

# Installation and Operating Instructions

## ECS Series



5,10, or 20 lb. Capacity

**The Perfect  
Counting Scale  
for  
Any Application**

- Counting
- Weighing
- Shipping
- Inventory Control
- Batching



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*Copies of this manual are available in Adobe Acrobat PDF format on our website.*

## **SET-UP: Preparing the Scale for Use**

Remove the contents from the carton which includes the scale, platter, and the AC adaptor.

Install the platter by inserting the pins on the underside into the holes on the top of the scale console. The beveled edge of the platter should face forward.

The scale may be powered either with 4 'C' Cell batteries or the supplied AC adapter. If using batteries, do not use a mixture of old and new batteries. Once the batteries loose power, replace them with fresh ones or remove them from the scale. Depleted batteries left in the scale may cause the unit to fail when operated on the AC adaptor.

Insert the plug into the jack on the rear of the unit and then plug the transformer into a standard 110/120 volt AC outlet. The use of a surge protector is recommended.

Turn the scale on by pressing the ON/ZERO key.

The ECS scale can display grams, pieces (pcs), ounces (oz), or pounds (lbs.). When the scale is set to ounces, an indicator arrow will appear above the oz symbol on the display.

Locate your scale on a solid, level work surface free from air drafts and vibrations. While precise leveling of the scale is not required, you may get inaccurate results if all four adjustable feet are not in contact with the work surface.

**CAUTION:** The AC adaptor supplied with the scale is a proprietary design. If it should ever fail, replace only with a QTech unit. The use of any other adaptor may result in scale and/or battery damage as well as voiding your warranty.

### **For Consistent and Accurate Results:**

- Avoid scale placement near windows, fans, and air conditioning or heating vents. Do not leave anything on the scale platter when not in use.
- Use a surge protector with the AC adaptor to minimize the effects of voltage spikes.
- Do not jog paper/parts or drop cartons on the scale platter.
- To avoid electronic interference do not operate cell phones within 6 feet of the scale.

**Important:** *Save the shipping carton and all packing materials should it be necessary to return the unit to the factory for service.*

## **FUNCTION: How to Sample**

Sampling is the process of “teaching” your scale to calculate a unit weight or “weight per 1000” pieces. Once the scale knows the unit weight, it can quickly provide a count by dividing the weight on the scale by the unit weight.

This is the most critical step in the entire counting process. The golden rule of sampling is this: the larger the initial sample size, the more accurate your counts will be. There is a breakeven point, however, at which point an increased sample size will provide little or no additional accuracy. We suggest you use the sampling sizes listed in the table below as a starting point. You may then experiment with these values to find a reasonable tradeoff between the time spent sampling and the resulting accuracy.

Turn the scale on by pressing the ON/ZERO key. Press the UNITS key to cycle through grams, lbs, oz, and PCS - select “PCS”. Next press the NET/GROSS key to cycle through the available samples sizes: C10, C20, C50, C100, and C200. Select a sample size of 10, 20, 50, 100, or 200 pieces, and place that exact amount of items on the scale.

Next press the UNITS key - “CAL” will appear and then the scale will display the selected sample size in the window.

Select from the following sampling procedures depending on the item you wish to count:

### **PAPER SAMPLING:**

<b>Sheet Size</b>	<b>Sampling Procedure</b>
8-1/2 x 11”	Press the NET/GROSS key to cycle through the available samples sizes and select: <b>C20</b>
5-1/2 x 8-1/2”	Press the NET/GROSS key to cycle through the available samples sizes and select: <b>C50</b>
2 x 3-1/2” or Smaller Sheets	Press the NET/GROSS key to cycle through the available samples sizes and select: <b>C100</b>

**NOTE:** If you will be counting fewer than 1000 sheets you may use a smaller than normal sampling size.

### **PARTS SAMPLING:**

<b>Item Type</b>	<b>Sampling Procedure</b>
Small, light weight items, such as beads, screws, etc.	Press the NET/GROSS key to cycle through the available samples sizes and select: <b>C50</b>
Medium weight items, such as fittings, extrusions, etc.	Press the NET/GROSS key to cycle through the available samples sizes and select: <b>C20</b>
Larger items, such as heavier castings, finished products, etc.	Press the NET/GROSS key to cycle through the available samples sizes and select: <b>C10</b>

## COIN SAMPLING:

Item Type	Sampling Procedure
Coins or Tokens	Press the NET/GROSS key to cycle through the available samples sizes and select: <b>C100</b>

## FUNCTION: Counting

### COUNTING:

Once the Unit Weight has been determined through the sampling process you may begin adding additional pieces to the scale. The count will be displayed incrementally in the display window. The count will continue to accumulate until the maximum weight capacity of the scale is reached. If you exceed the rated weight capacity the WEIGHT window will display an error. Remove some items from the platter until the quantity is once again visible.

### TARING (Zeroing):

This feature allows you to count paper inside a box or carton by first eliminating the weight of the container. It also allows for the use of a “expansion” or oversized platter for counting items which exceed the built-in platter dimensions. You can sample first and then tare out a weight, or you can tare out a weight and then sample with the container on the scale. Remember that the weight should always be “0” before sampling.

