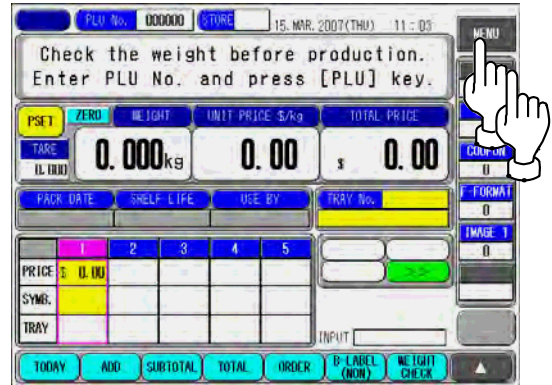
3.1	TEST MENU ENTRY	2
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3.5	SELF DIAGNOSTIC	9
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3.1 TEST MENU ENTRY

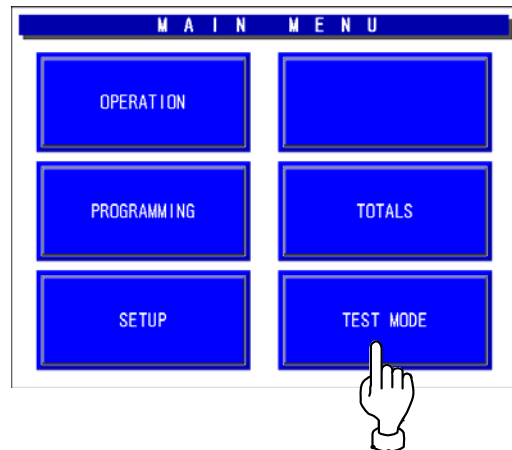
1. Turn on the Main Power Switch.



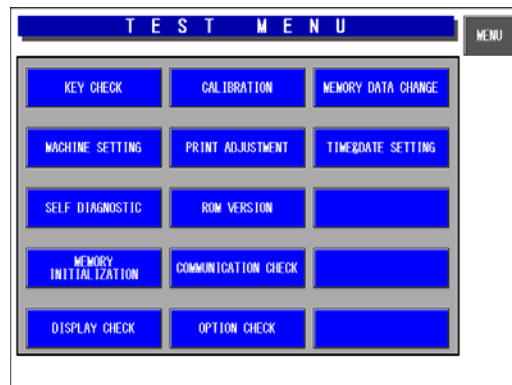
2. Press the [MENU] button on the initial screen.



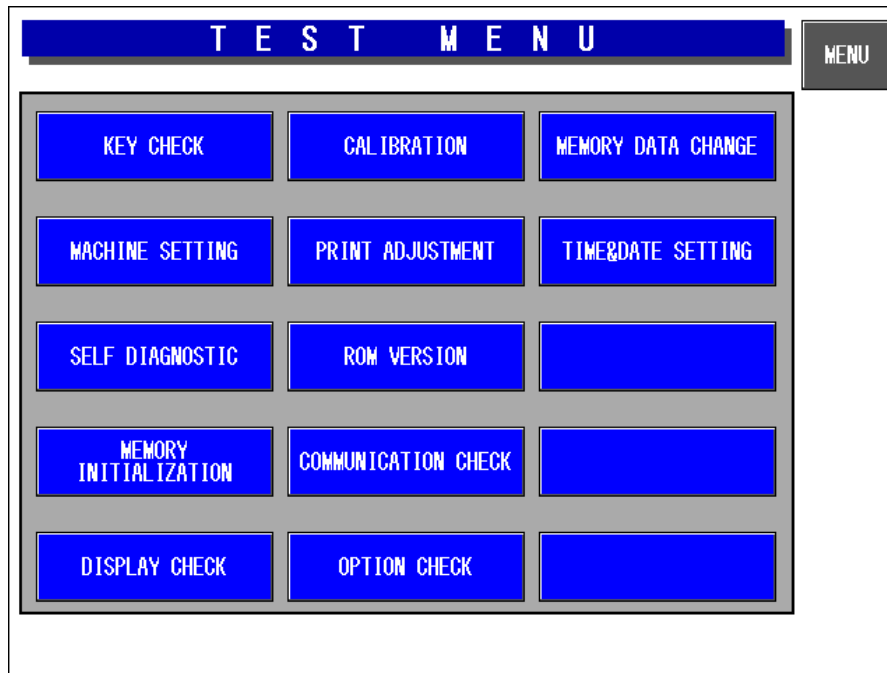
3. Enter "495344" using the numeric keys and press the [TEST MODE] button.



4. The Test Menu screen appears.



3.2 TEST MENU

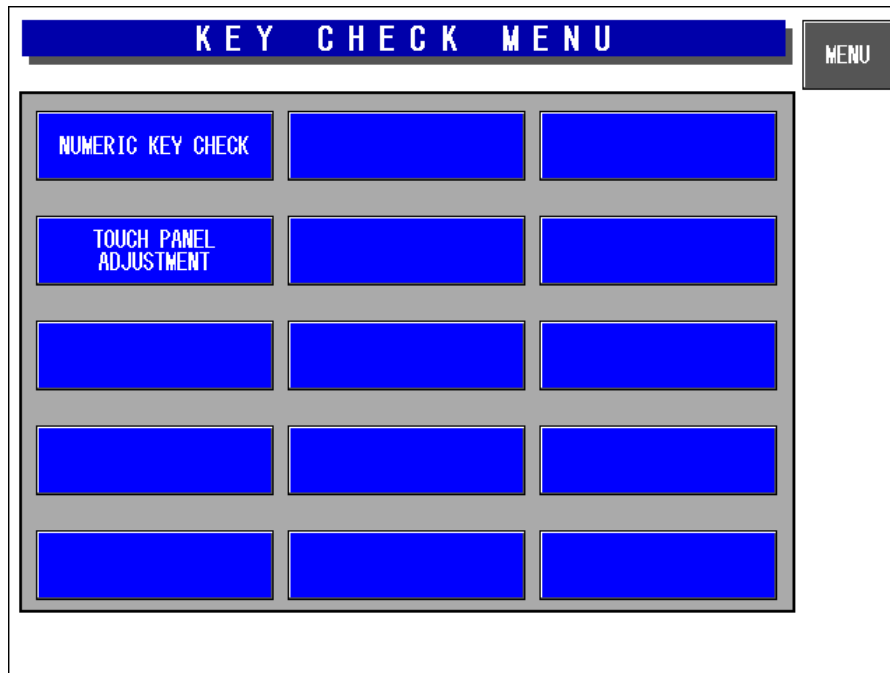


Test Menu Screen

Buttons/Display Fields	Function
Key Check	Changes to the Key Check menu screen.
Machine Setting	Changes to the Machine Setting screen. Set basic machine and optional unit configuration.
Self-diagnostic	Changes to the Self-diagnostic screen. Check cables, memory, printer head and connection check, etc.
Memory initialization	Changes to the Memory Initialization screen. Display memory information (installed and remainder) and initialize memory (master data clear, system data initialization, and test data setting).
Display check	Changes to the Display Check screen. Adjust color contrast.
Calibration	Changes to the Scale Calibration screen. There are two screens for calibrating the scale and setting the scale board. (Scale board setting requires password entry)
Print adjustment	There are two screens for adjusting the printer head information (head type, head resistance, head running distance, etc.) and the print information (print density, various sensor distances, label length, etc.).
ROM version	Changes to ROM version display. Displays ROM versions for OS, BSP, BIOS, Main memory, Scale, ELAN, Thermal head, Wrapper, etc.
Communication check	Changes to the Communication Check screen. Check I2NET and RS232C hardware (Communication and RAM).
Option check	Changes to the Option Check screen. Check barcode scanner reading and card slot operation.
Memory data change	Changes to the Memory Data Change menu screen. Confirm and change SRAM memory and refer FROM.
Time/ Date setting	Changes to date and time setup screen. Set the present date, time, and printing year.

3.3 KEY CHECK MENU

Press the [Key Check] button on the Test Menu screen. Then, the Key Check Menu screen appears.

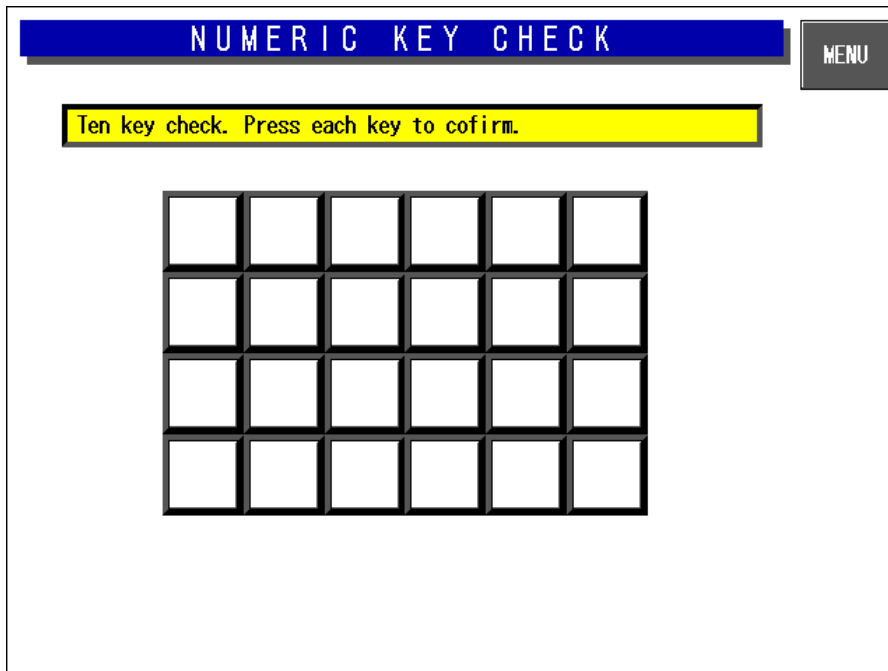


Key Check Menu Screen

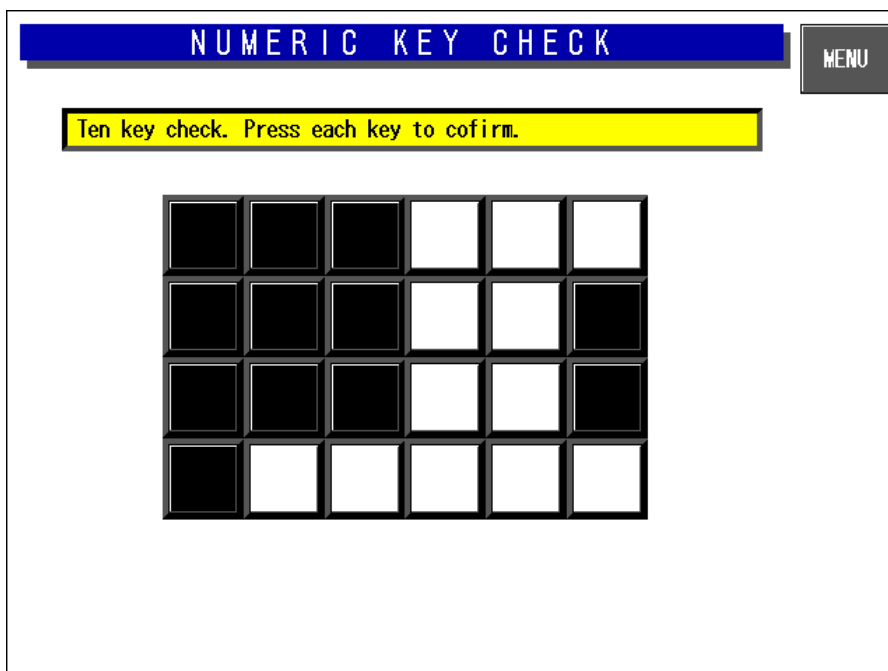
Buttons/Display Fields	Function
MENU	Returns to the Test Menu 1/2 screen.
Numeric Key Check	Changes to the Numeric Key Check screen. Press the stroke keys on the keypad, then the corresponding button will change its color black on the screen.
Touch Panel Adjustment	Changes to the Touch Panel Adjustment screen. Adjust touch panel press position by pressing the center marks (+) on the two buttons located at the top left and the bottom right of the screen using a pointed object, and finally pressing the center mark (+) on the acknowledge button.

3.3.1 STROKE KEY CHECK

Press the [Numeric Key Check] button on the Key Check Menu screen. Then, the Numeric Key Check screen appears. Stroke keys can be tested by pressing each key on the control console. Pressing each numeric key will temporarily change the corresponding button color to black. After checking all stroke keys, press the [MENU] button to return to the Key Check Menu screen.



Numeric Key Check Screen



Buttons/Display Fields	Function
MENU	Changes to the Key Check Menu screen.

3.3.2 TOUCH PANEL ADJUSTMENT

Press the [Touch Panel Adjustment] button on the Key Check Menu screen. Then, the Touch Panel Adjustment screen appears. Screen and touch panel positions on the LCD screen can be adjusted on this screen.

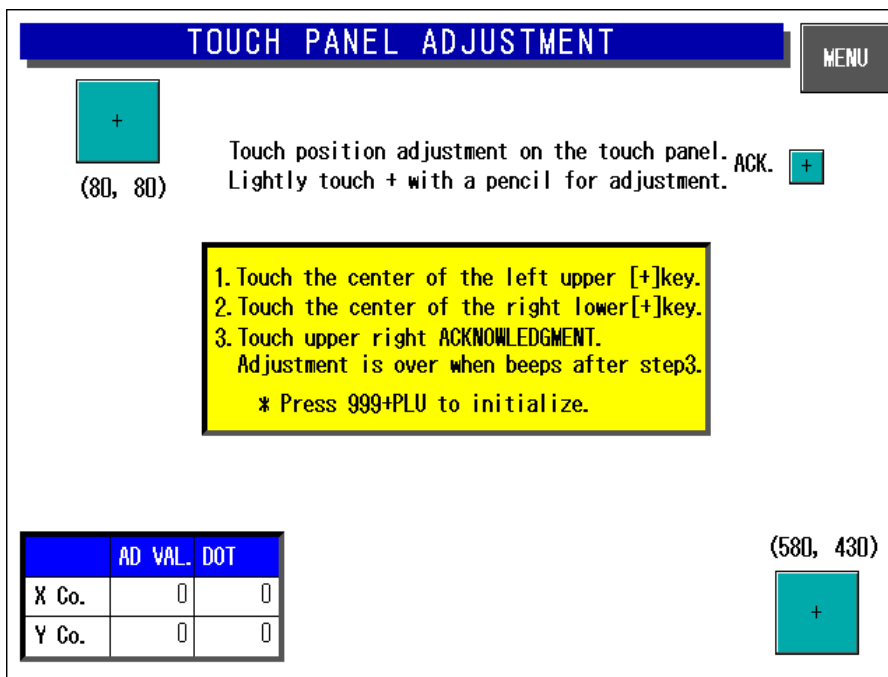
Press the two center marks on each button located at the top left and the bottom right of the screen using a pointed object. The pressed button will change its color to black, and the coordinates positional data of the pressed point is displayed.

In the same way, press the center mark on the Acknowledge button to complete the position adjustment.

Press the MENU button to return to the Key Check Menu screen.

Note 1: Be sure to adjust the touch panel after system data has been initialized.

2: If the adjustment cannot be properly completed, enter "999" and press the [PLU] key to return to the default data, then, tray to perform adjustment again.



Touch Panel Adjustment Screen

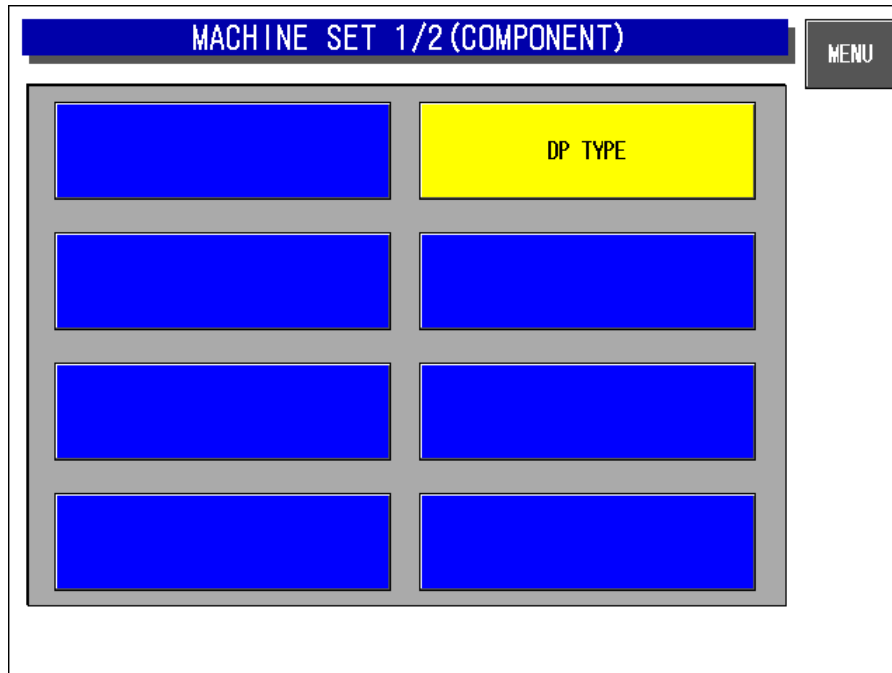
Buttons/Display Fields	Function
MENU	Changes to the Key Check Menu screen.
Position Adjustment [+]	Press only the "+" mark on the buttons located at the top left and the bottom right of the screen. Pressing these buttons will change the button color to black.
Acknowledge [+]	Completes position adjustment.
Coordinate Display Field	Displays coordinate information.

3.4 MACHINE SET 1/2: BASIC COMPONENT

Press the [Machine Setting] button on the Test Menu screen. Then, the Machine Set 1/2 (Component) screen appears.

3.4.1 MACHINE SET 1/2 (COMPONENT)

This procedure is used to determine which program is to be used with this machine. Press one of the buttons based on the actual machine configuration. When selected, the button color will reverse yellow

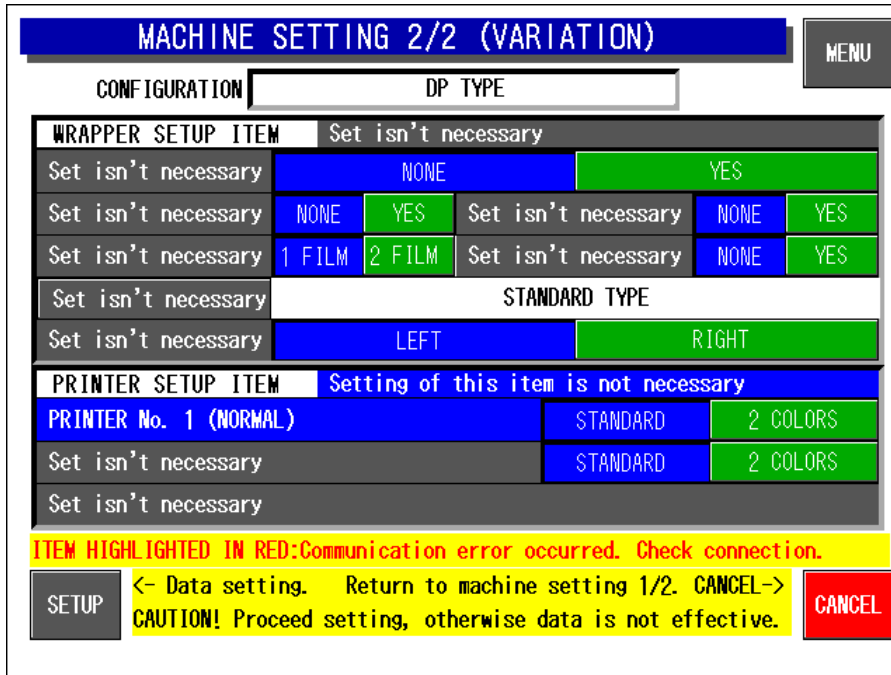


Machine Set 1/2 (Component) Screen

Buttons/Display field	Function
DP Type	Used when no wrapping unit is equipped.

3.4.2 MACHINE SET 2/2 (VARIATION)

On this screen, further detailed settings can be performed.



Machine Setting 2/2 (Variation) Screen

Buttons/Display Fields	Function
MENU	Returns to Test Menu 1/2 screen.
CANCEL	Cancels changes and returns to Machine Set 1/2 screen.
Wrapper Setup Item	Not used.
Printer Setup Item	Displays connection results with various printers and the applicator.
Printer No.1	Selects printer #1. Press the "Standard" or "2 colors" button to select. Default data: "Standard"

3.5 SELF DIAGNOSTIC

Press the [Self Diagnostic] button on the Test Menu screen. Then, the Self Diagnostic screen appears. This procedure is used to perform self-diagnosis for the listed items. Make sure that the I2Net connectors, RS232C connectors, and card slot are provided.

Note: All memory will be initialized after executing this procedure.

SELF DIAGNOSTIC	
SELF DIAGNOSTIC REMARK: All memory will be initialized after executing. 1. Make the I2NET Connector, RS232C Connector&Cardslot ready. 2. Press EXECUTE.	
SRAM READ/WRITE TEST	I2 NET (ILAN) SELF CHECK
TEST DATA SETTING	COMMUNICATION(ELAN->ILAN)
MACH. 1 HEAD RESISTANCE	COMMUNICATION(ILAN->ELAN)
MACH. 1 HEAD DOT EXHAUSTION	SCALE COMMUNICATION CHECK
	WRAPPING COMMUNICATION CHECK
RS-232C (Dsub) LOOP CHECK	
CARD SLOT (TOP) CHECK	
CARD SLOT (BOTTOM) CHECK	
I2 NET (ELAN) SELF CHECK	

Self-diagnostic Screen

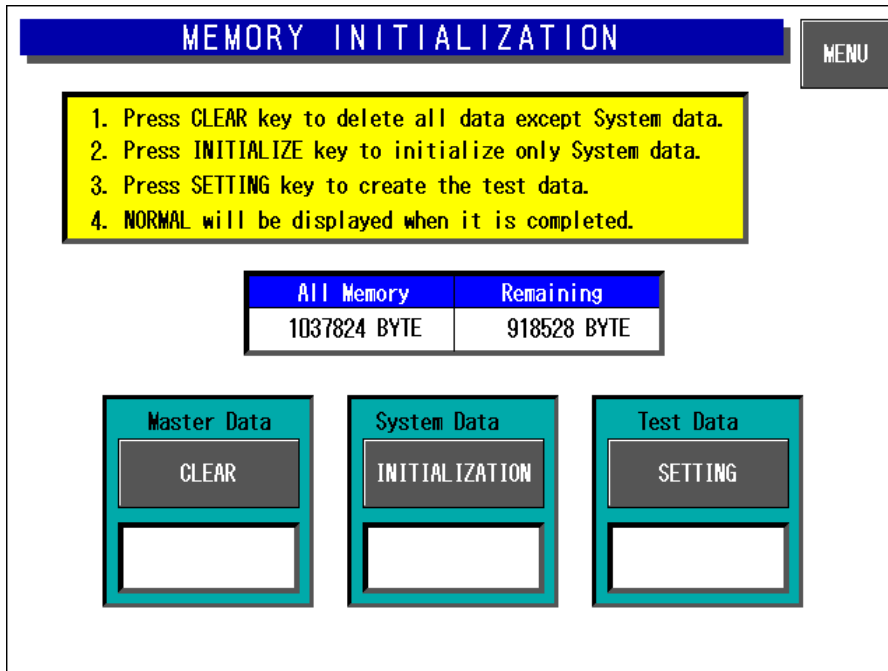
Buttons/Display Fields	Function
MENU	Returns to the Test Menu 1/2 screen.
EXECUTE	Press the [EXECUTE] button to execute cable, memory, printer head, display operation checks, and initialization.
Execution Item	Displays execution results (Operating/Normal/Abnormal) to the right of each item.

3.6 MEMORY INITIALIZATION

Press the [Memory Initialization] button on the Test Menu screen. Then, the Memory Initialization screen appears.

This procedure is used to delete all data except system data, initialize system data only, and create test data.

Note: Repeat the procedure if memory initialization ends abnormally.



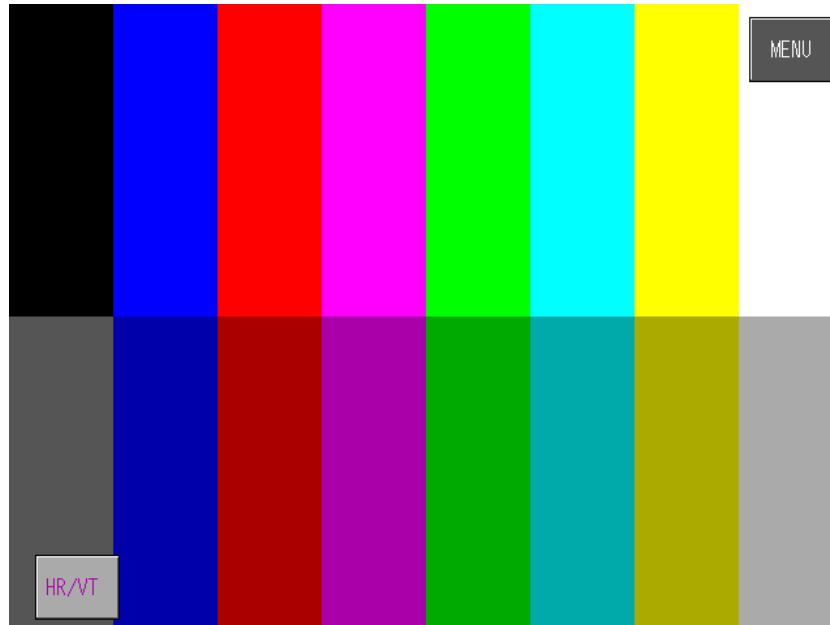
Memory Initialization Screen

Buttons/Display Fields	Function
MENU	Returns to the Test Menu 1/2 screen.
Master Data CLEAR	Clear master data. "Processing" is displayed during execution. "Normal" is displayed when the execution has ended normally. "Abnormal" is displayed when execution has ended abnormally.
System Data INITIALIZATION	Initialize system data (system master and machine master data). "Processing" is displayed during execution. "Normal" is displayed when the execution has ended normally. "Abnormal" is displayed when execution has ended abnormally.
Test Data SETTING	Set test data after master data has been cleared and system data has been initialized. "Processing" is displayed during execution. "Normal" is displayed when the execution has ended normally. "Abnormal" is displayed when execution has ended abnormally.

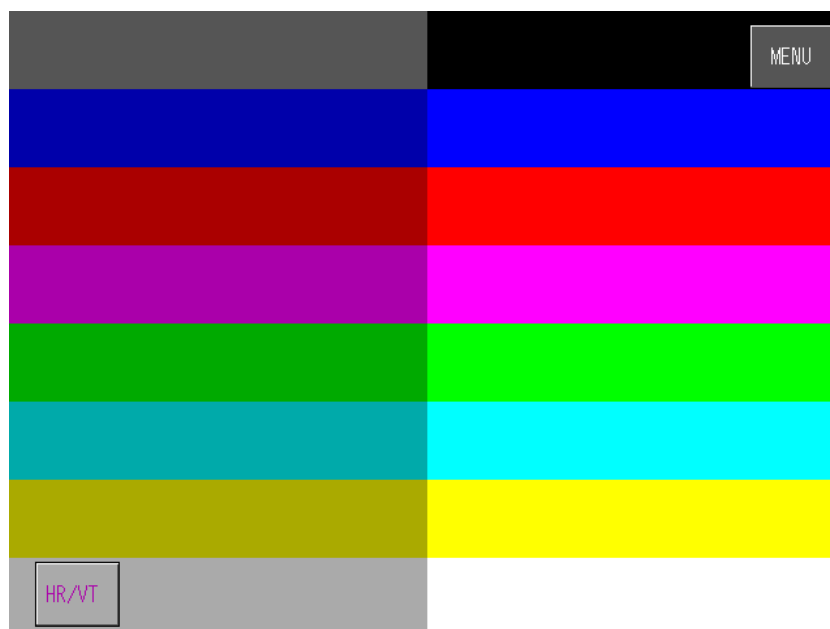
Note: Repeat the procedure if memory initialization ends abnormally.

3.7 DISPLAY ADJUSTMENT

Press the [Display Check] button on the Test Menu screen. Then, the display check screen appears. This procedure is used to check whether the screen shows an ideal color contrast or not. To adjust the color contrast, turn the knob on right side of the operating console.



Display Adjustment Screen (Vertical)



Display Adjustment Screen (Horizontal)

Buttons/Display Fields	Function
MENU	Returns to the Test Menu 1/2 screen.
Horizontal/Vertical	Changes between horizontal and vertical color patterns.

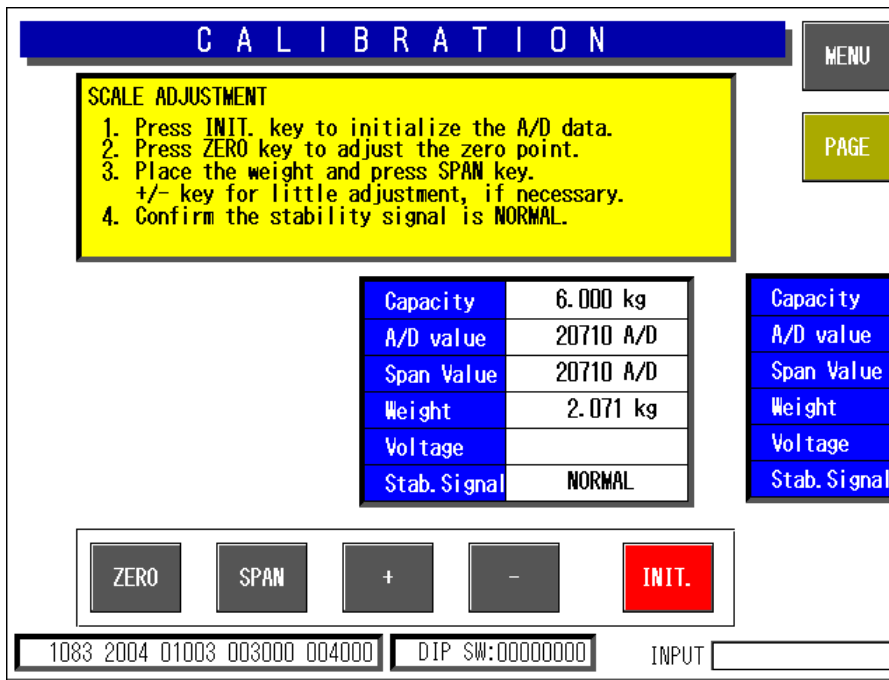
Turn the knob on right side of the operating console to adjust color contrast.

3.8 SCALE CALIBRATION

Press the [Calibration] button on the Test Menu screen. Then, the Calibration screen appears.

3.8.1 A/D DATA INITIALIZATION, ZERO POINT/SPAN ADJUSTMENT

This procedure is used to initialize the A/D data, adjust the zero point, and perform span adjustment of the scale.



Calibration Screen

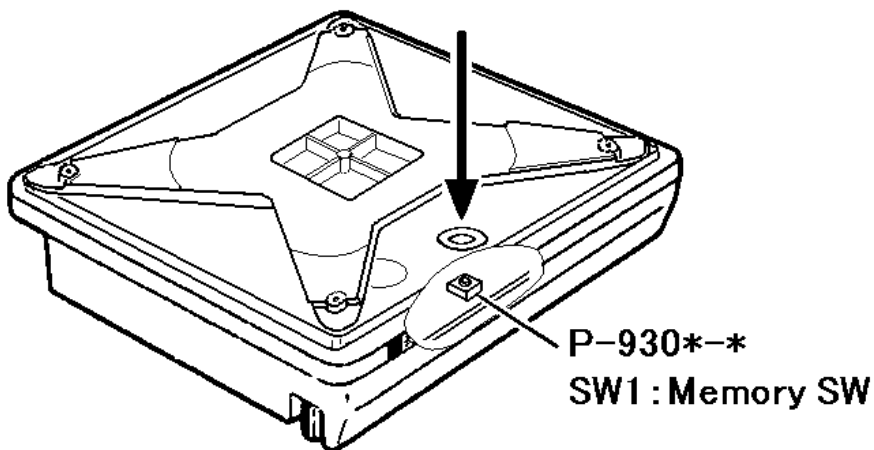
Buttons/Display Fields	Function
MENU	Returns to the Test Menu 1/2 screen.
PAGE	Changes to the scale adjustment screen after password has been entered. Inputting the command sends it directly to the scale board.
ZERO	Executes zero point adjustment.
SPAN	Executes span adjustment.
[+][-]	Executes fine span adjustment using these buttons.
INITIALIZE	Executes the scale board initialization.
Capacity	Displays weighing capacity in "kg" based on scale board information.
A/D Value	Displays A/D (read) data (count value) in A/D units.
Span Value	Subtracts span data from the read data (the above mentioned A/D value) and displays the value (count value) in A/D units.
Weight	Displays the weight value in "kg" calculated from the A/D value based on the set district information.
Voltage	Displays the voltage.
Stability Signal	"Normal" is displayed when the first stability signal is received normally. The display goes blank if communication is unsuccessful.
Scale Setting Information	Displays basic performance data and country specific scale setting data.
DIP Switch Data	Displays scale board DIP switch setting status. Refer to the table below.

■ DIP Switch Settings

DIP SW bit	Content
0	Board No. 0: Set with "X" command 1: "0" fixed
1	Storage command 0: "W" command prohibited 1: "W" command allowed
2	Test mode 0: "*" command prohibited 1: "*" command allowed
3	Movement average 0: 8 times 1: None
4	Zero bias 0: Yes 1: No
5	Sending weight 0: No 1: 20msec
6	A/D data 0: ASC-HEX 5byte 1: ASC-HEX 6byte
7	Analog filter 0: Software 1: Hardware

■ Memory Switch

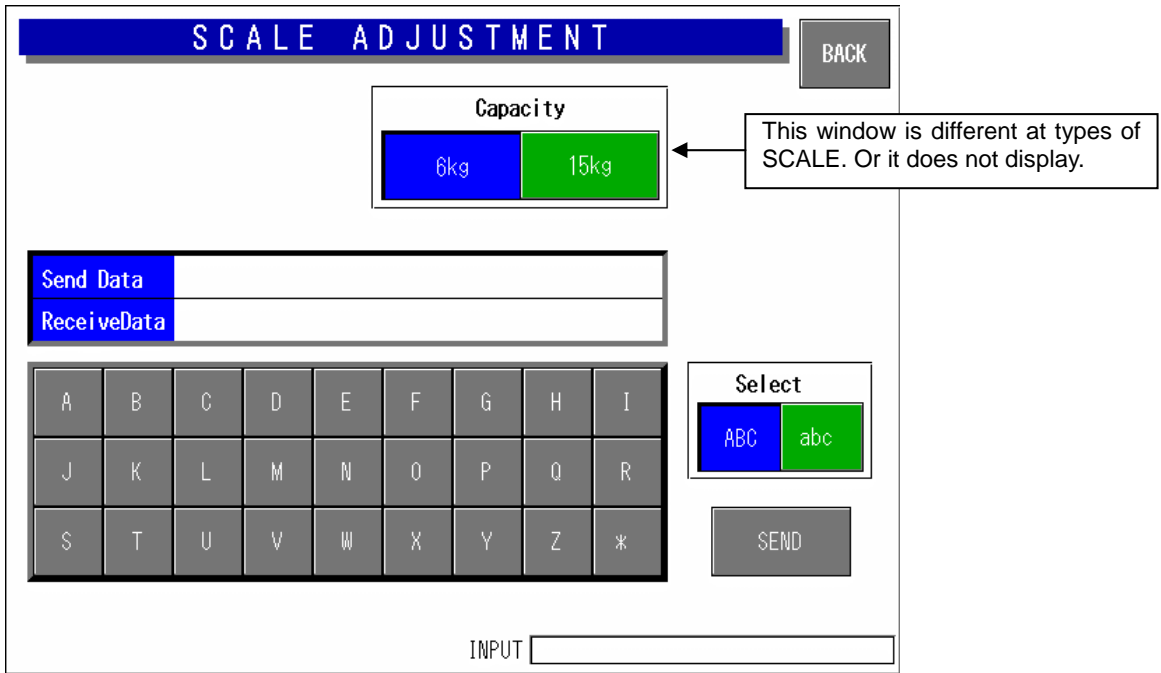
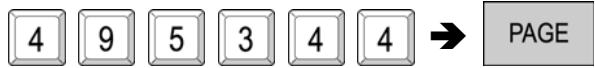
Please push a Memory switch after the completion of adjustment.



3.8.2 SCALE ADJUSTMENT

This procedure is used to select the weighing capacity and create a command message to be sent to the scale.

Enter “495344” using the numeric keys and press the [PAGE] button.



Scale Adjustment Screen

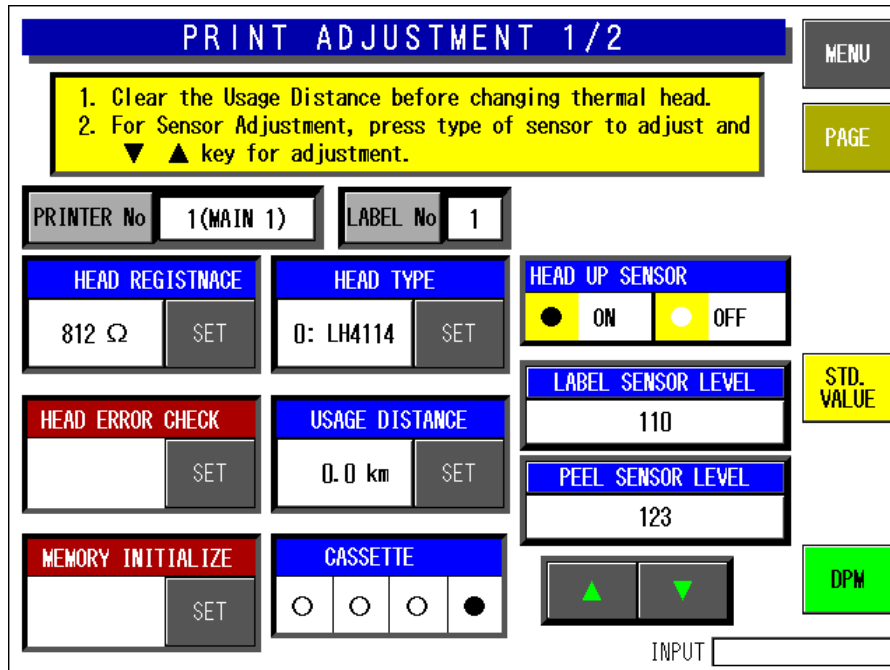
Buttons/Display Fields	Function
BACK	Returns to the Calibration screen.
Capacity	Select either “6kg” or “15kg”. Press the button that corresponds to the capacity to be selected. The button color will change to blue.
SPAN	Executes span adjustment.
Select [ABC] [abc]	Select either “ABC” or “abc”. These buttons select upper or lowercase letters for alphabetic input when creating a command message to send to the scale board. Select letter type by pressing the corresponding button. The button color will change to blue.
SEND	Send the command message to the scale unit.
Send Data	Displays command message data sent to the scale board.
Receive Data	Displays command message data received from the scale board.

3.9 PRINT ADJUSTMENT

Press the [Print Adjustment] button on the Test Menu screen. Then, the Print Adjustment 1/2 screen appears.

3.9.1 PRINT ADJUSTMENT 1/2

This procedure is used to set various printing conditions, and adjust various sensor levels for the selected printer.

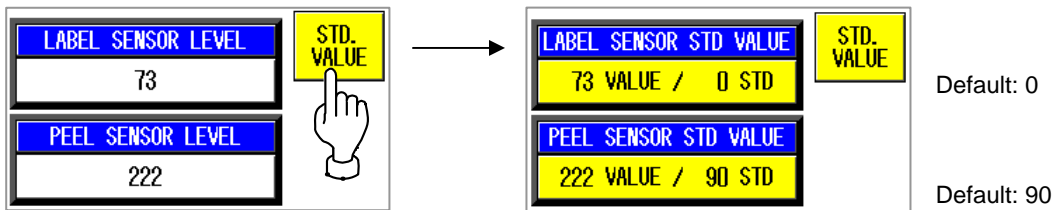


Print Adjustment 1/2 Screen

Buttons/Display Fields	Function
MENU	Returns to Test Menu 1/2 screen.
PAGE	Changes to Print Adjustment 2/2 screen.
DPM (Digital Potentiometer)	Adjust the sensitivity of each label sensor and peel sensor. Changes the label and peel sensor value Display Fields to green and makes it possible to change data. Adjust sensitivity by pressing one of the sensor value Display Fields and making a numeric entry. Sensitivity can be adjusted by pressing one of sensor value Display Fields after numeric entry. Touch this button again to exit sensitivity adjustment mode and return the color to white.
Printer No.	Displays the printer number to be adjusted. Touch the [SET] button after numeric entry to set a new printer to be adjusted. Data range is 1-4.
Label No.	Displays the label number that is linked with the numbers of the printer and the cassette to be adjusted. Set the label number in the label detail screen in System Mode. Default data: "1" for printer #1, "2" for printer #2, "6" for PP printer. Set the above-mentioned label sensor threshold (standard) value for each label number.

Buttons/Display Fields	Function
Head Resistance	<p>Displays thermal head resistance (Ω, zero suppression). Touch the [SET] button after numeric entry to set new head resistance. Data range is 0-999. The buzzer will sound if data is set beyond the specified range. Touch the [SET] button without numeric entry to automatically set head resistance. "Auto Setting" is displayed during the execution of automatic settings.</p>
Head Error Check	<p>Execute thermal head error check. "Processing" is displayed during processing. "Normal" is displayed when processing has ended normally. "Abnormal" is displayed when processing has ended abnormally.</p>
Memory Initialization	<p>Initialize printer memory. "Processing" is displayed during processing. "Normal" is displayed when processing has ended normally. "Abnormal" is displayed when processing has ended abnormally. Execute sensor levels, back feed calibration, initialization of the protection setting value against head temperature rise, and acquisition of the head resistance, and initialization of label and cassette master data for the selected printer. Be sure to execute this procedure when the P-910 has been replaced.</p>
Head Type	<p>Displays thermal head type name. One of the following three types can be set: Press the [SET] button after numeric entry to set the desired head type. Default data: "0" LH4114 (8 dots/mm standard).</p> <p>1: LH4116 (8 dots/mm history control). Printing is not possible with the LH4116 head (8 dots/mm history control) installed. Printing can be normally performed when "1" is set and the LH4114 installed.</p> <p>2: BHP4312 Set the BHP4312 (8 dots/mm 2 colors) when using two color specifications. Set the DIP switch on the thermal board and "Thermal paper type" in "Print Adjustment 2/2" screen to "2: 2 color label".</p>
Usage Distance	<p>Thermal head movement distance ("km", zero suppression) is displayed. Touch the [SET] button to clear head movement distance.</p>
Cassette Status	<p>Refer only when adjusting the cassette applicable printer.</p> <p>○○○○: No cassettes are inserted. ○○○●: Cassette 1 is inserted. The same sensor as [Head Up Sensor] is used.</p>
Head Up Sensor	<p>Displays head status. "ON" is illuminated when the head is set normally. "OFF" is illuminated when the head is up.</p>
Label Sensor Level	<p>Displays label sensor level. Touch this button to finely adjust the label sensor level (display field will change to green) and press the (Δ ∇) adjustment buttons. Touch this button again to change the display to white and set adjustment data. The level range is 0-255.</p>
Peel Sensor Level	<p>Displays peel sensor level. Touch this button to finely adjust the peel sensor level (display field will change to green) and press the (Δ ∇) adjustment buttons. Touch this button again to change the display to white and set adjustment data. The level range is 0-255.</p>

STANDARD VALUE	STANDARD VALUE can perform change of the threshold value of label sensor and peel sensor.
----------------	---



LABEL SENSOR STD VALUE

The initial value of the threshold value of a label sensor is 0.

