[PRECAUTIONS]

The scale or indicator should always be used in an environment which is free from excessive air currents, corrosives, vibrations, temperatures and humidity extremes. These factors will affect displayed weight readings.

DO NOT use the scale or indicator

Next to open windows or doors causing drafts or rapid temperatures changes! A temperature between 0 ~ 40 degree Celsius is recommended.

Near air conditioning or heat ventilations!

Near vibrating, rotating or reciprocating equipment!

Near magnetic fields or equipment that generates magnetic fields.

On a rough work surface!

Leveling the scale

(when the indicator is connected to a platform)

Always adjust the scale to a level position with level adjusters until the bubbles appear in the center circle of the level indicator!

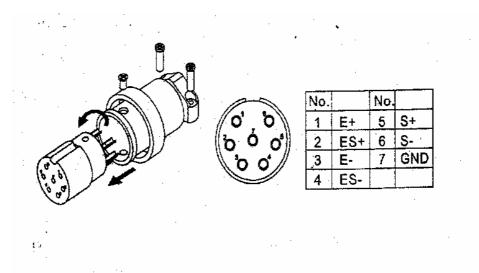
Battery

Recharged the battery whenever the symbol is flashing; this indicates that battery level is low. Charge the battery with the DC 9V / 1A adaptor attached. And when the battery is charging, the LED is red and when is fully charged the LED turns green. (it takes approximately 6 hours to charge battery completely)

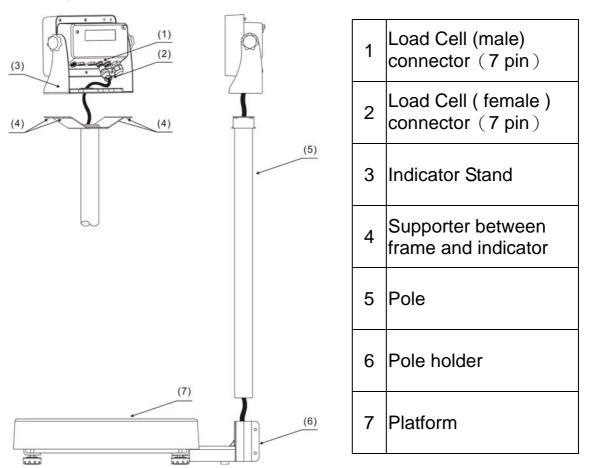
[Installation]

Load Cell connections

7 pin Load Cell connections



Setting up the platform

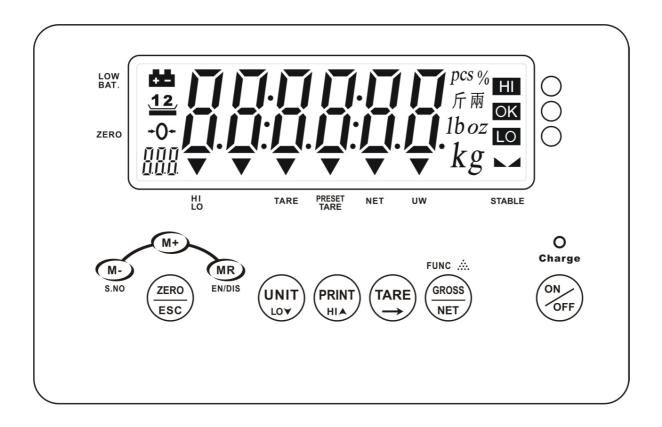


Assemble the scale by the following steps (refer to the diagram

above)

- 1. Pull the load cell cable through pole holder (6) up. Install pole (6) into the pole holder (5), and fix the pole with cross-headed screws.
- 2. Pull load cell cable through indicator supporter (4) to connect to the indicator.
- 3. Install Indicator supporter (4) and indicator stand (3) together.
- 4. Adjust the indicator to adequate viewing angle and tighten the screws located on each side of the Indicator.

LCD display and function of each key



■ LCD display and explanation

LCD display	Explanation			
kg	Weighing unit in Kilograms or Grams			
-0-	" ZERO " sign			
	Stable sign when the weight reading is stable			
pcs	Piece counting function			
%	Percentage function			
•	Indication sign for insufficient unit weight, net weight, tare, pre-tare, Hi-Lo limits.			
0.00	Operation message display			
HI OK LO	HI, OK and LO limits indication			
1b oz	Additional weighing units			
66	Battery Power is weak			

■ Explanation of each key

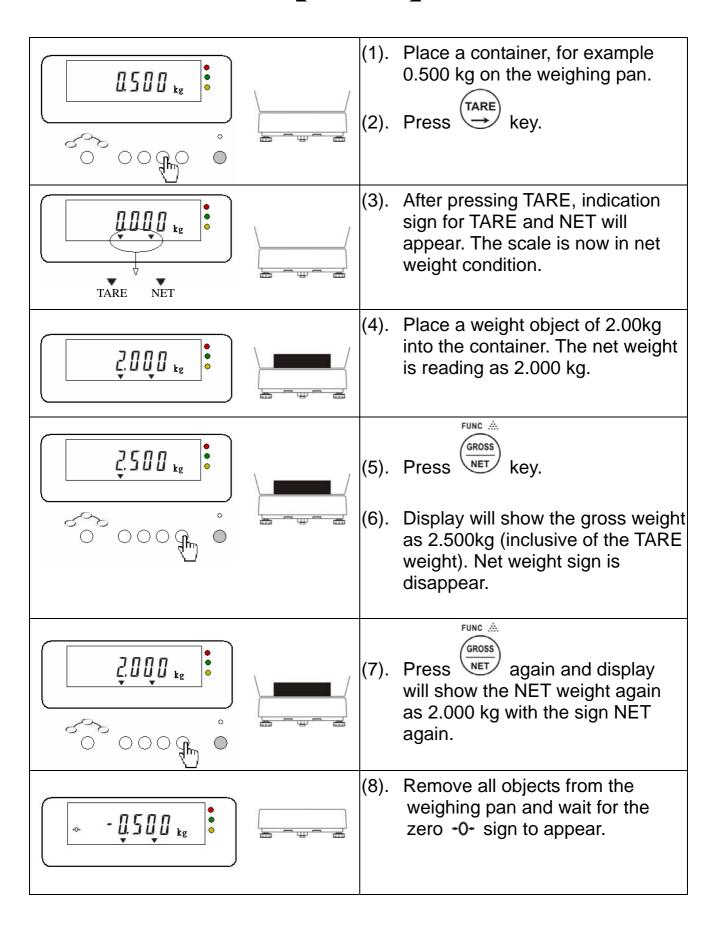
Posi- tion	Keys	Main function	Secondary functions
	ON OFF	Turns the indicator on or off	
1	M- s.no	To delete the accumulation weights or certain number of accumulated weight	 change the digit when in parameter mode (decreased) change the number when in HI-LO checking mode setting of serial number setting of date & time

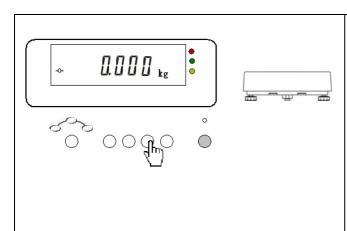
		T	VO
			Change the digit when in parameter model (increased)
2	M+	Accumulation	Change the number when in HI-LO checking mode
2	(M+)	Accumulation	Press this key to enter the testing mode
			 Change the setting of accumulation mode.
3	ZERO ESC	Set the display to zero	Press to escape from parameter setting without saving.
			2. Cancel function
4	MR	Recall total accumulation weights	Enable or disable the HI-LO checking function
•	EN/DIS	or certain number of accumulated weights	2. Capacity / division setting
	UNIT	Switch the weighing unit from one to another	To enter to weighing units setting mode
5			To enter into HI-LO checking mode and key in the LO limits
			Setting the space when in printing format mode
		Send the data stored	To enter to printer mode
6	PRINT	in memory to PC or printer when pressed	To enter into HI-LO checking mode and for key in HI limits
			1. To enter to pre-tare mode
7	7 Tare		Move the cursor to left when in parameter setting mode
	FUNC	Switch the weight between GROSS/NET	To enter to internal parameter setting
8			Sample storing mode when in piece counting mode
			Reset the serial number when in serial number mode
			 To enter to print format setting mode

