

# Weighing Scale

**AW-X series**

## Operation Manual



AW-x-en,V5.1-2007

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## I. Precautions Before Using The Scale

1. Do not let the scale get wet and do not place it in an environment with extreme temperature or humidity.

2. Do not shock the scale and do not exceed the capacity.

\*Permanent damage can occur \*

3. If the power is low or the scale automatically power off, please charge the battery for a full 12 hours before use. Incomplete charging can damage the battery.

4. Before using the scale, place it on a stable platform and adjust its feet to make the scale level.

5. Working conditions:

1) The operating temperature should be: 0°C~40°C

2) Power supply: AC220V±10% or DC6V4A.h storage battery.

## II. Keypad Functions



: If there is a minor weight displayed, without anything on the pan; hit the zero key to clear the display.



: Use this key to subtract the container's weight.



: Unit conversion key.

## III. Operations

(I) Power on-

Remove all objects from the tray; push the switch to "ON" to turn the scale ON. The scale will self-test and then go to


normal weighing mode.

## (II) Power off-



Push the switch to " OFF" to turn the scale off.

## (III) Zero function -


**Zero range :  $\pm$  5% of max. capacity**

Press  key to return the display to zero in case there is any zero drifting while unloaded.

## (IV) Tare function -




Place the container on the pan, press  key to subtract the container's weight when the displayed numeric is stable and then NET sign "  " will be shown. Remove the container, the display will show the gross weight accompanied by a negative sign. Press the Tare key again to cancel Tare mode.

## (V) Unit conversion -

Press  key to revolve units of measure in weighing mode, then the corresponding symbol will be shown (or the Unit conversion LED will lighten).

## (VI) Mul-parameters setting.(The setting of filter parameters,

**Select the range of zero tracking and the range of displaying "0", Select divisions )**

When power-on self-test, press and hold  key until entered the setting of parameters. In the following settings, Press  key to change parameters and press  key to confirm.

1) **Select the filter parameters:** (There are ten classes "n b0" →


"n b9",to be selected) When the scale is used in different situations need to change the response speed,you can change the time to display stably and the degree of stability by setting the filter parameters.(The parameters " n b0" → " n b8" means that the response speed is slow → fast. "n b0" is most stable and slow, "n b8" is fastest. "n b9" is fit for continuous weighing.)

2) **Select the range of zero tracking.** There are six classes to be selected — 0.0d, 0.5d, 1.0d, 1.5d, 2.0d, 3.0d.


3) **Select the range of displaying "0".** There are two classes to be selected — **Zero-S** (invalid) and **Zero-L** (when the weight within the range of  $\pm 3d$ , the display is "0").

4) **Select divisions.** The display of screen is "**d x.xx**" (x.xx is the value of division).



### **(VII) Recharging the battery**

When the battery voltage is low, the POWER LOW indicator  will be shown. Please turn off the scale and then recharge, or else the scale will automatically turn off. When recharging, a yellow LED will light up on the panel. And it will turn RED when fully charged. It will take approx. **12 hours** to fully charge the battery. To ensure the battery voltage is in full, we recommend charging an extra 3~4 hours.

### **(VIII) External calibration**

1. Keep pressing  key and switch on the scale simultaneously.




After power-on self-test, it will display "CAL". And press key to show "0".



2. Place any weights on the platform. Whereafter, input the value (unit: g) of the weights via  key to input numerical value and  key to shift.

3. Press  key for confirmation. The value of weight on the platform will be shown. The calibration is now completed.

#### IV. Instructions of serial communication (optional)

##### 1) The Setting of serial communication

Turn the scale on; press and hold  key until the end of self-test to enter the select of baud rate parameters. There is three classes to be selected — **2400bps**, **4800bps**, **9600bps**; the display of screen is **bAud 24**, **bAud 48**, **bAud 96**. Press  key to select and  key to confirm.

Then enter the setting of the mode of data transmission. There are two kinds to be selected — **St** (output once when the reading is stable), **Co** (continue output). Press  key to select and  key to confirm.

##### 2) Data Format Of Serial Communication In Weighing Mode:

Status 1	Status 2	Data	Unit	Newline
1 2 3	4 5 6	7 8 9 10 11 12 13 14	15 16 17 18	19 20

State 1 (2 byte)

State 2(2 byte)

**OL:** Overload

**GS:** gross mode

**NT:** subtle mode

**ST:** stable

**US:** unstable

Data (8 bytes)

2D (HEX) = "-" (minus)

2B (HEX) = "+" (plus)

2E (HEX) = "." (decimal)

20 (HEX) = " " (space)

UNIT (4 byte)

g= 20 (HEX) ; 20 (HEX) ; 20 (HEX) ; 67 (HEX)

kg= 20 (HEX) ; 20 (HEX) ; 6B (HEX) ; 67 (HEX)

lb= 20 (HEX) ; 20 (HEX) ; 6c (HEX) ; 62 (HEX)

oz= 20 (HEX) ; 20 (HEX) ; 6F (HEX) ; 7A (HEX)

CR= Od (HEX) ; Oa (HEX) ;

**EXAMPLE:** (Stable net +16.8g)

Status 1, Status 2,

DATA

UNIT

CR

**ST**

**NT**

**+16.8**

**g**

**OD,OA**