Cubiscan 325v2

Operations and technical manual

Version 1.1

Quantronix, Inc.

Cubing and weighing systems

955 W White Drive

Ogden, Utah 84404

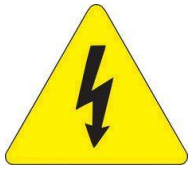
U. S. A.

Phone: 801.451.7000

Website: http://www.cubiscan.com

CUBISCAN®

 CAUTION	The Cubiscan 325v2 should only be serviced by qualified personnel. Observe precautions for handling electrostatic sensitive devices when setting up or operating the Cubiscan 325v2.

 WARNING	Disconnect all power to the Cubiscan 325v2 before servicing or making any connections.

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4. Not been operated or maintained in accordance with Seller's instructions.
5. Been subject to misuse or abuse, negligent handling, improper installation, accident, damage by fire, flood, snow, ice, water or other liquid damage, lightning, abnormal electrical condition and/or power surge, earthquake, or other act of God or events outside of Sellers control.
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Manual updated 2026-05-27

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CHAPTER 1
PRODUCT DESCRIPTION

The Cubiscan 25v2 is a small, static cubing system that uses sensing technologies to measure and weigh irregularly-shaped parts and components as well as boxed items. Small parts and non-cuboidal items are measured with great precision using infrared sensing technology. The sensing gate is moved by hand to allow the user complete control over the measuring process.

The Cubiscan 25v2 is commonly used to improve storage-space planning, for carton size selection, repacking, check-weighing, and shipment manifesting in medical, pharmaceutical, apparel, hardware, and consumer goods distribution. It has an integrated touchscreen display and outputs to a user-supplied PC. Capacity for irregular items can be measured up to 18 x 12 x 12 inches with a resolution of 0.05 inches. The Cubiscan 25v2 also includes an integrated, high-accuracy 15 x 0.005 lb scale.

Each unit has one active serial communication port, one Ethernet port, and one USB port. Proprietary interface software, called Qbit™, is available and allows for menu-driven operator control, data storage/transfer, and diagnostics. 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 25v2 uses powerful sensing technologies to create a flexible and economical solution for today's most demanding cubing and weighing applications.

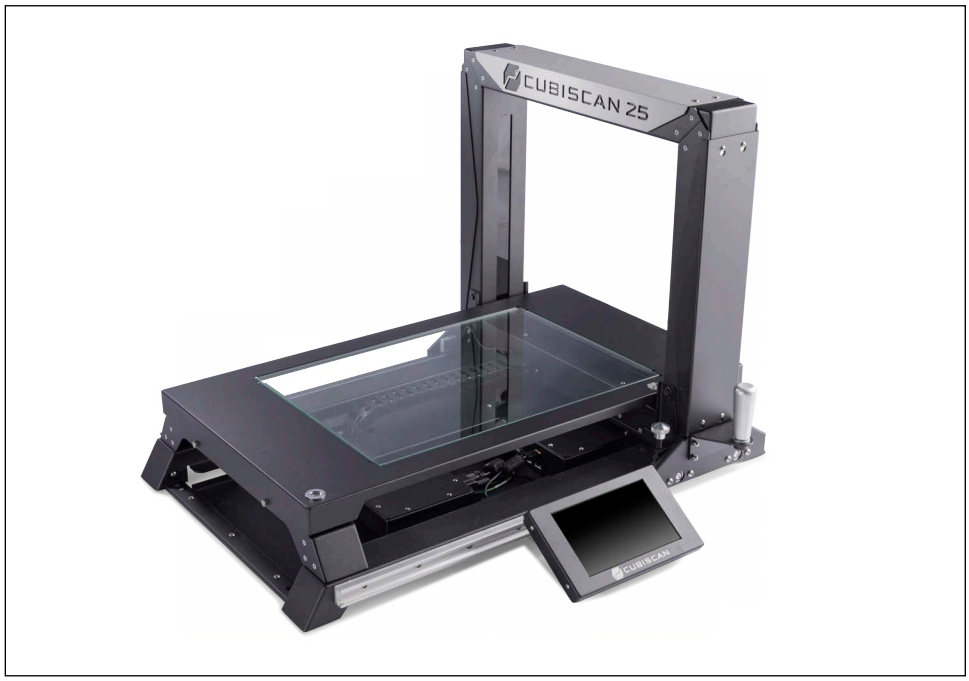


Figure 1
Cubiscan 25v2

Specifications

Power Requirements

100 – 240 VAC, 50 – 60 Hz

Environmental

Operating Temperature:	32° to 104° F (0° to 40° C)
Humidity:	0 to 90% non-condensing

