

INDUSTRY-401

WEIGHING INDICATOR

USER MANUAL



Soluciones de pesaje y  
equipos para alimentos



**Safety Instruction**

For safety operation pls. follow the safety instruction.



**WARNING**

Setting, Calibration Inspection and Maintain of the indicator is prohibited by Non-professional staff.



**WARNING**

Pls. make sure the weighing display have good ground in using

**ATTENTION**



**WARNING**

OBSERVE PRECAUTIONS FOR HANDLING ELECTROSTATIC SENSITIVE DEVICES

The indicator is the static and sensitive equipment, cut off the power during electrical connections, internal components touched by hand is prohibited, and please take the measure of anti-static.

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# 1 Instruction

BBG P7518 is a economical weighing indicator which specially designed for bench scale. It has friendly display interface, simplicity of operation, stable performance, affordable power saving effort.

## 1.1 Main function

- » Basic Weighing function
- » Count / price function
- » Total function
- » Piece weight /unit price memory function
- » Piece weight /unit price call function
- » Battery voltage instructions
- » Power Saving function
- » Setting value output function
- » RS232C/RS-485 serial communicate interface (Match model)

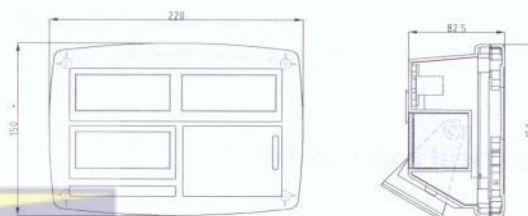
## 1.2 Technical parameter

- » Load cell excitation voltage: +3.3VDC
- » A/D switching rate: 10times/second
- » Input signal range: 0~12.8mV
- » Load capacity: Maximum connect 4 load cell of 350Ω
- » Unit of weight: kg, lb
- » number of verification intervals: 3000e
- » Optional parameters: 1/2/5/10/20/50
- » Display: LCD/LED
- » Keypad: 10 number keys, 10 ↑ function keys
- » communication interface: RS232C/RS485;  
Many baud rate can be chosen:600/1200/2400/4800/9600/19200

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- » Operation temperature: -10~40℃
- » Storage temperature: -20~+60℃
- » Power supply: 4V/4Ah battery; AC220V/50Hz.

## 1.3 Outline dimension



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## 2 Installation

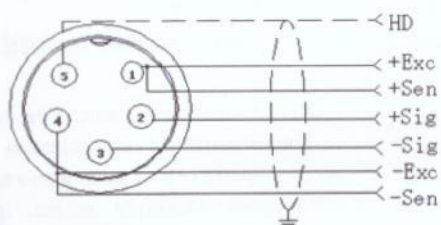
### 2.1 Open - package inspection

Once you open the package, pls check all the parts based on the packing list. If there are something missing or broken, pls contact with our after-sales department as soon as possible to ensure proper use of the indicator.

### 2.2 Electrical connection

#### 2.2.1 Load cell connection

The indicator can connect with 4 load cell of 350Ω at most, 4 wire or 6 wire load cell both ok. In order to get easy connection, LP7518 use quick disconnect as below:



#### 2.2.2 Power supply connection

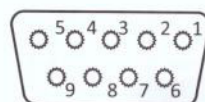
One end of power cable connect with indicator, another one with AC 220V.

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### 2.2.3 Communication interface

RS232 : DB9 Pin, it can connect with big display or computer.

DB9 definition:

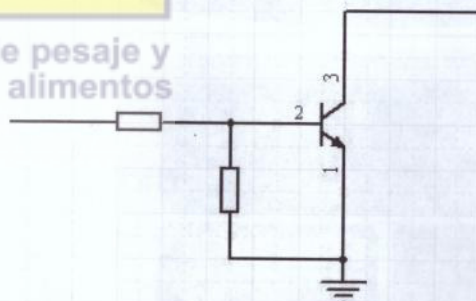


PIN2	TXD	Sending data
PIN3	RXD	Receiving data
PIN5	GND	Ground interface
PIN8	OUT	Setting value output
PIN9	GND	Ground interface

### 2.2.4 Setting value output

In software, setting value output will alert when it is more than upper limit, less than the lower limit or between them. In hardware, it use isolated transistors to output the setting value. Schematic circuit diagram as below:

