

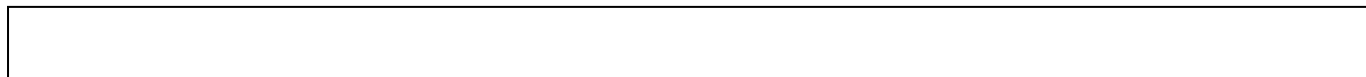
CL5000J Series

Service Manual **(English)**

Rev. 2007. 09. 06

Table of Contents

1. Proper Operation	5
1.1 Introduction.....	5
1.2 Model and Specification.....	6
1.3 Environmental Conditions & Safety	7
1.4 Leveling and Footer Location.....	8
1.5 Power Outlet and Requirements.....	10
2. Classification.....	11
2.1 Scale Overview.....	11
2.2 Display and Indicators.....	12
2.3 Printer	13
2.4 Communication	14
2.5 Key Pad.....	15
3. Getting Started	16
3.1 Sealing Method.....	16
3.2 Installation of the Label Roll.....	16
3.3 Turning Power On	18
3.4 Program Menu and Tree.....	18
3.4.1 How to access PROGRAM MODE.....	18
3.4.2 Program Menu Tree	19
3.4.3 Calibration Menu Tree	20
4. Calibration Mode	21
4.1 Calibration.....	21
4.1.1 Span Calibration (Menu Code 8110).....	22
4.1.2 Span/Zero Fine Adjust (Menu Code 8120)	23
4.1.3 Capacity & Units (Menu Code 8130)	24
4.1.4 Gravity Constant (Menu Code 8140).....	25
4.1.5 Hysteresis Calibration (Menu Code 8160).....	27
4.1.6 A/D Set (Menu Code 8180).....	28
4.1.6.1 A/D Initialize (Menu Code 8183)	28
4.1.6.2 A/D FirmWare Update (Menu Code 8187)	28
4.2 System Options.....	29
4.2.1 System Clear	29
4.2.1.1 Clear PLU (Menu Code 8211)	29
4.2.1.2 Clear Table (Menu Code 8212)	29
4.2.1.2 Clear Table (Menu Code 8213)	29
4.2.1.3 Clear All (Menu Code 8214)	29
4.2.2 Set Scale Type	30



4.3	Printer Hardware.....	31
4.3.1	Label Size (Menu Code 8320)	31
4.3.2	Sensor Calibration (Menu Code 8330)	31
4.3.3	Sensor & Motor <<Peel >> (Menu Code 8340).....	31
4.3.4	Print Intensity (Menu Code 8350)	31
4.3.5	Adjust Feed Length (Menu Code 8360)	32
4.3.6	Label Pre-print (Menu Code 8370).....	32
4.3.7	Printer Initialize (Menu Code 8380)	32
4.7	Self Test	33
4.7.1	Display Test (Menu Code 8510).....	33
4.7.2	A/D Test (Menu Code 8520)	33
4.7.3	Keyboard Test (Menu Code 8530).....	33
4.7.4	Chess Print (Menu Code 8540)	34
5.	Parameter	35
6.	Servicing & Parts Replacement	¡Error! Marcador no definido.
6.1	Platform Safety Overload Adjustment.....	¡Error! Marcador no definido.
6.2	Removing the Upper Case	¡Error! Marcador no definido.
6.3	Main board Replacement (TODO : change)	¡Error! Marcador no definido.
6.4	Power Supply Replacement	¡Error! Marcador no definido.
6.5	Load Cell & AD Converter Replacement	¡Error! Marcador no definido.
6.6	Print Assembly Replacement.....	¡Error! Marcador no definido.
6.7	Display Replacement.....	¡Error! Marcador no definido.
6.8	Keyboard Replacement A,B(with/without breaking sealing)	¡Error! Marcador no definido.
7.	Update	¡Error! Marcador no definido.
7.1	F/W update	¡Error! Marcador no definido.
8.	Schematic & Diagrams.....	¡Error! Marcador no definido.
8.1	System Block Diagram.....	¡Error! Marcador no definido.
8.2	Connection Diagram.....	¡Error! Marcador no definido.
8.3	I/O Pin Connection	¡Error! Marcador no definido.
8.4	Main PCB	¡Error! Marcador no definido.
8.5	A/D PCB.....	¡Error! Marcador no definido.
8.6	Display PCB.....	¡Error! Marcador no definido.
8.7	I/O PCB	¡Error! Marcador no definido.
8.8	Printer I/O PCB	¡Error! Marcador no definido.
8.9	Slot PCB.....	¡Error! Marcador no definido.
9.	Exploded Views.....	¡Error! Marcador no definido.
9.1	Scale Assy (B,P-type)	¡Error! Marcador no definido.
9.2	Body Assy (B,P-type).....	¡Error! Marcador no definido.
9.3	Platform (B,P-type)	¡Error! Marcador no definido.

9.4	Upper Case	¡Error! Marcador no definido.
9.5	Pole display (P-type)	¡Error! Marcador no definido.
9.6	Printer Assembly.....	¡Error! Marcador no definido.
9.7	Printer Header Assemble	¡Error! Marcador no definido.
9.8	Cartridge	¡Error! Marcador no definido.
9.9	Tray assembly (B,P-type).....	¡Error! Marcador no definido.
10.	Part List	¡Error! Marcador no definido.
10.1	Electronic.....	¡Error! Marcador no definido.
10.2	Mechanical.....	¡Error! Marcador no definido.
12.	Revision.....	¡Error! Marcador no definido.

1. Proper Operation

1.1 Introduction

Thank you for purchasing the CAS CL5000J price computing printer scale. We have designed this equipment with advanced features, high quality construction, and user-friendly menu driven programming. We are confident that you will find the CAS CL5000J scale will meet all of your most demanding needs.

Sales data is easily acquired through many of the available. Also available: High speed printer, 53 preset keys (106 using the SHIFT key or double click) per department, and several operation modes that enable you to control & access to the scale.

For larger operations, CL5000J has in-store network that can link-up to 32 scales. RS-232 port, ethernet port enable to export and import program data for time-save mangement. On-time operation possible because of PLU and all other data files are kept locally in each scale' s memory bank; the scale' s speed is the same as a stand-alone unit in a network.

The CL5000J can use with label. Also cartridge loading mechanism helps to refill the label roll easily. Also you can print logos, templates, ingredient messages, advertisement lines, and more to promots your store.

Remember, for proper installation and maintenance please read the CL5000J Manual before use. A wide variety of supplies, accessories, and expansion options are available through CAS Corporation for whatever your new and increasing demands may require

The CL5000J also comes with the SP-2 software package. This software runs on any PC using the 95/98/2000/XP Windows OS. You can design your own label formats on your computer screen and save them to your hard drive. With this percise interface, the labels you see on-screen appear exactly on the printer. You can also manage all of the CL5000J' s programs and options like pricing, PLU programming, etc. You can upload data from a CL5000J or download data. This is ideal solution for an emergency scale backup system. All this and many more features are packed into the SP-2 software package. SP-2 software package enhances your business next level.

