# **JCW-B Series User's Guide**

**Crane Scale with Wireless Indicator** 

## **Table of Contents**

1 Product Features	3
2 Key Technical Specification and Basic Parameters	4
3 Model Specifications	5
4 Indicator Panel	5
5 Key Pad Functions	5
6 Introduction Mode of Operation	6
7 Basic Operations	7
(1) <b>Power ON</b>	7
0/ZERO	8
1/AUTO	9
2/ADD	10
Manual Add	10
Auto Add	11
3/Add	11
4/Print H	12
5/Order	13
6/Division	14
7/Tare	15
8/Subtract	16
9/Feed	17
Search	17
Backligh/Confirm	18
SET	18
[1] Clear	19
[2] Summarize	19
i. Printing Per Sequence Number	20
ii. Printing Per Order Number	20
iii. Printing Per Weighing Date	21
[3] Total Clear	22
[4] Set Date	23
[5] Set Time	23
[6] Zero Range	24
[7] Others	
[1] Set Weight Limit	
[2] Calibration	
[3] Change Password	29
[4] Zero-point Track Range	
[5] Filter Setup	
[6] Auto Print Setup	
[7] Printer Setup	
[8] Indicator Exchange	31
8 Battery Charging Method	32
9 Precautions.	
10 Trouble-shooting	
11 After Sale Service	
12 Packaging List	34

#### 1. Product Features

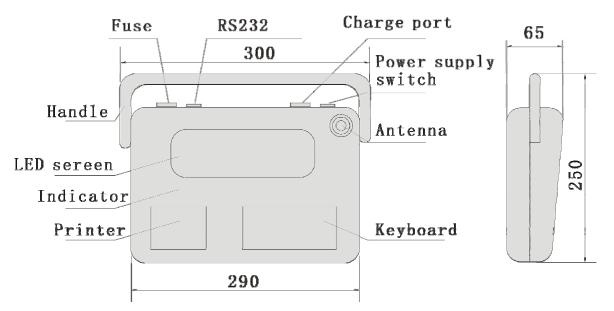
JCW-B digital wireless crane scale is comp osed of two parts, a scale and a force indicator. The scale uses a patented high precision resistant-strain transducer and employs a reliable force transfer structure. Combined with the multi-function intelligent indicator, the weighing system is very capable for application in specified range of weighing operation.

The key features of the force indicator are:

- Compact and light weight for portable operation
- Backlighting equipped LCD display for great visibility under low light operation environment.
- Build-in calendar and clock
- Build-in Epson micro printer that can print up to 9999 set of weighing data according to the measurement date, order or weighing sequence
- Large memory space to store up to 2,900 lines of data.
- Battery power level monitor for scale and indicator
- Overload warning for safe operation
- Auto-off when the scale remains inactive for over 2 hours

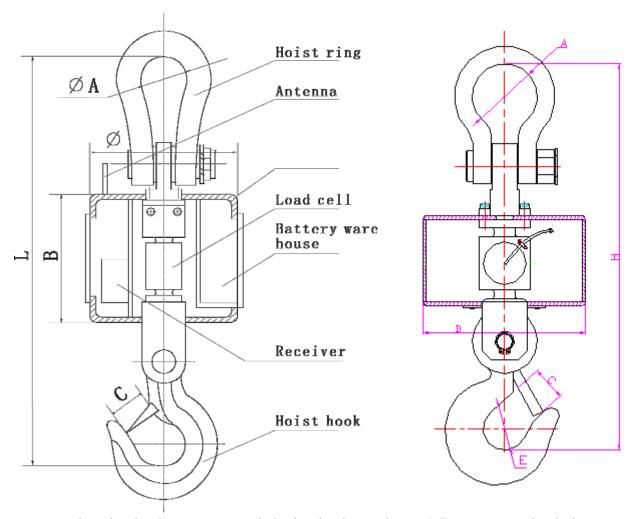
## **Indicator and JCW-B Crane Scale Dimensions**

#### Force Indicator



Fuse, Serial Output, Charger input, handle, LCD display, printer, power switch, antenna

Scale



hanging hook, antenna , scale body , load transducer,  $\ensuremath{\mathrm{A/D}}$  processor , hook ,battery housing

• Model Type

Model Type	Range	Division dimension (mm)				weight			
	t	kg	A	В	С	D	Е	Н	kg
JCW-B	1	0.5	76	105	34	190	47	460	15
JCW-B	2	1	76	105	34	190	47	460	15
JCW-B	3	1	76	105	40	190	50	486	15
JCW-B	5	2	80	120	48	200	60	560	23
JCW-B	10	5	90	128	52	216	70	630	36
JCW-B	15	5	135	141	60	216	85	897	52
JCW-B	20	10	150	148	73	240	90	948	103

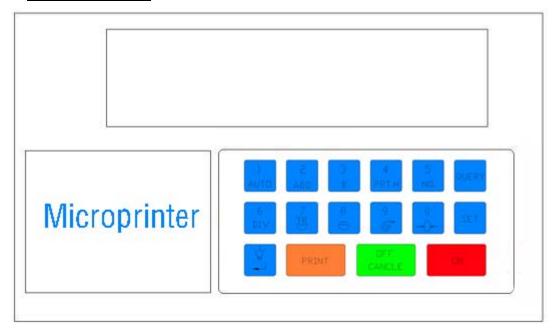
## 2. Key Technical Specification and Basic Parameters

- Accuracy Class: GB11883-89 (International R76 equivalent)
- Power Source: 6V/4AH Nd-H battery
- Radio Frequency: 430MHz (8 frequency band)
- Load Cell Activation Power: DC 5V±5%
- Operation Temperature: 10°~50°C and 0°~40°C for scale and indicator, respectively
- Radio Transmission distance: >200m unobstructed

## 3. Model Specifications

Model Type	Maximum Capacity (kg)	Division (kg)	Weight Limit (kg)
JCW-B-1	1000	0.5	1004.5
JCW-B-2	2000	1	2009
JCW-B-3	3000	1	3009
JCW-B-5	5000	2	5018
JCW-B-10	10000	5	10045
JCW-B-15	15000	5	15045
JCW-B-20	20000	10	20090
JCW-B-30	30000	10	30090
JCW-B-40	40000	20	40180
JCW-B-50	50000	20	50180

## 4. Indicator Panel



## 5. Key Pad Functions

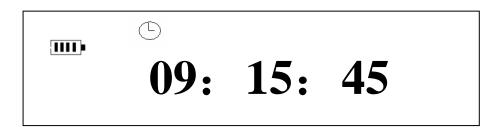
Keys	Function descriptions		
0~9	Numerical keys, they can also be used with other function		
	keys		
ZERO	Zero the current weight display.		
Auto	Start or End auto storing or printing function.		
Add	Add current stable weighing data to the internal memory,		
	including parameters, such as sequence number, index,		
	date and time, etc.		
Total	Show the total weighing number and total weight		