Level Detection mode:

0 STD judges the difference of the Sensor output level, of label and label gap.
In the case of 60 or more, a level difference judges it as a label gap.

Threshold Detection mode:

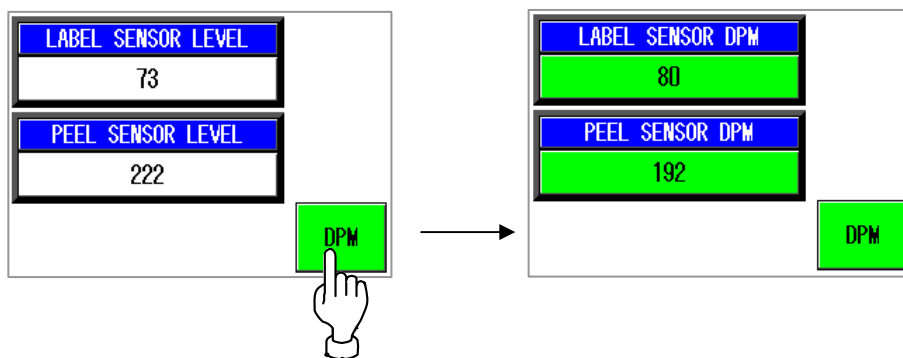
In the case of one (1) or more, STD considers it as the value of threshold.
If the value of threshold is exceeded, it will be judged as a label gap.

PEEL SENSOR STD VALUE

Only Threshold Detection mode:

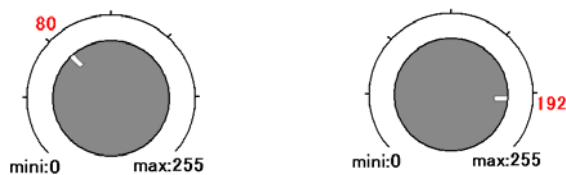
It is judged that the value below threshold has a label.
It is judged that the value exceeding threshold has no label.

DPM	DIGITAL POTENTIAL METER Digital The position of volume can be checked.
-----	---



It is a minimum 0 from a maximum 255.

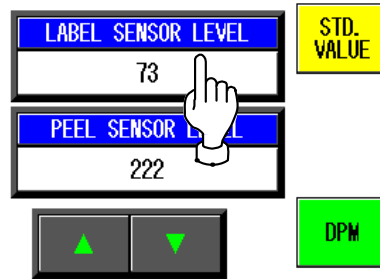
The following figure is a case where it transposed to analog type volume.



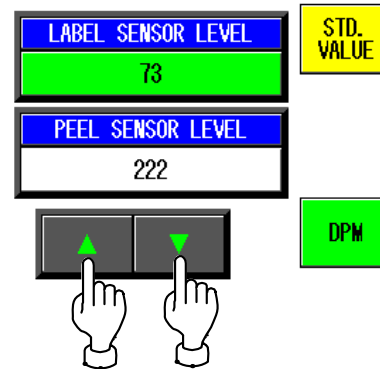
The adjustment method of a LABEL SENSOR

1. The adjustment method of a gain.

Touch the [LABEL SENSOR LEVEL] button.



Display field will change to green.



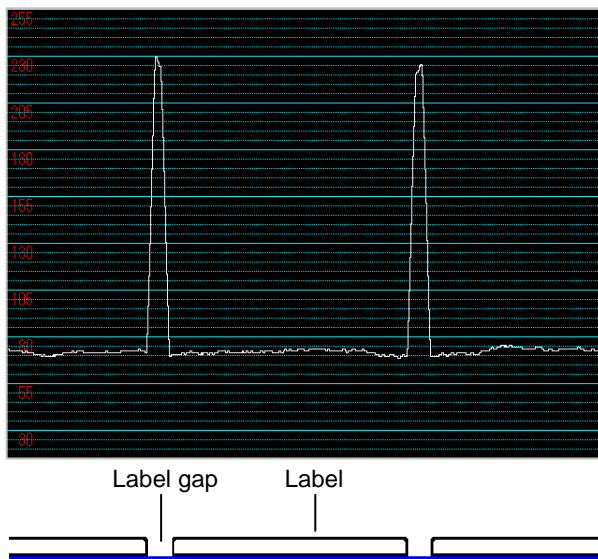
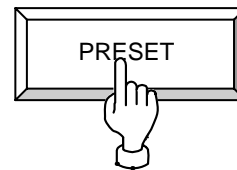
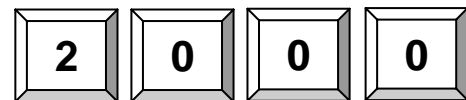
Touch the (Δ ∇) adjustment buttons. Press this button again to change the display to white and set adjustment data.

2. The check method of a sensor level.

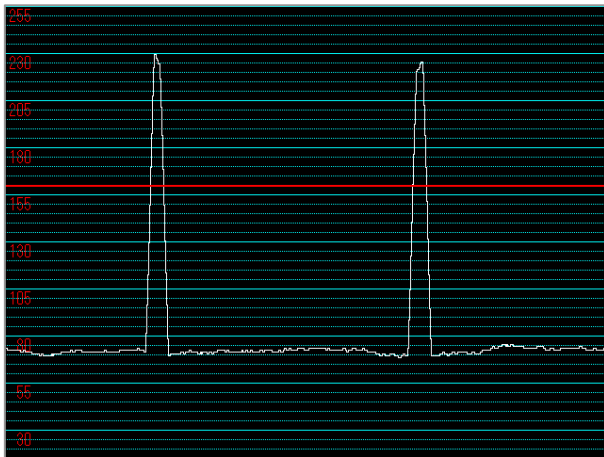
Press the [FEED] key 2 or 3 times. Then, label comes out.



Press the [2][0][0][0] at numeric keys. And press the [PRESET] key. Then, graph pops up.



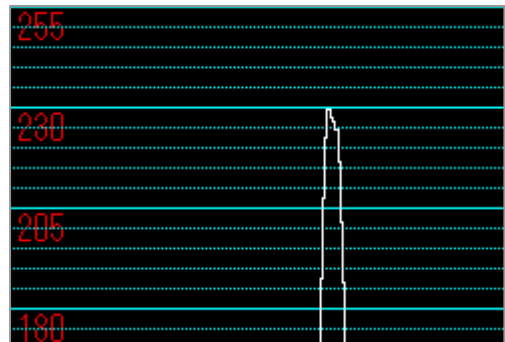
Graph in case a STD value is 0



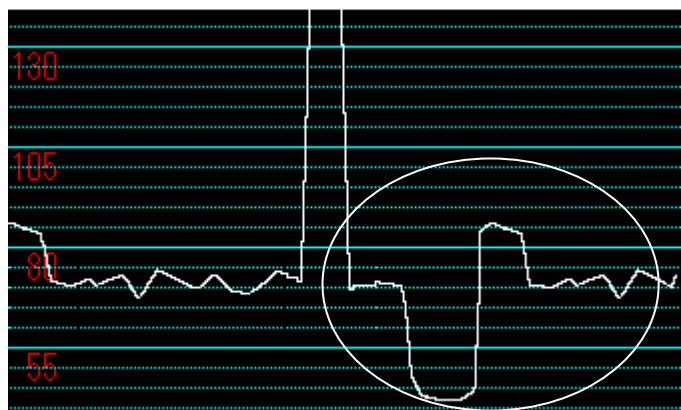
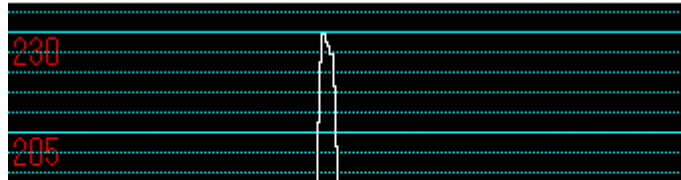
← Red Line is STD value.

Graph in case a STD value is XXX.

Please adjust the output of label gap to 200 - 240.



Label which has shade in graphic design may cause 60 or more output change.
 In this case, it is judged as label gap.
 In such a case, Please set it as Threshold Detection mode(STD value).

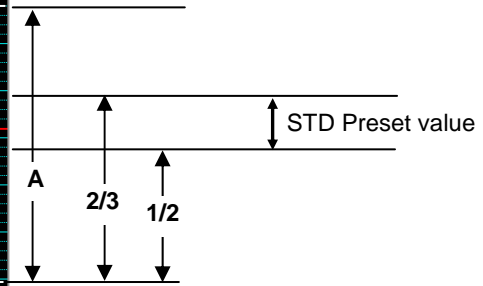
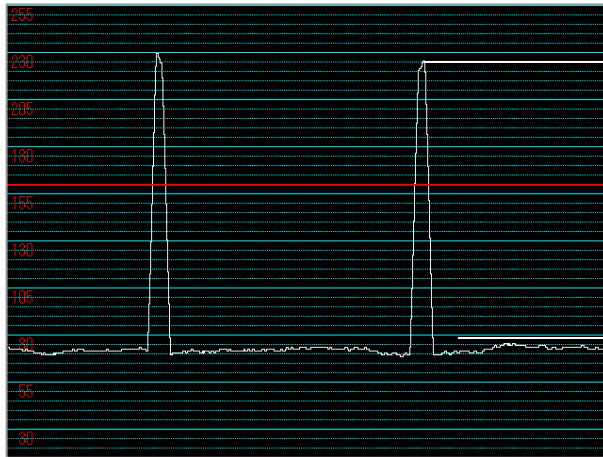
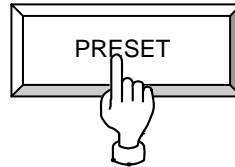
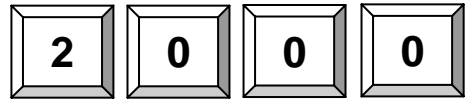


3. The adjustment STD value(Threshold Detection mode)

Press the [FEED] key 2 or 3 times. Then, label comes out.



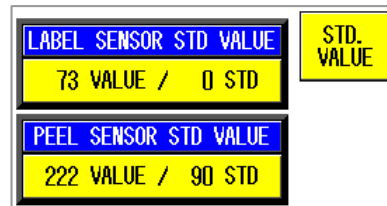
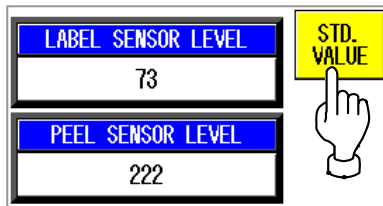
Press the [2][0][0][0] at numeric keys. And press the [PRESET] key. Then, graph pops up.



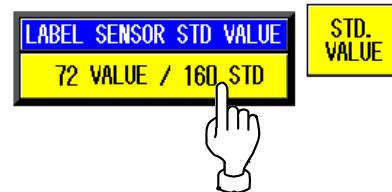
A is the value between label detection part and label gap detection part.
 Label detection part is the highest value.
 Label gap detection part is the lowest value.

Preset value is between one half of A, and 2/3.

Touch the [STD VALUE] button.



Enter the "STD Preset value" at numeric keys, and touch the [LABEL SENSOR STD VALUE] field.
 Next, please display Graph pops and check the line of STD VALUE Line.



The adjustment method of a PEEL SENSOR

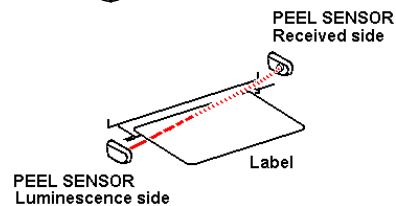
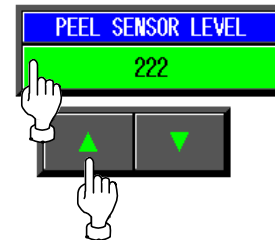
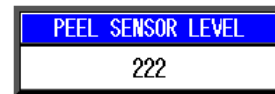
1. The adjustment method of a gain.

Check the value of PEEL SENSOR LEVEL. When not covered by label between Peel sensor.

With a value 200 or more , it is good.

With 200 or less , adjust [PEEL SENSOR LEVEL].

If a level does not go up, the optic axis has shifted. Or Sensor is no good.(Adjustment method the optic axis. or Exchange sensors.)

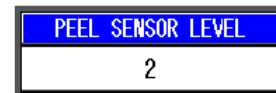


Touch the [FEED] key . Then, label comes out.

When covered by label between Peel sensor.
Check PEEL SENSOR LEVEL in this state.
10 or less are normal.

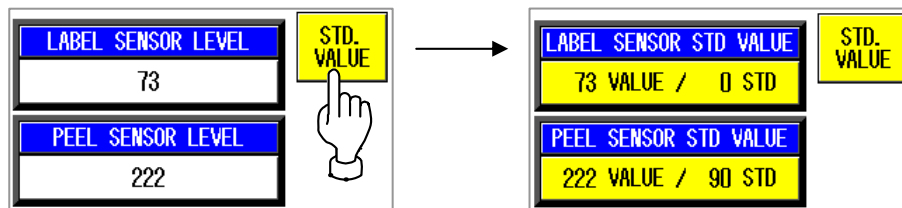
When much more values are shown, the influence from a spotlight may be received.

In this case, please avoid a light source.



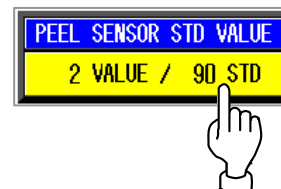
2. The adjustment STD value

Touch the [STD VALUE] button.



The check of PEEL SENSOR LEVEL can also be performed in this mode.

Enter the "STD value" at numeric keys. And touch the [PEEL SENSOR STD VALUE].



3.9.2 PRINT ADJUSTMENT 2/2

This procedure is used to set printing conditions, label and peel sensor distances, and various labeling conditions for test label printing.

PRINT ADJUSTMENT 2/2					
TEST-PRINTER No.		TEST-FORMAT No.		TEST-LABEL LENGTH	
PRN No. 1	SET	52	SET	37.0 mm	SET
PRINT DENSITY		LABEL SENSOR DIS.		LABEL GAP	
5	SET	50.0 mm	SET	2.5 mm	SET
PRINT SPEED		PEEL SENSOR DIS.		FEED	
100 mm/sec	SET	11.0 mm	SET	7.5 mm	SET
*TEST PRINT LABEL PRINT BACKFEED CONTROL [NORMAL] [CHECKER] [NO] [YES]				FEED (STOP)	
				3.5 mm	SET
				PAPER TYPE	
				1:STANDARD	SET
BACKFEED LENGTH			HEAT PROTECTION		
[45mm]	[60mm]	[80mm]	[1.0 mm]	[NO]	[YES] [SPECI]
					INPUT <input type="text"/>

Print Adjustment 2/2 Screen

Buttons/Display Fields	Function
MENU	Returns to the Test Menu 1/2 screen.
PAGE	Changes to the print adjustment (head information) screen.
Printer No.	Displays the number of the printer to be adjusted. Press the [SET] button after a numeric entry to change the number of the printer to be adjusted. The data range is 1-4. The buzzer will sound if data is entered outside the range or no data is entered.
Print Density	Displays the set print density. Press the [SET] button after a numeric entry to set the print density. The data ranges from 0 (lightest) to 9 (darkest), and the buzzer will sound if data is entered outside the range or no data is entered. The default value is "5".
Print Speed	Displays the set print speed (mm/sec). Press the [SET] button after a numeric entry to set the print speed. The data range is 60-130 (in units of 10mm/sec.). The default value is "100mm/sec." A slower print speed results in a higher print quality.
Test Format No.	Displays the test label format number (2 digits) to be referred to for test printing or label feeding. Press this button after a numeric entry to set the label format for the test print. The data range is 1-99, and the buzzer will sound if data is entered outside the range or no data is entered. The default value is the default format set in the printer.
Label Sensor Distance	Displays the set label sensor distance (mm). The entered data can be set as the printer label sensor distance by pressing the [SET] button after a numeric entry. The data range is 1-999 in increments of 0.1mm. The default value is 41.0mm.
Peel Sensor Distance	Displays the set peel sensor distance (mm). The entered data can be set as a peel sensor distance of the objective printer by pressing the [SET] button after a numeric entry. The data range is 1-999 in increments of 0.1mm. The default value is 11.0mm.
Test Label Length	Displays label length (mm) for test printing. The entered data can be set as the printer label length by pressing the [SET] button after a numeric entry. The data range is 1-9999 in increments of 0.1mm. A buzzer will sound if data is entered outside the range or no data is entered. The default value is the label length of the above-mentioned test format number. The label will be fed for the distance of the label and gap lengths.
Label Gap	Displays the set gap length (mm). The entered data can be set as a gap length of the printer by pressing the [SET] button after a numeric entry. The data range is 1-999 in increments of 0.1mm. A buzzer will sound if data is entered outside the range or no data is entered. The default value is 2.5mm.
Feed	Displays the set feed length (mm). The entered data can be set as the printer feed length by pressing the [SET] button after a numeric entry. The data range is 1-999 in increments of 0.1mm. The default value is 7.5mm. This data becomes the back feed length when the back feed control is performed.
Feed (Stop)	This is effective only when the automatic label applicator is used. A label is issued leaving the set feed stop length, and fed for the length immediately before it is sucked by the applicator. The set feed stop length is displayed. Press the [SET] button after a numeric entry to set the feed stop length of the printer. The data range is 1-999 in units of 0.1mm. The default value is 3.5mm.
Test Print (Label Print)	Select the print pattern when test printing is performed. Press either "Normal" or "Checker" to select the item and change the button color to blue. When test printing is performed, this selection information will be used. The default data is "Checker".

Buttons/Display Fields	Function
Test Print (Back Feed Control)	<p>Select the back feed function when test printing is performed. Press either "YES" or "NO" to select the desired function and change the button color to blue.</p> <p><i>Note: This setting is applied only to the test print. Back feed settings for normal printing can be performed in the Label Detail Settings in the System Menu.</i></p>
Paper Type	<p>Displays the type of thermal paper selected. Press the [SET] button after a numeric entry to set the type of thermal paper to be used in the printer. The data range is 0-9 with the following parameters:</p> <ul style="list-style-type: none"> 1: Standard label 2: Two color label 3-9: Not registered <p>The default value is "1".</p>
Back Feed Length	<p>A loss is caused in the feeding length for each roller due to the reverse rotation of the motor, gears, and print roller during back feed operation. This function is used to make up that loss.</p> <p>It does not influence the store name, address, and ruled lines for each existing format. However, it is used in the case of a format without sufficient space.</p> <p>The top and bottom dimensions (approximation) of the set label and the back feed correction length (mm). Press the top/bottom select button to determine the label top/bottom type for correction length.</p> <p>Select one of three types: 45mm, 60mm, or 80mm. The selected size field changes to blue. Press the correction length display field after a numeric entry to set the correction length for the selected top and bottom dimensions. The data range is 0.0-9.9mm.</p>
Heat Protection	<p>Displays the heat protection selection for the set head. Press the [SELECT] button to select head temperature increase protection. The button color will change to blue.</p> <p>No: Print even if the head temperature increases. (Default) Yes: Stop printing for about 0.5 seconds if the head temperature increases.</p> <p>The print density is high, and it is a level where the temperature over rises by 1000 piece continuous printing. The print density is high and the head will overheat after continuously printing 1000 labels.</p> <p>Usually set to "No".</p>

3.10 ROM VERSION DISPLAY

Press the [ROM Version] button on the Test Menu screen. Then, the ROM Version screen appears. This procedure is used to display the ROM version of connected devices. It cannot display devices that are not connected.

ROM VERSION			
SOFTWARE	VERSION	SOFTWARE	VERSION
MAIN	B0640		
SCALE	J0503		
WRAP APP			
		BOOT ROM	J0568E
LABEL APP		OS	5.3.1-1.2/3
LABEL BOOT		ELAN	I2NET 5
		ILAN	I2NET 5
PROCESS BD	J0505		

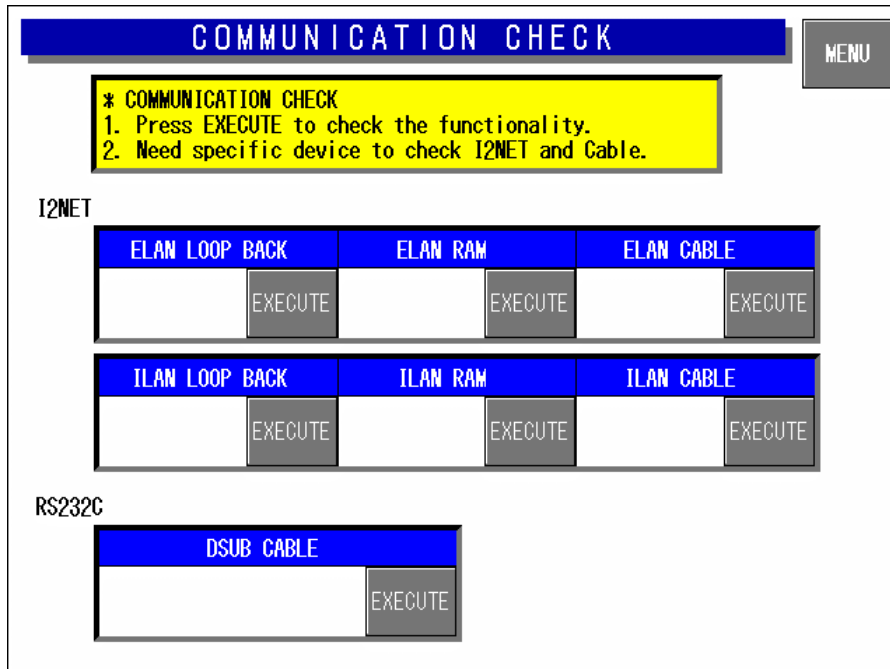
ROM Version Display

Buttons/Display Fields	Function
MENU	Returns to the Test Menu 1/2 screen.
Version Display	Displays the ROM version of connected devices. The sample data for the above-mentioned display is different from actual ROM version numbers. Cannot display devices that are not connected.

The software of MAIN is Different at country and specifications.

3.11 COMMUNICATION CHECK

Press the [Communication Check] button on the Test Menu screen. Then, the Communication Check screen appears. This procedure is used to perform various communication checks.

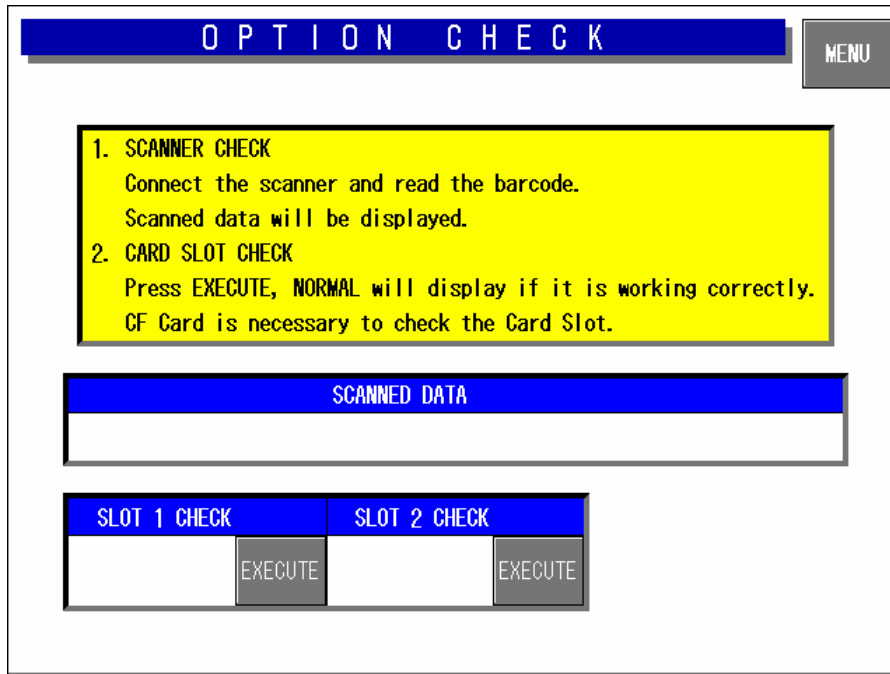


Communication Check Screen

Buttons/Display Fields	Function
MENU	Returns to the Test Menu 1/2 screen.
ELAN Loop Back	Press the [EXECUTE] button to execute a send and receive loop test within the board.
ELAN RAM	Press the [EXECUTE] button to execute a send and receive buffer memory test.
ELAN Cable	Connect the IF-21FD to the cable to confirm the response. Press the [EXECUTE] button to execute a cable test.
ILAN Loop Back	Press the [EXECUTE] button to execute a loop back test.
ILAN RAM	Press the [EXECUTE] button to execute an ILAN RAM test.
ILAN Cable	Connect the IF-21FD to the cable to confirm the response. Press the [EXECUTE] button to execute a cable test.
RS232C Dsub Cable	Press the [EXECUTE] button to execute a cable test and RS-232C input/output check. Use the loop back connector for testing.
Display Status	“Operating” is displayed during execution. “Normal” is displayed when the execution has ended normally. “Abnormal” is displayed when execution has ended abnormally.

3.12 OPTION CHECK

Press the [Option Check] button on the Test Menu screen. Then, the Option Check screen appears. This procedure is used to perform scanner and card slot checks.

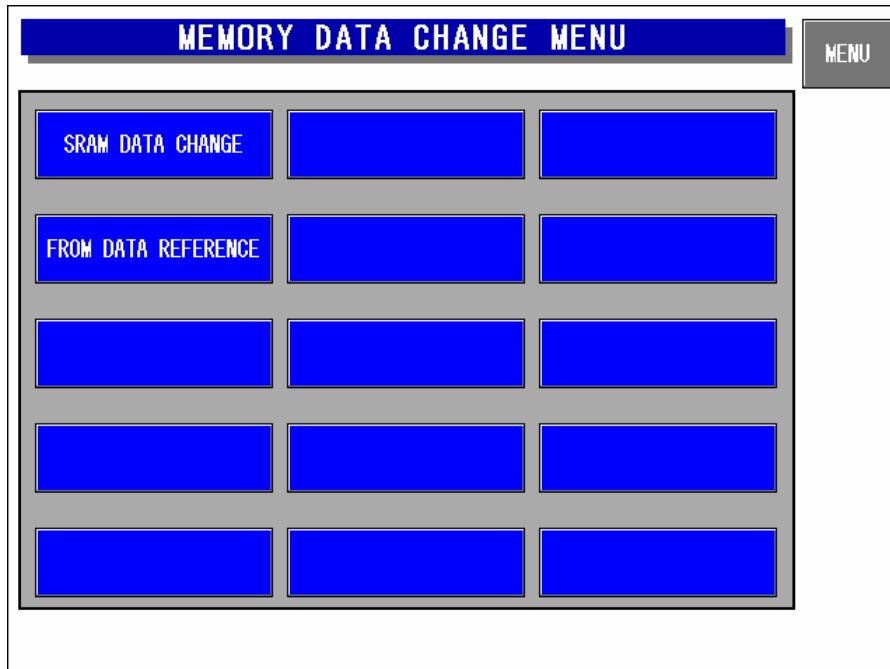


Option Check Screen

Buttons/Display Fields	Function
MENU	Returns to the Test Menu 1/2 screen.
Scanned Data	Displays the OCR data when a barcode is read with the scanner.
Slot 1 Check	Insert the formatted CF card (8M, 16M) and press the [EXECUTE] button to execute an operation check.
Slot 2 Check	Insert the formatted CF card (8M, 16M) and press the [EXECUTE] button to execute an operation check.
Display Status	<p>"Operating" is displayed during execution.</p> <p>"Normal" is displayed when the execution has ended normally.</p> <p>"Abnormal" is displayed when execution has ended abnormally.</p>

3.13 MEMORY DATA CHANGE MENU

Press the [Memory Data Change] button on the Test Menu screen. Then, the Memory Data Change Menu screen appears.

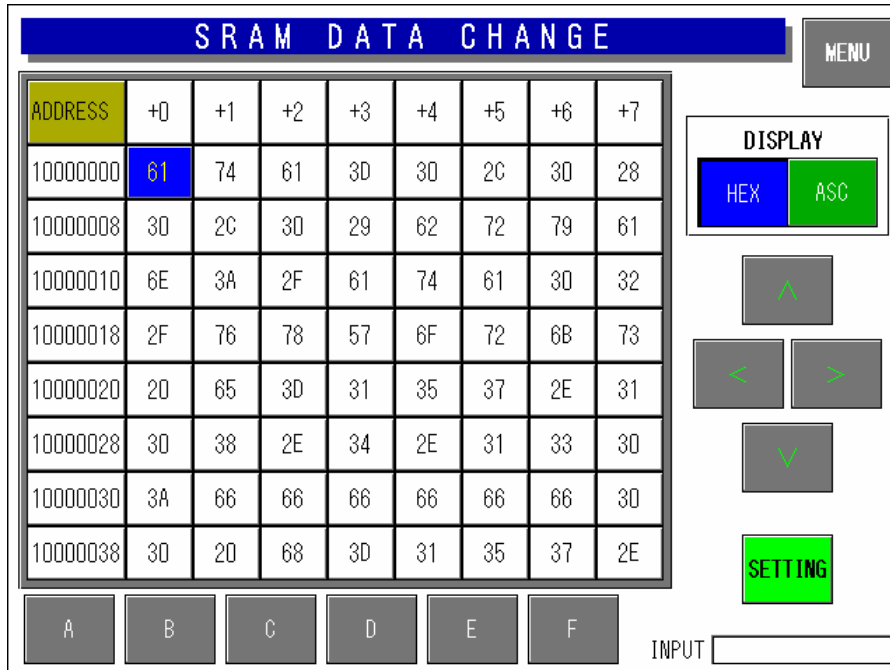


Memory Data Change Menu Screen

Buttons/Display Fields	Function
MENU	Returns to the Test Menu 1/2 screen.
SRAM Data Change	Press this button to change the display to the SRAM data change screen. SRAM data can be changed and confirmed on the memory dump list.
FROM Data Reference	Changes to the FROM data reference screen. FROM data can be confirmed on the memory dump list.

3.13.1 SRAM DATA CHANGE

Press the [SRAM Data Change] button on the Memory Data Change Menu screen. Then, the SRAM Data Change screen appears. This procedure is used to confirm or change SRAM data on the memory dump list.

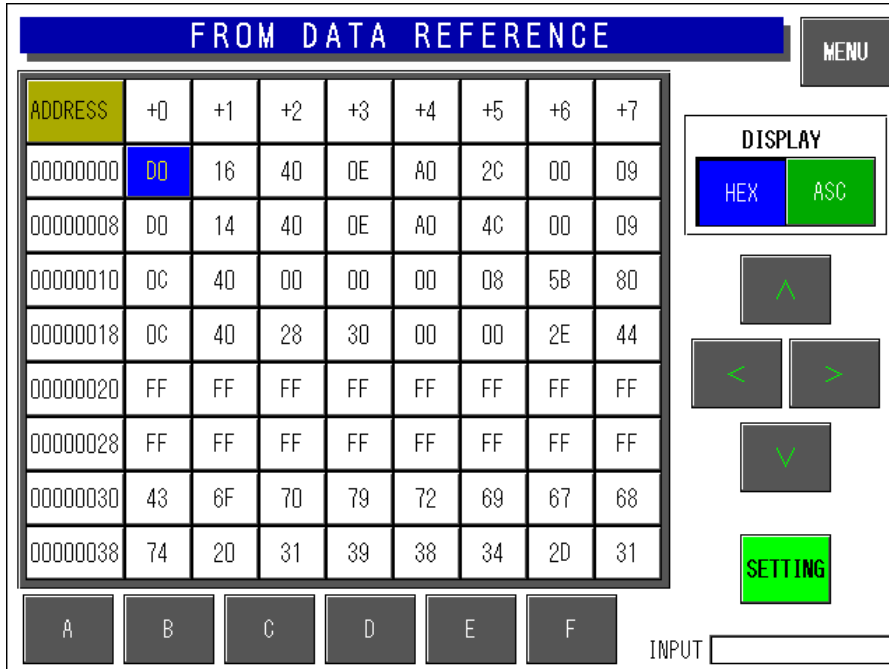


SRAM Data Change Screen

Buttons/Display Fields	Function
MENU	Returns to the Memory data change menu screen.
SRAM Data Button	Press any button (address position) to change its color to blue and enable settings for modification. The memory data status is displayed.
Display	Select either "HEX" or "ASC" data formats. Press one of these buttons to select the data format and the selected button will change to blue. The data display format will change in the SRAM data display field.
Up/Down Left/Right	Press these buttons to move active SRAM data (address) positions. Press these buttons without a numeric entry to move the cursor in the desired direction. Press one of these buttons after a numeric entry to move the cursor to the entered address position.
SETTING	Press this button after numeric entry to set the entered data to the memory data to be changed (RAM data field is blue). The data range is 0-FF. An operation error buzzer will sound if data is entered outside the range or there is no numeric entry made.

3.13.2 FROM DATA REFERENCE

Press the [FROM Data Reference] button on the Memory Data Change Menu screen. Then, the FROM Data Reference screen appears. This procedure is used to confirm FROM data on the memory dump list.



FROM Data Reference Screen

Buttons/Display Fields	Function
MENU	Returns to the Memory data change menu screen.
FROM Data Button	Press any button to change its color to blue and display the set memory data.
Display	Select either "HEX" or "ASC" data formats. Press one of these buttons to select the data format and the selected button will change to blue. The data display format will change in the FROM data display field.
Up/Down Left/Right	Press these buttons to move the displayed FROM data position. Press these buttons without a numeric entry to move the cursor in the desired direction. Press one of these buttons after a numeric entry to move the cursor to the entered address position.
SETTING	This screen is used only for data reference and an error will occur if this button is pressed.

3.14 TIME AND DATE SETTING

Press the [Time & Date Setting] button on the Test Menu screen. Then, the Time and Date Setting screen appears. Enter the date (DD-MM-YYYY) and press the Date field to set. In the same manner, enter the time (HH:MM:SS) and press the Time field to set.

Time and Date Setting Screen

Buttons/Display Fields	Function
MENU	Returns to the Test Menu 1/2 screen.
DATE	Press this button after a numeric entry to set the date. Non-existent calendar dates cannot be set. Data format is day (2 digits), month (2 digits), and year (4 digits).
TIME	Press this button after a numeric entry to set the time. Data format is hour (2 digits), minute (2 digits), and seconds (2 digits). The data range is 0-235959. Press this button without a numeric entry to set seconds to "00".

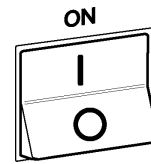
4

SYSTEM MODE**Contents**

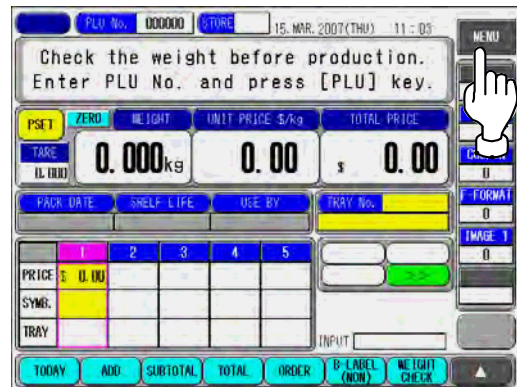
4.1	SYSTEM MENU ENTRY	2
4.2	SYSTEM MENU	3
4.3	TCP/IP SETUP	6
4.4	SYSTEM DATA SETUP	8
4.5	AUTO PROGRAM SETTING	10
4.6	LABEL PRINT COMBINATION SETUP	13
4.7	FORMAT SETTING	23
4.8	PRINT ITEM SETTING.....	24
4.9	FILE CHECK	26
4.10	FILE INPUT/OUTPUT	28
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4.12	LINK MASTER ERROR SETUP.....	32
4.13	DISPLAY ERROR LOG	33
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4.17	TRACEABILITY SETUP	48
4.18	SPECIAL TIME	49
4.19	CF FILE I/O	51
4.20	MACHINE NO.	59
4.21	EXCHANGE RATE	60
4.22	SCANNER SETUP	61

4.1 SYSTEM MENU ENTRY

1. Turn on the Main Power Switch.



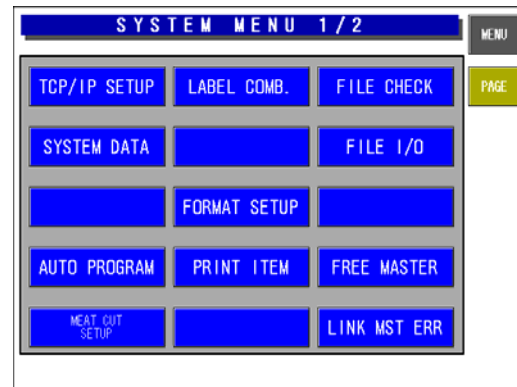
2. Press the [MENU] button on the initial screen.



3. Enter "495344" using the numeric keys and press the [PLU] stroke key.

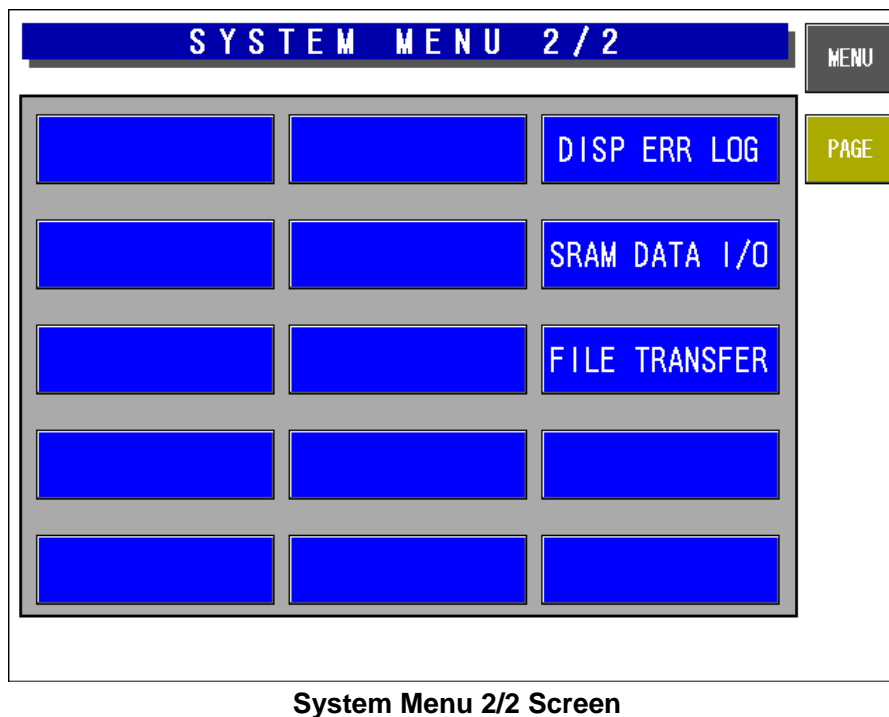
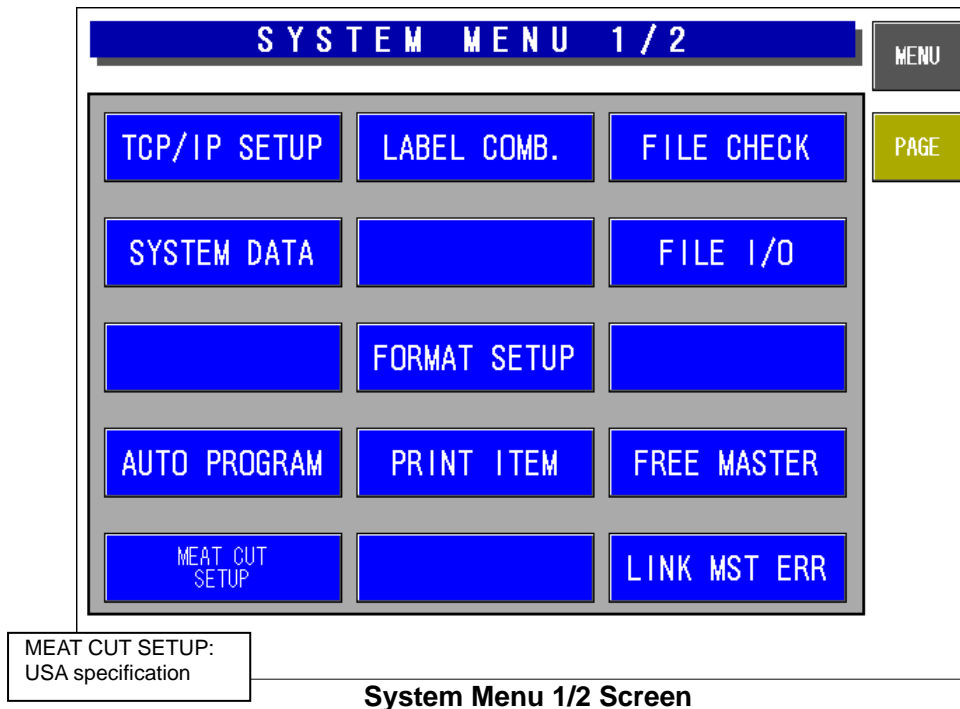


4. The System Menu screen appears.

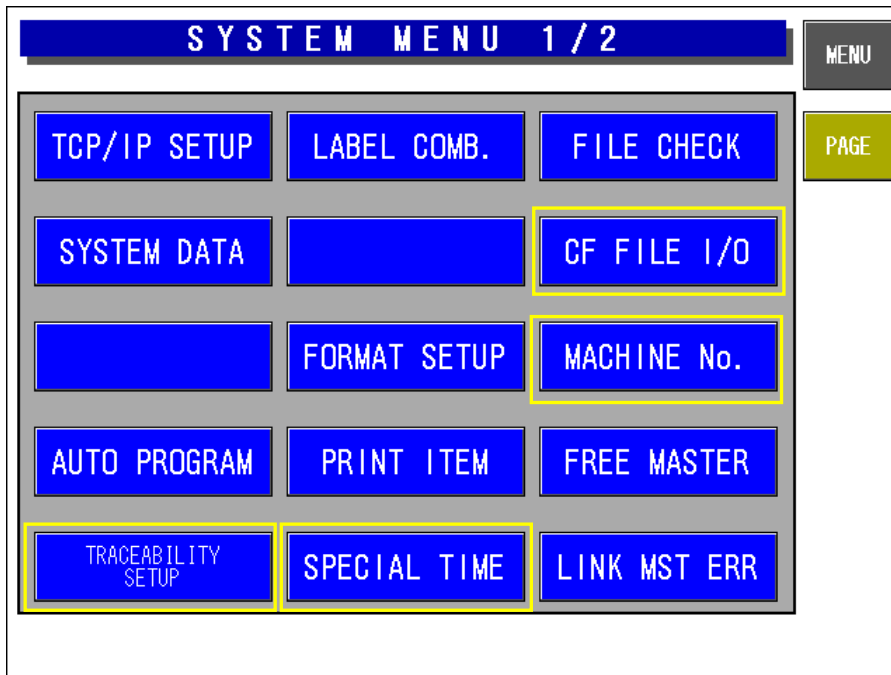


4.2 SYSTEM MENU

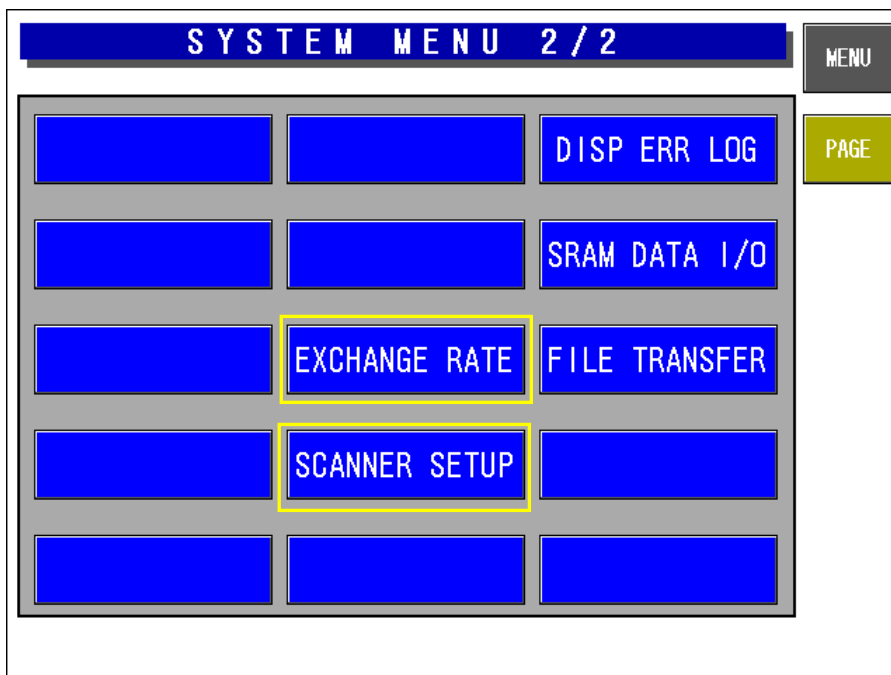
CAN & USA Specifications



EU Specifications



System Menu 1/2 Screen



System Menu 2/2 Screen

Buttons/Display Fields	Function
MENU	Changes to the System Menu 1/2 screen.
PAGE	Press to turn over the screen.
TCP/IP Setup	Changes to the TCP/IP Setup screen. Various data can be set according to consultation of your SE when this machine is connected to a computer.
System Data	Changes to the System Data Setup screen. Processing can be selected when the production order is completed. Select master file change (each PLU/unit price).
Auto Program	Changes to the Auto Program Setting screen. Select whether or not to update data and reflect it to the PLU master file automatically for each item.
Label Combination	Changes to the Label Print Combination Set screen. Set the label type, format, and details. Changing to the label details setting and the format edit screen is also possible as an extended screen. This is not displayed when no printer is connected.
Format Setup	Changes to the Format Setup screen. Create, edit, and delete the label formats.
Print Items	Changes to the Print Item Setting screen. Set the label print items and print position.
File Check	Changes to the File Check screen. Initialize all internal master files.
File I/O	Changes to the File I/O screen. Perform master file I/O processing with the IF-21FD.
Free Master	Changes to the Free Message Name Registration screen. Set the free master names 1-5.
Link Master Error	Changes to the Link Master Error Setup screen. Set the error processing when the character string master file linked with a PLU is not registered.
Display Error Log	Changes to the Display Error Log screen. Check past error history (500 or less).
SRAM Data I/O	Changes to the SRAM Data Input/Output screen. Set IF-21FD and the SRAM data I/O.
File Transfer	Changes to the File Transfer Menu screen. Perform CF card and SRAM data input and output.
Meat Cut Setup	USA specification It relates to the yield of a cut.