1.2 Model and SpecificationI

Model	CL5000J Series			
Capacity	6Kg	15Kg	30Kg	
Interval	1g/2g	2g/5g	5g/10g	
Max Tare	-2.999Kg	-5.998Kg	-9.995Kg	
Display	7-segment VFD			
	Tare: 4 digit			
	Weight: 5 digit			
	Unit Price: 6 digit			
	Total Price : 6 digit			
Zero Pass Range	1~50% (default 10%)			
Re-Zero Range	1~50% (default 2%)			
Overload Range	Max Capa. ~ Max Capa. + 255d (default Max+9d)			
A/D Conversion Rate	Approx. 8/sec			
Measurement type	Load cell			
Platter type	SUS			
Key	B-Type	PLU Key : 48, Function Key: 36	P,R-	PLU Key : 72, Function Key: 36
Speed Key		PLU Key : 96	Type	PLU Key : 144
Data Table	PLU		1~999999	6000
	Ingredient 400 Char		1~100	100
	user defined Barcode Format		1~20	20
	Department		1~99	99
	Origin		1~500	500
	Group		1~99	99
	Label Format		Default :30, User:10	40
	Bitmap		1~5	5
	Quantity Symbol		1~8	8
	Tare Table		1~99	99
Report	Scale, PLU, Misc. PLU, Group, Department, Hourly			
Printing Resolution	202 dpi			
Label Size	Width: 40mm ~ 60mm, Length: 30mm ~ 80mm			
Barcode Type	EAN13, I2OF5, CODE128C ,			
Font	Offer varoius sizes of label format, e.g Small, Middle, Large Size, and on the label format, also offers various types of fonts, such as Italic,Bold,Underline,Throgh Line, Double through line, Reverse,shadow, outline etc.			
Printer Type	Direct Thermal Print			
Dimensions	B-Type	408 x 432 x 173 mm	Tray : 380 x 244 mm	
	P-Type	408 x 493 x 542 mm		
	R-Type	408 x 493 x 607 mm		

1.3 Environmental Conditions & Safety

1) Please avoid the following hostile conditions

- Temperatures below or exceeding:
–10° C ~ 40° C (14° F ~ 104° F)
- Excessive vibration
- Wind or fans functioning in direct contact with weighing platform.
- Direct sunlight
- High humidity
- Ungrounded electrical outlet
- Unstable or flimsy surface
- Shared electrical outlet
- Dust or dirt
- Poor ventilation

2) Environmental Protection

The scale should be installed in a dry and liquid free environment. When the scale is installed in a high humidity or wet-type environment, be sure to avoid spilling or spraying directly on any surface of the scale.

3) Personal Safety

It is very important to be aware of personal safety whenever maintaining or operating this equipment. We have tried to place warning labels and other indicators at the actual location on the equipment where the danger is most likely to occur. Warnings and cautions that are necessary for the safe operation of the scale are contained in this manual. Please, make sure to read carefully ALL warnings and cautions before operating the scale.

4) Observe the following safety precautions

- Shut the scale **OFF** and unplug the scale whenever you are changing the label roll or whenever working in the printer bay.
- The outlet that the scale is plugged into, should be properly grounded.
- Whenever connecting or disconnecting **ANY** cables from the scale, be sure to hold the cables by the end connector. Failure to do so may cause a short circuit.
- Maintain a static-free work area.
- The outlet used must have the proper voltage ratings.

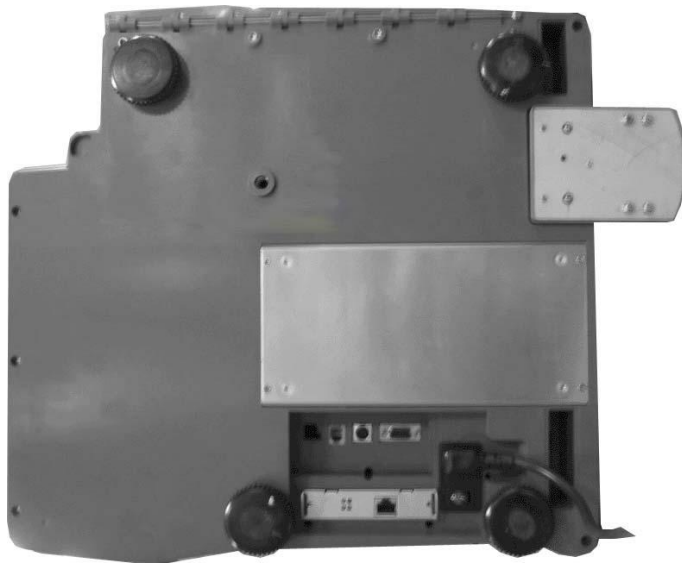
1.4 Leveling and Footer Location

1) Location

This scale must be placed on a flat and stable surface. Please keep the scale away from the direct path of oscillating fans, ventilation systems, or strong drafts as these air disturbances can be picked-up by the scale's very sensitive weighing platform and may cause incorrect weight readings.

1.1) General Footer

Factory setting (Footer location is following picture)



