

# User Manual

---

**GRC Series**

***DIGITAL COUNTING SCALE***

## Cautions

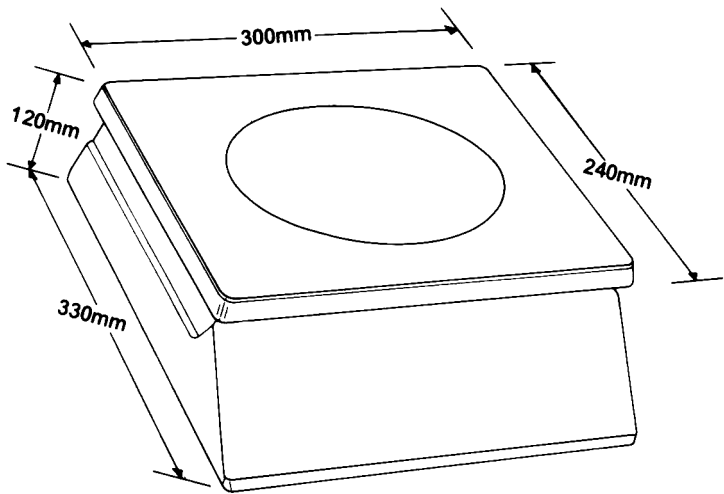
---

- Upon receiving the scale, please take at least 8 hours to recharge the battery (refer to page 10) before you start to operate this scale.
- Please recharge the battery after a long period of storage (more than one month). It takes 8~10 hours to fully recharge the battery.
- Please assemble the platter before powering on the scale.
- Do not keep the weight placed on the platter for a long period.
- Keep the scale away from the environment with high temperature, high humidity, heavy press, and heavy bump.
- Always make sure the scale is located in a flat and plane surface.

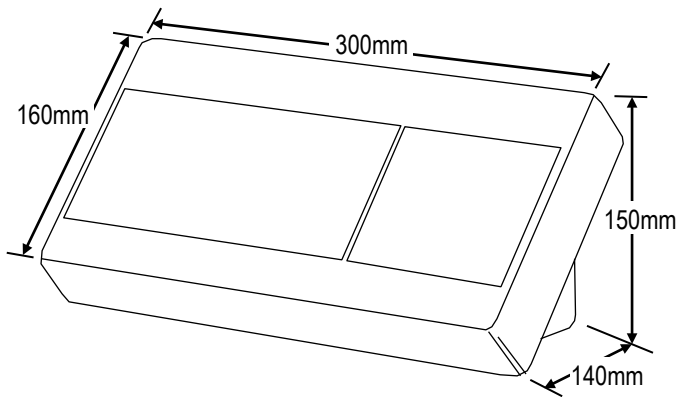
# Dimensions

---

*Tabletop:*



*Indicator:*



## Symbols on LCD

---

### ■ Zero Indication (▼):

▼ cursor appears on the bottom edge of WEIGHT LCD (above of **ZERO** printed on the display-overlay), and indicates the scale is at zero-point.

### ■ NET Weight Indication (▼):

▼ cursor appears on the bottom edge of WEIGHT LCD (above of **TARE** printed on the display-overlay), and indicates the tare weight has been deducted.

### ■ Accumulation Indication (▼):

▼ cursor appears on the bottom edge of QUANTITY LCD (above of **M+** printed on the display-overlay), and indicates the memory bank has stored accumulative data of total weight and total quantity.

### ■ Insufficient Sampling-Quantity Indication (▼):

▼ cursor appears on the bottom edge of UNIT WEIGHT LCD (above of **S.Q** printed on the display-overlay), and indicates the sampling-quantity (setup via **SAMPLE** key) is less than 10 pieces. The more sampling-quantity on the platter, the scale could calculate more precise unit weight.

## ■ Insufficient Unit Weight Indication (▼):

▼ cursor appears on the bottom edge of UNIT WEIGHT LCD (above of **S.W** printed on the display-overlay), and indicates the averaging unit weight is too light.



The internal resolution of this scale is 30000. While the averaging unit weight of measured subjects is lighter than “**max capacity / 30000**”, ▼ cursor will flash on UNIT WEIGHT LCD. For example:

With 30kg max capacity; and the internal resolution is 30000.  $30\text{kg} / 30000 = 1\text{g}$ . If the averaging unit weight of measured subjects is lighter than 1g, ▼ cursor will flash on UNIT WEIGHT LCD (above of **S.W** printed on the display-overlay).