EU Specifications

Traceability Setup	Setting for Traceability.
Special Time	The row of time data can be rearranged arbitrarily.
CF File I/O	Perform master file I/O processing with the CF card.
Machine No.	Can only use "Edit" to modify machine number. Push the [EDIT] button and edit the machine number. It can be composed of numbers, Letters and symbols. The length of machine number is limited to 20.
Exchange Rate	Input the exchange rate for local currency. Select the currency of Setting to barcode.
Scanner Setup	Input barcode system of scanner

4.3 TCP/IP SETUP

When this machine is connected to a computer, set the required data according to your SE's advice.

TCP/IP SETUP			
HOST IP ADDRESS	157.108.4.117		
HOST NAME	bryan		
TARGET IP ADDRESS	157.108.4.130		
SUBNET MASK	255.255.255.0		
GATEWAY ADDRESS	157.108.4.254		
TARGET NAME	lstr2k1		
USER NAME	target		
PASSWORD	user		
RCV HOLDER	d:/ftp	SendHOLDER	d:/ftp

INPUT

TCP/IP Setup Screen

TCP/IP SETUP			
<p>Do you want to confirm TCP/IP setup?</p> <p>When [EXECUTE] key is pressed, setting is completed and reboot the scale.</p> <p>When [CANCEL] key is pressed, setting is not reflected.</p>			
<input type="button" value="EXECUTE"/>		<input type="button" value="CANCEL"/>	

INPUT

Execution Confirmation Screen

Buttons/Display Fields	Function
MENU	Returns to the System Menu 1/2 screen.
FIX	Displays the confirmation screen. Press the [EXECUTE] button on the confirmation screen The machine is automatically turned OFF, and turned ON again to apply parameter table settings.
PING	Press to execute a communication test with the host computer.
LOWER LETTER/ UPPER LETTER	Press to select upper or lower case letters for character entry.
Character buttons (A, B, C, etc.)	Press to enter characters for setup values.
INPUT	Displays the data input from the numeric keys and/or the character buttons. A total of 15 digits can be displayed. If 15 digits are exceeded, the first characters will be lost.
Parameter Table	Enter new data using the character buttons and/or numerical keys when changing the parameters. Delete a parameter by pressing the corresponding field on the screen without numeric entry to display the confirmation screen and press the [EXECUTE] button on the confirmation screen.
EXECUTE	Execute processing.
CANCEL	Cancels execution.

4.4 SYSTEM DATA SETUP

There are two System Data Setup screens. On these screens, select the basic machine conditions.

SYSTEM DATA SETUP (1)					
Order Completion Setup		PLU Weight Limit Setup		SLP Tare Use	
BUZZER	MESSAGE	NO	YES	NO	YES
Master Selection (PLU/UP)					
POS TYPE	by PLU	by U/P	LOGO #2	by PLU	by U/P
POS KIND	by PLU	by U/P	LABELING MODE	by PLU	by U/P
POS FLAG	by PLU	by U/P	INFEED SPEED	by PLU	by U/P
POS CODE	by PLU	by U/P	LOGO #3	by PLU	by U/P
REGISTER CODE	by PLU	by U/P	SAFE HANDLING IMAGE NO.	by PLU	by U/P
POP No.	by PLU	by U/P		by PLU	by U/P
COUPON MESSAGE	by PLU	by U/P		by PLU	by U/P
LOGO #1	by PLU	by U/P		by PLU	by U/P

System Data Setup Screen(1)

Buttons/Display Fields	Function
MENU	Returns to the System Menu 1/2 screen.
PAGE	Turns over the screens.
Order Completion Setup	The end process can be selected when the production quantity reaches the set order number. Press the desired button to select either "Buzzer" or "Message." The selected button color will change to blue. Default data: "Buzzer"
PLU Weight Limit Setup	Selects whether to use the upper/lower weight limit check or not when processing a weighing commodity. Press to select the item and the button color will change to blue Default data: "No"
M Price Key Setup	Select whether to enable a markdown price entry in the operation mode
Master Selection (PLU/Unit price)	Press the corresponding button to select "By PLU" or "By Unit Price" The selected button will change to blue. Default data: "By U/P" except POS related data and infeed speed.

SYSTEM DATA SETUP (2)			
ROUND TYPE	DOWN	ROUND	UP
BARCODE PRINT	STANDARD	DISCOUNT	
U/P DISCOUNT	NORMAL	SPECIAL	
OCR TYPE	NORMAL	UCC	
DATE CAL	TODAY	TOMORROW	
TARE SELECT	TARE	TARE 2	

MENU

PAGE

System Data Setup Screen(2)

4.5 AUTO PROGRAM SETTING

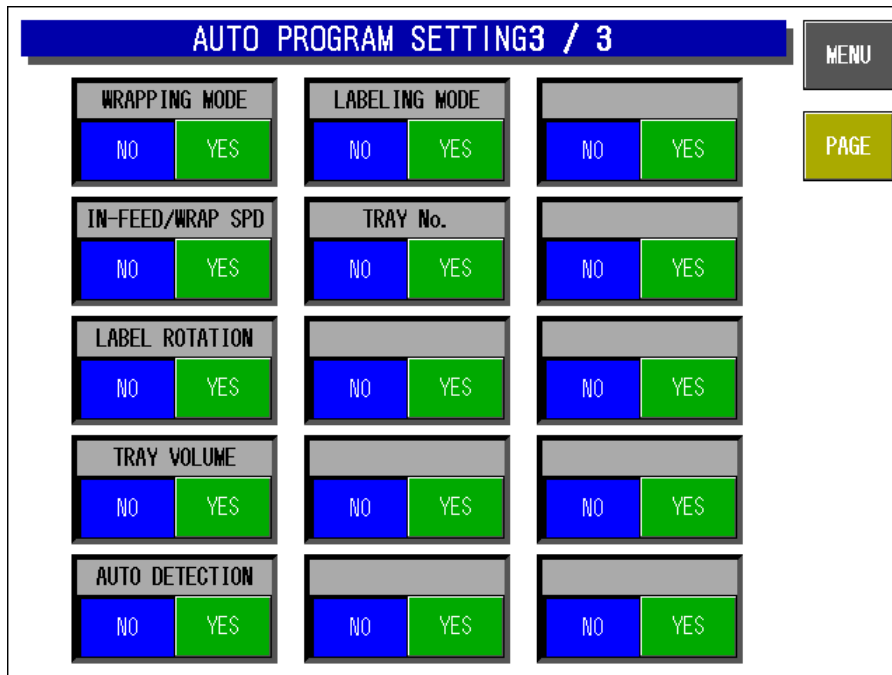
There are three Auto Program Setting screens. On these screens, select whether or not to update data and reflect it to the PLU master file automatically for each item.

AUTO PROGRAM SETTING1 / 3			MENU
UNIT/FIXED PRICE	PACK DATE/TIME	NUTRITION NO.	PAGE
NO YES	NO YES	NO YES	
M PRICE MODE	SHELF LIFE	OPEN PRICE	
NO YES	NO YES	NO YES	
FIXED WEIGHT	USE BY PRINT	FORCED TARE	
NO YES	NO YES	NO YES	
SYMBOL/PCS	BARCODE PRINT	PROP. TARE	
NO YES	NO YES	NO YES	
TARE	BARCODE FORMAT	EXTRA MSG1 No.	
NO YES	NO YES	NO YES	

Auto Program Setting 1/3 Screen

AUTO PROGRAM SETTING2 / 3			MENU
EXTRA MSG2 No.	FREE MSG4 No.	LABEL FORMAT	PAGE
NO YES	NO YES	NO YES	
EXTRA MSG3 No.	FREE MSG5 No.	SECOND LABEL	
NO YES	NO YES	NO YES	
FREE MSG1 No.	POP No.	ITEMCODE	
NO YES	NO YES	NO YES	
FREE MSG2 No.	COUPON No.	UPPER/LOWER LIMIT	
NO YES	NO YES	NO YES	
FREE MSG3 No.	IMAGE No.	SH IMAGE No.	
NO YES	NO YES	NO YES	

Auto Program Setting 2/3 Screen



Auto Program Setting 3/3 Screen

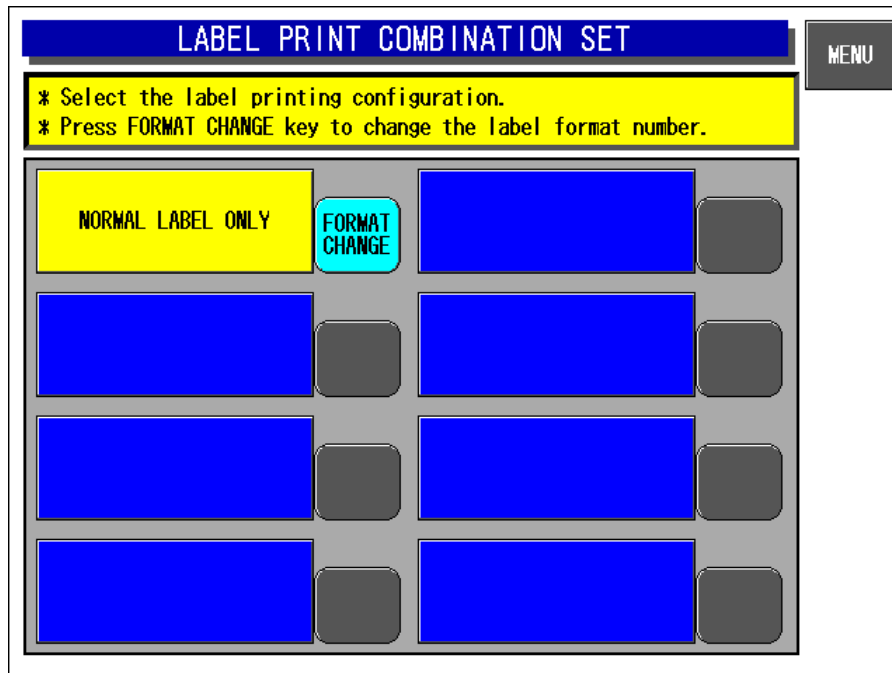
Buttons/Display Fields	Function
MENU	Returns to the System Menu 1/2 screen.
PAGE	Turns over the screen.
Automatic Update Select	Reflect changes made in normal mode in the master file. <ul style="list-style-type: none"> • “No”: The master file is not updated. • “Yes”: The master file is updated. • Press to select the item. Default data: See the table below.

4.5.1 AUTOMATIC UPDATE ITEMS

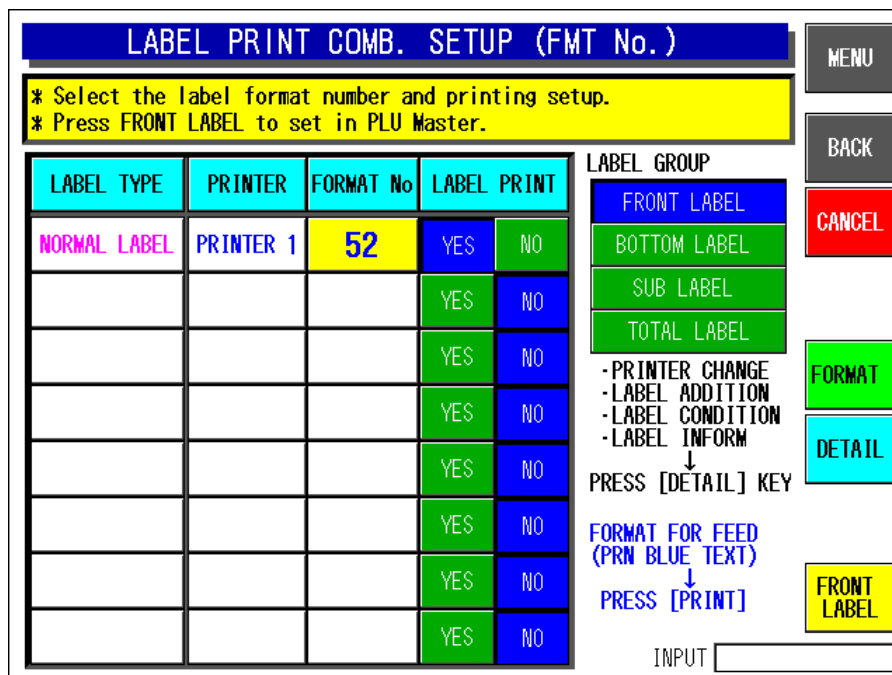
Auto Update Item	Update Object Master File	Default
UNIT/FIXED PRICE	Weighing mode, Unit price, Fixed price, Unit price number	No.
M PRICE MODE	Markdown flag, Markdown price	No.
FIXED WEIGHT	Fixed weight, Weighing mode, Fixed price quantity	No.
SYMBOL/PCS	Fixed price sign, Fixed price quantity	No.
TARE	Tare weight	No.
PACK DATE/TIME	Pack date print flag, Pack time print flag, Pack time selection flag, Pack time	No.
SHELF LIFE	Shelf life date print flag, Shelf life time print flag, Shelf life period, Shelf life time (relative time)	No.
USE BY PRINT	Use-by date print selection	No.
BARCODE PRINT	Barcode print flag	No.
BARCODE FORMAT	Barcode format	No.
NUTRITION No.	Nutrition number	No.
OPEN PRICE	Open price	No.
FORCED TARE	Forced tare	No.
PROP. TARE	Prop tare	No.
EXTRA MSG1	Comment No.1	No.
EXTRA MSG2	Comment No.2	No.
EXTRA MSG3	Comment No.3	No.
FREE MSG 1 No.	Free message No.1	No.
FREE MSG 2 No.	Free message No.2	No.
FREE MSG 3 No.	Free message No.3	No.
FREE MSG 4 No.	Free message No.4	No.
FREE MSG 5 No.	Free message No.5	No.
POP No.	POP number	No.
COUPON No.	Coupon number	No.
IMAGE No.	Image number	No.
LABEL FORMAT	Label format number	No.
SECOND LABEL	Second label	No.
ITEM CODE	PLU code	No.
UPPER/LOWER LIMIT	Upper weight limit data, Lower weight limit data	No.
SH IMAGE No.	SHI Image number	
WRAPPING MODE	Wrapping mode	No.
IN-FEED/WRAP SPD	Infeed speed	No.
LABEL ROTATION	Label pasting direction	No.
TRAY VOLUME	Piling height	No.
AUTO DETECTION	Automatic recognition	No.
LABELING MODE	Labeling mode	No.
TRAY No.	Tray number	No.

4.6 LABEL PRINT COMBINATION SETUP

On this Label Print Combination Setup screen, select the label printing configuration, set various conditions for each label, and change the label format.



Label Print Combination Setup screen



Label Print Combination Setup Screen: Front Label

LABEL PRINT COMB. SETUP (FMT No.)				
* Select the label format number and printing setup. * Press FRONT LABEL to set in PLU Master.				
LABEL TYPE	PRINTER	FORMAT No	LABEL PRINT	
BARCODE LABEL	PRINTER 1	52	YES	NO
INGREDIENTS ONLY LABEL	PRINTER 1	61	YES	NO
INGREDIENTS BARCODE LABEL	PRINTER 1	62	YES	NO
			YES	NO
			YES	NO
			YES	NO
			YES	NO
			YES	NO

LABEL GROUP

FRONT LABEL

BOTTOM LABEL

SUB LABEL

TOTAL LABEL

- PRINTER CHANGE
- LABEL ADDITION
- LABEL CONDITION
- LABEL INFORM

↓
PRESS [DETAIL] KEY

FORMAT FOR FEED
(PRN BLUE TEXT)

↓
PRESS [PRINT]

INPUT

MENU

BACK

CANCEL

FORMAT

DETAIL

FRONT LABEL

Label Print Combination Setup Screen: Bottom Label

LABEL PRINT COMB. SETUP (FMT No.)				
* Select the label format number and printing setup. * Press FRONT LABEL to set in PLU Master.				
LABEL TYPE	PRINTER	FORMAT No	LABEL PRINT	
			YES	NO
			YES	NO
			YES	NO
			YES	NO
			YES	NO
			YES	NO
			YES	NO
			YES	NO

LABEL GROUP

FRONT LABEL

BOTTOM LABEL

SUB LABEL

TOTAL LABEL

- PRINTER CHANGE
- LABEL ADDITION
- LABEL CONDITION
- LABEL INFORM

↓
PRESS [DETAIL] KEY

FORMAT FOR FEED
(PRN BLUE TEXT)

↓
PRESS [PRINT]

INPUT

MENU

BACK

CANCEL

FORMAT

DETAIL

FRONT LABEL

Label Print Combination Setup Screen: Sub-label

LABEL PRINT COMB. SETUP (FMT No.)				
* Select the label format number and printing setup. * Press FRONT LABEL to set in PLU Master.				
LABEL TYPE	PRINTER	FORMAT No	LABEL PRINT	
TOTAL/SUBTOTA	PRINTER 1	97	YES	NO
			YES	NO
			YES	NO
			YES	NO
			YES	NO
			YES	NO
			YES	NO
			YES	NO

LABEL GROUP

FRONT LABEL

BOTTOM LABEL

SUB LABEL

TOTAL LABEL

-PRINTER CHANGE
-LABEL ADDITION
-LABEL CONDITION
-LABEL INFORM

↓
PRESS [DETAIL] KEY

FORMAT FOR FEED
(PRN BLUE TEXT)

↓
PRESS [PRINT]

INPUT

MENU

BACK

CANCEL

FORMAT

DETAIL

FRONT LABEL

Label Print Combination Setup Screen: Total Label

LABEL PRINT SETUP (FRONT LB)		
* Following information is referred when front label type is set to fixed in PLU file. * The label is printed based on setup data such as printer number, label format and cassette. * In case the label type is set to fixed in PLU file, the label printing configuration will not be referred. * Set the following step 1-3. 1. Set the printer number to print the front label. 2. Set the label format number to print the front label. (Press FORMAT key to edit the label format) 3. Set the cassette number if the printer is set with cassette.		
PRINTER	FORMAT No.	CASSETTE No
PRINTER 1	52	1

INPUT

BACK

FORMAT

Label Print Setup (Front Label) Screen

LABEL PRINT COMBINATION SETUP						
Label Printing Setup						
LABEL TYPE	PRINTER	FORMAT	CASS	LABEL PRINT		LB PRINT CONDITION
NORMAL LABEL	PRINTER 1	52	1	YES	NO	NO CONDITION
EYECATCH IMAGE LABEL	PRINTER 1	23	1	YES	NO	W/Eyecatch image
EYECATCH PRICE LABEL	PRINTER 1	28	1	YES	NO	W/Campaign price
CAMPAIGN COMMENT LABEL	PRINTER 1	0	1	YES	NO	W/Campaign comment
CAMPAIGN ORIGIN LABEL	PRINTER 1	0	1	YES	NO	W/Campaign origin
BARCODE LABEL	PRINTER 1	52	1	YES	NO	B LB: barcode

* Press [LABEL DETAIL] key for further setup for label print.
 * Press [INITIALIZATION] key to return to the DEFAULT setting.

*Unable change bottom label's print conditions. INPUT

Label Print Combination Setup Screen

LABEL PRINT COMBINATION SETUP						
Label Printing Setup						
LABEL TYPE	PRINTER	FORMAT	CASS	LABEL PRINT		LB PRINT CONDITION
	PRINTER 1					NO CONDITION
						W/Eyecatch image
						W/Campaign price
						W/Campaign comment
						W/Campaign origin
						B LB: barcode

el print.
 T setting.

INPUT

Printer Number Selection Pop-up Screen

LABEL PRINT COMBINATION SETUP				
Label Printing Setup				
LABEL TYPE	PRINTER	FORMAT	CASS	LB PRINT CONDITION
W/Eyecatch image				NO CONDITION
W/Campaign comment				W/Eyecatch image
W/Campaign origin				W/Campaign price
W/Campaign price				W/Campaign comment
NO CONDITION				W/Campaign origin
				B LB: barcode
				Label print. setting.

INPUT

- MENU
- BACK
- CANCEL
- LABEL DETAIL
- FORMAT
- ▲
- ▼
- INIT.

Label Content Selection Pop-up Screen

Buttons/Display Fields	Function
MENU	Returns to System Menu 1/2 screen.
BACK	Saves data changes and returns to the Label Print Combination Setup screen.
FORMAT CHANGE	Displays the printing conditions for each label type. Press to change the label format number Change the label format number.
CANCEL	Cancels data changes and returns to the Label Print Combination Setup screen.
FORMAT	Pressing without numeric entry changes to the format edit screen for the format number of the selected label type. Pressing after numeric entry changes to the format edit screen for the entered number.
DETAIL	Changes to the Print Combination Detail Setup screen. <ul style="list-style-type: none"> • Printer selection • Print item addition • Format number setting • Print condition setting • Label print detail information setting • Label type addition
FRONT LABEL	Changes to the printer, format number, and cassette number setup screen for a label to be attached on the tray top.
LABEL DETAIL	Change to the label detail setup data (print density, sensor distance, etc.). The current label format number displayed on the label detail setup screen becomes the format number at the present cursor position (highlighted yellow).
INITIALIZE	Returns the print combination data to the default data.
▼ ▲	Moves the cursor up or down.
Label Type	Displays the printer name for each label type. Press the label type field to enable the current label selection. Edit the format number of the selected label type after selection by pressing the [FORMAT] button.
Printer	Select the printer (number) that will be used to print the labels. Press to display the pop-up screen. Select the printer on the pop-up screen.
Format No.	Displays the set format number for each label variation. The default format number is displayed at the initial setting. Press the display field after entering a format number to set the number. The format number is automatically set as the default printer format for the specified format number. When two or more format numbers are set to one printer, the higher-ranked format number will be enabled.
Label Print	Select label printing. “Yes”: Labels will be printed. “No”: Labels will not be printed. In this case, the item will not be displayed on the Format Setup screen the next time it is displayed. The selected data will become invalid for total labels.
Label Print Condition	Set the label print condition. The priority level when a number of print conditions agree is fixed in the order that is displayed on the pop-up screen (from top left to bottom right of the screen). Press to display the pop-up screen.
Label Group	Press the desired button to display the label type items of the selected group and change the color to blue.

4.6.1 CONNECTED PRINTER / PATTERN SELECTION ITEMS

Pattern Selection Item	Main printer only	Main printer and Sub (PP)
Normal label only	●	
Normal label or eye-catching label		●
Normal label or mini eye-catching label	●	
Normal label and sub-label		●
Normal label and batch raw material label		
Normal label or eye-catching label and sub-label		
Normal label or mini eye-catching label and sub-label		●
Normal label or eye-catching label and batch raw material label		
Normal label or mini eye-catching label and batch raw material label		

4.6.2 LABEL DETAIL SETUP

L A B E L S E T U P				BACK
1. Select PRINT No. and set the label No. 2. Set the detail data of the label No. *Up to 99 labels can be registered. Any one can link to printer. *Print check format No. is used only for test printing.				
PRINTER No	No. 1	CASSETTE	01	LABEL No. 01
THERMAL PAPER TP.	1:STANDARD	SENSOR TYPE	1:LABEL	
LABEL GAP	2.5 mm	SENSOR DISTANCE	18.5 mm	
PREPRINT FEED	7.5 mm	PRINTING SPEED	2:100 mm/sec	
FEED END LEN	3.5 mm	PRINTING DENSITY	5	
PRINT DIRECTION	NORMAL REVERSE	2 CLR PRINT DENS.	5	5
BACK FEED	NO YES			
Print Check	Format Info.	Print Check PLU	Cassette No 01	
FORMAT No.	Label Wid	Label Len	ITEM No.	INPUT
52	60.0 mm	37.0 mm	000000	

Label Print Pattern (Label Details) Setup Screen

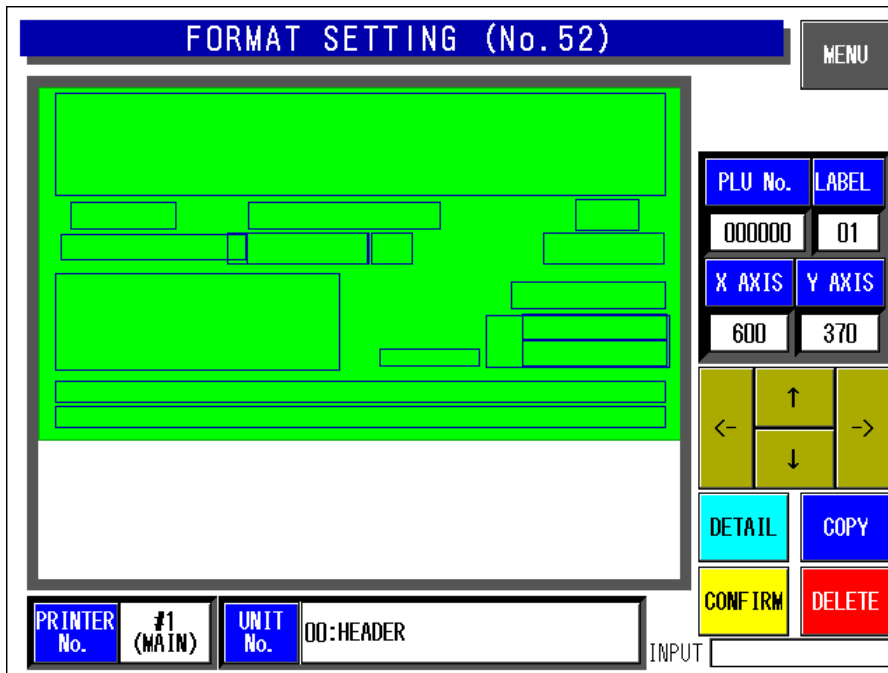
Buttons/Display Fields	Function
BACK	Save data changes and return to the label print pattern detail setup screen.
Printer No.	Press after numeric entry to display the label information of the entered printer and enable label information change and confirmation (test print). Printer numbers are defined as follows: Printer #1: Main printer 1 Printer #2: Main printer 2 Printer #3: PP printer (and Sub printer)
Cassette No.	Press after numeric entry to display the label information of the entered cassette and enable label information change and confirmation (test print). The data range is 1-7. An error screen is displayed if the corresponding cassette is not inserted. The cassette number becomes "1" when a non-applicable printer is called.
Label No.	This is used when label print information is different for each printer and cassette. Press after numeric entry to call the label print information. The data range is 1-99. The same default number is set for each printer and cassette. This data is not usually changed. The label sensor distance is associated with the label number. For example, if the same number is set for printers #1 and #3, the label sensor distance will be the same for both printers and will result in a misalignment.
Thermal Paper Type	Set label type. Press one of these buttons after numeric entry to set the paper type. Press one of these buttons without numeric entry to display the pop-up screen. Next, press the desired button to set the paper type.
Label Gap	Set label gap. Press after numeric entry to set the gap length. The data range is 0-999 (0.0 mm – 99.9 mm on the screen). Default data: 2.0 mm

Buttons/Display Fields	Function
Preprint Feed	Set the preprint feed length. Press after numeric entry to set the feed length. The data range is 0-999 (0.0 mm – 99.9 mm on the screen). Default data: 7.5 mm
Feed End Length	Displays the set feed end length (unit: mm). Press after numeric entry to set the feed end length. The data range is 1-999 (0.1 mm – 99.9 mm on the screen). Default data: 3.0 mm The label is issued leaving the set length behind and fed immediately before the label is sucked.
Print Direction	“Normal rotation” and “Reverse rotation” can be set as the label print direction. The selected item will change color to blue. Default data: “Normal rotation”
Back Feed	Select the back feed availability at the start of label printing. The selected item will change its color to blue. Default data: “Yes” When “Yes” is selected the label is back fed in the above-mentioned preprint feed length and printing starts. Make sure “Yes” is selected at all times.
Sensor Type	Set the label feed availability using the label sensor control. Press after numeric entry to set the sensor type. Press without numeric entry to display the pop-up screen. Press the desired button to make a selection. Default data: “1” (Label sensor)
Sensor Distance	Set the distance between the label sensor position and the printer head end. Press after numeric entry to set the distance. The data range is 0-999 (0.0 mm – 99.9 mm on the screen). Default data: 17.5 mm The label feed amount will increase when the data is increased, and decrease when the data is decreased.
Printing Speed	Set the label print speed. Enter either “1” or “2” (1:80mm/sec 2:100mm/sec) and press this button. Press without numeric entry to display the pop-up screen. Press the desired button to make a selection. Default data: “2” (100 mm/sec)
Printing Density (0 - 9)	Set the print density when using the monochrome thermal head. Press after numeric entry to set the density. The data range is 0-9. (0: lightest 9: darkest) Default data: “5”
2 Color Print Density (0 - 9)	Set the print density for black and red when the two color thermal head is used. Press one of these buttons after numeric entry to set the density. The data range is 0-9. (0: lightest 9: darkest) Default data: “5” for both black and red
Print Check Format No.	Set the test print format. Press after numeric entry to set the number. The data range is 1-99. Default data: 52 (37 x 60 mm) for printers #1, #3, and #4 20 (55 x 60 mm) for printer #2
Format Information	Displays the label size of the set default format number. Confirm that the set format number is correct. This function is display only and the data cannot be changed.
Item No.	Set the test item number for print confirmation. Press after numeric entry to set the number. The checker pattern is printed when the item number is “0.”

Buttons/Display Fields	Function
Cassette No.	This is effective only when the cassette applicable printer number is selected. Displays the number of the inserted cassette. "1" is displayed when the cassette non-applicable printer is used. Make sure the cassette number called is same as the inserted cassette number. An error screen will appear if it is different. This function is display only and the data cannot be changed.

4.7 FORMAT SETTING

With this machine, a maximum of 99 label formats can be set from “1” to “99”.
A maximum of 63 items can be printed in one format that is called as “unit”.



Format Setting Screen

Buttons/Display Fields	Function
MENU	Displays the copy confirmation screen to finish settings.
[←] [↑] [→] [↓]	Moves the selected unit position. “X “ and “Y” axis coordinates change accordingly.
Unit No.	Displays the called unit. Enter the numeric value and press this field to call up the desired unit.
DETAIL	Checks the detailed data for the selected unit,
CONFIRM	Confirms that the change has been made on the screen. Returns to the Format Setting screen.
COPY	Specifies the copy source by entering a numeric value.
DELETE	Deletes the called screen data.



REFERENCE

Refer to Appendix A “Label Formatting” for detailed procedures for formatting labels.

4.8 PRINT ITEM SETTING

On this Print Item Setting screen, select the setting for each print item.

Print Item Setting Screen

Buttons/Display Fields	Function
MENU	Apply the set data and return to the Setup Menu 1/2 screen.
5 X 7 Print Select	Select one of the print items to be printed in 5 X 7 size. Press the desired button to select the item and change the button color to blue.
M Price Print Select	Select either "Label print price" or "Barcode price" when printing the mark down price label. Select one of the following 3 types: Barcode Only: The markdown price is reflected only in the barcode, and the normal price (before markdown) is printed in the price print field. Barcode and Double line The markdown price is reflected only in the barcode, and two strikeout lines are printed over the normal price (before markdown). Double line and M price: The markdown price is reflected in the barcode and two strikeout lines are printed on the normal price (before markdown) and the price after markdown is printed. Press the desired button to select the type and change the button color to blue. Default data: "Double line and M price" <i>Note: Two strikeout lines and the markdown price are printed for commodities which the markdown price is registered.</i>

Buttons/Display Fields	Function
Comment Print Position Select	<p>Select the comment character string print position when it is included in the PLU name extension field. Select one of the following 4 types:</p> <p>Format: Printed in the position specified by the format. Under: Printed under the PLU name. Under Ingredient: Printed under the ingredient. Over: Printed above the PLU.</p> <p>Press the desired button to select the type and change the button color to blue. Default data: "Format"</p>
Origin Print Position Select	<p>Select the origin name character string print position when it is included in the PLU name extension field. Select one of the following 3 types:</p> <p>Format: Printed in the position specified by the format. Left: Printed on the left of the PLU. Right: Printed on the right of the PLU.</p> <p>Press the desired button to select the type and change the button color to blue. Default data: "Format"</p>
Register Code Print Select	<p>Select the item to be printed in the register code print field. Select either "Register" or "Store No." Press the desired button to select the type and change the button color to blue. Default data: "Register"</p>
Repack Mark Print Select	<p>Select the printing of "." and the Use-by date on the end of each pack. Select either "No Print" or "Print." Press the desired button to select the type and change the button color to blue. Default data: "Print"</p>
Register Code Print Position Select	<p>Select register code print position when it is included in the PLU name extension field. Select one of the following 3 types:</p> <p>Format: It is printed at the position specified by the format. Left: It is printed on the left of the PLU name. Right: It is printed on the right of the PLU name.</p> <p>Press the desired button to select the type and change the button color to blue. Default data: "Format"</p>
POP Print Position Select	<p>Select POP character string print position when it is included in the PLU name extension field. Select one of the following 3 types:</p> <p>Format: Printed at the position specified by the format. Left: Printed on the left of the PLU name. Right: Printed on the right of the PLU name.</p> <p>Press the desired button to select the type and change the button color to blue. Default data: "Format"</p>

4.9 FILE CHECK

This screen is used to confirm master files such as PLU master, Store master, Extra message master files, etc. registered in this machine

No.	MASTER NAME	NUMBER
1	PLU /UNIT PRICE FILE [WILL BE CLEARED]	3 (3)
2	STORE FILE [WILL BE CLEARED]	2
3	EXTRA MESSAGE 1 [WILL BE CLEARED]	0
4	POP MESSAGE FILE [WILL BE CLEARED]	0
5	COUPON MESSAGE FILE [WILL BE CLEARED]	0
6	ORIGIN FILE [WILL BE CLEARED]	0
7	EXTRA MSG 2 [WILL BE CLEARED]	0
8	EXTRA MSG 3 [WILL BE CLEARED]	0

Memory Information

REMAINING (BYTE)	913888
PLU MASTER (NUMBER)	3872

100%
50%
0%

*Press [SELECT] to select Master for initialization..

File Check Screen

Buttons/Display Fields	Function
MENU	Returns to the System Menu 1/2 screen.
Master Name	Displays master names (only master files that can be processed by the IF-21FD and master files with the number "0"). Press the desired field to make a selection and change the color to light blue.
Number	Displays the number of data registered in the machine (only master files that can be processed by the IF-21FD and master files with the number "0"). Press the desired field to make a selection and reverse the color to light blue.
Memory Information	Displays remaining SRAM memory in bytes. (Zero suppression, Max.8 digits)
PLU Master	Calculates the number of items that can be registered based on the amount of remaining memory. Number of Items = Remaining amount ÷ (Fixed PLU master parts + PLU name character string 128 bytes + One unit price master)
Memory Remaining Display Bar	Displays the amount of memory remaining in black.
▼ ▲ ▼ ▲	Press to move the master information list display page up/down.
▼ ▲	Press to move the cursor position in the master information list display up/down (cursor is yellow).
SELECT	Select master files for initialization. Press the desired field where the cursor is positioned to select a master file. This will select an unselected field or unselect a selected field. Selecting a field will change the field where the cursor is positioned light blue. Placing the cursor on a selected item will change the color of the field to green.

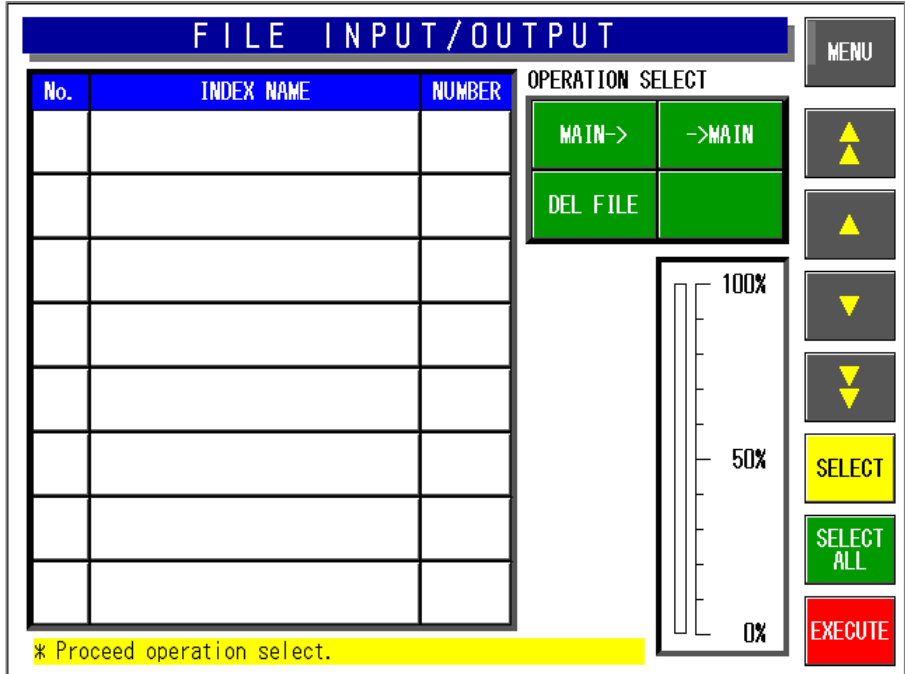
Buttons/Display Fields	Function
SELECT ALL	Select or cancel all master files for initialization. All items on the list will be selected even if there is only one unselected item on the list. When all items are already selected, they will be canceled. Selecting will change the color of the entire field to light blue.
EXECUTE	Press to initialize the selected master files. Processing is different for each master file. <ul style="list-style-type: none">• Clear: Delete existing master files.• Initialize: Existing master files will be deleted and initialized to default values.• Number reference: Confirm the number of existing master files without execution.

Note: Processing guidance is displayed at the bottom of the screen.

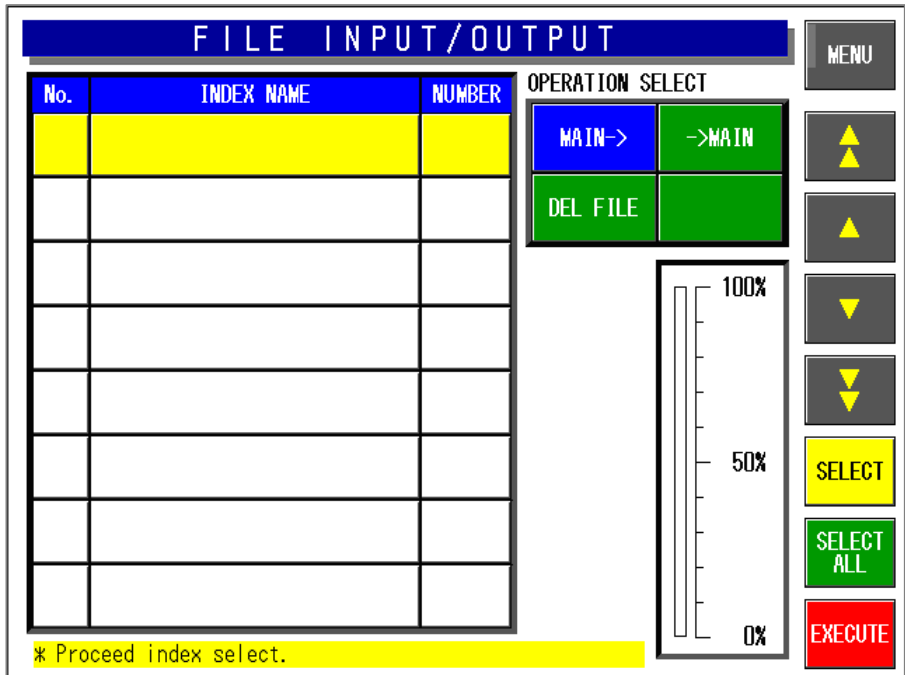
4.10 FILE INPUT/OUTPUT

Master files stored in this machine can be input and output to or from a floppy disk via IF21 or to the CF card via DataRapid. Note that the PLU master data must be downloaded first when downloading PLU and Unit price master data individually to the main body.