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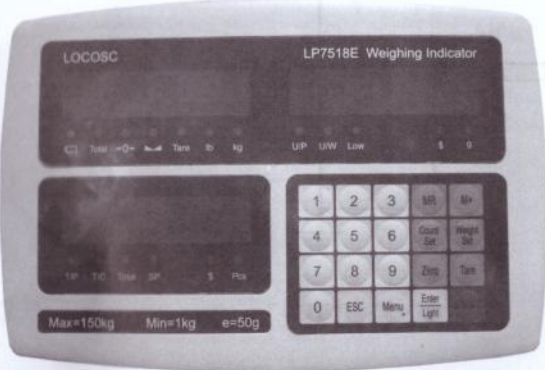
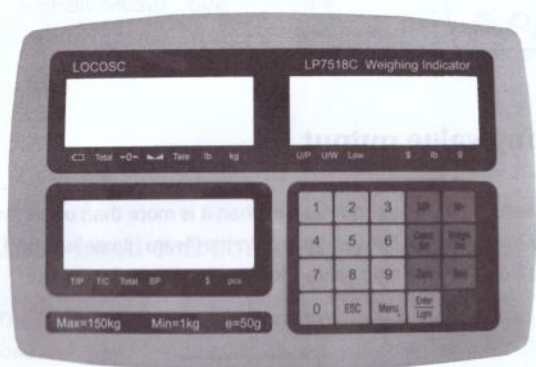


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## 3 Operation

### 3.1 Operation panel



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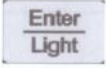
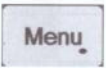
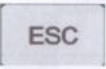
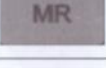
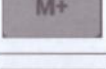
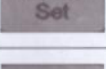
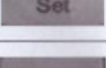
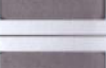
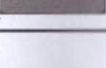
LED

#### Display Instruction

display	instruction
	weighing data
Power	battery quantity indicates
Total	accumulation
Zero	zero the weight within tolerance
Stable	The weighing data is stable
Tare	tare
Kg	kg
lb	lb
Unit price	in pricing function, unit price indicates
Piece weight	in weighing mode, piece weight indicates
LOW	Inaccurate results because of light sample weight
USD	amount unit
g	Sample weight unit
Amount	total amount indicates
Qty	quantity indicates
Setting value	setting value indicates
Piece	quantity unit

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## Keys function

Keys	Keys name	Keys function
	Power on/off	Press 1 second to power on or power off
	Enter/Light	1、 At weighing mode, press it to adjust LED brightness 2、 In menu, press it to confirm current operation
	SET/.	1、 At weighing mode, press it to enter into menu 2、 When input data, press it to insert decimal point
	ESC	Exit current operation
	Memory	Store piece weight or unit price
	Accumulation	Accumulate quantity, amount or weight
	Quantity set	Set the quantity of samples
	Weight set	Set the weight of samples
	Zero	1. At weighing mode, zero the weight within tolerance 2. At data input mode, zero the data
	Tare	At G.W mode, get the tare weight. At N.W mode, clear the tare, get the G.W

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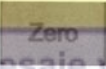
## 3.2 Basic operation

### 3.2.1 Power on/off

At power off mode, press  1 second to power on. After self inspection, it will show battery voltage, then goes to the weighing mode and show current weight.

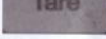
At weighing mode, press  1 second to power off.

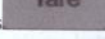
### 3.2.2 Zero

Press  if the weight on the scale is within zero tolerance, indicator show zero automatically.

At motion mode, and light of stable is off, it doesn't work.

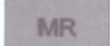
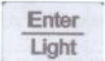
### 3.2.3 Tare

At G.W mode and the gross weight is stable, press , the gross weight is tared, indicator show the Net weight, the "tare" status light is on.

At tare mode, Press , clear the tare weight, the indicator will show the gross weight, the "tare" status light is off.

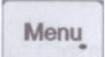
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### 3.2.4 Piece weight /unit price store

At weighing mode, press  , indicator display "no---xx"(xx is the serial number of store). Use the number keys to change serial number, press  , store Piece weight /unit price. If the indicator already has the same serial number, it display "CoUE-0" to remind you whether over or not. Press "1", cover all the store; press "0", back to the last menu, put the new serial number.

Notice: at Count mode, store the Piece weight ; at price mode, store unit price

### 3.2.5 Piece weight /unit price call

press  , enter into menu, input "13" and press enter, the indicator display "no---xx", use the number keys to call the serial number you need, and press enter, back to the weighing mode.

Notice: at Count mode, call store the Piece weight ; at price mode, call unit price

### 3.2.6 Accumulation

At Zero mode, load weight till stable, Press total go to accumulation mode, "Total" light on, display total weight. After 5 seconds, back to the accumulation mode automatically.

