

COUNTING SCALE SERIES

Counting Scale
OPERATORS
MANUAL



Electronic Scale

BS21107

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6.0 ERRORINFORMATIONANDSPECIFICATION

ErrorInformation

- 1.Whenthedisplayshows“ADL---”,“ADH---”,“ AD-OVER”,itisnotnormal mode.Pleasedealwithitaccordingtothefollowingsteps:
 - a .Pleasecheckiftheplatterdeviates
 - b .Contactthedealer.
- 2.Whenthedisplayshows“” afterauto-checking,thepresident voltageis5.0Vandthescalecannotbeturnedon.Pleasedealwithit accordingtothefollowingsteps:
 - a. Insertinthespecialcharger,powerthesource.Turnontheindicator again,rechargingthebattery.thescalecanbeusdeonlyuntilthe voltageisover5.3V.
 - b .Contactthedealer.

Capacity	Eightradiofcapacity:1.0,1.2,1.5,2.0,3.0,5.0,6.0,7.5 CapacityL1kg-75T
Resolution	0.001g~2000g
Response	3~5seconds
Display	LCDdisplaywithbacklight
Tare	EqualtoMaxcapacity
Over-load alarm	Autoalarmwhenloadisover9d
Over-load capacity	Protectautomaticallywhentheloadis125%ofcapacity
Source	Rechargeablebattery DC6V4Ah Adaptor AC220V
Power	Backlight90mA; Nobacklight70mA
Temperature	Storage-10~+50C Work0~+40C
Humidity	Storage5%~90%R.H. Work10%~80%R.H.
Pansize	335mmX220mm

UnitConversion

1kg	=	1000g
1lb	=	453.59237g
1oz	=	28.349523125g

5.0 RS232 Communication Protocols

The balance uses RS232 UART signal, one frame consists of 10 Bit

1. Format

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

BIT1: Startbit BIT2~BIT9: Data bit BIT10: Stopbit

All data is on ASCII Code

2. Connection

Standard RS232 pin interface: 2#-TXD(sending), 3#-RXD(receiving), 5#-GND(ground), can be connected with PC directly.

3. Print Label

add:	1	:	Sub-add
n/w:	0.0001	:	Net weight
u/w:	0.0000	:	Unit weight
Pcs:	1	:	Quantity

Note: The above setting related to RS232 is available only when the instrument is with RS232 interface.

1.0 Notices and alarming

Notices:

1. Please clean the display and operation panel with wet towel instead of soaking in water.
2. When the value of the scale is not zero, press [Zero], 0 will come.
3. If mobile or wireless machines are in use near by when turning on the scale, the display will flash once, and then become normal. If doesn't, please turn it on again.
4. The provided adaptor should be used when charging.
5. After a long-time use (above one year), the rechargeable battery can't keep using for long after more than 12-hour charging, which means new one should be replaced.
6. When the display appears charge alarm, please charge or change the battery as soon as possible.
7. The weight can't be over the max capacity, otherwise, the scale will be damaged.

Alarming

1. Overload alarming

When the load on the platform is over 90% of max capacity, the beep will be sound and must remove the load from platform immediately.

2. Unit weight alarm

"Lack of Unit Weight" indicator will appear if the averaged unit weight or set unit weight is not enough for accurate counting operation.

3. Sample number alarm

If the total weight of sample is below limit value, it will indicate lack of sample.

4. Low battery alarm

When appears on the display, you're requested to recharge the scale over 12 hours. When the scale is in recharging, the mark will be flashing. The mark will disappear after recharge has finished.

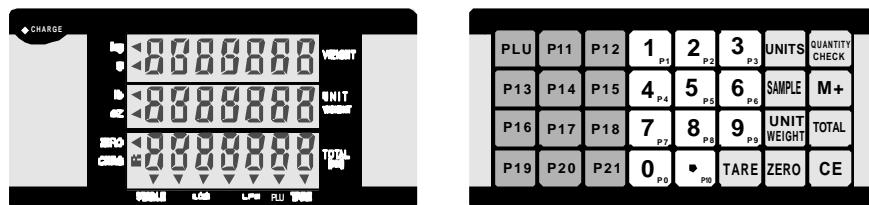
5. Charging light indication

When the battery is charging, the charging light appears in red. When full, in green.