Measuring Sensor

Infrared light beam

Weight Sensor

Four load cells

Measuring Capacities

Measurement Range

Length:	0.10 to 18.00 in (0.2 to 45.0 cm)
Width:	0.10 to 12.00 in (0.2 to 30.0 cm)
Height:	0.10 to 12.00 in (0.2 to 30.0 cm)

Measurement Increment: 0.05 in (0.1 cm)

Measurement Time:	< 5 seconds
Object Characteristics:	Opaque
Weight Capacity:	0.005 to 15.000 lb (0.002 to 6.000 kg)
Weight Increment:	0.005 lb (0.002 kg)

Physical

Length:	32 in (81 cm)
Width:	27 in (69 cm)
Height:	23 in (58 cm)
Weight:	62 lbs (28 kg)

User Interface

Cubiscan's QBIT™ software can be used to interface with the Cubiscan 25v2.

Display:
Integrated TFT LCD touchscreen displays length, width, height, weight, unit of measure, 2D and height profile, and diagnostic codes.

Outputs:
Serial (1), Ethernet (1), USB type A (3), USB type B (1)

CHAPTER 2
SETUP

This chapter provides instructions for assembling and setting up the Cubiscan 25v2. Perform the steps to set up the Cubiscan 25v2 in the following order:

Unpacking

The Cubiscan 25v2 is shipped in a single container with all components. The glass platform is packed in a separate cardboard box inside the crate.

Remove the Ethernet and power cables, the Ethernet adapter box, and the calibration cube from the foam supports and set them aside.

Remove the glass platforms from the box and place them in a safe location. The platforms are in a protected cardboard box located beneath the Cubiscan 25v2's measuring gate.

Carefully remove the cardboard support that covers the top and sides of the Cubiscan 25v2.

Lift the Cubiscan 25v2 out of the shipping crate. It is best to have two people do this because the Cubiscan 25v2 weighs 62 lbs (28 kg) and may be awkward to handle.

Do not remove the green foam shipping supports between the scale base and platform as they will help prevent damage to the load cells while you are moving and assembling the Cubiscan 25v2.

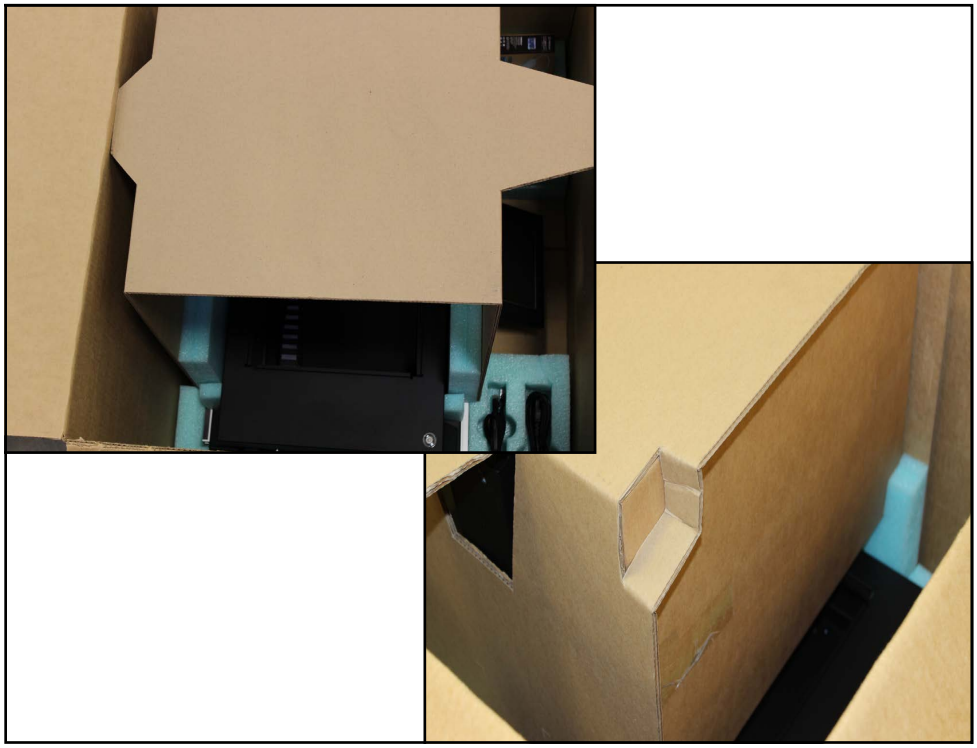


Figure 2
Cubiscan 25v2 in crate

Examine the container and the Cubiscan 25v2 carefully for any damage. If, after unpacking, you discover any damage to the Cubiscan 25v2, contact the carrier immediately.