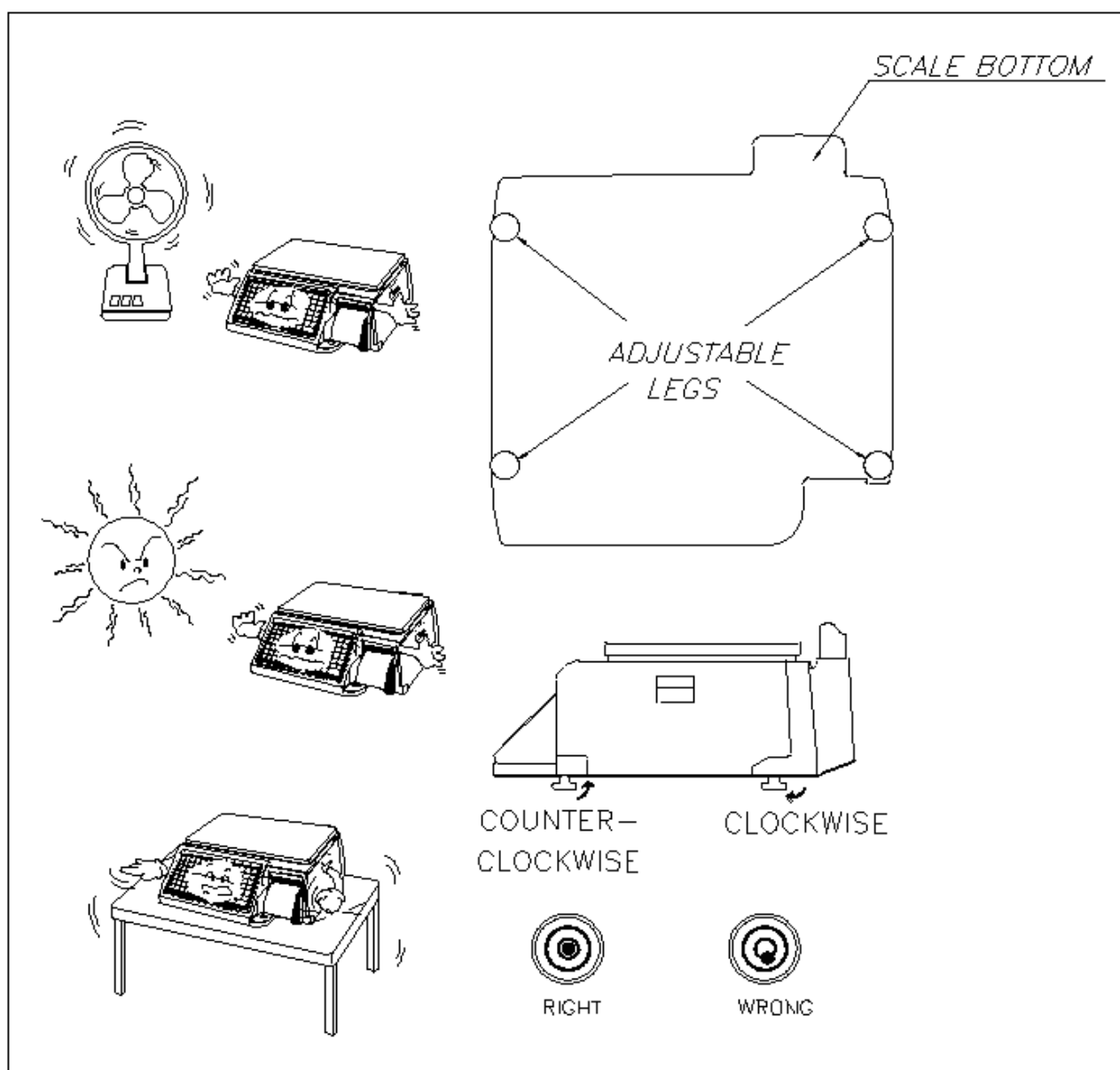
1.2) Short Case Footer

Unscrew the footer and place in center hole for narrow place.



2) Leveling

If the scale is not properly leveled, please adjust the 4 adjustable legs at the bottom of the scale. Turn the legs clockwise or counterclockwise so as to center the bubble of the leveling gauge inside the indicated circle. Turning the adjustable legs counter-clockwise (viewed from top of scale) will lower that part of the scale. Turning the adjustable legs clockwise (viewed from top of scale) will raise that part of the scale. (See Fig.)

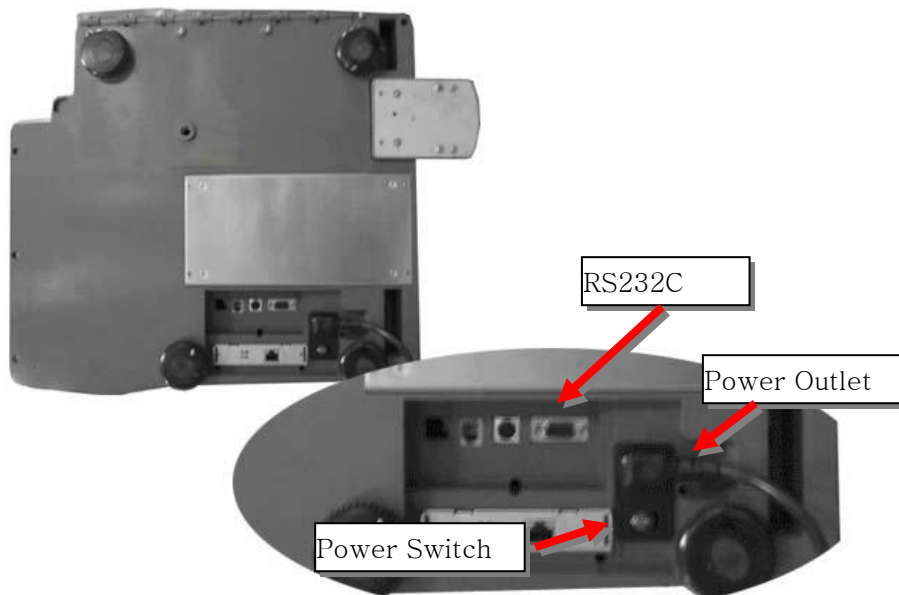


1.5 Power Outlet and Requirements

Power Source : AC 100~240V, 50/60Hz, 1.5A

Power consumption : Max 90W

CL5000J's outlet is on bottom of scale.



- 1) The CL5000J is designed to be used almost anywhere in the world! Like the many appliances of today, the CL5000J is designed with an automatically switching power supply. This allows operation when connected to an AC source from 100V to 240V at 50/60Hz with 5% tolerance.

NOTE: Please make sure that the power lines used for the CL5000J are dedicated lines with
No high-noise devices (such as compressors, motors, etc) running on it.
Also, make sure that the wiring to the electrical socket is correct.
If you are uncertain as to the state of your work' electrical lines,
please contact a certified electrician.

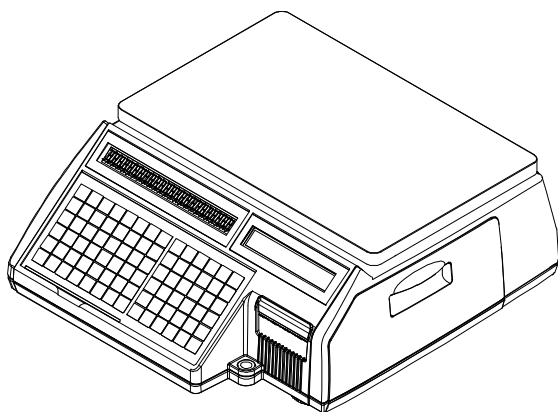
- 2) Once you are sure as to the safety of the electrical line, make sure to ONLY plug the scale into a 3- prong outlet. The third prong is a safety ground and an electrician should properly wire this if it is not correct or if you are unsure. Failure to this CAN result in electrical shock from use of this or any electronic scale.
- 3) Do not use any 3-prong to 2-prong adapters or break-off the third prong from the CLP power cord. The third prong is necessary and must be properly connected.
- 4) If you have any problems or questions regarding this matter, make sure to contact the CAS Service Department.

2. Classification

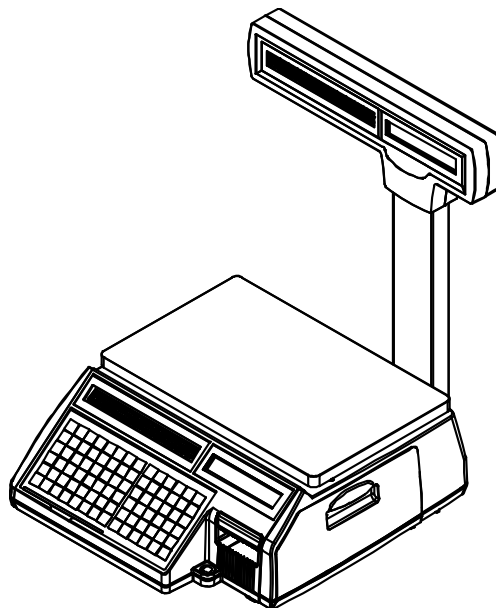
2.1 Scale Overview

CL5000J has 2 different type Standard Type, Pole Type(R,P).