6. Checking quantity alarm

When the checking quantity function is on and the quantity is over upper limitation, the short sound beeps. If the quantity is less than lower limitation, the long sound beeps.

2.0 Display and Key

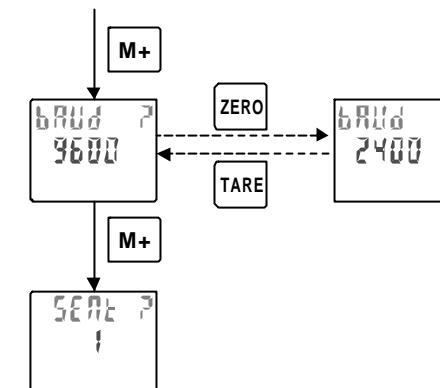


- UNITS** In the weighing mode, there are four units selectable: kg/g/lb/oz
- QUANTITY CHECK** This is for setting upper and lower limitation in weighing mode.
- SAMPLE** setting the counted sample numbers on the platform into scale memory.
- M+** Accumulate counting in accounting mode and save setting in function mode and shift to the next function selection.
- UNIT WEIGHT** setting the unit weight data in a weighing mode. At setting status, this key can be used as exit key.
- TOTAL** is used for recalling the counts data, which restore each time and total weight, which is accumulated.
- TARE** tare in the weighing mode and used as the key to increase the setting value.
- ZERO** zero in the weighing mode and used as the key to decrease the setting value.
- CE** cancel the set numerical data and input new data in weighing mode and delete PLU value in the setting mode.
- PLU** used as entering PLU mode or setting PLU unit in weighing mode and as exiting key in PLU mode.
- P0 - P21** PLU unit key. Used to memory the unit weight.

4.10 Selection of BPS

This is for the selection of communication speed. "2400", "4800" and "9600" are selectable. It is set as "9600" when the scales leave the factory.

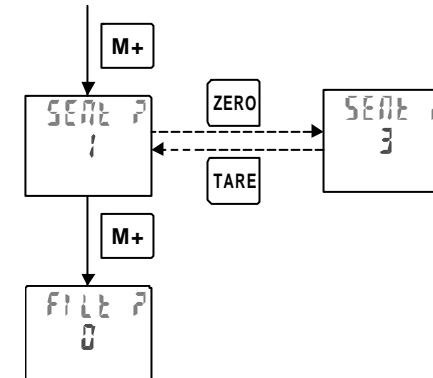
- Select "BAUD?"
- The flashing number of second lines shows the present setting value. Press **ZERO** or **TARE** to select.
- Press **M+** to confirm the revised value or press **UNIT WEIGHT** to cancel the revision and exit the function setting.



4.11 Selection of Transmission Way

This function is active while the balance is connected with printer, computer and the relative equipment. There are 3 selection: 1. continuous transmission 2. one stable transmission 3. transmission as per response

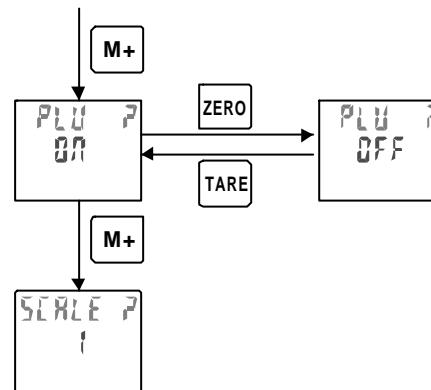
- Select "SENT?"
- The flashing number of second lines shows the present setting value. Press **ZERO** or **TARE** to select.
- Press **M+** to confirm the revised value or press **UNIT WEIGHT** to cancel the Revision and exit the function setting.