Carefully remove the Cubiscan 25v2 and its components from the crate, and place the Cubiscan 25v2 on a solid, stable surface for assembly. See "Assembling the Cubiscan 25v2" on page 6.

Placement

The Cubiscan 25v2 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 25v2 to extremes in temperature or humidity. Locate the Cubiscan 25v2 as far from open freight doors as possible. Heaters or air conditioners should not blow directly on the Cubiscan 25v2.
- Avoid placing the Cubiscan 25v2 in direct sunlight, as it may affect measurement readings.
- Protect the Cubiscan 25v2 from static electricity, especially the touchscreen.
- Place the Cubiscan 25v2 on a flat, sturdy surface as free from vibration as possible. Excess vibration can reduce the accuracy of the Cubiscan 25v2 scale.
- The Cubiscan 25v2's platform is free-floating—it is resting on four springs (load cells). Maintain a minimum of one-inch clearance at the back and sides of the Cubiscan 25v2. Do not rest objects against or set objects on the Cubiscan 25v2 when not in use.
- If a computer is used, place it as close to the Cubiscan 25v2 as possible. The operator needs to use the keyboard or mouse on the computer while cubing and weighing packages using the Cubiscan 25v2.
- Orient the Cubiscan 25v2 so the touchscreen faces the operator.

Assembling the Cubiscan 25v2

The Cubiscan 25v2 is almost completely assembled when shipped. You only need to remove the shipping materials, place the glass platform, and loosen the scale thumb screws.

- Place the base assembly of the Cubiscan 25v2 on a stable surface. Make sure that the Cubiscan 25v2 is level. Adjust the leveling feet located in each corner if necessary. (An optional cart, custom-designed for the Cubiscan 25v2, is available from Cubiscan.)

1. Carefully remove the four green foam shipping supports from the Cubiscan 25v2 base.

2. Remove the glass cubing and weighing platform from the cardboard box that was in the shipping crate, and carefully place it on the platform frame, as shown below.

Figure 3
Glass cubing and weighing platform

3. Store the extra glass platform in a safe location.

Loosening the scale thumb screws

There are four thumb screws that must be loosened before the Cubiscan 25v2 can properly cube and weigh objects. These screws are located on each end of the Cubiscan 25v2.

To loosen the screws, complete the following steps.

1. Locate the scale thumb screws. Refer to Figure 4 below.

2. Loosen each screw by turning the screw to the left several times until the weighing platform is able to move freely.

3. Do not remove the screws from the Cubiscan 25v2.

Figure 4
Scale thumb screws

Loosening the gate stop

1. Loosen the gate stop by turning it counter-clockwise. If you ever want to lock the gate in place, simply turn the gate stop clockwise until the gate no longer moves.

