

IND ICATOR SERIES

Weighing Indicator OPERATION MANUAL



BS03014

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IND-L

1.0 SAFETY AND PREPARATION

Notices and guides to the alarming:

- 1.1 Display and operation panel should be cleaned by the wet towel, but avoid soaking and cleaning these two parts in the water;
- 1.2 In case that the scale is not in correct zero position, please press [ZERO] key, auto zero tracking function will work.
- 1.3 Power off while the mobile phone or the wireless products are used nearby, the display may flash once, then return to normal status. If doesn't, please restart.
- 1.4 The adaptor provided together with the scale should be used when charging.
- 1.5 After long-time use (above a year), when the rechargeable battery can't keep using for long after more than 12-hour charging, the old one should be changed due to aging. You can change it at the nearest agency.
- 1.6 Please notice if the sign  appears on the right corner of the display, the scale should be recharged or changed a new battery. Please do it in time.
- 1.7 When using the electric scale, the load shouldn't exceed the maximum capacity in order to prevent from damaging the scale.

Alarming function:

1.1 Over-loading alarming

When the load on the platform exceeds 3 percent of maximum capacity, "OVR" will appear on the display with an alarming sound-"beep", the load should be removed immediately.

1.2 Low-loading alarming

If there isn't platform on the scale or troubled load cell, "LOW" will appear on the display with an alarming sound-"beep".

1.3 Charging alarming

When the light of low battery voltage appears, you are requested to stop using the scale and recharge it with the provided adaptor over 12 hours. When recharging have finished, the mark light disappear and you can cut off the power.

1.4 Charging light alarming

When battery voltage is low, the light appears in red. When full, in orange.

2.0 DISPLAY AND KEY



Guides to LCD signal: ○ STABLE >0< ZERO ⇄ TARE 🔋 LOW VOLTAGE

- CHECK Key is used for the alternation between normal weighing mode and quantity check operation mode.
At setting status, this key can be used for setting mode key.
- UNITS Key is used for changing units in the weighing mode.
At setting status, this key can be used as shift key.
- TARE Key is used for tare the container weight from the gross weight.
At setting status, this key can be used as decrease key.
- ZERO Key is used for setting or readjusting the scale in correct zero position for accurate weighing operation.
At setting status, this key can be used as increase key.

3.0 OPERATION INSTRUCTION

1. Power on

Turn on the power switch, the LCD display will show 0~F sequentially for several seconds. Then the value of weighing will be zero, and enter weighing status.

2. Zeroing

If the value of weighing is not zero (the zero light doesn't appear) before weighing, press [ZERO] key back the value of weighing to zero for accurate weighing operation.

3. Units selection

Select the current unit in the weighing mode by press [UNITS] key. There are four units (g, lb, oz and t) to be selected.

4. Tare

Put the basket onto the scale platform and press the [TARE]key, then the display will show the indicating arrow. If the display shows that the scale fails to return to zero, you're requested to press the [ZERO] key to zero it, which means the weight of the basket has been deducted. If deduction needed to be cancelled, remove the basket and the display will show the minus, then press the [TARE] key.

5. Weigh check setting

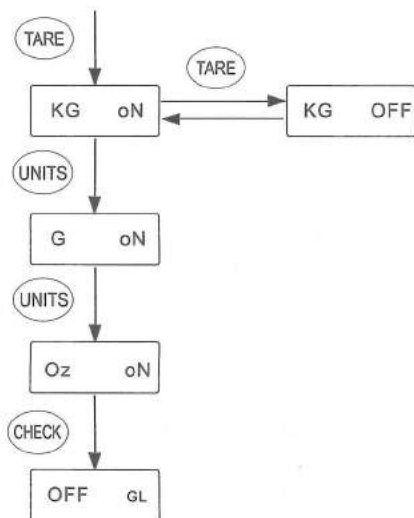
- Press [CHECK], the display will show upper limit value and "H" symbol, press [UNITS], [TARE] or [ZERO] to enter upper limit value.
- Press [CHECK] again, the display will show lower limit value and "L" symbol, press [UNITS], [TARE] or [ZERO] to enter upper limit value as well.
- Now press [CHECK] again to confirm and return weighing status.

