

Cubiscan 110-TC



Operations and technical manual

Version [1.1]

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Cubing and weighing systems

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Cubiscan 110-TC operations and technical manual

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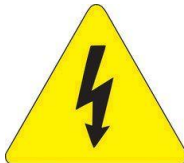
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CAUTION

The Cubiscan 110-TC should only be serviced by qualified personnel.

Observe precautions for handling electrostatic sensitive devices when setting up or operating the Cubiscan 110-TC.



WARNING

Disconnect all power to the Cubiscan 110-TC before servicing or making any connections.



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Manual updated 2026-05-27

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CHAPTER 1

PRODUCT DESCRIPTION

The Cubiscan 110-TC is a precision volume measuring and weighing instrument for use in applications in which precise weighing and measuring is required.

The Cubiscan 110-TC design combines parcel dimensional measuring and weighing into one operation. The collected data can be formatted and transmitted to a host computer via Ethernet or USB connection. Along with transmitting to a host computer, the collected data is also displayed on the touchscreen control panel.

The Cubiscan 110-TC utilizes four sensors (ultrasonic transducers) to determine the length, width, and height of an object placed on its measuring surface. The object is simultaneously weighed by a precision aluminum load cell. The load cell and sensors are controlled by a proprietary Cubiscan controller. The controller, load cell, and support circuitry are conveniently located in the base of the Cubiscan 110-TC.

The Cubiscan 110-TC is designed for the demands of an industrial environment. The load cell, frame, and sensor housing are made of forged and machined aluminum. A mobile cart and useful accessories such as a portable power supply are available to create a completely mobile cubing, weighing, and identification workstation.

The Cubiscan 110-TC is easy to assemble, set up, operate, and maintain. Its simple design and extreme accuracy coupled with intelligent, self-contained circuitry make the Cubiscan 110-TC a valuable weighing/measuring tool for any business.

The Cubiscan 110-TC was calibrated at the factory, but may require recalibration due to handling during shipping. Complete calibration instructions for the Cubiscan 110-TC are provided in "CALIBRATION" on page 45.



Figure 1
Cubiscan 110-TC

Specifications

Electrical

Voltage: 100-240 VAC, 47-63 Hz

Current: 1.05 A maximum current draw, 0.15 A typical

Measuring Capacities

Minimum Package Dimensions: 0.5 x 0.5 x 0.5 in (L x W x H)
(1.0 x 1.0 x 1.0 cm)

Maximum Package Dimensions: 36 x 24 x 30 in (L x W x H)
(90 x 60 x 75 cm)

Dimension Increment:	0.1 in (0.2 cm)
Minimum Package Weight:	0.05 lbs (0.02 kg)
Maximum Package Weight:	100 lb (50 kg)
Weight Increment:	0.05 lb (0.02 kg)

Environmental

Operating Temperature: 14° to 104° F
(-10° to 40° C)

Humidity: 0 to 90% non-condensing

Physical Specs

Length: 44 in (112 cm)

Width: 27 in (69 cm)

Height: 38.5 in (98 cm)

Shipping Weight: 70 lb (34 kg)

User Interface

QBIT™ software can be used to interface with the Cubiscan 110-TC.

Display:
Integrated TFT LCD touchscreen displays L, W, H, weight, unit of measure,
and diagnostic codes

Outputs:
Serial (1), Ethernet (1), USB (1)

CHAPTER 2

SETUP

This chapter provides instructions for assembling and setting up the Cubiscan 110-TC. Perform the steps to set up the Cubiscan 110-TC in the following order:

- Unpack the Cubiscan (page 4)
- Set up the back panel (page 6)
- Adjust the shipping bolts (page 7)
- Place the Cubiscan where you will be using it (page 8)
- Connect power to the Cubiscan (page 9)
- Turn on the Cubiscan 110-TC (page 10)
- Connect the Cubiscan to a computer or network (optional) (page 10)
- Connect the Cubiscan to a barcode scanner (optional) (page 13)
- Install the Qbit for Windows PC software (optional) (page 16)

Unpacking



To unpack the Cubiscan 110-TC, take the following steps.

1. Remove the top of the crate.

2. Remove the screws holding the wood packing bar in place, and remove the wood bar from the crate.



Figure 2
Cubiscan 110-TC in Crate

3. Remove the packing material from around the Cubiscan 110-TC.
4. Carefully lift the Cubiscan 110-TC from the crate (this may require two people).

Examine the container and the Cubiscan 110-TC carefully for any damage. If, after unpacking, you discover any damage to the Cubiscan 110-TC, contact the carrier immediately.

The Cubiscan 110-T is shipped in a single container with all components. Refer to the list below to identify the components.

- Fully assembled Cubiscan 110-TC
- AC power cord
- USB cable
- Calibration cube
- Qbit software CD (optional)
- Operations and Technical Manual (in PDF form on the CD)

Accessories and tools packed with the Cubiscan 110-TC include the following:

- 2.5 mm Allen wrench
- 4.0 mm Allen wrench

- 5.0 mm Allen wrench
- 6.0 mm Allen wrench
- 13 mm wrench
- 1/8" in Allen wrench
- Bubble level

If any of the components or accessories are missing or defective, contact Cubiscan or your system integrator.

NOTE > A power strip (not included) is recommended for turning power off and on.

Setting Up the Back Panel

Take the following steps to attach the back panel and connect the sensor cables.

1. Remove the four screws from the back of the Cubiscan 110-TC.

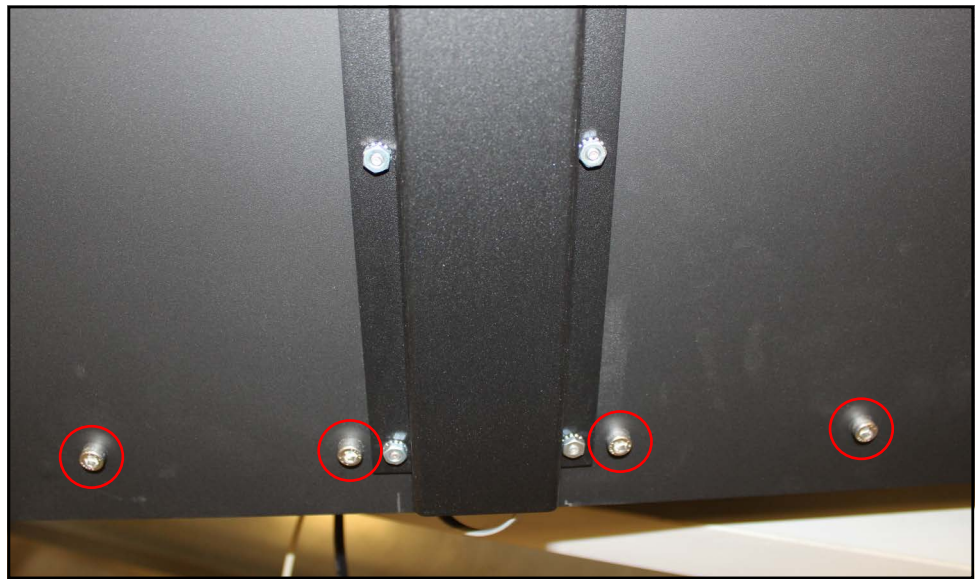


Figure 3
Back Panel Screws

2. Lift the back panel into its upright position, making sure not to constrict the three sensor cables protruding from the back of the scale plate.
3. Use the screws from step 1 to secure the back panel in its upright position.

4. Insert the plug on each length sensor cable into its socket on the back (at each end) of the Cubiscan 110-TC.
5. Route the height sensor cable up the channel on the back panel, and insert the plug into the socket on the height sensor.

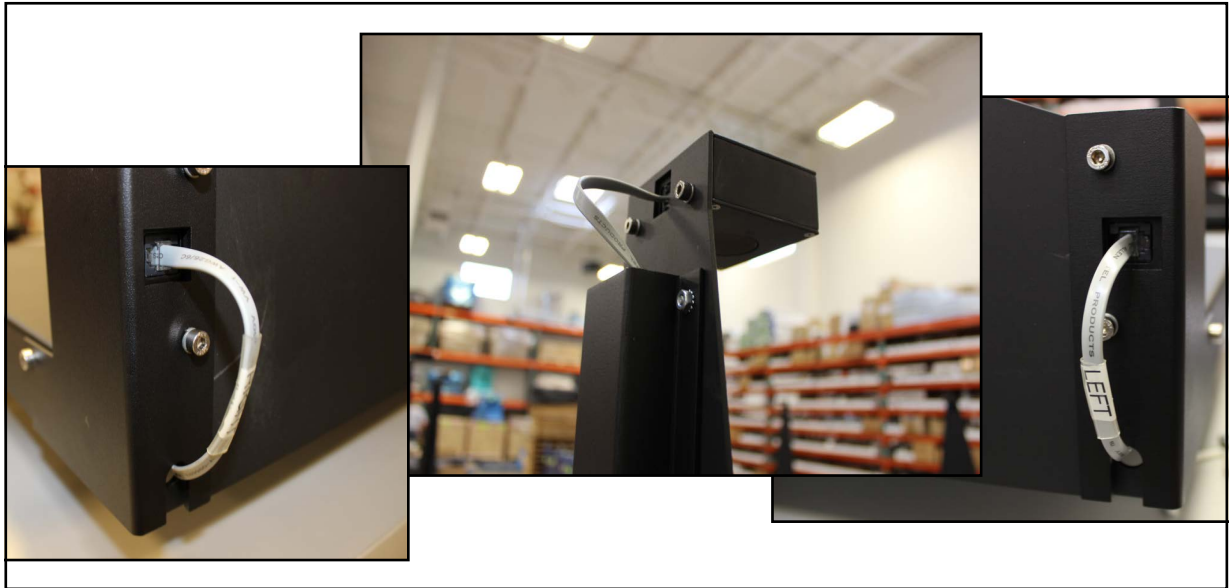


Figure 4
Sensor Cables

Adjusting the Shipping Bolts



Three shipping bolts are located on the Cubiscan base to anchor the scale to the base. The bolts must be tightened after shipping for proper operation of the scale. Complete the following steps to adjust the shipping bolts.

1. Carefully tip the Cubiscan 110-TC onto the back panel to expose the bottom of the scale.

2. Turn all three of the shipping bolts clockwise until the head is tight against the scale plate.

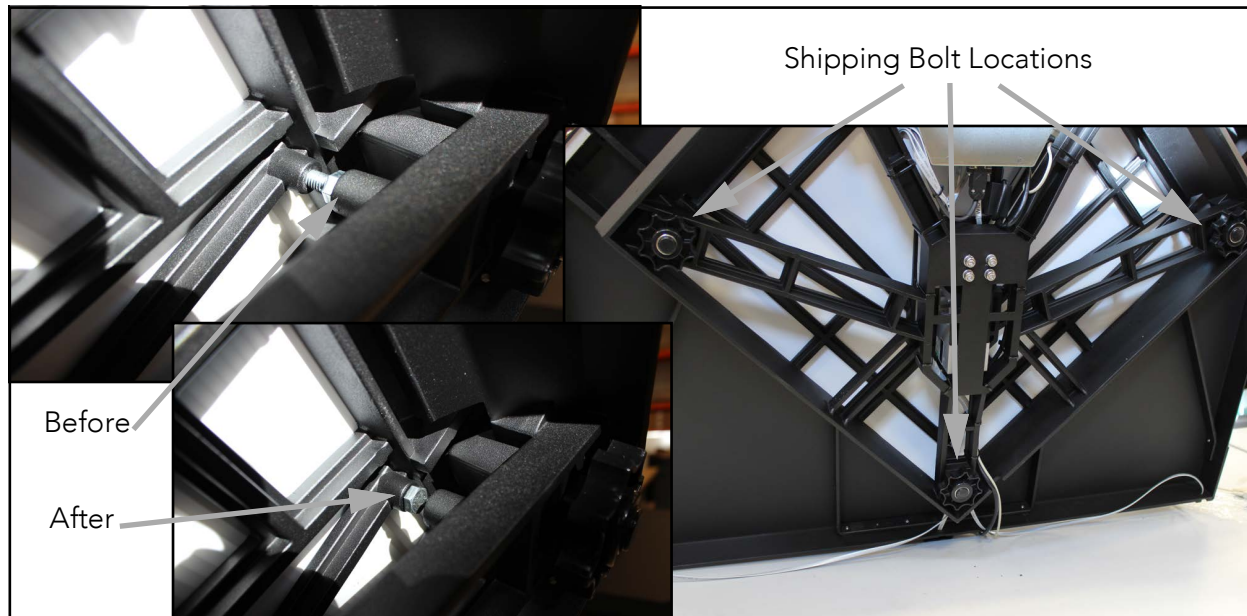


Figure 5
Shipping Bolts

3. Tip the Cubiscan 110-TC back to its upright position.

Placement

The Cubiscan 110-TC is designed to be operated in a warehouse environment; however, for proper operation the following conditions should be met if possible.

- Do not subject the Cubiscan to extremes in temperature or humidity. Locate the Cubiscan as far from open freight doors as possible. Heaters or air conditioners should not blow directly on the Cubiscan.
- Protect the Cubiscan from static electricity, especially the control panel.
- Place the Cubiscan on a flat, sturdy surface as free from vibration as possible. Excess vibration can reduce the accuracy of the Cubiscan 110-TC scale.
- The Cubiscan's platform is free-floating—it is resting on a spring (load cell). Maintain a minimum of one-inch clearance at the back and sides of the Cubiscan. Do not rest objects against or set objects on the Cubiscan when not in use.
- If a computer is used, place it as close to the Cubiscan as possible. The operator needs to use the keyboard or mouse on the computer while cubing and weighing packages using the Cubiscan 110-TC.