[ZERO]

-Ö+	(1). The indicators zero point +0+ sign is shown in the left diagram. When the display is at zero, this sign will appear.
	(2). Press to return to zero when the display is without the +0+ sign.
• [] [] [] kg	(3). Now, the +0+ sign appear and the scale is in zero point.
+0+	Remarks: The range of zero point is +/- 2% of the max capacity. Example: the zero range of 60kg is +/- 1.2kg

[TARE]

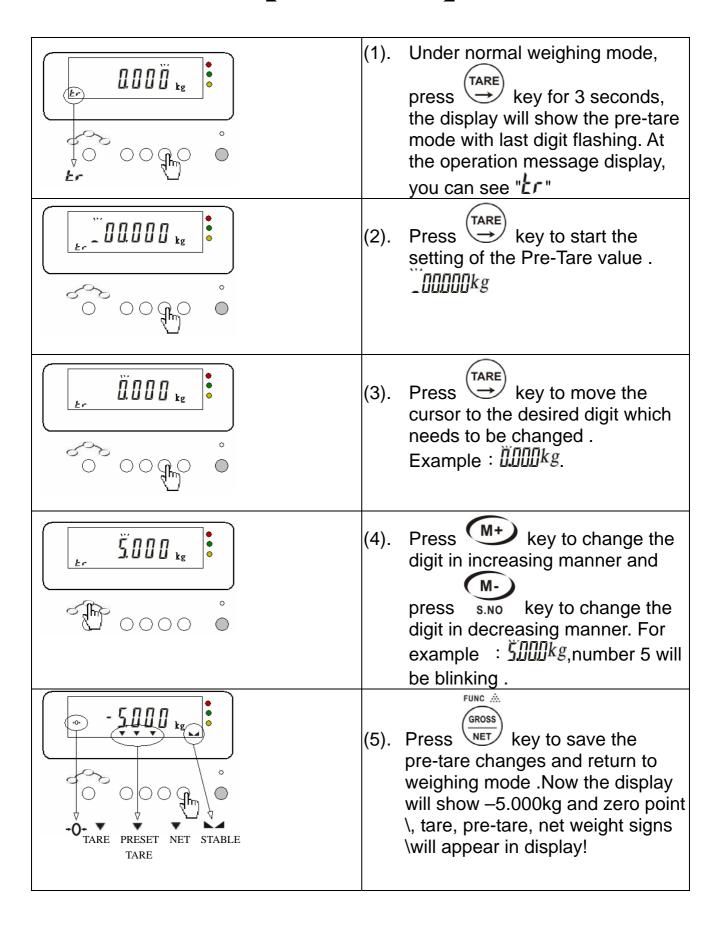


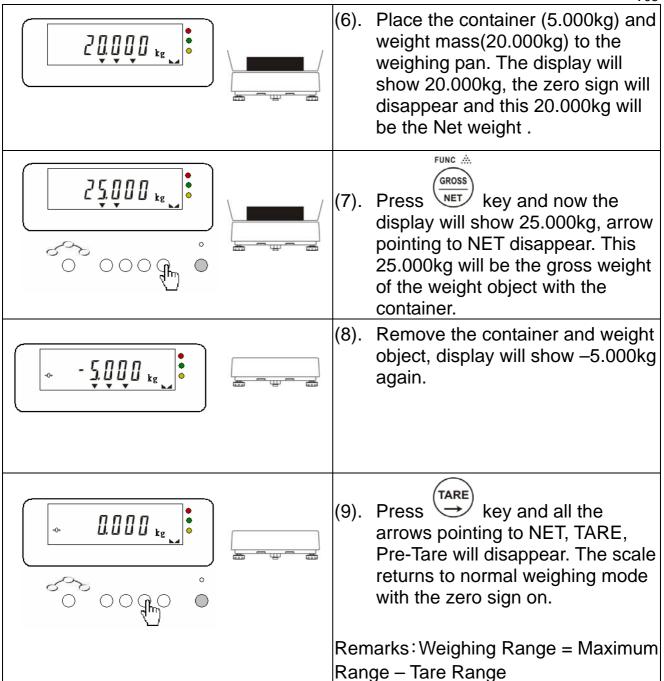


- Press key . (9).
- (10). The NET and TARE signs will disappear and the scale now return to Zero point.

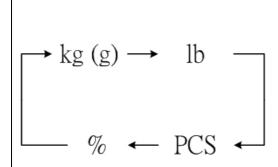
Remarks: Weighing Range = Maximum Range – Tare Range

[PRE-TARE]





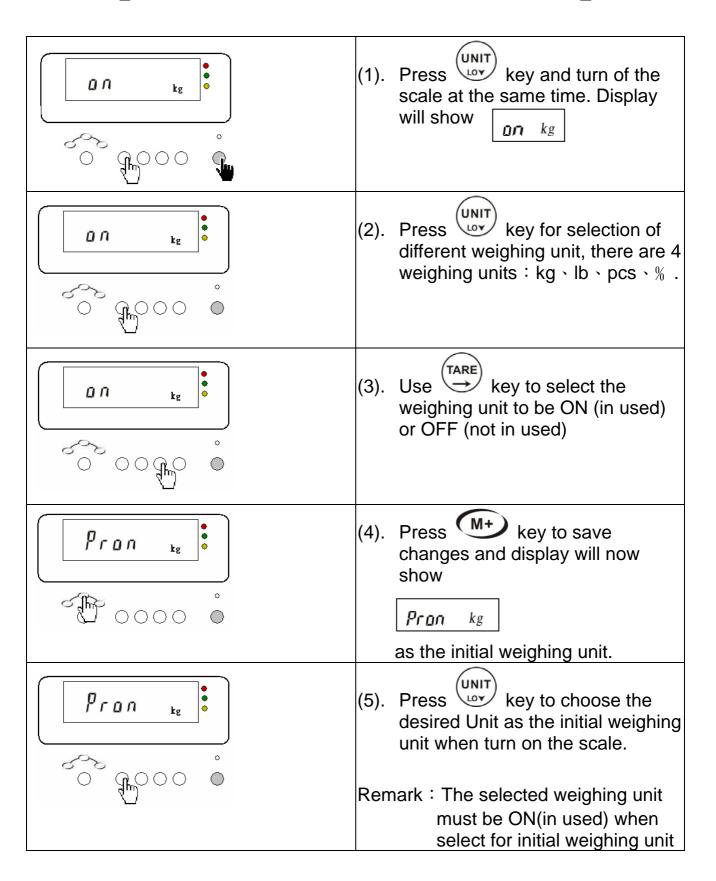
[SELECTION OF WEIGHING UNIT]

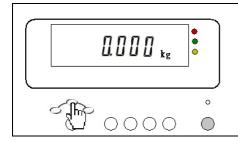


key to select the weighing unit in sequence as shown on the left diagram.

Remarks: When using division $\geq 1g$, the unit will be shown as kg when using division < 1g, the unit will be shown as g.