4.8 Selection of PLU Function

There are two modes for PLU setting: "ON" or "OFF". The scale is set as ON when it leaves the factory. The details are as follows:

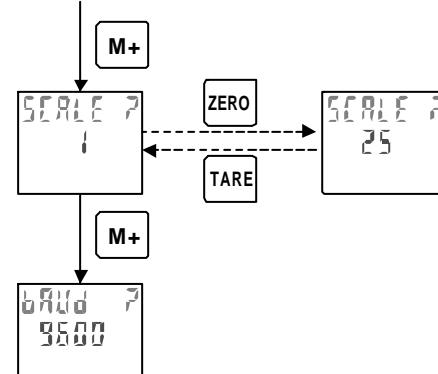
- Select "PLU?"
- The flashing number of second line shows the present setting value.
- Press **ZERO** or **TARE** to select.
- Press **M+** to confirm the revised value or press **UNIT WEIGHT** to cancel the revision and exit the function setting.



4.9 Selection of Communication Address

The function is for the selection of communication address. There are 1-25 addresses selectable.

- Select "SCALE?"
- The flashing number of second line shows the present address. Press **ZERO** or **TARE** to select.
- Press **M+** to confirm the revised value or press **UNIT WEIGHT** to cancel the revision and exit the function setting.



3.0 Operation

1. Power on

When turning on the scale, the display shows **SYS-HP COUNT VOL-6.38**. 3 seconds later, the system check from 0-9 sequentially (the present voltage of the battery is VOL-6.38). Then the value of weighing will be zero, and enter weighing Mode.

2. Zeroing

Please check if the scale is zeroing before weighing (Whether ► points to zeroing sign). If the sign doesn't appear, weight may be wrong, so please press **ZERO** before using.

Note: The zero range is 4% max capacity.

3. Units Selection

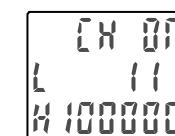
Select the current unit in the weighing mode by press **UNITS** key. Kg, g, lb or oz is available.

4. Tare Function

Put the basket onto the scale pan and press the **TARE** key, then the LCD display will show the indicating arrow ►, which means that the weight of the basket has been deducted. (if the LCD display shows that the scale fails to return to zero, you're requested to press the **TARE** key again). Place the goods into the basket and key in the unit price, then net weight of the goods will be shown negative value. Press [Tare], the display shows 0. Press [zero] and the symbol ► disappear and the tare is canceled.

5. QUANTITY CHECK ALARMING

- Press **QUANTITY CHECK** to enter the quantity check setting as figure 1.
- Choose ON or OFF by **ZERO** and press **M+** to enter next function.
- If select "OFF", press **M+** and the system exits to the weighing mode. Input the lower quantity limit when the second line 'L' flashes as figure 1 and press **M+** to enter next function.
- Input the upper quantity limit when the third line 'H' flashes as figure 2 and press **M+** back to the counting mode. The setting of QUANTITY CHECK alarming is finished.



6. Sample setting (there are two methods of sample setting)

A. Number setting: (in case of the unknown unit weight)

- Place the certain numbers of sample on the platform, press **CE** and the second line will show 0.
- Set the numbers of sample through numerical keys, then press **SAMPLE**.
- 2 seconds after the display shows "CAL--" on the third line, numbers on the three lines show as following figure.

Press **SAMPLE** to input sampled number

Count Sampling

The counting is finished

B. Unit weight setting (in case of unit weight is already known):

- Press **CE** for canceling the previous unit weight and sample setting.
- Press **UNIT WEIGHT** key, the setting is finished and countable.