- Orient the Cubiscan so the control panel faces the operator.

After meeting the above criteria as best as possible, complete the following steps to place and level the Cubiscan 110-TC.

1. Place the Cubiscan 110-TC on a solid, stable surface. Be sure that nothing touches the back wall or top platter, as this may affect the scale.
2. Place the bubble level provided in the center of the scale platter.
3. Adjust the five leveling feet under the Cubiscan 110-TC to level the scale. Make sure all feet are touching the supporting surface.

An optional cart and portable power supply are available from Cubiscan to create a completely mobile cubing, weighing, and identification workstation.

Connecting Power



The Cubiscan 110-TC uses an external AC power adapter. Take the following steps to connect power to the Cubiscan.

1. Locate the AC power adapter, which is bundled inside the Cubiscan base. The DC power cord from the power adapter is attached to the controller box.
2. Locate the AC power cord (supplied), and connect it to the AC power adapter.
3. Route the AC power cord under the Cubiscan base so it cannot be crushed, bent, or pulled loose.
4. Connect the other end of the AC power cord to a standard power strip equipped with an ON/OFF switch.
5. Use the power strip switch to turn the Cubiscan on and off (see “Turning on the Cubiscan” on page 10).

Turning on the Cubiscan



Specific procedures must be followed each time you turn on the Cubiscan 110-TC, as follows:

1. Make sure there are no packages or other objects on the Cubiscan platform.
2. Turn on the Cubiscan 110-TC via the power strip (see “Connecting Power” on page 9).

The Cubiscan performs self-calibration and diagnostic procedures that take about five seconds. Do not touch the Cubiscan platform during these five seconds.

Connecting to a Computer or Network



To operate the Cubiscan 110-TC, you can connect it to a computer or a network, or you can use the control panel, as follows:

- Connect it via a USB to USB cable. Use Qbit software on the computer to run the Cubiscan 110-TC.
- Connect it to a host system via a standard Ethernet TCP/IP port.
- Connect it to a PC using a serial RS-232 cable.

USB Connection

Complete the following steps to connect the Cubiscan 110-TC to a computer using a USB connection. The USB connection method is the recommended method, and all materials needed for communicating with a computer are supplied.

1. Place the computer in its permanent location, generally close to the Cubiscan. (Refer to “Placement” on page 8 for more information.)
2. Route the USB cable under the base. Ensure the cable is not crushed, bent, or able to be pulled loose.
3. The Cubiscan controller is located just behind the control panel at the front of the base. Connect one end of the USB cable to the USB connector on the back of the Cubiscan controller.

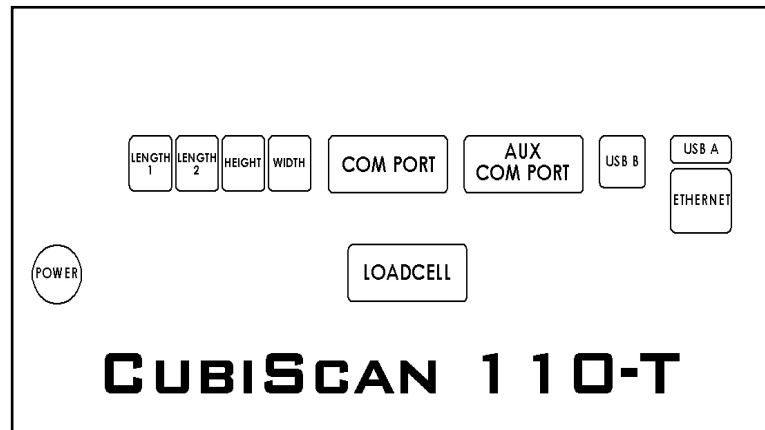


Figure 6
Back of Controller

4. Locate a free USB port on your computer and connect the other end of the USB cable to the port.

When you have completed these steps, the Cubiscan 110-TC should communicate with a computer.

Ethernet Connection

Complete the following steps to connect the Cubiscan 110-TC to a computer using an Ethernet connection.

1. Place the computer in its permanent location, generally close to the Cubiscan. (Refer to "Placement" on page 8 for more information).
2. Route the Ethernet cable under the base. Ensure the cable is not crushed, bent, or able to be pulled loose.
3. The Cubiscan controller is located just behind the control panel at the front of the base. Connect one end of the Ethernet cable to the Ethernet connector on the back of the Cubiscan controller, as shown below. Push the connector in until it locks. There should be an audible snap when it locks.

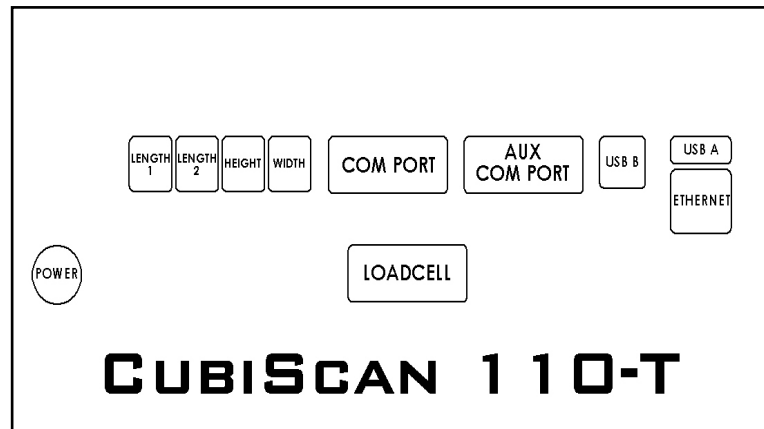


Figure 7
Back of Controller

4. Insert the connector on the other end of the cable into the computer's network socket until it locks.
5. Contact your system integrator or call **Cubiscan Technical Assistance** at **801.451.0500** for assistance

Serial Connection

Complete the following steps to connect the Cubiscan 110-TC to a computer using a serial connection.

1. Place the computer in its permanent location, generally close to the Cubiscan. (Refer to "Placement" on page 8 for more information).
2. Route the RS-232 serial communications cable under the base. Ensure the cable is not crushed, bent, or able to be pulled loose.

3. The Cubiscan controller is located just behind the control panel at the front of the base. Connect one end of the serial cable to the serial connector on the back of the Cubiscan controller, as shown below.

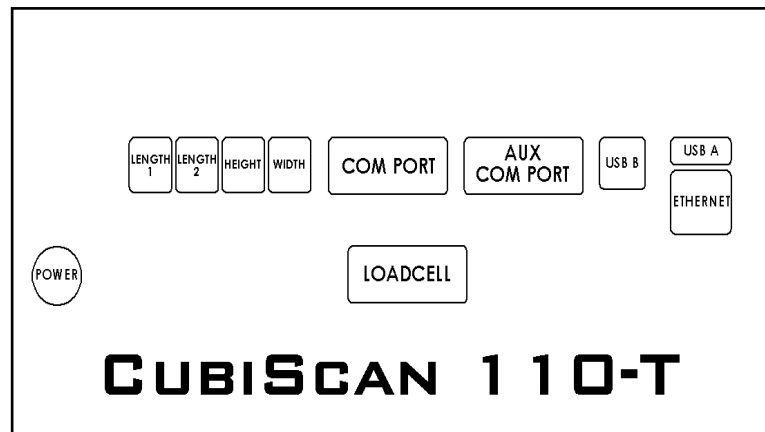


Figure 8
Back of Controller

4. Locate a free serial port on the back of your computer and connect the other end of the serial cable to the port.
5. To secure the serial cable, tighten the screws (two on each connector) at both ends of the cable. It is important that the cable be secure.

Connecting to a Barcode Scanner (Optional)

The Cubiscan 110-TC has an additional USB port for connecting to a barcode scanner. To connect the Cubiscan to a barcode scanner, complete the following steps.

NOTE ➤ This barcode connection option is for non-Qbit software users. If you are using Qbit software, you will connect the barcode scanner directly to the PC.

1. Route the barcode scanner USB cable under the base. Ensure the cable is not crushed, bent, or able to be pulled loose.
2. The Cubiscan controller is located just behind the control panel at the front of the base. Connect the free end of the cable to the barcode

scanner connector on the back of the Cubiscan controller, as shown below.

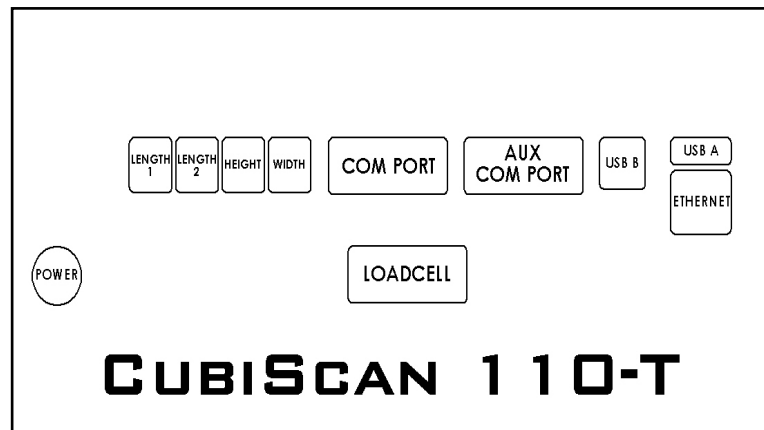


Figure 9
Back of Controller

3. Once the barcode scanner is connected to the Cubiscan 110-TC, you need to turn the barcode feature on. On the Cubiscan 110-TC touchscreen. Tap the menu icon in the upper left corner of the home screen.

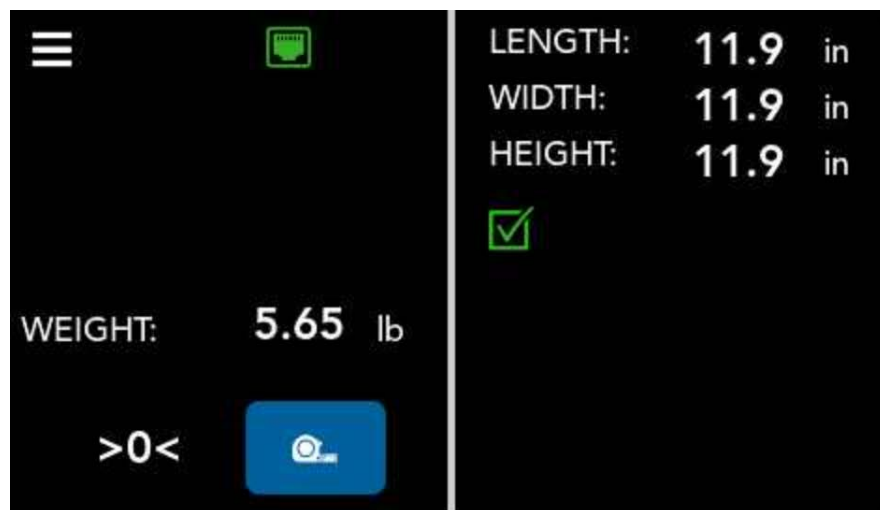


Figure 10
Cubiscan 110-TC Touchscreen

4. From the menu side panel, select **MSR SET**.

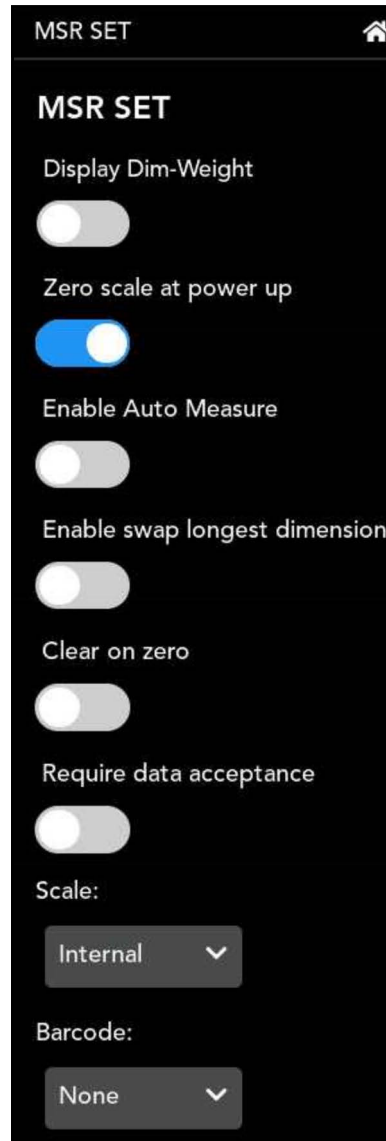


Figure 11
Measure Settings

5. Under the section **Barcode** and select either **one**, or **two** from the dropdown, depending on the number of scans needed for each measurement. The Cubiscan will wait to post measurement data until the number of barcode scans are performed.

Installing Qbit (Optional)



A flash drive is available containing the Qbit application, which can be used to operate the Cubiscan 110-TC.

The *Qbit User Guide*, located on the flash drive, provides instructions for installing and using Qbit. You can also download the user guide from the Cubiscan website at www.Cubiscan.com.