4.0 USER SETTING

Hold [Tare] and turn on the machine to enter the user setting mode. Press [Mode] to choose the user setting options and [Units] to choose sub-options. Press [Tare] to revise the mode of ON or OFF or value after confirming the selection.

4.1 Selection of Units

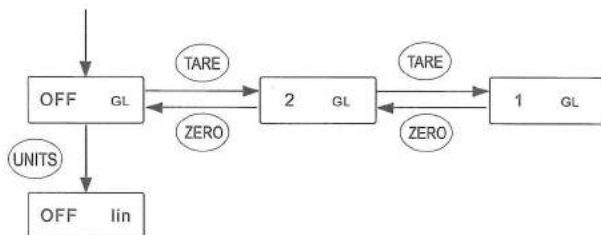
The function is for selecting the mode of units. When the unit is turned off, it can't be got when user shifts the units. Press [Units] to choose the unit and [Tare] to turn on or off the unit. Press [Check] to enter the next backlight selection setting and weight check alarming (refer to 4.2). The steps are as follows:



4.2 Backlight Selection and Weight Check Alarming

4.2.1 Backlight Selection

The function is for choosing the validity of auto backlight. "1" means auto backlight; "2" means the backlight is on all the way. "OFF" means the function of backlight is void. Press [Tare] or [Zero] to choose. And press [Units] to enter the setting of weight check alarming (refer to 4.3). The steps are as follows:



4.2.2 Weight Check Alarming

The function is for selecting the weight check alarming. Press [Tare] or [Zero] to choose the alarming ways. Press [Units] back to the setting of backlight selection and [Check] to enter the next setting of Hold.

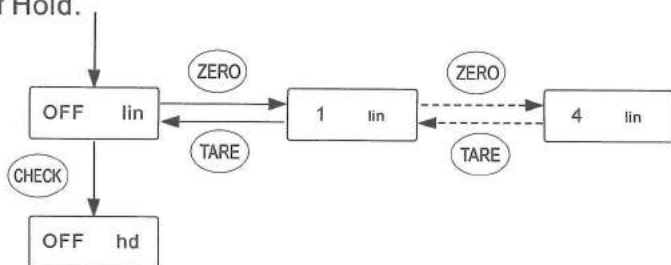


Illustration of parameters:

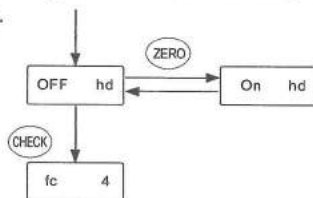
- OFF/ON: Turn on/off the weight check alarming;
- "1": When the weight is less than the lower weight limit or the weight is more than the upper weight limit, the machine alarms. Otherwise, the machine doesn't alarm.
- "2": When the weight is between the upper and lower weight limit, the machine alarms. Otherwise, the machine doesn't alarm.
- "3": When the absolute weight value is less than the lower weight limit or the absolute weight value is more than the upper weight limit, the machine alarms. Otherwise, the machine doesn't alarm.
- "4": When the absolute weight value is between the upper and lower weight limit, the machine alarms. Otherwise, the machine doesn't alarm.

Note: If user wants the machine to alarm at one point, please set the same upper and lower limit value and the mode as ON2 or ON4. If users wants the machine not to alarm at one point, please set the same upper and lower limit value and the mode as ON1 or ON3.

