4、The balance is exposed to radioactive environment or corrosive substances；

5、Users open the balance without authorization or repair the balance without our permission.

Eighth:Package

No.	Content	Quantity
1	Electronic Balance	1
2	Weighing Tray	1
3	Power Cord	1
4	Instruction	1
5	Warranty card	1
6	Package	1

Note：Please save the carton in case of reusing.

Appendix

The steps of connecting to computers:

1. Click the "start menu "

Program

└──→ **Attachments**

└──→**Communication**

└──────→ **Hyperterminal**

2、Enter a name: ICON SELECTION,Click OK

3、Ignore the previous column ,Select "connection with a (N)：com 1" ,Click OK:(1)Baud rate ：1200（or 2400）

　　　　　(2) Data bits ：8

　　　　　(3)Parity ：No

　　　　　(4)Stop bit ：1

　　　　　(5)Data flow control ：hardware

Click OK，display the current weighing value

TPS80001HB
Precision Electronic Balance

USER MANUAL

Contents

Sixth:Maintenance

1、 Don't use sharp objects (such as a pencil, ball pen) to touch the button, please use your fingers ;

2、 Be careful not to let the object fall from on the scale from a high place, lest damage sensor ;

3、 Don't expose the balance to over a long period of time under the environment of high humidity or dust;

4、 After using， It is better to cover the shelter to prevent dust intrusion ;

5、 When weighing powder and fine particulate matter ,you should use container to avoid powder and fine particulate matter falling into the tray at the bottom of the weighing sensor ;

6、 Wear gloves to take weight when calibrating;

7、 Keep it clean and dry.

When cleaning must be attention :

1)Before cleaning,unplug the power adapter ;

2)Don't use corrosive cleaner (such as solvent),water can be used with a soft lint-free cloth dipped again after some neutral detergent(such as soap) to clean .

3)When cleaning,don't let the water drop into the balance;

4)After cleaning,use dry out hair soft cotton wipe balance up carefully.

Seventh:Warranty

Our product have one year warranty (from the date of selling)

During the warranty period, the user can replace or repair free of charge defective products with warranty card and commercial invoice.

Except for the following situations ;

1、 Exceeding the warranty period;

2、 Users own fault to broken the balance(overloading or pressing with hands) ;

3、 Users operate the balance not following the instruction ;

Fault	Reason	Way
No display	Unplugged ； Power transformer is damaged； The red light brights,press "ON/OFF",no display;	Plug the power cord； Change power transformer； If it still doesn't work,you should send it to maintenance department ; The button panel is damaged.
Unstable display value	The bad working environment； Windshield is opened； Foreign body between the tray and working platform or be touched; Unstable power supply,beyond the maximum ; Unstable weighing things; （Absorb the moisture or evaporation）	Improve the working environment to avoid the influences from vibration and air current; Close the windshield； Take away the foreign body,and turn tray ; Access to AC 220V power regulator;
Display values do not tally with the actual weight	No calibration； No taring; Not adjusted the levels ；	Calibration; Press"→0←"； Adjusted the levels.

First:Introduction

This specification is applied to TPS8001HB series multi-function precision electronic balance .

TPS8001HB series multi-function precision electronic balance is the latest development of a new generation of products from CHANGZHOU XINGYUN ELECTRONIC EQUIPMENT Co.,Ltd.It adopts single sensor with high precision.

It has the imported integrated circuit ,Stable and reliable performance,easy to operate.

Features:

◇ Colorful shell,fashionable and simple appearance,LCD display，the three of glass doors windshield；

◇ Easy to operate and learn，unit conservation.The software system of TPS8001HB series precision electronic balance provides the function of selecting the unit for user;

◇ Be able to tare,reset, cumulative, overload,fault alarm within the scope of the whole range;

◇ With optional functions of counting and other several functions ;

◇ The adjustable minimum weighing value ,choose from 1D to 5D arbitrarily ,factory value:4;

◇ The standard configuration AC/DC,4V battery can be recharged ;

◇ Selectable RS232 interface,rear display.

Model	TPS8001HB
Max Capacity	10 kg
Accuracy level	III
Resolution	0.1 g
Repeatability	±0.2 g
Liner error	±0.3 g
Stable time	≤ 3s
Operating Temp	17.5℃～22.5℃
Pan size	(160 x 160) mm
Outlook dimension	(270 x 200 x 80) mm
Power supply	Power cord
Calibration	External
Net weight	2 kg
Gross weight	2.5 kg
Packing size	(310 x 230 x130) mm
Communication interface	RS232

200, 300, 400, 500" Press "→0/T←" and choose one mode value.

   1)Place the things with same quantity with mode value on the weighing tray and then press "COU" . Then "= = = = = =" will be displayed.

   2)Very soonly , it will display stable mode value and then the setting of counting operation is finished. After that, counting operation could be conducted.

   3)Place the things in the weighing tray and display will show the quantity of thing.

   6) Press the "COU" button and then "= = = = = =" will be displayed. The balance may quit counting operation state immediately and return the weighing state.

4.4 Tare function

(1) If there is a container on the weighing tray, the balance displays the weight of container.

(2) Press "→0/T←"and then "0.0" will be displayed. It indicates that the tare has been deducted.