Setup Checklist



Before using the Cubiscan 110-TC for the first time, verify the following:

- Have the Cubiscan 110-TC and the computer (if applicable) been placed in the proper operating environment? (page 8)
- Has the Cubiscan been fully assembled? (page 9)
- Have the sensor cables been connected to the sensors? (page 6)
- Has the back panel been secured? (page 6)
- Have the shipping bolts been adjusted? (page 7)
- Has the base of the Cubiscan been leveled? (page 8)
- Has the AC power adapter been connected correctly? (page 9)
- Has the Cubiscan 110-TC been set up to communicate with a computer (if applicable)? (page 10)
- (Optional) Has the barcode scanner been connected properly? (page 13)
- If you are using Qbit to operate the Cubiscan 110-TC, has the application been copied onto your computer's hard-disk drive? (Refer to the *Qbit User Guide* for information.)
- Does the Cubiscan require recalibration? The Cubiscan 110-TC was calibrated at the factory, but may require recalibration due to handling during shipping. Refer to "CALIBRATION" on page 45 for information on calibrating the Cubiscan 110-TC.
- If you are using Qbit software, check the status of the Cubiscan before operating it. Refer to the *Qbit User Guide* for information on checking the Cubiscan's status.

CHAPTER 3

OPERATION

This chapter provides instructions for operating the Cubiscan 110-TC.

NOTE ➤ *The platform of the Cubiscan should be kept clean and free of objects that are not being measured.*

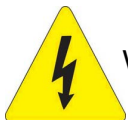
Before You Begin

Follow the procedures below to turn on the Cubiscan. The Cubiscan should be turned on before you start Qbit (if applicable).

1. Make sure there are no packages or objects on the Cubiscan platform.
2. Turn on the Cubiscan 110-TC via the power strip. The Cubiscan performs self-calibration and diagnostic procedures that take about five seconds. Do not touch the Cubiscan platform during these five seconds.

NOTE ➤ *Do not lean on or touch the Cubiscan platform or the package while a package is being cubed and weighed. Any kind of contact with the platform during the measurement process can alter the weight or sensor reading.*

NOTE ➤ *You should occasionally verify that the zero settings on the Cubiscan are correct. To do this, take a measurement with nothing on the scale and see if all values recorded are zero. The Cubiscan's empty weight and measurements can be reset to zero (zeroed) at any time (refer to the Qbit User Guide or to "Zeroing the Cubiscan 110-TC" on page 20).*



WARNING

Disconnect all power to the Cubiscan 110-TC before servicing or making any connections.

Using Qbit for Windows

Refer to the *Qbit User Guide* for instructions on cubing and weighing and other functions in Qbit. The *Qbit User Guide* is provided on the flashdrive accompanying the Cubiscan or can download it from the Cubiscan website at www.Cubiscan.com.

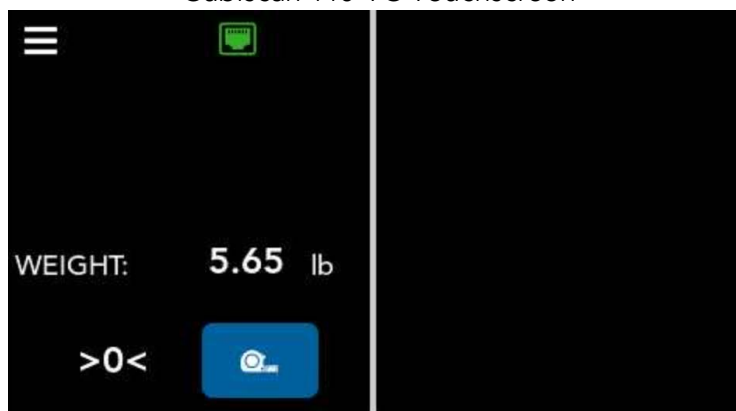


For information on measuring odd-shaped packages, refer to “Measuring Odd-Shaped Packages” on page 19.

Using the Touchscreen

All controls and displays for the Cubiscan 110-TC are located on the touchscreen at the front of the base. If a computer is not connected, you can use the control panel to cube and weigh packages. Measurements and weight are displayed on the touchscreen.

Figure 12
Cubiscan 110-TC Touchscreen



L= These display the measured dimensions in inches (in) or centimeters (cm) as selected.
W=
H=

Wgt= This displays the measured weight in pounds (lb) or kilograms (kg) as selected.

Dwgt= This displays the dimensional weight in pounds (lb) or kilograms (kg) as selected. Must be enabled in settings.

Factor= This displays the dimensional factor currently being used to calculate the dimensional weight. This option can be turned on or off in settings.

Ready (indicator) This indicates that the Cubiscan 110-TC is ready for cubing and weighing.

->0<- Tap this key to reset the sensors and scale to "zero" (make sure the platform is empty). Refer to "Zeroing the Cubiscan 110-TC" on page 20.

Measure (button)



Tap this key to prompt a measurement. The weight and dimensions of the object on the platform will be displayed on the screen.

Take the following steps to cube and weigh a package using the touchscreen to control the Cubiscan.

1. Verify that the Cubiscan platform is empty. The ->0<- indicator should be lit, and 0.00 should be displayed in the **Wgt=** field. Except for the **Factor** field, the rest of the display should be clear.
2. Place the package or object to be cubed and weighed on the platform and slide it against the center of the back panel. The ->0<- indicator light should go out.



Do not lean on or touch the Cubiscan platform or the package while a package is being cubed and weighed. Any kind of contact with the platform during the measurement process can alter the weight or sensor reading.

3. Press **Measure**. The length, width, height, weight, and dim weight of the package are displayed. The factor used to determine the dim weight is also displayed.
4. Remove the package from the platform. Wait for the ->0<- indicator to light before placing the next package on the platform.

If the ->0<- does not light, it means that the scale needs to be zeroed. To zero the scale, make sure that the platform is free of all objects, then press Zero.

Measuring Odd-Shaped Packages



The Cubiscan 110-TC is designed to measure dimensions on "cube-like" packages (objects that are square or rectangular) with a distinct width, length, and height. Packages that have odd shapes or irregular surfaces may be measured using the Cubiscan 110-TC; however, the dimensions will be determined by the closest straight edge or corner and may not accurately represent the actual width, height, and length of the package.

When measuring objects with irregular or porous surfaces that do not reliably reflect sound, it may be necessary to place a rigid sheet of plastic

or metal against the irregular side or sides so the sensors can record the dimensions. For example, when measuring books, a rigid sheet should be placed against the paper edge of the books.

NOTE > If rigid sheets are used when measuring objects, tare values should be entered to compensate for the thickness and weight of the sheet. Set tare values using the Options function on the Tools menu of Qbit (refer to the Qbit User Guide).

Zeroing the Cubiscan 110-TC

Tap the [Zero] button on the touchscreen to “zero” the Cubiscan 110-TC (set all empty measurements and weight to zero). The weight of the platform and the measurement from each sensor to the platform sides when the platform is empty must be set to zero for the Cubiscan 110-TC to operate properly.

The Cubiscan 110-TC tries to zero itself automatically every five seconds when it is not in the Measure mode. However, you may need to use this option in the following circumstances.

- If, during a long measuring session, environmental conditions (temperature and humidity) have changed noticeably.
- If you suspect that the last zeroing was in error (something was on the platform).

NOTE > Make certain that the platform is free of all objects before using Zero. If not, the zero reading will not be accurate.

CHAPTER 4

CONFIGURATION

This chapter provides instructions for using the Cubiscan 110-TC touchscreen to set up the height, width, and length measurements, configure the units, dimensional weight factor, and other settings.

If you have a computer connected to the Cubiscan 110-TC with Qbit installed, you can use Qbit to set up the measurement and dimensional weight units, perform calibration, and other functions.

Refer to the *Qbit User Guide* for instructions on measuring and other functions in Qbit. The *Qbit User Guide* is provided on the flashdrive with the Qbit application, or you can download it from the Cubiscan website at www.Cubiscan.com.

System configuration



The following options can be used to configure your Cubiscan 110-TC. The options available on the configure menu are Operation, Units, Ethernet, and Other.

General settings

The Cubiscan 110-TC may be customized to suit your specific dimensioning needs. To access the general settings, complete the following steps:

1. Tap the menu icon in the upper left corner of the home screen.

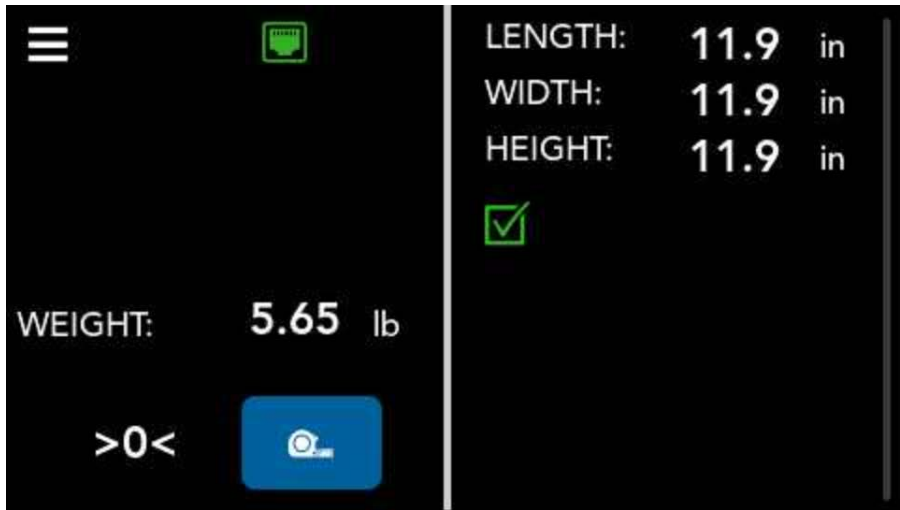


Figure 13
Cubiscan 110-TC Touchscreen

2. From the menu side panel, select **SETTINGS**.

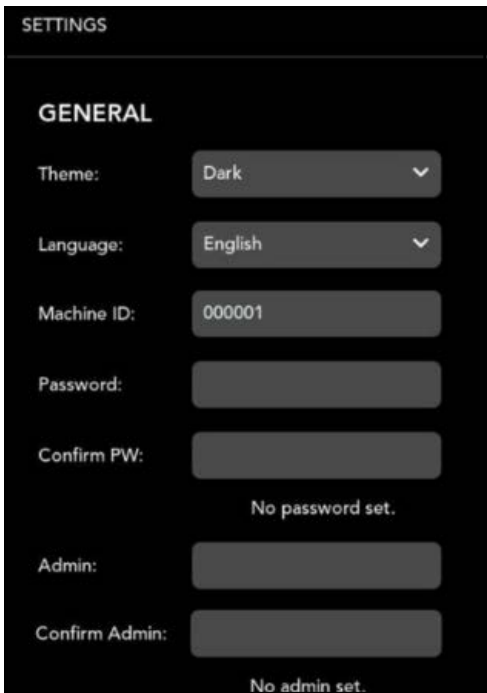


Figure 14
General settings

- Theme** Users may select from either a light theme or a dark theme.
- Language** Select your desired language form the following options: **English, French, Spanish, Portuguese, Japanese, and Chinese.**

Machine ID Optional Machine ID may be set for the Cubiscan. This may be useful in a facility where data is tracked from more than one Cubiscan.

Password Optional password Protection for the touchscreen is available. Enter desired password into the text field and reenter it in the field next to **Confirm PW**.

When the password is set you will also be prompted to enter the password and username to access the web interface administration page. The username will be **cubiscan** and the password will be whatever is entered in the settings.

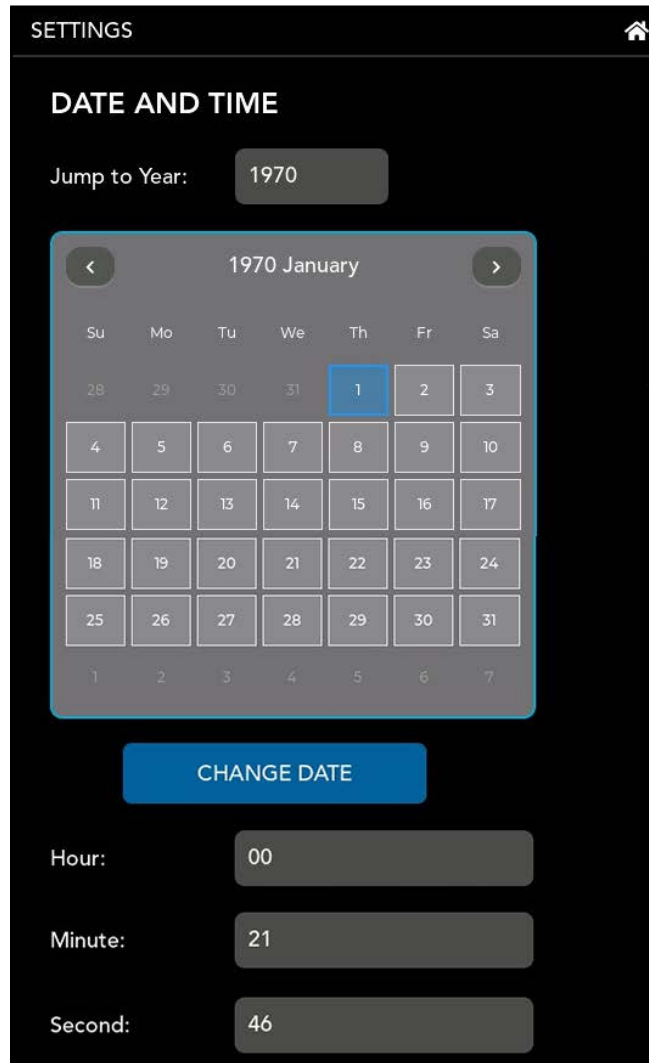
Admin Add an administrator password by entering it in the field next to **Admin**. Reenter the password in the field next to **Confirm Admin**.