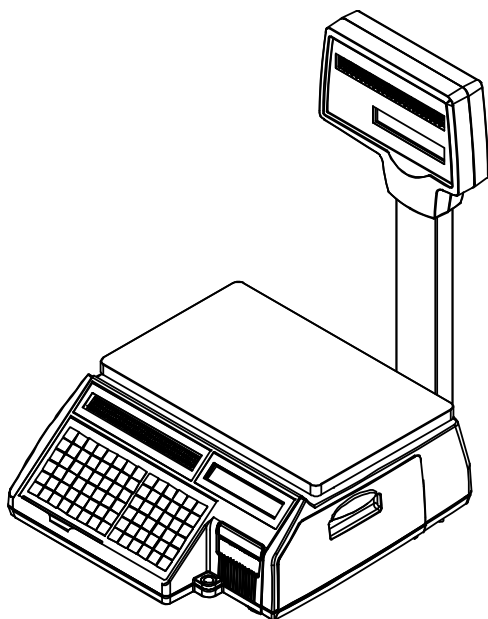
■ Standard Type

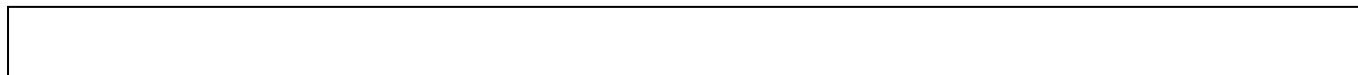


■ Pole Type P



■ Pole Type R





2.2 Display and Indicators

There is VFD display on CL5000J. VFD display indicates program tare, weight, unit price, total price. Underbar indicates stable, net, zero, auto, save, prepack, D/C, shift, data transfer.

■ Display: 4/5/6/6

TO DO : Insert Picture

■ Indicators

SYMBOLS	DESCRIPTION
ST (▼)	Stable weight indicator
NET (▼)	Net weight indicator
► 0◄	Zero weight indicator
AUTO	Print Mode indicator
SAVE	Auto clearing status indicator
PREPACK	Auto clearing status indicator
DC (▼)	Discount status indicator
SHIFT (▼)	Speed key shift status indicator
TR	Data transmission status indicator

2.3 Printer

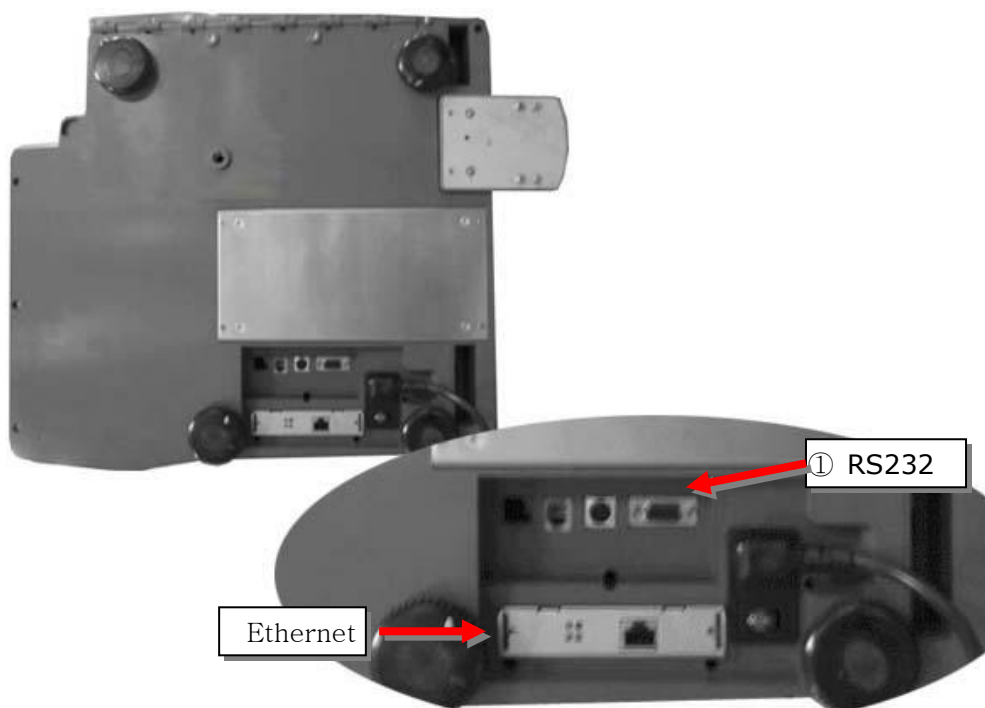
- Cartridge type print mechanism
- High quality ROHM printer head (50km/5x10⁷pulses)
- Improved a rotating force by using 2 independent motors
- Large compartment for 120mm paper roll
- High speed at 75 mm/sec.
- 5 intensity ranges for paper roll quality adjustment
- Supports Paper
 - Labels,
 - Continuous strip labels,
 - Lineless paper



2.4 Commuication

■ Standard

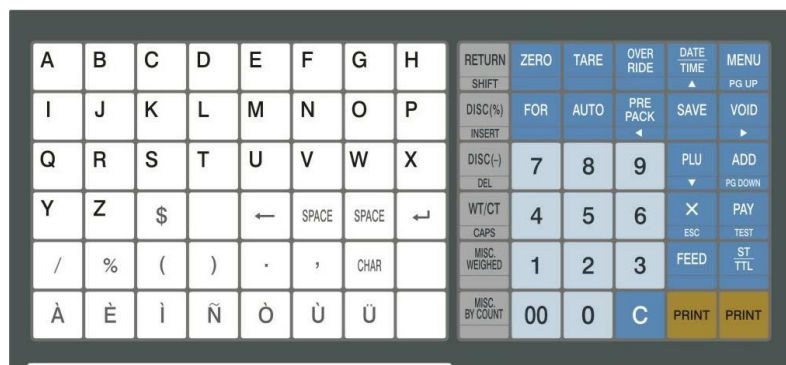
- ① RS232
- ② Ethernet



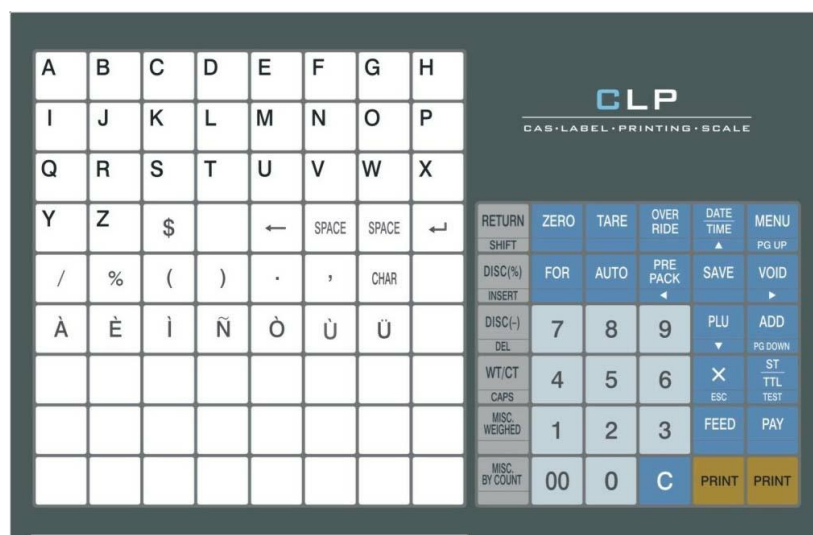
2.5 Key Pad

Key pad is like following picture (This may change depends on contury)