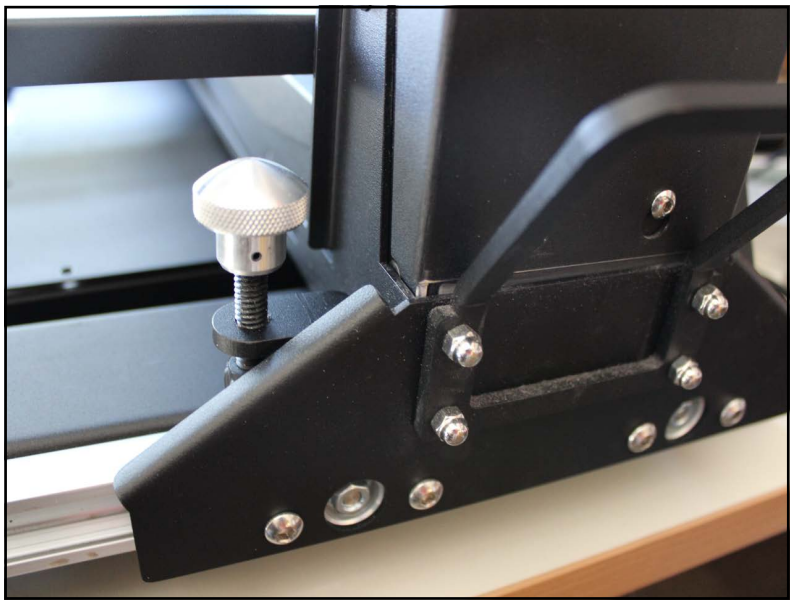


Figure 5
Gate stop

Connecting power

1. Locate the AC power cord (supplied), and connect it to the power connection on the right side of the controller box, as shown below.

Figure 6
Connecting power

2. Route the AC power cord so it cannot be crushed, bent, or pulled loose.

3. Connect the other end of the AC power cord to a standard power outlet.

4. Use the power switch on the right side of the controller box (shown above) to turn the Cubiscan 25v2 on and off.

NOTE *The Cubiscan 25v2 should be powered on before running the Qbit program to cube and weigh packages.*

Turning On the Cubiscan 25v2

Specific procedures must be followed each time you turn on the Cubiscan 25v2, as follows:

1. Make sure there are no packages or other objects on the Cubiscan 25v2 platform.

2. Make sure the gate is in the home position (right-hand side).

3. Turn on the Cubiscan 25v2 with the power switch located on the right side of the controller box.

4. Zero the Cubiscan 25v2. For instructions, See "Zeroing the Cubiscan 25v2" on page 24.

The Cubiscan 25v2 performs self-calibration and diagnostic procedures that take about 5 seconds. Do not touch the Cubiscan 25v2 platform during these 5 seconds.

Connecting to a computer or network (Optional)

To connect the Cubiscan 25v2 to a computer, do the following.

1. Place the computer close to the Cubiscan 25v2. (Refer to "Placement" on page 6 for information.)

2. Remove the center cover by removing the two thumb screws located on the right-hand side of the cover. Slide the cover off to the left so that you can access the ports on the left side of the controller.

3. Locate the controller box. The controller box can be found beneath the measuring gate's home position (the right-hand side).

4. Choose from one of the following operating methods.

   - Connect the Cubiscan 25v2 to a host system via a standard Ethernet TCP/IP port. This is the recommended method and all parts needed to connect the Cubiscan 25v2 to a computer via an Ethernet connection have been supplied by Cubiscan. You can use Qbit software or the touchscreen options to configure the Cubiscan 25v2 for TCP/IP communication. Contact Cubiscan for information on available software. Or, refer to the Communications Protocol.
   - Connect the Cubiscan 25v2 to a PC using a USB type B cable (not provided) through the USB port on the controller box.
   - Connect the Cubiscan 25v2 to a PC through the RS-232-C serial port on the controller box. Use the Qbit software on the computer to run the Cubiscan 25v2.

- Operate the Cubiscan 25v2 without a computer using the touch-screen. Refer to "Measuring/Weighing items" on page 21 for information.

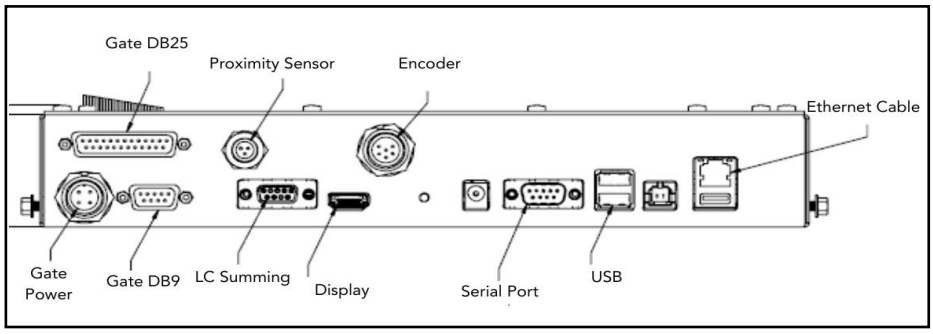


Figure 7
Controller box inputs

Connecting to a Computer via Ethernet

This section describes how to use Ethernet to connect a computer to the Cubiscan 25v2 (recommended method).