Note: Connect the IF-21FD with the I2NET INLINE (Dsub-9).



File Input/Output Screen



File Input/Output Index Screen

FILE INPUT/OUTPUT		
No.	MASTER NAME	NUMBER
1	PLU FILE	3
2	UNIT PRICE FILE	3
3	STORE FILE	2
4	EXTRA MSG 1	0
5	POP FILE	0
6	COUPON FILE	0
7	ORIGIN FILE	0
8	EXTRA MSG 2	0

Operation Select

MAIN->	->MAIN
DEL FILE	FORMAT

100%

50%

0%

* SELECT MASTER

MENU

▲

▲

▼

▼

SELECT

SELECT ALL

EXECUTE

File Input/Output Master File Screen

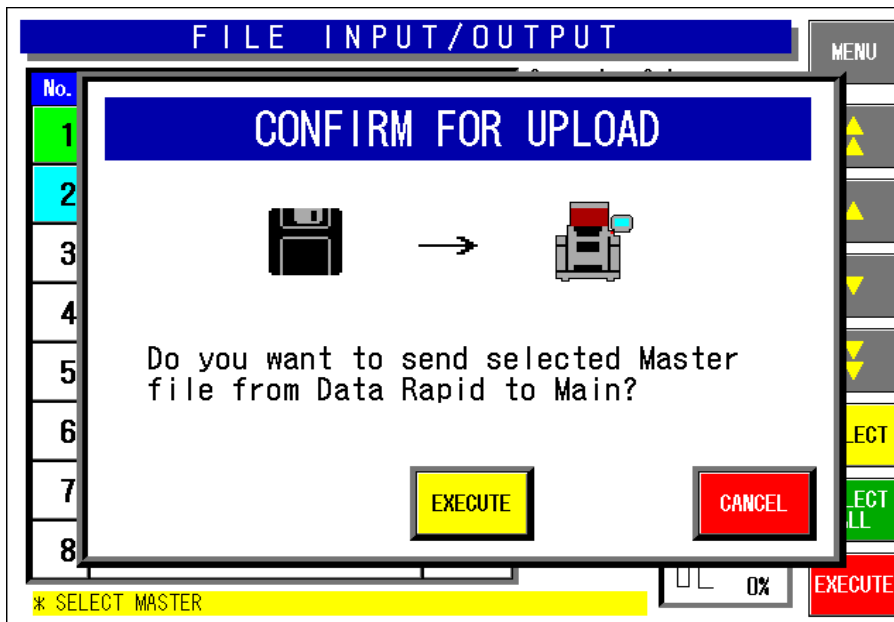
FILE INPUT/OUTPUT	
No.	
1	<div style="background-color: #000080; color: white; padding: 5px; margin-bottom: 10px;">CONFIRM FOR DOWNLOAD</div> → <p>Do you want to send selected Master file from Main to Data Rapid?</p> <div style="display: flex; justify-content: space-around; margin-top: 10px;"> <div style="background-color: #FFFF00; padding: 5px 15px;">EXECUTE</div> <div style="background-color: #FF0000; padding: 5px 15px;">CANCEL</div> </div>
2	
3	
4	
5	
6	
7	
8	

* SELECT MASTER

0%

EXECUTE

Download Confirmation Screen (Main Body → IF-21FD)



Upload Confirmation Screen (IF-21FD → Main Body)

Buttons/Display Fields	Function
MENU	Returns to the System Menu 1/2 screen.
Operation Select	Select file I/O processing. Select "Main body →" "→ Main body" "File delete" or "Format". Press the button to request the index information acquisition from the IF-21FD and change to the index screen. Press it again to re-display the index screen.
Bar Graph	Shows the processing progress of each master file.
▼ ▲	Press to move the master information list display page up/down.
▼ ▲	Press to move the cursor position (highlighted yellow) in the master information list display up/down. Only existing index columns can be moved when "→Main body" or "File Delete" is selected.
Index Information	Displays the index numbers and names of files in the IF-21FD. Processing differs according to the processing item selected. Main body→: Changes to the master display screen when the index is selected via the index name edit screen. →Main body: Changes to the master display screen when the index is selected via the index name edit screen. However, it is only possible to select an item displayed in the index list. File Delete: The selected index is displayed in light blue when the indexes are selected. Format: This screen is used solely for confirmation files existing in the IF-21FD and selection is not possible.
SELECT	Select master files for input/output. Press the desired field where the cursor is positioned to select a master file. This will select an unselected field or unselect a selected field. Selecting a field will change the field where the cursor is positioned light blue. Placing the cursor on a selected item will change the color of the field to green.
SELECT ALL	Select or cancel all master files for input/output. All items on the list will be selected even if there is only one unselected item on the list. When all items are already selected, they will be canceled. Selecting will change the color of the entire field to light blue.

4.11 FREE MESSAGE NAME REGISTRATION

With this machine, master files are prepared at the factory.

On this screen, there are five areas named Free 1 through Free 5 you can freely use. You can change these master name as you like.

Note: When a free master name is changed the updated master name is displayed thereafter.

FREE MSG NAME REGISTRATION		
		MENU
		▲▲
		▲
		▼
		▼▼
		EDIT
No.	DEFAULT NAME	NEW NAME
1	FREE 1	FREE 1
2	FREE 2	FREE 2
3	FREE 3	FREE 3
4	FREE 4	FREE 4
5	FREE 5	FREE 5
	INPUT	<input type="text"/>

Free Message Name Registration Screen

Buttons/Display Fields	Function
MENU	Returns to the System Menu 1/2 screen.
▼▲	Press to move the cursor position (highlighted yellow) up/down.
▼▲	Press to move the cursor position to either Free 1 or Free 5.
▼▲	
EDIT	Press change to the free master name edit screen at the present cursor position.

4.12 LINK MASTER ERROR SETUP

A master data that is linked with the PLU master data is called "Link Master".

This "YES" or "No" setting decides whether an error is displayed or not when the PLU master data is called, and the corresponding producer master data is not found.

LINK MASTER ERROR SETUP					
* Set the error control of the unregistered line when Link Master is called. * Select YES to display error screen.					
LINK MASTER NAME	ERROR SET		LINK MASTER NAME	ERROR SET	
POP	NO	YES	FREE 1 MASTER	NO	YES
	NO	YES	FREE 2 MASTER	NO	YES
EXTRA MSG 1	NO	YES	FREE 3 MASTER	NO	YES
COUPON MSG	NO	YES	FREE 4 MASTER	NO	YES
EXTRA MSG 2	NO	YES	FREE 5 MASTER	NO	YES
EXTRA MSG 3	NO	YES		NO	YES

Link Master Error Setup Screen

Buttons/Display Fields	Function
MENU	Returns to the System Menu 1/2 screen.
Error Set	Select error screen display for each link master if the character string is not registered when a link master is called. Press either "NO" or "YES" to select and the selected button color will change to blue.

4.13 DISPLAY ERROR LOG

With this machine, the display error log can be recorded. To save the error log data to the CF card, press the FILE OUT button. Press to select one of four card types to which the log data is stored. Usually, main program is stored in the CF-1. Therefore, select the card type other than the CF-1.

Note 1: Press the [PRINT] key to print the error log label. (Journal output is performed when the journal printer is connected)

Note 2: Error logs are output in CSV format.

Note 3: The error log can be analyzed by opening spreadsheet software (Excel and Lotus123) or database software (Access).

DISPLAY ERROR LOG						BACK
DATE	TIME	ERROR No.	PLU No.	TRAY	ERROR DETAIL	
9/30	10:12	0322-0000	000000	0000	Start-point return processing is d	
9/30	10:12	0361-0000	000000	0000	The power supply was switched on	
9/30	09:52	0322-0000	000000	0000	Start-point return processing is d	
9/30	09:52	0361-0000	000000	0000	The power supply was switched on	
9/30	08:55	0322-0000	000000	0000	Start-point return processing is d	
9/30	08:55	0901-1000	000000	0000	It cannot communicate with the pri	
9/30	08:55	0361-0000	000000	0000	The power supply was switched on	
9/30	08:44	0322-0000	000000	0000	Start-point return processing is d	
9/30	08:44	0901-1000	000000	0000	It cannot communicate with the pri	
9/30	08:44	0361-0000	000000	0000	The power supply was switched on	
9/29	18:39	0361-0000	000000	0000	The power supply was switched on	
9/29	17:27	0322-0000	000000	0000	Start-point return processing is d	
9/29	17:26	0361-0000	000000	0000	The power supply was switched on	

▲ ▼ Curr/ALL 1 / 21 DELETE FILE OUT

Display Error Log Screen

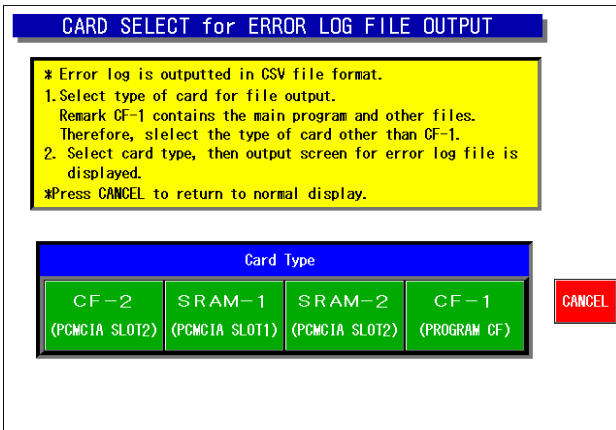
CARD SELECT for ERROR LOG FILE OUTPUT				
<p>* Error log is outputted in CSV file format.</p> <p>1. Select type of card for file output. Remark CF-1 contains the main program and other files. Therefore, select the type of card other than CF-1.</p> <p>2. Select card type, then output screen for error log file is displayed.</p> <p>*Press CANCEL to return to normal display.</p>				
Card Type				
CF-2 (PCMCIA SLOT2)	SRAM-1 (PCMCIA SLOT1)	SRAM-2 (PCMCIA SLOT2)	CF-1 (PROGRAM CF)	CANCEL

Error Log File Output Screen

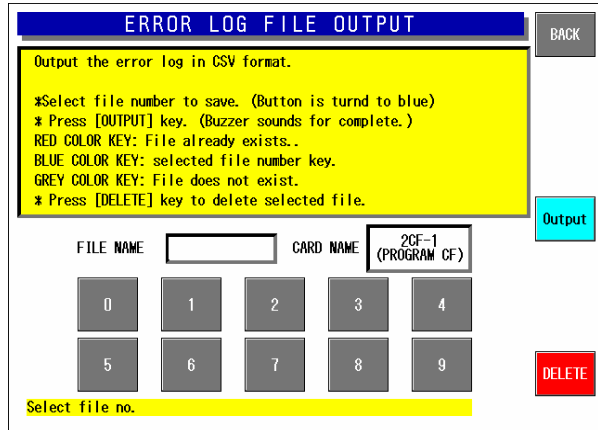
Buttons/Display Fields	Function
MENU	Returns to the System Menu 1/2 screen.
Date	Press to display the selected items in order.
Time	
Error No.	
PLU No.	
Tray No.	
▼ ▲	Press to change the error list page.
DELETE	Press to initialize the confirmation screen. Press [EXECUTE] to clear the error log information. Press [CANCEL] to close the dialog without deleting data.
FILE OUTPUT	Changes to the error log file output select/execute screen.
CANCEL	Return to the error log screen without executing file output.
EXECUTE	Press to output the error log in CSV format to the selected card.
Card Type	Press the corresponding button to select one of the four cards as the error log file output destination. CF-2 / SRAM-1 / SRAM-2 / CF-1 The selected button changes to blue.

4.13.1 ERROR LOG FILE OUTPUT PROCEDURE

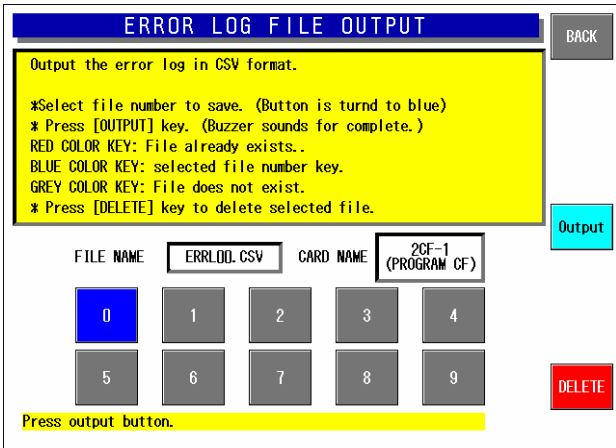
(1) Select the card type



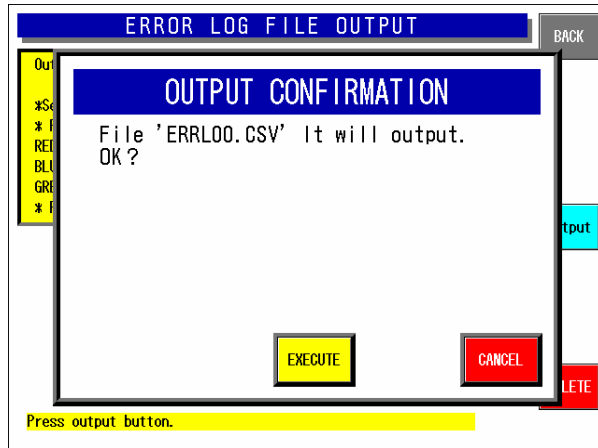
(2) Select the file number.



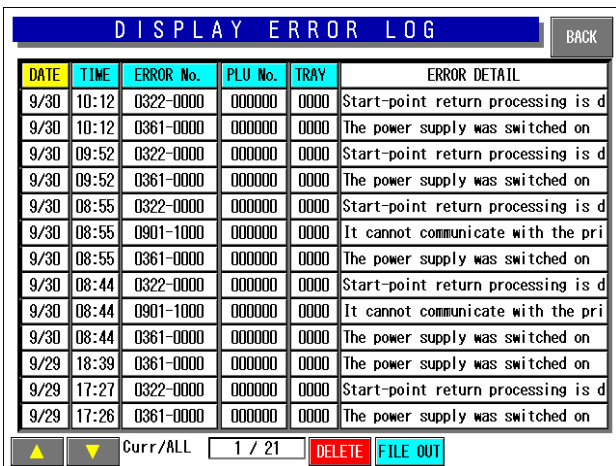
(3) Output the file.



(4) The confirmation screen appears.

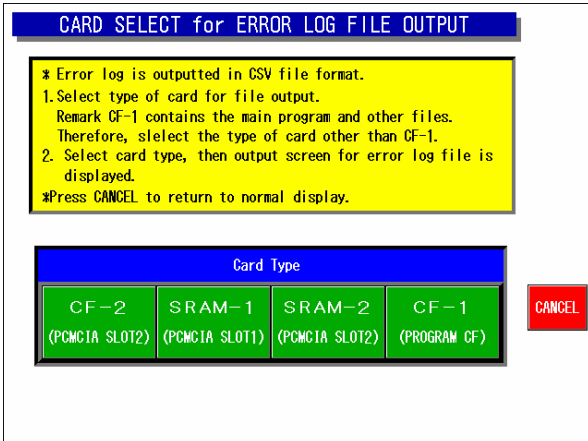


(5) The Display Error Log screen appears.

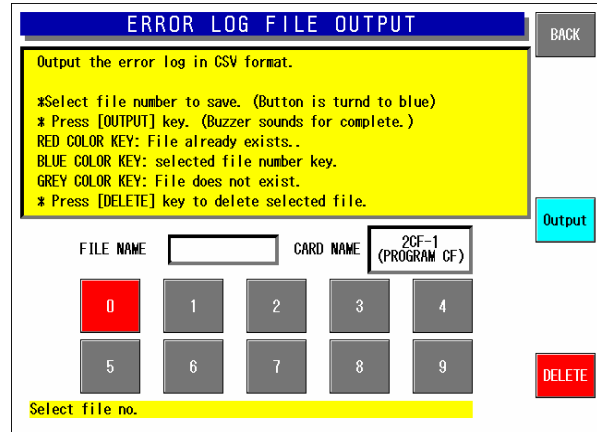


4.13.2 ERROR LOG FILE OUTPUT DELETE PROCEDURE

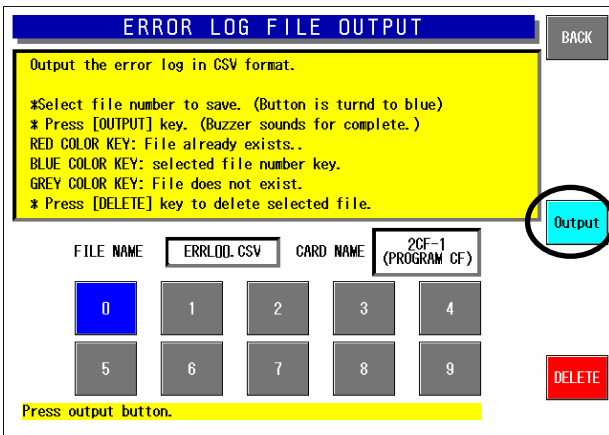
(1) Select the card type.



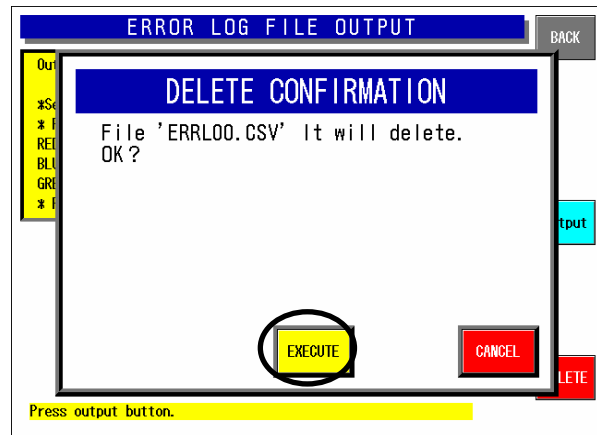
(2) Select the file number.



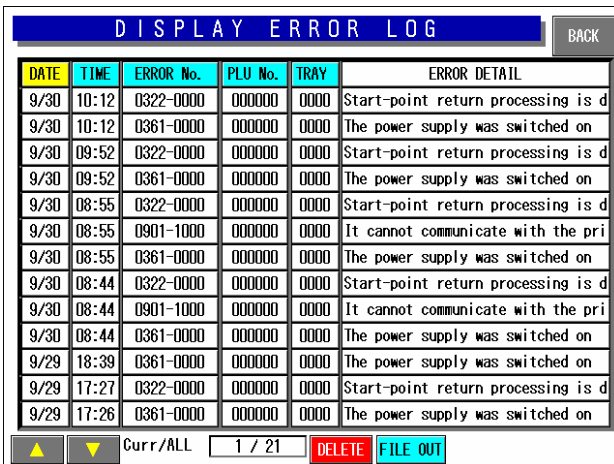
(3) Delete the file.



(4) The confirmation screen appears.



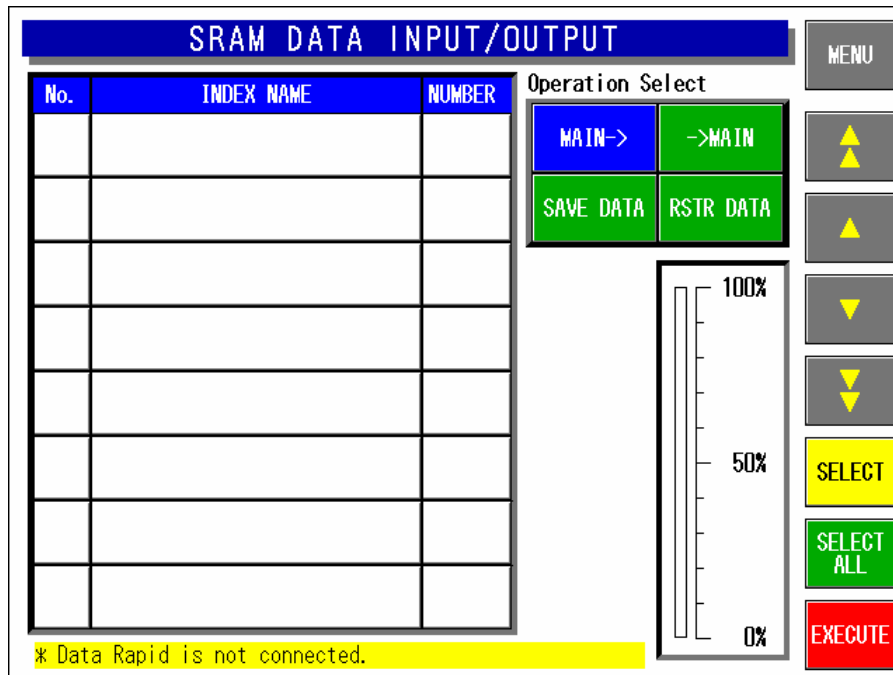
(5) The Display Error Log screen appears.



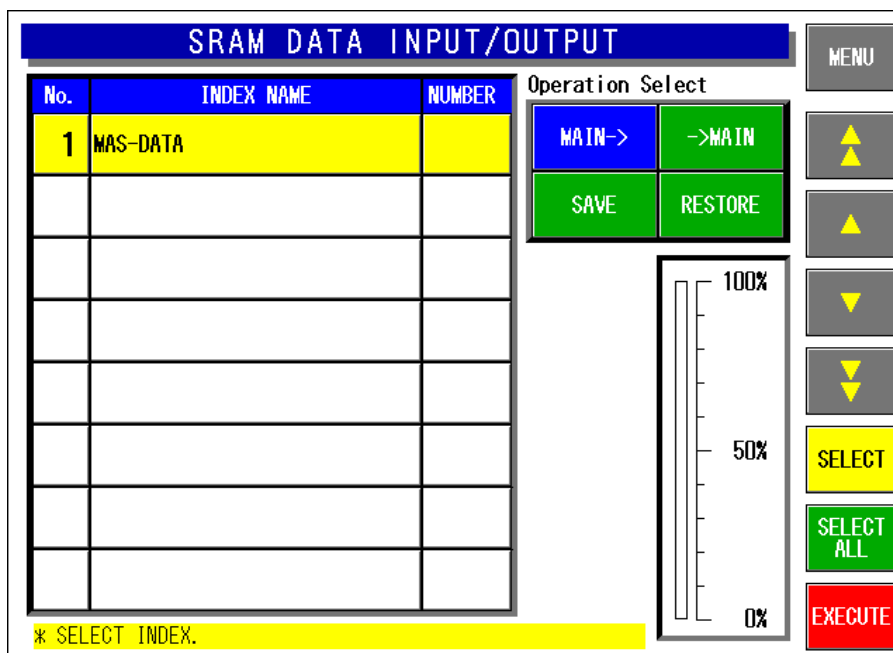
4.14 SRAM DATA INPUT/OUTPUT

This function is used to back up the Static RAM data.
The following items are stored in the CF-1 card.

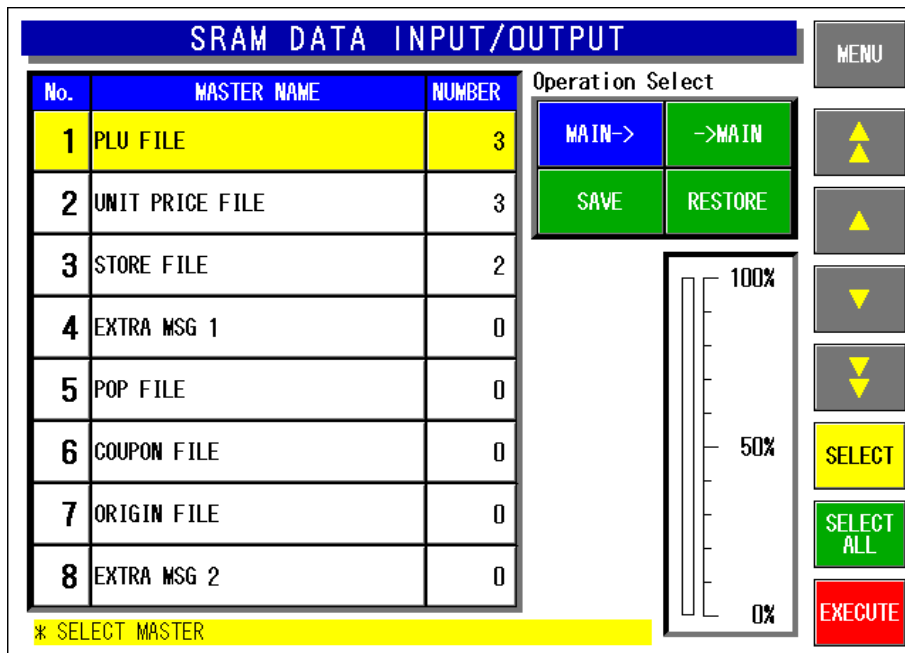
- Items selected in the machine setup screen
- Calendar
- Head run distance
- Wrapping count
- Pasting count
- Wrapper error correction data



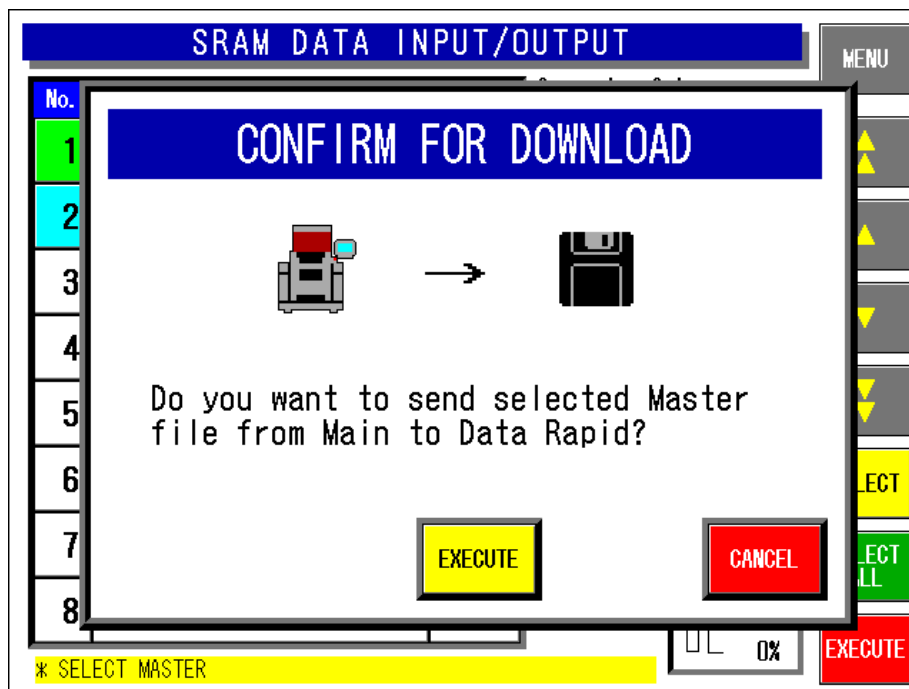
SRAM Data Input/Output Screen



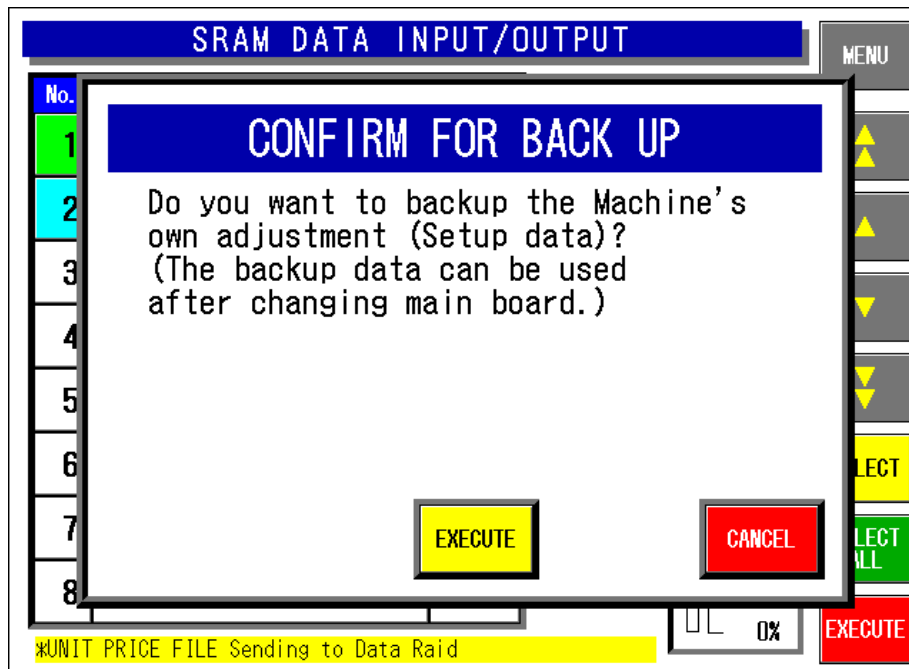
SRAM Data I/O (Main body->) Screen



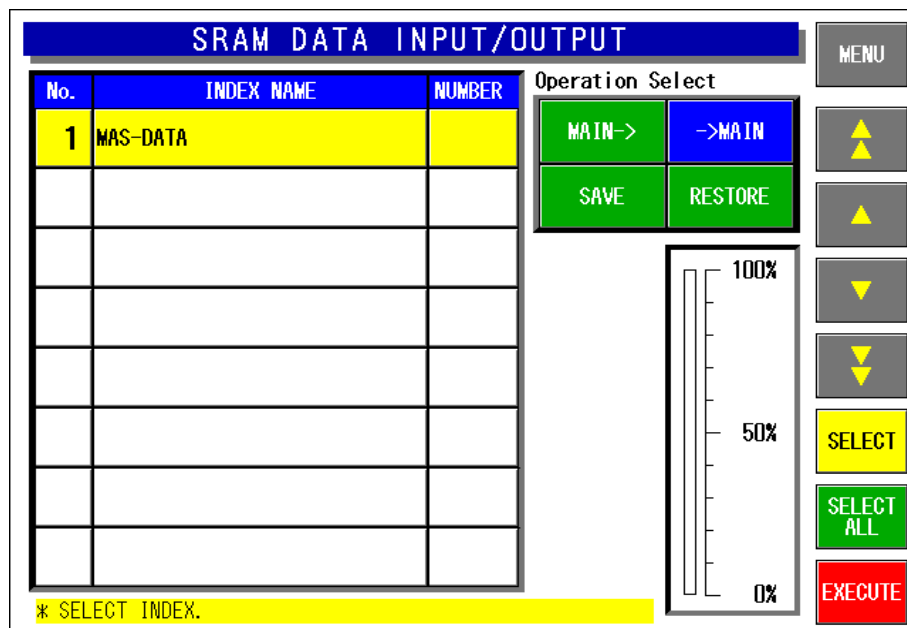
Output Master Data Selection Screen



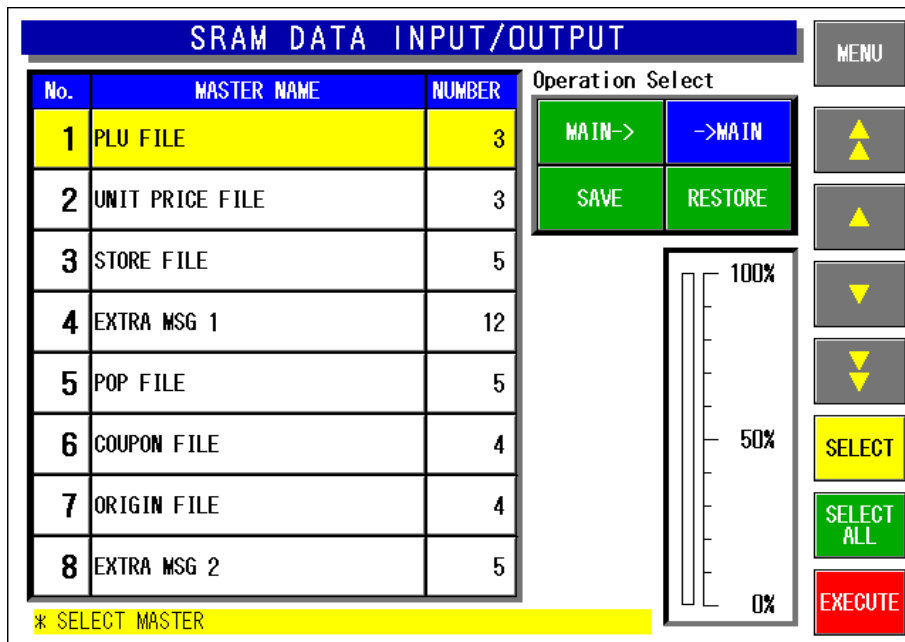
Download Confirmation Screen



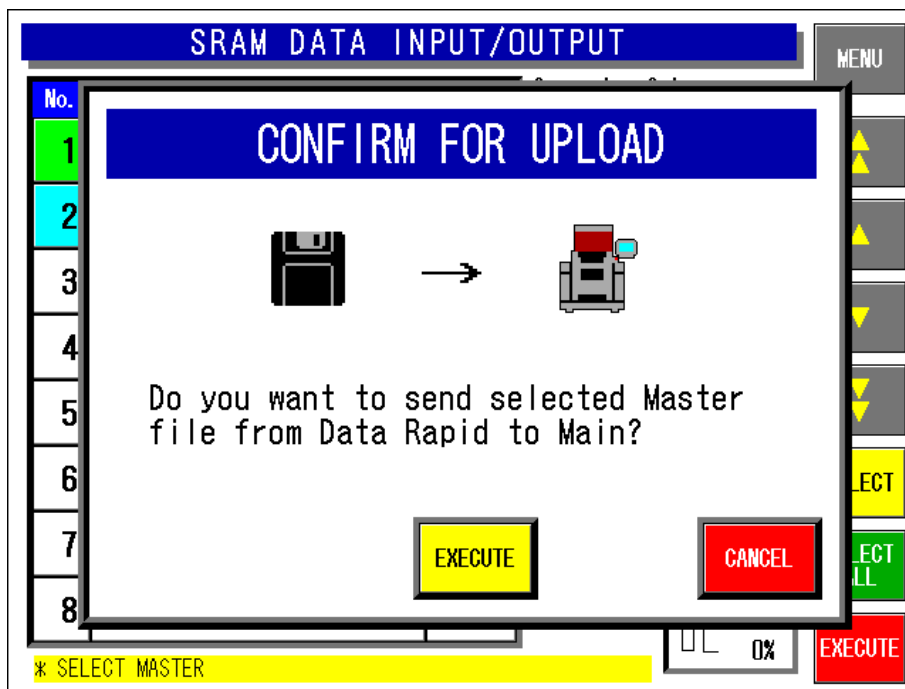
Backup Confirmation Screen



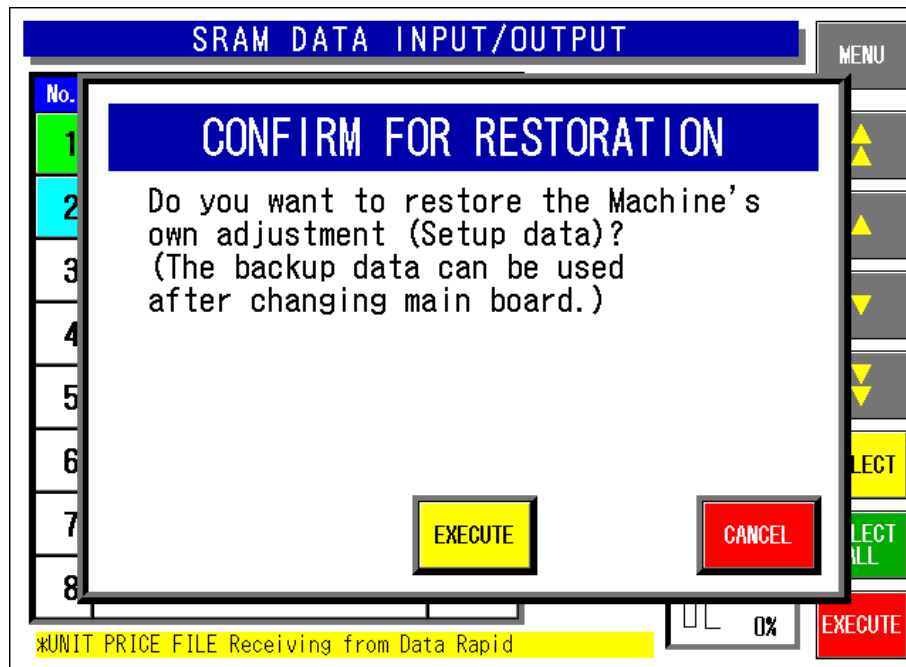
SRAM Data I/O (→ Main body) Screen



Input Master Data Selection Screen



Upload Confirmation Screen

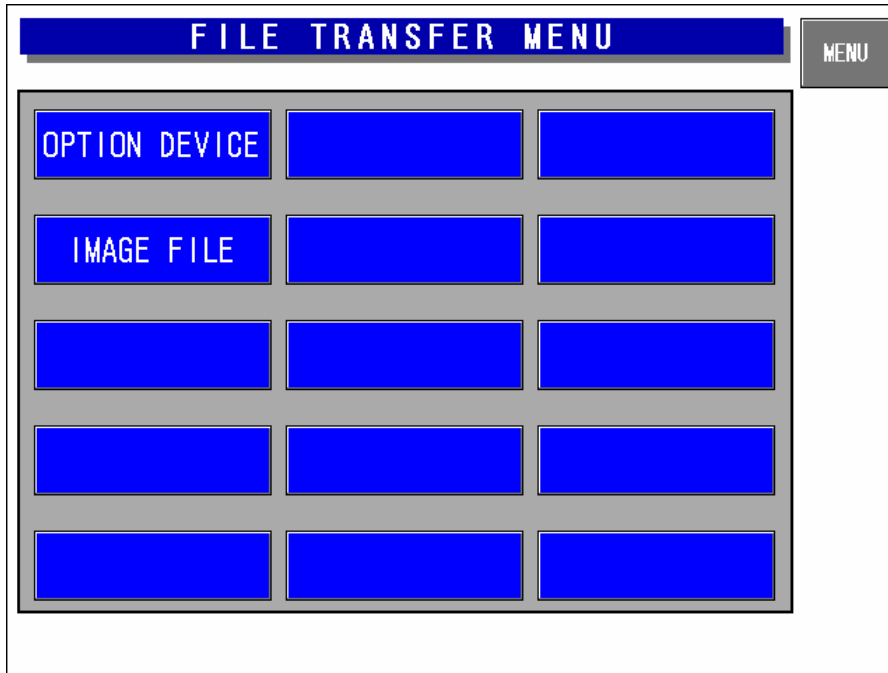


Restoration Confirmation Screen

Buttons/Display Fields	Function
MENU	Returns to the System Menu 1/2 screen.
Operation Select	<p>MAIN→ Select to output main body master data to the IF-21FD FD and SRAM main body data (set system data for each machine) to the CF-1 (main program CF). (File name: sram.dat)</p> <p>→ MAIN Select when replacing the main board or copying all data to another machine. Backup master data and permanent storage field data (system data for each machine) can be input to SRAM. (File name: sram.dat.)</p> <p>SAVE DATA Select to save the set the machine unique data in the CF-1. (File name: sram.dat.)</p> <p>RESTORE DATA Select to restore machine unique data (file name: sram.dat.) stored in the CF-1.</p>
Index Name Setting / Select	Press the corresponding button to set (edit) or select the desired index name(s). The output master data selection screen is displayed when the index name is fixed.
File Name Select (SELECT/ ALL SELECT)	Press one of these buttons to select the desired output file.
▼▲ ▼▲	Press to move the list index information display page up/down.
▼▲	Press to move the cursor position in the index information list display (highlighted yellow) up/down.
EXECUTE	<p>Output the selected file. The confirmation screen is displayed. Press [EXECUTE] to initiate processing. Press [CANCEL] to cancel processing and return to the previous screen. The permanent storage data backup confirmation screen is displayed when file output ends normally.</p> <p>Press [EXECUTE] to copy SRAM permanent storage data to the main program CF. (File name: sram.dat)</p>

4.15 FILE TRANSFER MENU

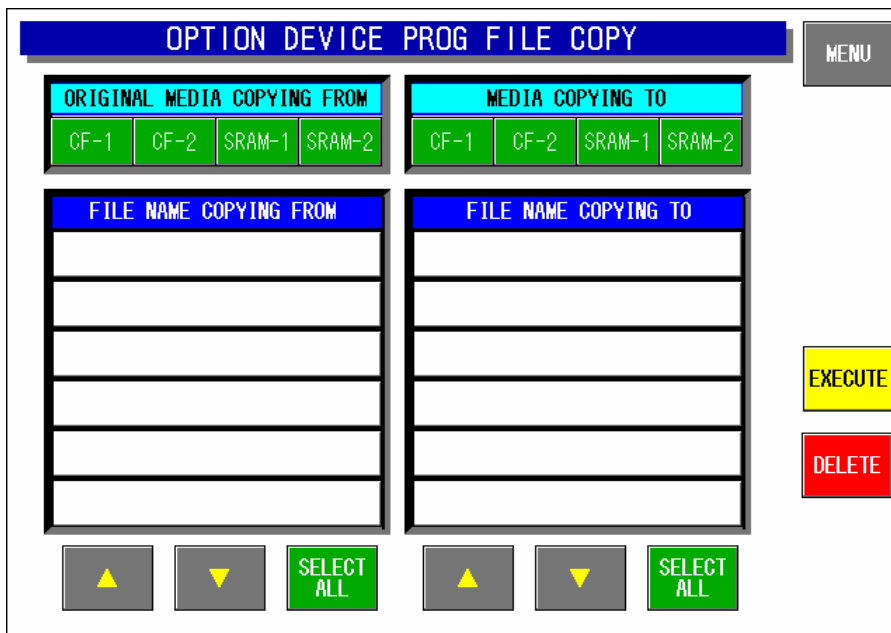
This function is used to copy data stored in the CF card to another CF card.