(3) Place the thing into container and the balance will display the weight of thing.

4.5   Minimum weight setting

Under the weighing range you need, you can choose the minimum weight as your requirement ,for example ,we choose the "0.0" accurate ,so we can set the minimum as following:

1. Turn on the balance when it display"0.0"

2. Press"→0/T←"+"COU",when it will display "1d"(there are 1d to 5d five digits can choose)

3. Press "COU" or " CAL " to choose the minimum weighing you required. then press"→0/T←"to confirm your choice.

Fifth:Trouble Shooting

3)Display stably "1000.0"and then remove weight. The "= = = = = =" will be displayed;

4)Display blinkingly "500.0" standard weight value then place 500g weight,the "= = = = = =" will be displayed;

5)Display stably "500.0"and then remove weight. The "= = = = = =" will be displayed;

6)Display blinkingly "200.0" standard weight value then place 200g weight,the "= = = = = =" will be displayed;

7)Display stably "200.0"and then remove weight. The "= = = = = =" will be displayed;

8)Then the "0.0" will be displayed;. The calibration is finished.

Fifth:Function setting

4.1 Weighing

(1)Turn on the balance to make it warm up stably and display "0.0".

(2) Place a thing on the weighing tray and display the weight of the thing. It indicates the weight is already stable when the display value is not changed again.

4.2 Unit change

There are six units can be choose,press "UNIT" and choose the unit you need : g/oz/ct .

4.3 Counting operation

TPS8001HB Series precision electronic balance meets the requirements of various industrial count ,especially for small parts,when counting,please make sure all the weight of the sample must be consistent ,and it requires the weight of weighed thing must heavier than the four times of minimum reading value,or the difference of counting could be great if not counting can't be done.

   Step:

   4)When the "0.0" displayed,press "COU" button and "COU" will be displayed.

   5) Display blinkingly one of value of counting mode, "5,10,20, 40, 50, 100,

Second:Cautions

2.1、 Installation

1)Please be careful open the package, remove scales and the items in the cabinet gently ,then save the cartoon in case of reusing .

2)Put on the tray,plug the power cord(input:220v).Please place tray correctly,or there will be a tip of can't be weighted .

2.2、 The choice of the working environment

When TPS8001HB series precision electronic balance weighs under the condition of the conventional laboratory or industrial measuring room ,it should choose work environment according to the following requirements:

(1) The workroom should be stay clean,dry;

(2)It should be placed in a stable and fixed worktable ;

(3) Working platform should stay away from windows and doors, which can reduce airflow impact due to open a window or the door;

(4) Working platform should be set in the place of less vibration and interference

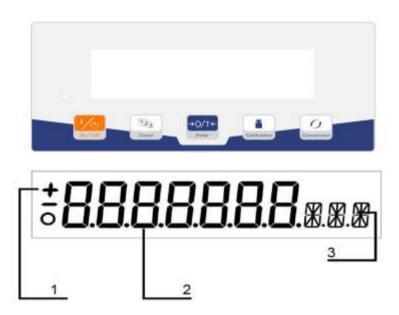Less affected by the vibration around the room ,it is the good position to place the worktable ;

(5) It should be placed in to avoid direct sunlight and away from the heater, that easy to cause changes in temperature ;

(6) Please avoid connecting to big machine or Equipment with interference;

(7) Dry environment prone to electrostatic , can take corresponding measures to prevent electrostatic from weighting;

(8) It should be stay away from anything with magnetism;

(9) Can't be used in the explosive dangerous area;

(10) Can't be used in high humidity or high dust environment for a long time;

(11) When transferring balance from the cold environment from the warm environment,the moisture in the air can be condensation in the balance .That affect the accuracy and reliability of the weighing.In order to avoid this

(12) phenomenon ,you can place it not plugged in at room temperature 2 hours before using.

2.3、 **Before using**

1)Place the balance level

2)Use balance adjustable leg to make the bubbles in the middle of the circle

3)Ensure it warms up fully (warm up for an hour)

2.4、 **Display Icon**

1. Status icon:"+"and"-"is the reading state, the "O" means the weighing
2. process ,when it disappear ,the weighing is stable.
3. The digits :the digits mean the object weight
3. The unit icon

Third:Calibration

When the balance works a long time,due to the temperature、humidity ，it makes balance has small error .So when use the new balance for the first time,the balance must be calibrated.

3.1 Calibration weight

Model	Weight
TPS8001HB	5000g

Note:This series balance we don't match with calibration weight.

Warm up the balance after 30 minutes,it doesn't calibrate until the balance stable.

Take TPS8001HB for example

A 、 One-point Calibration

1) Turn on the balance it shall display the weighing mode as "0.0", then press the "Cal" button until shows "CAL", then release.

2) Display blinkingly the "500.0" and then place same value standard weight,The display show on"= = = = = =" ,

3) Display stably "500.0"weight value and remove weight,then "= = = = = =" will be displayed.

4) Then the "0.0" will be displayed;. The calibration is finished.

B、Three-point Calibration

1) Turn off the balance,then press the"CAL"button and turn on the balance simultaneously until the display shows "CAL",then release.

2) Display blinkingly "1000.0" standard weight value then place 1000g weight,the "= = = = = =" will be displayed;