Date and Time

To set the date and time complete the following steps:

1. Tap the menu icon in the upper left corner of the home screen.
2. From the menu side panel, select **SETTINGS**.

3. Scroll down to the **DATE AND TIME**.



SETTINGS

DATE AND TIME

Jump to Year: 1970

< 1970 January >

Su	Mo	Tu	We	Th	Fr	Sa
28	29	30	31	1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31
1	2	3	4	5	6	7

CHANGE DATE

Hour: 00

Minute: 21

Second: 46

Figure 15
Date and Time

Date Settings Set the date for the Cubiscan using the calendar input. Tap **[CHANGE DATE]** after making changes to the date to ensure changes are saved.

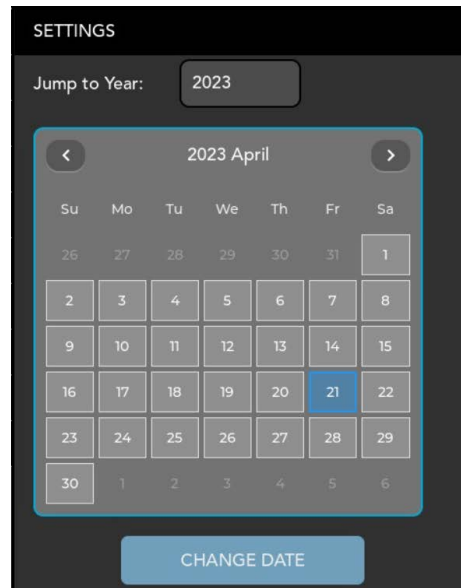


Figure 16
Date settings

Time Settings Set the time by entering values into the text fields next to **Hour**, **Minute**, and **Second**.

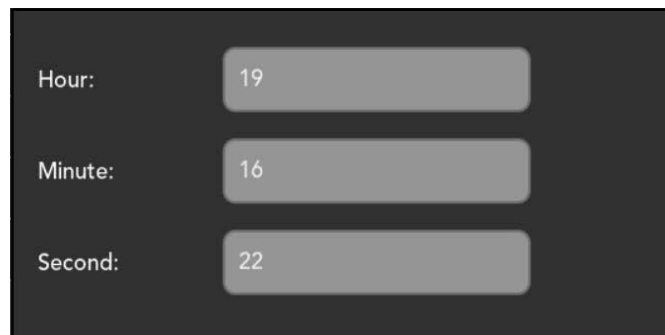


Figure 17
Time settings

System Reset

In the event that settings need to be reset back to factory defaults, the Cubiscan 110-TC has a system reset. By initiating system reset, all settings including custom settings will be reset back to their initial presets. Resetting

the system back to defaults will result in loss of all custom settings and should be avoided unless absolutely necessary.



Figure 18
System reset

To initiate a system reset complete the following steps:

1. Tap the menu icon in the upper left corner of the home screen.
2. From the menu side panel, select **SETTINGS**.
3. Scroll down to **SYSTEM RESET**.
4. Tap **[RESET TO FACTORY DEFAULTS]**.

Measure Settings



The following options can be used to configure your Cubiscan 110-TC. Settings exist for configuring measurements and the interface, allowing you to setup a measurement system that meets your needs and preferences.

To access the measure settings, perform the following steps:

1. Tap the menu icon in the upper left corner of the home screen.

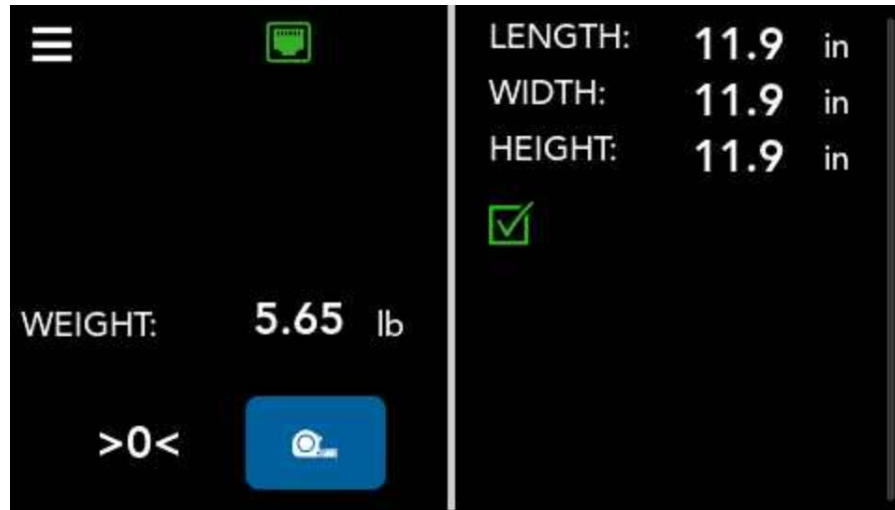


Figure 19
Cubiscan 110-TC Touchscreen

2. From the menu side panel, select **MSR SET**.

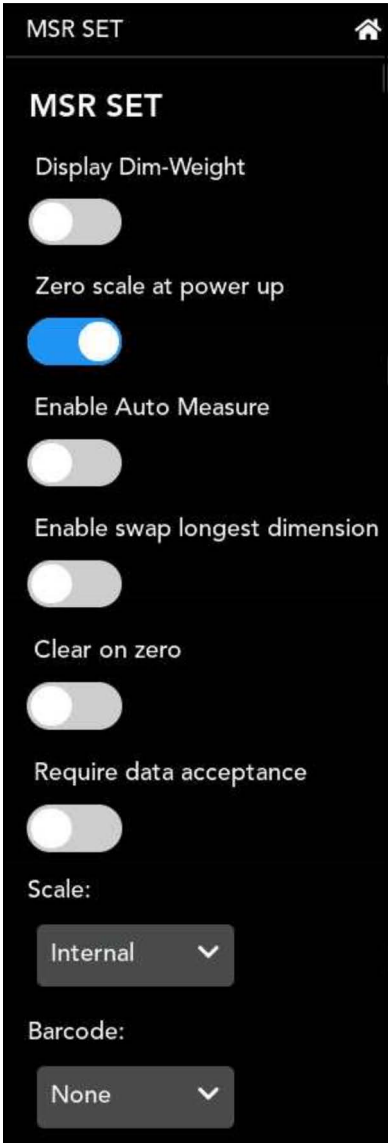


Figure 20
Measure Settings

Display Dim-Weight	Toggle this switch to display the dim weight and factor on the home screen.
Zero scale at power up	Toggle to have the scale zeroed automatically when powered on.
Enable auto measure	Toggle auto measure mode on/off. When enabled CS 110-TC will automatically measure when product is placed on the platform.

- | | |
|--------------------------------------|--|
| Enable swap longest dimension | Check this box if you want to enable the Swap Longest feature. This feature will automatically report the longest dimension as the length. |
| Clear on zero | When this box is enabled, the image associated with a measurement will disappear once the item is removed from the measuring platform. When this box is unchecked, the image associated with a measurement will remain on the screen until a measurement of another item is taken. |
| Require data acceptance | Toggle to enable data acceptance. With data acceptance enabled, each measurement will require a manual acceptance of data. After each measurement a box will appear at the bottom of the left-panel requesting a confirmation by the operator. Click the check-box icon to accept the measurement data or the X icon to clear the results for remeasurement. |

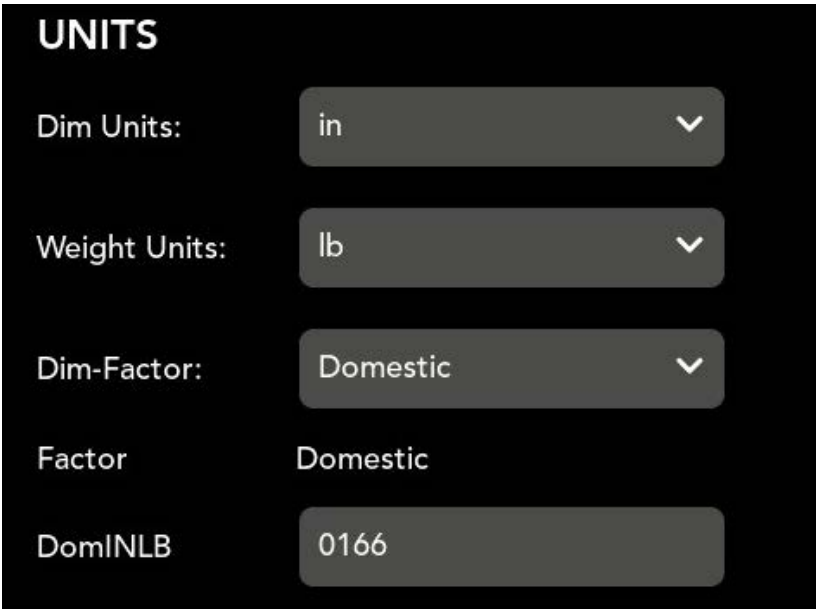


Figure 21
Data-acceptance

- | | |
|----------------|---|
| Scale | Select internal to use the built-in scale or select disable to not use the scale. |
| Barcode | Select from none , one , or two . This will determine whether a barcode should be scanned and whether one or two barcodes should be scanned. |

Units

The Units section, provides configuration of measuring units. These units will be displayed on the measurement screen and will be posted to data acquired during measurements.



The screenshot shows a configuration screen titled "UNITS". It contains five rows of settings:

Field	Value
Dim Units:	in
Weight Units:	lb
Dim-Factor:	Domestic
Factor	Domestic
DomINLB	0166

Figure 22
Units

- Dim units** In this field you can select **inches**, **centimeters**, or **millimeters** for your dimensional units.
- Weight units** In this field you can select **pounds** or **kilograms** for your weight unit.
- Dim-factor** In this field you can select a **domestic** or **international** dim-factor.
- Factor** Will automatically set to the selected **Dim-Factor** (domestic or international). Below in the **DomINLB**, the pre-configured factor will be displayed for the given units and dim-factor selected. This factor may be adjusted as needed by entering the desired factor in the text field.

QR Code

The Cubiscan 110-TC offers a QR Code that may be displayed on the touchscreen, providing the dimensioning information. This may be used in

conjunction with third party software as a means of capturing the dimensioning information.

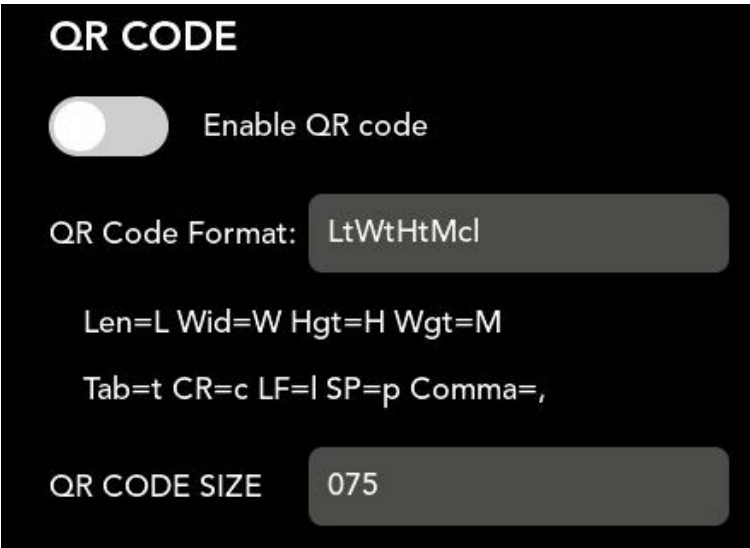


Figure 23
Barcodes

- Enable QR code** Toggle to enable/disable the QR code. When enabled, the QR code will appear on the home screen after a product has completed dimensioning.
- QR Code Format** Determine the format that the information will be received. Using the commands as depicted in the chart below the text field, you may customize the format according to your needs.
- QR Code Size** Set the size of the barcode that will display on the home screen.

Scale



Figure 24
Scale

Increment (lb)	Use the drop down to select the increments of pound measurements. Increment options include: 0.2, 0.1, or 0.05.
Increment (kg)	Use the drop down to select the increments of kilogram measurements. Increment options include: 0.1, 0.05, or 0.02.
Enable Pack Type	Toggle to enable pack type during measurement.

Connection



The Connection section Provides information and options for the setup of an Ethernet or other connection, allowing for the transfer of data from the CS 110-TC.

To access the connection settings, perform the following steps:

1. Tap the menu icon in the upper left corner of the home screen.
2. From the menu side panel, select **CONNECTIONS**.

Ethernet Settings

The Ethernet Settings field allows you to select the Ethernet settings for the Cubiscan. The following information is displayed to help you connect with the CS 110-TC: **MAC Address**, **IP Address**, **Subnet**, and **Gateway**.

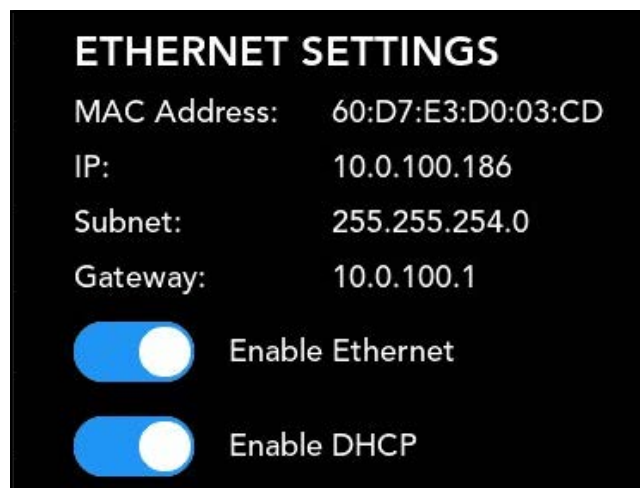


Figure 25
Connection

- Enable Ethernet** Toggling this option enables or disables the Cubiscan 110-TC’s ability to communicate via Ethernet.
- Enable DHCP** Toggling this option enables or disables a Dynamic Host Configuration Protocol (DHCP) connection.