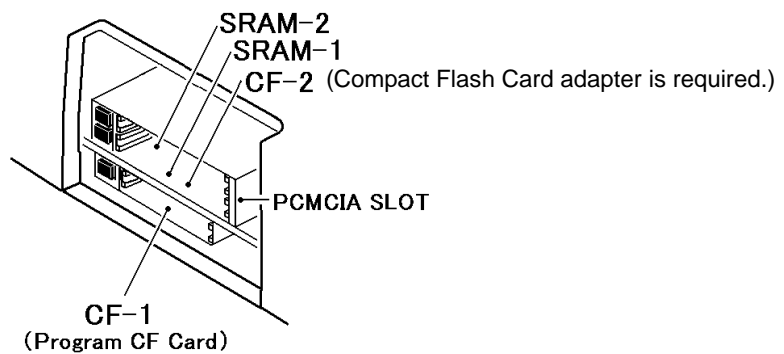
File Transfer Menu Screen

Buttons/Display Fields	Function
MENU	Returns to the System Menu 1/2 screen.
OPTION DEVICE	Press to transfer the option device program.
IMAGE FILE	Press to transfer (copy, delete) the image file.

4.15.1 OPTION DEVICE PROGRAM FILE COPY



Option Device Program File Copy Screen



4.15.2 IMAGE FILE COPY

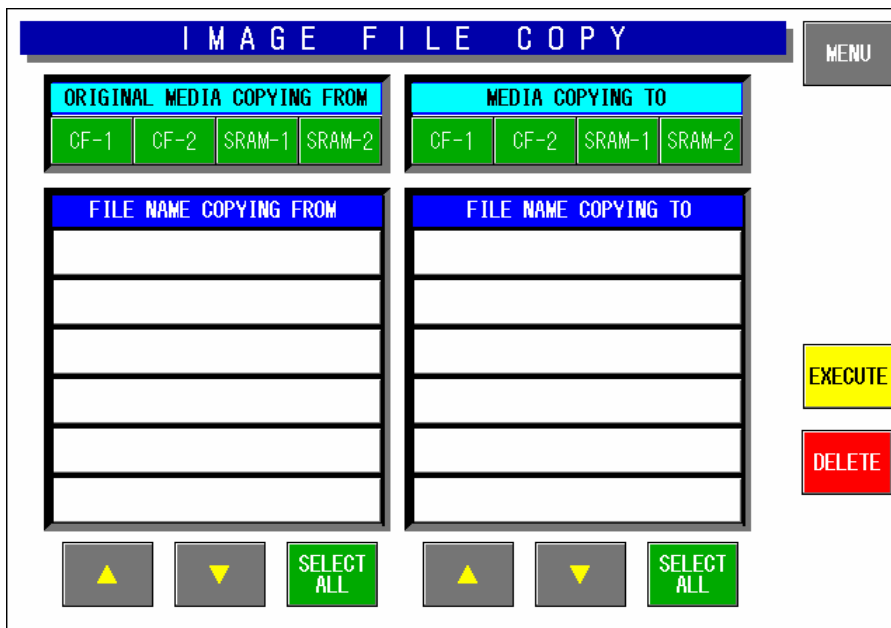


Image File Copy Screen

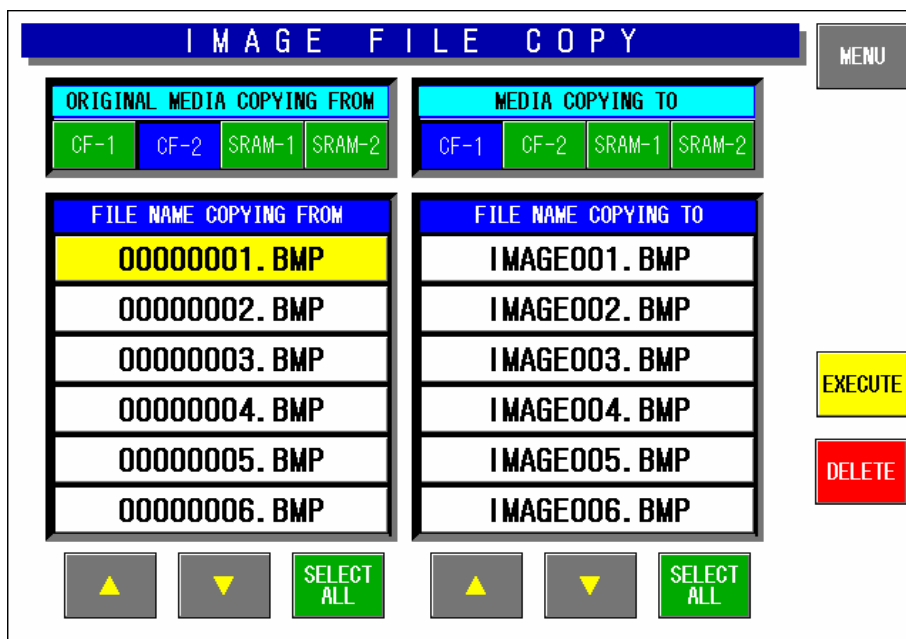
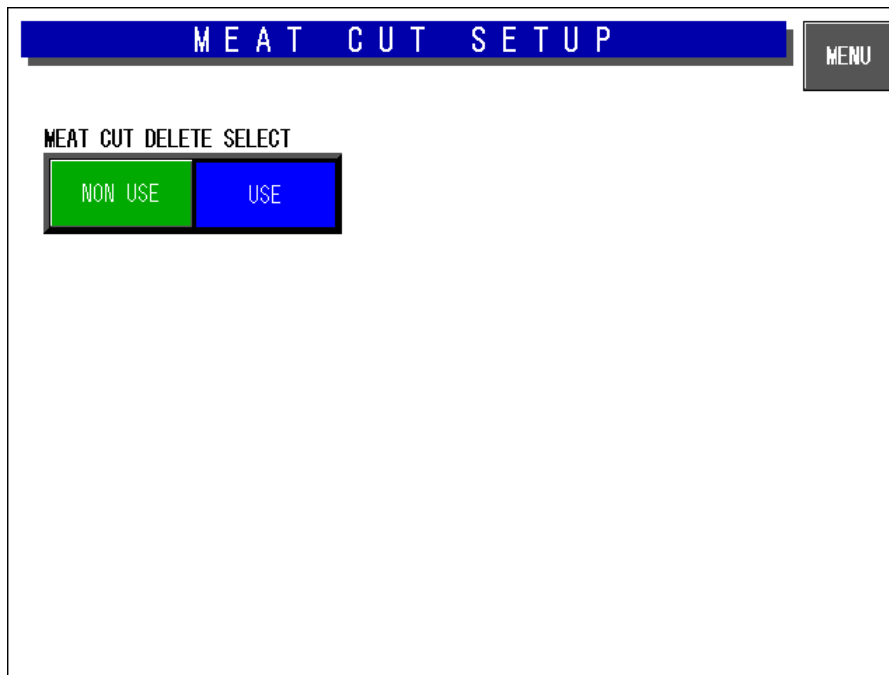


Image File Copy Screen (Example)

Buttons/Display Fields	Function
MENU	Returns to the System Menu 1/2 screen.
Copying from/ Copying to	Select copy origin and destination from the 4 card types: Press the corresponding button to make a selection. The selected button will change to blue.
▼ ▲	Press to move the cursor up/down.
EXECUTE	The image file (BMP) stored in the selected card is copied to the copy destination. Displays the execution confirmation screen. Press [EXECUTE] to copy. Press [CANCEL] to cancel and close the confirmation screen.
DELETE	Deletes the selected file.

4.16 MEAT CUT SETUP

This specification is for USA.



Meat cut Delete Select Screen

4.17 TRACEABILITY SETUP

This specification is for EU.

The screenshot shows the 'TRACEABILITY SETUP' screen. At the top is a blue bar with the title 'TRACEABILITY SETUP' and a 'MENU' button. Below this is a yellow box containing the text 'Setting for Traceability.'. The screen is divided into several sections, each with two buttons: 'Traceability Total' (NON ADD, ADD), 'Transaction Total' (NON ADD, ADD), 'RFID Serial Port' (NON USE, USE), 'Trace Master Delete' (MANUAL, AUTO), 'Transaction Total Delete' (MANUAL, AUTO), and 'Journal Printer' (NON USE, USE). Below these is a 'TRACEABILITY PASSWORD' field with the value '0000'. At the bottom right, there is an 'INPUT' field.

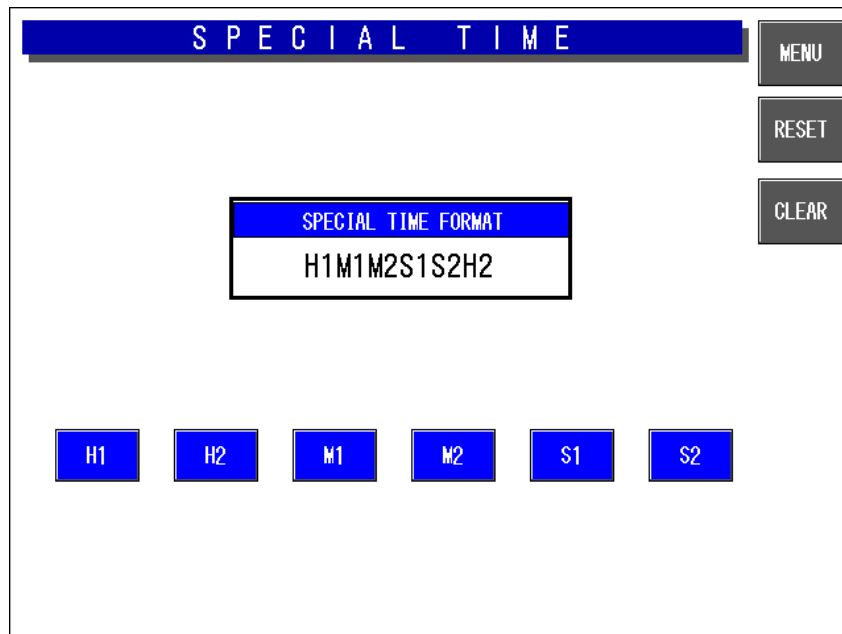
Traceability Setup Screen

Buttons/Display Fields	Function
MENU	Returns to the System Menu 2/2 screen.
Traceability Total	Select whether or not to add the data to Traceability Total. Press the desired button to select either "NON ADD" or "ADD" The selected button color will change to blue. Default data: "NON ADD"
Transaction Total	Select whether or not to add the data to Transaction Total. Press the desired button to select either "NON ADD" or "ADD" The selected button color will change to blue. Default data: "NON ADD"
RF ID Serial Port	Select whether or not to use the serial port for Radio-Frequency ID. Press the desired button to select either "NON USE" or "USE" The selected button color will change to blue. Default data: "NON USE"
Trace Master Delete	Select whether or not to delete the Trace Master. Press the desired button to select either "MANUAL" or "AUTO" The selected button color will change to blue. Default data: "AUTO"
Transaction Total Delete	Select whether or not to delete the Transaction Total. Press the desired button to select either "MANUAL" or "AUTO" The selected button color will change to blue. Default data: "AUTO"
Traceability Password	Set the password data by pressing this button after 6-gigit numeric entry. Press this button after "000000" entry to cancel the password and the mode selection.
Journal Printer	Select whether or not to use the Journal Printer. Press the desired button to select either "NON USE" or "USE" The selected button color will change to blue. Default data: "USE"

4.18 SPECIAL TIME

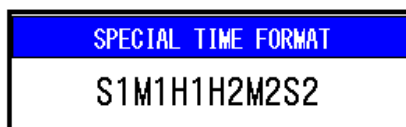
This specification is for EU.

The row of time data can be rearranged arbitrarily.



Special Time Screen

It will become a default format if a [RESET] button is touched.

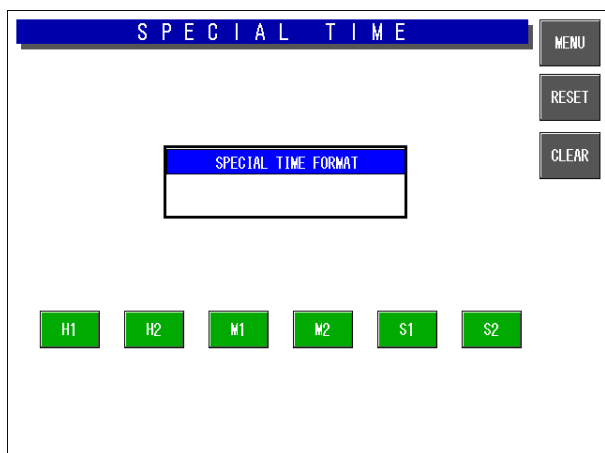


H1: 10 hours
H2: 01 hour
M1: 10 minutes
M2: 01 minute
S1: 10 seconds
S2: 01 second

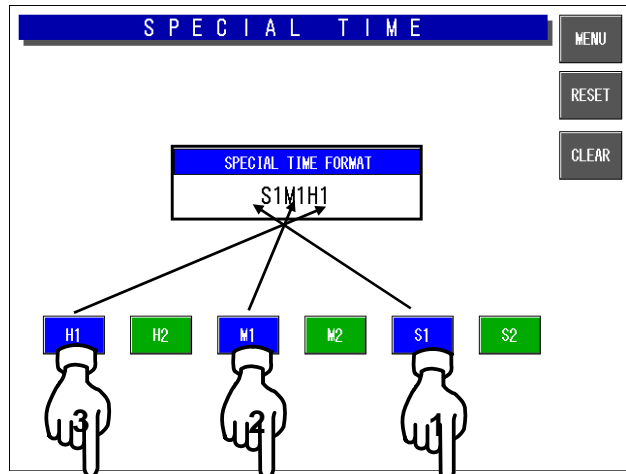


The operation method

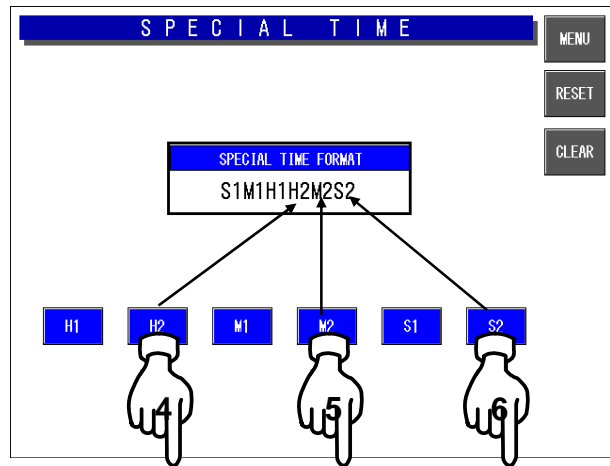
1. Touch a [CLEAR] button. Then, a format is erased.



2. Touch the button.
It displays in an order of having been touched.



Example
12:34:50 --- Print: 531240



4.19 CF FILE I/O

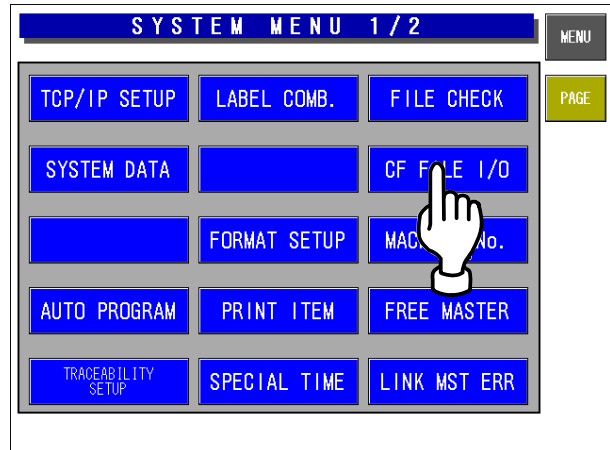
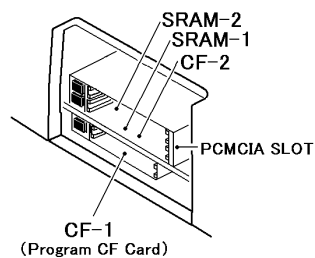
This specification is for EU.

This function requires a CF card inserted into Slot 1 (CF-2) located inside of the I/O port section on the left side of the machine.

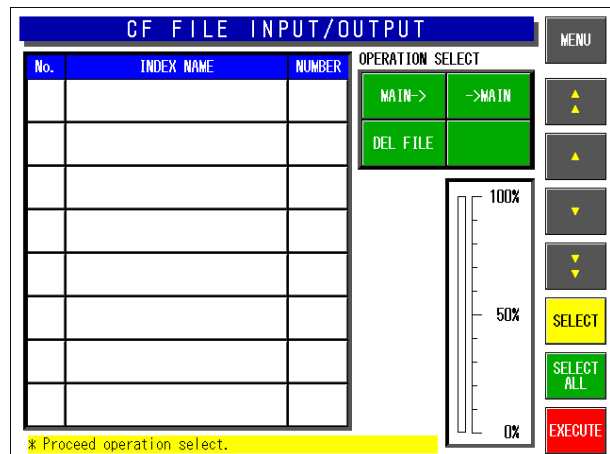
4.19.1 FILE DOWNLOAD

1. Ensure that the System Setting Menu screen is displayed.

Then, touch the [CF FILE I/O] button on the screen.



2. The CF File INPUT/OUTPUT screen appears.



3. Touch to select the [MAIN->] button among the following three commands.

[MAIN->]

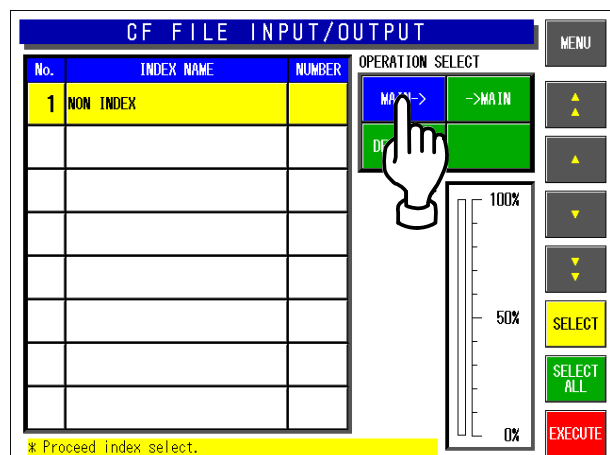
Select when writing the machine data into the CF card memory.

[->MAIN]

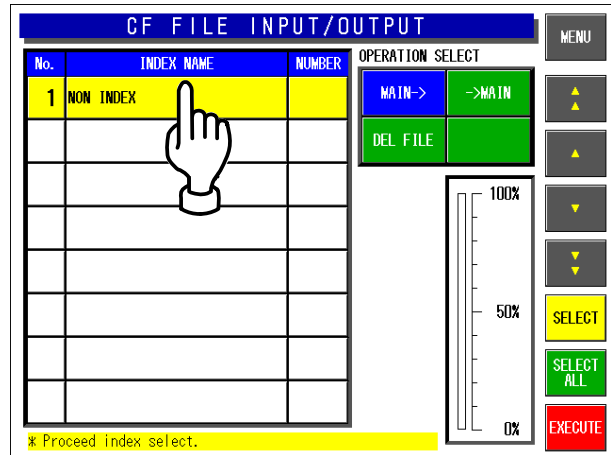
Select when writing the CF data into the machine memory.

[DELETE]

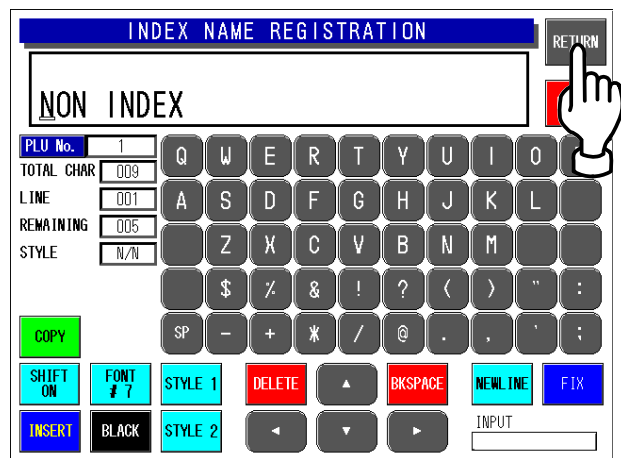
Select when deleting data.



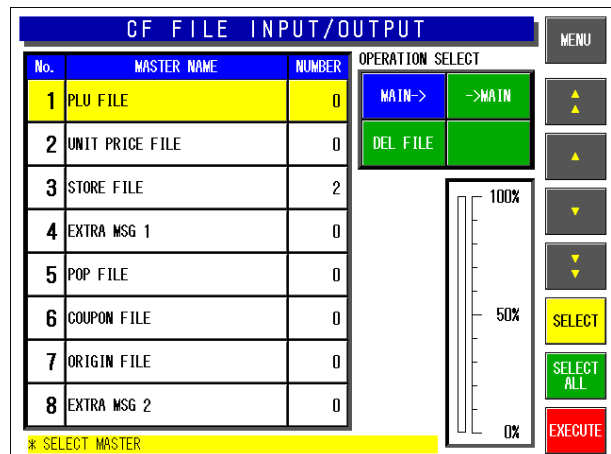
4. Touch to select desired index fields.



5. The text edit screen appears. Then, touch the [RETURN] button.

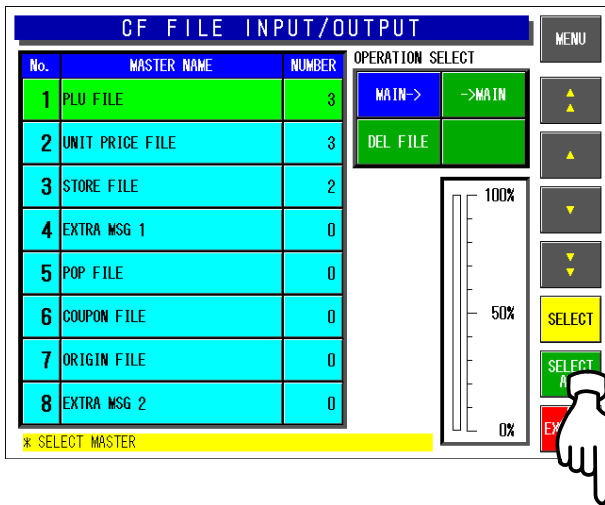


6. All stored master data appears on the screen.

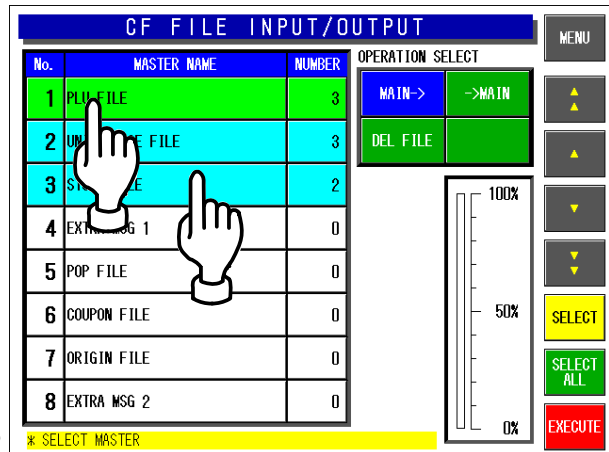


7. Touch to select desired master data.

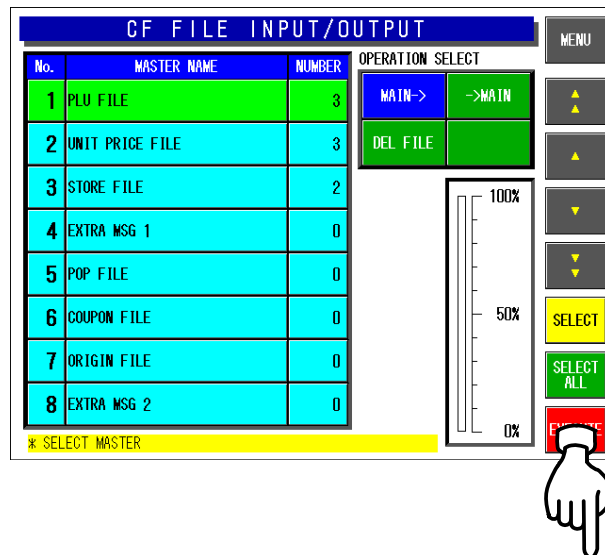
Touch [SELECT ALL] to select all master data.



Touch to select each master data.

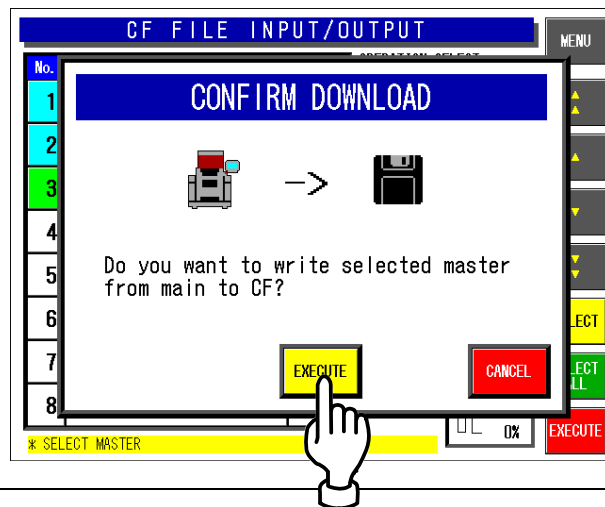


8. Touch the [EXECUTE] button to start downloading.



9. The confirmation screen appears. Then, touch the [EXECUTE] button to download the selected data into the CF card memory.

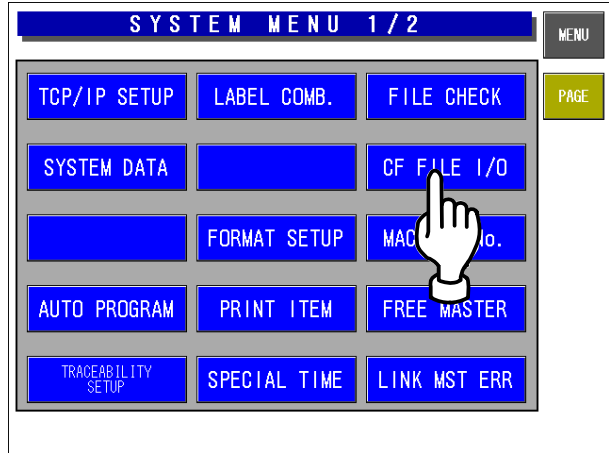
When download is normally completed, the buzzer sounds.



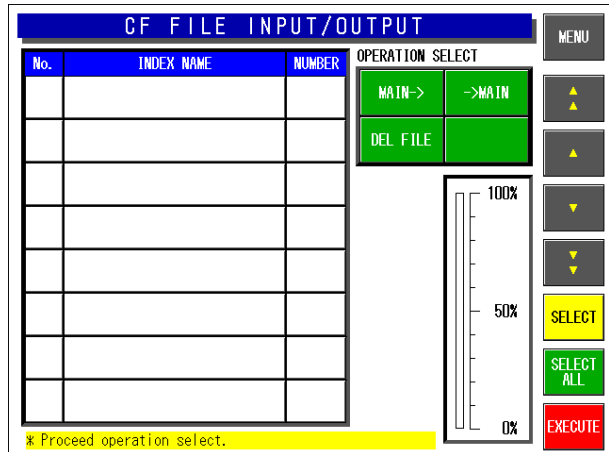
4.19.2 FILE UPLOAD

1. Ensure that the System Setting Menu screen is displayed.

Then, touch the [CF FILE I/O] button on the screen.



2. The CF File INPUT/OUTPUT screen appears.



3. Touch to select the [->MAIN] button among the following three commands.

[MAIN->]

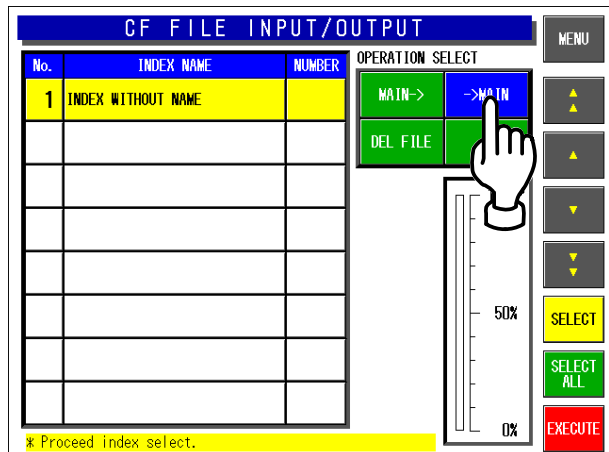
Select when writing the machine data into the CF card memory.

[->MAIN]

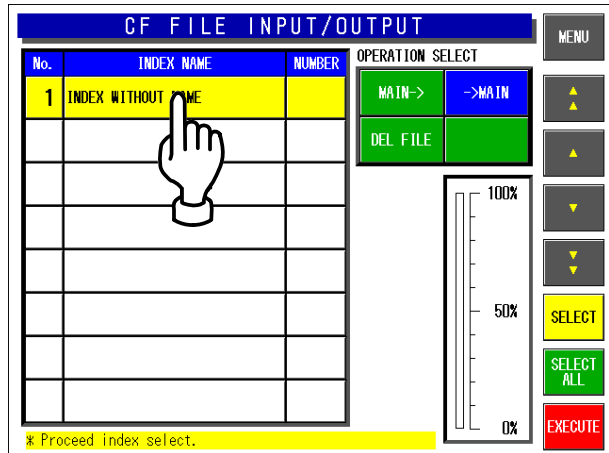
Select when writing the CF data into the machine memory.

[DELETE]

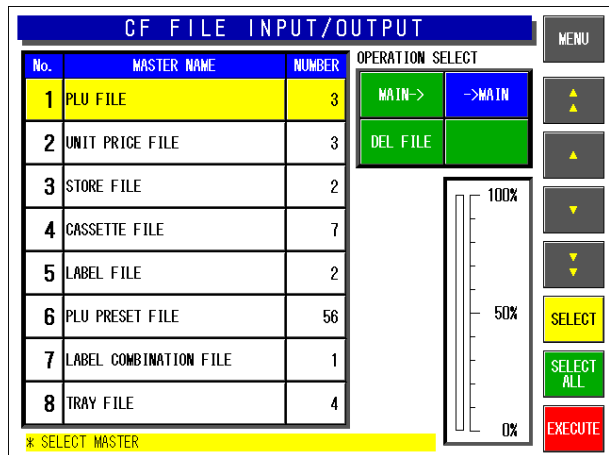
Select when deleting data.



4. Touch to select a desired index field.

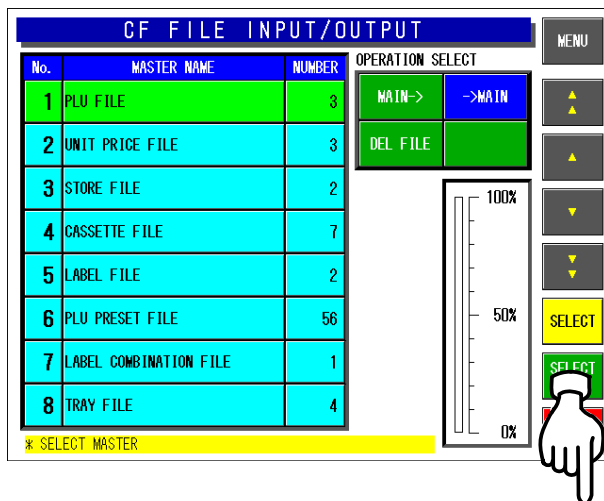


5. All stored master data appears on the screen.

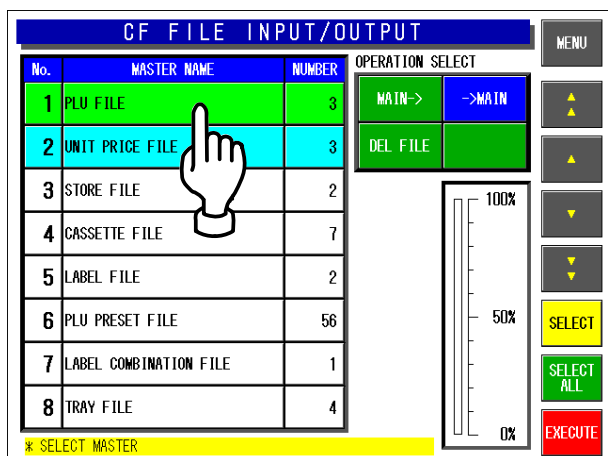


6. Touch to select desired master data.

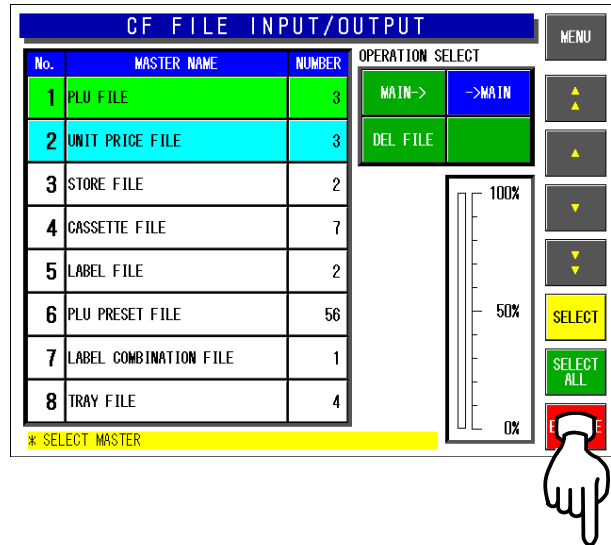
Touch [SELECT ALL] to select all master data.



Touch to select each master data.

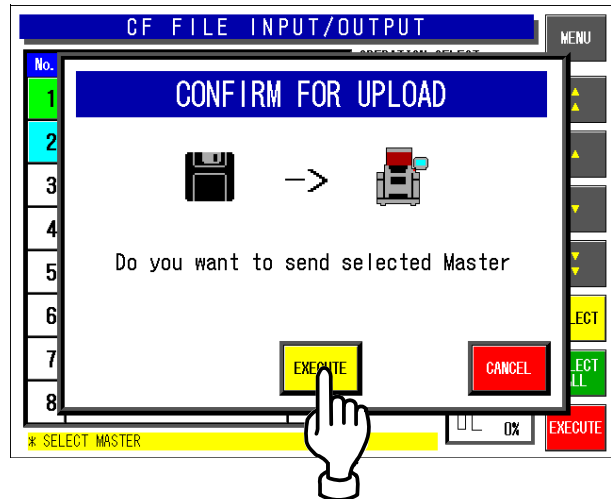


7. Touch the [EXECUTE] button to start uploading.



8. The confirmation screen appears. Then, touch the [EXECUTE] button to upload the selected data into the machine memory.

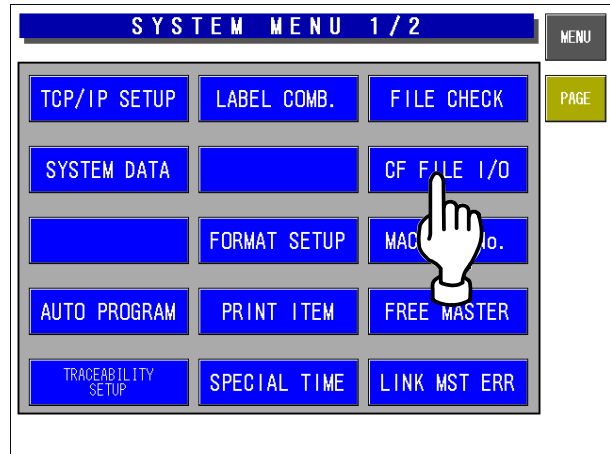
When upload is normally completed, the buzzer sounds.



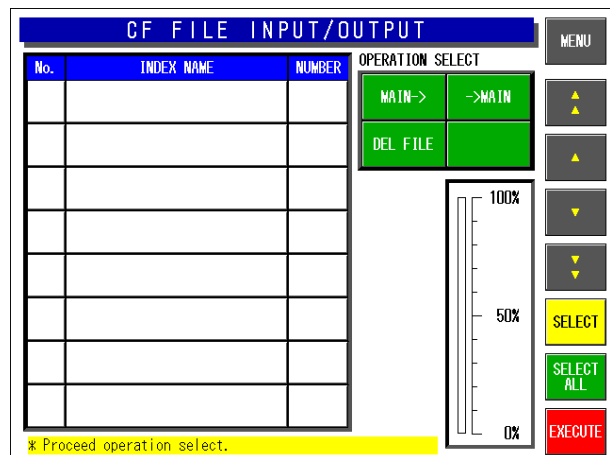
4.12.3 FILE DELETION

1. Ensure that the System Setting Menu screen is displayed.

Then, touch the [CF FILE I/O] button on the screen.



2. The CF File INPUT/OUTPUT screen appears.



3. Touch to select the [DELETE] button among the following three commands.

[MAIN→]

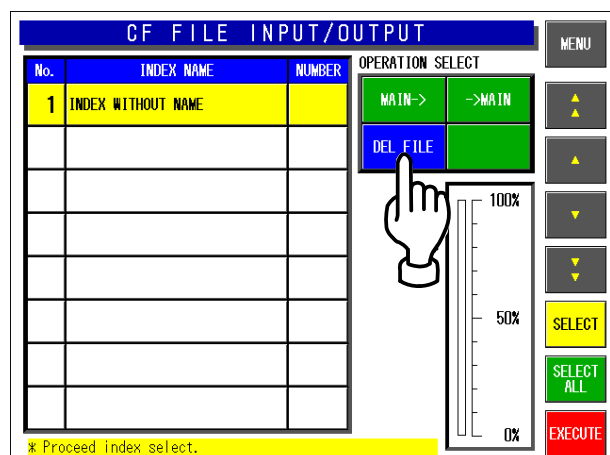
Select when writing the machine data into the CF card memory.

[→MAIN]

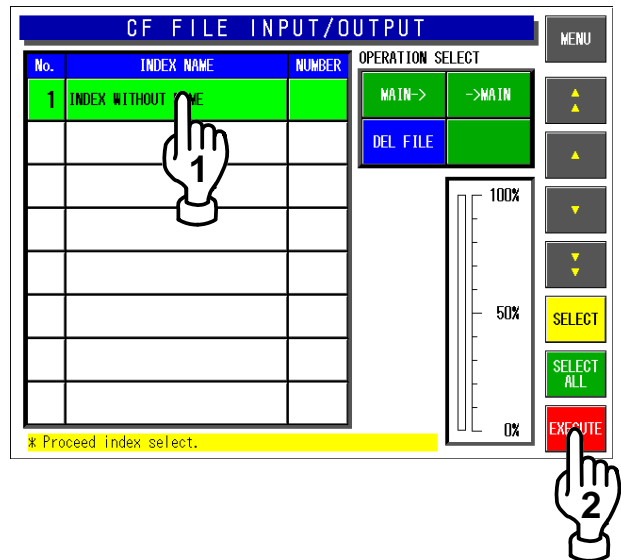
Select when writing the CF data into the machine memory.

[DELETE]

Select when deleting data.

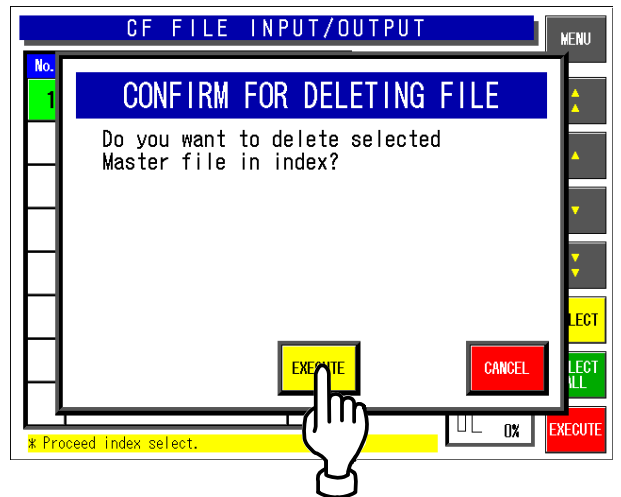


4. Touch to select a desired index field, and touch the [EXECUTE] button to start deleting.



5. The confirmation screen appears. Then, touch the [EXECUTE] button to delete selected master data.

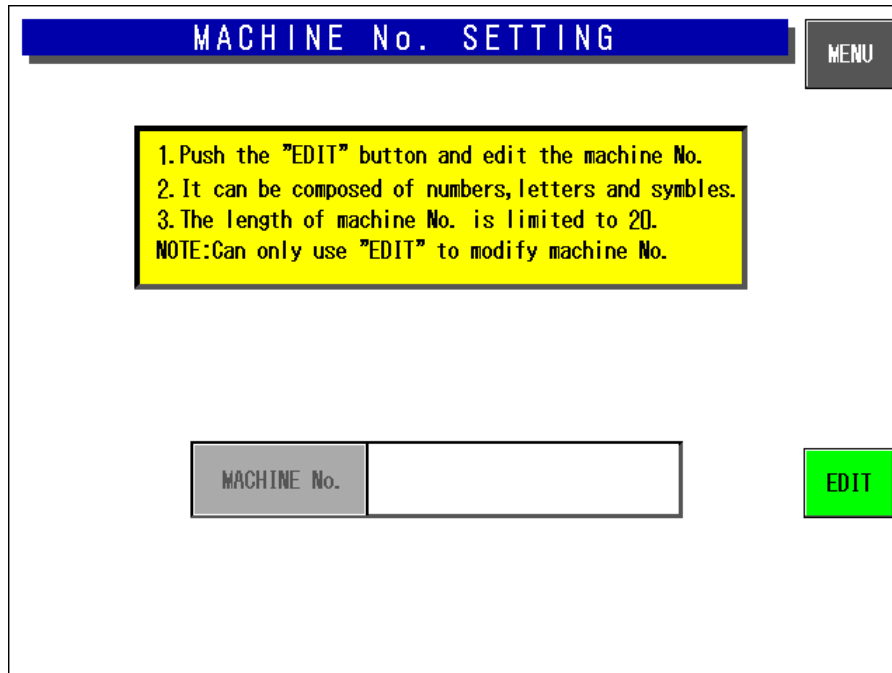
When deletion is normally completed, the buzzer sounds.



4.20 MACHINE NO.

This specification is for EU.

Can only use "Edit" to modify machine number.

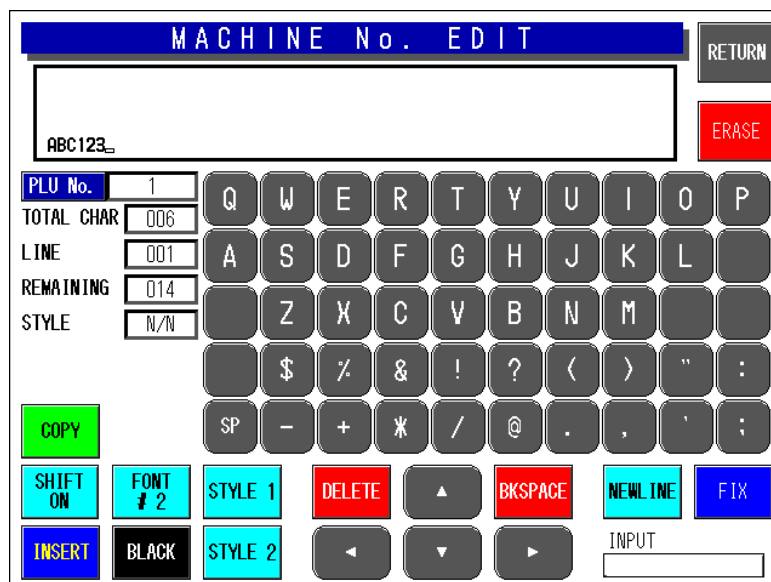


Machine Number Setting Screen

Push the [EDIT] button and edit the machine number.