Function	Procedure
To Eliminate the Weight of a Box or Expansion Platter *	Place the container or expansion platter on the scale and press the <b>TARE</b> key. <b>NOTE: The scale must be in the grams, lbs, or oz. mode for the Tare function to work. Press the UNITS key to advance to one of these settings if you are currently in the PCS (pieces) mode.</b>
To Eliminate a “Negative” Tare Weight	Press <b>TARE</b> key with nothing on the platter. <b>NOTE: The scale must be in the grams, lbs, or oz. mode for the Tare function to work. Press the UNITS key to advance to one of these settings if you are currently in the PCS (pieces) mode.</b>

## **SUGGESTIONS:**

## **Tips and Troubleshooting**

- If you should inadvertently press the wrong key and the scale will not respond, turn the scale off and back on again to clear the problem.
- Purchase a quality surge protector for your scale to avoid damage from electrical surges and spikes. Do not operate cell phones within 6 feet of the scale to avoid interference.
- Leaving the scale plugged-in at the outlet (but turned off) will keep the circuitry warm and will avoid inaccurate counts or weights due to "electronic drift".
- If you need to count over-size sheets of paper (11x17", 12x18", etc.) QTech offers a sturdy "expansion" (oversized) platter for sale. You can make a temporary expansion platter out of any suitable material such corrugated cardboard. Tare the weight before sampling and counting.
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### **Troubleshooting - Incorrect Counts:**

When used properly, QTech scales will provide accurate counts. If the sampling instructions are followed and the item you are counting is uniform in weight, the scale will always display the correct count, plus-or-minus one or two pieces per thousand. Incorrect counts are most often the result of one or more of the following factors:

**A Miscount During Sampling:** The scale is dependent on the operator for the accuracy of the sampling count. If you set the scale for a 50 piece sampling, but there are actually only 49 pieces, you will get an incorrect count.

**Too Small of a Sampling:** Example: if the recommended sampling size is 100 pieces, and you only use 10 or 20 pieces, there is a good chance that you will get an inaccurate count. Remember: the larger the sampling size, the better the accuracy of the final count.

**Operating the Scale in a Draft:** An air draft can affect the scale's accuracy. Avoid using the scale near any source of moving air: fans, air conditioners, heaters; even a cross draft coming from an open window or door.

**Lack of Uniformity of the Item Being Counted:** The scale is dependent on the item being counted to be uniform; every item has to weigh the same. A mixture of different weights will result in inaccurate counts.

**Require Technical Support?**

Call 1-800-831-4175

## **CALIBRATION: Calibration Instructions**

**NOTE:** The ECS scale **does not** need to be calibrated for normal use. Calibration is required only for ISO certification.

### **Procedure:**

Turn the scale on. Press the UNITS key repeatedly until scale displays, "lbs."

Turn the scale off and turn it upside down. You will see a small black switch in a hole on the underside of the scale. Move the switch to the left from "LOCK" to "ADJ". Turn the scale right side up.

Press and hold down the TARE key. While continuing to hold the TARE key down, use another finger to press and hold down ON/ZERO key. Both keys should now be held down. In exact sequence, first release the ON/ZERO key, and then the TARE key. The scale will display "01C5P" (the top stroke of the "5" will be missing). If it does not display exactly, repeat this process.

Next, select from the following instructions based on the capacity of your scale:

### **Procedure for the ECS 5 (5 lb. Capacity):**

Press the ON/ZERO key once. The scale will read "02CAL".

Press the TARE key once. The scale will display "2500" (with last "0" blinking).

Press the ON/ZERO key once.

Press the TARE key. The scale will first display "CEnt", and then, "2500".

Place 2500 grams on the scale in the form of a certified test weight, allow the display to stabilize, and then press the TARE key once - the scale will beep three times.

Turn the scale off and turn over. Move black switch right from "ADJ" to "LOCK".

Turn scale back on. The scale is now calibrated and ready for use.

### **Procedure for the ECS 10 (10 lb. Capacity):**

The method is identical to the 5 lb. model above except that a value of '5000' will be displayed instead of '2500', and you should use a 5000 gram test weight for calibration.

### **Procedure for the ECS 20 (20 lb. Capacity):**

The method is identical to the 5 lb. model above except that a value of '10000' will be displayed instead of '2500', and you should use a 10,000 gram test weight for calibration.

# Other Counting Solutions from QTech



## MODEL **X-RES**

**Low-cost, with Exceptionally High Resolution for Small Parts Counting, Postal Verification, and Ink Mixing**

<b>Capacities:</b>	<b>Resolution:</b>
3 lbs. - X-RES-3	1 Part in 300,000
12 lbs. - X-RES-12	



## QCS Series

**Our Most Popular and Versatile Model for Every Counting Application**

<b>Capacities:</b>	<b>Resolution:</b>
3 lbs. - QCS-3	1 Part in 600,000
6 lbs. - QCS-6	(QCS-3: 1 part in 2,000,000)
15 lbs. - QCS-15	
30 lbs. - QCS-30	
65 lbs. - QCS-65	



## EZ-60

**For Fast, One-Button Counting of Pennies, Nickels, Dimes, Quarters, Fifty-cent pieces, and Dollar Coins**

<b>Capacity:</b>	<b>Resolution:</b>
60 lbs. - EZ-60	1 Part in 600,000



## QCS-150

**High Capacity, Heavy-Duty Counting Scale with Detachable Console**

<b>Capacity</b>	<b>Resolution:</b>
150 lbs. - QCS-150	1 Part in 600,000

## **About QTech Business Products...**

QTech Business Products is dedicated to providing cost effective solutions to your counting, ink mixing, weighing, and shipping scale needs. Our goal is to provide quality products and exceptional service and support.

### ***At QTech you can always expect:***

- **90 DAY** money back guarantee
- **A Full 3-YEAR** Product Warranty
- **TOLL-FREE** phone technical support at no charge for as long as you own the scale
- **PROFESSIONAL**, courteous, and timely response to your inquiries, questions, or concerns

***Customer Satisfaction  
is the Driving Force at QTech***



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