■ Standard Type Keypad

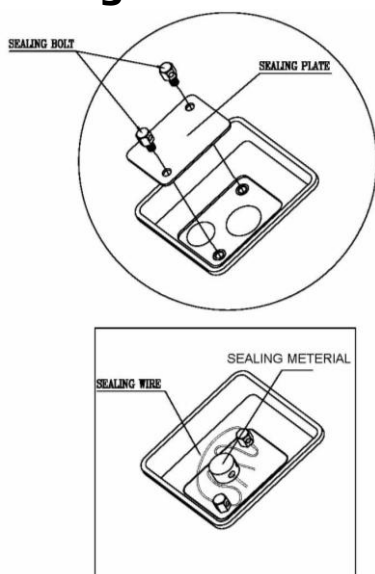


■ Pole Type Keypad



3. Getting Started

3.1 Sealing Method



3.2 Installation of the Label Roll

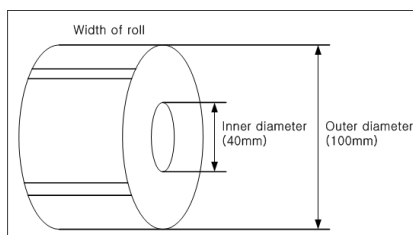
■ Label Specifications

Outer diameter of roll : 100mm

Inner diameter of roll : 40mm

Width of receipt roll : 40, 50, 60mm

Width of label roll : 60mm(MAX)



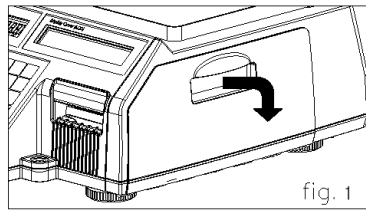
■ Print Area

Width of label : 60mm(MAX)

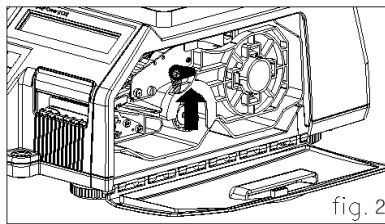
Length of label : 80mm(MAX)

To install the label roll at ANY time you must follow the directions in this section:

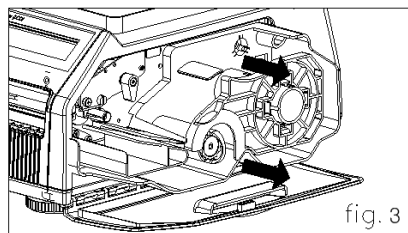
- 1) Press the ON/OFF key and make sure that the display is completely off. Open the printer's side-access panel. (See fig.1)



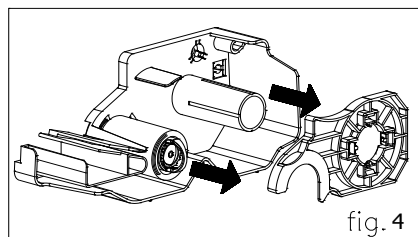
- 2) Lift up TPH lever as fig 2.



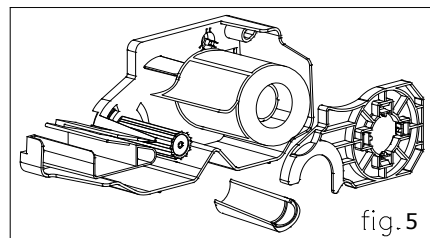
- 3) Remove cartridge as fig. 3.



- 4) Remove Pick-Up Spool assembly and paper guide from the cartridge as fig. 4.



- 5) Place the label in the scale as fig. 5



- 6) Press the FEED key.

NOTE: For auto label calibration press FEED key two or three times

* If label position is not correct, you have to check the followings:

- a. Label size (Label setting menu)
- b. Feed Adjustment (Feed adjustment menu)
- c. Sensor calibration (Sensor Calibration menu)

3.3 Turning Power On

When you turn on scale, display will show below screen.

	CAS	CL5000	vEr 1.0
0.000	▼ 0.000 ▼	0.00	0.00

3.4 Program Menu and Tree

3.4.1 How to access PROGRAM MODE

You can see the Program Menu screen by pressing the MENU key.

1100	PGm	PLU	
------	-----	-----	--

You can use both keys, **DATE-TIME/▲** and **PLU/▼** to move other menu. Once you choose a suitable menu, press **PRINT** key to execute program.

NOTE: Refer to the function keys available program and calibration menu.

Program and Calibration Menu, Function Key	Description
DATE-TIME/▲, PLU/▼	Selects a different menu
PRINT	Executes command or selects the submenu
X/ESC	Exits the Menu

1100	PGm	PLU	
------	-----	-----	--

Digit 1100 indicates Menu code. You should press **PRINT** key at prior menu to see sub menu screen as below.

1120	PGm	Edit	
------	-----	------	--

Whole **Program and Calibration Menu Tree** is described from next pages.

Refer to each code of **Program and Calibration Menu Tree** in following pages.

3.4.2 Program Menu Tree

CODE	Menu	CODE	Sub Menu	CODE	Sub Menu
1100	PLU	1120	New/Edit		
		1144	Expand Item		
		1150	LIST		
		1160	Speed Key		
1200	PLU Table1	1240	Sales Message		
		1250	Origin		
		1260	Barcode		
		1270	Tare		
		1280	Unit Symbol		
1300	PLU Table2	1310	Message		
1400	Store Data Table	1410	Store		
1500	Global Setting	1510	Label Format		
		1520	Barcode		
1600	Report	1610	Report Print	1611	Scale
				1612	PLU
				1613	Misc. PLU
				1614	Group
				1615	Department
				1616	Hourly
		1650	Clear All		
1700	Printing	1710	Print Label Item		
		1730	H/W Setting	1732	Label Size
				1733	Sensor Calibration
				1734	Peel Sensor
				1735	Print Intensity
				1736	Adjust Feed Length
				1737	Label Preprint
				1738	Initialize Printer
1800	Scale Config	1830	Department/Store/speed key number		
		1840	Date/Time		
		1852	Change Password		
		1860	Test	1861	Display
				1862	A/D
				1863	Keypad
				1864	Chess Printer
				1865	Printer Sensor
		1870	Scale Parameter		
		1890	Clear Memory	1861	PLU
				1862	Table1
				1863	Table2
				1864	All

--

1900	Communication	1910	Network Setting	1912	DHCP
				1913	IP
				1915	RS232C Baudrate

3.4.3 Calibration Menu Tree

CODE	Menu	CODE	Sub Menu	CODE	Sub Menu
8100	Calibration	8110	Span Calibration		
		8120	Span/Zero Fine Adjust		
		8130	Capacity & Units		
		8140	Gravity Setting		
		8160	Hysteresis Calibration		
		8180	A/D Set	8183	A/D Initialize
				8187	A/D F/W Update
8200	System Options	8210	System Clear	8211	Clear PLU
				8212	Clear Table1
				8213	Clear Table2
				8214	Clear All
		8220	Set Scale Type		
8300	Printer Hardware	8320	Label Size (Height)		
		8330	Sensor Calibration		
		8340	Peel Sensor		
		8350	Printer Intensity		
		8360	Adjust Feed Length		
		8370	Label Pre-print		
		8380	Initialize Printer		
8500	Self Test	8510	Display Test		
		8520	A/D Test		
		8530	Keyboard Test		
		8540	Printer Test(Chess)		
		8550	Printer Sensor		
8600	Parameter Setting	8600	[Parameter Setting Mode]		

4. Calibration Mode

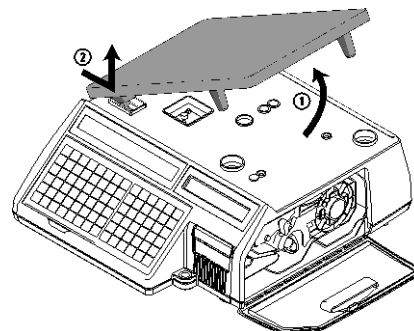
4.1 Calibration

Execute Weight Calibration and A/D related settings

(Access Authorized CAS Tester only)

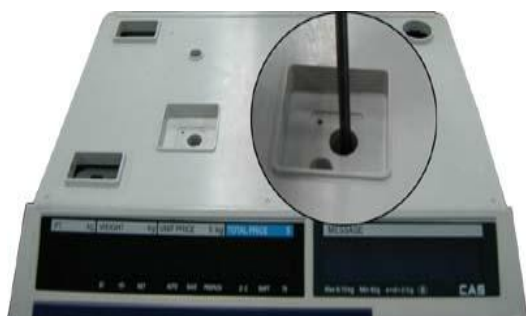
Open the tray and remove the calibration sealing.

