

Weighing SCALE User Manual

Model: Q1C

Please read this manual carefully before operation

---General Precautions

---Operating condition and other attentions

---Warranty

SPECIFICATIONS

Accuracy: Class III

Nonlinear: $\leq 0.01\%F.S$

System working voltage: DC:5V

Large display connector: Sampling serial output way

Sample rate: 20 times per second (can select)

POWER

Input: 120~240V

Output: 100V/600MA

Rechargeable battery: 6V/4AH

BEFORE USING

- 1) Place this product on a firm and smooth place, don't place it in vibration or shaking, use bench for use on four only adjust foot, adjust the balance using the bubble level.
- 2) Use independent source, avoid other electrical disturbance.
- 3) Don't put any object on the platter when turn on the balance.
- 4) Please, turn on 2-3 minutes before using.
- 5) Avoid temperature change too large and air flow strenuous sites.
- 6) Don't overload the balance, don't exceed the maximal capacity.

SYSTEM POWER CONSUMPTION

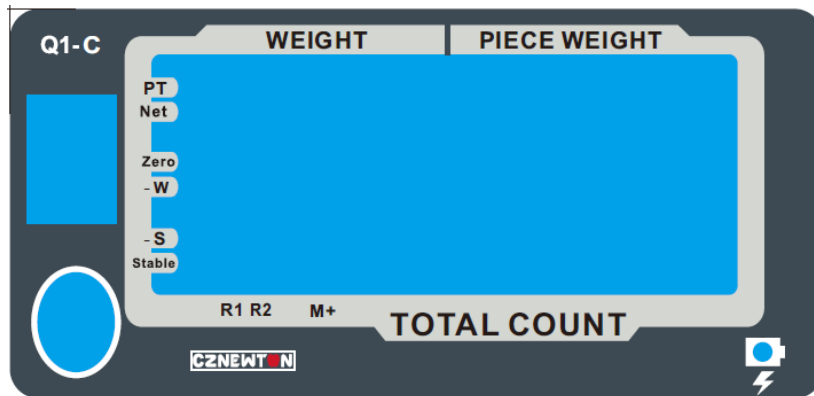
Main system power consumption: about 12mA

Main system power consumption (with backlight): about 36mA

Main system power consumption (with backlight and RS-232): about 48mA

Battery life: none backlight, about 320 hours.

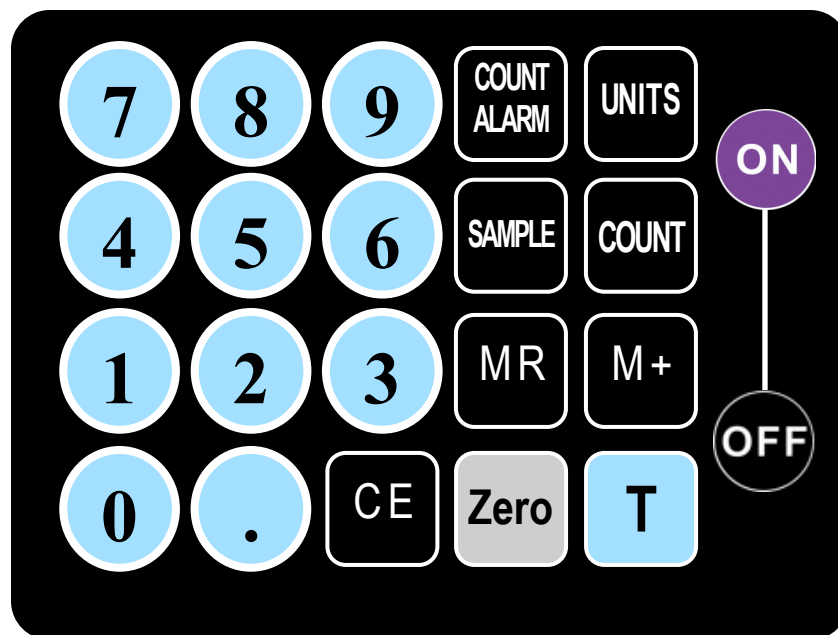
LCD Display



Size: 77 mm x 27 mm X 2.8 mm

Font height: 16 mm

Control Panel



KEY DESCRIPTION for MODEL Q1C



Press and hold this key for 2 seconds to turn off the scale.