4.3 Setting of Hold and Hold Released

4.3.1 Hold setting

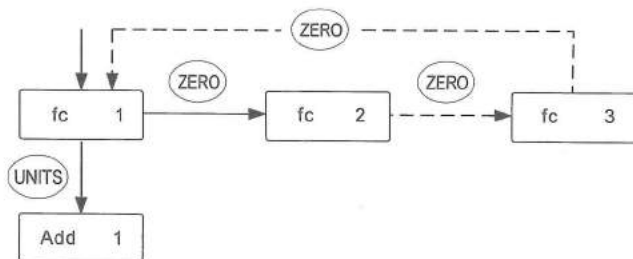
The function is to choose the validity of hold function. "ON" means the function is valid. "OFF" means the function is void. If the hold function is on, and when the weight value is over 9d and the weighing is stable, the machine will hold the value. When the hold function is valid, press [Units] to enter the setting hold released (refer to 4.3.1) and [Check] to enter the setting of selection of communication mode (refer to 4.4).



4.4 Selection of Serial Communication Mode, BPS and Indication Address (Optional)

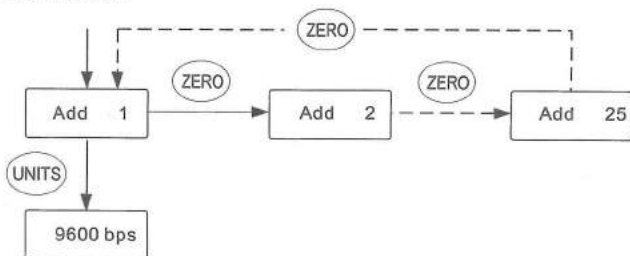
4.4.1 Selection of Serial Communication Mode

This is used to select 4 communication modes that connect to PC. "1" refers to Continuous transfer mode; "2" refers to Instruction response transfer model; "3" refers to Stable transfer mode; "4" refers to Printing mode. Press [Zero] to choose 4 modes and [Units] to enter the selection of indicator address (4.4.2) after confirmation. Press [Check] to go back to the setting of units. The setting operation is as follows:



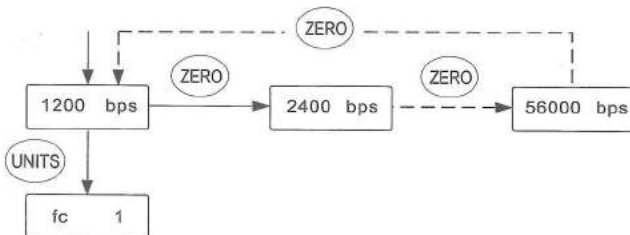
4.4.2 Selection of Indicator Address(Optional)

This is used to choose address. There are 1-25 address selectable. Press [Zero] to choose the address and press [Units] to enter the selection of BPS(4.4.3) after confirmation. Press [Check] to go back to the setting of units. The setting operation is as follows:



4.4.3 Selection of BPS(Optional)

This is used to choose the BPS. There are four communications BPS selectable: 9600,4800,2400 and 1200. Press [Zero] to choose the BPS and [Units] to go back to communication mode after confirmation. Press [Check] to go back to the



5.0 COMMUNICATION PROTOCOLS

The balance use RS 232 UART signal, one frame consists of 10 Bit.

Bit1	Bit2	Bit3	Bit4	Bit5	Bit6	Bit7	Bit8	Bit9	Bit10
------	------	------	------	------	------	------	------	------	-------

BIT1: Start bit BIT2~BIT9: Data bit BIT10: Stop bit All data is on ASCII Code

printing content:

add: A : pc address
 n/w: 0.0001kg : net weight
 u/w: 0.0001kg : unit weight
 Pcs: 1 : quantity

Frame format on weighing mode:

Byte	Notes	Contents
1	Start of text	02H(STX)
2	Indicator Add	A~Z
3	Stable status	0 stable/1 unstable
4	Data Sign	+/-
5~10	Data Sign	6 Byte (From high to low)
11	Decimal	From right to left (0-5).
12~14	Unit Code	A~Z
15	Power	0 normal/1 low battery
16, 17	XOR Checksum	2 Byte A~Z
18	End of text	03(ETX)

XOR=2 \oplus 3.....14 \oplus 15

Note: Checksum of high-half byte and low-half byte less or equal to 9, adding 30H, then the data transfer as number of ASCII code. Example: Checksum of high-half is 6, adding 30H, it come up to 36H, data will be transferred as 6 of ASCII code. Checksum of high-half byte and low-half byte is over 9, adding 37H, the data transfer as alphabet of ASCII code. Example: Checksum of high-half is B, adding 37H, it come up to 42H, the data will be transferred as B of ASCII code.