(CAUTION: Lift the tray Right side first and unlock the left side)



Order to access calibration mode:

Insert a stick into the CAL switch. Switch power on, while pushing the CAL button.



NOTE: For Hanging type: Pull forward the bottom handle to open

Refer to each code of Program and Calibration Menu Tree.

First page of Calibration mode

8100	CAL	CALibr	
------	-----	--------	--

--

4.1.1 Span Calibration (Menu Code 8110)

(Calibration MENU → Calibration → Span Calibration)

*Requires set of certified weights. (For best result prepare 15kg/6kg (max) weights)

- ① Select "Span Calibration"

8110	CALib	SPAn	
------	-------	------	--

Press "PRINT"

8110	SPAn	UnLoAd	
------	------	--------	--

- ② Empty tray and press "PRINT"

8110	SPAn	Wait4	10329
------	------	-------	-------

While calibrating zero display shows "Wait4" ~ "Wait0" and follow next message for Span Calibration.

8110	SPAn	LoAd	
------	------	------	--

- ③ Put on the Weight for Max. Capacities then press "PRINT"

*Menu 8130 sets the max capacity for calibration.

8110	SPAn	Wait4	78048
------	------	-------	-------

Display shows "Wait4" ~ "Wait0" then following message

8110	SPAn	SPAn	
------	------	------	--

4.1.2 Span/Zero Fine Adjust (Menu Code 8120)

(Calibration MENU → Calibration → Span/Zero Fine Adjust)

This mode is for fine tuning of scale after span Cal. Please put Max weight on the tray and adjust A/D results at 60000, using the cursor key "◀ ▶ ." and Number key.

- ① Select menu "Span/Zero Fine Adjust", no weight is on the tray

8120	FinE	AdJUSt	0
------	------	--------	---

If internal value is not set to zero, press "ZERO" key..

- ② Put Max. Capacity weight on the tray

8120	FinE	AdJUSt	60012
------	------	--------	-------

And this screen is a just sample data for testing. This sample data are perhaps not the same as the data that you will have with your scale.

- Internal value 60012 needs to change 60000
Press  X 12 Times to decrease internal value.

8120	FinE	AdJUSt	60000
------	------	--------	-------

4.1.3 Capacity & Units (Menu Code 8130)

(Calibration MENU → Calibration → Capacity & Units)

Set scale's Weighing unit, capacity, Interval, Cal Unit.

Caution: Span calibration must take place after "Capacity & Units" setting.

Do not change setting after **Span calibration**.

No	Capacity	Middle weight in Hysteresis Cal.
0	6 kg, dual	2 kg
1(default)	15 kg, dual	5 kg
2	30 kg, dual	10 kg
3	60 kg, dual	20 kg
4	150 kg, dual	50 kg
5	300 kg, dual	100 kg
6	600 kg, dual	200 kg
7	1,500 kg, dual	500 kg
8	3,000 kg, dual	1,000 kg
9	6,000 kg, dual	2,000 kg

8130

CALib

CAPA

1

4.1.4 Gravity Constant (Menu Code 8140)

(Calibration MENU → 1. Calibration → 4. Gravity Constant)

CL-5000Jr scale enables to calibrate in any country. You can set according to country standard gravity constant data. For case of full recalibration set the factory gravity first and then local area gravity code.

(For span calibration Local gravity value is automatically matches with Factory gravity value)

First, Enter the gravity value in calibration area (Factory)

8140	Grvty	G-CAL	9.7994
------	-------	-------	--------

Second, Enter the gravity value in using area (local)

8140	Grvty	G-USE	9.7799
------	-------	-------	--------

Use the following table to determine the proper G-Constant for your area.

Country	City	G-Constant	Country	City	G-Constant
Argentina	Buenos Aires	9.7979	Mexico	Mexico City	9.7799
Australia	Sydney	9.7979	Morocco	Rabat	9.7964
Austria	Vienna	9.8099	Netherlands	Amsterdam	9.8129
Belgium	Brussels	9.8114	New Zealand	Wellington	9.8039
Belize	Manamah	9.7904	Norway	Oslo	9.8189
Bolivia	La Paz	9.7844	Panama	Panama City	9.7814
Brazil	Brasilia	9.7889	Peru	Lima	9.7829
Canada	Montreal	9.8069	Philippines	Manila	9.7844
	Ottawa	9.8069	Poland	Swider	9.8159
	Toronto	9.8054	Portugal	Lisbon	9.8009
	Vancouver	9.8099	Rumania	Bucharest	9.8054
Check Republic	Prague	9.8114	Saudi Arabia	Riyad	9.7904
Chile	Santiago	9.7979	Scotland	Stockholm	9.8189
China	Hong Kong	9.8099	Singapore	Singapore	9.7814
Colombia	Bogota	9.7799	South Africa	Johannesburg	9.7919
Costa Rica	San Jose	9.7829	Spain	Madrid	9.8024
Cypruss	Nicosia	9.7979	Switzerland	Bern	9.8084
Denmark	Copenhagen	9.8159	Taiwan	Taipei	9.7904

--

Ecuador	Quito	9.7724	Tunisia	Tunis	9.7799
Finland	Helsinki	9.8189	Turkey	Ankara	9.8024
Germany	Dusseldorf	9.8129	Uruguay	Montevideo	9.7964
Great Britain	London	9.8144	USA	Anchorage	9.8189
Greece	Athens	9.8009		Atlanta	9.7964
Guatemala	Guatemala	9.7844		Boston	9.8039
Hungary	Budapest	9.8069		Chicago	9.8024
Indonesia	Djakarta	9.7814		Dallas	9.7949
Iraq	Baghdad	9.7964		Detroit	9.8039
Japan	Mishima	9.7979		Los Angeles	9.7979
Korea	Seoul	9.7994		New York	9.8024
Kuwait	Kuwait	9.7919		Philadelphia	9.8024
Lebanon	Beirut	9.7964		San Francisco	9.7994
Mauritius	Port Louis	9.7859	Venezuela	Caracas	9.7829

NOTE: The G-Constant is the acceleration of gravity in meters per second per second.

4.1.5 Hysteresis Calibration (Menu Code 8160)

(Calibration MENU → Calibration → Hysteresis Calibration)

You can re-adjust the med-range weight level for precise calibration.

8160	CALib	HySt	
------	-------	------	--

Hysteresis Calibration for example 15 kg, middle value is 5 kg

- ① Press "print".