Press this key briefly to turn on the scale. A self-test will run on the display and then stabilize showing zero



Select the desired weight unit in setup mode.



Reset the weight to zero "0", but the display value has to be lesser than $\pm 2\%$ of maximum capacity. In the setup mode, it means moving up.



Tare key: To subtract the weight of container (Max. capacity tare)
 Preset Tare: Press Tare key with no object on the pan. Use 0 ~ 9 number keys to enter the preset tare weight value. Press the tare key to confirm.
 Clear Preset Tare: Press the Tare key again to clear the preset tare with no object on the pan.
 In the setup mode, it means moving up.



Manually set up piece weight. Use 0~9 number key and decimal [.] key to enter piece weight, and then press [count] key to initiate counting.
 Weight window displays total weight, piece weight window displays piece weight, and total count window displays the counts.

When weight window displays weight, use [0~9] number keys to set sample size and press [sample] key to initiate the calculation of piece weight.



Set count alarm: Press this key when total count window displays pieces to set the alarm. The current count is set as the alarm count. When the counting number is greater than this set number, PIECE WEIGHT window shows **g hi -- --** and the buzzer starts to alarm.

Clear count alarm: press and hold the [Count Alarm] key until buzzer beeps twice. Set point will auto cancel when turn off the scale.

M+

Accumulate weight and count. The piece weight window briefly shows **-r01-- --**. The scale can accumulation up to 99 times. In the setup mode, it means enter (confirmation).

MR

Display total accumulated count, total accumulated weight, and total count. Clear accumulation: press and hold the **【MR】** key until buzzer beeps twice, then clear accumulation

CE

Clear the piece weight window. In the setup mode, it means exit.

User Functions (UF1 -- UF9)

At weighing mode, press and hold the **【M+】** key, then press the **【T】** key, weight window will show UF-1, press **【Zero】** or **【T】** key to cycle select UF-1~UF-9. Please noted that not all functions are available for end users, especially when the scale is sealed. Some functions are locked on purpose due to the NTEP regulation.

Table: List of User Functions

Function	LCD Display	Description
UF-1	Internal Values at span and zero; battery voltage	Press 【M+】 key to enter, and press to exit. <pre>1 3 5 2 8 8 bat 6 . 3 4 5 3 6 4 7</pre> Weight window displays internal value (span), piece weight window displays battery actual voltage, and total window displays internal value at zero.
UF-2	Piece weight auto-average	Press 【M+】 key to enter, <pre>A a u g 1</pre> AAVG 0: Disable AAVG 1: Enable (factory default). Use 0 and k keys to enable or disable piece weight auto-average. This function is specially designed for counting scale to reduce or minimize counting error and therefore resulting more accurate counts.
UF-3	Auto power-off	Press 【M+】 key to enter. <pre>A o f f 0 0</pre> Press 【T】 or 【Zero】 to move cursor, use 0~9 keys to enter auto power-off time in minutes. Press 【M+】 to confirm or press 【CE】 key to exit.
UF-4	Backlight	Press 【M+】 key to enter. Press 0~2 keys to select <pre>L i t 0 : auto light up L i t 1 : backlight on L i t 2 : backlight off</pre> Press 【M+】 key to confirm, and press 【CE】 key to exit.
UF-5	Accumulation	press 【M+】 to enter <pre>A C C U 0 0</pre> (factory default) A B A 0: Stable required

