

ELECTRONIC ANALYTICAL BALANCE

USER MANUAL

I About the Balance

Specification

Model	Range	Division	Repeatability	Linearity	Pan Size
FA1004N	100g	0.1mg	0.2mg	0.5mg	ø 80mm
FA1204N	120g	0.1mg	0.2mg	0.5mg	ø 80mm
FA2004N	200g	0.1mg	0.2mg	0.5mg	ø 80mm
FA2104N	210g	0.1mg	0.2mg	0.5mg	ø 80mm
FA2204N	220g	0.1mg	0.2mg	0.5mg	ø 80mm

Features

Stainless Steel Pan

Super bright LCD display with backlight

RS232 Interface

Mains adapter supplied as standard

Windshield supplied as standard

Height adjustable feet

Auto Calibration

Selectable measure units:mg, g, oz, ct

Memory for accumulated time

Applications

Weighing

Net weight / tare

Below balance weighing


Piece counting function


9.1 DATA OUTPUT


1	Model or a decimal point
2	A space or a decimal point
3	A space or *
4	+ or - or a decimal point
5	data
6	Data or a decimal point
7	Data or a decimal point
8	Data or a decimal point
9	Data or a decimal point
10	Data or a decimal point
11	Data or a decimal point
12	Data
13	Unit 1
14	Unit 2
15	Unit 3
16	Enter
17	Wrap


7.5 INTERNAL AUTOCALIBRATION TIME SETTING

Press "ON" until it show "AUTOCAL", Press "0/T" to enter the automatic calibration time setting, press on to choose the different time:

-----10 minutes automatic calibration

-----30 minutes automatic calibration

-----60 minutes automatic calibration

-----Turn off the automatic calibration

Press "0/T" to confirm the setting

8.1 FAULT JUDGMENT

If you come across any problem, you can check it by yourself and find the reasons.

FAULT	REASON	EXCLUDE
No display	Not connected to the power supply; Fuse is broken; Power transformer damage;	Plug in the power line; Replace the fuse; Replacement of power transformer; Contact factory
Weighing unstable	Bad working conditions; The wind screen is open; Something between the table and balance; The power unstable; Weighing unstable;	Keep the environment stable, close the windows and doors; Close the glass door; Take away the things; Connect the stable power;
The weighing digits are wrong	The balance not calibrated. Not tared before weighing. No adjustment of the level.	Calibration. Tare before weighing. Adjust the level feet.

II SETTINGS

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8.1 FAULT JUDGMENT

9.1 DATA OUTPUT

1.0 KNOW YOUR BALANCE

Thank you for selecting the FA Series Analytical Balance.

This Instruction Manual will guide you of the installation, accessories, trouble-shooting, after sales service information, general maintenance of the balance, etc. it will also guide you through the various applications.

Please do not put the weight over the weighing capacity , it will be damage the weighing sensor.

Please read this Manual thoroughly before starting the operations. If you need any clarifications, feel free to contact us.

The FA balances are ideal for laboratory and general purpose weighing. The balances can also be used for some advanced weighing functions.

FEATURES:

Stainless Steel Pan

Super bright LCD display with backlight

RS232 Interface

Adapter supplied as standard

Windshield supplied as standard

Height adjustable feet, Bubble Level

Auto Calibration

Selectable measure units, mg,g, oz, ct

Memory for accumulated time

Weighing fuction

Piece counting function

Below balance weighing

7. 4 COUNTING FUNCTION

There are counting functions in the balance, and you can use this for count the quantity. And please keep the products have the same weight, and the minimum weight must be $\geq 0.5\text{mg}$.

The details operation as blow:

1. Press "ON" key , enter the menu , then press "ON" key, until it show "COU";



2. Press "0/T" to enter the counting function, it show "COU 5pcs";



3. Press "ON" choose the quantity for sample, and put on the same weight, press "0/T" enter:



4. it will show the number after COU, then you can begin the counting;