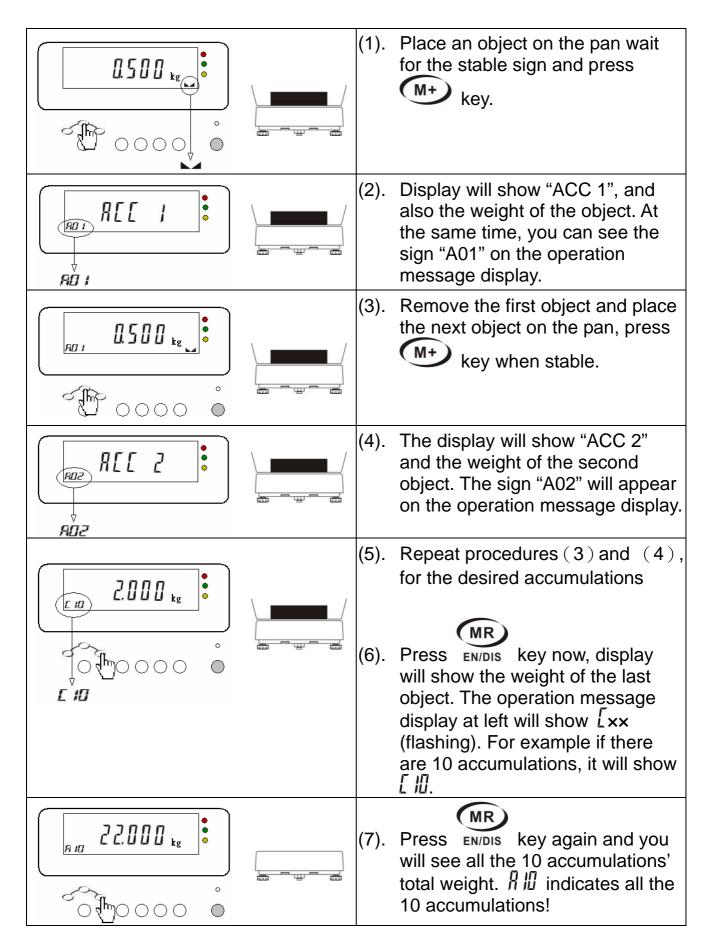
[INITIAL WEIGHING UNIT SETTING]

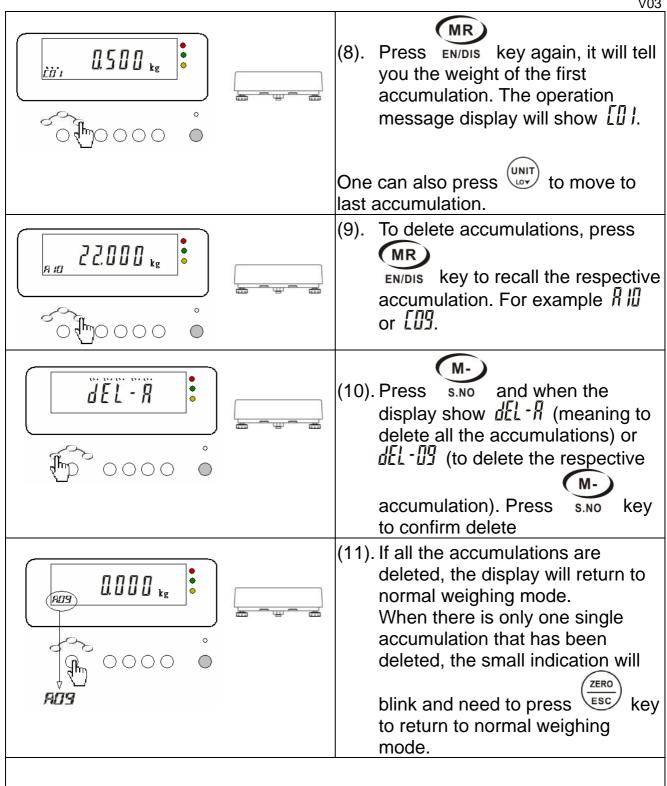




(6). Press M+ key to save changes and return to normal weighing mode.

[ACCUMULATIONS]

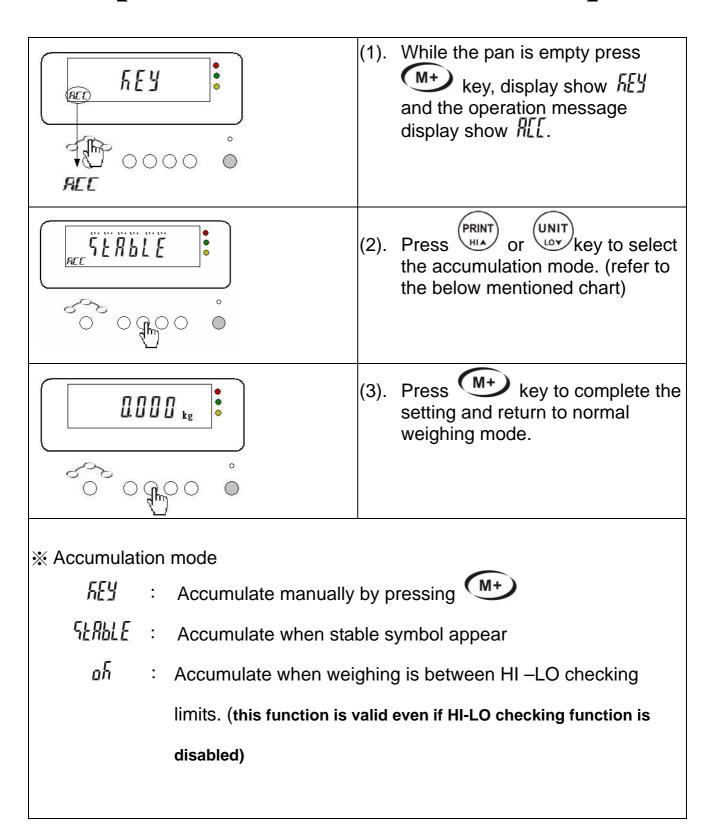




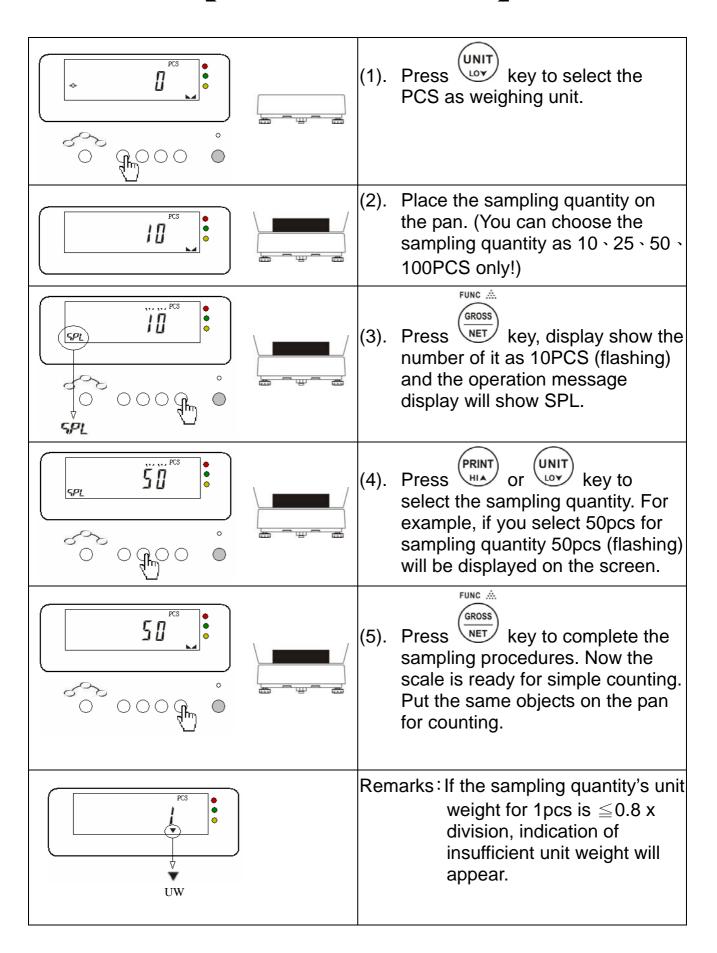
Remarks:

Maximum number of accumulation is 20 units.