Print H	Print the header for the data sheet		
Order	Change the current order number (0000~9999)		
Division	Set the division number or the minimum display variable number		
TARE	Set the known tare number (0000.0 ~9999.9)		
Subtract	This function is mainly used for milling or molding application to indicate the amount of weight subtracted.		
Feed	Forward the print paper for four lines without printing		
Search	Search the existing weighing data		
Setup	Set the system index		
Backlight/Confirm	Turn on the backlighting when the display is for weight or		
	time. Confirm for others.		
Print	Print the weighing data (two types of printing method)		
Off/Cancel	Turn off the indicator or cancel specified operating steps		
On	Turn on power supply to the system		

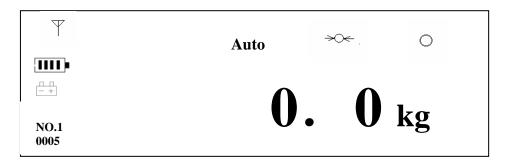
### 6. Introduction - Mode of operation

Immediately after the indicator is turned on, it will go through self-check sequence, including the version of the operating interface, measurement capacity limit, then the numbers from 999999, 88888, 777777, ....to 111111. There will be 0.5 second interval between each set of numbers.

After the completion of self-check sequence, the time mode will be displayed as Fig. 1. If there is weighing signal detected, the display will change into Weigh mode from time mode as shown in Fig. 2. Otherwise the display will remain in Time mode.



As shown in Fig. 1, the battery power level indicator is located in the upper left corner of the LCD display. Four-bar indicates the battery is at full charged full, one-bar means the battery power is low. In that case, the indicator needs to be charged to prevent it from data lost. 09:15:45 is the current time.

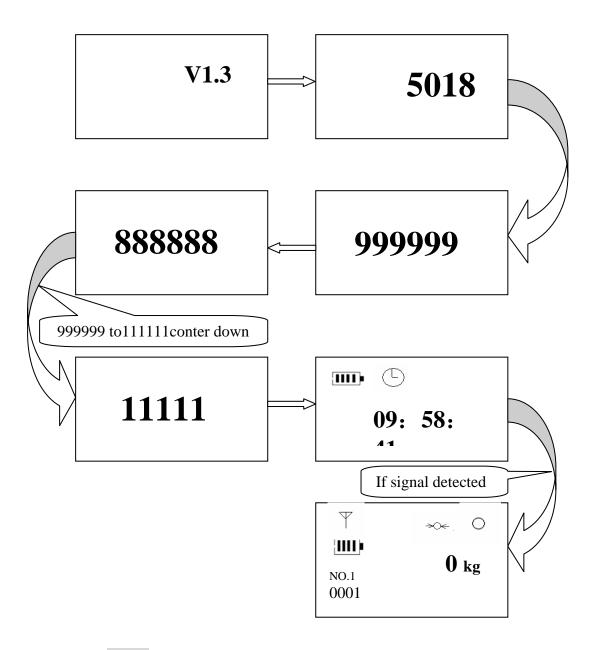


In Fig.2, RECEIVE indicates there is weighing signal detected by the indicator and the indicator is in weighing mode; AUTO means that the indicator is in automatic store and print states; STABLE means the measured weight has been at stable condition; ZERO indicates that there is 0 weight; the number under Sequence is the current weighing number (as shown as 005 in Fig. 2). Scale Power Low indicates that the scale battery needs to be changed so to maintain proper signal transmission.

#### 7. Basic Operations

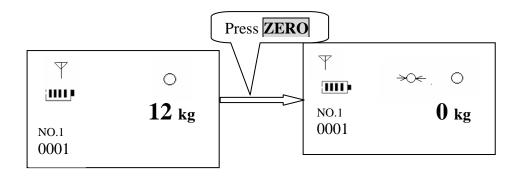
The basic operations for the indicator are described below.

- a) Power ON For simple weighing operation, it can be done by following operating sequence:
  - i. For initial use, connect the battery of the crane scale:
    - 1) open the battery housing using a flat-tip screw driver and connect the battery to the power cable;
    - 2) Switch the power to ON position. The scale is powered on when a long beep is heard.
  - ii. 30 seconds after the scale is powered on, turn on the indicator power. Press Now will show the software version first (such as "V1.0" as shown in figure below) and then the weight value limit (as shown as "5018" in this case). After that, the display will cycle from "999999" all the way down to "111111". If there is no weight signal received from the scale, the display will remain in Time mode as shown in Fig. 1. If there is weight signal received, the indicator will change to WEIGH mode (Fig.2).
  - iii. After the load is craned up through the scale and STAB is continuously shown on the upper right corner of the display, the weight value displayed is the weight of the load.



#### b) ZERO

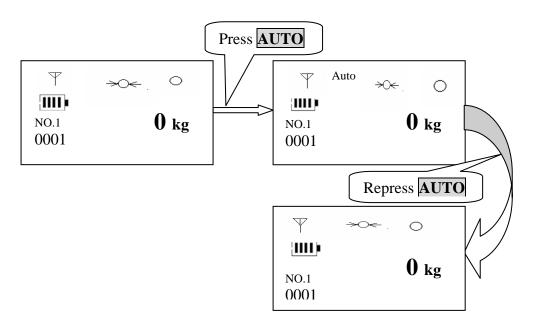
The indicator should show "0.0" under non load condition. In case there is residual value displayed under zero loading, such as 12kg as shown in figure below; it has to be zeroed before weighing operation. Press **ZERO** to zero it out. The weight display should be 0kg and ZERO is lit. Zeroing function is only effective when the residual display is less than 20% F.S. of the scale.



## c) AUTO

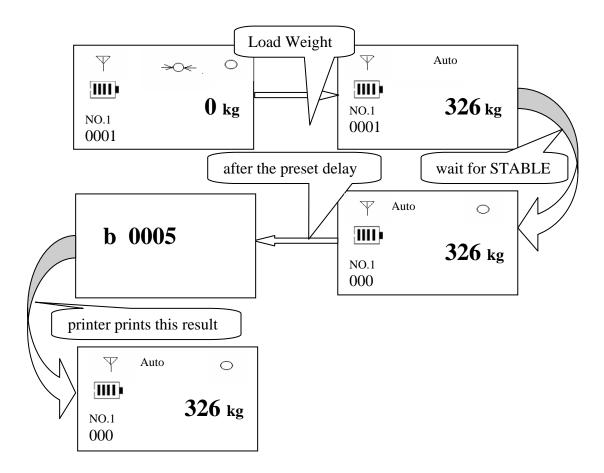
Y

In WEIGH mode, press Auto key and AUTO is lit. Now the system is in automatic mode of operation for date storage and print. Press Auto key again, AUTO indicator is off. In this mode, the system is operating in manual mode. Any weight data has to be manually totaled to be saved.