Use Cubiscan's Qbit software (refer to the Qbit User Guide) or the touchscreen options (see Chapter 4 "Configuration") to configure the Cubiscan 25v2 for TCP/IP communication. Contact Cubiscan if you need additional assistance.

If you are using the Ethernet connection option:

1. Install the driver that is needed.

2. Connect the Ethernet cable (supplied) to the Cubiscan 25v2's Ethernet port.

Access Ethernet network settings

Once the driver is installed you need to set the static IP address and the Subnet mask of the adapter. You can access these network settings by completing the following steps:

1. Under **Control Panel > Network and Sharing Center** locate and click on the correct connection to bring up the status window.

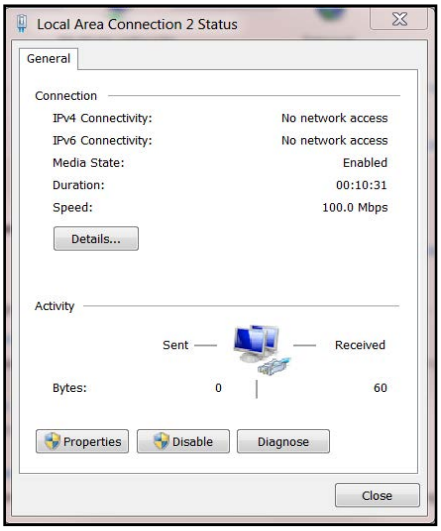


Figure 8
Status window

2. Select **[Properties]**. Double-click Internet Protocol Version 4 to bring up the general properties window.

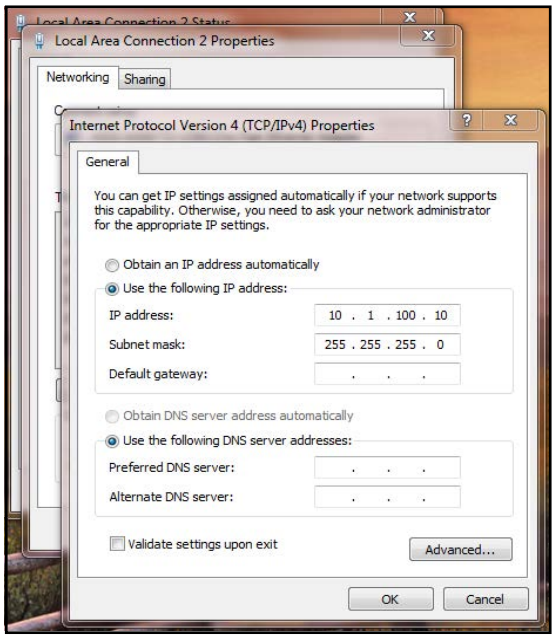


Figure 9
General properties window

From this screen you can set the IP address and Subnet mask. The recommended IP address setting is 10.1.100.10. The recommended Subnet mask setting is 255.255.255.0.

3. Click **[OK]** to exit when you are finished. Close any other remaining windows.

Once you have completed this setup process, the computer should communicate with the Cubiscan 25v2.

Connecting to a computer via USB

This section describes how to use a USB connection to connect a computer to the Cubiscan 25v2.

If you are using the USB cable (not supplied) connection:

1. Connect the USB cable to the Cubiscan 25v2's USB type B port located on the controller box, as shown in Figure 7.

2. Make sure that the proper driver has been installed on the PC.

3. Connect the USB cable to the PC.

Connecting to a computer via Serial (RS-232-C)

If you are using the RS-232-C serial communications cable (not supplied) connection, complete the following steps:

1. Route the RS-232-C serial communications cable so it cannot be crushed, bent, or pulled loose. Make sure that the cable does not interfere with the scale.

2. Connect the serial cable to the Cubiscan 25v2's serial port, as shown in Figure 7.

3. Locate a free RS-232-C serial port on your computer. Refer to your computer's documentation, if necessary, to identify the ports. Connect the serial cable directly to the serial port.

4. To secure the RS-232-C serial cable, tighten both screws at each end of the cable. It is important that the cable be secure.

Installing Qbit (optional)

A flash drive is available containing the Qbit software program, which can be used to operate the Cubiscan 25v2.