8160	HySt	UnLoAd	10329
------	------	--------	-------

- ② Clear the tray and press "PRINT", then "Wait4" ~ "Wait0" will display.

8160	HySt	middLE	40329
------	------	--------	-------

- ③ Put middle weight (5kg) on the tray and press "PRINT", then "Wait4" ~ "Wait0" will display.

8160	HySt	LoAd	70329
------	------	------	-------

- ④ Put 15kg on the tray and press "PRINT", then "Wait4" ~ "Wait0" will display.

8160	HySt	middLE	40329
------	------	--------	-------

- ⑤ Put Clear middle weight (5kg) on the tray and press "PRINT", then "Wait4" ~ "Wait0" will display.

8160	CALib	HySt	
------	-------	------	--

4.1.6 A/D Set (Menu Code 8180)

(Calibration MENU -> Calibration -> A/D Set)

4.1.6.1 A/D Initialize (Menu Code 8183)

(Calibration MENU -> Calibration -> A/D Set -> A/D Init)

8183	Ad-Se	init	
------	-------	------	--

Wait for a moment after pressing "PRINT" ,and while display shows following message

8183	Ad-Se	init	wAit
------	-------	------	------

CAUTION: Must record setting values before Executing menu . This will set the scale first default setting

4.1.6.2 A/D FirmWare Update (Menu Code 8187)

(Calibration MENU -> Calibration -> A/D Set -> Update)

8187	Ad-Se	UPdAtE	ConnEct
------	-------	--------	---------

You can change the A/D firmware with your PC in this mode.

4.2 System Options

(Calibration MENU → System Options)

4.2.1 System Clear

(Calibration MENU → System Options → System Clear)

8210	SyStE	CLEAr	
------	-------	-------	--

You can clear memory depends on options below.

4.2.1.1 Clear PLU (Menu Code 8211)

(Calibration MENU → System Options → System Clear → Clear PLU)

Clear all PLU data.

8211	CLEAr	PLU	
------	-------	-----	--

4.2.1.2 Clear Table (Menu Code 8212)

(Calibration MENU → System Options → System Clear → Clear Table1)

Clear all Table1 data.

8212	CLEAr	tAbLE1	
------	-------	--------	--

4.2.1.2 Clear Table (Menu Code 8213)

(Calibration MENU → System Options → System Clear → Clear Table2)

Clear all Table2 data.

8213	CLEAr	tAbLE2	
------	-------	--------	--

4.2.1.3 Clear All (Menu Code 8214)

(Calibration MENU → System Options → System Clear → Clear All)



8214	CLEAR	ALL	
------	-------	-----	--

Clear PLU, Table1, Table2 and Shop data
Symbols and Speed key is initialized

4.2.2 Set Scale Type
(Calibration MENU -> System Options -> Set Scale Type)

8220	SyStE	StyPE	1
------	-------	-------	---

This mode was setted by manufacturer. See the following table, and set value in order.
1 – Bench type, 2 – Pole type, 3 – Hanging, 4 – Self service

4.3 Printer Hardware

No.	Sub-menus	Description
1	Label Size	Lable mode "Height(40)" * () are default value.
2	Sensor Calibration	You can mearsure "Gap" & "Peel" . And print out them. Also you can test Sensor & Motor.
3	Sensor	Setting Peel-off sensor.
4	Print Intensity	Set the extent of intensity of label printed.
5	Adjust Feed Length	Set adjusting values of feed length. This value can be from "0" to "400"
6	Label Pre-print	You can set preprint length.
7	Printer Initialize	You can reset printer.

4.3.1 Label Size (Menu Code 8320)

(Calibration MENU -> Printer Hardware -> Height)

You can input "Height" of label manually. (30 ~ 80mm)

4.3.2 Sensor Calibration (Menu Code 8330)

(Calibration MENU -> Printer Hardware -> Sensor Calibration)

This mode will automatically feed the label several times to calculate the measurement.
The average data of "Gap" & "Peel" are pronted out, and displayed on screen.

4.3.3 Sensor & Motor <<Peel >> (Menu Code 8340)

(Calibration MENU -> Printer Hardware -> Peel)

You can select [Y], [N] for "ACTIVE PEEL-OFF"

4.3.4 Print Intensity (Menu Code 8350)

(Calibration MENU -> Printer Hardware -> Print Intensity)

You can enter any value from "0" to "4" set the tension of label.
The 2 is default value.

4.3.5 Adjust Feed Length (Menu Code 8360)

(Calibration MENU -> Printer Hardware -> Adjust Feed Length)

User may enter any value of the feed alignment from "0" to "400".

You can adjust the printing position detail with this menu.

* 1pixel = 0.125mm , 8pixel = 1mm Ex) Value "+80" will feed 10mm more
Value "-40" will feed 5mm less

4.3.6 Label Pre-print (Menu Code 8370)

(Calibration MENU -> Printer Hardware -> Label Pre-print)

User may select Preprint mode and any value of the preprint length from "0" to "10".

It controls the length that label is pushed out.

4.3.7 Printer Initialize (Menu Code 8380)

(Calibration MENU -> Printer Hardware -> Printer Initialize)

Initialize printer setting.

4.7 Self Test

4.7.1 Display Test (Menu Code 8510)

(Calibration MENU -> Self Test -> Display Test)

Selecting 1 will start Display test, press any key to stop and exit.

4.7.2 A/D Test (Menu Code 8520)

(Calibration MENU -> Self Test -> A/D Test)

8520	tESt	Ad	
------	------	----	--

4.7.3 Keyboard Test (Menu Code 8530)

(Calibration MENU -> Self Test -> Keyboard Test)

8530	tESt	KEy	
------	------	-----	--

You can test keyboard by pressing.

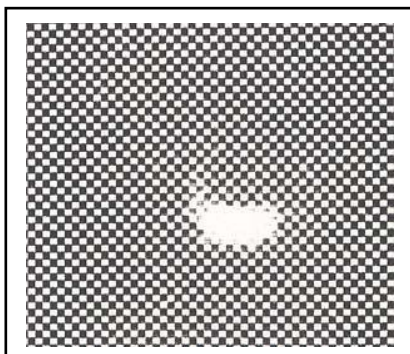
Press any keys to test Row Code.

- * Raw Code is location of key. (Upper left Connor is 1)
- * Press ESC will exit the test or display Row Code.
- ESC + ESC : End of test

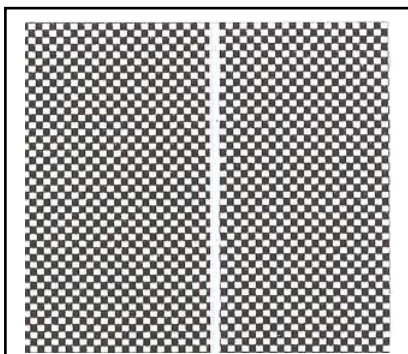
4.7.4 Chess Print (Menu Code 8540)

(Calibration MENU -> 5. Self Test -> 4. Chess Print)

Select Printer Test (Chess). The scale will then print a TPH (Thermal Print Head) test label. This label print checker pattern helps to find problems with the TPH. You should clean the TPH before you try this procedure. Follow the maintenance procedure for cleaning the TPH. The following examples shows that some of problems that can occur.



