



# WEIGHT INDICATOR **X0**

## User Manual



v.201811

Value Each Gram

## 1. Main Specifications:

A/D resolution:	1000000
A/D sampling rate:	40 times/second
Excitation voltage:	DC 5V
Driving load cells:	4x350 Ω or 8x700 Ω
Display:	6-bit 0.8 inches red LED
Power supply:	100-240V
Working Temperature:	0~+40°C
Storage Temperature:	-25~+55°C
Relative humidity:	≤85% RH
Overall dimensions:	230x160x125mm
Weight	1.7Kgs

## 2. Keypad Functions

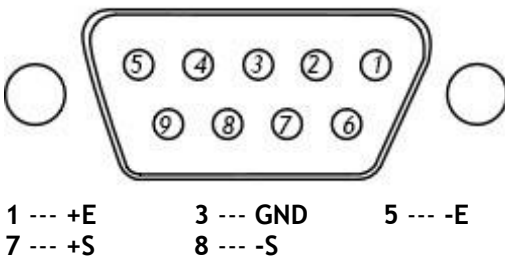
[ * ]	Function selection during normal operation and configuration
[→0←]	Zero display and set zero point or enter a tare value

## 3. Display Status

[ AC ]	Mains power is connected
[→T←]	A weight has been tarred and display the net weight.
[→0←]	Zero display.
[ ▲▲ ]	Weight is stable.
[x10 ]	The display is temporarily set to high resolution.
<sup>lb</sup> [ 0 ]	The unit of weight is lb.

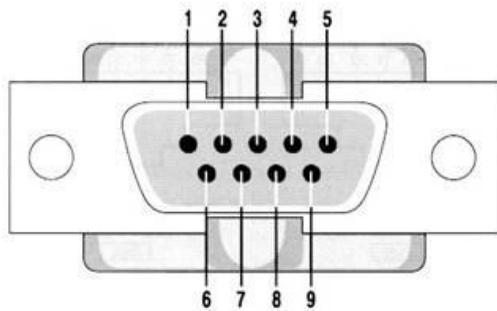
## 4. Technical Description

### 4.1. Load cells to indicator DB9 pin plug



INDICATOR	LOAD CELL
+E (1)	+Excitation
-E (5)	-Excitation
+S (7)	+Signal
-S (8)	-Signal
GND (3)	(GND) shield

### 4.2. RS-232 DB9:



INDICATOR	COMPUTER
Pin3	Pin2
Pin5	Pin5

pin 2 Rxd Input    pin3 TXD Output    pin5 Signal GND

#### 4.2.1. Continuous ASCII RS-232 data output format

Refer to point 6 of 4. Configuration.

#### 4.2.2. Manual and Automatic Printing Output:

Address: Adr = 01, n = 3, gross = 88.69kg, tare = 29.41kg, net = 59.28kg

No:XXXX	No: 3
G:XXXXXXkg	G: 88.69kg
T:XXXXXXkg	T: 29.41kg
N:XXXXXXkg	N: 59.28kg

### 4.2.3. Connecting to a printer

X0	DB9 Pin No.	Printer	DB25 Pin No.
	3 (TxD)		2 (RxD)
	5 (GND)		7 (GND)

## 5. Configuration

Connect load cells to the indicator and set following configuration parameters:

- 5.1 Press [→0←] key and switch on the indicator, after self-checking, press [→0←] key, it displays [CAL SP]
- 5.2 press [→0←] key, it display [-SEt-], press [ \* ] key, display [d 0.01], press [→0←] key to select division of the scale (0.001-0.002-0.005-10-20-50-100-200-500-0.10-0.20-0.50-1-2-5-0.1-0.2-0.5-0.01-0.02-0.05)
- 5.3 Press [ \* ] key to confirm and enter next step of capacity setting, it displays [150.00], change it by keep pressing the [→0←] key until the number changed to be the one you need, and release it and press again to move it to left, and keep pressing [→0←] key again to set the second number....
- 5.4 Press [ \* ] key, display [FLt 0] to set digit Filter parameters: 0-1-2,
- 5.5 Press [ \* ] key, display [AUtP10], set the second number =0 or =1, 0 means no power saving function and 1 means power saving function, set the first number for zero trace range (1--9): 1:0.4 d, 2:0.8 d, 3:1.2 d, 4:1.6 d, 5:2d, 6:2.4 d, 7:2.8 d, 8:3.2 d, 9:3.6 d, and the first number set to be 0, it means no auto zero upon power on, if it is equal or above 1, it will auto zero (less or equal 20% F.S.)
- 5.6 Press [ \* ] key, display [Adr 00], for RS232 output format:  
**Adr=00**  
The ASCII data format is “=, \*1, \*2, \*3, \*4, \*5, \*6”  
<stx> =, \*1, \*2, \*3, \*4, \*5, \*6” (\*1, \*2, \*3, \*4, \*5, \*6” are weight data)  
If the weight is [100.00] kg, the continuous output is “=0.001=00.001=”  
**Address: Adr=99**  
The ASCII data format is “=. \*6, \*5, \*4, \*3, \*2, \*1”  
<stx>=, \*6, \*5, \*4, \*3, \*2, \*1 (\*6, \*5, \*4, \*3, \*2, \*1 are weight data)  
If the weight is [100.00] kg, the continuous output is “=100.00=100.00=”  
**Address: Adr=1—98**  
manual and automatic printing output
- 5.7 Press [ \* ] key, display [b 2400] for setting of baud rate range: 1200→2400→4800→9600
- 5.8 Press [ \* ] key, display [0.00] to confirm configurations and go to calibration mode.