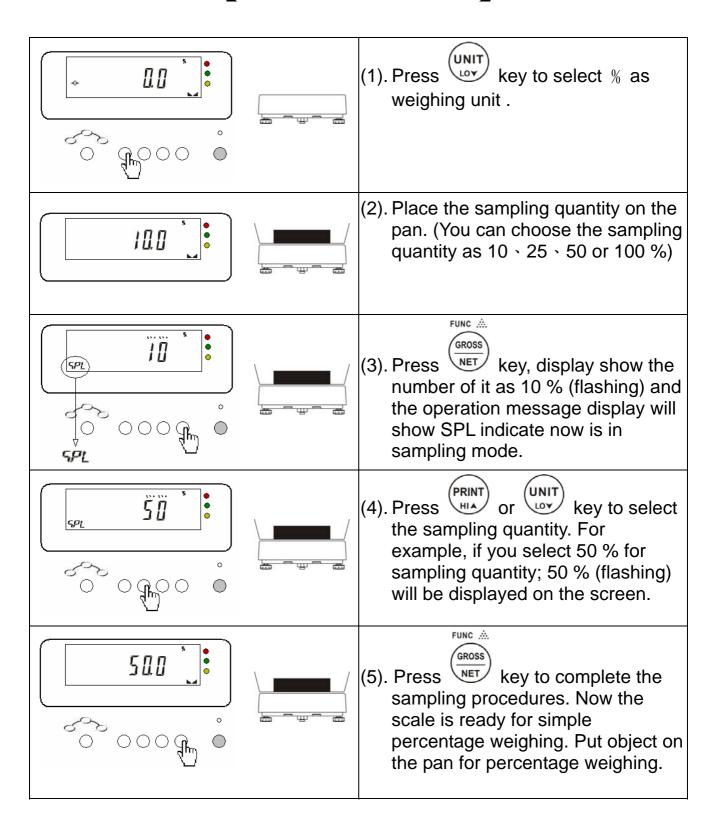
[ACCUMULATION MODE SETTING]



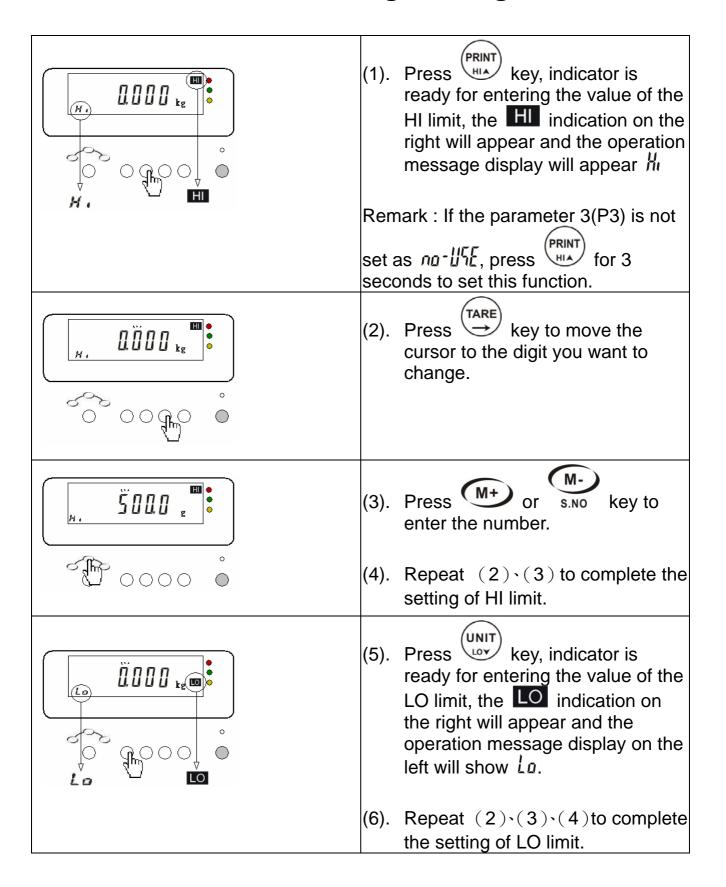
[SIMPLE COUNTING]

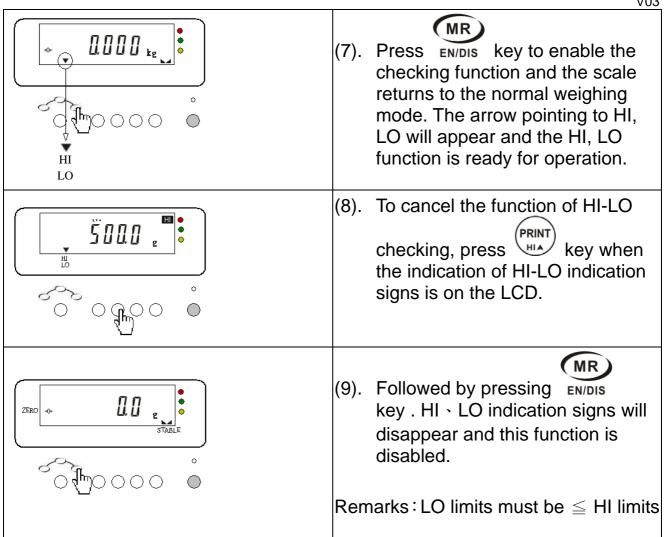


[PERCENTAGE %]

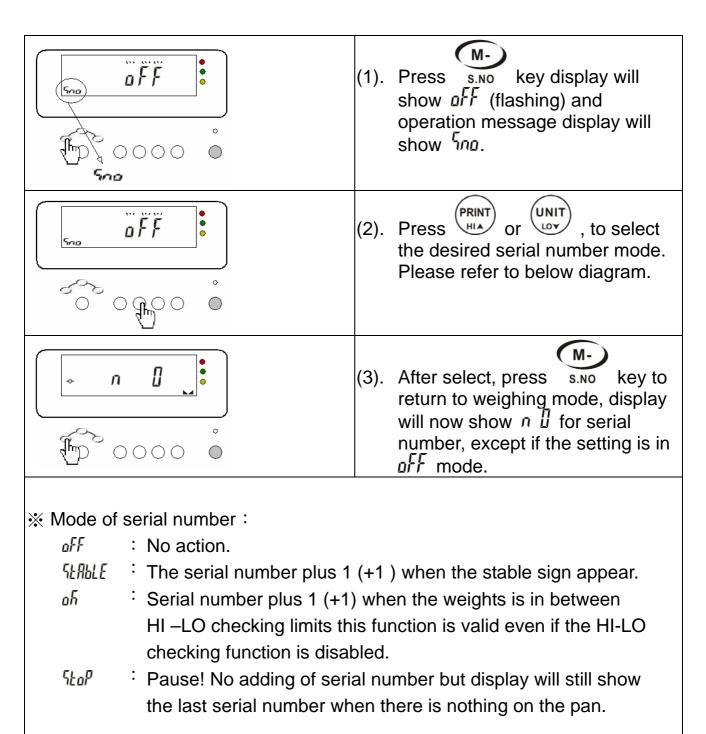


[HI / LO Checking for weight]