## Operation Instructions

---

### ■ Status of the Battery :

When WEIGHT LCD indicates  and the scale sounds **beep beep beep** every thirty-minute, it means the battery is running in low-voltage status. LCD will cate continuously for reminding the user to recharge the battery. If the battery is still running in low-voltage status without being recharged, WEIGHT LCD will indicate **-OFF-** and the scale will sound **beep** repeatedly. Please power of the scale and recharge the battery (refer to page 10) as soon as possible.

### ■ **0 ~ 9:**

Pressing these keys to key in the unit weight or sampling-quantity.

### ● :

- (1) Pressing this key to set the decimal point for the weight.
- (2) Press and hold [●] key till the scale sounds beep to enable or disable optional Backlight.

### ■ **CE:**

Pressing this key to delete the setting of weight value.

### ■ **ZERO:**

Pressing this key to zero the weight. WEIGHT LCD will show ▼ cursor on the above of **ZERO** (printed on the display-overlay).

### ■ **TARE:**

Pressing this key to deduct the tare weight. Put the package or container on the platter and then press [**TARE**] key. ▼ cursors will flash on WEIGHT LCD (above of **TARE** and **ZERO**).

### ■ **M+:**

Pressing this key could save the measured weight

and quantity values into the memory bank (up to 99 data accumulation). Please notice the **M+** function must be operated under the same unit weight.

### ■ **MR:**

Pressing this key to recall the data one by one that is saved in the memory bank. After the last item of saved data is recalled, pressing [**MR**] key again will show the total accumulative values of total weight (on WEIGHT LCD) and total quantity (on QNANTITY LCD).

### ■ **MC:**

Pressing this key to delete all accumulated data in the memory bank (the scale will sound **beep beep** and WEIGHT LCD will flash **CLR** when [**MC**] key has been operated.

### ■ **SAMPLE:**

Pressing this key to confirm the sampling quantity.

Example:

Put 500pcs of screws on the platter; then key in 500; then press [**SAMPLE**] key once, the scale will calculate the averaging unit weight of 500 screws and show the value on UNIT WEIGHT LCD.

While putting another more pieces (less than 500pcs) of screws on the platter, the scale will re-calculate the averaging unit weight (UNIT WEIGHT LCD will

clear the original value and then show the updated value). Please do NOT remove any thing from the platter till the updated value of averaging unit weight has been displayed.

## ■ **WS:**

Pressing this key is to set the value of unit weight. We suggest the unit weight should be heavier than the division (or sensitivity) of the scale. For GRC-30kg x 5g, the unit weight should not be lighter than 5g.

Example:

With the known unit weight at 10g, please key in **10**; then press [**WS**] once; then 10g will be indicated on UNIT WEIGHT LCD.

## ■ **MEMO A & MEMO E:**

Five preset memory keys for saving the values of unit weight.

Example: saving **5g** into **MEMO A**.

Key in **5** and then press and hold [**MEMO A**] key till the scale sounds **beep** >> Finish setting. Press [**MEMO A**] key could recall **5g** showed on UNIT WEIGHT LCD. To modify the setting figure of **MEMO A**, please just follow the above steps again.

## ■ **ALARM:**

### 1. Quantity Alarm:

<1> Press [**ALARM**] key to select **-PCS-** (showed on UNIT WEIGHT LCD.

<2> Key in **100** (showed on WEIGHT LCD; then

press [**ALARM**] key again to confirm the setting.

**!! Notice:** The setting values under **-Hi-** mode and **-Lo-** mode must be **0**.

When the total quantity of measured subjects is  $\geq 100$ , the scale will sound **beep** continuously.

## 2. Hi/Lo Weight Limit:

Example: setup Hi/Lo weight range at  $10\text{kg} \pm 500\text{g}$ .

<1> Press [**ALARM**] key to select **-Lo-** (showed on UNIT WEIGHT LCD); then key in **9.500** (showed on WEIGHT LCD; then press [**ALARM**] key again to confirm the setting.

<2> Press [**ALARM**] key to select **-Hi-** (showed on UNIT WEIGHT LCD); then key in **10.500** (showed on WEIGHT LCD; then press [**ALARM**] key again to confirm the setting.

**!! Notice:** The setting value under **PCS** mode must be **0**.

The scale will sound **beep** continuously while:

**9.500**  $\leq$  the total-weight value  $\leq$  **10.500**

## 3. Over-Weight Alarm:

Example: setup 10kg as the over-weight limit.