Notice:  
At weighing mode, window 1 display accumulated weight

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At count mode, window 1 display high order of accumulated quantity , and window 2 display low order

At price mode, window 1 display high order of accumulated amount, and window 2 display low order

### 3.2.7 Sample weight set

Press "quantity set" or "weight set" keys to set the sample weight set  
Notice: only at count mode can set the sample weight

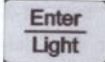
#### Quantity set

At weighing mode, load weight till stable, press the number keys to input quantity of samples, then press "quantity set", get the sample weight automatically.

At weighing mode, use the number keys to input the sample weight, then press weight set, get the sample weight.

### 3.2.8 Unit price set

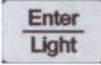
At weighing mode, use the number keys to input the unit price, press

 or wait 10 seconds then finish the set.

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### 3.2.9 Brightness control / backlight switch

To LED indicator, at weighing mode, press  to control the brightness of digital tube. There are 5 levels of control, when get to a maximum brightness, the buzzer alarms.

To LED indicator, at weighing mode, press  to on or off backlight.

### 3.2.10 Battery power indicates

LED indicator: green, orange, red light separate indicate high, medium, low battery power. The light turns orange and flash while it charges, and green means fully charged battery.

LCD indicator: high battery power, the triangle instruction symbol lights; low battery power, it flashes quickly and indicates to charge. While it charges, it flashes slowly; and the triangle instruction symbol lights means fully charged battery.

### 3.2.11 Password

LED indicator: the password fixed as "888888" and cannot change.  
 LCD indicator: the initial password is "888888". Enter the "PSt-48" menu, change the password. When users forget password, enter the "PSt-48" menu to create dynamic password then contact with our after-sales department to decode.

## 4 Menu operation

### 4.1 Access to menu

The way to set menu:

At weighing mode, press "Menu." to enter into menu and the indicator displays "PSt-00".

The way to exit menu:

At menu mode, press "ESC" or "Enter/Light" continuously until displays "PSt-00" then press "ESC" back to the weighing mode.

### 4.2 Menu function

Menu	function	instruction
PSt-10	display accumulated value	Indicator displays accumulated quantity and the total light turns on
PSt-11	clear accumulated value	Indicator displays "CLEr-0", input 1 then clear accumulated value, input 0 it will not work
PSt-12	check piece weight/ unit price	Indicator displays "read-0":0: check piece weight by stored number;1:query records one by one. While query some record, press "Menu." with confirmed message whether to clear or not
PSt-13	call piece weight/unit price	call piece weight/unit price of goods; display "no-xx",use number keys to input stored number
PSt-14	clear piece weight records/unit price	display "CLEA-0",input 0, it not work; input 1 then clear all the records
PSt-15	check internal code	display internal code
PSt-16	check battery power	display battery power



St-17	check software version	display software version "SU-X.XX"
St-18	check hardware version	display hardware version "HU—X.X"
St-20	set work mode of system	display "SYSt-x" X=0: count mode, X=1: price mode, X=2: weighing mode
St-21	set power saving time	display "SdS-xx" xx=00: not save power xx=1-60: saving time, the unit is second
St-22	set communication protocol	display "pc—xx" xx=01: choose communication format 1 xx=02: choose communication format 2
St-23	set baud rate	display "bxxxxx" use number keys to input baud rate, then press "Enter/light"
St-24	set communication module type	display "pt--xx" xx=00: no connected communication module xx=01: RS-232 module xx=02: RS-485 module (Half Duplex)
St-25	set module address	display "Ad-000" notice: according to specific communication protocol
St-26	set Initial zero range	display "CZL-xx" xx=0-20: expressed as a percentage
St-27	set manually zero range	display "SZL-xx" xx=0-10: expressed as a percentage
St-28	set automatically zero tracking range	display "ldF-x.x" expressed as a indexing number, choose among 0, 0.5, 1.0, 2.0, 3.0, 4.0 and 5.0
St-29	set automatically zero tracking time	display "ldS-xx" xx=0-5

PSt-30	set tare range	display "qPF-xx" xx=0-20: expressed as a percentage
PSt-31	set standstill range	display "PUF-xx" xx=0,1,2,5,10, expressed as a indexing number;
PSt-32	set noise filter	display "lbq-xx" xx=0-4, the bigger the value, the stronger noise filter strength
PSt-33	set dynamic filter	display "dbq-xx" xx=0-30, the bigger the value, the stronger noise filter strength
PSt-34	set high order of fixed value	display "Hxxxxx" xxxxx=00000-99999(not including decimal point) at count mode, set the number of warning number at weighing mode or price mode, set the weight of warn weight
PSt-35	set low order of fixed value	display "Lxxxxx" xxxxx=00000-99999(not including decimal point) at count mode, set the number of warning number at weighing mode or price mode, set the weight of warn weight
PSt-36	set warning mode	display "bjs-x" x=0: close warning function; x=1: warn smaller than low order x=2: warn between high order and low order x=3: warn bigger than high order
PSt-37	set warning tone	display "beep-x" x=0: off; x=1: on;
PSt-40	set unit	display "Unit-x" x=0:kg x=1:lb
PSt-41	set division	display "E---x" x=1, 2, 5, 10, 20, 50