## 6. Calibration

Calibration should be done after setting the parameters

- 6.1 Press [→0←] key, display [CAL SP] for starting of calibration
- 6.2 Press [ \* ] key, display [CAL 00] make sure no anything on the scale and press [ \* ] key to do zero calibration, it will display [-----] till it's done and display the full capacity of the scale [150.00]
- 6.3 Load the standard weight of full capacity on the platform, press [ \* ] key, display [-----] until it displays the full capacity [150.00] and done.  
*(\* If no full capacity standard weight, 60% F.S. standard weight recommended to be used for calibration, change the weight value by keep pressing [→0←] key and change it to be the right one after put the weights).*

## 7. A/D Counts Display

Press [→0←] key three times, display [-A-d-], press [ \* ] key, display [123456], A/D counts 123456, press the [ \* ] key to return to weighing mode.

## 8. Factory Default Reset

Press [→0←] key, display [CAL SP], press [→0←] key again, display [-SEt-], press [→0←] key again, display [-A-d-], press [→0←] key again, display [FACT] for default factory set, press [ \* ] to choose and quit  
*Factory settings: d=0.01, FS=150.00, FLt=0, AUtP=10, Adr=00, b=2400, AUt=0 and clear memory (n=0;H=0;L=0)*

## 9. General Display Mode

Press [ \* ] key for 2 times to increase the accuracy 10 times (x10 display)

Press [ \* ] key for 3 times to display the accumulating numbers [n 3]

*When this display, press [→0←] to clear accumulating weight if it needed*

Press [ \* ] key for 4 times to display the beginning 4 digits of accumulated weight [H 0]

Press [ \* ] key for 5 times to display the last 4 digits of accumulated weight [L 1085]

Press [ \* ] key for 6 times to display to set the accumulating mode [Aut 0]

*\*0 = auto accumulating off, 1 = auto accumulating when weight added, 2 = auto accumulating when weight is removed*

Press [ \* ] key for 7 times to display battery volumen [bt 95]

## 10. Input Data

Keep pressing [→0←] key for 2 seconds, the digital will increase. Click the [→0←] key, it move leftwards

## 11. Zero/Tare

If sometimes the scale is not zero when it power on, keep pressing [→0←] for 2 seconds to zero the scale  
If put some container on the platform, press [→0←] once time to tare the container and get net weight, and the tare status light one, press [→0←] again to remove the tare value and the light off.

## 12. Power Saving Mode (AUtP=X1)

More than 45 seconds no operation, indicator automatically reduces display brightness.

More than 30 minutes no operation, indicator automatically reduces display brightness and display [ - ] for standby.

When press the button or the weight on the scale changes, indicator automatically wake up for weighing.

## 13. Weight accumulation and clear

When weight is stable, press [ \* ] key to accumulation the current weight to the total weight, the total number of accumulation will display [n 12] for 1.5 seconds

Press [ \* ] key for 3 times to display the accumulating numbers [n 3] and press [→0←] to clear accumulating weight if it needed

## 14. Automatic Memory Accumulation

Press [ \* ] key of six times, display [AUt-0] for setting accumulating mode.

14.1. [AUt-0]: Automatic accumulation is off.

14.2. [AUt-1]: Automatic accumulation is on, accumulates when weight is added.

14.3. [AUt-2]: Automatic accumulation is on, when weight is removed.

## 15. Clear Accumulation

Press [ \* ] key for 3 times to display the accumulating numbers [n 3] , press [→0←] to clear accumulating weight

## 16. Low Battery Warning

When the battery capacity less than 20% volume, the low battery warning [ \_ ] indicator on and the indicator display [ bAtt ] and powers off after about 2 hours. Connect the AC/DC adapter to recharge the battery immediately.

## 17. Kg/lb unit Exchange

Press [ \* ] key for 2 seconds to Exchange the weight unit from Kg to Lb, keep pressing it for 2 seconds again to change it from lb to Kg again.

## 18. LED Error Code

[ OUEr ]	weight > FS + 9d
[ -OUEr ]	weight < -2% FS,
[ Error ]	calibration error.
[ _ XXXX ]	battery is capacity less than 20%
[ bAtt ]	low battery warning, recharge the battery immediately

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