- 1: stable not required
 B: 0: The weight has to return to zero to accept new accumulation
 1: No tare weight to accept next accumulation
- UF-6 RS-232 output Press **【M+】** key to enter. Press **【T】** or **【Zero】** to move cursor,
 2 3 2 3 0 (factory default)
 AB
 A: 0 Baud rate 1200
 1 Baud rate 2400
 2 Baud rate 4800
 3 Baud rate 9600
 4 Baud rate 19200
 B: 0 RS232 output disabled
 1 Manual output – Format 2
 2 Stabel output – Format 1
- UF-7 A/D update rate Press **【M+】** key to enter, and use 0-2 keys to enter ADC speed
 S P E E D 0 : low speed (factory default, 7.5 Hz)
 S P E E D 1 : standard speed, 15 Hz
 S P E E D 2 : High speed, 30 Hz
 Press **【M+】** key to confirm, and press **【CE】** key to exit.
- UF-8 Display condition at zero Press **【M+】** key to enter. Use 0~5 keys to enter condition at zero.
 Z P 1 : 1 division not to display at zero (factory default)
 Z P 2 : 2 divisions not to display at zero
 Z P 3 : 3 divisions not to display at zero
 Z P 4 : 4 divisions not to display at zero
 Z P 5 : 5 divisions not to display at zero
 Press **【M+】** key to confirm, press **【CE】** key to exit.

Standard Calibrations

For NTEP certified scale, these functions are not available. At weighing mode, press and hold the **[Zero]** key, then press the **[M+]** key. LCD display ECF-1. Press **[Zero]** key or **[T]** key to select ECF-1~ECF-3

ECF-1 Weight calibration

Press the **[M+]** key to enter ,

```
0 . 0 0 0
Lb      7 9 2 8 9
```

LCD displays internal value, press the **[M+]** key to calibration the zero weight after stable , Next use 0~9 keys to enter the weight to be calibrated, and place the required weight mass onto the scale ,

```
6 . 0 0 0
Lb      1 3 9 7 5 6
```

press **[M+]** key to confirm the calibration procedure completed , press **[CE]** key return to previous setup mode

ECF-2 Zero calibration

Press the **[M+]** key to enter ,

```
0 . 0 0 0
Lb      7 9 2 8 9
```

display internal value at zero weight after stable. Press the **[M+]** key to calibrate/confirm. Press **[CE]** key return to previous setup mode



ECF-3 SPAN calibration

Press the **[M+]** key to enter.

```
6 . 0 0 0
Lb      1 3 9 7 5 6
```

Use 0~9 keys to enter the weight to be calibrated. Place the required weight mass onto the scale , Place the required weight mass onto the scale , press **[M+]** key to confirm the calibration procedure completed , press **[CE]** key return to previous setup mode

Error Messages and Troubleshooting

Error Display	Meaning	Troubleshooting
h h h h h h	Overload	Weight on pan exceeds maximum capacity
L L L L L L	Weight is too low	Weight is too low at the negative
E r r n	Weight unstable	Vibration or varying load on the pan during switch-on
E r r H	Initial zero too high	Scale turned on with weight > 10% of maximum capacity already on the pan
E r r L	Initial zero too low	Scale turned on with upward force > 10% of maximum capacity acting on the pan
 Battery symbol visible	Battery voltage is lower than 5.6 V	Battery needs charging. Connect to main adaptor. Press 【 T 】 and 【 6 】 together to view battery voltage. Press 【 CE 】 to return to weighing mode
 Battery symbol flashing	Battery voltage is lower than 5.5 V	Battery needs charging. Connect to main adaptor
Scale automatically shuts off	Battery voltage is lower than 5.4 V	Battery needs charging. Connect main adaptor

GUARANTEE

This scale is guaranteed for one year from the delivery date. The guarantee covers any fabrication defect of the material.

During this period CZNEWTON covers the labour cost and the spare parts necessary for the reparation of the scale.

This guarantee does not cover the failures caused by an inappropriate use or overcharge. **The guarantee does not cover the freight cost (transport) necessary to repair the scale.**