St-42	set decimal point	display "dot--x" x=0-4
St-43	set max. capacity	display "xxxxxx" xxxxxx=000000-999999,not including decimal point
St-44	correct zero point	explain in details as below
St-45	correct max. capacity	explain in details as below
St-46	calibration	explain in details as below
St-47	restore default	<b><u>restore default of all data, including calibration information, pls carefully.</u></b>
St-48	change password	only for LCD indicator
St-49	create dynamic password	only for LCD indicator

## 5 Calibration and adjustment

Calibration and correction are two different definitions, as below

Calibration: correct point-to-point from zero point

Adjustment: When the indicator is used long time, zero point or max.

capacity undergo large departure, need to correct.

### 5.1 Indicator calibration

Step of calibration operation:

Step	Method of operation	Display
1	at weighing mode, press "set" to enter into top-level menu	display "PSt-00"

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2	use number keys to input "46" , press "Enter/light" , enter password input state	display "-----"
3	Take out the sealing screw, press calibration switch (no need for LCD indicator)	display "-----"
4	input password"888888" press "Enter/light" to enter next step	
5	use number keys to choose unit, then press "Enter/light" to enter next step	display "Unit-x" x=0:the unit is kg x=1: the unit is lb
6	use number keys to choose division value, then press "Enter/light" to enter next step	display "E---xx" xx=0:division value, choose among 1,2,5,10,20 and 50
7	use number keys to choose decimal point, then press "Enter/light" to enter next step	display "dot--x" x=0-4
8	use number keys to input max.capacity, then press "Enter/light" to enter next step	display "xxxxxx"
9	use number keys to calibration points, then press "Enter/light" to enter next step	display "bdo--x" x=2:choose 2 point x=3:choose 3 point
10	Press "Enter/light" to enter first point calibration (pls ensure the scale is free and stable state)	display "CAL-0"
11	calibrate first point (zero point), wait for 10s and calibrate automatically, then enter next step	display "xx" xx is countdown time
12	then press "Enter/light" to enter next step	display SPAN-1
13	put the weights with calibration weight on the scale, and keep stable .use number keys to input the calibration value, then	display "xxxxxx" is calibration weight

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### 7.3 Battery charge and maintain

(1) Please charge the battery in time when the light indicates low power, so as not to affect battery life.

(2) When you get the indicator, please charge the indicator 24 hours at first.

### 7.4 Default parameter list

Menu	Function	Default	Instruction
PSt-20	System work mode	0	count mode
PSt-21	Power saving time	5	5 seconds
PSt-22	communication format	1	communication format 1, ASCII format
PSt-23	Baud rate	9600	9600bps
PSt-24	Communication module type	1	RS232 module
PSt-25	Module address	1	1
PSt-26	Initial zero range	10	±10%
PSt-27	Manually zero range	2	±2%
PSt-28	Zero tracking range	2.0	2.0d
PSt-29	Zero tracking time	1	1 second
PSt-30	Tare range	100	100%
PSt-31	Sentenced to steady range	5	5d
PSt-32	Noisy filter strength	2	Class 2

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PSt-33	Dynamic filter strength	8	Class 8
PSt-34	Upper limit	weight:2000	2000kg
		quantity:200	200
PSt-35	Under limit	weight:1000	1000kg
		quantity:100	100
PSt-36	Warning mode	3	Higher than upper limit
PSt-37	Buzzer switch when warning	1	on
PSt-40	unit	0	kg
PSt-41	Division	5	5
PSt-42	Decimal point	0	0
PSt-43	Max. capacity	10000	10000
PSt-48	password	888888	888888

Soluciones de pesaje y equipos para alimentos

Attachment 1

#### Packing list

S/N	ITEM	SPECIFICATION	UNIT	QTY	REMARK	PACKING CONFIRM
1	Weighing indicator	LP7518	PCS	1		
2	Plastic bag		PCS	1		
3	bag		PCS	1		
4	USER		PCS	1		

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	MANUAL					
5	LOADCELL PLUG	5 PIN Quick disconnect	PCS	1		
6	RS232	DB9 (male)	PCS	1		
7	Signal cable	Φ3 core shield signal cable	PCS	1	Match	
8	AC Power cable	Φ3 core	PCS	1		
9	Bracket	Installation bracket	PCS	1		
10	Certificate		PCS	1		
11	Packing list	LP7518	PCS	1		



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