1



2

There are several things that this printout sample can reveal:

1. The rubber roller may be dirty or have something stuck to it. Also, the roller may be perforated.
2. This is a clear indication that the TPH has been damaged or burned out.

If you need to replace the TPH, please contact the CAS Service Department.

4.7.5 Print Sensor (Menu Code 8550)

(Calibration MENU -> 5. Self Test -> 5. Printer Sensor)

8550	SEnSo	G128	P128H0
------	-------	------	--------

5. Parameter

8600

CAL

PArAm

8600

PArAm

nO

100

You can input Parameter number (“ Fuction Code: [] ”) for predefine settings.

If You need to Initial Parameter settings, Enter the number “ 999 ”

If You need to Initial Parameter settings and clear all data (include report), Enter the number “ 998 ”

No	MODE	VALUE	DESCRIPTION	REMARK
201	CAL	0~3 (3)	Weight Decimal Position	
202	CAL	0~3 (2)	Price Decimal Position	
204		0~1 (1)	Display scale version at the initial time (0-No, 1-Yes)	
205		0~1 (0)	Test display at the initial time (0-No, 1-Yes)	
301		0~10 (3)	Key count threshold for confirming key value (unit : 23.8 ms)	
302		0~10 (5)	Key time-out value for confirming continuous input If this time is over, unit price will be cleared when next key is entered. (unit : 1.7 sec)	
304		1~4	Key type : 1-bench, 2-pole, 3-hanging, 4-self service	no default
305		1~5 (1)	Speed key table number	
401		1~99 (1)	Scale current department number	
402		0~1 (1)	Allow fixed price sale (0-No, 1-Yes)	
403		0~2 (0)	Change Unit Price : 0-No, 1-Temporary, 2-permanently	
414		0~1 (0)	Always Use global label number	
417		0~1 (1)	Allow printing multi label (using X key)	

--	--	--	--	--

418		0~1000 (50)	Threshold weight for auto printing (unit : weight) ex) 50 -> 0.050g	
419		0~1 (1)	Automatically clear PLU after printing (0-No, 1-Yes)	
420	CAL	0~20 (20)	Minimum weight digit for printing (unit : division) Ex) 20d -> 40g (15kg)	
421	CAL	0~1 (0)	Allow printing when weight is under min. weight	
422		1~1000 (1000)	Unit weight for unit price	
423		0~100 (0)	Unit for price round (unit price) Ex) 10 -> 0.10 \$	
424		-----	password	
425		1~100 (30)	Time for waiting stable when printing (unit : 90 ms)	
426		0~1 (0)	Automatically clear sale information after printing without tare and weight (0-No, 1-Yes)	
427		0~1 (0)	Use double speed key	
430		0~1 (1)	Automatically clear sale information after printing with no weight (0-No, 1-Yes)	
431		0~1 (1)	Allow printing without checking previous sale (0-No, 1-Yes)	
432		0~1 (0)	Change sale type from weight to fixed price When print key is pressed without weight (0-No, 1-Yes)	
434		0~1 (0)	Allow warning account over (0-No, 1-Yes)	
435		0~1 (0)	Allow printing only weight (0-No, 1-Yes)	
436		1~10 (1)	Current shop number	
437		0~1 (0)	Automatically misc. PLU sale when no PLU is called	
501		1~255 (1)	Current scale address	
502		0~4 (3)	3 - 57,600 bps	
503		0~999 (300)	Time threshold for checking communication is running (unit : 10 ms)	
505		0~99 (20)	Continuously interpreting time in sale mode when communication is running (unit : 10 ms)	
509		0~1 (0)	Use DHCP (0-No, 1-Yes)	
510		0~0xFF	MAC address 0	HEX mode
511		0~0xFF	MAC address 1	HEX mode
512		0~0xFF	MAC address 2	HEX mode
513		0~0xFF	MAC address 3	HEX mode
514		0~0xFF	MAC address 4	HEX mode

--

515		0~0xFF	MAC address 5	HEX mode
516		----	IP address (Do not modify in parameter menu, use program menu)	
517		----	Subnet mask (Do not modify in parameter menu, use program menu)	
518		----	Gateway address (Do not modify in parameter menu, use program menu)	
519		0~99999(20304)	TCP server port	
601		240~640 (320)	Label length (unit : dot / 8 dot = 1 mm)	
602		448	Label width (unit : dot / 8 dot = 1 mm)	
603		0	Label adjust value (Do not modify in parameter menu, use program menu)	
604		0~40 (16)	Gap length (unit : dot / 8 dot = 1 mm)	
605		0~12 (6)	Printer intensity (Do not modify in parameter menu, use program menu)	
606		0~1 (1)	Use Peel off sensor (0-No, 1-Yes)	
607		80 (64)	Pre-print length (unit : dot / 8 dot = 1 mm)	
608		0~255 (128)	Gap sensor threshold	
609		0~255 (128)	Peel off sensor threshold	
701		0~1 (0)	Year digit length (0-2 digit , 1-4 digit) Ex) 0-07, 1-2007	
702		0~9999 (2000)	Year text for 4 digit year (last 2 digit must be 00) Ex) if this year is 2017, year text is 2000	
703		0~1 (0)	Use month text (0-number, 1-text)	
704		0~1 (0)	Use 12 hour(AM/PM) (0-24, 1-12)	
705		0~3 (1)	Date type (0:YY MM DD, 1:DD MM YY, 2:MM DD YY 3:MM YY)	
706		0~1 (1)	Time type (0:HH MM SS, 1:HH MM)	
707		0~255(.)	Date division symbol (see ASC-II table)	
708		0~255(:)	Time division symbol (see ASC-II table)	
709		0~1 (1)	Enable printing serial number (0-No, 1-Yes)	
710		0~1 (1)	Enable printing packed date (0-No, 1-Yes)	
711		0~1 (1)	Enable printing packed time (0-No, 1-Yes)	
712		0~1 (1)	Enable printing sell-by date (0-No, 1-Yes)	
713		0~1 (0)	Enable printing sell-by time (0-No, 1-Yes)	
714		0~1 (1)	Enable printing shop data (0-No, 1-Yes)	

--

715		0~1 (1)	Enable printing PLU number (0-No, 1-Yes)	
716		0~1 (0)	Enable printing week (0-No, 1-Yes)	
717		0~100 (0)	Weight Cut-off in barcode data Ex) value = 10, 1,000 →>100	
718		0~100 (0)	Price Cut-off in barcode data Ex) value = 10, 1,000 →>100	
719		0~1 (0)	Print Weight in by-count sale mode	
720		0~1 (0)	Print Group number instead of department number in barcode data	
721		0~3 (2)	Print Origin in name field instead of Origin field (0-origin, 1-name1, 2-name2, 3-name3)	
722		0~1 (1)	Print All date/time enable (0-No, 1-Yes)	
724		0~1 (0)	Print Weight in fixed price sale mode	
725		0~1 (0)	Enable Korea E-Mart week (only korea version)	
726		1~99 (1)	Global label number	
727		1~99 (1)	Total label number	
728		1~20 (1)	Global barcode number	
801		-	(Caption) Weight	
802		-	(Caption) Price	
803		-	(Caption) Packed On Date	
804		-	(Caption) Sell By Date	
805		-	(Caption) Produced Date	
901		0~1 (0)	Expand PLU item (0-No, 1-Yes)	
998		---	Init parameter, clear all data and report	
999		---	Init parameter	