7. Accumulation

- Press **M+** key in counting mode to enter accumulate mode as the figure 2.
- Save and back to the normal counting mode by pressing **UNIT WEIGHT**.
- The times of counts will be accumulated by repeating the above two steps (99 times can be accumulated).
- Press **CE** to clear the times of counts.

figure2

figure3

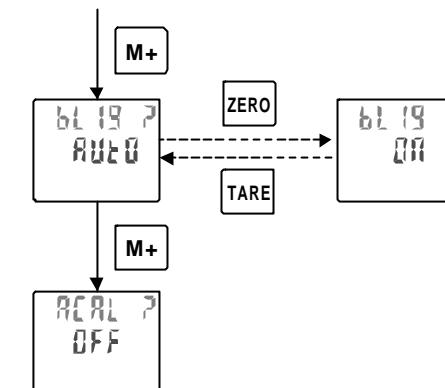
8. Accumulation checking

- In weighing mode, press **TOTAL** key to enter the accumulation checking mode in the counting mode as figure 3.
- Save and back to the normal counting mode by pressing **UNIT WEIGHT**.
- Press **CE** to clear the times of counts.

4.6 Selection of Backlight

There are three backlight ways: "ON", "OFF", "AUTO". The scale is set as AUTO when it leaves the factory. The details as follows:

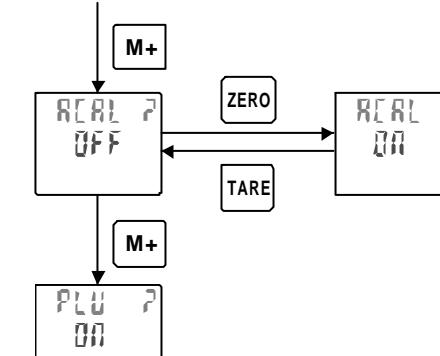
- Select "BLIG?"
- The flashing number of second lines shows the present setting value. Press **ZERO** or **TARE** to select backlight way.
- Press **M+** to confirm the revised value or press **UNIT WEIGHT** to cancel the revision and exit the function setting.



4.7 Selection of Auto Calibration

There are two modes for calibrating the unit weight automatically: "ON" and "OFF". When the auto calibration is On at counting, the system can modify the difference of counting automatically, and the counting function will be more accurate. The mode is set as "OFF" when the scales leave the factory. The details as follows:

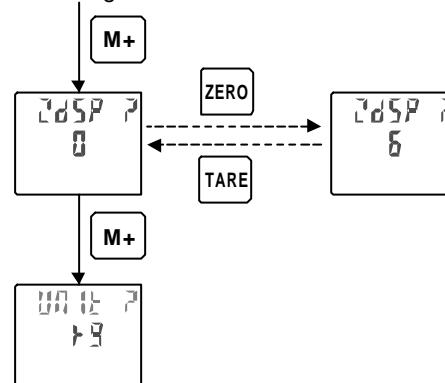
- Select "ACAL?"
- The flashing number of second lines shows the present setting value. Press **ZERO** or **TARE** to select "ON" and "OFF".
- Press **M+** to confirm the revised value or press **UNIT WEIGHT** to cancel the revision and exit the function setting.



4.4 Selection of Zero Display Range

The zero display range is 0-6 (The selection doesn't affect the zero value but the indication). The value is set as "3" when the scales leave the factory. The details are as follows:

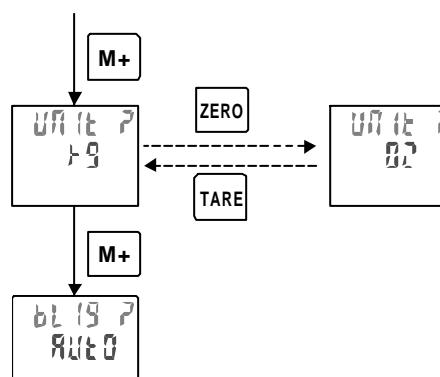
- Select "ZDSP?"
- The flashing number of second line shows the present setting value. Press **ZERO** or **TARE** to select the value..
- Press **M+** to confirm the revised value or press **UNIT WEIGHT** to cancel the revision and exit the function setting.