Communication Settings

Under the communication settings section are options for setting how the server will receive communications from the Cubiscan 110-TC.

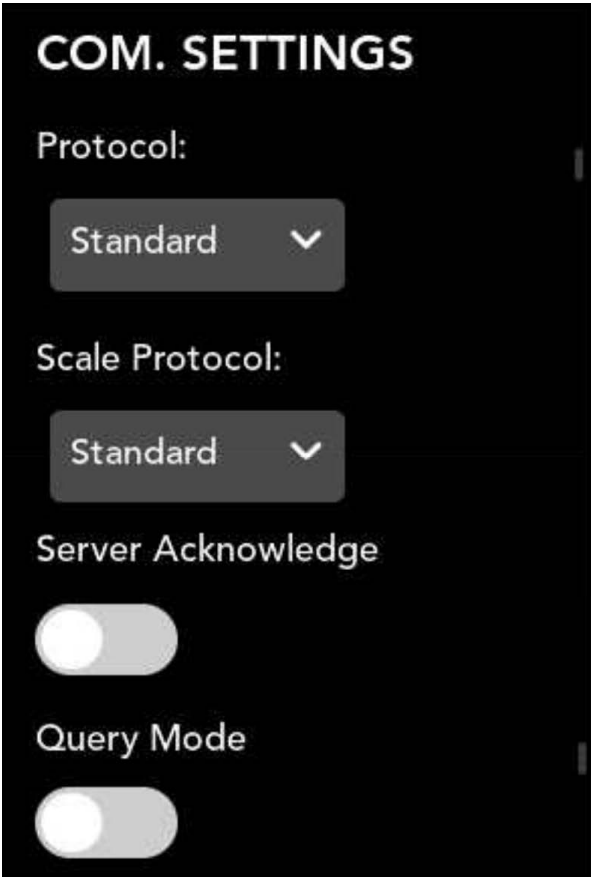


Figure 26
Communication settings

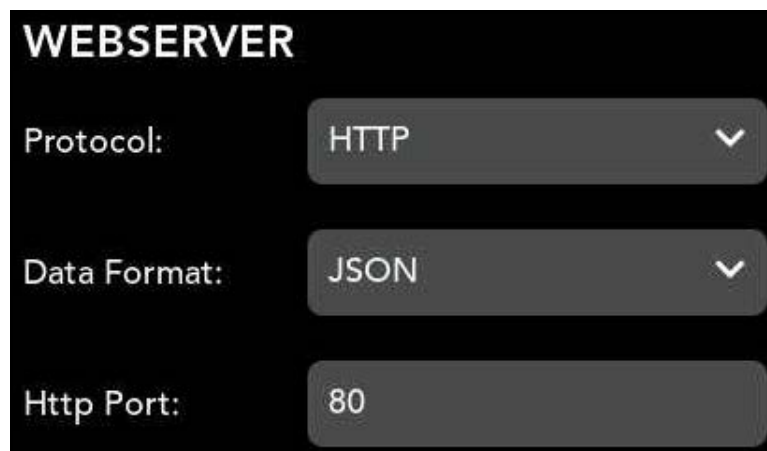
- Protocol** Sets the protocol for posting dimensional data to server (web-server posting not included). Options include: **JSON**, **standard**, **expanded**, **CS-100L**, **JSON (Legacy)**, or **Custom**. The default is standard. If you are unsure what protocol to use for posting data, consult your network administrator.
- Scale Protocol** Sets the protocol for posting scale data to server (web-server posting not included). Options include: **standard**, **expanded**, and **CS-100L**. The default

is standard. If you are unsure what protocol to use for posting data, consult your network administrator.

- Server Acknowledge** Toggle to enable/disable the server acknowledge function. When enabled, the measurement will not complete until an acknowledgment is detected from the server. See "Using the Touchscreen" on page 18.
- Query Mode** With Query Mode enabled, the Cubiscan 110-TC holds the measurement data packet until the string `<STX>M<ETX><CR><LF>` is sent. This allows the Cubiscan 110-TC to function more like a Cubiscan 100, allow those who have developed software to the Cubiscan 100 to easily adapt the Cubiscan 110-TC without significantly large change to the software.

Web-server

The Web-server settings provides options to set Protocol and certificate server request (CSR).



The screenshot shows a dark-themed interface titled "WEBSERVER". Below the title are three settings:

- Protocol:** A dropdown menu currently showing "HTTP".
- Data Format:** A dropdown menu currently showing "JSON".
- Http Port:** A text input field containing the number "80".

Figure 27
Connection - Protocol

- Protocol** Enable or disable Protocol and set desired Protocol. Options include: HTTP and HTTPS.
- Data Format** Sets the protocol for posting data to web-server. Choose from the following data formats: XML, JSON (Legacy), or JSON.
- Http Port** Enter the port number for the webserver.

Post Settings

The Post section provides a toggle to enable or disable the posting of data to Qbit-Cloud or other endpoint. The Qbit-Cloud User Guide is provided

on the flash drive included with the Cubiscan 110-TC, or you can download it from the Cubiscan website at www.cubiscan.com.

The screenshot shows a configuration interface with a dark background. It is divided into three main sections: POST, GET, and CAMERA. The POST section has a toggle for 'Enable Post' (checked), a toggle for 'Post Debug' (unchecked), a dropdown for 'Protocol' (set to HTTPS), a toggle for 'Enable Authorization Key' (checked), and input fields for 'Host' (githubclubdev.azurewebsites.net), 'URL' (/Measurement/Post), 'Port Https' (443), and 'IP used' (0.0.0.0). The GET section has a toggle for 'Enable Remote Configuration' (unchecked). The CAMERA section has a toggle for 'Enable Camera' (unchecked) and an input field for 'IP' (0.0.0.0).

Figure 28
Connection - post

With post enabled, the following information will be needed for the Cubiscan to post data:

POST

- Enable Post** Toggle to enable/disable posting of measurement data.
- Post Debug** Toggle to enable/disable posting of debug data
- Protocol** Select the post Protocol from the dropdown. Options include: HTTP, HTTPS.

Enable Authorization Key	When HTTPS protocol is selected, an option to enable authorization key will appear. The authorization key must be downloaded to SD card.
Host	Enter host address of network to post data.
URL	Enter the address of the network to post data.
Static IP	Enter static IP of the network to post data.
Port	Enter the network port used to post data based on the chosen protocol.
IP used:	IP address used for posting data.

GET

Enable Remote Configuration:	Enabling this options will allow the Cubiscan 110-TC to get the configuration data from Qbit-Cloud. This includes additional miscellaneous fields defined in the Qbit-Cloud.
-------------------------------------	--

CAMERA

Enable Camera	For CS 110-TC with camera, toggle to enable camera image posting.
IP	The IP address use to post images from camera when enabled.

Scale Setting



The Cubiscan 110-TC has a built in scale. To configure the scale, complete the following steps:

1. Tap the menu icon in the upper left corner of the home screen.

2. From the menu side panel, select **SCALE**.



Figure 29
Scale settings

Scale Calibration	Tap button to begin scale calibration. See “Calibrating sensors” on page 48.
Scale Values	Displays information from scale including weight and zero.
Scale Corners	Displays information from scale about the load cells.
Zero	Tap button to zero the scale.
Enable FIR	Toggle to enable/disable FIR function. FIR is an alternative algorithm used to calculate weight more accurately. While accuracy may increase, the time for measurement will increase as well.
Averaging	Adjusts the amount of measurement data averaged during weighing. The greater the number, the more accurate the measurement. Increasing the averaging will increase the time to complete measurement.
Filtering	Adjusts the intensity of filtering during weighing. The greater the number, the more accurate the measurement. Increasing the filtering will increase the time to complete measurement.
Enable debug	Toggle to enable debug logging.

Post Configuration

Configuration of post can occur either through the touch screen or through the embedded webserver (enter the Cubiscan IP address into a browser). To set up the configuration using the touchscreen, the following settings must be enabled:

1. Select **Measure Settings** from the side menu. Go to section **Measurement Settings**. Set the number of barcode from the Barcode dropdown.

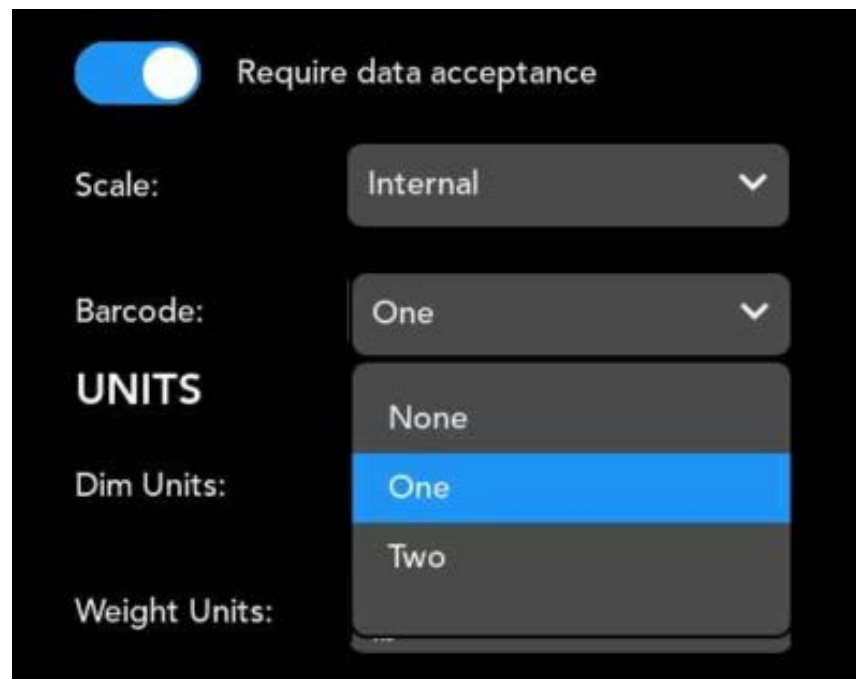


Figure 30
Select barcode



The USB barcode scanner must be configured to append an <ENTER> key when posting.

2. Select **Connection** from the side menu. Go to the section **Com. Settings** and set the following:

Server Acknowledge: ON
Protocol: 'JSON' or 'JSON(Legacy)'

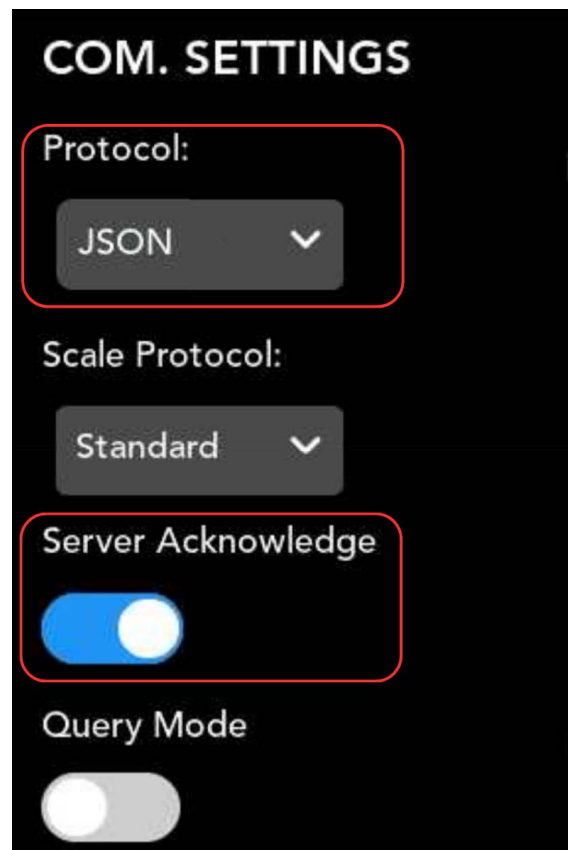


Figure 31
Communication settings

3. Select **Connection** from the side menu. Go to section Post and set the following:

Enable Post: ON

Protocol: Choose 'HTTP' or 'HTTPS'

Host: Enter the endpoint. (example: "ptsv3.com")

URL: Enter the URL. (example: "/t/cs/")

Port: Enter the Port. For 'HTTP' input 80. For 'HTTPS' input 443.

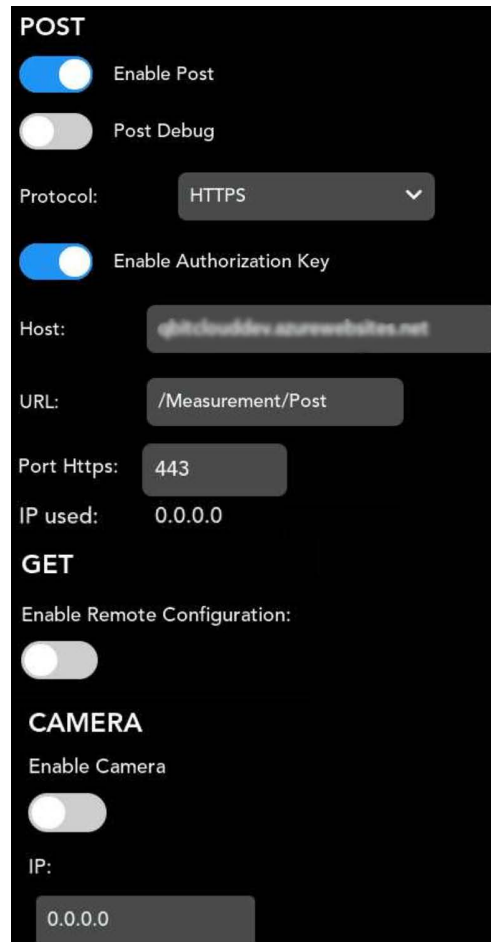


Figure 32
Post settings

4. For troubleshooting purposes, enable **Post Debug**.

Testing Post

Complete the following steps to test the posting process and ensure that data is sent correctly.

