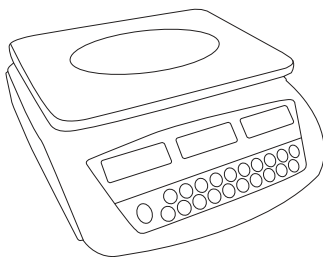


# CTS

## USER MANUAL

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Model	Capacity
CTS 6000	6kg x 0.1g
CTS 30000	30kg x 0.5g

Thank you for purchasing the My Weigh® CTS digital scale. The CTS series electronic counting scale uses high precision sensors and the latest Microchip technology. It is specially designed and manufactured for accurate weighing and counting functions. Please read all operating instructions carefully before use. This electronic scale is a precision instrument. With normal care and proper treatment, it will provide years of reliable service. For more information please visit [www.myweigh.com](http://www.myweigh.com)

Never load the scale with more than the maximum capacity. Although the CTS is designed to be extremely durable with extra overload protection built into the case, overloading will permanently damage it! Avoid any exposure to extreme heat or cold, your scale works better when operated at normal room temperature. Keep your scale in a clean environment. Dust, dirt, moisture, vibration, air currents and/or a close proximity to other electronic equipment can all cause an adverse effect on the reliability and accuracy of your scale. Handle with care. Gently apply all items to be weighed onto the tray top. Avoid shaking, dropping or otherwise shocking the scale. Scales are delicate instruments and unlike cellular phones, scales have delicate sensors that determine how much an item weighs. If you drop or shock your scale, these sensors “feel” the shock and are sometimes destroyed. This happens with all digital scales. We design our scales to be as resistant to shock or drops as possible, however there is no way for us to protect 100% against load cell or sensor damage. Failure to follow these instructions will void your warranty.

Always allow the scale to acclimate to normal room temperature for at least one hour before use. Give your scale sufficient warm up time. Usually 30-60 seconds before calibration to give the internal components a chance to stabilize.

### PRECAUTIONS BEFORE USING THE BALANCE





1. Matter charged with static electricity can affect accuracy. Discharge all static electricity. For example, one method is to use Static-Guard spray, and spray it on both sides of the weighing platform.
2. The balance must be in an exact horizontal position in order to achieve accurate measurement results. In order to bring the balance into a horizontal position, the adjustable feet are turned either clockwise or counter-clockwise until the air bubble on the front panel is in the center of the marked circle.
3. Please use an independent power outlet to avoid interference from other electrical appliances.
4. Do not put any objects on the platform before powering on.
5. When possible please allow the scale to warm up for several minutes before operation.
6. Items should always be placed on the center of the platform when being weighed.
7. For optimum accuracy, recalibrate before each use.

### POWER SUPPLY

The CTS is powered by a **rechargeable battery** or directly by **AC-DC 9V 650 mA power adapter**.

## Weight Response Speed

To change the desired weight response time:

1. Press and hold  key and turn the scale ON. Keep holding  until the end of the self-test.
2. The display will show the current setting: (nb 0 =slowest ~ nb 6 =fastest). Press  to toggle the settings and press  to confirm.

\*\*\* FOR ADVANCED USERS ONLY \*\*\*

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## Zero Tracking Range and Zero Display Range



Zero tracking enables high precision scales to compensate during wind fluctuations and vibrations. It is possible to adjust the level of assistance offered by zero tracking. To do this use the following steps:

### 1. Zero Tracking Selection

- a. Press and hold  key and turn the scale ON. Keep holding  until the end of self-test.
- b. The display will show "0.0d", "0.5d", "1.0d", "1.5d", "2.0d", "3.0d" Press  to toggle the settings and press  to confirm.





### 2. Zero Display Range Selection

The display will show "Zero-S" (invalid) or "Zero-L", "0" is displayed when the weight is within  $\pm 3d$  range). Press  key to toggle the settings, press  to confirm.





3. Select whether "0" will be shown when the weight is within  $- (30d \sim 0d)$ . Press  to toggle "30d OFF" or "30d ON", press  to confirm.

## Division Selection

Users can change the division that the scale will display.

1. Press and hold  key and turn the scale ON. Keep holding  until the end of the self-test.
2. The display will show the selected division. Press  to toggle the settings and press  to confirm.

## Counting and Auto-average

1. Press and hold  key and turn the scale ON. Keep holding  until the end of self-test. The display will either show "div" or "Code". Users can toggle between the 2 settings by pressing . To confirm press .

**DIV setting**- the scale uses the unit weight as displayed on the LCD.





**CODE setting**- the scale will use the unit weight as calculated by the processor. This is much more accurate as it calculates to more decimal points.

NOTE: We recommend users to use the scale on the CODE setting.

2. Once your selection is confirmed the scale will enter AUTO AVERAGING function. Here you can choose between ON and OFF. Users can toggle the settings by pressing  and confirm the selection with .











NOTE: Auto averaging ON enables the scale to accurately work out the weight per unit on samples where there are discrepancies on the Individual weights. Advanced users who need exact results are recommended to leave this OFF, but we would recommend that the weight per unit is calculated exactly by setting a large sample size initially to take care of deviations in the item's weights.