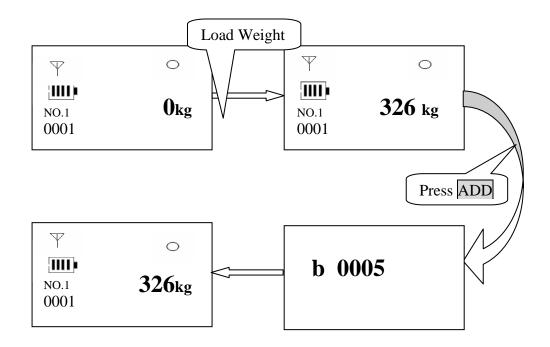
With AUTO shown on the display, each weighing result is automatically saved in the data memory after preset time delay (see Auto-print stable time setup). The result is also being printed with its weighing sequence number.

This AUTO process is illustrated in the diagram below:



\*Note: "b 005" means that the current saving is for weighing load No. 5.

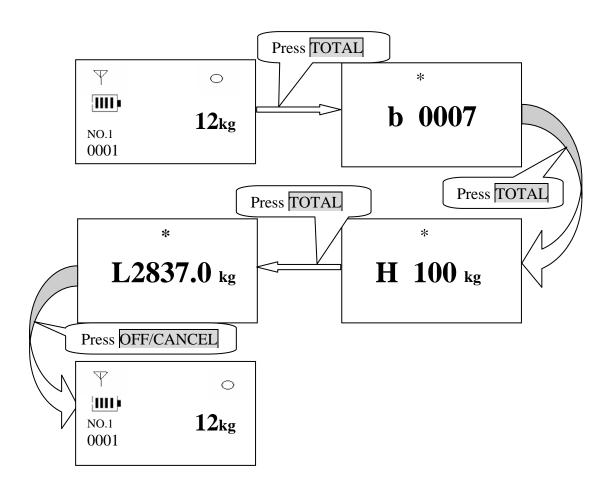
- **d) Add** (below description is effective only without using HEADER key):
  - i. Manual Add Press Add key when the system is in manual WEIGH mode (AUTO is not lit in the display), the weighing result will be saved in the internal memory which can be searched and summarized for printing. Sequence number will increase by step of 1. For the same stable weigh value, it can only be saved once.



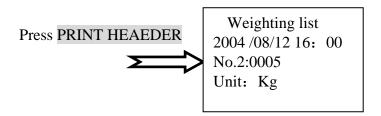
ii. Auto Add – Press Auto key to activate Auto Add for data saving and printing. The AUTO indicator has to be lit on the display. Under automatic operation, each non-zero stable measurement will be saved and printed automatically. However, the indicator has to be zeroed between measurements or 50 division numbers.

#### e) Total

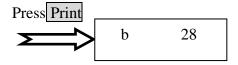
In WEIGH mode, press Total key and the Total sign will light on the display. Under Total, "b 0007" is shown, for example. "b" indicates weighing and "0007" indicates the total weighing number meaning there are 7 set weighing data saved so far. Press Total again, and the display shows "H100kg", for example. "H" indicates the data's high digit, "100" indicates that the total weight high digit is 100. Press Total again, the display shows "L2837.0kg". "L" means lower digits of total weight as "2837kg". So the total weight should be 1,002,837kg. Press Off/Cancel to exit total weight display.



#### f) Print Header In WEIGH mode, press Print H will print the weighing results in the following format:

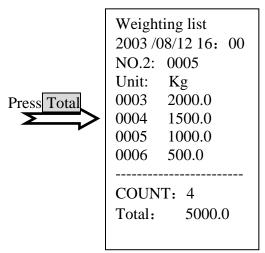


Press this key can also perform statistic print function. In the above example, when the indicator shows a stable weight measurement, press Print. The printer will print the following results:



"0003" is the current sequence number and "2014" is the current load weight. Both numbers will be saved in the data memory. Sequentially, the following data set will be saved and

printed with sequence number "0004", "0005", "0006"... Upon weighing completion, press Add, the indicator will summarize and print the total weight by the total weighing numbers, starting from Print H:

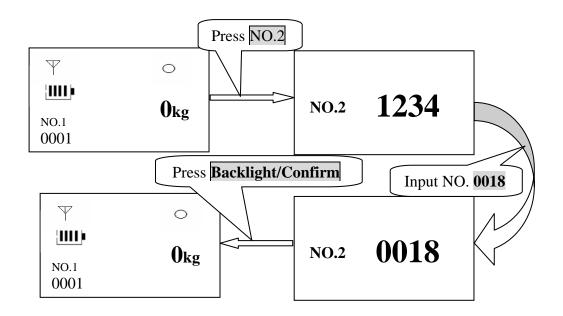


Note: The scale needs to be zeroed between each weighing operation.

g) Order

When Order is pressed, Index is highlighted with the current indexing number, such as "Order 1234". If the order number needs to be modified, use the numerical keys (0~9) to input and then press Backlight/Confirm to confirm changes or press Off/Cancel to cancel the operation. In the following example, the order number is changed from 1234 to 0018.

The modification range of order number is from  $0000 \sim 9998$ . In case the input order number is 9999 and Backlight/Confirm is pressed, the indicator will show "52909". "52909" is actually the current received A/D value. Press Off/Cancel to return to WEIGH mode of operation.