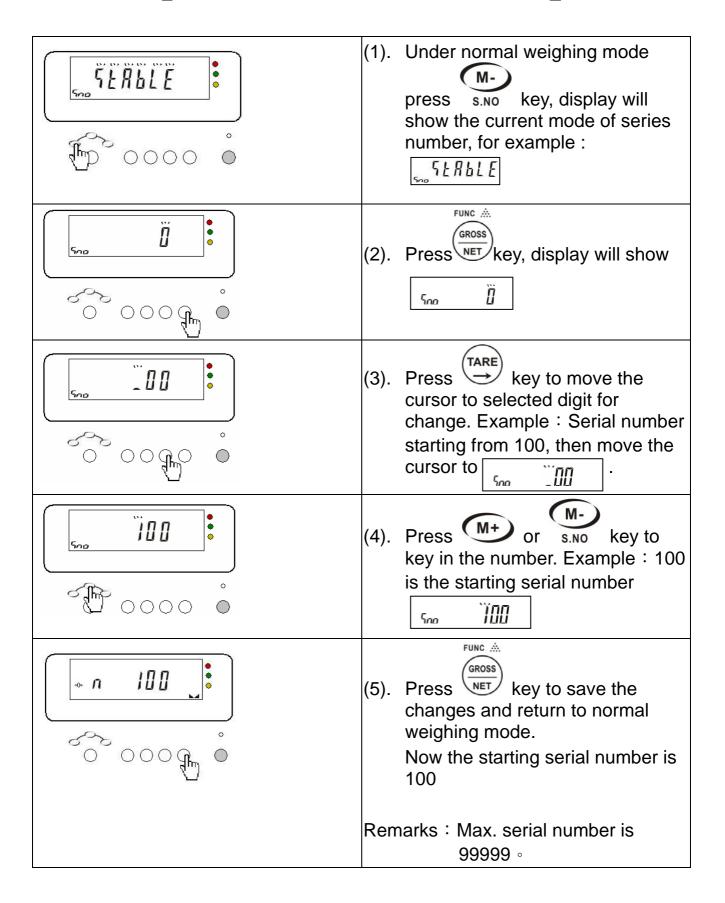




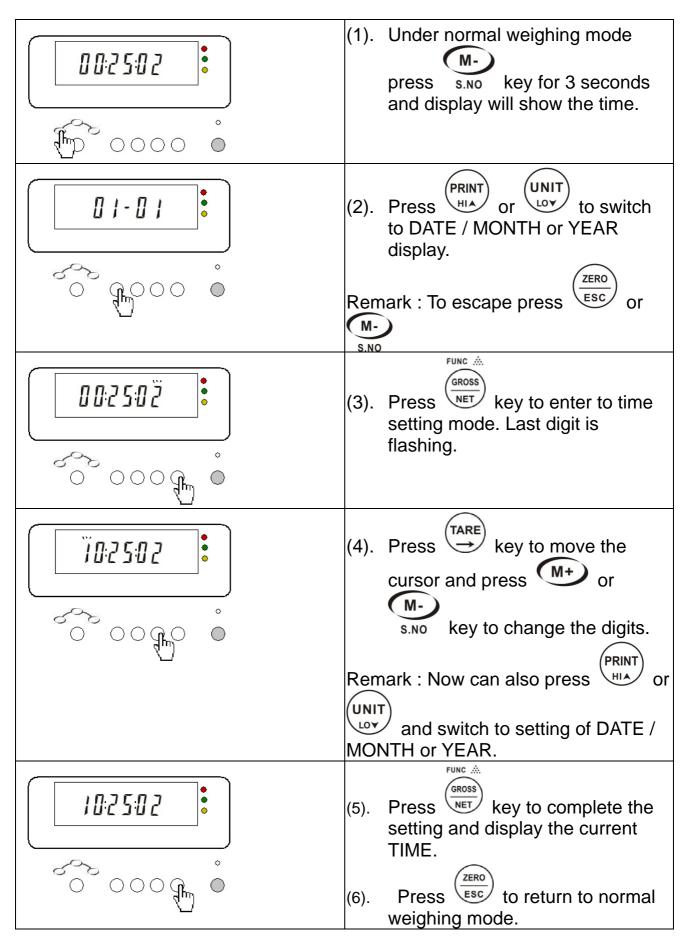
(SERIAL NUMBER)



[SERIAL NUMBER SETTING]

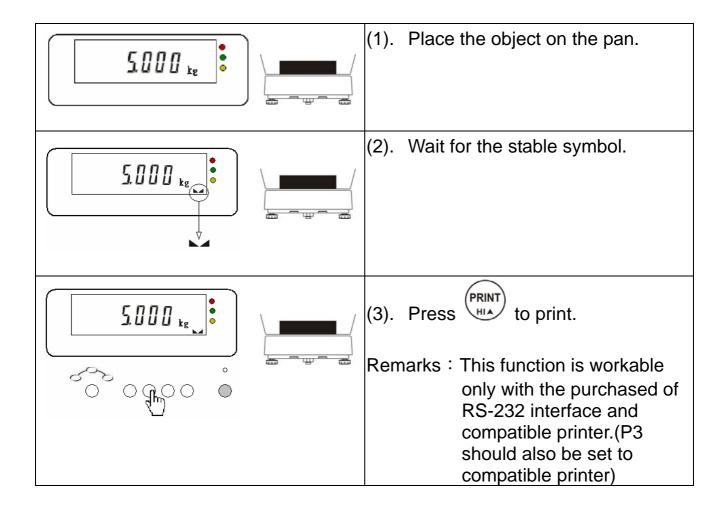


[TIME SETTING]



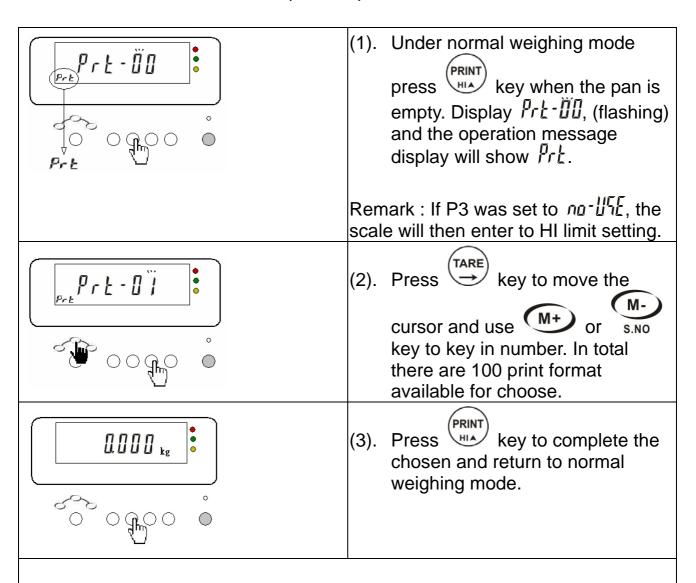
V03
Remarks: After switching off the
indicator, the date/time will
be erased unless if this
indicator is equipped with
RTC + Rs232.

[PRINT]



[PRINT FORMAT SETTING]

This function is applicable only when the Parameter P3 - Printer Type is set to normal, SH-24, BP-443D or EZ-2P.



Note:

1. There are three options of printers available: SH-24(dot-matrix printer), BP-443D(Label printer) or EZ-2P(Label printer).