1. Ensure that the Post Debug is enabled. See "Post Settings" on page 34.
2. With the Home screen displayed, scan an item barcode.
3. Initiate measurement by tapping the measurement icon on the home screen. The barcode, length, width, height, and weight will display on the home screen.

4. A green checkmark will appear below the measurements, indicating that the process was successful

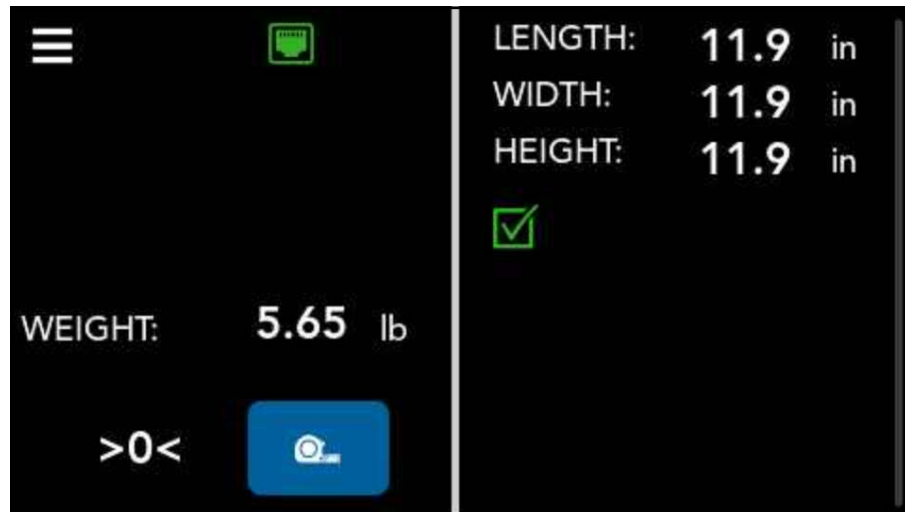


Figure 33
Test Posting

5. From the side menu, select **Log**.
6. Select "POSTSENT.TXT" and tap [OPEN FILE]. The log of the sent post will display.



Figure 34
Post sent log

7. Select "POSTRESP.TEXT" and tap [OPEN FILE]. The log of the response to the post will display. Look for the "200 OK" in the log. This serves as the server acknowledgment of the post.

```
POSTRESP.TXT
HTTP/1.1 200 OK
Date: Wed, 03 Jul 2024 21:12:36 GMT
Content-Type: text/html; charset=utf-8
Transfer-Encoding: chunked
Connection: keep-alive
vary: Cookie
CF-Cache-Status: DYNAMIC
Report-To: {endpoints:[{"url":"https://va.nel.cloudflare.com/vreport/v47s=YN4lkZ57AFoM%2FvZ6KDrXob8prtBpfsbvIwdsuCKBwBKUJlmiC87WfVvxrSPCbsBJO3Ba8JEbXhM4%2BM9ngo5JaSlshZ2vZypp9d9t4Sw4P7/UMmUxniMPph%2F3jYrleY4%3D"}],"group":"cf-nel","max_age":604800}]
NEL: {"success_fraction":0,"report_to":"cf-nel","max_age":604800}
Server: cloudflare
CF-RAY: 89d9dfec79b76c13-DFW
alt-svc: h3=":443"; ma=86400

1a9a
<head>
<script async src="https://pagead2.googlesyndication.com/pagead/js/adsbygoogle.js?client=ca-pub-9525023494877291"
crossorigin="anonymous" type="481ef8e84c82bc8580259036-text/javascript"></script>
<title>PTS - V3</title>
<meta charset="utf-8">
<meta name="viewport" content="width=device-width, initial-scale=1">
<link rel="stylesheet" href="https://maxcdn.bootstrapcdn.com/bootstrap/3.4.1/css/bootstrap.min.css">
<script src="https://ajax.googleapis.com/ajax/libs/jquery/3.6.1/jquery.min.js" type="481ef8e84c82bc8580259036-
text/javascript"></script>
<script src="https://maxcdn.bootstrapcdn.com/bootstrap/3.4.1/js/bootstrap.min.js" type="481ef8e84c82bc8580259036-
text/javascript"></script>
```

Figure 35
Post sent log

8. From the side menu, select **Connection**. Go to the Post section.

The **IP used** field displays the resolved IP address of the endpoint. An example of a JSON payload is as follows:

```
{
  "measurement": {
    "status": "0",
    "cubiscan_id": "096215227208003203",
    "machine_id": "000001",
    "package_count": 3,
    "date_time": "2024-07-03T21:24:05+00:00",
    "length": 15.2,
    "length_status": "0",
    "width": 14.75,
    "width_status": "0",
    "height": 1.8,
    "height_status": "0",
    "dimensional_units": "in",
    "weight": 2.17,
    "weight_status": "0",
    "weight_units": "lb",
    "dim_weight": 2.43,
    "dim_weight_status": "0",
    "dim_weight_factor": 166,
    "dim_weight_factor_type": "D",
    "barcode1": "658655821",
    "barcode2": null,
    "customer_id": null,
    "site_id": null,
    "response_required": true,
    "trigger_source": "internal",
    "checksum": "2D5C64EA"
  }
}
```

Figure 36
JSON log

For JSON (Legacy), the payload will be as follows:

```
{
  "csMeasureData": {
    "Status": "00",
    "Cubiscan_ID": "096215227208003203",
    "Machine_ID": "000001",
    "Package_Count": "00000005",
    "Date_Time": "20240703214359",
    "Length_Value": "15.20",
    "Length_Status": "00",
    "Length_Units": "in",
    "Width_Value": "14.80",
    "Width_Status": "00",
    "Width_Units": "in",
    "Height_Value": "1.80",
    "Height_Status": "00",
    "Height_Units": "in",
    "Weight_Value": "2.165",
    "Weight_Status": "00",
    "Weight_Units": "lb",
    "DimWeight_Value": "2.44",
    "DimWeight_Status": "00",
    "DimWeight_Units": "lb",
    "Factor_Value": "0166",
    "Factor_Type": "D",
    "Barcode1": "658655821",
    "Barcode2": "",
    "Customer_ID": "",
    "Site_ID": "",
    "Response_Required": "1",
    "Measure_CRC": "B447"
  }
}
```

Figure 37
JSON (Legacy) log



Status fields of "0" or "00" (Legacy) indicates success of post while a non-zero in the status field indicates failure.

CHAPTER 5

CALIBRATION

This chapter provides instructions for calibrating the Cubiscan 110-TC. The Cubiscan 110-TC is calibrated at the factory; however, some circumstances in which recalibration may be required include the following:

- Calibrate the Cubiscan 110-TC if you have problems cubing and weighing after assembly and setup.
- Calibrate the Cubiscan if it is subjected to any type of mechanical shock or collision with a heavy object.
- Calibrate the Cubiscan as part of a regular maintenance schedule. If the Cubiscan is used heavily, scale calibration should be performed monthly and sensor calibration yearly.

NOTE > *If an error message appears during calibration, power the Cubiscan off and back on and start calibration over (refer to CHAPTER 5 “CALIBRATION” for more information).*

Before you begin

Before calibrating the Cubiscan 110-TC, remove all packages or other material from the platform, and blow any dust off the sensor screens. Refer to “Cleaning the Sensors” on page 54 for information on cleaning the sensors.

All controls and displays for the Cubiscan 110-TC are located on the touchscreen at the front of the base. For information on the controls and indicators, refer to “Using the Touchscreen” on page 18.

If you want to calibrate using Qbit, refer to the Qbit User’s Guide.

NOTE > *The calibration cube should be kept clean and undamaged—you will need it each time you calibrate the Cubiscan 110-TC.*

Calibrating the scale

To perform the calibration, you will need the following:

- Official test weight up to 50 pounds (25 kg) (it is recommended that you calibrate with the maximum weight)

IMPORTANT: Do not begin scale calibration until you have the test weight. Calibrating without an accurate known weight (within 0.01 of a lb/kg) can make all future weight readings inaccurate.

Take the following steps to calibrate the Cubiscan 110-TC scale.



When calibrating the scale, the Cubiscan 110-TC must be stable with no movement of the platform such as that caused by vibration or air.

1. At the home screen, tap the menu icon in the upper left corner.

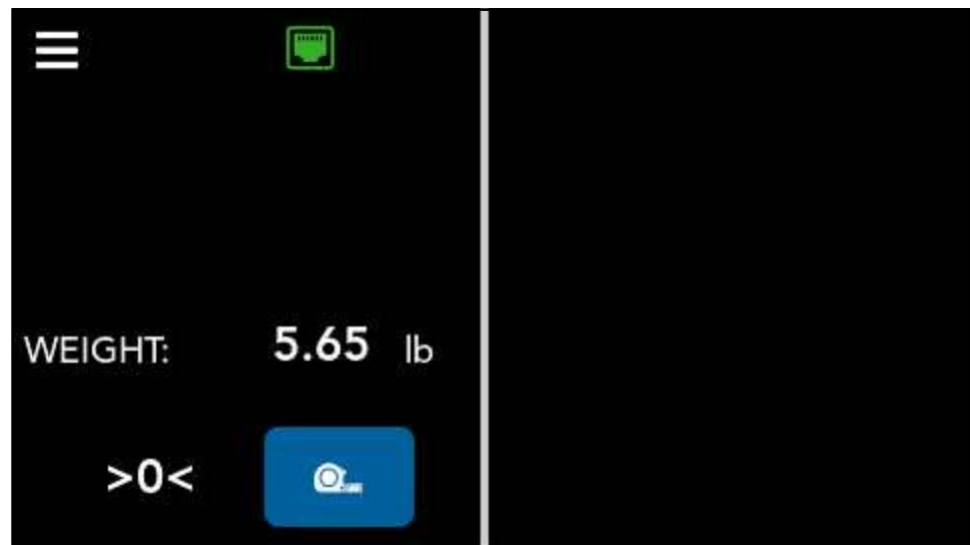


Figure 38
Home screen



If you have set up a password previously in the system configuration, you need to enter the password to unlock the menu.

2. Select **Scale** from the side menu. Tap the **[Calibrate Scale]** button to begin the scale calibration.



Figure 39
Scale screen

3. The following screen is displayed. Follow the instructions as displayed.

Figure 40
Second scale calibration screen

4. Enter the calibration weight value in the first text field. Then select the units in the dropdown below the field.

5. Clear the platform of all items. Tap **[Scale Initialize]** to begin the calibration process. A message will appear.

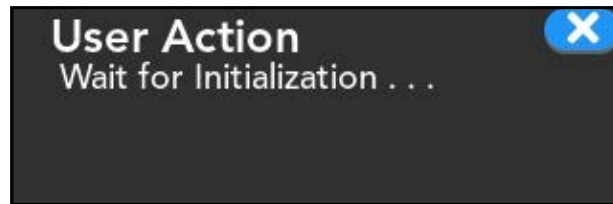


Figure 41
Initialize message

6. After the scale has initialized, Tap **[Scale Zero]** to zero the scale.
7. Once the scale is zeroed, place the calibration weight on the platform and tap **[Scale Calibration]**. A message will display when calibration is complete.

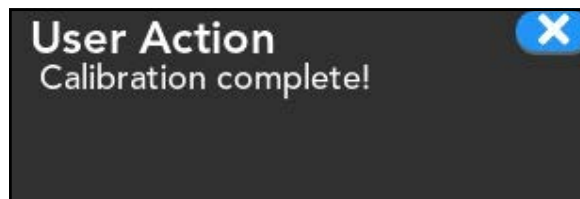


Figure 42
Scale calibration complete

Calibrating sensors



To perform the calibration, you will need the following:

- 12" x 5" x 3.6" calibration cube, supplied with the Cubiscan

To calibrate the sensors using the touchscreen, proceed as follows.

1. At the home screen, tap the menu icon in the upper left corner.

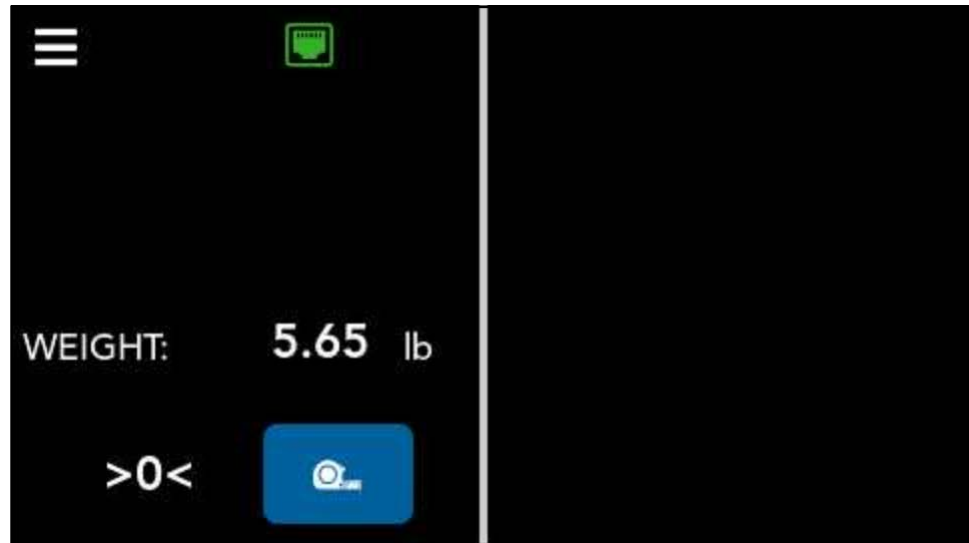


Figure 43
Home screen



If you have set up a password previously in the system configuration, you need to enter the password to unlock the menu.

