

## FUNCTION SETTINGS

1. Press [ON/OFF] to turn on the scale, the display will show flash digits and then -----,press [PRINT], the display will show XXXX BAU value ( press [UNIT] to select among 1200,2400,4800,9600), our default setting is 9600.

Press [ZERO] to enter Parity mode, the display will show none PAR,press [UNIT] to select odd,even,none (odd stands for 7 data bits with odd parity, even stands for 7 data bits with even parity,none stands for 8 data bit without parity)our default setting is none.

Press [ZERO] to enter Print mode, the display will show X mod, press [UNIT]to select 0,1,2,3 (0 stands for serial data output disabled,1 stands for demand mode by press [PRINT],2 stands for automatic print when scale is stable, 3 stands for continuous print, our default setting is 1.press [ZERO] again to return to weighing mode.

2. Press [ON/OFF] to turn on the scale, the display will show flash digits and then -----, press [UNIT] to enter auto off function, the display will show OFF PWR, press [UNIT] to select among 3,5,10,off ( 3 stands for 3minutes, 5 stands for 5minutes, 10 stands for 10 minutes, off stands for inactivate auto off function )

press [ZERO] to select backlight, the display will show X BL ,press [UNIT] to select X value (X stands for 0,1,2) , 0 stands for inactivate backlight function, 1 stands for the backlight is always make function. 2 satnds for auto backlight .

Press [ZERO] to enter unit selecting function, the display will show ON X ( X stands for the units :g,oz, lb,twt...tola) press [UNIT] to select ON (activate the selected unit) or OFF ( inactivate the selected unit), press [ZERO] again to return to weighing mode.

3. Switch the power to “ON” and than press [ON/OFF]to turn on the scale. The display shows F-E-9 to 0 and than “-----”, press[PCS]key to enter ZERO track function setting, display shows x.xd ZER, press [UNIT] key to select ZERO track value (0.0d-0.5d-1.0d-1.5d-2.0d-3.0d) ; press [ZERO]key to enter ZERO setting, display shows x.xd RTZ, press [UNIT] key to select ZERO value (0.5d-1.0d-2.0d-3.0d) ; press [ZERO] key to enter single segment setting or double segment setting , press [UNIT] key to switch between them ,SIN dsp means single segment setting (default setting),db 1 dsp means double segment setting; press [ZERO] key to enter FIL setting, press [UNIT] key to select filter rangn amond (0-1-2-3-4),”2”is default setting; press [ZERO] key to select zero range when turn on the scale, press [UNIT] key to select percent (2 PZR-5 PZR -10 PZR -20 PZR); press [ZERO] key to set zero range, press [UNIT] key to select percent (5 KZR or10 KZR); press [ZERO] key to set TARE range, press [UNIT] key select percent (50 KTR or100 KTR); press [ZERO] key to enter overload protection setting, press [UNIT] key to select overload protection value (9d OVR-1 OVR-2 OVR-10 OVR); press [ZERO] key to set beep function, press [UNIT] key to choose turn on or turn off the beep, “ON”means activate the beep, “OFF” means inactivate the beep; press [ZERO] key to unite the function of TARE and ZREO, press [UNIT] to switch between them.“ON”means unite function activate, “OFF”means unite function inactivate. press [ZERO]key again to return weighing mode..

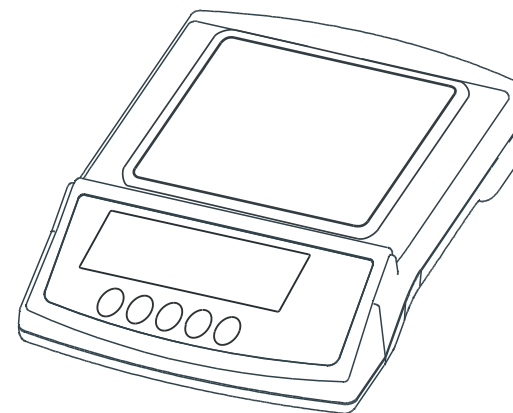
4. Press [ZERO] to return to weighing mode.



# COMPACT SCALE/BALANCE

## INSTRUCTION MANUAL

Manual\_FR-H\_V1 ENG



# SAFETY PRECAUTIONS

All safety messages are identified by the following the words "WARNING" and "CAUTION". These words mean the following:

△WARNING	<b>Important information to alert you to a situation that might cause serious injury and damage to your property if instructions are not followed.</b>
△CAUTION	Important information that tells how to prevent damage to equipment.

When using the scale/balance, the following safety precautions should always be followed.