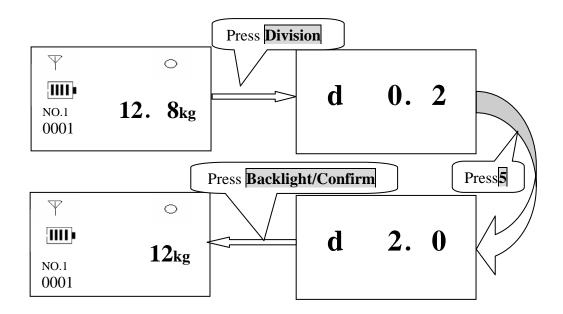


#### h) Division

Press DIV key to display the current division number. Use numerical keys 0~9 to select desired division number. Press <u>Backlight/Confirm</u> to confirm or <u>Off/Cancel</u> to cancel. The correspondence between numerical number and division number are as following:

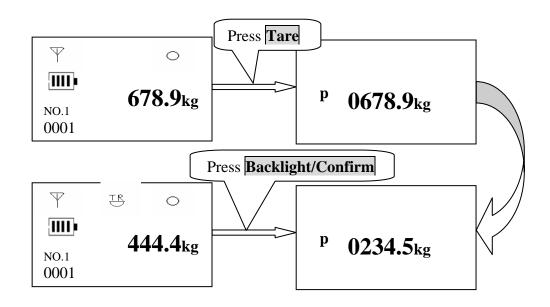
- 1 0.1
- 2 0.2
- 3 0.5
- 4 1.0
- 5 2.0
- 6 5.0
- 7 10.0
- 8 20.0
- 9 50.0

The following example is to change the division value from 0.2 to 2.0.



i) TARE
In TARE mode, use numerical keys to enter the tare value then press

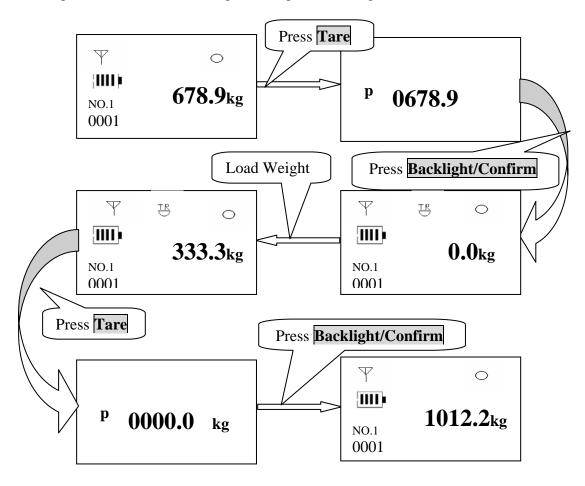
Backlight/Confirm. The weighing results afterward will be net weights.



In this example, 234.5kg is the tare and 444.4kg is the net.

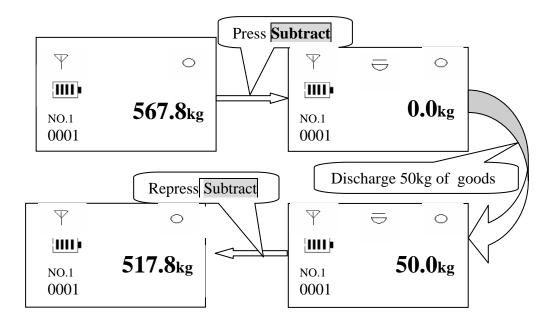
When TARE key is pressed, the indicator will display P XXXX.Xkg. This is the current Tare weight. If there is no tare weight defined, press TARE key, XXXX.X is the current weight value. Press Backlight/Confirm to define the weight as tare. TARE indicator is lit while the net weight is displayed. With tare defined, the display will show the net

weight of the load. Press TARE again to change XXXX.X to 0.0000. Now press Backlight/Conform to show the gross weight (including tare):



#### j) Subtract

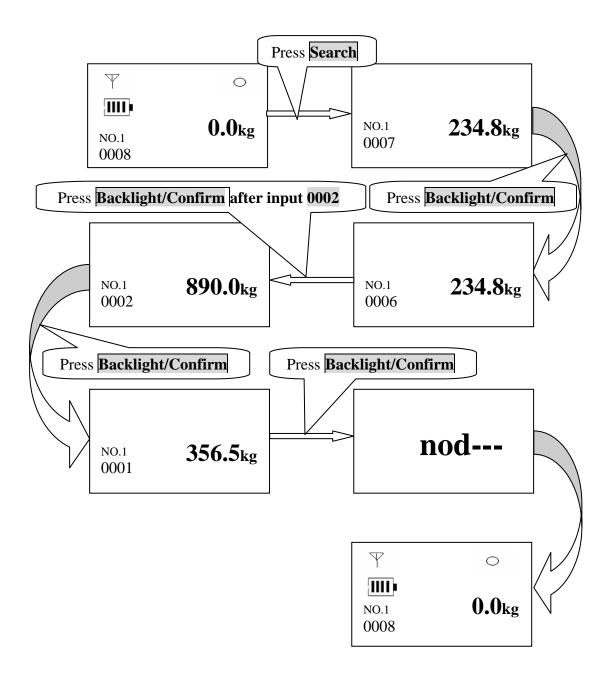
Subtract function is specially designed for steel milling or molding operation. Under the normal weighing operation for example, the weight of a load is 567.8kg. Now enter the Subtract mode of operation by pressing Subtract so the displayed weight value becomes "0.0 kg". When a 50kg of load is removed, the indicator will show the 50kg as subtraction. Press Subtract again, the left weight is shown (as normal weight). The diagram below shows an example of Subtract operation.



k) Feed When Feed key is pressed, the paper will be forwarded 4 lines without printing.

#### 1) Search

When Search key is pressed, the display will show the weighing result prior to the current sequence number. Press Backlight/Confirm key, the indicator will show the weight result for the previous sequence until Sequence number 0001. If one keeps pressing Backlight/Confirm key, "nod---" will be displayed, indicating all the weighing data have been displayed already. Press Off/Cancel to return WEIGH mode. In addition, one can search any weighing result by entering the four-digit sequence number to show its weight record. Press Backlight/Confirm to continue to the previous sequence until the end. In case there is no weight record for the sequence entered, the display will show "Nod---". Press Off/Cancel to return to WEIGH mode.

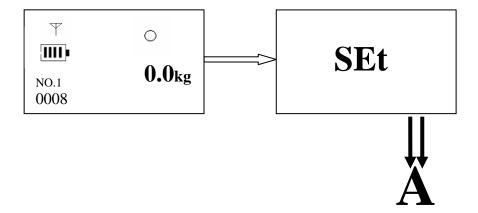


#### m) Backlight/Confirm

In WEIGH mode, press Backlight/Confirm key to turn on the backlighting. Press it again will turn the backlight off. Under other operating conditions, the key is used as confirmation. If there is no weighing activity 2 minutes after the backlight is turned on, the indicator will turn the light off to preserve battery power.