## Backlight Setting

1. Press and hold  key and turn the scale ON. Keep holding  until the end of self-test.
2. The display will show "AUTO"=(backlight on when weight placed on tray) or "OFF"=(backlight disabled) or "ON"=(backlight on constant). Press  to toggle the settings and press  to confirm.

## KEY PAD FUNCTIONS



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 Zero key to clear the display	 Use this key to confirm desired batch limit
 Tare Mode	 Use this key to clear the readings entered
 This key is used for total count accumulation	 Used when manually keying in the unit weight
 Use this key to clear the total count accumulation	 Sample Key . Used when keying in a sample amount
 Use this key to clear the saved batch limit	 Unit Selection Key



## OPERATION INSTRUCTIONS

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### Tare

Tare can be used for eliminating the weight value of an empty container. Place an empty container on the scale and press . Then place the items to be weighed in the container. NOTE: When all weight is removed from the weighing tray, the tared value of a container will be displayed as a negative number. Press  again to return the scale to zero.

### Unit Weight Input





A known unit weight can be inputted directly by entering the value first then followed by pressing  key. Press  to select a weighing unit kg, g, lb, oz.

### Unit weight by sampling

1. Put the objects intended for sampling on the weighing platform.
  2. Input the number of the objects, this number will flash in the Unit Weight display.
  3. Press  Key, the calculated unit weight will then be shown in the Unit Weight display, the total quantity will then be displayed.
- Note: Remember the greater the initial sample size, the more accurate the results.
4. Press  key to clear the saved sample.




### Batch Weighing

Users can set a minimum or maximum limit when weighing in batches. An alarm will sound when you have exceeded the batch limit.

1. First enter the sample weight by following the Unit Weight by Sampling steps (see above).
2. Now press  key. The display will show "down 0". To enter the desired minimum limit, input a number and press .
3. The display will show "UP 0". To enter the desired minimum limit, input a number and press .
4. Now begin weighing, when the scale exceeds the batch limit an alarm will activate.
5. Press  key to clear the saved batch limit.

### Accumulation

This is used to track the total count on numerous batches of the same item. By using this function the scale keeps a running total.

1. First enter the sample weight by following the Unit Weight by Sampling steps (see above).
2. Place the batch you wish to weigh on the tray. Now use  key to memorize the total, after each additional batch you can add to the accumulation by pressing  key. Please allow the scale to stabilize before adding to the accumulation.
4. Press  key to clear the total. The display will show the accumulated total in the Unit Weight display (a maximum of 99 accumulations can be accepted. The display will show "OL" when the accumulated count is more than 999,999).

## Communication Settings (optional)

1. Press and hold **[2]** key and turn the scale ON. Keep holding **[2]** until the end of self-test.
2. The display will show the Baud Rate preset, select one (2400, 4800 or 9600) by pressing **[<=>]** and press **[<=>]** to confirm.
3. Next enter communication selection mode. In communication mode there are 4 settings in which to send data to the PC (a) "PR"= use this setting to manually send the data by pressing **[<=>]** (b) "ST1"=data will be sent when the reading is stable (c) "ST0"=data is sent when the reading is stable but not zero, (d) "Co"= data is sent continuously.
4. Press **[<=>]** to toggle the settings and press **[<=>]** to confirm.

## RS-232 Communication format

Baud Rate : 2400,4800,9600

Data Bit : 8

Parity : N(None)

Stop Bit : 1

Code : ASCII

Data Format :

G=GROSS N=NET

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	
HEAD				DATA										UNIT		CR	LF	
G/N	.	W	.	:	+	-									(K)	g	CR	LF

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	
HEAD				DATA										UNIT		CR					
U	.	W	.	:	+	-									g	/	p	c	s	CR	LF

### EXAMPLE:

G.W. : + 100g

U.W. : + 0.2g/pcs

Total : + 500pcs

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	
HEAD				DATA										UNIT		CR			
T	O	T	A	L	:	+									p	c	s	CR	LF

## CALIBRATION

Calibration may be required when the scale is first set up for use, or if the scale is moved to a different altitude or new location. 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 can occur. For the most accurate results we recommend calibrating your scale before each use.

How to calibrate:

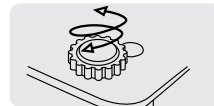
\*\*You must have an accurate 4kg weight for the CTS 6000 / 20kg for the CTS 30000 in order to calibrate.\*\*

1. Press and hold **[<=>]** key and turn the scale ON. Keep holding **[<=>]** until the end of self-test.
2. The display will show "CAL". Press **[<=>]** again and the display will show "0"; place the correct weight on the tray.
3. Enter the value of the weight in kg using the number keys.
4. Press **[<=>]** to confirm the calibration weight. Calibration is complete.

SPECIFICATIONS			
<b>Capacity</b>	6kg x 0.1g	30kg x 0.5g	<b>Units</b> kg, g, lb, oz, pcs
<b>Scale dimension</b>	320mm x 310mm x 120mm		
<b>Tray dimension</b>	295 x 220mm		
<b>Scale Weight</b>	3kg		
<b>Operating temperature</b>	Optimum 10-40°C (50-104°F)		
<b>Power Source</b>	Rechargeable battery / AC-DC 9V 650mA power adapter		
<b>Tare range</b>	Up to scale's maximum capacity		

### ADJUSTABLE FEET

on bottom of each corner of the scale



### DATA TRANSMISSION PORT

on right side of the scale