It can be composed of numbers, Letters and symbols.

The length of machine number is limited to 20.



4.21 EXCHANGE RATE

This specification is for EU.

The screenshot shows the 'Exchange Rate Setting' screen. At the top is a blue header with the text 'Exchange Rate Setting' and a 'MENU' button to its right. Below the header is a yellow box containing two instructions: '* Input the exchange rate for local currency.' and '* Select the currency of Setting to barcord.' Underneath are three input fields: 'Exchange Rate' with the value '0', 'Decimal Position' with the value '0', and 'Barcode Price Sel' with two buttons labeled 'Euro' and 'Local'. At the bottom right, there is an 'INPUT' label followed by a small empty text box.

Exchange Rate Setting Screen

Input the exchange rate for local currency.
Select the currency of Setting to barcode.

Buttons/Display Fields	Function
MENU	Returns to the System Menu 2/2 screen.
EXCHANGE RATE	Input the exchange rate for local currency. (0-99999999)
DECIMAL POSITION	In put the decimal position. (0-7)
BARCODE PRICE SELECT	Select the currency of Setting to barcode. [Euro] or [Local]

4.22 SCANNER SETUP

This specification is for EU.

Input barcode system of scanner

The image shows a 'Scanner Setting' screen. At the top, there is a blue header bar with the text 'Scanner Setting' and a 'MENU' button on the right. Below the header, a yellow box contains the instruction: '* Input barcord system of scanner (The item inputed zero is without setting)'. The screen features four input fields, each with a blue header and a 'Set' button: 'Barcode Digit Num' (value 0), 'PLU Begin Col' (value 0), 'PLU Digit Num' (value 0), and 'Chk Digit Begin Col' (value 0). At the bottom, there is an 'INPUT' label followed by a text entry field.

Scanner Setting Screen

Buttons/Display Fields	Function
MENU	Returns to the System Menu 2/2 screen.
BARCODE DIGIT NUMBER	Input the barcode length.
PLU BEGIN COL	Input the start position of PLU in the barcode.
PLU DIGIT NUMBER	Input the PLU code length.
CHECK DIGIT BEGIN COL	Input the start position of check digit in the barcode.

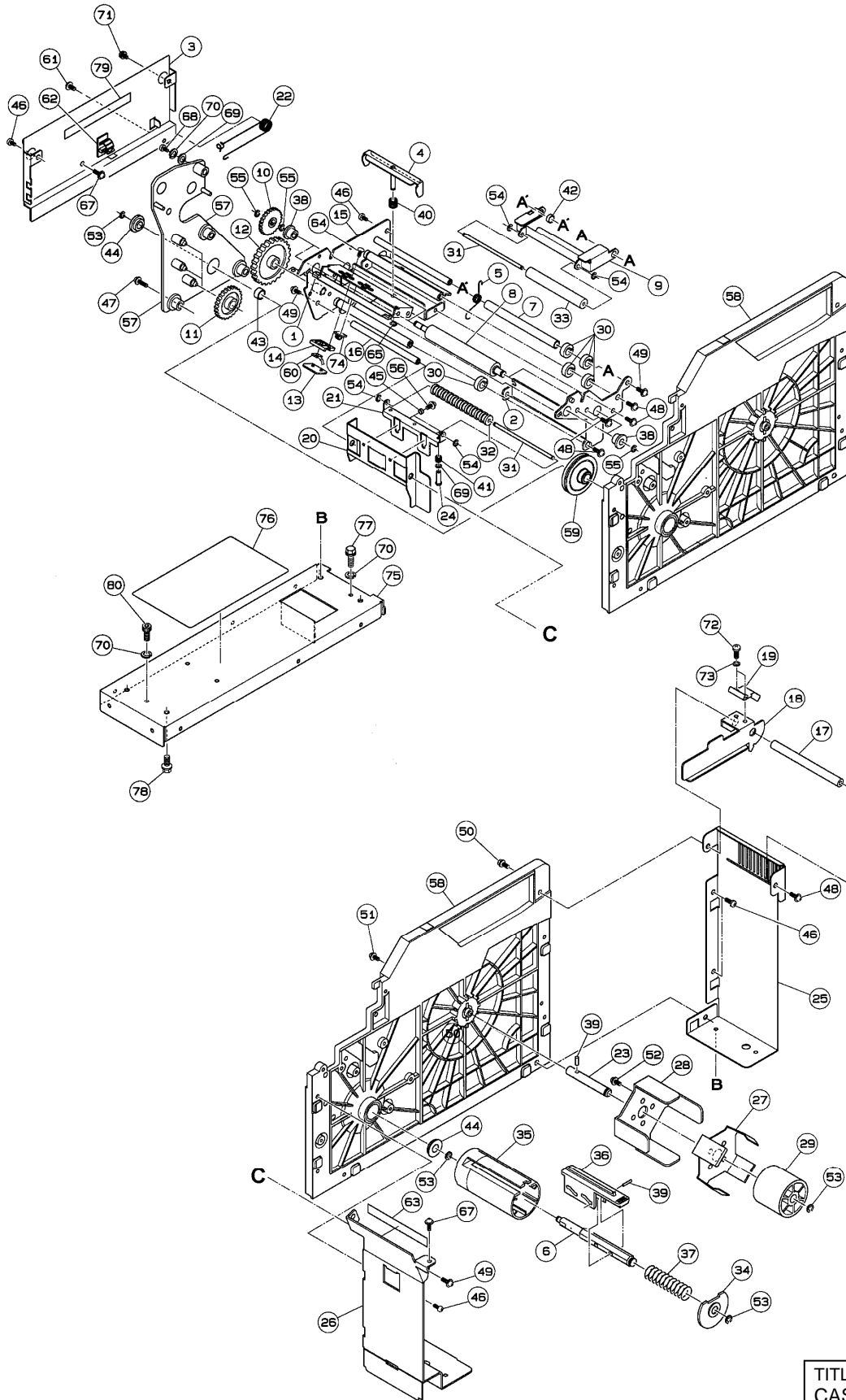
5

**MECHANICAL
ASSEMBLY**

Contents

5.1 CASSETTE UNIT	2
5.2 MAIN BODY UNIT	4
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5.4 SCALE UNIT	7

5.1 CASSETTE UNIT



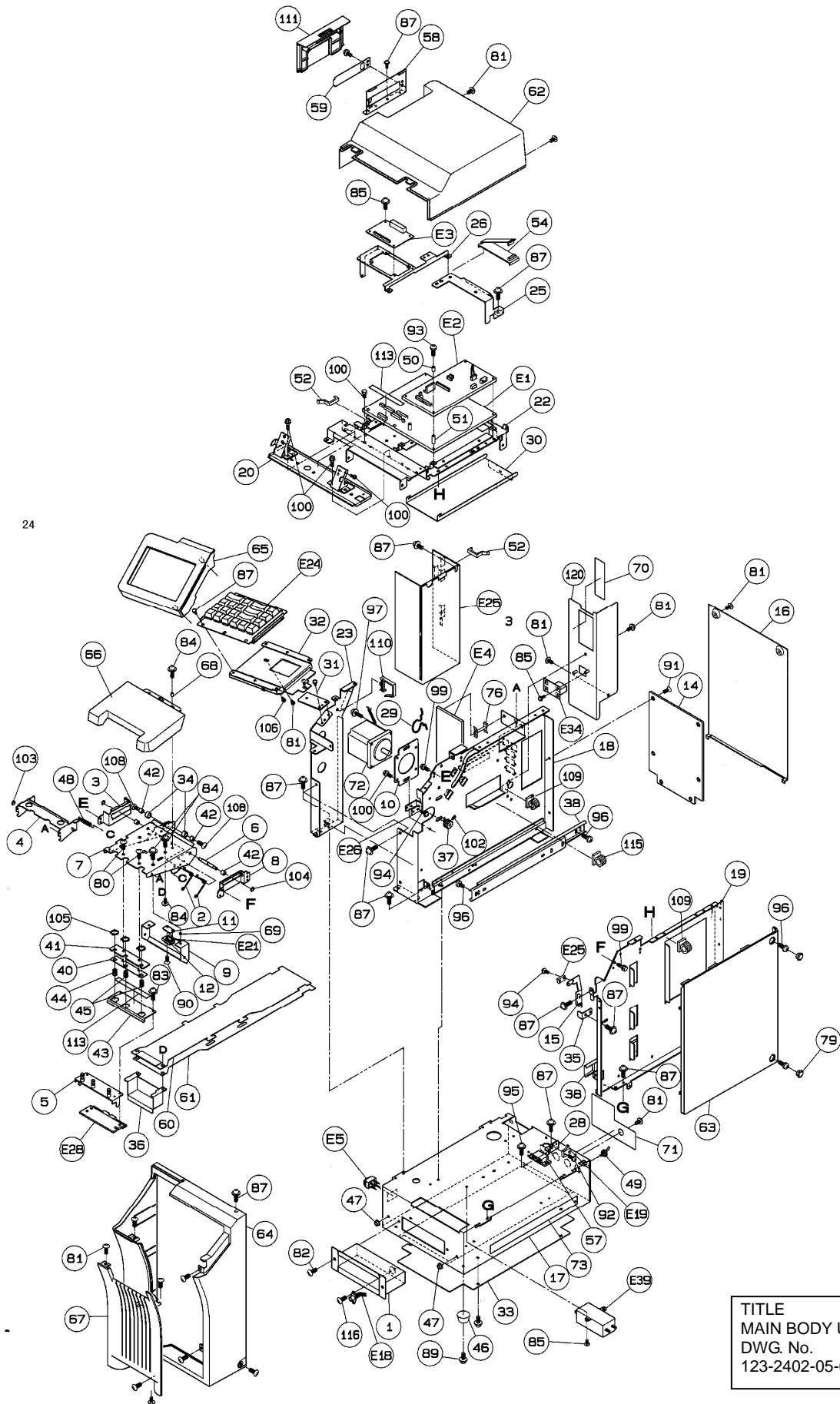
TITLE
CASSETTE UNIT
DWG. No.
096-9752-06-0

CASSETTE UNIT: IP-EMZ
 PART CODE: 113-8448-09
 Refer to DWG No.: 096-9752-06-0

ITEM	DESCRIPTION
1	PLATE AS:PEELING SHAFT:
2	BRACKET:PRINT:
3	COVER:HARNESS:LAVEL SENSOR
4	LAVEL:BREAK:
5	SPRING:C:3
6	SHAFT:STEP:
7	ROLLER:
8	ROLLER:PRINT:
9	BRACKET:LABEL:STOPPER
10	GEAR:IDOLER:25
11	GEAR:FLAT:
12	GEAR:FLAT:
13	PLATE A:SENSOR
14	BLOCK B:SENSOR:
15	BASE AS:PRINTER:
16	SHAFT:LABEL:REAR
17	THREADED ROD:ROUND:MM
18	GUIDE:LABEL:
19	SPRING:PLATE:GUIDE
20	BRACKET:HOLDER:
21	HOLDER:ROLLER:
22	SPRING:COIL:
23	SHAFT:LABEL:
24	STEP SCREW:PAN:
25	FRAME:CASSETTE:REAR
26	FRAME:CASSETTE:FRONT
27	SPRING:PLATE:
28	GUIDE:PRINTER:CASSETTE
29	ROLLER:POLE
30	GUIDE:LABEL:
31	SHAFT:ROLLER:ASSIST
32	ROLLER:ASSIST:
33	ROLLER:ASSIST:
34	COVER:WILDING:
35	BOBBIN:WILDING:
36	HOLDER:WILDING:STOPPER
37	SPRING:COIL:COMPRESSIVE
38	BUSH:
39	SPRING PIN:
40	SPRING:COIL:COMPRESSIVE

ITEM	DESCRIPTION
41	SPRING:COIL:COMPRESSIVE
42	COLLAR:SPACER
43	COLLAR:SPACER
44	BEARING:RADIAL:
45	COLLAR:SPACER
46	TAPPING SCREW:PLUS:P TIGHT
47	TAPPING SCREW:TP:B TIGHT
48	TP TAPPING SCREW:
49	TP SCREW:
50	HEX BOLT:BOLT&WASHER AS S2P2:
51	SCREW:CROSS TRUSS:
52	TP TAPPING SCREW:T2
53	E RING:
54	E RING:
55	E RING:
56	SCREW:CROSS PAN HEAD:
57	COVER:GEAR:
58	MAIN BODY:PRINTER:CASSETTE
59	LIMITTER A:ASSY:
60	SENSOR AS:LABEL:
61	SCREW:CROSS TRUSS:
62	ACCESSORY:CLAMP:CKN CLAMP
63	TAPE REJECTION
64	SCREW:CROSS FLAT:
65	E RING:
67	SCREW:CROSS TRUSS:
68	SCREW:CROSS PAN HEAD:
69	PLAIN WASHER:
70	SPRING WASHER:
71	TAPPING SCREW:CROSS PAN HEAD:
72	SCREW:CROSS PAN HEAD:
73	SPRING WASHER:
74	ACCESSORY:CLAMP:WIRE
75	BASE:CASSETTE:
76	NAME PLATE:EXPLANATION:
77	HEX BOLT:
78	PLUS HEX BOLT:
79	TAPE REJECTION
80	HEX SOCKET BOLT:

5.2 MAIN BODY UNIT



TITLE
 MAIN BODY UNIT
 DWG. No.
 123-2402-05-0

MAIN BODY UNIT: IP-EMZ

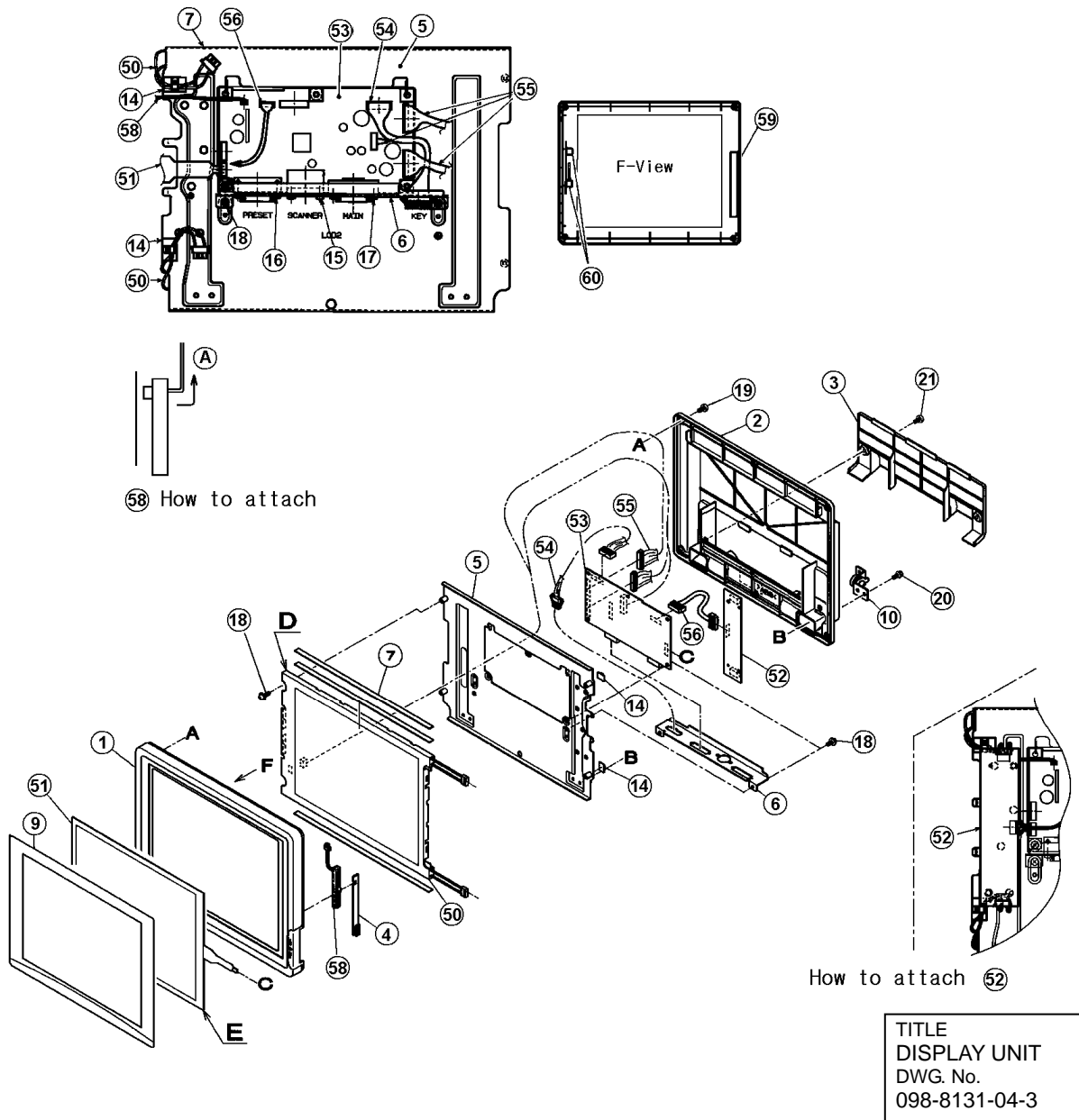
PART CODE:

Refer to DWG No.: 123-2402-05-0

ITEM	DESCRIPTION
1	BRACKET:WEIGH:
2	SPRING:B:2
3	SLIDE:RAIL:LEFT
4	BRACKET:STOPPER
5	BRACKET:HEAD:
6	SHAFT:PRINTER:SLIDE
7	BRACKET AS:PRINT:
8	SLIDE:RAIL:RIGHT
9	BRACKET:SENSOR:
10	BRACKET:MOTOR:
11	PLATE A:SENSOR
12	BLOCK B:SENSOR:
14	FRAME:REAR:
15	SENSOR:RECEIVER:
16	COVER:REAR:
17	BASE:UNDER:
18	FRAME:MIDDLE:
19	FRAME:RIGHT:
20	BRACKET:AS:DISPLAY
22	FRAME AS:UPPER
23	FRAME:LEFT
25	BRACKET:THERMAL HARNESS:
26	BRACKET:DISPLAY BOARD:
28	L PLATE A:MICRO SW
29	CRIPPING:PRINT:
30	COVER:HARNESS:THERMAL
31	PLATE A:KEY
32	BASE:KEY:
33	PLATE A:COVER:LOWER
34	COLLAR:
35	BRACKET:STOPPER
36	COVER:PRINTER:CONNECTOR
37	GEAR:FLAT:
38	RAIL:SLIDE:
40	PLATE A:SPRING:SUPPORT
41	STAY:HEAD:THERMAL
42	BUSH:
43	COVER:HEAD:
44	SPRING:COIL:COMPRESSIVE
45	SPRING:COIL:COMPRESSIVE
46	RUBBER PAD:
47	ACCESSORY:BUSH:
48	SPRING:COIL:TENSION
49	ACCESSORY:BUSH:CABLE
50	PWB ACCESSORY:COLLAR BUSH:
51	PWB ACCESSORY:COLLAR BUSH:
52	ACCESSORY:FASTENER:EDGE
54	ACCESSORY:CLAMP:FLAT CABLE
57	CATCH:MAGNET:
58	COVER:SLOT:CF
59	PLATE B:PC:
60	SHEET:HARNESS:UPPER
61	SHEET:HARNESS:LOWER
62	CASE:MAIN BODY:UPPER
63	CASE:MAIN BODY:SIDE
64	CASE:MAIN BODY:FRONT
65	CASE:KEY:

ITEM	DESCRIPTION
66	COVER:PRINTER:
67	COVER:CASSETTE:FRONT
68	COLLAR:SPACER
69	COLLAR:SPACER
70	NAME PLATE:EXPLANATION:
71	NAME PLATE:EXPLANATION:
72	MOTOR AS; STEPPING:
73	NAME PLATE:SPECIFICATION:
76	PWB ACCESSORY:CARD SPACER:
79	CAP:
80	SCREW:CROSS TRUSS:
81	SCREW:CROSS TRUSS:
82	SCREW:CROSS TRUSS:
83	TP SCREW:
84	TP TAPPING SCREW:
85	TP SCREW M3X6
87	TP SCREW:
89	SCREW:CROSS TRUSS:
90	SCREW:CROSS FLAT:
91	SCREW:CROSS FLAT:
92	SCREW:CROSS PAN HEAD:
93	SCREW:CROSS PAN HEAD:
94	SCREW:CROSS PAN HEAD:
95	SCREW:CROSS PAN HEAD:BWA S2P2
96	SCREW:CROSS PAN HEAD:
97	SCREW:CROSS PAN HEAD:BWA S2P1
99	CROSS HEAD:HEX BOLT WITH SW/PW
100	PLUS HEX BOLT:
102	SET SCREW:HEX SOCKET:W-POINT
103	E RING:
104	E RING:
105	C RING:FOR SHAFT:
106	TP TAPPING SCREW:T2
108	SCREW:CROSS TRUSS:
109	ACCESSORY:CLAMP:CKN CLAMP
110	ACCESSORY:CLAMP:LWS CLAMP
111	COVER:CARD:
113	TAPE REJECTION
115	ACCESSORY:CLAMP:CKN CLAMP
116	SCREW:CROSS PAN HEAD:
120	L PLATE B:
E1	PWB:P-910:H-2
E2	PWB:P-964:-3
E3	PWB:P-919:B-3
E4	PWB:P-918:A-1
E5	SWITCH AS:SEESAW:
E18	HARNESS:C2:SCALE
E19	SENSOR AS:HEAD:
E21	SENSOR AS:LABEL:RECEIVER
E24	KEY BOARD AS:
E25	POWER SUPPLY:SWITCHING:
E26	PHOTO INTERRUPTOR:TRANS:
E27	PHOTO INTERRUPTOR:TRANS:RECEIV
E34	PWB:P-967:-1 Ethernet Junction Board
E39	Noise Filter

5.3 DISPLAY UNIT



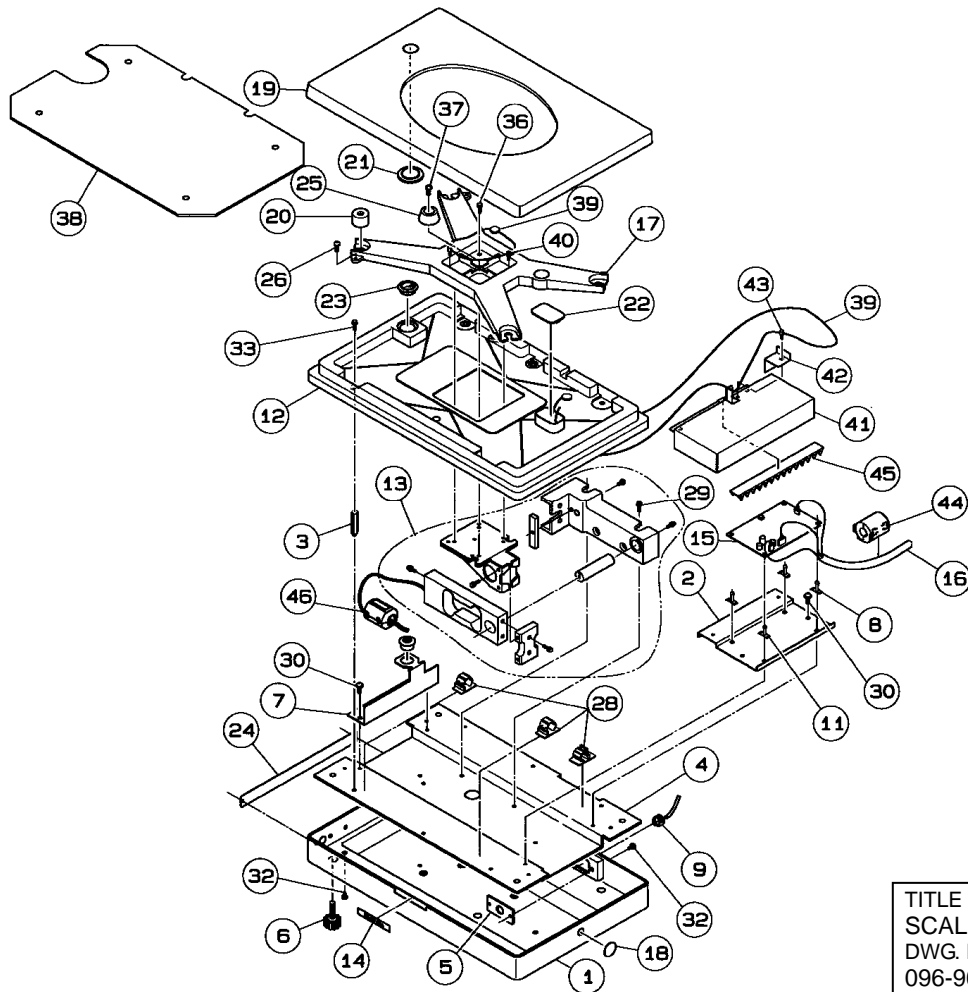
DISPLAY UNIT: IP-EMZ
 PART CODE:
 Refer to DWG No.: 098-8131-04-3

ITEM	DESCRIPTION
1	CASE:CONTROLLER:FRONT
2	CASE AS:CONTROLLER:REAR
3	COVER:CONNECTOR:
4	COVER:VOLUME:
5	FRAME:CONTROLLER:
6	BRACKET:CONNECTOR:OPERATION
7	SHEET:
9	SHEET:DISPLAY:
10	PRINT:TORQUE:
14	ACCESSORY:CLAMP:WIRE
15	SCREW:CROSS PAN HEAD:
16	SCREW:CROSS PAN HEAD:
17	SCREW:CROSS PAN HEAD:

ITEM	DESCRIPTION
18	SCREW:CROSS PAN HEAD:BWA S2P2
19	TAPPING SCREW:CROSS PAN:P
20	CROSS HEX:SET SCREW S2P2:
21	TAPPING SCREW:CROSS PAN HEAD:
50	DISPLAY:LIQUIT CLYSTAL:TFT
51	TOUCH PANEL:ANALOG:
52	INVERTER
53	PWB:P-917:B-2
54	HARNESS:C2:KEY JUNC.
55	HARNESS:C4:TFT
56	HARNESS:C2:INVERTER
58	VOLUME AS:
59	PLATE:SPACER:
60	PLATE:SPACER:

5.4 SCALE UNIT

15kg/30lb



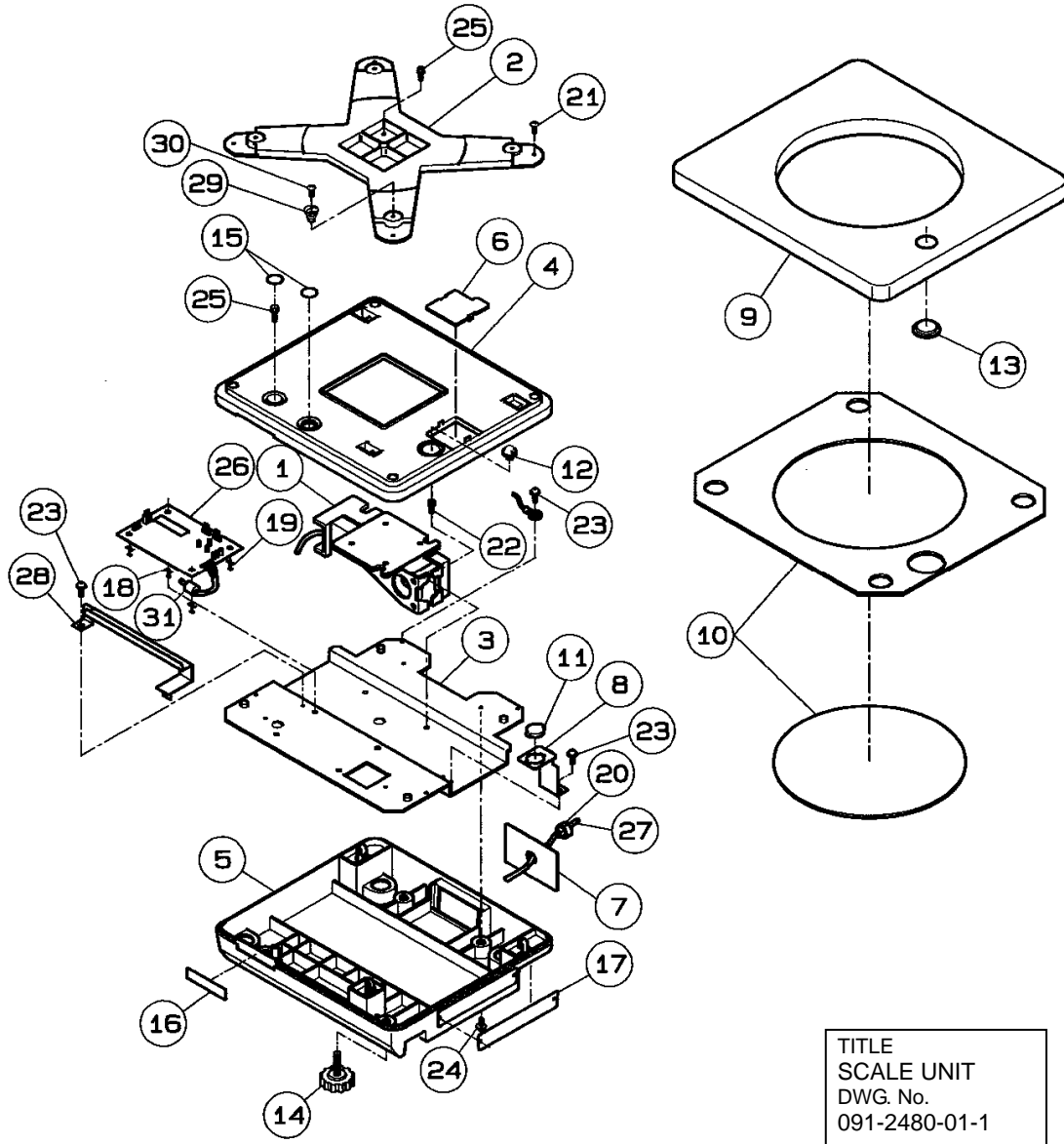
TITLE
SCALE UNIT
DWG. No.
096-9606-05-1

SCALE UNIT: 15kg/30lb:IP-EMZ
PART CODE: 15kg:120-0182-07 30lb:123-2295-03
Refer to DWG No.: 096-9606-05-1

ITEM	DESCRIPTION
1	CASE:SCALE:LOWER
2	BRACKET:PWB:
3	THREADED ROD:HEX:MF
4	BASE:WEIGH:
5	PLATE B:METAL:IPEMZ
6	LEG:ADJUSTING:
7	METAL FITTING UNIT FOR LEVEL
8	PWB ACCESSORY:CARD SPACER:
9	ACCESSORY:BUSH:CABLE
11	PWB ACCESSORY:CARD SPACER:
12	ENCLOSURE
13	LC UNIT:CLC-25L: 15kg/30lb
14	NAME PLATE:COMPANY NAME:
15	PWB:P-930A-2:
16	HARNESS:C5:SCALE COMM
17	PLATTER SUPPORTER
18	SEAL:
19	PLATTER:
20	SUPPORTER RUBBER:
21	CAP:WINDOW:
22	CAP:

ITEM	DESCRIPTION
23	LENSE:
24	NAME PLATE:SPECIFICATION:CAN
24	NAME PLATE:SPECIFICATION:USA
25	RUBBER PAD:
26	SCREW:PLUS TRUSS:SCREW LOCK
28	ACCESSORY:CLAMP:CKN CLAMP
29	GT CAP SCREW:
30	TP SCREW:
32	SCREW:CROSS TRUSS:
33	HEX BOLT:BOLT&WASHER AS S2P2:
36	CROSS HEXAGON BOLT
37	TP SCREW M4X8 CHROMATE
38	SHEET:INSULATOR:
39	SEALING:WITH WIRE:
40	STEP SCREW:
41	COVER:PWB:
42	COVER:SWITCH:
43	SCREW:SEALING:
44	FILTER:FERRITE CORE:
45	FILTER:FINGER:
46	FILTER:FERRITE:

6kg



TITLE
SCALE UNIT
DWG. No.
091-2480-01-1

SCALE UNIT: 6kg:IP-EMZ
PART CODE: 123-2302-06
Refer to DWG No.: 091-2480-01-1

ITEM	DESCRIPTION
1	LC UNIT:CLC-10N: 6kg
2	PLATTER SUPPORTER
3	BASE:WEIGH:
4	ENCLOSURE
5	CASE:SCALE:LOWER
6	CAP:
7	PLATE B:
8	BRACKET FOR LEVEL
9	PLATTER:
11	LEVEL AS
12	LENSE:
13	CAP:WINDOW:
14	LEG:ADJUSTING:
15	SEAL:
16	NAME PLATE:COMPANY NAME:

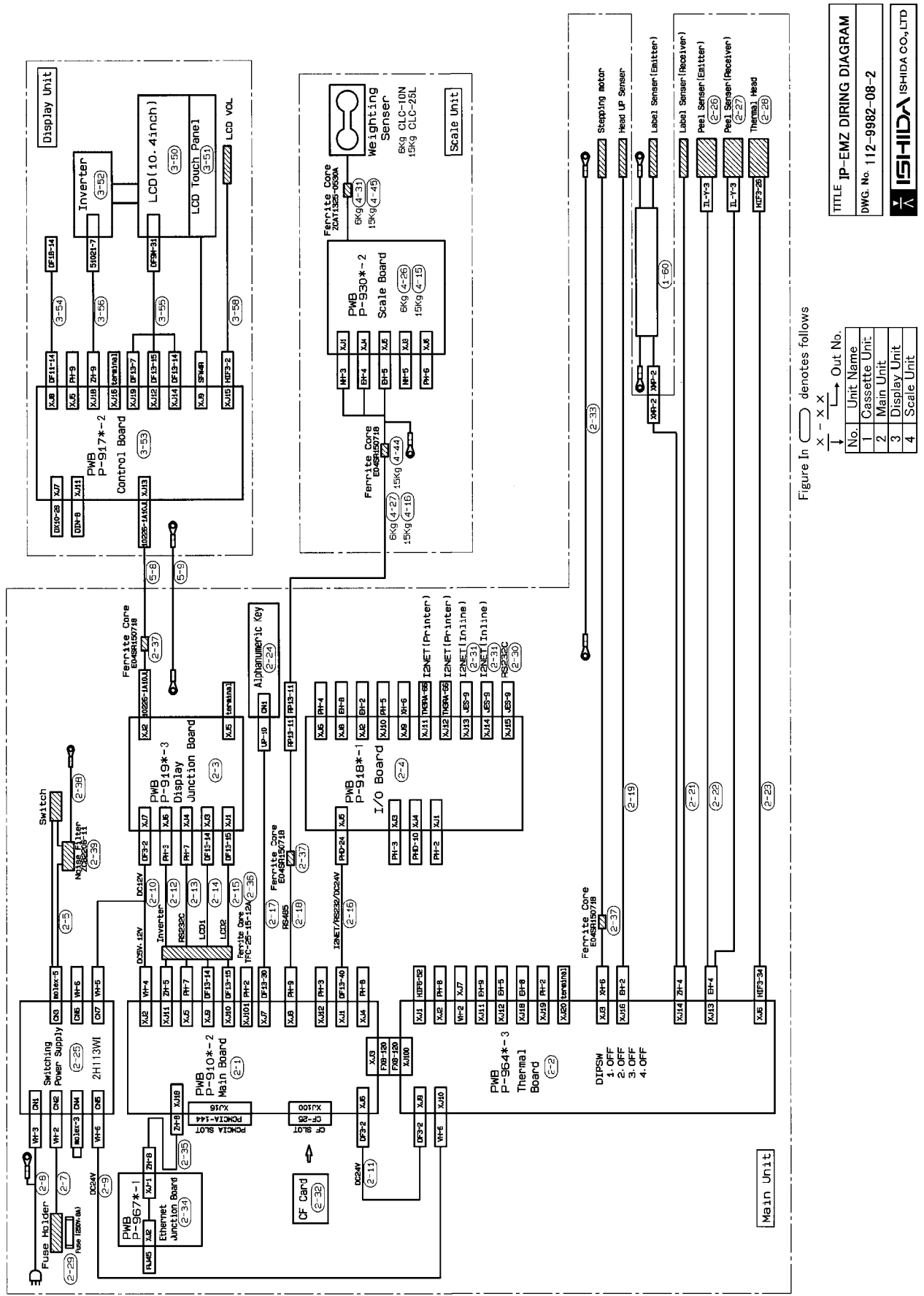
ITEM	DESCRIPTION
17	NAME PLATE:SPECIFICATION:
18	PWB ACCESSORY:CARD SPACER:
19	PWB ACCESSORY:CARD SPACER:
20	ACCESSORY:BUSH:CABLE
21	SCREW:PLUS TRUSS:SCREW LOCK
22	GT CAP SCREW:
23	TP SCREW:
24	TP SCREW:
25	HEX BOLT:BOLT&WASHER AS S2P2:
26	PWB:P-930A-2:
27	HARNESS:C5:SCALE COMM
28	COVER: HARNESS
29	SPRING:
30	TP SCREW:
31	FERRITE CORE

6

**ELECTRIC
ASSEMBLY****Contents**

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6.5	CONNECTOR JUNCTION PC BOARD (P-918A-1)	12
6.6	LAN PC BOARD (P-967-1)	14
6.7	DISPLAY JUNCTION PC BOARD (P-919B-3)	15
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6.1 ELECTRIC BLOCK DIAGRAM



TITLE JP-EMZ DIRING DIAGRAM
 DWG. No. 112-9982-08-2
ISHIDA ISHIDA CO., LTD

Figure In denotes follows

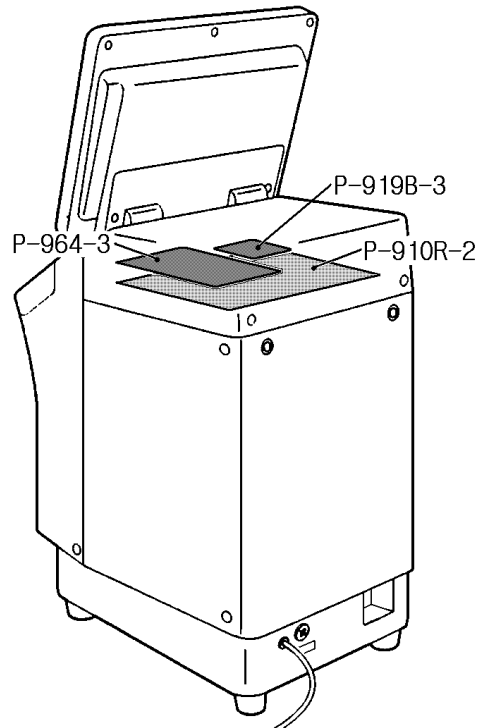
x - x x ↳ Out No.

No.	Unit Name
1	Cassette Unit
2	Main Unit
3	Display Unit
4	Scale Unit

6.2 MAIN PC BOARD (P-910R-2)

6.2.1 BOARD LOCATION

Main board controls the entire machine.
It is located in the main body.



- **Main storage data**

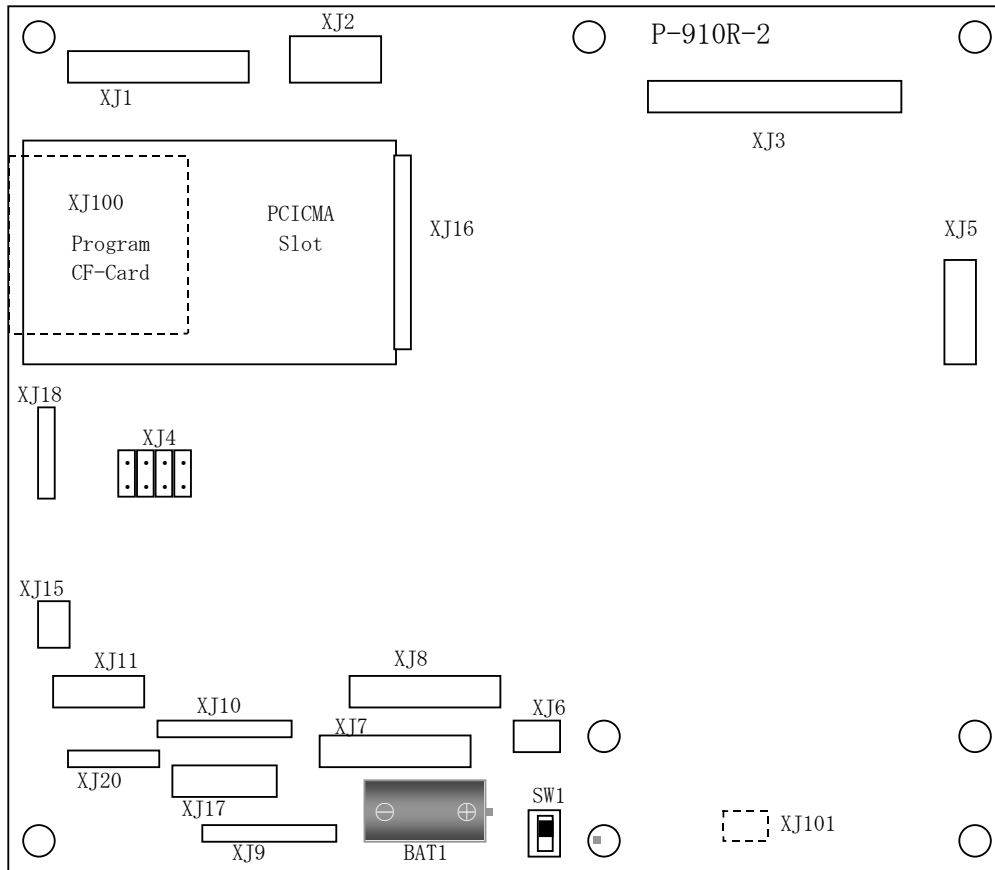
- Master data such as commodity master data, etc.

- **Work after PC board replacement**

- Load the backup data if any from IF-21FD.
- Turn on the battery switch after the board was replaced.

CAUTION

When replacing this board, please follow local regulation on its disposal because it contains lithium battery.