[SPACE BETWEEN LINES WHEN PRINTING]

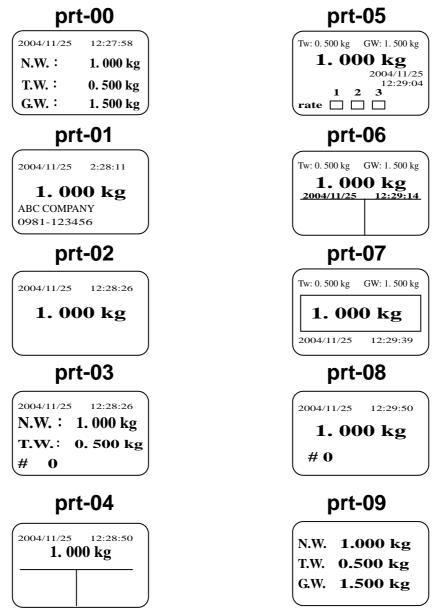
Only available for SH24 / normal

	(1). In parameter for printer(P3) choose the setting to SH-24 / NORMAL.
Pre O	(2). While the pan is empty press Rey and display shows Prt-II . The operation message display will show Prt
Pre In E - I	(3). Press key, display show Line-1. The operation message display will show Irk.
LinE-Z	(4). Press or s.no key to set the number of empty lines (space) when printing. {minimum =0, maximum=9}
	(5). Press key to complete the setting and return to normal weighing mode.

[PRINTING MODE SETTING]

This function is applicable only when the Parameter P3 - Printer Type is set to normal, SH-24, BP-443D, or EZ-2P. PRINT Pr Ł - 00 (1). Press key. Display show PrŁ-00, operation message display show Prt. FUNC SERBLE GROSS (2). Press NET key. Display will show the printing mode. Example: 5thblE 000 gr PRINT ωĥ (3). Use wo or key to select the printing mode. (refer to the below mentioned chart) FUNC ... GROSS []. [] [] _{kg} (4). Press key to save changes and return to normal weighing mode. REY : Print manually by pressing PRINT key. : Print continuously when connecting to PC or large LED Contin Display. SERBLE : Print after stable symbol appear nδ : Print when weight is between HI-LO limits (this function is valid even if HI-LO checking function is disabled)

SAMPLES OF BP-443D / EZ-2P PRINTING FORMAT]



* 10 Print formats are preset in printer by Jadever *

Note: (1) Please contact your supplier/-dealer for additional EZ-2P & BP-443D print formats.

- (2) A memory card has to be installed in EZ-2P. (BP-443D memory card is standard)
- The print formats are installed into the printers through PC. Please (3) email your specific requirement to us and we will make the requested print format for you.

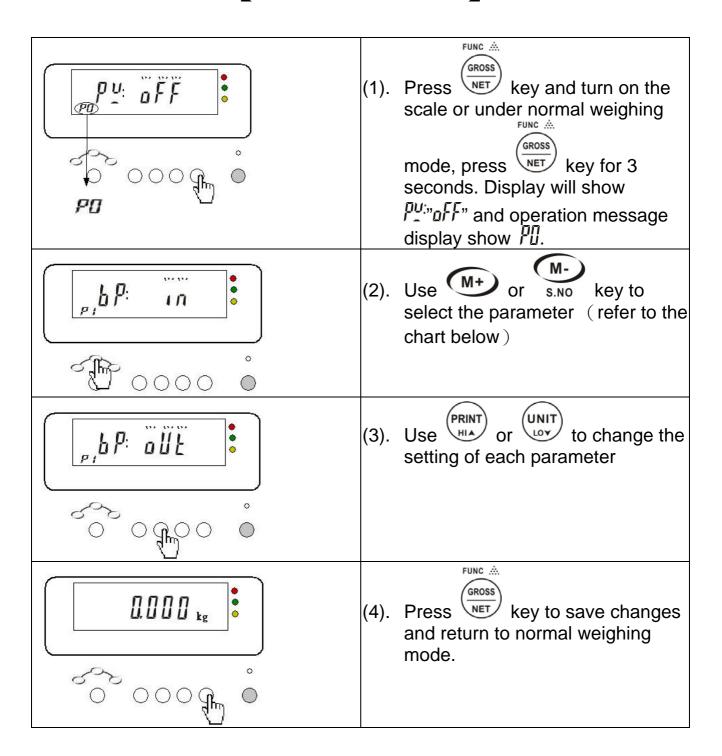
[SAMPLES OF SH-24 PRINTING FORMATS]

When RLLB appear under display of accumulation, key the print-out will like as following.

Prt-00	0.379kg
Prt-01	2002/01/01 00:09:23 0.379kg
Prt-02	#1 0.379kg
Prt-03	2002/01/01 00:09:23 #1 0.379kg
Prt-04	N.W: 0.379 kg T.W: 0.100 kg G.W: 0.479 kg
Prt-05	2002/01/01 00:09:23 N.W: 0.379 kg T.W: 0.100 kg G.W: 0.479 kg
Prt-06	#1 N.W: 0.379 kg T.W: 0.100 kg G.W: 0.479 kg
Prt-07	2002/01/01 00:09:23 #1 N.W: 0.379 kg T.W: 0.100 kg G.W: 0.479 kg

200	2/01/01 00:09:23
(1)	0.100 kg
(2)	0.100 kg
(3)	0.100 kg
	0.300 kg

[PARAMETERS]

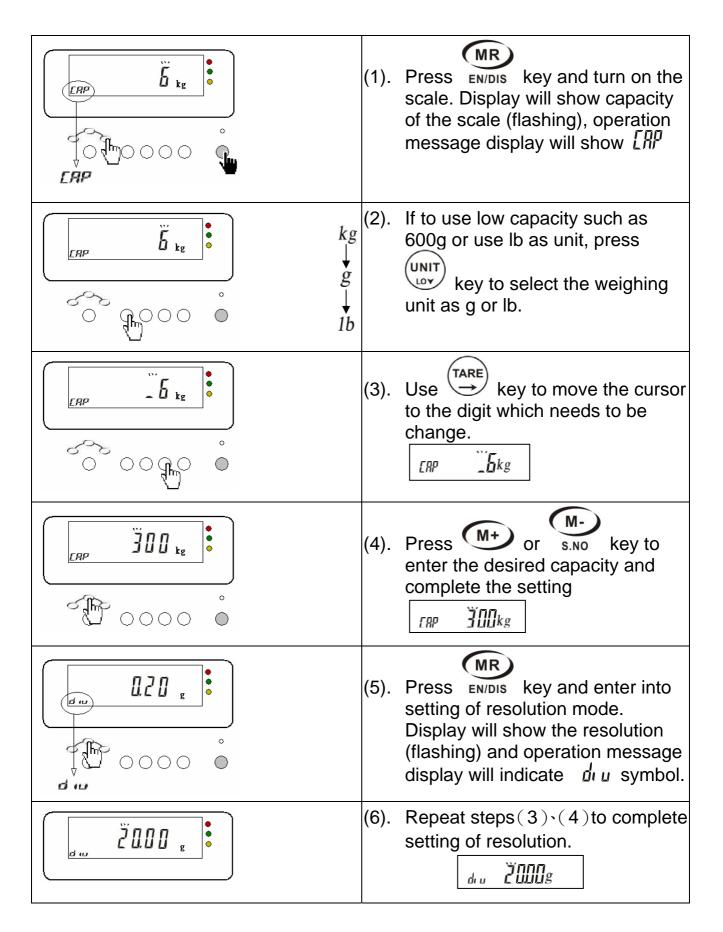


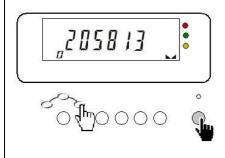
[EXPLANATION OF PARAMETERS]