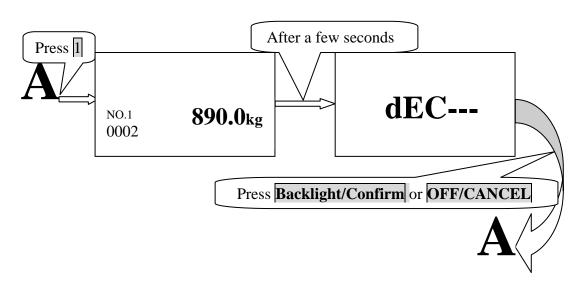
#### n) SET

Press SET key to enter setup mode of operation. "SET" is displayed. Press numerical key to select the desired function. The numerical key represents the function in SET mode as below:



#### 1 – Clear

When 1 is pressed under SET mode, the last entry (the weight record with highest sequence number) will be displayed. A few seconds after, "dEC---" is showing. Press Backlight/Confirm to clear or Off/Cancel to cancel.



If there is no stored weight data, the display will show "nod---". Press Off/Cancel to return to WEIGH mode.

#### 2 – Summarize

Press 2 key under SET to enter Print Summery mode (or PRB). In the Prb menu, there are three options, PRB1, PRB2 and PRB3:

PRB1 means to print summary according to sequence number.

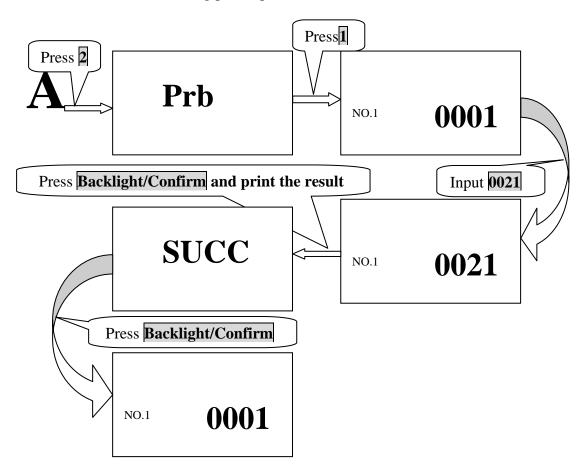
PRB2 means to print summary according to order number.

PRB3 means to print summery according to weighing date.

Input the desired sequence number, order and date for the summary after selecting the summary method. One can go direct printing by entering the sequence, order or date data. SUCC will be displayed upon printing completion and FAIL indicates otherwise. Regardless

SUCC or FAIL, press Backlight/Confirm to return to input mode to continue. Press Off/Cancel to return to PRB mode.

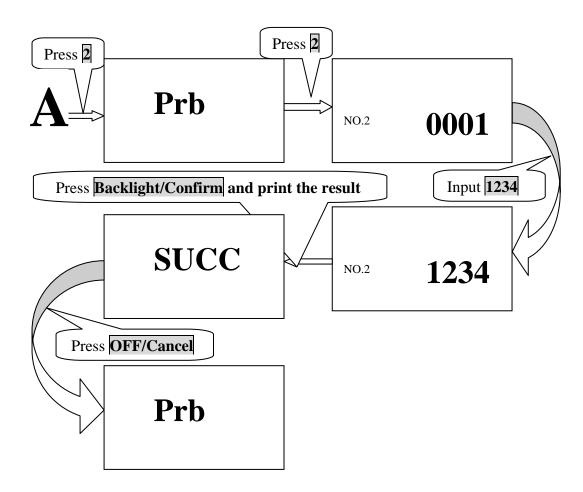
i. Printing per Sequence number



The result is below:

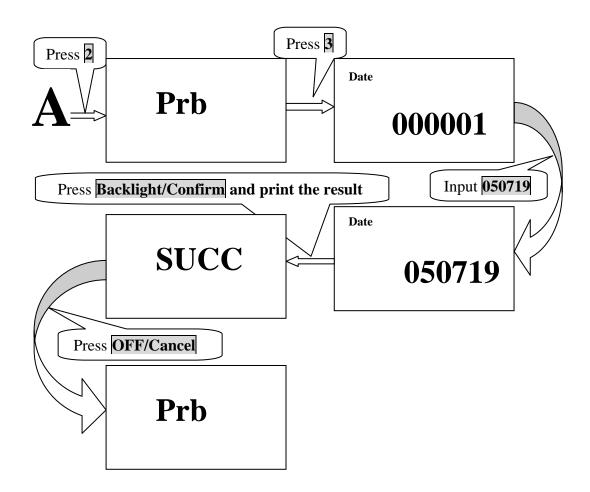
Weighting list 2005/07/19 14: 42 Unit: kg 0001 500.0

ii. Printing per Order Number



The result is below:

iii. Printing per Weighing Date (insert Diagram)



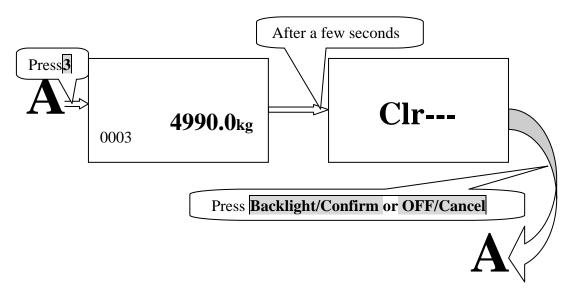
The result is below:

Weighting list 2005/07/19
Unit: kg
0001 500.0
0002 1500.0
0003 2999.0
0009 1000.0
COUNT: 0004
Total: 5999.0
l

#### 3 – Total Clear

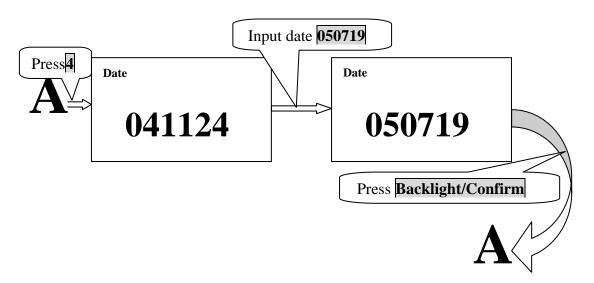
Press 3 under SET menu, the total number of weighing and the total weight are shown first. In the below example, "0003" indicates the total number of weighing and "4990.0" is

the total weight. After about 2 seconds, the "Clr---" comes up. Press Backlight/Confirm to clear all the existing data in the memory. Press Off/Cancel to quite. After clearing, the current sequence becomes 0001.



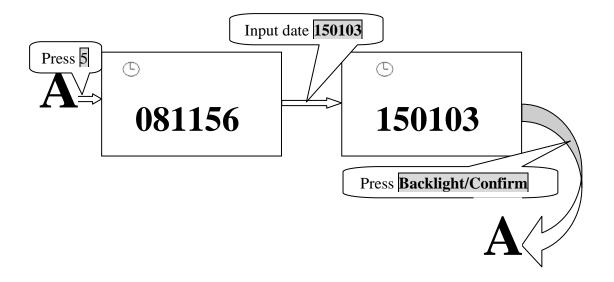
#### 4 – Set Date

Press 4 to show the current date: i.e.05.02.18 (mm/dd/yr) Please follow the below example for date change.