The Qbit User Guide, located on the 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 25v2 for the first time, verify the following:

1. Have the Cubiscan 25v2 and the computer (if applicable) been placed in the proper operating environment? (page 6)

2. Has the Cubiscan 25v2 been fully assembled? (page 6)

3. Has all shipping material been removed? (page 4)

4. Is the Cubiscan 25v2's scale platform free moving? The Cubiscan 25v2 should not be pushed up against a wall and no object, cable, etc., should be resting on it or against it.

5. Has the Ethernet, RS-232-C, or USB cable been attached to the Cubiscan 25v2 and the computer (if applicable)? (page 11)

6. Has the AC power cord been connected correctly? (page 10)

7. If you are using Qbit to operate the Cubiscan 25v2, has the software been copied onto your computer's hard-disk drive? (Refer to the Qbit User Guide for information.)

8. Does the Cubiscan 25v2 require recalibration? The Cubiscan 25v2 was calibrated at the factory, but may require recalibration due to handling during shipping.

   Refer to page 58 for information on calibrating the Cubiscan 25v2. If you are using Qbit software, check the status of the Cubiscan 25v2 before operating it. Refer to the Qbit User Guide for information on checking the Cubiscan 25v2's status.

CHAPTER 3
OPERATION

This chapter provides instructions for operating the Cubiscan 25v2.

NOTE > *The Cubiscan's glass platform 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 25v2. The Cubiscan 25v2 should be turned on before you start Qbit (if applicable).

1. Make sure there are no objects on the Cubiscan's platform.
2. Make sure that the gate has enough room to move freely.
3. Turn on the Cubiscan 25v2. The Cubiscan 25v2 performs self-diagnostic procedures that take about 5 seconds. Do not touch the Cubiscan 25v2 platform during these 5 seconds.
4. The Cubiscan 25v2 must be zeroed each time it is turned on. For instructions on zeroing the Cubiscan 25v2, see "Zeroing the Cubiscan 25v2" on page 24.

NOTE > *Do not lean on or touch the Cubiscan 25v2 glass platform or the object while the object is being measured and weighed. Any kind of contact with the platform during the measurement process can alter the weight or sensor reading.*

CAUTION

While the Cubiscan 25v2 has overload protection, objects heavier than 15 pounds (6 kg) should not be placed on the platform. Overloading the scale or shock loading (dropping a heavy object on the scale) can cause permanent zero shift, making the scale inoperable.

Cubiscan 25v2 touchscreen

You can use the Cubiscan 25v2 touchscreen (below) to configure and control the Cubiscan 25v2 as well as display measurement results.

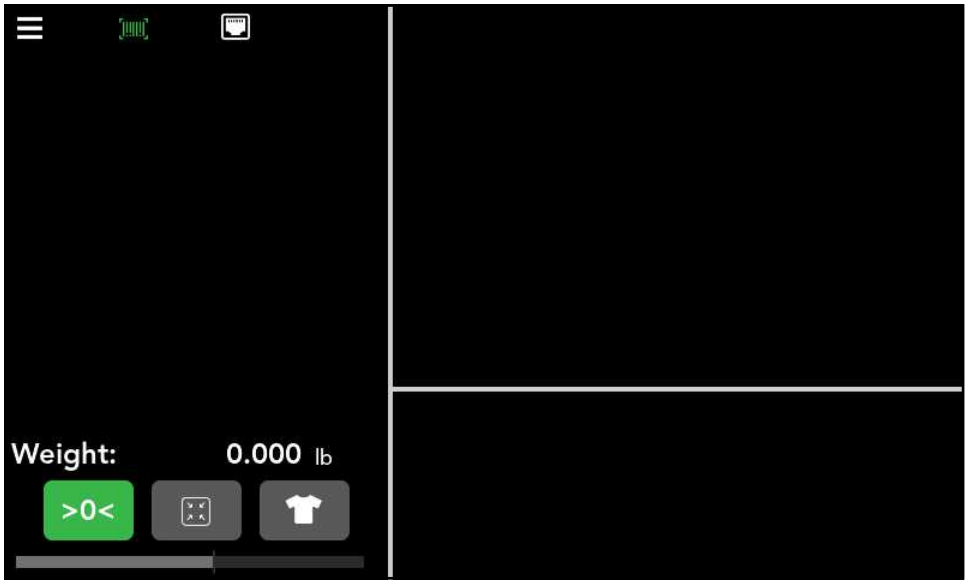


Figure 10
Cubiscan 25v2 touchscreen

Touchscreen care

Never use a sharp or hard-tipped object to tap on the touchscreen. You can tap lightly on the screen with your fingertip, or you can use the eraser end of a pencil or a stylus with a soft point. Use a light touch, just hard enough for the screen to respond.