6.0 SPECIFICATION AND UNIT CONVERSION

SPECIFICATION

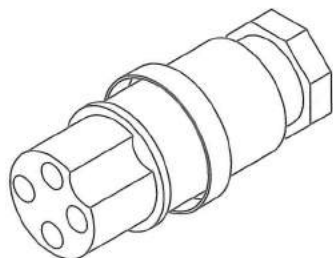
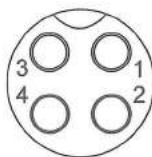
Capacity	Eight radix of capacity: 1.0, 1.2, 1.5, 2.0, 3.0, 5.0, 6.0, 7.5 Capacity L 1kg-75T	
Resolution	0.0001~500	
Response	3~5 seconds	
Display	LCD display with backlight/LED display	
Tare	Equal to Max capacity	
Over-load alarm	Auto alarm when load over 3% of capacity	
Over-load capacity	Protect automatically when the load is 125% of capacity	
Source	Rechargeable battery DC 6V 4Ah Adaptor AC 220V/DC 10V 500mA	
Power	Backlight 90mA; No backlight 70mA	
Temperature	Storage -10~+50 C Work 0~+40 C	
Humidity	Storage 5%~90% R.H. Work 10%~80% R.H.	
Net/gross weigh	IND-L: 1.35/1.53kg	IND-J: 2.17/2.38kg
Package	8 units in one carton box size: 22*30*18.4	weight: 20.5kg carton size: 64*42*40

Unit Conversion

1 kg	=	1000g
1 lb	=	453.59237g
1 oz	=	28.349523125g
1 HL	=	605g
1 t (TOLA)(INDIA)	=	11.6638038g

Load Cell connection instruction:

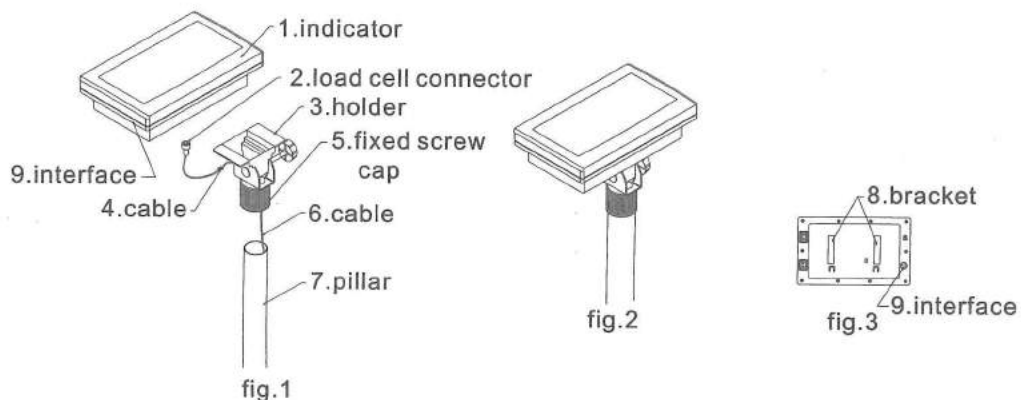
- 1, +5V 2, AGND
3, +IN 4, -IN



7.0 ASSEMBLE INSTRUCTION

Guides to installment of large indicator

1. Firstly putting the cable (6) through the pillar (7), and then insert the pillar (7) into base, fastening the fixed screw.
2. After putting the cable (6) through the holder (3).
3. Then, insert the holder (3) into the bracket (8) of indicator. Joining the load cell connector (2) with interface (9). And linking the cable (4).
4. Adjusting the holder (3) for right position, and then fasten the fixed screw on the display.



Installment Guides to IND-J