2. Select **SENSORS** from the side menu. Tap the **[Calibrate]** button to begin the scale calibration.

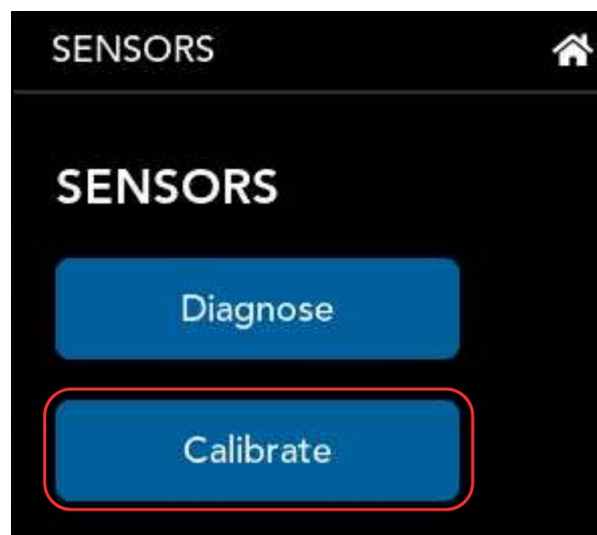


Figure 44
Calibrate sensors

3. With the calibration menu displayed, follow the steps outlined on the display. Make sure the Cubiscan is clear of all objects. Tap **[Zero Sensor]**.



Figure 45
Zero sensors

4. After the sensors have completed zeroing the **[Zero Sensor]** button will turn a lighter blue and the next steps button will turn a darker blue, signaling that the Cubiscan is ready to proceed to the next step. Position the calibration cube on the left and tap **[Left Sensor]**.

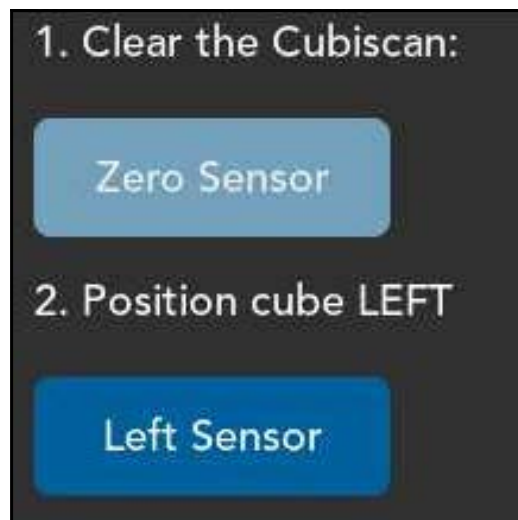


Figure 46
Left Sensor

5. Next, position the cube on the right and tap **[Right Sensor]**.

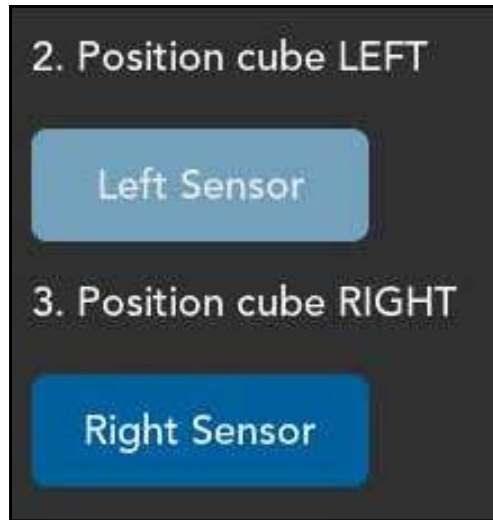


Figure 47
Right Sensor

6. Position the cube in the up position as illustrated on the display and tap **[Top Sensor]**.



Figure 48
Top Sensor

7. Finally, position the cube in the front position as illustrated on the display and tap **[Front Sensor]**.
8. If the calibration is successful a calibration complete message should display.

Calibrating the touchscreen

If you are having problems selecting functions on the touchscreen, you may need to recalibrate it. You should recalibrate any time it becomes difficult to select options on the screen.

Take the following steps to calibrate the touchscreen.

1. At the home screen, tap the menu icon in the upper left corner.

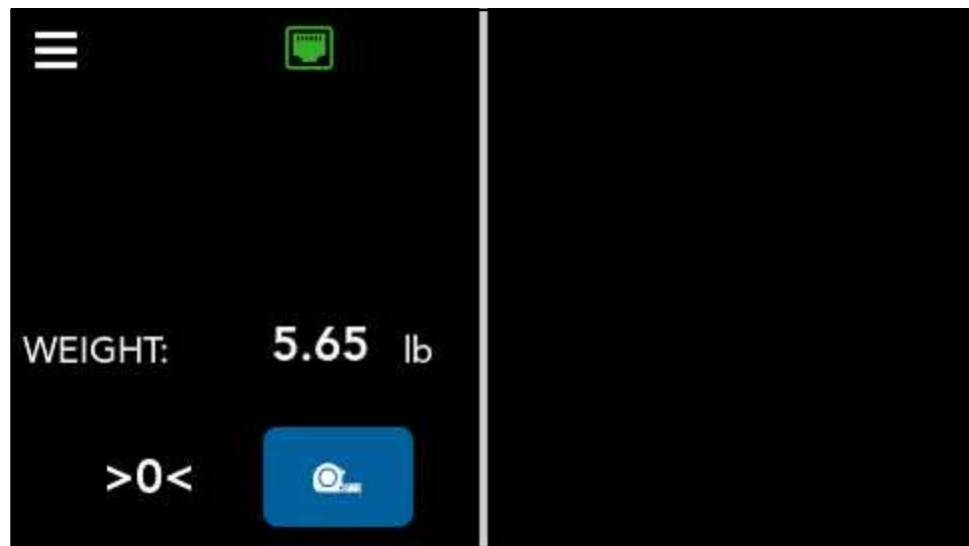


Figure 49
Home screen

NOTE > If you have set up a password previously in the system configuration, you need to enter the password to unlock the menu.

2. Select **TOUCH SCR** from the side menu. Tap **[CALIBRATE]** to begin the scale calibration



Figure 50
Touchscreen calibration

3. Using a stylus or your finger, touch the center of each blue box on the screen until the "O" turns green. There are five calibration points on the screen.

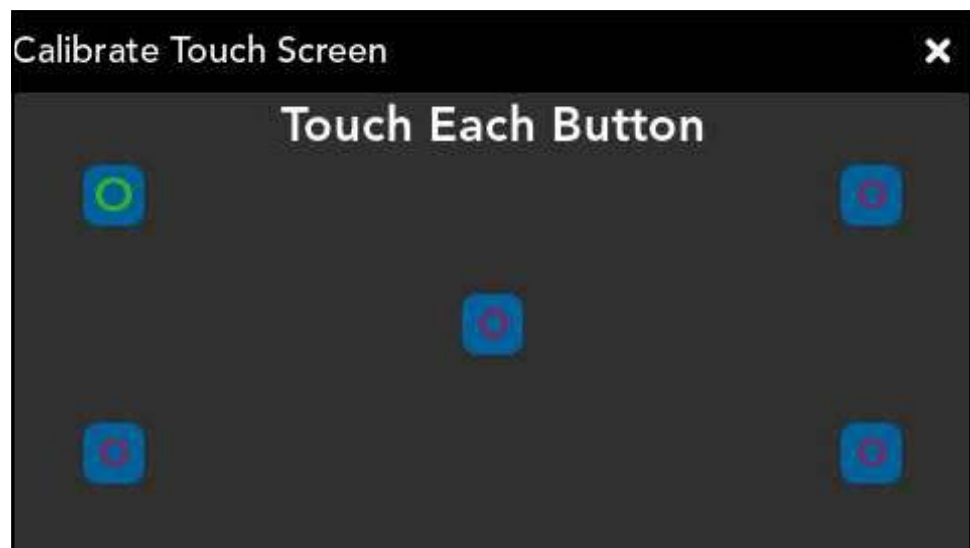


Figure 51
Touchscreen calibration

4. When all the O's are green, the calibration is complete.

CHAPTER 6

MAINTENANCE

This chapter provides information on the care and maintenance of the Cubiscan 110-TC. Routine maintenance and careful handling will help keep the Cubiscan 110-TC in good operating condition and prevent service calls or repairs.

Precautions



The Cubiscan should not be subjected to extremes in temperature or humidity, nor should it be subjected to excessive vibration. For environmental recommendations, see “Placement” on page 8.

Do not put packages on the platform that are known to be over 100 pounds (50 kg). All objects, especially heavy ones, should be placed on the platform gently. Shock loading will occur if an object is dropped or thrown onto the platform. This puts unnecessary and potentially damaging pressure on the load cell.

The Cubiscan has been designed to accept overload without damage. However, rough handling and abuse, over time, can cause the load cell to lose much of its spring action. In addition, severe shock loading can cause permanent zero shift, making the scale inoperable.

Cleaning the Sensors



The sensors should be kept clean. While dust normally won't interfere with sensor operation, they should be cleaned routinely to prevent the possibility of interference. To clean, gently blow dust from the gold foil surface.



CAUTION

The gold foil screen on the front of the sensor is delicate. Do not use high pressure air or water lines to clean the surface of the gold foil and do not touch it with fingers, tools, or brushes. Doing so may result in damage.

CHAPTER 7

TROUBLESHOOTING

This chapter provides assistance in identifying and solving common problems with the Cubiscan 110-TC. If you encounter problems not covered in this chapter, or if a defect is suspected, contact your system integrator or call **Cubiscan Technical Assistance** at **801.451.0500** for assistance.

After installation, most problems are caused either by incorrect cabling or because the system setup is not correct. If you are having problems with the Cubiscan 110-TC, first verify that all cables attached to the controller box inside the base (serial communications cables, sensor cables, power cord, Ethernet cable, load cell cable) are fully seated and secure (locking rings, clips, or screws). Then, verify that the setup is correct.

Problems with your computer may affect operation of the Cubiscan 110-TC system. If you have trouble starting Qbit or if you encounter problems with your computer (including computer related error messages), refer to your computer manual or contact your computer representative or dealer for assistance.

Frequent computer errors may be caused by dust or static electricity. It is important that your computer be kept as clean and static free as possible. consult your computer manual for information.

If problems continue, review the following sections for more information.

No response when powered on



If there is no response when you power on the Cubiscan 110-TC, do the following:

1. Verify that the power strip is “live” and that the AC power cord is properly and securely connected to the power adapter and to the power strip.
2. Verify that the DC power cord is securely connected to the power connector on the back of the Cubiscan.

Readings are not accurate



If you suspect that the Cubiscan 110-TC readings are inaccurate, do the following:

1. Zero the scale by making sure the platform is free of all objects and then selecting **Zero** from the toolbar or Tools menu in Qbit. (If a computer is not connected, tap >0< on the touchscreen.)

If the Cubiscan does not return to zero or is slow to return to zero, level the Cubiscan and make certain that all five leveling legs are resting on the supporting surface.

2. Move the Cubiscan if it is located close to open freight doors or where hot air is blowing on it. Extreme changes in temperature and humidity can affect the accuracy of the Cubiscan 110-TC. Refer to "Placement" on page 8.
3. Recalibrate the Cubiscan. Refer to "CALIBRATION" on page 45.

Computer error messages



The following error messages generated by Qbit indicate a communication problem between the Cubiscan and the computer.

No communications with Cubiscan	This message indicates that no communication is taking place between the computer and the Cubiscan 110-TC.
---------------------------------	--

Transmission error	This message indicates that erroneous data or garbled data is being sent from the Cubiscan.
--------------------	---

If you receive one of these messages, verify the following.

1. Is the Cubiscan turned on and securely connected to power?
2. Is the USB, serial, or Ethernet cable securely connected?
3. Is there a problem with the Cubiscan 110-TC? Perform the Status function in Qbit to check the status of the Cubiscan.

4. Is there a problem with the computer or network? Troubleshoot the computer, or contact your network administrator.

Version

This section describes the Version menu of the Cubiscan 110-TC. The About menu contains useful information and records of the Cubiscan 110-TC.

This section discusses the options available on the version menu. Complete the following steps to access the version menu.

