



Operation Instruction



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Memo

1.The main technical parameters

Model	Series Analytical Balance(0.1mg/1mg)
Accuracy degree	I / II
Rated load	50g-1000g
Accuracy	0.1mg / 1mg
Load cell	Electromagnetic force sensor
Stabilization	≤8s
INT time	2/4/8 or 2.5/5/10
Product size	350*210*355mm
N.W/G.W	6.2kg/7.8kg
Power supply	100-240V
Power consumption(V.A)	15
Calibration weight	50g/100g/200g
Calibration way	Internal or External
Warm up time(min)	180
Interface	RS232

2.Installation diagram

5.Trouble shooting

Problem	Causation	Solution
Nothing displayed	<ul style="list-style-type: none">• No power• AC/DC main transformer is broken	<ul style="list-style-type: none">• Plug in the AC/DC adapter• Replace the transformer• Send it to the services if it is broken again after replacement
Displayed value is unstable	<ul style="list-style-type: none">• Bad working environmet• The door of the chamber is not close properly• There is an object or a crash between the pan and the shell• Unstable power supply exceed the limit• The object weighed is unstable (evaporation or absorption of moisture)	<ul style="list-style-type: none">• Improve working condition to avoid vibration or breeze• Close the door properly• Remove the object and rotate the pan to avoid the crash• Connect an external AC main stablilizer
There is a big error between the actual value and displayed value	<ul style="list-style-type: none">• The balance is not calibrated• The display is not tared before weighing• The balance is not properly leveled	<ul style="list-style-type: none">• Calibrate the balance• Press TARE key to zero the display• Level the balance by turning the adjusting feet

4. Care and maintenance

The analytical balance is a highly precision instrument. it should

be handled carefully as other precision instrument in the laboratory.

1. Do not use a sharp or rough object such as a pen or ball pen etc.

2. To touch the keys. use your finger only;

3. Do not let any object fall on the pan, otherwise the weighing system will be damaged;

4. Do not expose the balance in high temperature or mill dust environment for a long time;

5. Do not disassemble the balance without permission;

6. It is better to cover the balance after use;

7. Keep the balance clean and dry.

8. Cleaning

*Unplug the AC adapter before cleaning;

*Do not use any aggressive cleaning agent such as solvent;

*Use a piece of wet smooth and soft cloth with some mild detergent such as soap;

*Make sure no liquid enters into the balance;

*After cleaning, wipe down the balance with a piece of soft and dry cloth.

Print

There are 5 molds could be choose:

-p r t-0: print continually

-p r t-1: print every one second

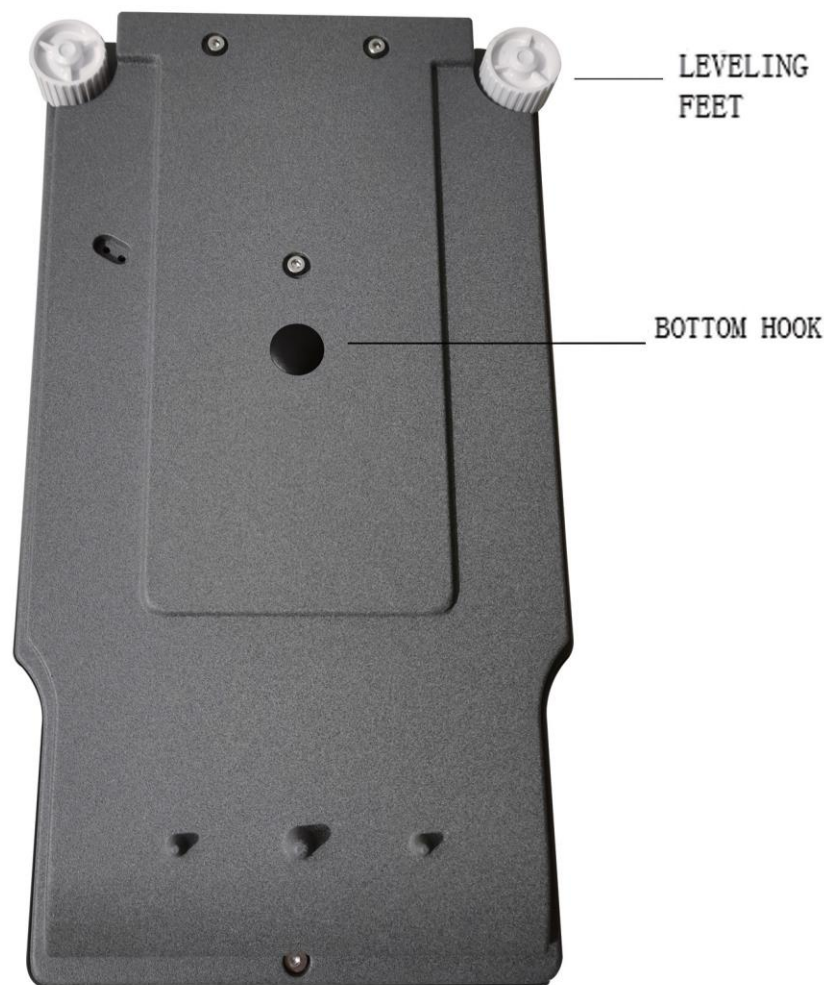
-p r t-2: print every two second

-p r t-3: print every three second

-p r t-4: print every four second



Print



(8) Counting function

The items used for counting must be standard parts, individual unit weight difference should not be big

*four molds can be chosen

---Cou-05

---Cou-10

---Cou-15

---Cou-20

*long press PCS button, and the display will show "5"

"10" "15" "20" in turn, then put the goods to be counted onto the weighing pan, the quantity must be the same as the display showed, then press CAL, it will appear the line "---", after several seconds, it will show the weighing number on the screen, take out the weighing product and zero will be shown on display, then you could count the same goods with the quantity you want.

(9) Weighing

*power on enter weighing mode

*after calibration, the weight shown in display is the weight of weighing objects

(10) Tare

*put the container on the pan, it will display the weight value

*press TARE until zero is shown on screen, put the weighing objects in the container to weight the net weight

B: External calibration balance

*long press Cal button until the display show CAL

*place corresponding value weight on the pan which shown the display

*remove the weight , then the calibration is finished.

(5) Unit conversion

Long press Unit button and the unit will show on display, choose the unit you want for weight

(6)INT adjustment

*four molds can be choose

INT-0 Fastest

INT-1 fast

INT-2 slow

INT-3 slowest

(7) Stabilization adjustment

four molds can be choose

ASD-0 best

ASD-1 better

ASD-2 good

ASD-3 normal

3. Operation instruction

(1) Preparation

*unpack the box and removing all packing, install the pan

*place the balance on a stable work surface, free from vibration, sunshine and air flow

* $20^{\circ}\text{C} \pm 2.5^{\circ}\text{C}$ for first class balance with a fluctuation of temperature not greater than 1°C/h

*relative humidity: first class balance 50%-75%

*working voltage: 100-240V 50~60HZ 0.5A

(2) Operation

*check level indicator before use it, if bubble is not in center, adjust the level feet and make it in center

*balance uses touch button, can carry out multiple keyboard control, operation flexibility, can press corresponding button for conversion and select each function simply.

(3) Power on

A: External calibration balance

*after plug in, the balance start electrify, normally power on the display and start operation after warm up the machine.

*press power to let display on, the display will show all symbol, after 2 seconds, will show the max weight on the display, then it will enter weighing mode:0.0000g, press OFF button again for power off

B:Internal calibration balance

*after plug in, the balance start electrify, turn on the balance, the display will start warm up(30 minutes), it will auto-calibration once warm up finished. You could start weighing after displaying 0.0000g.

*for an urgency use. Power on and press the “ON” button again in the warm-up time. It will auto-cal and you could start weighing after displaying 0.0000g on the screen.

(4) Calibration

The high accuracy analytical balance with two kinds of style: automatic internal calibration and external calibration

A: Automatic Inter- cal balance

Method 1:

When the balance is displayed as 0.0000g, press the “CAL” button. When the display shows “CAL INT” , release the “CAL” button. The balance enters the automatic internal calibration state and displays “CAL” . Waiting for a dozen seconds and the calibration is over. The balance shows 0.0000g and the balance returns to the weighing state.

*For quick enter the weighing mode

1. Turn on the scale by press the button of “ON” , normally it will automatic start to warm up 30minutes. When it in warm up state, the display will appear t-00-01(02/03/04...), in this state, press the button of “ON” , then press the “TARE” button, after a few seconds, the 0.0000g will show on the display, then you can start weighing.

2. When the scale in the sleep mode, the display will show “Close” if you want quick enter weighing mode, press the button of “ON” , the screen will display “INT-CAL “, after it disappeared, it will in the state of “.” , then press the button of “TARE” , after a few seconds, the 0.0000g will show on the display, then you can start weighing.

Method 2:

External-cal(Calibrate with calibration weight)

Pressing the button of “ON” and “CAL” in the same time. The screen will display “--CAL— “ and please wait a few seconds until the calibration weight value to be displayed. Place the corresponding value weight on the weighing pan and wait for the value displayed stable, then remove the weight and calibration finished.

*Noted: In normal use, the balance should be calibrated using internal calibration.