4.5 Selection of Power On Unit

The setting is for the selection of power on unit. The units: kg,g,lb,oz are selectable. The details are as follows:

- Select "UNIT?"
- The flashing number of second lines shows the present setting value. Press **ZERO** or **TARE** to select the unit needed..
- Press **M+** to confirm, and the used unit after power on zero is then new set unit or press **UNIT WEIGHT** to cancel the revision and exit the function setting.



9.PLU counting function

- In the counting mode (there is unit weight), press **PLU**, the display shows as figure4. Input the PLU value, press **M+** to confirm and save, shown as figure5. The saving is successful. Press **PLU** or **UNIT WEIGHT** to exit PLU mode.
- In the weighing mode, press **PLU**, PLU symbol ► appears. Press **PLU** unit keys again together the corresponding unit weight and enter the counting mode.
- In PLU mode (The symbol ► of PLU appears), press **CE** to enter the deleting mode of PLU value, shown as figure6. If you confirm to delete the PLU value, press **M+** to delete and exit the deleting mode of PLU. If you don't want to delete it, press **UNIT WEIGHT** and back to PLU mode.

PLU-1R
0.5000
P- 11

figure4

PLU-1R
0.5000
P-PRSS

figure5

PLU-dEL
0.5000
P- 11

figure6

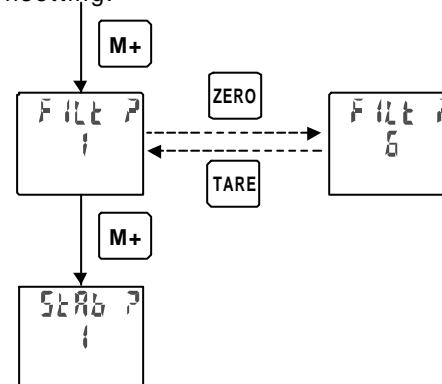
4.0 Description of User setting

In weighing mode, press both **CE** and **ZERO** to shift to user setting mode. The function of keys is as follows.

4.1 Selection of Anti-shake

In order to get faster responding speed or higher weighing stability, the setting can be revised, shown as the figure. The selection for anti-shake is 1-6. The bigger the value is, the higher the weighing stability is and the slower the responding speed is and vice versa. The value is set as "1" when the scales leave the factory. The details are as follows:

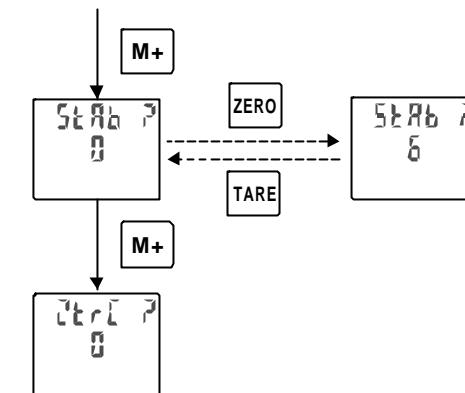
- Enter the user setting and the display shows "FILT?";
- The flashing number of second lines shows the present setting value. Press **ZERO** or **TARE** to select the value.
- Press **M+** to confirm the revised value or press **UNIT WEIGHT** to cancel the revision and exit the function setting.



4.2 Selection of Stable Range

The stable range is 0-6. The value is set as "2" when the scales leave the factory. The bigger the value is, the faster the stable speed is. The details are as follows:

- Select "STAB?"
- The flashing number of second lines shows the present setting value. Press **ZERO** or **TARE** to select the value..
- Press **M+** to confirm the revised value or press **UNIT WEIGHT** to cancel the revision and exit the function setting.



4.3 Selection of Zero Tracking Range

This is for zero tracking range selection in the weighing mode. There are 0-6 selectable. It is set as 5 when the scales leave the factory. The details are as follows:

- Select "ZTRC?"
- The flashing number of second lines shows the present setting value. Press **ZERO** or **TARE** to select the value..
- Press **M+** to confirm the revised value or press **UNIT WEIGHT** to cancel the revision and exit the function setting.