5. After the counting press "ON" and choose "weight", press "0/T" back to the weighing .



7.2 SPEED SETTING

Keep pressing **ON**, when “**speed**” will show in the display,

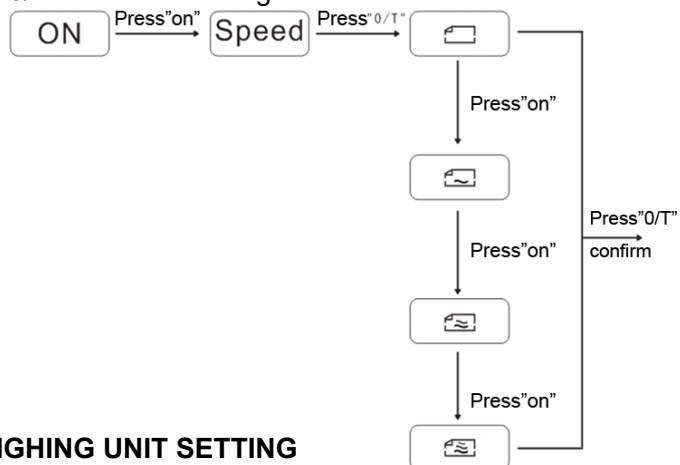
 ----Highest Speed

 -----High Speed

 -----Normal Speed

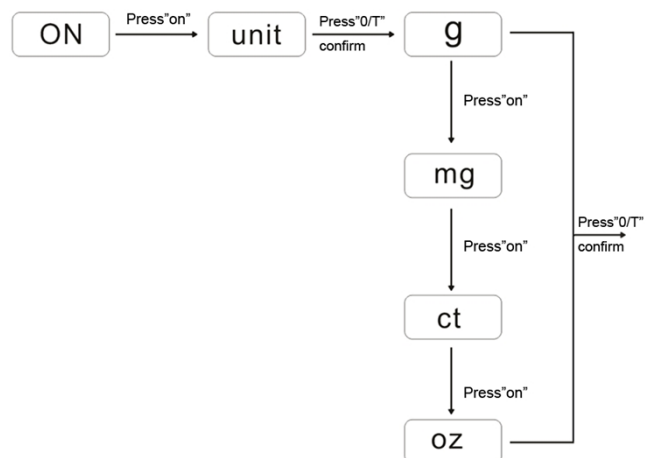
 -----Low Speed

press →0/T← to save setting



7.3 WEIGHING UNIT SETTING

Keep pressing **ON**, when **Unit** is shown ,Then operation as blow:



2.0 SPECIFICATIONS

Model	FA1004N	FA1204N	FA2004N	FA2104N	FA2204N
Range	0-100g	0-120g	0-200g	0-210g	0-220g
Division	0.1mg				
Repeatability	0.2mg				
Linearity	0.5mg				
Resp. Time	≤ 4 Sec.				
Pan Size	ø80mm				
Tare Range	Full				
Interface	RS-232 bi-directional				
Overall Dimensions	340 x 215 x 350mm				
Operating temperature	+10°C to 40°C				
Power Supply	External Power Adapter as standard (Input Voltage220 V)				
Net Weight	7.5 kg				

3.0 UNPACKING THE BALANCE

Remove the balance from the packing by carefully lifting it out of the box.

Inside the box you will find everything needed to start using the balance

4.0 CALIBRATION THE BALANCE

The balance need calibration when it not accurate, the step as:

- Keep the balance in the stable environment and stable table,Warm up the balance more than 1hours.
- Press“CAL” key, and it will going internal calibration, when it show 200.0000g, the calibration finish.

5.0 LOCATING THE BALANCE

- The balance should not be placed in a location that will reduce the accuracy.
- Avoid extremes of temperature. Do not place in direct sunlight or near air conditioning vents.
- Avoid unsuitable tables. The table or floor must be rigid and not vibrate.
- Avoid unstable power sources. Do not use near large users of electricity such as welding equipment or large motors.
- Do not place near vibrating machinery.
- Avoid high humidity that might cause condensation. Avoid direct contact with water. Do not spray or immerse the balances in water.
- Avoid air movement such as from fans or opening doors. Do not place near open windows or air-conditioning vents.
- Keep the balance clean. Do not stack material on the balances when they are not in use.

6.0 SETTING UP THE BALANCE

6.1 ASSEMBLING THE BALANCE

- Locate balance on solid surface, free from vibration
- Open the sliding door and gently place the stainless steel top.
- Level balance using the adjustable feet and the bubble level
- Connect the power to the balance
- For best performance, let the balance warm up for 30-60 min. and calibrate before using

6.2 LEVELLING THE BALANCE

After placing the balance in a suitable place, level it by using the bubble level. To level the balance turn the two adjustable feet at the rear of the balance until the bubble in the bubble level is centred.

7.0 OPERATION SETTINGS

7.1 SENSITIVITY SETTING

Keep pressing **ON**, when " **Stab** " is shown in the display,. Then operation as blow:

 ----- **Poorest Sensitivity**

 ----- **Poor Sensitivity**

 ----- **Normal Sensitivity**

 ----- **High Sensitivity**

press **→0/T←** to save setting