6.2.2 I/O SIGNALS

XJ1

No.	Signal name	Direction	Other end
1-8	RS-232C	↔	P-918 (XJ5)
9-12	I2NET (ELAN)	↔	
13-16	I2NET (ILAN)	↔	
17-18	RS-485 (Wrapper, Applicator, Sensors, and Scale)	↔	
19-31	Not used		
32-33	DC+24V	→	
34-38	GND	-	
39-40	Not used	-	

XJ2

No.	Signal name	Direction	Other end
1	DC+5V	←	<ul style="list-style-type: none"> ▪ Switching power supply (CN7) ▪ P-919 (XJ7)
2	GND	-	
3	DC+12V	←	
4	GND	-	

XJ3

No.	Signal name	Direction	Other end
A1-A60 B1-B60	Signal between P-964 and P-910	↔	P-964 (XJ100)

XJ5

No.	Signal name	Direction	Other end
1	RS232C TxD	→	P-919 (XJ4) To P-917 via the above-mentioned PC board.
2	RS232C RTS	→	
3	RS232C RxD	←	
4	RS232C CTS	←	
5	RS232C DC+5V	→	
6	RS232C SG	-	
7	RS232C FG	-	

XJ6

No.	Signal name	Direction	Other end
1	DC+24V	←	P-964 (XJ9)
2	GND	-	

XJ7

No.	Signal name	Direction	Other end
21	KS3	→	Alphanumeric Key
22	KS2	→	
23	KS1	→	
24	KS0	→	
11	KD5	←	
12	KD4	←	
13	KD3	←	
14	KD2	←	
15	KD1	←	
16	KD0	←	
1-10 25-30	Not Used	-	

XJ8

No.	Signal name	Direction	Other end
1	Scale stability signal	←	Scale Unit P-930 (XJ1,4,5)
2	Not used	-	
3	Not used	-	
4-5	RS-485 (Scale communication)	↔	
6	DC+12V	→	
7	GND	-	
8	Not used	-	
9	GND	-	

XJ9

No.	Signal name	Direction	Other end
1-8	LCD control signal	↔	P-919 (XJ3) To P-917 via the above-mentioned PC board.
9	DC+5V	→	
10	GND	-	
11-14	Not used	-	

XJ10

No.	Signal name	Direction	Other end
1,3,4,6, 8-15	LCD control signal	←→	P-919 (XJ1) To P-917 via the above-mentioned PC board.
2	Not used	-	
5, 7	GND	-	

XJ11

No.	Signal name	Direction	Other end
1	DC+12V	→	P-919 (XJ6) To P-917 via the above-mentioned PC board.
2	GND	-	
3	Buzzer ON/OFF	→	
4-5	Not used	-	

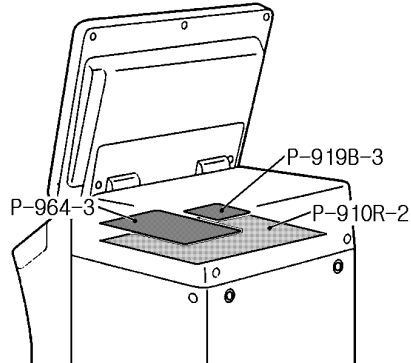
XJ18

No.	Signal name	Direction	Other end
1	LAN TD+	→	P-967-1 (XJ1)
2	LAN TD-	→	
3	LAN TD+	←	
4-5	LAN TD-	←	

6.3 THERMAL PC BOARD (P-964-3)

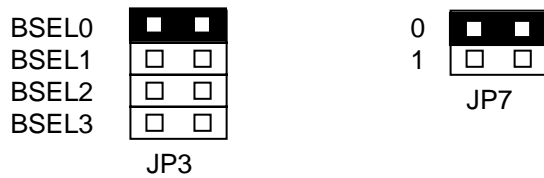
6.3.1 BOARD LOCATION

Thermal board controls the printer.
It is located in the main body.

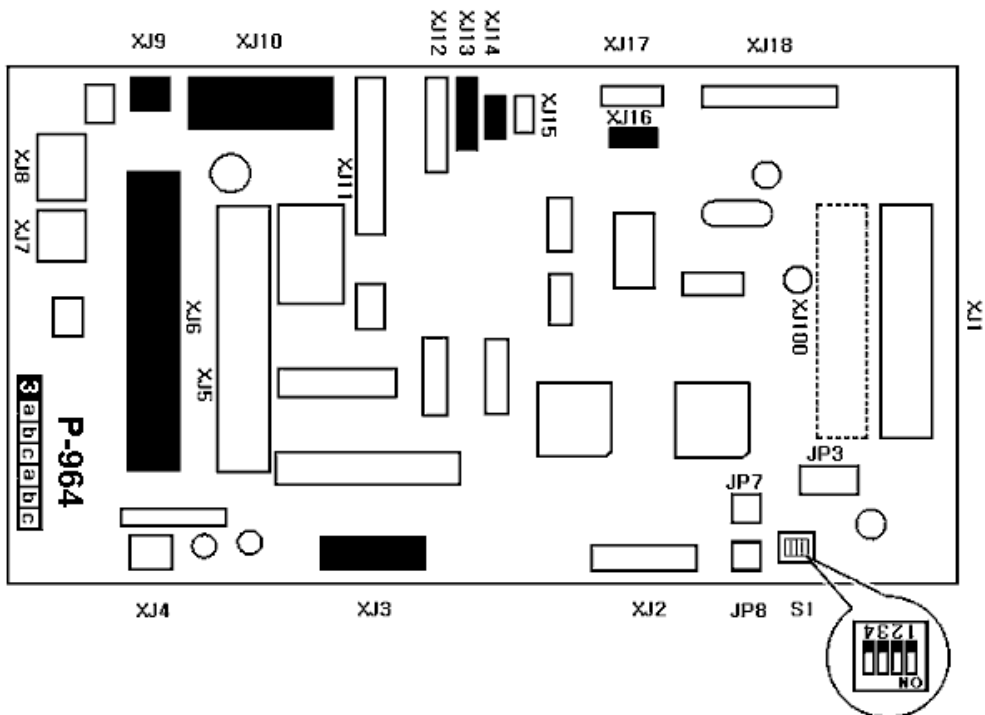


Note that one thermal PC board is required for one printer.
Set the jumper switch on the PC board for each printer as follows:

PC board for Printer #1

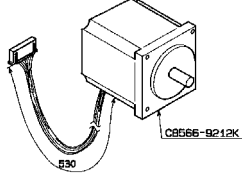


Note: Set "OFF" for all the settings of DIP switch (S1) mounted on the PC board.



6.3.2 I/O SIGNALS

XJ3

No.	Signal name	Direction	Other end
1	\bar{B} phase	→	Stepping motor for label feeding 
2	B phase	→	
3	\bar{A} phase	→	
4	A phase	→	
5	BCOM	-	
6	ACOM	-	

XJ6

No.	Signal name	Direction	Other end
1,3,5,7,9,11	GND	-	Thermal head
2,4,6,8,10	DC+24V	→	
13	DC+5V	→	
12,14,34	Thermal head control signal	↔	

XJ7

No.	Signal name	Direction	Other end
1	DC+24V	→	DC Winding motor
2	GND	-	

XJ9

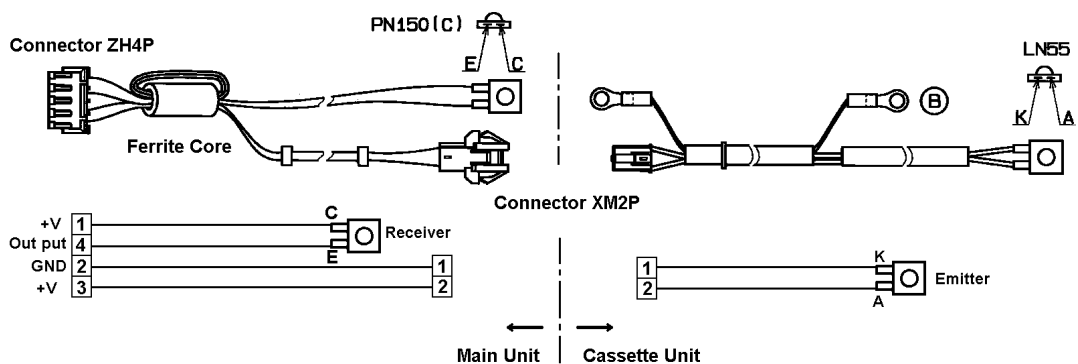
No.	Signal name	Direction	Other end
1	DC+24V	→	P-910 (XJ6)
2	GND	-	

XJ10

No.	Signal name	Direction	Other end
1-3	DC+24V	←	Switching power supply (CN5)
4-6	GND	-	

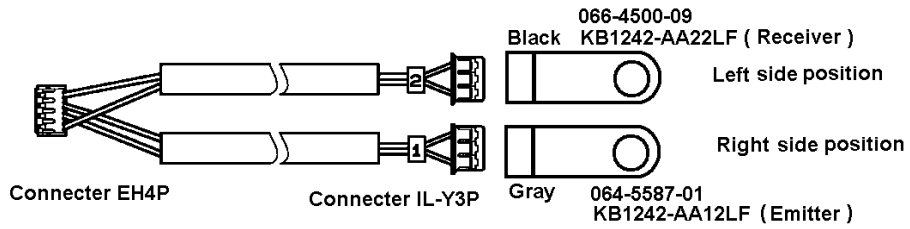
XJ13

No.	Signal name	Direction	Other end
1	Power supply for sensor receiving light	→	Label sensor
2	GND (emitter side)	-	
3	Power supply for sensor emitter side	→	
4	Sensor input signal (receiver side)	←	



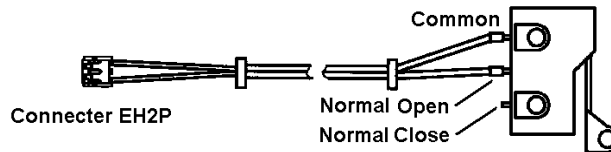
XJ14

No.	Signal name	Direction	Other end
1	Power supply for sensor receiving light	→	Peel sensor
2	GND (emitter side)	-	
3	Power supply for sensor emitter side	→	
4	Sensor input signal (receiver side)	←	



XJ16

No.	Signal name	Direction	Other end
1	Sensor input signal	←	Head-up sensor
2	GND	-	



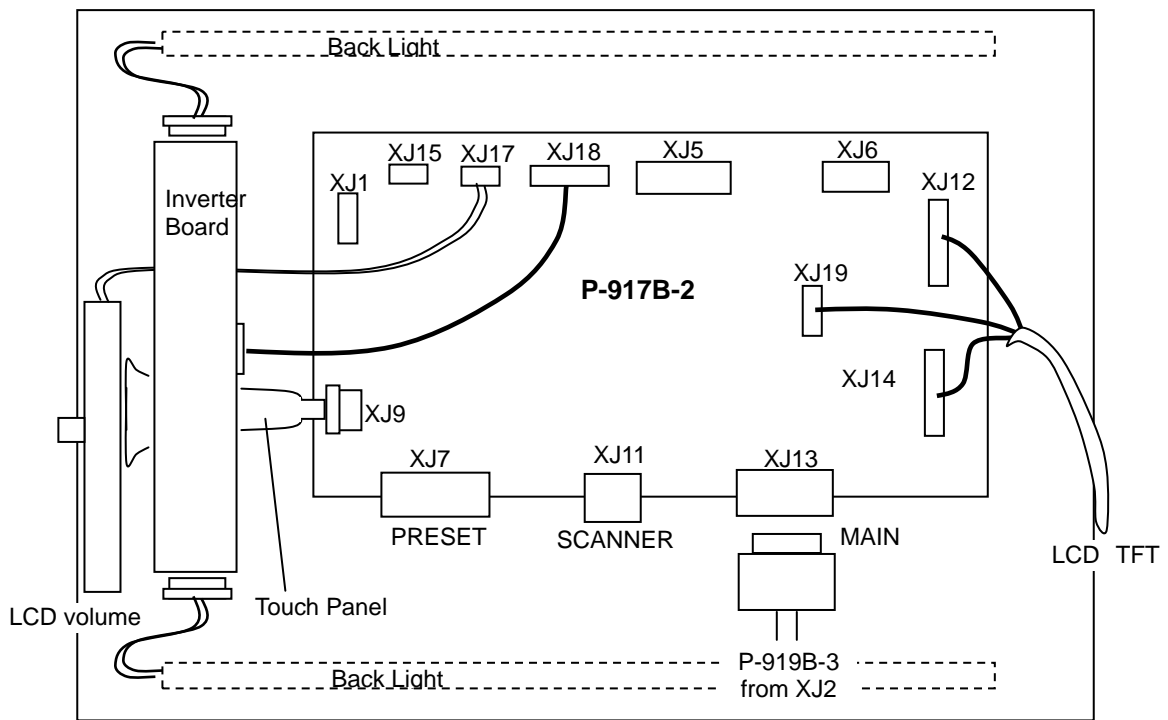
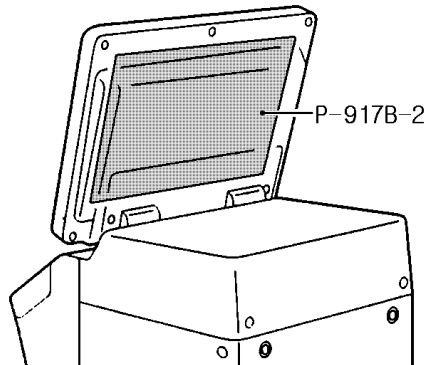
XJ100

No.	Signal name	Direction	Other end
A1-A60 B1-B60	Signal between P-909 and P-910	↔	P-910 (XJ3)

6.4 CONTROL CONSOLE PC BOARD (P-917B-2)

6.4.1 BOARD LOCATION

This board controls the control console.
It is located in the main body.



[Rear view]

6.4.2 I/O SIGNALS

XJ8

No.	Signal name	Direction	Other end
1-14	Keyboard control signal	←	Numeric keys

XJ9

No.	Signal name	Direction	Other end
1-4	Touch panel control signal	←	Touch panel

XJ12

No.	Signal name	Direction	Other end
1,4,8-15	LCD control signal	↔	TFT LCD display
2,3,6	Not used	-	
5,7	GND	-	

XJ13

No.	Signal name	Direction	Other end
1-26	LCD control signal RS-232C DC+12V	-	P-919 (XJ2)

XJ14

No.	Signal name	Direction	Other end
1-8	LCD control signal	↔	TFT LCD display
9	DC+5V	→	
10	GND	-	
11-14	Not used	-	

XJ17

No.	Signal name	Direction	Other end
1	LCD contrast adjustment variable resister	-	LCD volume
2	LCD contrast adjustment variable resister	-	

XJ18

No.	Signal name	Direction	Other end
1-3	DC+12V	-	LCD inverter
4,5	GND	-	
6	VR-2	-	
7	VR-1	-	

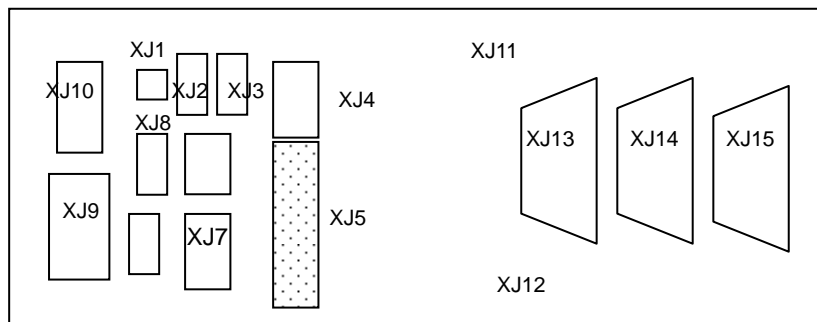
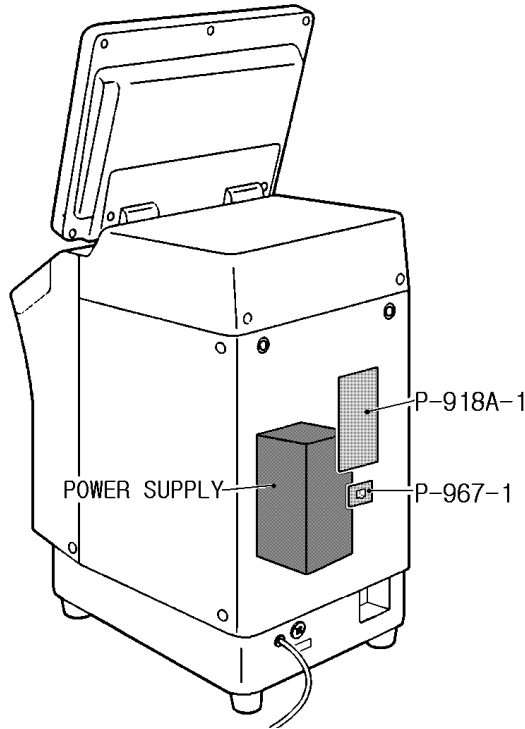
XJ19

No.	Signal name	Direction	Other end
1	DC+5V	-	LCD display
2,4	GND	-	
3,5-7	LCD control signal	-	

6.5 CONNECTOR JUNCTION PC BOARD (P-918A-1)

6.5.1 BOARD LOCATION

This board connects the I2NET and the options.
It is located in the main body.



6.5.2 I/O SIGNALS

XJ5

No.	Signal name	Direction	Other end
1-8	RS-232C	↔	P-910 (XJ1)
9-12	I2NET (ELAN)	↔	
13-16	I2NET (ILAN)	↔	
17-18	RS-485(Wrapper, Applicator, Sensors, and Scale)	↔	
19-20	DC+24V	←	
21-24	GND	-	

XJ11

No.	Signal name	Direction	Other end
1	I2NET D	↔	ILAN (Option 1)
2	I2NET \bar{D}	↔	
3	I2NET EN	↔	
4	I2NET \bar{EN}	↔	
5	GND	-	
6	FG	-	

XJ12

No.	Signal name	Direction	Other end
1	I2NET D	↔	ILAN (Option 1)
2	I2NET \bar{D}	↔	
3	I2NET EN	↔	
4	I2NET \bar{EN}	↔	
5	GND	-	
6	FG	-	

XJ13

No.	Signal name	Direction	Other end
1	Not used	-	ELAN (INLINE)
2	Not used	-	
3	GND	-	
4	I2NET EN	↔	
5	I2NET D	↔	
6	Not used	-	
7	FG	-	
8	I2NET \bar{EN}	↔	
9	I2NET \bar{D}	↔	

XJ14

No.	Signal name	Direction	Other end
1	Not used	-	ELAN (INLINE)
2	Not used	-	
3	GND	-	
4	I2NET EN	↔	
5	I2NET D	↔	
6	Not used	-	
7	FG	-	
8	I2NET \bar{EN}	↔	
9	I2NET \bar{D}	↔	

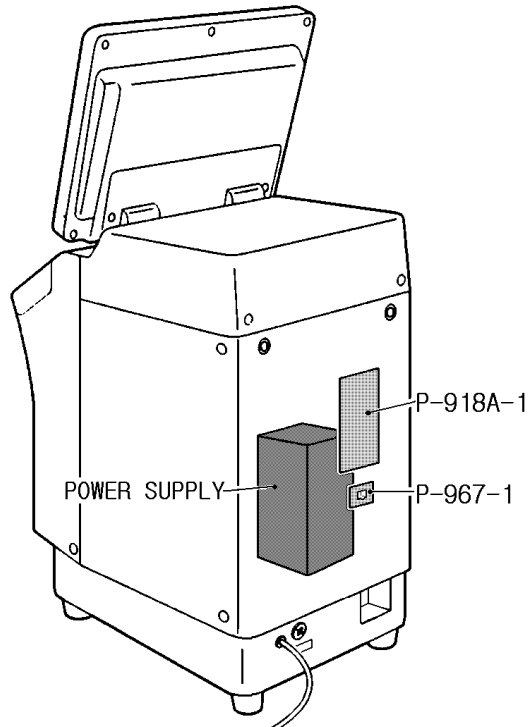
XJ15

No.	Signal name	Direction	Other end
1	RS232C CD	↔	ELAN (INLINE)
2	RS232C RxD	↔	
3	RS232C TxD	↔	
4	RS232C DTR	↔	
5	RS232C SG	-	
6	RS232C DSR	↔	
7	RS232C RTS	↔	
8	RS232C CTS	↔	
9	RS232C RI	↔	

6.6 LAN PC BOARD (P-967-1)

6.6.1 BOARD LOCATION

This board connects a computer, etc. using TCP-IP.
It is located in the main body.



6.6.2 I/O SIGNALS

XJ1

No.	Signal name	Direction	Other end
1	LAN TD+	←	P-910 (XJ18)
2	LAN TD-	←	
3	LAN RD+	→	
6	LAN RD-	→	
4.5.7.8	GND	-	

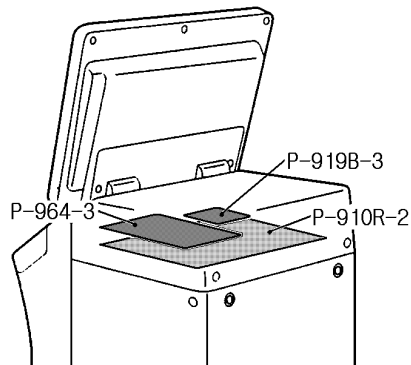
XJ2

No.	Signal name	Direction	Other end
1	LAN TX+	→	LAN
2	LAN TX-	→	
3	LAN RX+	←	
6	LAN RX-	←	
4.5.7.8	GND	-	

6.7 DISPLAY JUNCTION PC BOARD (P-919B-3)

6.7.1 BOARD LOCATION

This board junctions the main PC board and the display PC board. It is located in the right side cover of the main body.



6.7.2 I/O SIGNALS

XJ1

No.	Signal name	Direction	Other end
1,3,4,6,8-15	LCD control signal	↔	P-910 (XJ10)
2	Not used	-	
5-7	GND	-	

XJ2

No.	Signal name	Direction	Other end
1-26	LCD control signal RS-232C DC+12V	-	P-917 (XJ13)

XJ3

No.	Signal name	Direction	Other end
1-8	LCD control signal	↔	P-910 (XJ9)
9	DC+5V	←	
10	GND	-	
11-14	Not used	-	

XJ4

No.	Signal name	Direction	Other end
1	RS232C TxD	←	P-910(XJ5)
2	RS232C RTS	←	
3	RS232C RxD	→	
4	RS232C CTS	→	
5	RS232C DC+5V	←	
6	RS232C SG	-	
7	RS232C FG	-	

XJ6

No.	Signal name	Direction	Other end
1	DC+12V	←	P-910(XJ11)
2	GND	-	
3	Buzzer ON/OFF	←	

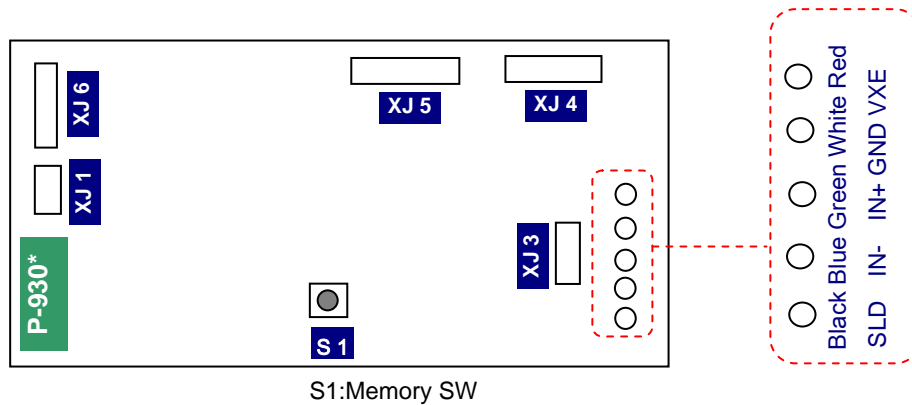
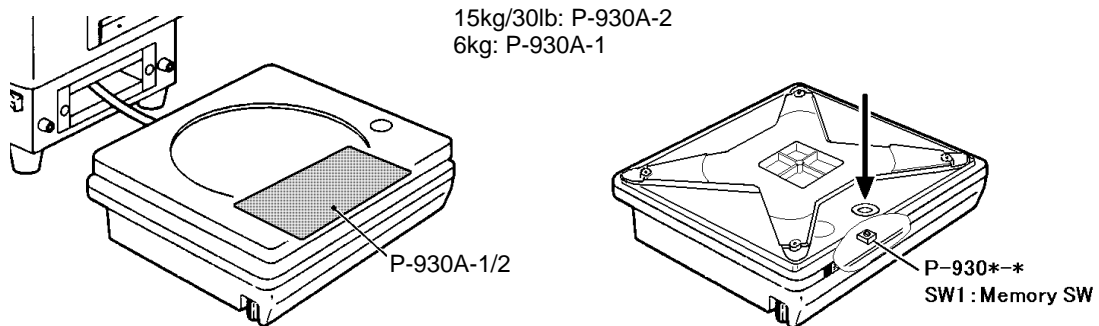
XJ7

No.	Signal name	Direction	Other end
1	DC+12V	←	Switching power supply (CN7)
2	GND	-	

6.8 SCALE BOARD (P-930A-1/2)

6.8.1 BOARD LOCATION

This board is located in the scale unit.



Please push a Memory switch after the completion of adjustment.

6.8.2 DIP SWITCH SETTING

Switch No.	1	2	3	4	5	6	7	8
S3	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF

DIP switch bit	Function	Set content
1	Board number	OFF: Command set ON: "0" fixed
2	Storage command	OFF: Command prohibited ON: Command allowed
3	Test mode	OFF: Command allowed ON: Command prohibited
4	Move average	OFF: 8 times ON: None
5	Zero bias	OFF: Yes ON: No
6	Weight when transmitting	OFF: None ON: 20msec
7	A/D data	OFF: ASC-HEX 5byte ON: ASC-HEX 6byte
8	Analog filter	OFF: Soft ON: Hard

6.8.3 I/O SIGNALS

XJ1

No.	Signal name	Direction	Other end
1	OUT+1 (measurement completion signal)	←	P-910 (main board) XJ8
2	OUT+2		
3	OUT- (measurement completion signal)	←	

XJ2

No.	Signal name	Direction	Other end
1	IN+		Not used
2	IN-1		
3	IN-2		
4	NC		

XJ3

No.	Signal name	Direction	Other end
1	VEX (DC+8 V load cell power supply output)		Not used
2	GND		
3	IN+(load cell input signal)		
4	IN-(load cell input signal)		
5	SHIELD		

XJ4

No.	Signal name	Direction	Other end
1	VEX+ (DC+12 V) power supply input)	←	P-910 (main board) XJ8
2	GND	-	
3	VEX-		
4	FG	-	

XJ5

No.	Signal name	Direction	Other end
1	D# (RS485 communication signal)	↔	P-910 (main board) XJ8
2	D (RS485 communication signal)	↔	
3	TXVCC		
4	TXGND		
5	FG	-	

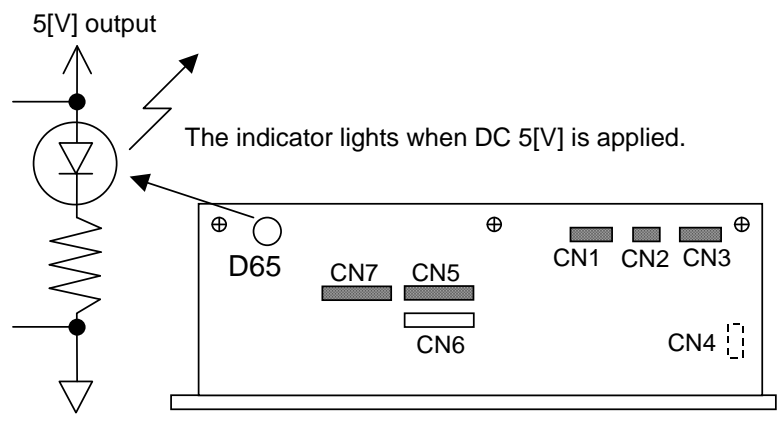
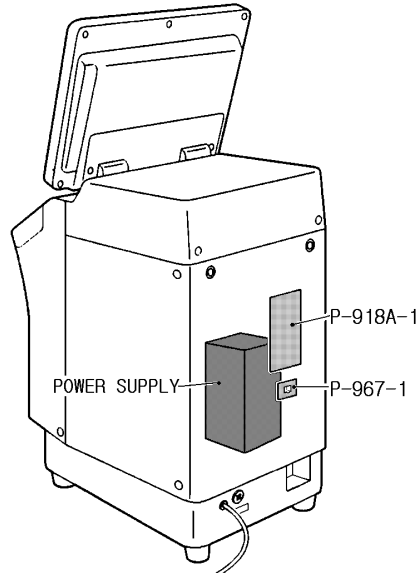
XJ6

No.	Signal name	Direction	Other end
1	RES		Not used
2	I/O0		
3	I/O1		
4	I/O2		
5	TXD		
6	RXD		
7	MD1		
8	VCC		
9	GND		

6.9 SWITCHING POWER SUPPLY (2H113W)

6.9.1 BOARD LOCATION

This unit is located in the main body.

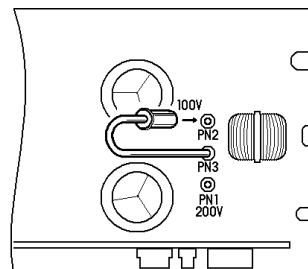


CAUTION

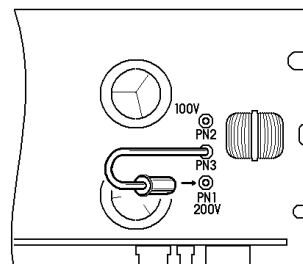
When the 200V is applied to the 100V specification, the switching power supply is damaged. Confirm the specification power-supply voltage.

● Input voltage select.

**PN2-PN3: 100V - 120V
(AC85 - 132V)**



**PN1-PN3: 200V - 240V
(AC170 - 264V)**



6.9.2 I/O SIGNALS

CN1

No.	Signal name	Direction	Other end
1	AC110 V –120V/230V	←	Power plug
3	AC110 V –120V/230V	←	
2	Not used		

CN2

No.	Signal name	Direction	Other end
1	AC110 V –120V/230V	←	Fuse
2	AC110 V –120V/230V	←	

CN3

No.	Signal name	Direction	Other end
1	AC110 V –120V/230V	→	Power switch
2	AC110 V –120V/230V	←	
4	AC110 V –120V/230V	→	
5	AC110 V –120V/230V	←	
3	Not used		

CN5

No.	Signal name	Direction	Other end
1-3	DC24V	→	Not used
4-6	GND	-	

CN7

No.	Signal name	Direction	Other end
1	DC+5V	→	P-910 (XJ2)
2	DC+12V	→	P-910 (XJ2), P-919 (XJ7)
3	Not used		
4	GND	-	P-910 (XJ2)
5	GND	-	P-910 (XJ2), P-919 (XJ7)

7

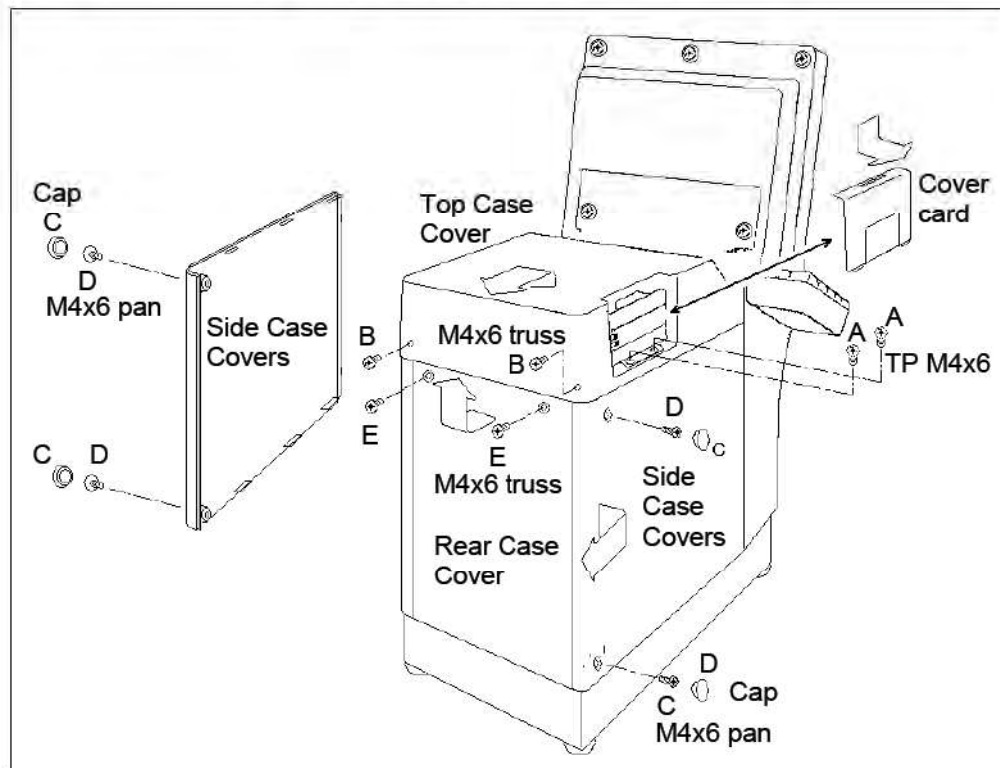
MAINTENANCE

7.1 PARTS REPLACEMENT

CAUTION

Make sure to unplug power cords before replacing parts.

7.1.1 REMOVING DEVICE COVERS



Top Case Cover

1. To remove the cover card, press down on and pull it in the direction indicated by the arrow.
2. Remove the TP M4x6 head screws (A) (2 pcs).
3. Remove the M4x6 truss head screws (B) (2 pcs) on the back of the top case cover.
4. To remove the top case cover, lift from the backside and pull it in the direction indicated by the arrow.

Side Case Covers (same part for both sides)

1. Remove the caps (C) (2 pcs).
2. Remove the M4x6 pan head screws (D) (2 pcs).
3. To remove the side case cover, lift from the backside and pull it in the direction indicated by the arrow.

Rear Case Cover

1. Remove the M4x6 truss head screws (E) (2 pcs).
2. To remove the rear case cover, lift it up in the direction indicated by the arrow.

7.1.2 REMOVING PRINTER COVERS

Remove this cover to replace the thermal head and top label sensor receiver.

1. Pull the label cassette approximately 3 cm as illustrated in the figure.



2. Grab the cover with both hands.



3. Press in while lifting the right side to remove the cover from the right securement screw.



4. In the same way, press in while lifting the left side to remove the cover.



7.1.3 REPLACING THERMAL HEADS

CAUTION

The power must be turned off before performing this procedure.

- Remove the printer cover. (Refer to "7.1.1 REMOVING DEVICE COVERS" and "7.1.2 REMOVING PRINTER COVERS".)
- After the part is replaced, set the Head Resistance and reset the Usage Distance. (Refer to "3.9 PRINT ADJUSTMENT".)

1. With both hands, grab the thermal head together with the bracket and pull towards you.



2. Disconnect the connector.



3. Remove the 3x6 mm securement screws (2 pcs) from the thermal head.



4. Remove the thermal head from the bracket and then attach a new thermal head.



5. Attach the connector to the thermal head, compress the bracket spring with both hands, and then install assembly into the printer.



7.1.4 THERMAL HEAD POSITIONING

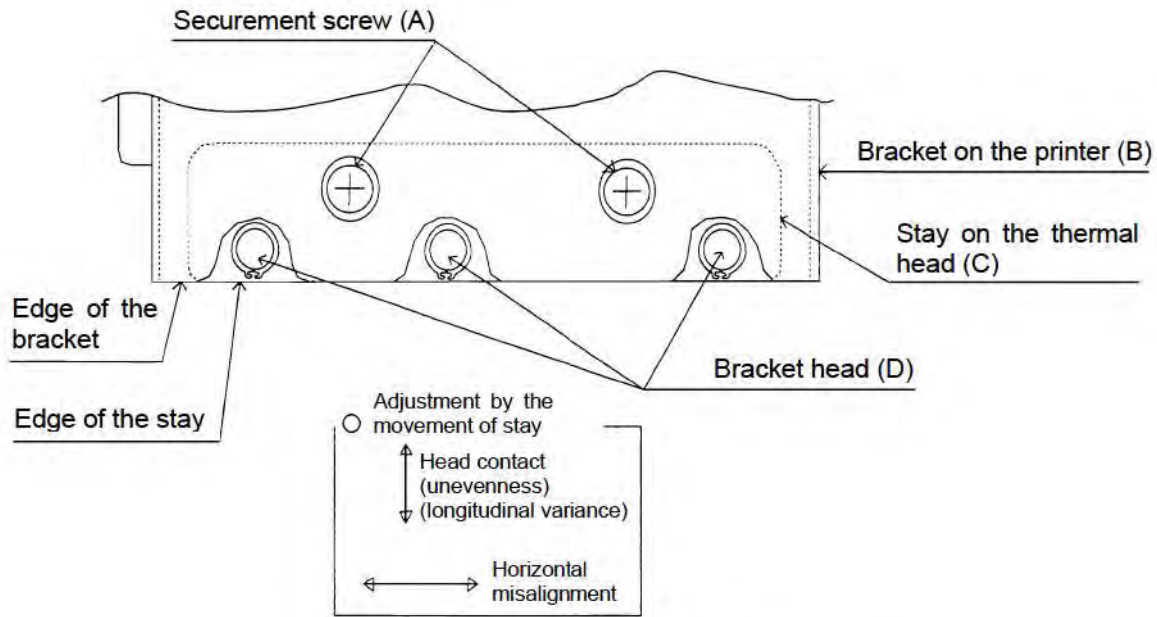


Fig. 7-1 Thermal Head Positioning

If output is not uniform or weak after performing a test print, the thermal head may be out of position. If this happens, reposition the thermal head.

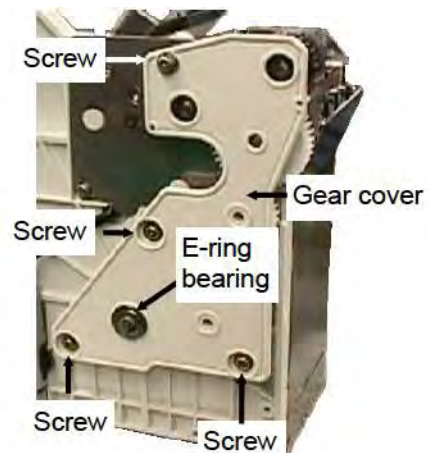
1. Preparation
 - a. Check that the label cassette is in proper condition.
 - a. Adjust the gap between the label receiver guide lever and the label width (paper tube) so that it is between 0.2 to 5.0 mm.
 - b. Adjust the gap between the label guide and the mount so that it is between 0.1 to 0.4 mm.
2. Remove the printer cover. (refer to p. 7-3)
3. Ensure the label cassette is loaded in the device.
4. Turn on the power, start the device in test mode, select print adjustment, and then set the head resistance. Set print density to 1. (refer to the print adjustment section for test mode)
5. Set the label settings. (refer to the same section)
6. Press Feed a few times to align the label position.
7. Perform the test print operation (press "Test Pattern" for label printing). Press the "PRINT" key. Check the third label or so for horizontal misalignment or unevenness in printing.

8. If there is any horizontal misalignment or unevenness in the printing, make the following adjustments.
 - a. Aligning to the reference position
In reference to Fig. 7-1, loosen securement screws A, align the edge of the bracket on the printer front side (B) with the edge of the stay on the thermal head front side (C), partially tighten the securement screws (A), and then position the thermal head while running the test print operation.
 - b. Overall print output is weak
This occurs if the thermal centerline of the thermal head is out of alignment with the centerline of the print roller along their parallel line.
In reference to Fig. 7-1, determine the position at which the print output is darkest by moving the securement screws (A) up or down and looking at the print output and then tighten the securement screws (A).
 - c. Variance in darkness of print output on left and right sides
The side with weaker print output indicates that the thermal head is out of vertical alignment with the centerline of the print roller.
In reference to Fig. 7-1, loosen securement screws (A) and then adjust the securement screws so that the thermal head is parallel with the printer rollers on both the left and right sides when looking from directly above (center lines are overlapping).
 - d. Print position is out of alignment on the right or left sides
Loosen securement screws (A) and move the thermal head position in the opposite direction to the misalignment (left or right) and then secure.
9. Reset to the original print density.

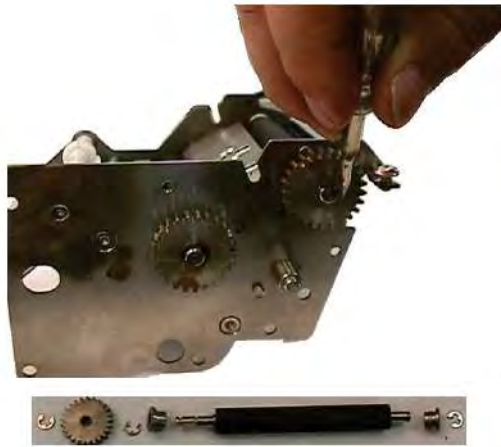
7.1.5 REPLACING PRINT ROLLERS

Perform this procedure with the label cassette removed.

1. Remove the screws (4 pcs) and the E-ring bearing on left side of the cassette and then remove the gear cover.



2. Remove the E-ring, gear, E-ring, and bearing on the left side of the print roller.



3. Remove the E-ring and bearing on the right side of the print roller.



4. Remove the print roller.



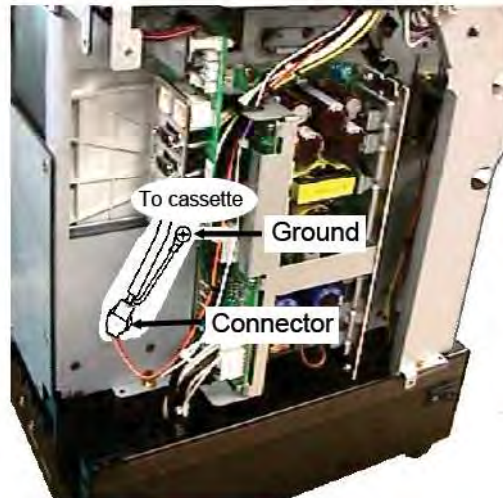
7.1.6 REMOVING LABEL CASSETTES

This part must be removed to replace the label sensor emitter.

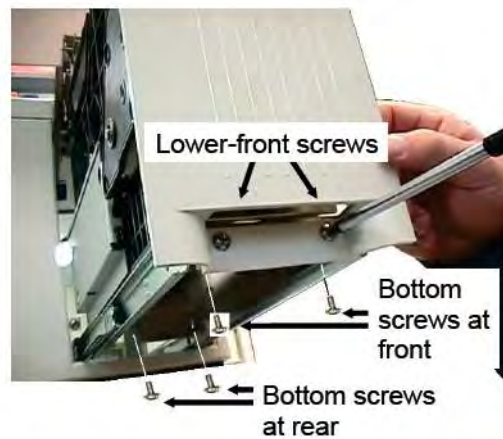
CAUTION

If labels over the specified amount are loaded, the device may fall during the rest of the procedure after removing the cassette. As such, remove labels before performing this procedure.