1. At the home screen, tap the menu icon in the upper left corner.

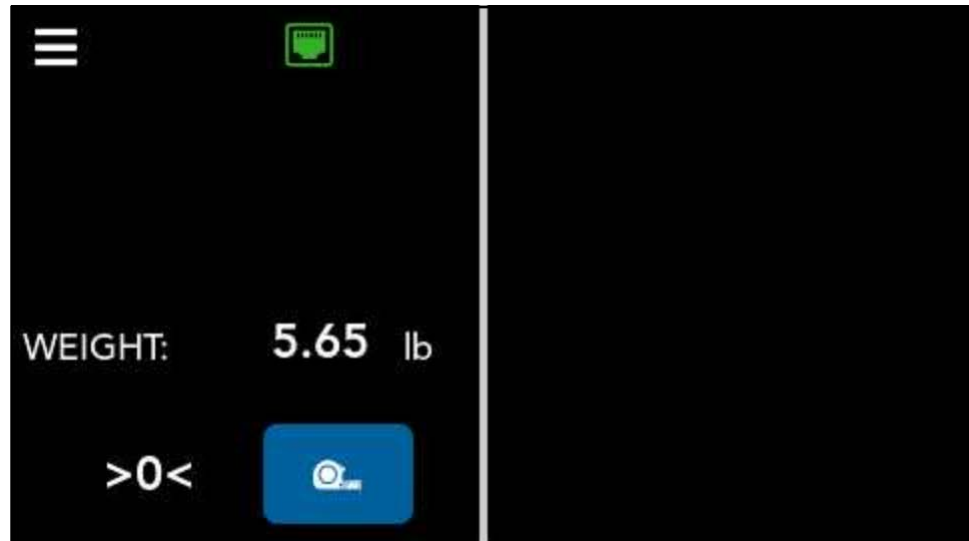


Figure 52
Home screen



If you have set up a password previously in the system configuration, you need to enter the password to unlock the menu.

2. Select **VERSION** from the side menu. The Version screen will display.



Figure 53
Calibrate sensors

The following information will display about the Cubiscan 110-TC and its Firmware.

MAC Address	The Media Access Control (MAC) address.
Serial Number	The product number that is unique to each Cubiscan 110-TC.
MDMI	The Multiple Dimensional Measuring Instrument (MDMI) status. This status can either be sealed or unsealed.
NAWI	The Non-Automatic Weighing Instrument (NAWI) status. This status can either be sealed or unsealed.
Operation Hours	The total hours of operation for the Cubiscan 110-TC.

Firmware

This section displays the firmware version used for the main controller, including build and kernel. This information is useful when a technician is diagnosing issues that may arise from the Cubiscan firmware.

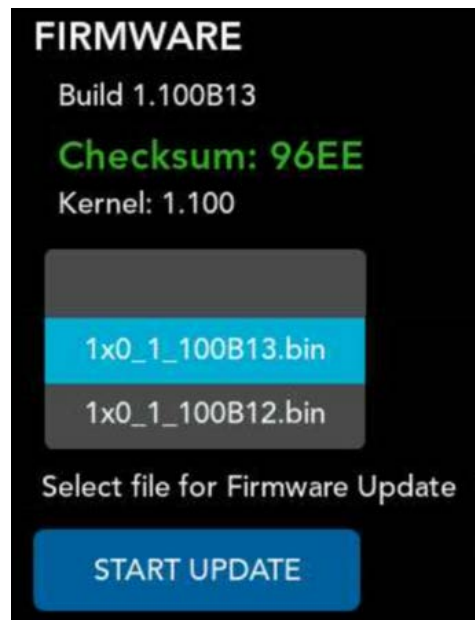


Figure 54
Firmware

Updating firmware

1. From the Version Screen, go to the Firmware section.
2. Select the version of the firmware you wish to install from the list of firmwares. The list will appear in a gray box. In order for the firmware to appear in this list, it must be installed through a network connection.

For instructions on how to load firmware through a microUSB, contact Cubiscan Technical Assistance at 801.451.0500.

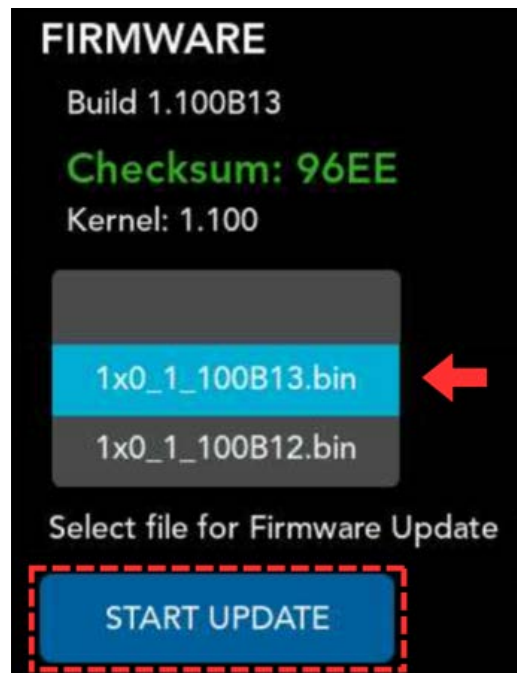


Figure 55
Updating firmware

3. Tap [START UPDATE], to begin the update of the firmware.

Scale/Sensor

This section displays scale and sensor information. This information is useful when a technician is diagnosing issues with dimensioning or weighing.

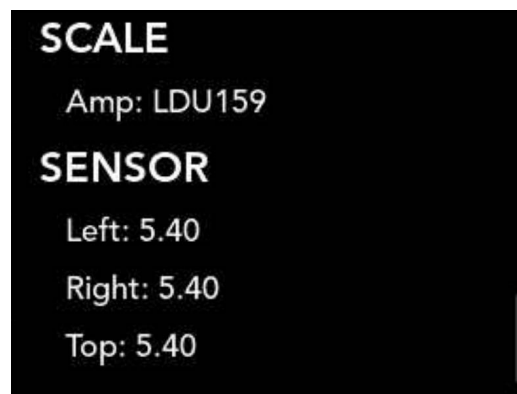


Figure 56
Scale/Sensor

Diagnostic

This section describes the diagnostic capabilities of the Cubiscan 110-TC.

Sensors diagnostics

Complete the following steps to view the scale diagnostics:

1. At the home screen, tap the menu icon in the upper left corner.

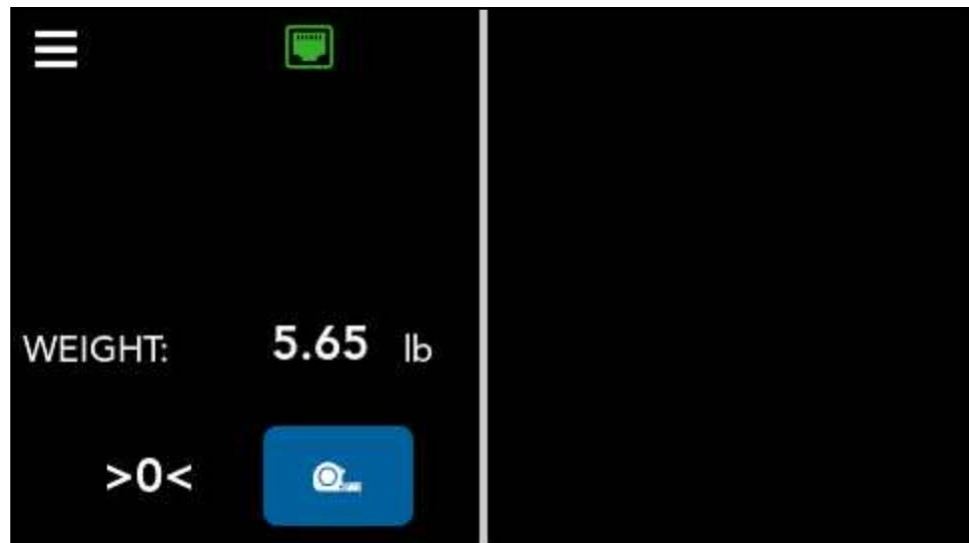


Figure 57
Home screen

NOTE > If you have set up a password previously in the system configuration, you need to enter the password to unlock the menu.

2. Select **SENSORS** from the side menu. Tap the **[Diagnose]** button to begin the scale calibration.

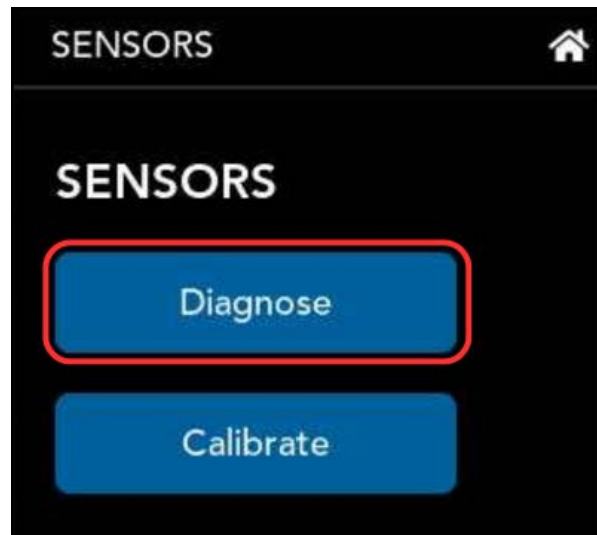


Figure 58
Diagnose sensors

3. The Sensor diagnostic screen will appear. This screen may be helpful for service technicians to determine issues with the sensors. Further diagnostic may be conducted in the Test screen.

Test

The Test section is mainly used by a service technician for diagnostic purposes. To contact a service technician, call **Cubiscan Technical Assistance** at 801.451.0500 for assistance.

The Test screen contains four buttons for testing **the right sensor, left sensor, top sensor** and **test scale**. To access the options from the Test screen, complete the following steps.

1. At the home screen, tap the menu icon in the upper left corner.

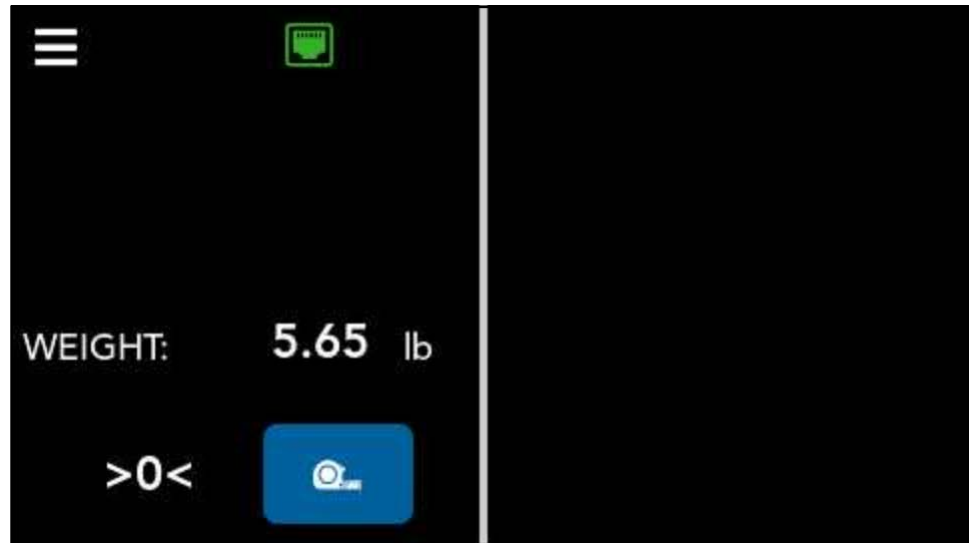


Figure 59
Home screen



NOTE

If you have set up a password previously in the system configuration, you need to enter the password to unlock the menu.

2. Select **SENSORS** from the side menu. Tap the **[Diagnose]** button to begin the scale calibration.

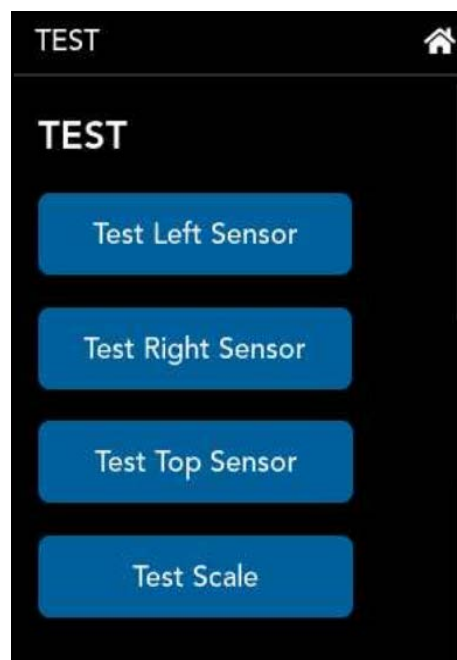


Figure 60
Test screen

3. To test one of the sensors or the scale, select the button for the respective sensor or scale. A screen will appear with the minimum, maximum, and average values for the sensor or scale along with a number designating the sensor or load cell.

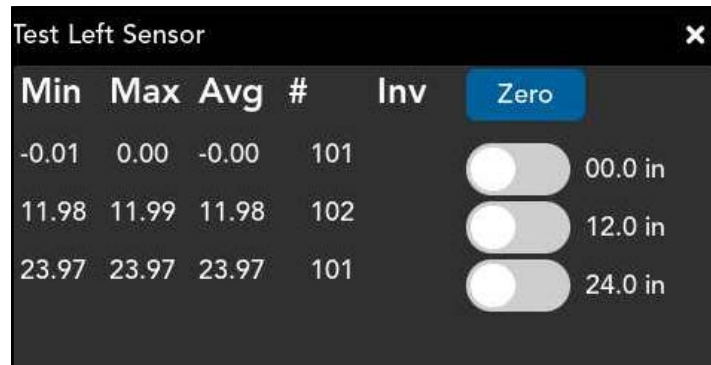


Figure 61
Test screen

4. The service technician may use these values along with the other test features to determine issues with the sensors or scale.

APPENDIX A

PARTS LIST

Following is a list of parts that can be purchased for the Cubiscan 110-TC as spare parts or if replacement is necessary.

Part No.	Description	Quantity/Unit
10083	Cord, AC Power	1
10273	Calibration Block, 12" x 5" x 3.6", Black	1
14062	Power Supply 12 VDC, 3.75A	1
14527	Main Controller Assembly	1
14540	USB Cable	1