### 5 - Set Time

Press 5 key to show the current time: i.e. 08:48:21



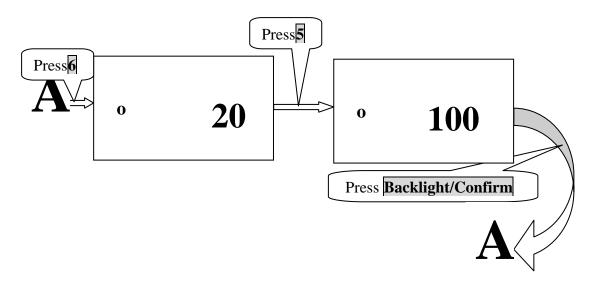
#### 6- Zero Range

Press key under SET menu, "O 100" is shown. "O" is the high digit which indicates the initial zero range at power up. The low digit indicates the exact zero range (%FS). For example, "10" means that any drift value which is less than 10% FS will be directly zeroed. The selections of zero range at power up are as below:

- 1 2%
- 2 10%
- 3 20%
- 4 50%

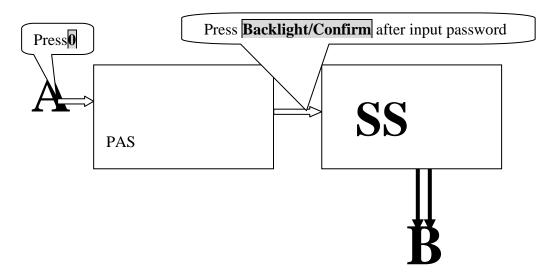
#### 5 -100%

In the example below, the zero range is changed from 20% FS to 100% FS:



#### 0 – Others to enter submenu (password required)

Press key to enter submenu. After "PAS" prompt, enter the correct password then press Backlight/Confirm. SS indicates the entry of secondary menu.

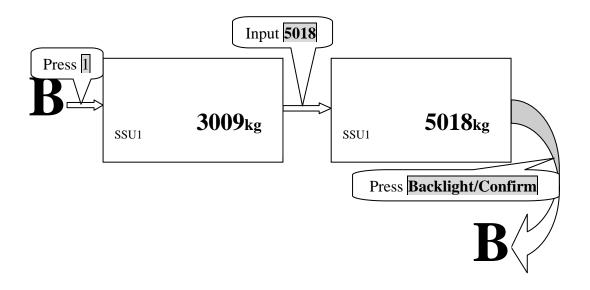


There are below selections:

#### ★ Set Weight Limit

After Select 1 in Subset menu, "SSU1 5018kg" is displayed, for example. Here "SSU1" indicates that the 1<sup>st</sup> item in the Subset menu is selected and "5518" is the weight capacity limit of the scale. To modify this number, input the new value and press Backlight/Confirm to finish. Otherwise Off/Cancel to quit.

In the below example, the weight capacity limit is changed from 3009kg to 5018kg.

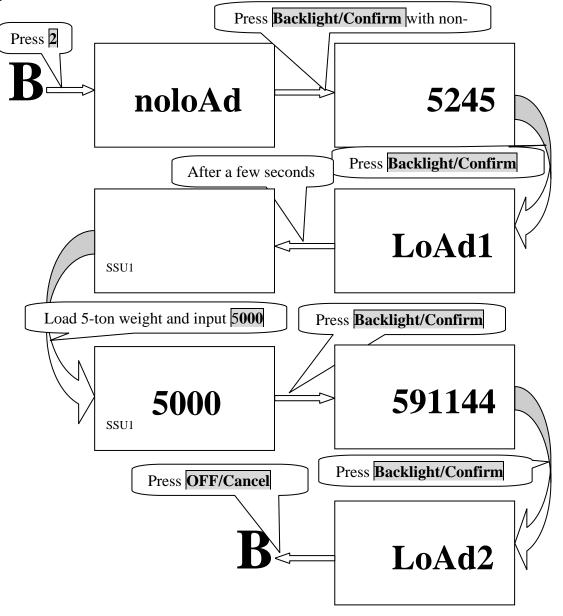


#### **★** Calibration

When 2 key is pressed under Subset menu, "noloAd" is shown, indicating the system is in calibration mode. The calibration procedure is as below:

#### Linear Calibration:

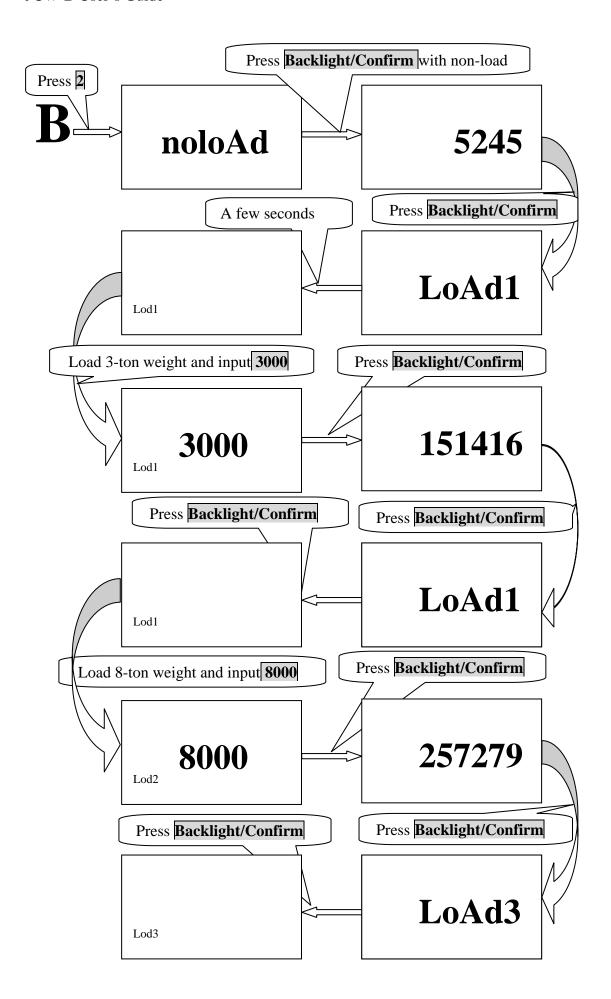
Removal any load from the digital scale. After the system is in calibration mode and "noLoAd" is shown, press <a href="Backlight/Confirm">Backlight/Confirm</a> to start calibration. The display will show "XXXXXXX" which is the internal code for zero. After the code is stable and "Load1" is shown, the display will go blank within 2 seconds. Now enter the load weight value. Press <a href="Backlight/Confirm">Backlight/Confirm</a>. The display will show "YYYYYY" which is the internal code for the load weight #1. After the code display becomes stable, press <a href="Off/Cancel">Off/Cancel</a> to complete the one-time linear calibration between 0 and Load1. If <a href="Backlight/Confirm">Backlight/Confirm</a> is pressed, the system is going to non-linear calibration. The following example is the linear calibration process for a 5-ton crane scale:



#### Non-linear Calibration:

Continuing from the linear calibration, press <a href="Backlight/Confirm">Backlight/Confirm</a> key when "Load2" is displayed. Now the weight value of Load2 should be entered, and then press <a href="Backlight/Confirm">Backlight/Confirm</a> key. Now the "ZZZZZZ" will show. ZZZZZZ is the internal code for Load 2. After the internal code becomes stable, the display will show "Load3". If a three-point nonlinear calibration (0, Load 1 and Load 2) is desired, press Off/Cancel to complete. Otherwise press <a href="Backlight/Confirm">Backlight/Confirm</a>. When the LCD display goes blank, enter the weight value for Load3 and then press <a href="Backlight/Cancel">Backlight/Cancel</a>. The internal code for Load3 is showing. After the display becomes stable, press <a href="Backlight/Confirm">Backlight/Confirm</a> to complete the four-point nonlinear calibration.

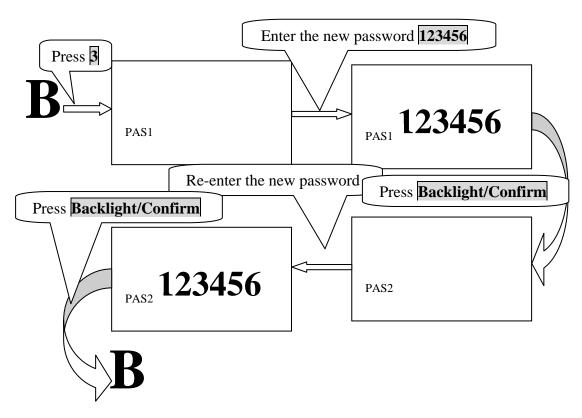
Below is an operating example that a 20-ton crane scale is non-linear calibrated with 3-ton, 8ton and 20-ton weight.



#### **★** Change Password

In Subset Menu pressing 3 key, enter the new password when "PAS1" is shown. Press Backlight/Cancel upon completion. Enter the new password one more time when the display is showing "PAS2" and press Backlight/Confirm. If both passwords entered are identical, the password modification is complete. Otherwise return to Subset Menu and repeat the above process to complete the password modification.

Below example is showing the procedure to change the password to "123456".

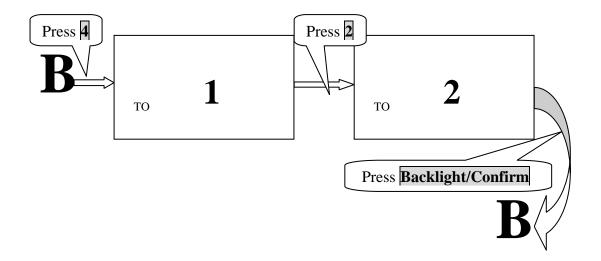


### ★ Zero-point Track Range

When 4 key is pressed under Subset menu, TO 1 is displayed. "TO" indicates the range of zero point tracking and the digit "1" indicates the detail of this range. There are several selections with their correspondence with the numerical keys.

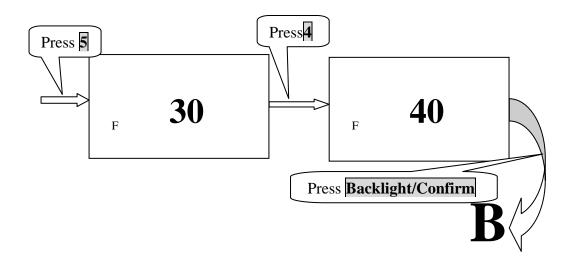
- 1 Off
- 2 Small
- 3 Moderate
- 4 Large

The below example is to change the tracking range from Off to Small.



#### ★ Filter Setup

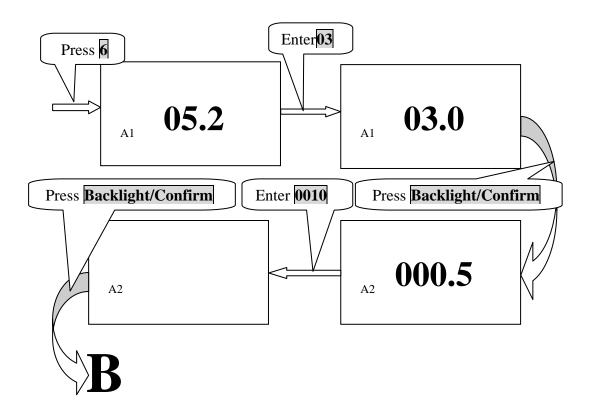
Press 5 key in Subset menu to enter Filter Setup. The display, for example, is "F 30". "F 30" is the extent of filtering. If no filtering change is needed, press Off/Cancel to quit. Otherwise press Backlight/Cancel to proceed to Filter Setup. In the example below, the filter is set from 30 to 40.



#### ★ Auto Print Setup

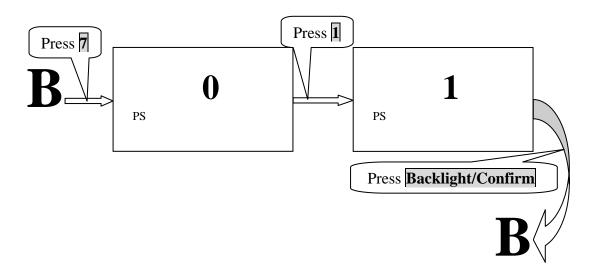
In Subset menu, press 6 key. The display is "A1 05.2", for example. Here "05.2" indicates that the auto-printing will start 5.2 seconds after the weighing completion (or the weight measured becomes stable). If no modification is needed, press Backlight/Confirm otherwise, enter the desired time (0.1~99.9) and press Backlight/Confirm to complete. Now, "A2 0.5" will be shown. Here "0.5" means the data variation range in division, within which it is considered stable during measurement. In this case, the stable range is 0.5 of one division. If no change, Backlight/Confirm to quit. Otherwise enter the new value (0.1~999.9). Press Backlight/Confirm to complete.