No	Function	Display	Detail
		ωFF	Off (No action)
		5	5 minutes
PO	Auto Power Off)[]	10 minutes
PU	(weights < 20d)	30	30 minutes
		☆ <i>50</i>	60 minutes
		90	90 minutes
			Scale: Enable the HI-LO checking
	Beeping (The effect of this	☆ ın	functions , beeps when the range is between HI & LO
	(The effect of this parameter is to		Scale: Enable the HI-LO checking
P1	determine when to have beep sounds	ollt	functions, beeps when the range is out of HI & LO
	during HI/OK/LO checking.)	Ein	Option: Relay with light tower: beeps
			when the range is between HI & LO
		EoUŁ	Option: Relay with light tower: beeps when the range is out of HI & LO
			No action of Hold
P2	HOLD (able to hold the displayed weight after load is remove)	מם	Able to hold the displayed weight and print at the same time after pressing print key (when there is loading). Press key to clear. *This function will work only when
			P3-Printer Type is set as NORMAL or SH-24.
	Printer type	אריםת אלי	No connection to any printer
	Setting of this parameter	voriunt	N/A
P3	determines the data format for the	58-24	Normal dot-matrix printer
	connected printer	<u> 67-443</u>	Label Printer
	type	E7-2P	Label Printer
P4	RS-232 Baud Rate	2400	
	Setting of this parameter	4800	
	determines RS-232	☆ 9 600	

	data transmission rate.	19200	
P5	RS-232Data Format Setting of this parameter determines the RS-232 transmission data	<pre></pre>	
P6	format. Backlight	oFF on	No Backlight Backlight is on always Off automatically 5 seconds after stable weighing
		AULo	Auto (backlight is actuated when weight loading is over 20d)

[CAPACITY / RESOLUTION SETTING]







(7). Press EN/DIS key and display will show the internal self checking value and stop. This means that setting of capacity/resolution is completed.

Example:

o 2058 I3

Turn off the scale and turn on again.

Note:

Maximum capacity to be set for this indicator is 400000kg.

Minimum division to be set for this indicator is 0.01g.

Whenever the capacity / resolution is set or changed, be sure to re-calibrate according to calibration procedure on service manual.

[DIVISION CONFIGURATION CHART]

	Kg		g		lb
Max	5000kg	Max	5000g	Max	500lb
	2000kg		2000g		200lb
	1000kg		1000g		100lb
	500kg		500g		50lb
	200kg		200g		20lb
	100kg		100g		10lb
	50kg		50g		5lb
	20kg		20g		2lb
	10kg		10g		1lb
	5kg		5g		0.5lb
	2kg		2g		0.2lb
	1kg		1g		0.1lb
	0.5kg		0.5g		0.05lb
	0.2kg		0.2g		0.02lb
	0.1kg		0.1g		0.01lb
	0.05kg		0.05g		0.005lb
	0.02kg		0.02g		0.002lb
	0.01kg		0.01g		0.001lb

[TESTING MODE]

(2). Press (M+) key, display will show the setting of capacity, the operation message display will show LMP. (3). Press (M+) key and all segments in display are appearing. This is to check if the display is in good condition. (4). Press (M+) key and all segments in display are appearing. This is to check if the display is in good condition. (4). Press (M+) key, display show L, this is to check the key function condition. (5). After testing completed press key to switch off. ** Relative position: 1 : Memory Cancel 5 : Unit 2 : Accumulation 6 : Print 3 : Zero / Esc 7 : Tare 4 : Memory recall 8 : Gross / Net	205813	(1). Press hey and turn on the scale. Display will show the internal count value and operation message display show
segments in display are appearing. This is to check if the display is in good condition. (4). Press M+ key, display show \$\frac{1}{2}\$, this is to check the key function condition. (5). After testing completed press key to switch off. ** Relative position: 1		(2	show the setting of capacity, the operation message display will
C, this is to check the key function condition. (5). After testing completed press key to switch off. ** Relative position: 1 : Memory Cancel 5 : Unit 2 : Accumulation 6 : Print 3 : Zero / Esc 7 : Tare	PCS 8 H F F F F F F F F F F F F F F F F F F	(3	segments in display are appearing. This is to check if the
Relative position: 1 : Memory Cancel 5 : Unit 2 : Accumulation 6 : Print 3 : Zero / Esc 7 : Tare		(4	£', this is to check the key
1 : Memory Cancel 5 : Unit 2 : Accumulation 6 : Print 3 : Zero / Esc 7 : Tare	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	(5	ON
1 : Memory Cancel 5 : Unit 2 : Accumulation 6 : Print 3 : Zero / Esc 7 : Tare	Relative position:		
3 : Zero / Esc 7 : Tare	,	5	: Unit
	2 : Accumulation	6	: Print
4 : Memory recall 8 : Gross / Net	3 : Zero / Esc	7	: Tare
	4 : Memory recall	8	: Gross / Net

[ERROR MESSAGES]

Error Messag	Reasons / Possible Caused	Solutions			
EO no EE	The CPU unable to read the EEPROM	Contact the manufacturer or nearest agent			
E1 [AL-d	Unable to read the 3 points calibration range	Refer to "service manual" for calibration procedures			
E2 7111	Zero Point is too high	(1) Make sure the pan is empty when turn on the scale or perform the 3 points calibration.(2) Check the connections of wires			
E3 7Lo	Zero Point is too Low	(1) Make sure the pan is on the scale or perform the 3 points calibration.(2) Check the connections of wires.			
E4 ՍոհեЯ	Unstable zero point	(1) Make sure there is no winds or vibration.(2) Check the connections of wires.			
E5 L[-of	(1)Load cell spec. not compatible. (2)calibrating weights mistake	(1) Replace with a compatible load cell.(2) Change with correct calibrating weights.			
E6 no L[Load cell read out always the same	(1)Check if load cell wire are connected correctly.			
E7 ou-20	The last accumulation is more than the preset accumulation allowed.	Press s.No key twice to clear all the accumulation or press No key twice to clear all the accumulation or press key to return to normal weighing mode.			
E8 L[-out	(1). Load cell specification is out of the ADC range(2). Wrong setting for calibration	(1). Choose the compatible load cell.(2). Re-calibrate the scale.			

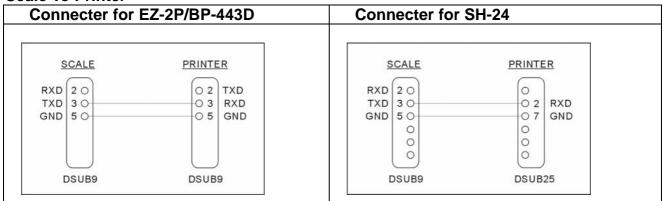
E10	[Lħ-b	Optional RS-232(RTC) batteries run out	Replace the batteries
E11	dı FF	Unable to accumulate. Two objects are with different units.	Press s.no twice to clear all accumulation data or press and return to normal weighing mode.
E12	ou-XX	Accumulation data exceed preset maximum	Press twice to clear all accumulation data or press and return to normal weighing mode.
E13	LojKi	Hi / Lo setting incorrect	Press key and reset Hi / Lo value.
E20	xxxxx	External division over Maximum (XXXXX is external resolution)	Press EN/DIS and reset Capacity / Resolution
E21	gn[xx	Capacity / Resolution Setting inaccurate.	Press EN/DIS and redo Calibration (make sure the calibrate weight is correct).
		Overload (Maximum display= max .capacity + 9e)	Remove the object from the weighing pan.
		Indicator unable to Switch On when pressing key	Use a tool to press the RESET key located at the back of the indicator to turn on the scale and clear the problem.