## △ WARNING

**Use only the AC adaptor with the scale/balance. Other adaptor may cause damage. (AC adaptor is optional)**

## △ CAUTION

Avoid installing the scale/balance in direct sunlight, this may cause discoloration or malfunctions.

Do not mix the type of batteries. Replace all other batteries at the same time.

If the scale/balance is not to be used for a long period of time, remove all batteries from the battery compartment to avoid leakage which may cause damage to the instrument.

Avoid overloading that could cause damage to the scale/balance.

Do not drop water in the scale/balance that is not water-resistant. It causes damage, if inside of the scale/balance is wet.

Matter charged static electricity could influence the weighing. Discharge the static electricity. As example, the method is to use the electrification prevention spray, to spray it to both side of weighing platform.

# SPECIFICATIONS

Model number	Capacity	Division
FR-H -100	100g	0.001g/0.005g
FR-H -200	200g	0.005g
FR-H -300	300g	0.005g/0.01g
FR-H -600	600g	0.01g/0.005g
FR-H -1000	1000g	0.01g/0.02g
FR-H -3000	3000g	0.05g/0.1g
FR-H -6000	6000g	0.1g/0.2g
FR-H -10000	10000g	0.2g/0.5g/1g
Platter	φ 115mm or 170 x 180mm	
Net/gross weight	1350/1500g	
Package	Standard carton: 34×22×14(cm <sup>3</sup> )	
	6 Units in one box: 47.5×38.5×45(cm <sup>3</sup> )	
Operating Temperature	0-40°C (32-104°F)	
Power source	Batteries or AC/DC	
	Adapter 9V/100mA (optional)	

## Counting procedures

### 1.Press [ON/OFF] to turn on the scale.

Wait for "0" to appear on the display.

### 2.Start the Count Procedure

If necessary, press [ZERO] key to set the display to "0".

3. Press the [PCS] key to put the scale in PCS mode. ,the display will show P=X X ,press UNIT to select XX value (10 20 50 100),Place a given number of samples of an item on the pan (the Sample Size should be either 10、 20、 50 or 100 pieces). The weight of these samples will show on the display.

4. Press the [PCS] key, the display will show "XX pcs", then the scale will recall the sample size you selected and show the starting sample size on the display (you can now remove the samples if you want to return the scale to 0)

5. Press the [PCS] key to return to the weighing mode

# CALIBRATION

## When to calibrate

Calibration may be required when it is initially installed, if the scale/balance is moved to a substantial distance. This is necessary because the weight of a mass in one location is not necessarily the same in another location. Also, with time and use, mechanical deviations may occur.

## How to calibrate

1. Before entering calibration mode, **There is a switch key on the bottom of the scale. Turn on the switch key first**, press [ON/OFF] to turn the power on for 1 minutes.

### 2. Enter calibration mode

Press [ON/OFF] to turn the power on. the display will show flash digits and then “-----”, Press [ZERO], the display will show “CAL”, Press [ZERO] again, the display will show “X0000 CAL”, X is flash digit. Press [UNIT] key the flash digit will move to right; Press [PCS] key to increase the flash digit. (*X is the calibration weight which can be setted according to your requirement*)

### 3. Calibration by the weight

When you selected the calibration weight, then place the calibration weight on platform. Then press [ZERO] key, the display return to the weight value, Now the calibration is complete.

4. Press [ON/OFF], turn off the power, press [ON/OFF] turn on the power again, place the weight on the platform to make sure whether weighing is correct, if not, repeat steps 2-4.

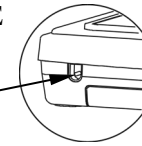
### 5. Return to weighing mode

Press [ON/OFF] to turn the power off. Press [ON/OFF] again to turn on the power and the scale/balance return to the weighing mode.

# PARTS DESCRIPTION

## ▶ RIGHT SIDE

AC adaptor  
Socket



## ▶ TOP

Display

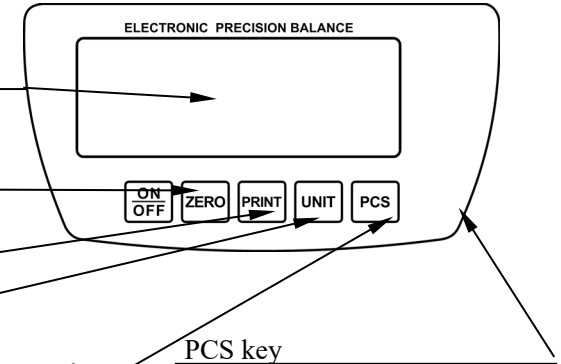
ON/OFF key  
Turns the scale  
power on/off.