In the following example, the auto-print time delay is changed from 5.2 seconds to 3 seconds and the stable range is from 0.5d to 1d.



### ★Printer Setup

In Subset menu, press key. The display shows "PS 1". "PS" is the printer setup and "1" indicates that there is a printer ("0" means there is no printer). Enter "0" to skip printing or enter "1" to select printing. Press Backlight/Cancel to return to Subset menu.



#### ★ Indicator Exchange

Press key in Subset Menu and the indicator shows "XXXXXX". XXXXXX is the calibration factor. If there is no change, press Backlight/Confirm. Otherwise enter the new

factor then Backlight/Confirm. Now the display shows "E X". X can be 0, 1 or 2 with the following implications:

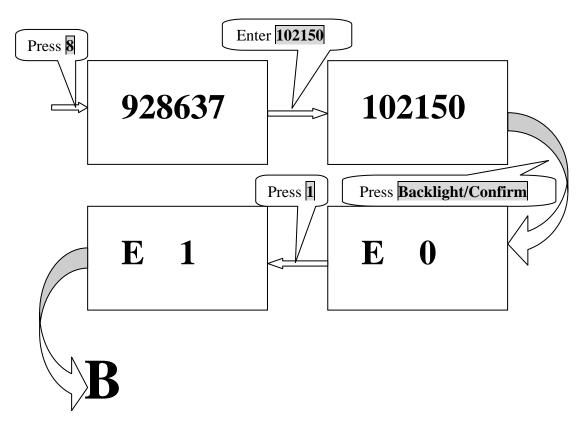
When X=0: if XXXXXX is 123456, then the calibration factor is 123456.

When X=1: if XXXXXX is 123456, then the calibration factor is 1234560.

So X is the power of 10 for the calibration factor.

Press Backlight/Confirm to complete the indicator exchange process.

In the example below, "928637" is the calibration factor. In the example, the calibration factor is changed to 1021500. Since the ratio between 1021500/928637 =110%, the change will result in weight display change of more than 10% from the old factor. Since the LCD display can only display 5 digits, so only 102150 is entered but change the E value to 1 (10x).



#### 8. Battery Charging Method

Both scale and indicator are powered by the batteries. For the scale, the battery can be charged either while it is installed on-scale or it can be taken out of scale and charged. Battery should be charged promptly once the indicator power monitor shows the low battery power. This is to prolong the battery life without over discharge. The power supply for the charger is 220V. It will take over 5 hours to fully charge the battery (depending on the battery power level at the time of charge).

#### 9. Precautions

Digital crane scales are precision measurement equipments. Proper maintenance is important to prolong their usable lifetime. Please note the following:

**i.** Read carefully the user guide before operating the scale and the indicator.

- **ii.** Do not overload the scale.
- **iii.** The crane motion should be up/down in vertical fashion. Do not drag or carry the weight load through the scale.
- iv. The scale can not be used extensively under high ambient temperature. Even with thermal isolation apparatus, effort should be made to minimize the scale's heat exposure. A rule of thumb is to the scale body is cool enough to touch (or below 70° C) so it can operate normally.
- v. Avoid hard banging and wafer from the scale.
- vi. Avoid personal injury by properly hanging of the scale body.
- **vii.** Minimize the usage of backlighting to preserve battery power.
- viii. Nd-H batteries are used for the scale and the indicator. Do not operate under low charge condition to prolong battery life. It is recommended that the battery to be disconnected from the scale if the scale is inactive for over 20 hours. Power off the indicator main if it is inactive for over a week. Charge the batteries each month even without usage.
  - **ix.** The indicator should be stored under dry and cool environment.
  - **x.** Use only the supplied charger and avoid over charging.
- **xi.** Handle gently the indicator handle.
- **xii.** Keep a safe distance when operating the crane scale from the weight load to prevent personal injury from falling objects.
- **xiii.** For Subset menu operation, do not attempt to alter the setup without proper training.
- **xiv.** Please contact us if the scale needs to be calibrated.

#### 10. Trouble- shooting

- i. Beeper continuous beeps load weight is exceeding the weight capacity of the scale. Please reduce the weight of load for normal operation.
- ii. The indicator shows only the time but no weight number no signal reception from the scale. Please check if the A/D convert is properly connected and the battery is properly charged (>6Volts). If there is no reception within 10 meters, please check if the scale antenna has good contact or if it is damaged. Use backup antenna if needed.
- iii. The indicator has no display even LCD screen is lit. It is either due to a bad or lowly charged battery. If the problem persists after recharge of the battery, change the battery.
- iv. If the indicator receives signal from the scale, however the weight display remains at 0 regardless of the weight, please follow the instruction on page ?? . Enter 9999 and press Backlight/Confirm. Then pull the scale slightly to see if there is change in internal code. If there is no change, it indicates that the transducer (or load cell) has bad contact. Please check the connection wire.
- **v.** During the printing process, if there is only printing sounds without paper out, then there is no more printing paper. Please reload. To load the paper, please following these steps:
  - 1. Turn off the power supply and open the printer cover.
  - **2.** Feed the paper through the entry slot. Turn on the power and press Feed. The printer paper should feed automatically.
  - **3.** Close the printer cover.

- vi. If the indicator displays "ERROR0" at power on and no head printing with Print H, they indicate that the printer for the indicator is broken. Please contact the vendor for a new printer.
- **vii.** In case the printing is illegible, the color ribbon need to be changed:
  - 1. Open the printer cover
  - **2.** Carefully remove the old color ribbon. Do not touch the printer bearings.
  - 3. Insert the new ribbon box gently into the left end of bearing axis with right side slightly up. If the ribbon box is not reach the bottom, please press the knob on the ribbon box and rotate slightly by following the arrow indicator. Until the left side of ribbon box hits the bottom, low the right end of the box.
  - **4.** Check if the ribbon is straight. If not, please rotate the knob on the left side of ribbon box to straight it out.
  - 5. Reinstall the printer cover.

Please note:

The printer model and its accessories are as below:

- 1. Roll paper: width: 44.5±0.5mm, thickness 0.07mm. Roll paper OD is <40mm.
- Ribbon: EPSON ERC-05.
   Printer: EPSON-150II.

#### 11. After Sale Service

Please feedback any problem encountered during the usage of the scale to our sales representative. This will ensure us to provide timely technical support and quality service. Please do not attempt to fix the problem which may void the existing warranty.

#### 12. Packaging List

Item	Name	Quantity
1	JCW-B	1
2	Scale	1
3	Instrument Box	1
4	Ribbon (ERC-05)	1
5	Printer Paper	2
6	Indicator Battery Charger	1
7	Scale battery Charger	1
8	User's Guide	1