# **Operating Manual**

#### **Environment Conditions**

 Place the balance in stably and smooth avoiding vibration, sunlight, airflow and strong electromagnetic waves.

• Temperature:  $5^{\circ}$ C  $\sim$   $35^{\circ}$ C

• Temperature Fluctuation: ≤5°C/h

• Humidity :  $50\% \sim 85\%$ 

#### Operation

- Plug in the electronic balance, please!
- Warm up 30 minutes before using and calibration
- Press turn-on key, it displays "8.8.8.8.8.", "Maximum capacity", "S-CAL" in turns. At last, it shows "0", weighing mode ready.
- The tare and object weight must not be beyond the limit.

### **Calibration**

# Single point calibration

Press "CAL" for 3 seconds (enter into calibration mode)  $\rightarrow$  Show "CAL\*\*\* " $\rightarrow$  "g" flicker $\rightarrow$  Put the standard weight on the pan  $\rightarrow$  Show "-CAL-"  $\rightarrow$  Show weight value  $\rightarrow$  Enter into weighing mode. After calibration, if you found it still shows not exactly, please make a new calibration.

# Multi point calibration

Press "CAL" for 3 seconds (enter into calibration mode) → Press "CAL" again and again, it will show different weight value and "CAL L", you can choose one kind of weight values to calibrate on the basis of single-range calibration, or you also can choose "CAL L" to perform the linear calibration.

When the screen shows "no CAL", it means you didn't put weight on the pan in 10 seconds. It will leave calibration mode automatically.

If screen show "E100", that means your former calibration method is WRONG and original correct calibration data is DISAPPEAR. In such case, calibration based on above steps.

### Weighing

- Read the value on the screen after the black spot at the bottom left disappeared.
   (That means the value is stable)
- The Max weighing is the showing largest value after turn on add 9d. (e=10d, "d" is minimum reading) If overloading, it will show "-----"and you must take away the goods at once, or the balance (load cell, especially) will be broken.

#### Tare:

Press the "TARE" key, the balance pan can be tared if the blank spot disappears.
 If there is the black spot, wait for the stability and then Tare

# **Zero-Tracking and Auto Tare**

- Turn off the balance.
- Press and hold "CAL" key and, at the same time, turn on the balance: display shows "-Zero-"
- Loose the key, and press "TARE" key. It will show "Zero\*d".
- Press "TARE" key to adjust the " \* " from 0 to 5,
   "Zero0d" means no Zero-tracking function (sensitivity is the highest),
   "Zero5d" means Zero-tracking is the largest (default setting).
- Then press "CAL" key to confirm, it will show "-tArE-".
- Press "TARE" key, "tArE\*d" will be shown, press "TARE" key o adjust the " \* " from 0 to 9.
   "tArE0d" means no Auto Tare,
  - "tArE9d" means Auto Tare Function is the largest. (default settings)
- Setting will be memorized for next use.

### **Other Functions:**

#### **Units Conversion:**

Press "MODE" about 3 seconds. Then press "TARE" key to confirm, "Unit\*" blinks.

Press the "MODE" key to select the unit which you need, and press "TARE" key to confirm.

#### Counting:

- Press "MODE" key about 3 seconds up to the display flashing.
- Press "MODE" key again to choose "Count" unit. Then press "TARE" key to confirm, show
  "pcs" Press "MODE" key once again, "pcs" can be changed from "10pcs" to "500pcs".
   The larger the number, the higher count accuracy.
- Put the relevant goods what need to count on the balance pan, follow to press the "TARE" key to confirm. It will show "-----". Setting count is done.
- When the counting unit weight is less than 2d, it will display "no-Cou" which means cannot counting. In this case, you should choose several goods together as a Unit to reset.

## Percentage:

- Press "MODE" key about 3 seconds up to the display flashing.
- Press the "MODE" key again to choose "PER" unit. Then press the "TARE"
- key to confirm, show "100%" unit.
- Put the goods on the pan and press "TARE" key, the goods are set as a unit "100%".
- Take away the goods and put on other goods, it will display percentage values.
   When the set goods weight what is divided by 100 is less than 2d, it cannot work and only show "no-PER". It should add to goods weight.

### **Print settings:**

- Press "MODE" button till "Prt" shinning. Then press "TARE" to confirm.
- Press "MODE" button to change it in "hAnd", "AUto" and "Contin".
- Press "TARE" to choose the mode you need.

"hAnd". (Print when you press "PRT").

"AUto". (print when the objects placed on the pan is >3d, and when the value is stable)

"Contin" (Print continuously)

# RS232 port Parameter:

Transmission data format: Every 10BIT as a Data frame,

BIT1, BIT2, BIT3, ....., BIT8, BIT9, BIT10.

BIT1: start bit, BIT2---BIT9: Data bit, BIT10: Stop bit

Baud rate: 9600 bps

All the words are the ASCII code

# Speed adjustment of weighing:

Press "TARE" for 3 seconds, it will show "SPEED!", drop the key, and enter weighing model.

Although the speed is slow, the accuracy is good.

If you choose "SPEED2", the speed is faster, but less accuracy

# Low voltage indication:

When the screen shows battery symbol in the upper left side, it is time to replace the new battery.

### Disposal of electronic devices

The electrical and electronic equipment marked with this symbol cannot be disposed of in public landfills.

According to the UE Directive 2002/96/EC, the European users of electrical and electronic equipment can return it to the dealer or manufacturer upon purchase of a new one.

The illegal disposal of electrical and electronic equipment is punished with an administrative fine.