ZERO key  
ets display to zero

PRINT key

UNIT key  
Changes weighing units, g, ct, oz, tola

PCS key



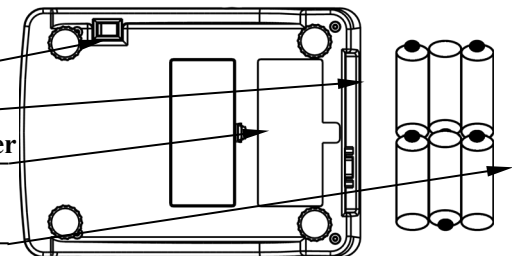
## ▶ BOTTOM

Switch key

Battery compartment

Battery compartment cover

Batteries  
Use 6 AA batteries



## ▶ DISPLAY

Low battery indicator

Negative value indicator

STABLE indicator  
when the reading is stable.

Print indicator

weighing unit

TARE indicator



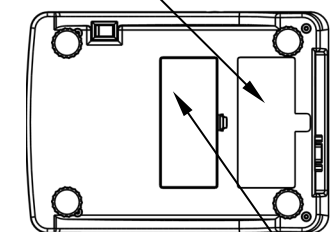
ZERO indicator

# PREPARATION

## 1.Installing batteries/Connecting the AC adaptor

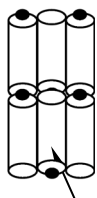
### batteries

Battery compartment



Battery compartment cover

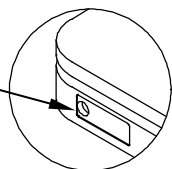
Remove the battery compartment cover and insert six batteries(R6P/LR6 /AAsize) into the battery compartment, taking extreme care that the polarities plus and minus is observed.



R6P/LR6/AA size  
Dry batteries.  
(batteries are not included)

### AC adaptor (optional)

AC adaptor socket



Plug the AC adapter to the AC adaptor socket on the side.  
The AC input requirement could be 110,120,220,230 or 240Volts (50/60Hz) depending on the area where used, so please verify that the adaptor is correct

## 2.Setting up the scale/balance

△, CAUTION

Avoid installing the scale/balance in direct sunlight, that may cause discoloration or malfunctions. Place your scale/balance on a firm weighing table so that the scale/balance is level. (The scale/balance will not perform accurately when it is not level.)

**Place the scale/balance on the firm surface that is flat and level for an accurate weighing.**

# WEIGHING

## Before weighing

Whenever possible, please allow the balance to warm up for 10 minutes after first turning to power on, so that the balance will function. Properly and accurately.

### Error messages

EEEE: Overload

: Low battery

**Calibration may be required before weighing.**

Read "CALIBRATION" first and if necessary, calibrate your scale/balance for accurate weighing.

## Weighing procedures

### 1.Press [ON/OFF] to turn on the balance.

When power is turned on, all display segments appear on LCD for a few seconds and finally "0" will appear on the display.

### 2.Select the weighing unit with [UNIT].

Press [UNIT] to select a weighing unit, eg. "g"、" ct " 、" oz "、" tola " .....

Once the unit has been selected, the selected unit will be displayed to the weight value.

### 3.Start weighing

**If you do not use a container for weighing**

Verify the reading is "0". If not, press [ZERO] to display "0".

Place objects on the weighing platform to weigh.

When the reading becomes stable, the stable indicator is displayed.

**If you use a container for weighing**

Place an empty container on the platform.

Wait for the stability indicator to be displayed and press [ZERO].

Place the objects to be weighed in the container.

When the reading becomes stable, the stable indicator is displayed.

# FEATURES

- Auto shut off (optional).
- Auto zero tracking
- Low battery indication
- Lager LCD Display
- Large square weighing pan
- 1/120000&1/15000 division available
- Auto calibration
- Auto backlight (optional)
- g/ct/oz/tola..... conversion(optional)
- with counting function(optional)
- Net weight/stability indication

Baud Rate :1200、2400、4800、9600

Data Bit :8/7/7

Parity : None/ Even/Odd

Stop Bit :1

Code :ASCII

Data Format :

**W=WEIGHT M=MESSAGE**

1	2	3	4	5	6	7	8	9	1	1	1	1	1	1	1	1	1	1	2
									0	1	2	3	4	5	6	7	8	9	0
<b>HEA</b>	<b>DATA</b>												<b>UNIT</b>				<b>CR</b>		
<b>D</b>																			
<b>W/</b>	<b>:</b>	<b>+</b>												<b>g</b>				<b>C</b>	<b>L</b>
<b>M</b>		<b>/-</b>																<b>R</b>	<b>F</b>

Example:

**100.00g : W:+ 100.00g**

**500.00ct : W:+ 500.00ct**

**Err-0 : M:over**