[LCD CHARACTERS]

0	1	2	3							9		
	}	Ľ,	3	Y		5	P		H	ij		
A		С					Н				L	M
N	Ь		ų	E	F		H	1	П	5		11
<u>N</u>	0	Р	Q	R	S	Т	U	V	W	X	Y	Z
n	Ū	ŢĪ.	ij	r	5	Ł	Ш	Ц	IJ	4	IJ	7

[CONNECTER]

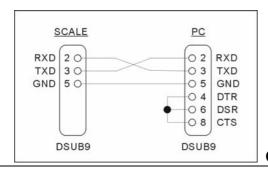
Scale To Printer



Scale To PC

When you want a scale to transmit data to PC continuously.

- (1) Using a cable as following to connect Scale and PC
- (2) Set printer mode as continue
- (3) Scale data will be sent to PC continuously. (of course, you must have the receiving software on the PC)



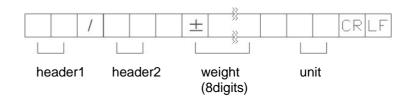
Only pin 2,3 and 5 are used.

[DATA PROTOCOL]

Output Data when Print Mode set as Continue

(header1: ST=STABLE US=UNSTABLE) (header2: NT=NET GS=GROSS)

For example: ST /NT + 12.350 kg



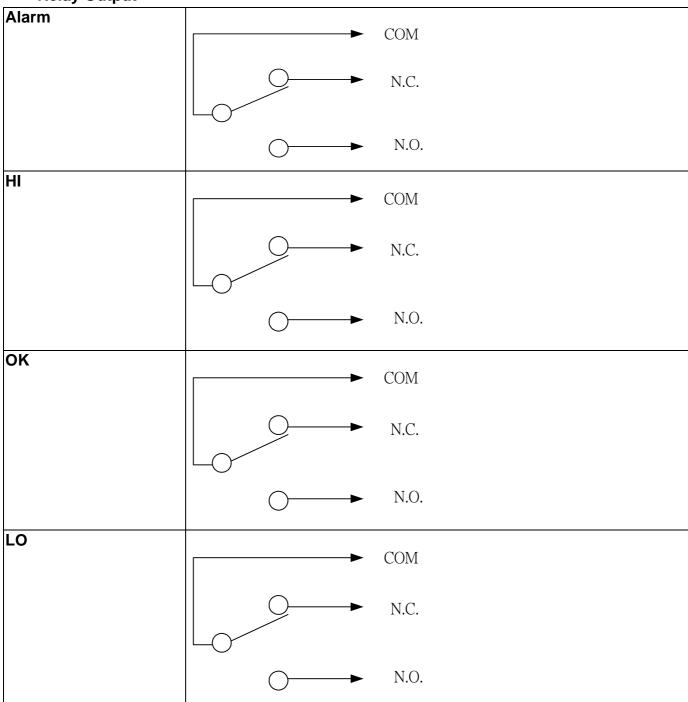
Input commands

"T" = perform TARE function

"Z" = perform ZERO function

[RELAY MODULE DIAGRAM]

Relay Output:



Relay Contact Spec

1A/24VDC , 0.5A/125VAC , 0.25A/250VDC

[PRODUCT SPECIFICATIONS]

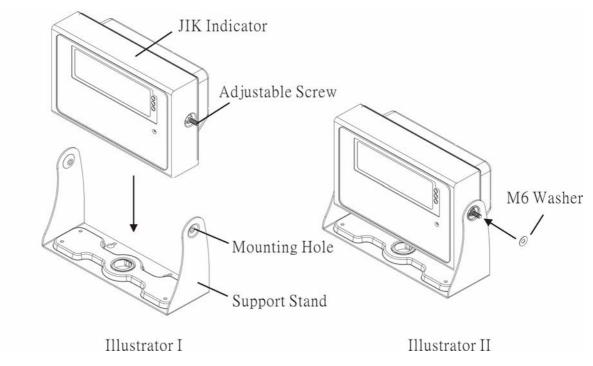
1. General

Enclosure	ABS	S/S			
Demensions	230(W) * 150(H) * 90(D) mm			
Display	6digit 30mm(H) & 3digit 10mm(H) LCD(include EL backlight)				
Units	kg or g, lb, 台斤.兩, 港斤.兩, pcs,%				
Power	Adaptor 9V/1A Recharging Battery 6V/3Ah	Adaptor 9V/1A Recharging Battery 6V/3Ah can be selected			
Weight(include Battery)	Approx. 2.5kg	Approx. 2.8kg			

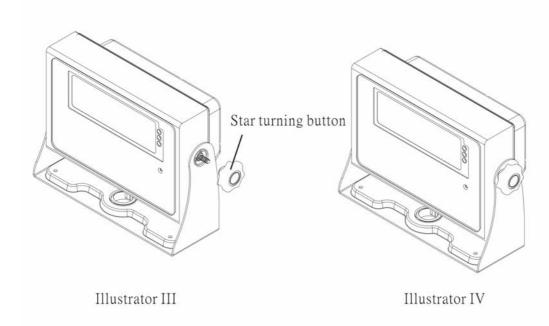
2. ADC and Loadcell

Mode1		Basic			
	Transform Mode	Δ - Σ			
ADC	Internal Resolution	Approx. 1,000,000 counts			
	External Resolution	Max. 30,000d(non-OIML)			
	Conversion Speed	10 times/sec			
System Linearity		Within 0.01% of FS			
Loadce11	Excitation	5VDC \pm 6% , 120mA(drives up to 8 * 350 L.C.)			
	Full Scale	-2 ~ 18mV(include dead load)			
	Input Sensitivity	Min. 0.16uV/d(non-OIML)			

[ASSEMBLY MANUAL OF JIK INDICATOR AND SUPPORT STAND

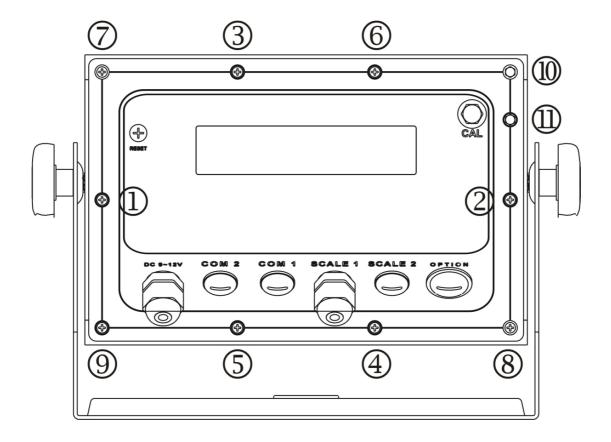


- 1. Using adjustable screw to pass through mounting hole. (illustrator I)
- 2. Put M6 washer onto adjustable screw. (illustrator II)



- 3. Rotating the star turning button into adjustable screw. (illustrator III)
- 4. Adjust the indicator to the best view, and then rotate it tight via star turning button. (illustrator VI)

[FIXING SCREW INSTRUCTION FOR JIK-XSX]



- After connecting load cell and optional devices (RS-232, RELAY), fix all screws attached fallow the above numeric sequence.
- If using an electric screwdriver, set the torque range to 5-7 kgf.cm.
- Sealing screws are to be located at sequence 10 and 11.

[SINGLE POINT CALIBRATION FOR WEIGHT]