1. Remove the cover on the left side and remove the connector and ground cable for the label cassette.



2. Remove the lower-front screws (2 pcs).



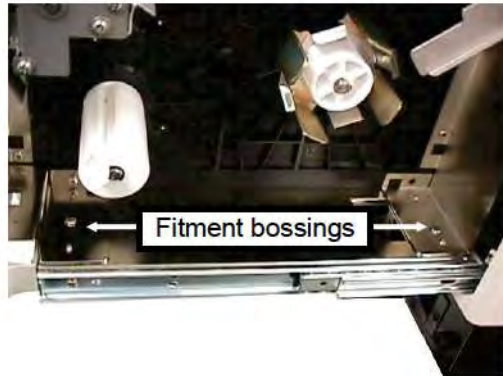
3. Remove the bottom screws (2 pcs) at the front.



4. Remove the bottom screws (2 pcs) at the rear.

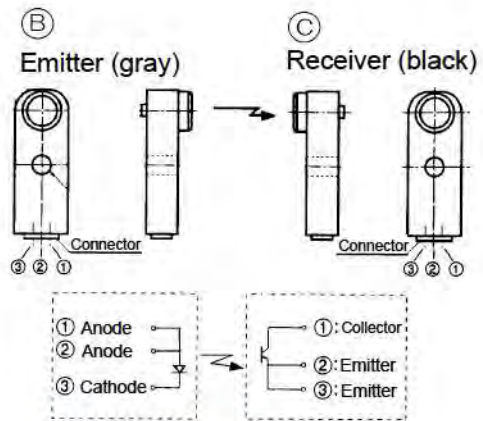


5. Lift the cassette up to remove.
To install, insert the cassette onto the fitment bossings (hex bolts) attached to the base and then install the screws (6 pcs) previously removed.



7.1.7 REPLACING PEEL SENSORS

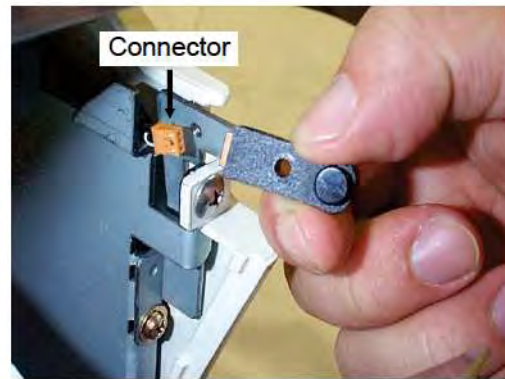
1. The emitter and receiver both have the same form.
Their body colors are different.



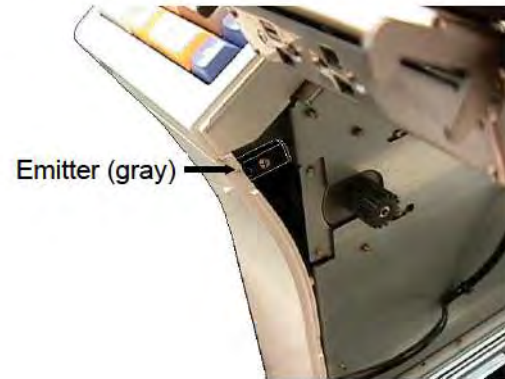
2. The receiver is located at the upper-right of the label output port.



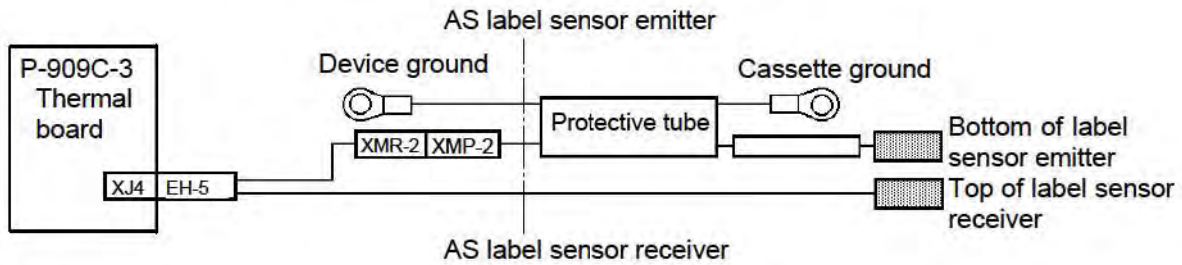
3. Remove the 3-mm securement screw, disconnect the connector, and then replace.



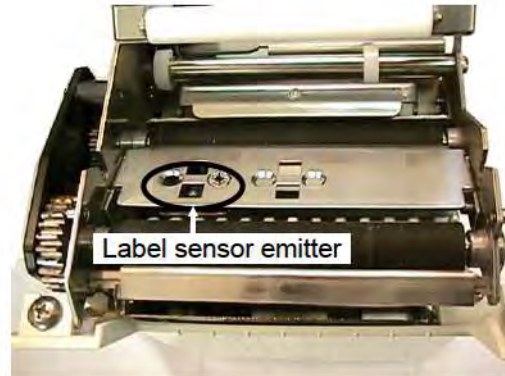
4. The emitter is located at the bottom-left of the label output port. Use the same procedure starting from after removing the label cassette to replace the receiver.



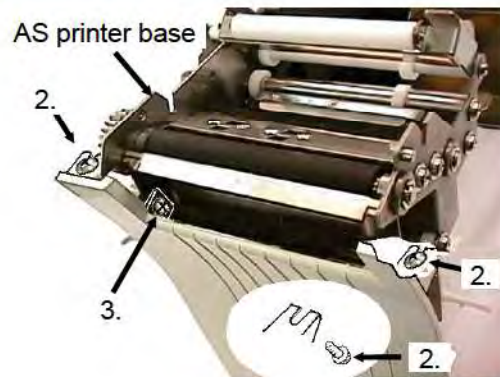
7.1.8 REPLACING LABEL SENSOR EMITTERS



1. This figure illustrates the label sensor emitter position.



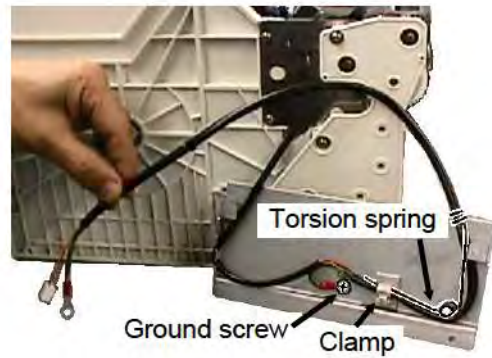
2. Loosen the screws (3 pcs) and remove the front cassette cover.
3. To remove the AS printer base, remove the screw (1 pc).



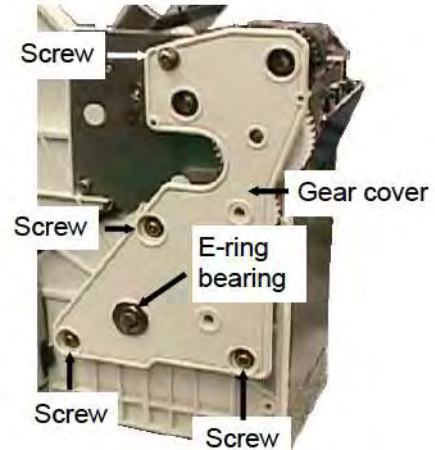
4. Remove the label cassette, remove the screws (3 pcs), and then remove the cover harness.
 - Refer to section 7.1.6 for more information on removing the label cassette.



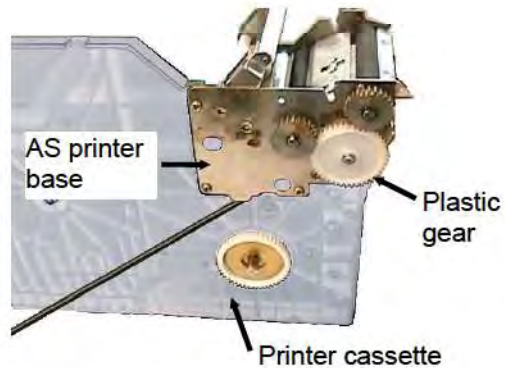
5. Remove the grounding screw, open the clamp, and then remove the harness. Remove the torsion spring from the harness.



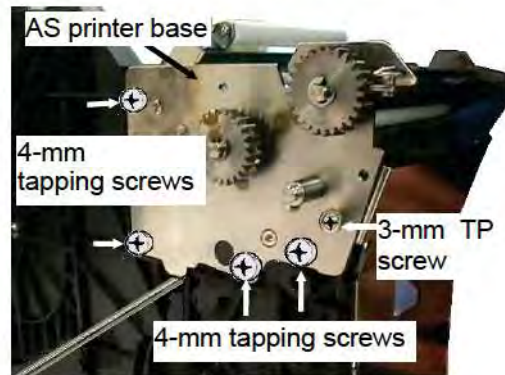
6. Remove the E-ring and screws (4 pcs) and then remove the gear cover.



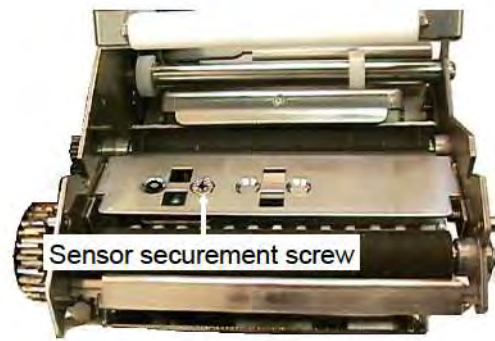
7. The AS printer base must be removed because the harness passes through a gap of approximately 50 mm between the AS printer base and printer cassette. Remove the plastic gear.



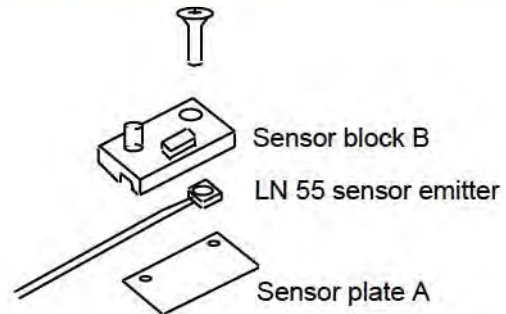
8. Remove the 4-mm tapping screws (4 pcs) and 3-mm TP screw and then remove the AS printer base.



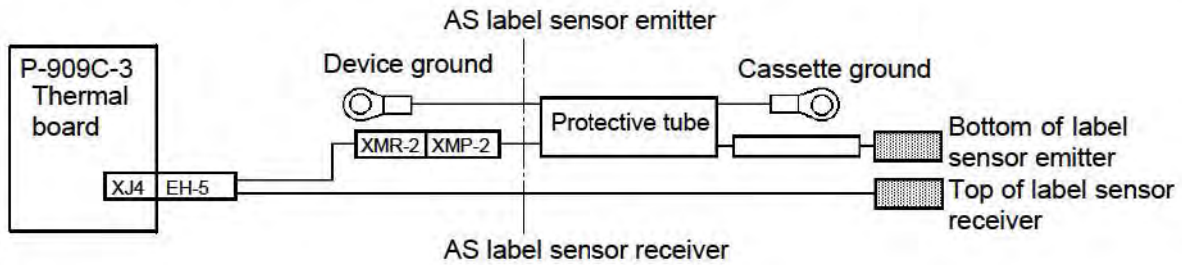
9. Remove the 3-mm pan head screw securing the sensor and then remove the AS label sensor emitter.



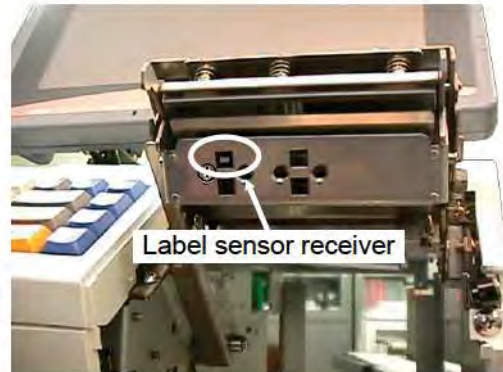
10. Separate the sensor block B from sensor plate A.
11. Perform this procedure in reverse to install a new AS label sensor emitter.



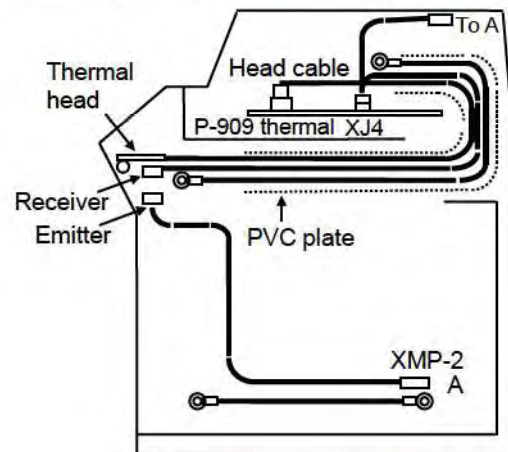
7.1.9 REPLACING LABEL SENSOR RECEIVERS



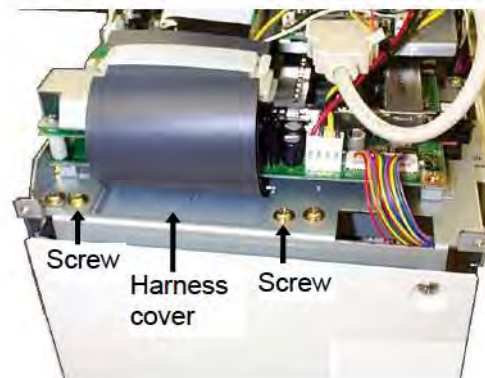
1. This figure illustrates the label sensor receiver position.



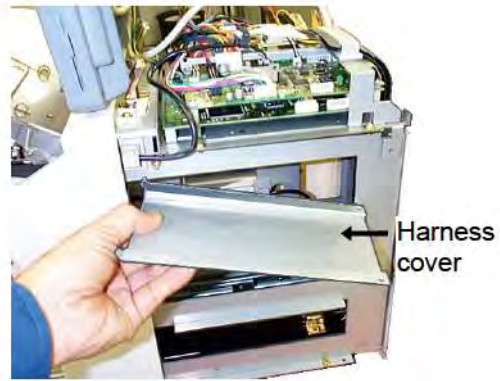
2. The sensor harness, head cable, and ground wire are protected by PVC plate and connected to the thermal board.



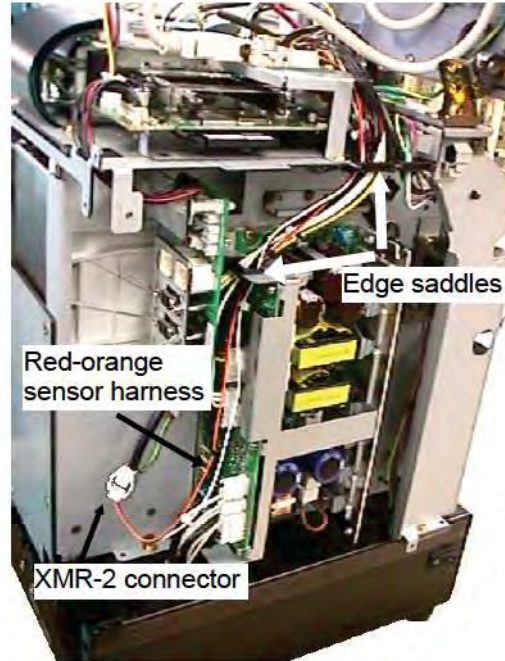
3. Remove the screws (2 pcs) and then remove the harness cover.



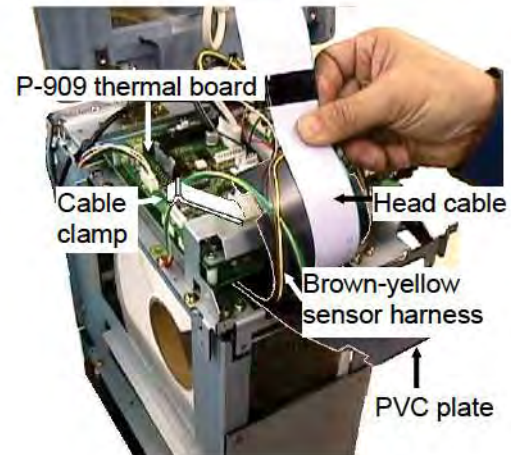
4. The harness cover has tabs at the tips. Pull on the side of the screw holes to remove the harness cover from the right side of the device.



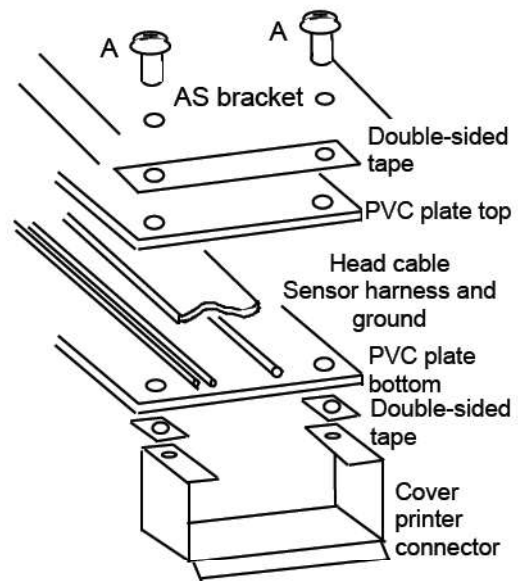
5. Disconnect the XMR-2 connector. Open the edge saddle so that the harness can be removed.



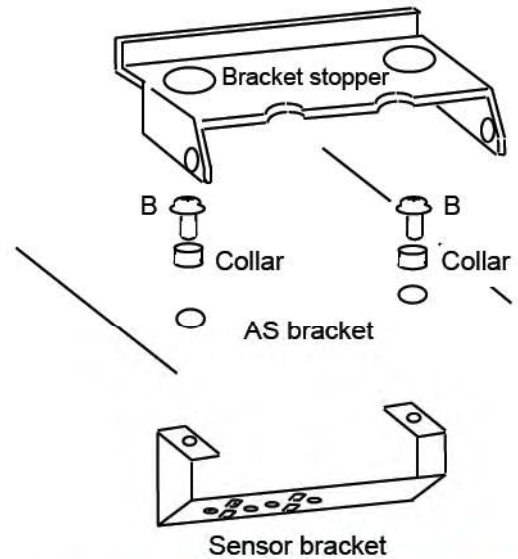
6. Disconnect the head cable from the XJ6 connector and the sensor connector from the XJ4. Unlock the cable clamp and open the PVC plate.



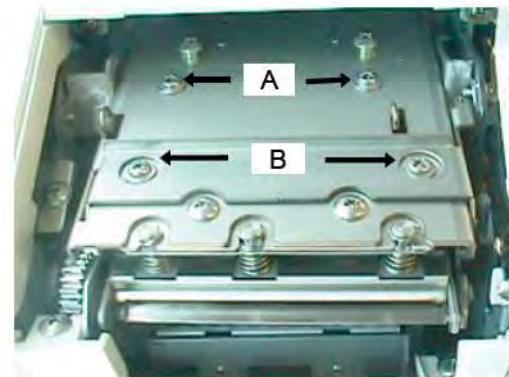
7. This figure illustrates the structure where screws (A) are installed. To facilitate the assembly process, the PVC plate top is secured to the AS printer bracket with double-sided tape. The PVC plate bottom is also secured with double-sided tape to the printer cover connector.



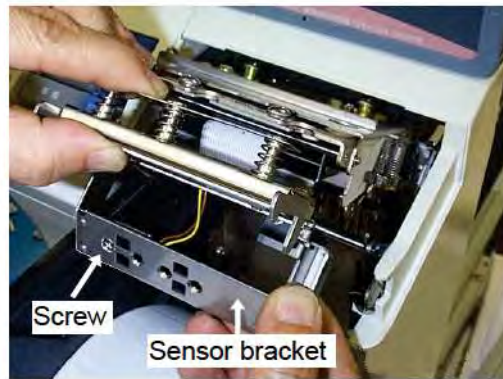
8. This figure illustrates the structure where screws (B) are installed. The sensor bracket used to install the sensor is designed to be movable so that it makes contact with labels. It is also stopped by the AS sensor bracket via collars.



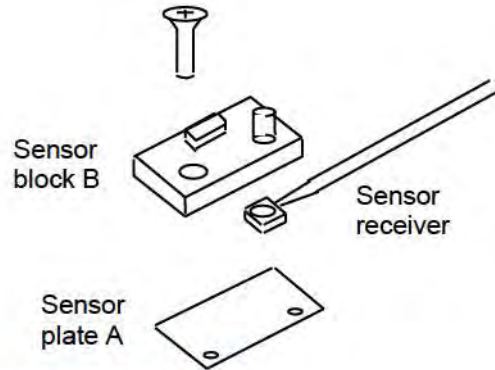
9. Remove the screws (A and B). (Tighten screws (A) first when reinstalling.)



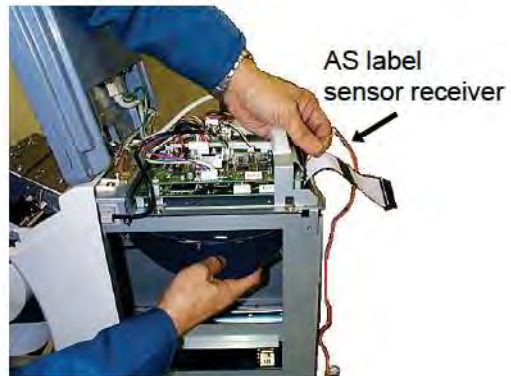
10. Pull out the sensor bracket and then remove the pan head screw. (The printer cover connector is not secure, and so the bracket can be pulled out for removal. During installation, the printer cover connector is secured first. As such, insert the sensor bracket while the thermal head is released.)



11. Separate the sensor block B from sensor plate A.

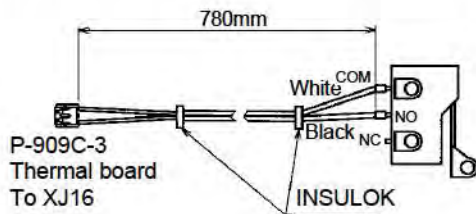


12. Remove the AS label sensor receiver.
13. Perform this procedure in reverse to install the part.

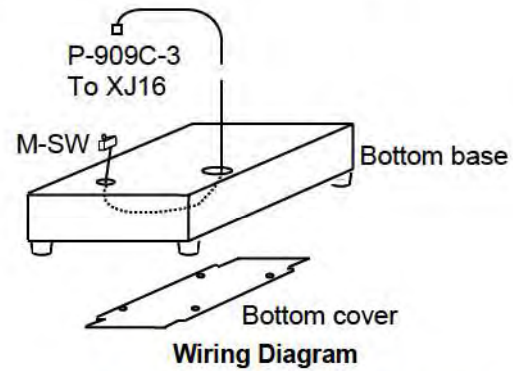


7.1.10 REPLACING HEAD-UP SENSORS

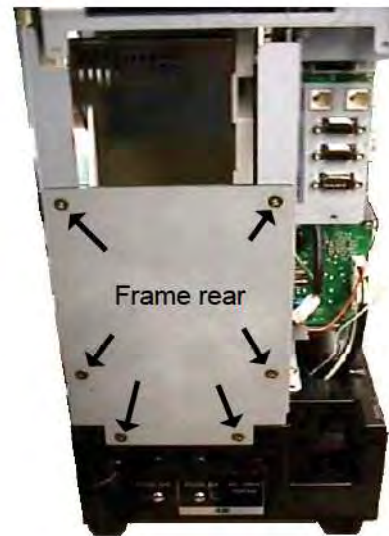
Head-up detection is a process using a microswitch (M-SW) located at the back of the storage compartment of the label cassette to detect if the label cassette at its deepest position.



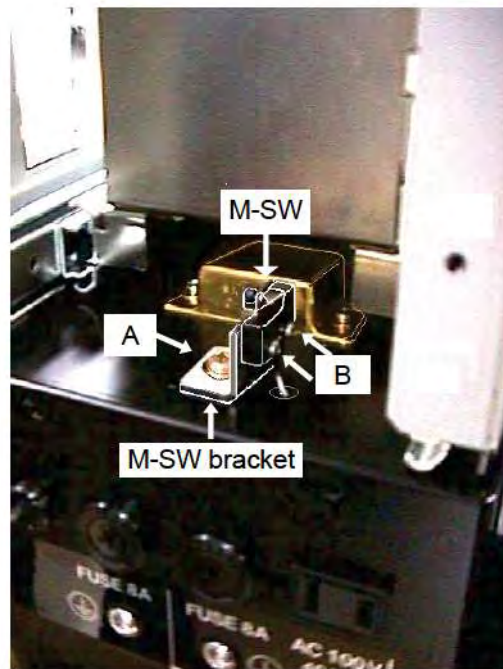
AS Sensor Head



1. This figure illustrates the frame rear and wiring diagram. Remove the bottom cover.



2. Remove the screw securing the M-SW bracket (A) (1 pc), remove the M-SW mounting screws (2 pcs) for each bracket, and then remove the M-SW bracket.



3. Install/adjust such that the microswitch turns on when the label cassette is at its deepest position.

A graphic consisting of a grey square with a white letter 'A' on the left, and a larger black rectangle to its right containing the text 'APPENDIX A LABELFORMATTING' in white, bold, uppercase letters.

A

APPENDIX A
LABELFORMATTING

Contents

- A.1 Label Format Table2
- A.2 Label Format Table Configuration.....4
- A.3 Printing Position change5
- A.4 Print size change.....6
- A.5 Fixed Character Content change7



LABEL FORMATTING

A.1 LABEL FORMAT TABLE

To print the numeric, character, barcode, line, or image data;

- Where the data is stored
- The position to be printed
- In which size
- And other print information is required.

A collection of these data which determines the printing style is called “Label Format Table”, and printing is performed based on these information.

Label format table with this machine is as follows;

Fixed program: 20 formats stored

SRAM: Fixed program in the CompactFlash

SRAM: Max. 99 formats stored

Using this machine, a maximum of 99 formats can be created and stored in the SRAM. This data can be written in the F/D using the DataRapid.

Up to 99 formats (label format number 1 through 99) are available with this machine.

If the same label number exists both in the CompactFlash and SRAM, the one in the SRAM is used.

The maximum number of label format tables are;

- (1) Number of label formats in the Compact Flash
20 written formats (fixed, not possible to change)
- (2) Number of formats in SRAM
99 formats (possible to be written in Set Up mode)

Fixed program (Max. 20 formats)	SRAM (Max. 99 formats)
Label format table No. 1	Label format table No. ?
Label format table No. 2	Label format table No. ?
Label format table No. 3	Label format table No. ?
Label format table No. 4	Label format table No. ?
Label format table No. 5	Label format table No. ?
Label format table No. 6	Label format table No. ?
Label format table No. 7	Label format table No. ?
Label format table No. 10	Label format table No. ?
Label format table No. 9	Label format table No. ?
Label format table No. 11	Label format table No. ?
Label format table No. 12	Label format table No. ?
Label format table No. 24	Label format table No. ?
Label format table No. 38	Label format table No. ?
Label format table No. 39	Label format table No. ?
Label format table No. 41	Label format table No. ?
Label format table No. 51	Label format table No. ?
Label format table No. 52	Label format table No. ?
Label format table No. 54	Label format table No. ?
Label format table No. 55	Label format table No. ?
Label format table No. 90	Label format table No. ?

Daily/Cumulative production total, Daily/Cumulative designated PLU total

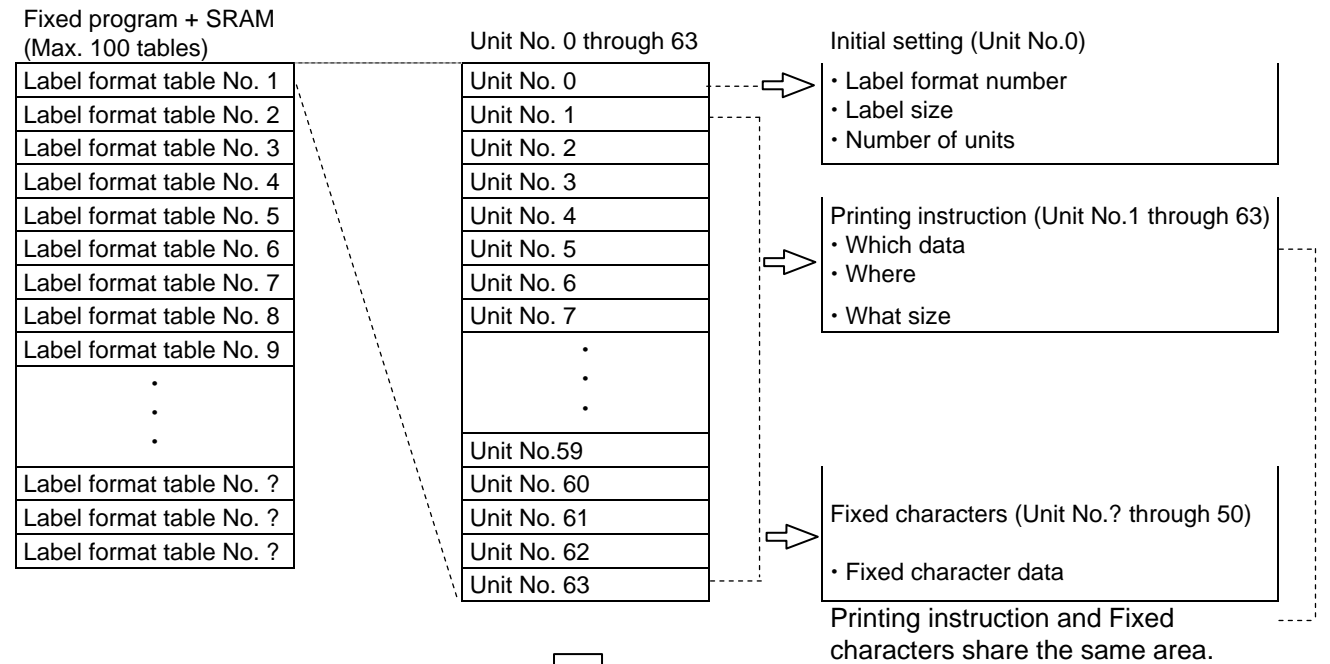
Label format table No. 99

For receipt

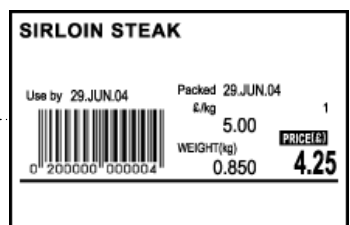
A.2 LABEL FORMAT TABLE CONFIGURATION

The label format table configuration for printing one label is shown below.
 One unit is used for printing per one printing item.

Up to 63 items (Unit No. 1 through 63) can be printed for one label.
 The unit number "0" is nothing to do with the printing item.



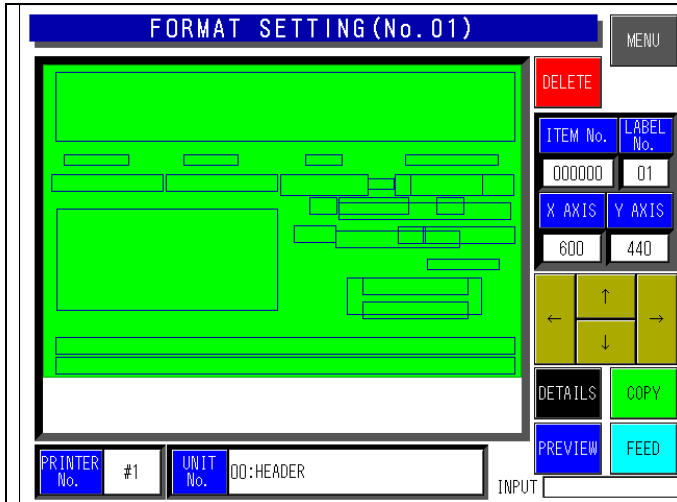
One label is issued based on Unit No.0 through 63.



Label format table configuration

A.3 PRINTING POSITION CHANGE

This section explains the procedure of changing the print position of the unit price (item print and data). As an example, call the format number "1", and register the changed format to the format number "1".



Call a label format number.

1→[PLU]

The format is displayed.

Set the label number.

Enter the label number→[Label No.]

Set the test item number

Enter the item number→[Item No.]

Print the non-changed label.

[PRINT]

Call the unit of unit price data

Touch the data field of Unit No. six times to display "06: Normal Numeric (Unit price)".

Or,

[6] → Touch the data field of Unit No

When [Unit No] is touched, the list appears and unit price data printing place turns in red frame.

Unit price data printing position change

Use [←][↑][→][↓] keys to move the printing position.

Call the unit price printing unit.

[3][4] → Touch the data field of Unit No "34: Fixed Character String (Unit price)" is displayed.

The unit price area turns in red frame.

Unit price printing position change

Use [←][↑][→][↓] keys to move the printing position.

Confirm the changed contents as an image.

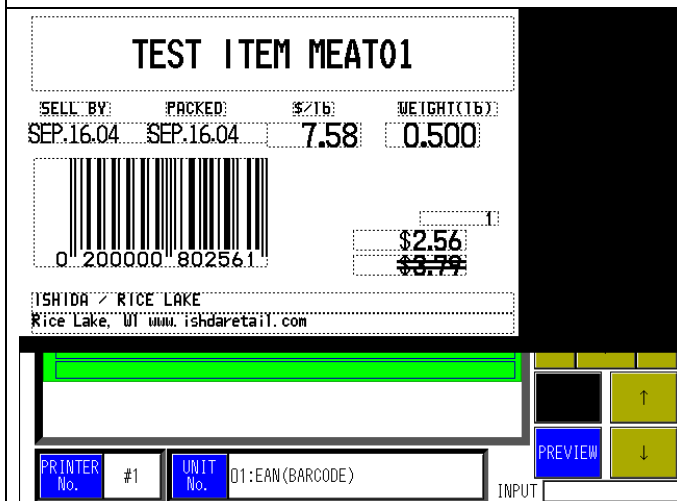
Changed label print

[PRINT]

Save the changed label format

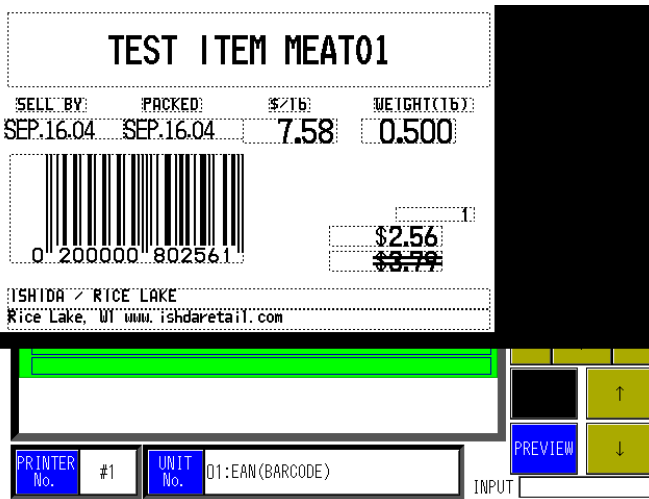
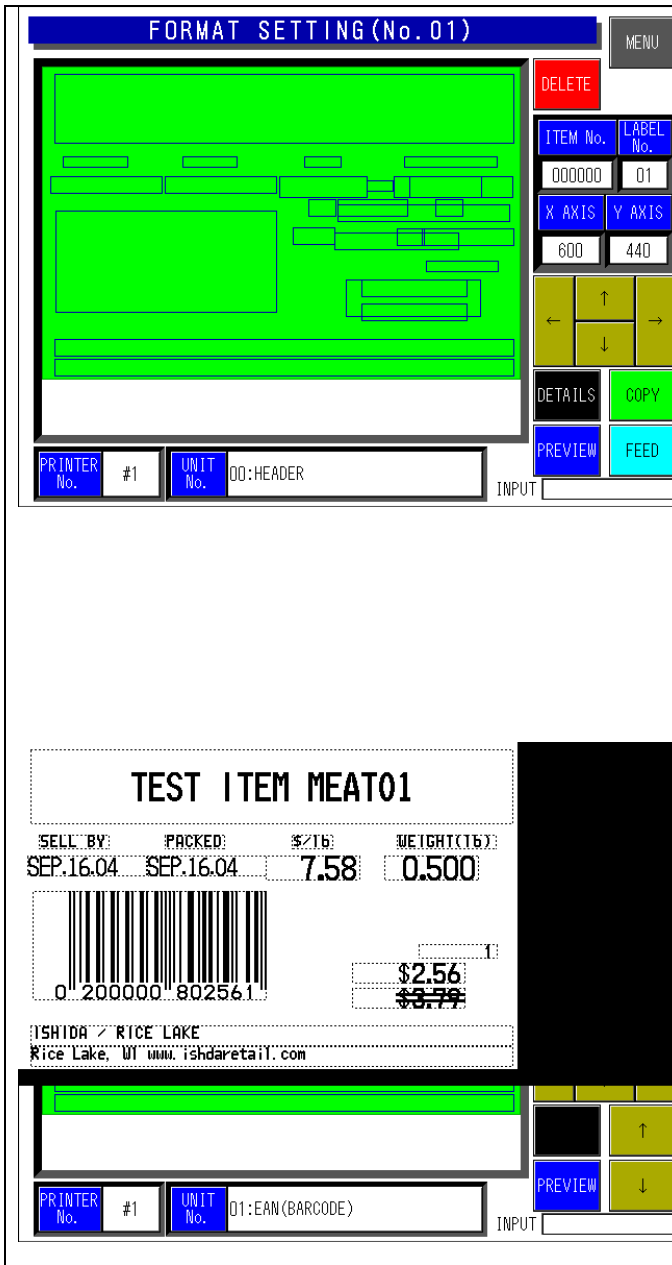
[MENU]

Touch the [EXECUTE] key on the save confirmation screen.



A.4 PRINT SIZE CHANGE

This section explains the procedure of changing the print size of the unit price data. As an example, copy the label format No.1 to a new label format No.80, and register it as a changed format as the format number 80.



Call a new label format number.

[8][0] → [PLU]

Copy the existing label format number.

[1] → [COPY]

Set the label number.

Enter the label number. → [LABEL No.]

Set the test item number.

Enter the item number. → [ITEM No.]

Print the non-changed label.

[PRINT]

Call the unit price data unit.

Touch the data field of Unit No. six times to display "06: Normal Numeric (Unit price)".

Or,

[6] → Touch the data field of Unit No.

When [Unit No] is touched, the list is displayed. unit price data printing place turns in red frame.

Change the size of the unit price data

[DETAIL]

Select the character type.

Touch [CHARCTER TYPE] to select the desired size.

Select "08" as an example.

Touch the [RETURN] key.

Confirm the changed contents as an image.

[Confirm]

Touch [Confirm] again will return to the original screen.

Changed label print

[PRINT]

Save the changed label format

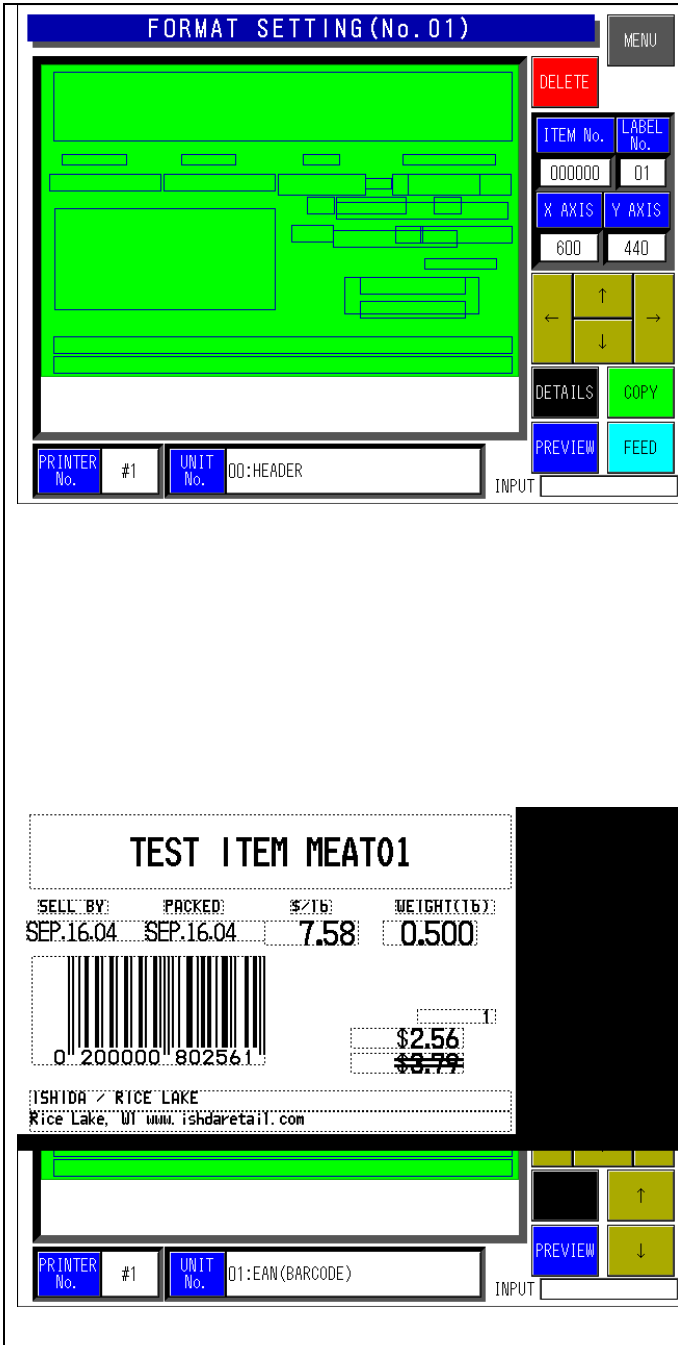
[MENU]

Touch the [EXECUTE] key on the save confirmation screen.

A.5 FIXED CHARACTER CONTENT CHANGE

This section explains the procedure of changing the unit price.

As an example, copy the label format No.1 to a new label format No.81, and register it as a changed format as the format number 81



- Call a new label format number.
[8][1] → [PLU]
- Copy the existing label format number.
[1] → [COPY]
- Set the label number.
Enter the label number. → [LABEL No.]
- Set the test item number.
Enter the item number. → [ITEM No.]
- Print the non-changed label.
[PRINT]
- Call a unit of the fixed character string (unit price).
[3][4] → Touch the data field of Unit No. to display “34: Fixed Character String (Unit price)”.
- The fixed character string printing area turns in red frame
- Display the Unit Setting screen.
[DETAIL]
- Register the fixed characters of the unit price.
Touch the [EDIT] key.
- Enter the fixed characters (unit price).
Divided by a carriage return, the first line of the PLU name is the Fixed Character No.1, and the second line is No.2.
- After entry, touch the [RETURN] key to register.
- Register the fixed character number to “1”.
Character No. → [1] → Character No
- Confirm the changed contents as an image.
Touch the [RETURN] key to return the display to the Format Setting screen.
[Confirm]
- Touch [Confirm] again will return to the original screen
- Changed label print.
[PRINT]
- Save the changed label format
[MENU]
- Touch the [EXECUTE] key on the save confirmation screen