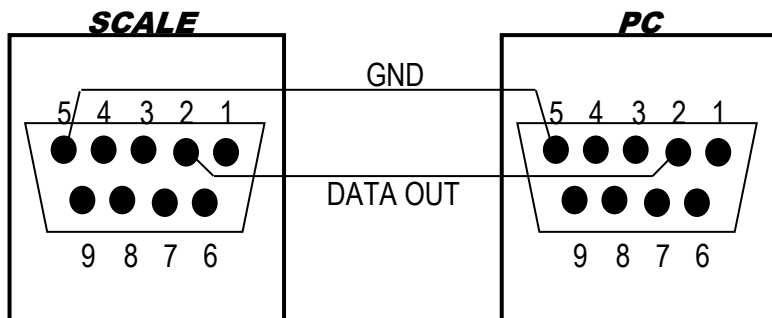
Press [**ALARM**] key to select **-Lo-** (showed on UNIT WEIGHT LCD); then key in **10.000** (showed on WEIGHT LCD; then press [**ALARM**] key again to confirm the setting.

**!! Notice:** The setting values under **PCS** mode and **-HI-** mode must be **0**.

The scale will sound **beep** continuously when the measured weight is  $\geq$  **10.000kg**.

## RS232 Interface

<optional device>



### Wiring Configuration:

Baud Rate: **9600**

Parity: **None**

Stop Bit: **1**

Data Bit: **8**

## Recharge the Battery

---

Power off the scale and connect the power cord to an AC outlet. CHARGE LED will indicate the ongoing status of the battery. It takes about **8~10 hours** to fully recharge the battery.

### **CHARGE LED:**

Color of LED	Status of the battery
RED	Initial connection
ORANGE	Charging
GREEN	Fully-charged

## Power Requirements

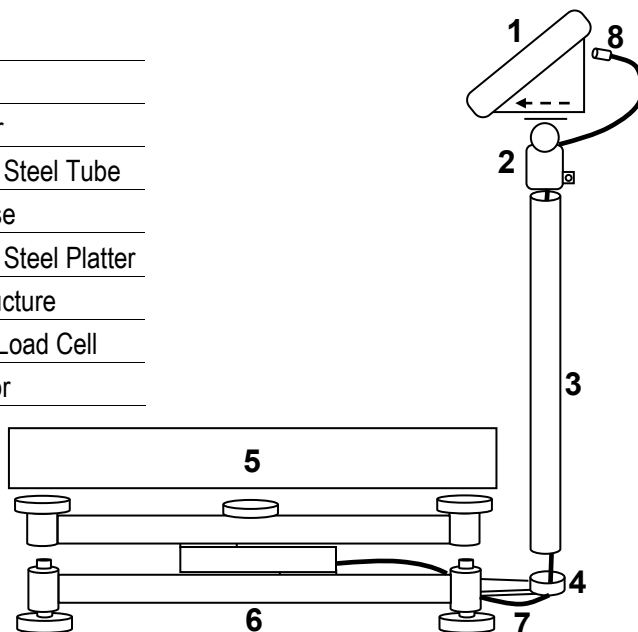
---

- AC : 110V~230V, 50/60 Hz
- DC : 6V DC / 25mA rechargeable battery;  
P=0.2W(max)

## **Installation Diagram of Bench Scale**

List of Components:

No.	Item
<1>	Indicator
<2>	Regulator
<3>	Stainless Steel Tube
<4>	Tube Base
<5>	Stainless Steel Platter
<6>	Main Structure
<7>	Cable of Load Cell
<8>	Connector



### **Installation Procedure:**

- A. Screw <4> Tube Base and <6> Main Structure together (*with 2 screws of Tube Base*).
- B. Insert <3> Stainless Steel Tube into <4> Tube Base (*with 2 screws of Stainless Steel Tube*).
- C. Screw <2>Regulator and <3> Stainless Steel Tube together (*with 1 screw and 1 clip of Regulator*).
- D. Please refer to the Diagram; pull <7> Cable of Load Cell, from the bottom to the top, through <3> Stainless Steel Tube; and then screw the Clip on the bottom of <4> Tube Base (*with 1 screw of Clip*).

11 E

**GRC-Counting Series User Manual**

for Notice the direction

Please refer to the arrow on the diagram for proper direction.

F. Put <5> Platter on <6> Main Structure.

G. Insert <8>Connector into the socket of <1>Indicator. Installation OK.

***We do more than you expect***

---