To clean the touchscreen, moisten a soft cloth with water, then gently wipe the screen clean with the cloth. Do not spray liquid directly on the touchscreen.

Cubing and weighing

The Cubiscan 25v2 can be used to measure irregularly-shaped, opaque objects as small as 0.1 inch (refer to "Specifications" on page 2 for specifications and size limitations).

Objects are measured by the infrared light beams on the Cubiscan's gate by moving the gate over the object on the platform.

Refer to the appropriate following section for instructions.

Cubing and weighing using Qbit

Refer to the *Qbit User Guide* for instructions on measuring, weighing, and other functions in Qbit. The *Qbit User Guide* is provided on the flash drive or you can download it from the Cubiscan 25v2 website at www.Cubiscan.com.

Cubing and weighing using the touchscreen

All controls and displays for the Cubiscan 25v2 are shown on the touchscreen at the front of the base. If a computer is not connected, you can use the touchscreen to measure and weigh objects.

Measurement and weight results will only display when the Cubiscan 25v2 touchscreen is displaying the home screen.

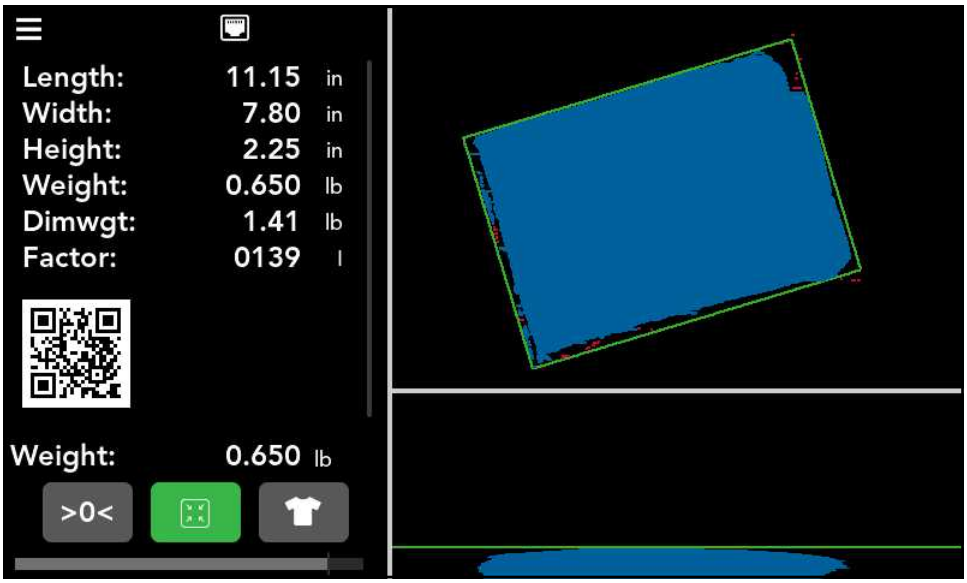


Figure 11
Measurement display

Length
Width
Height
These display the measured dimensions in inches (in), centimeters (cm), or millimeters (mm) as selected.

DIM-WGT
This displays the measured dim-weight in pounds (lb) or kilograms (kg) as selected.

FACTOR
Displays the factor used to determine the dim-weight. The fact is typically determined by pre-configured settings or can be set manually. See "Units" on page 35

WEIGHT
Displays the weight of the object.

->0<- (indicator)
This indicates that the scale is zeroed and ready to receive an object. This indicator must be lit before you can place an object on the platform. When you place an object on the platform, the indicator goes off.

Filter mode

Enable filter mode by tapping on the icon. In filter mode the Cubiscan 25v2 will detect the object with the most contiguous pixels (indicating the

largest object). All other objects or artifacts will still show in the view panel highlighted in red, but none will be included in the final calculation of the largest object.

Figure 12
Filter Mode

Apparel mode

Tapping the shirt icon will enable apparel mode. Measurement in apparel mode allows for a compression plate to be placed on the article to ensure height is measured accurately, see "Measuring with apparel mode" on page 25.

Menu

Tap the menu icon in the upper left corner of the machine to open the menu bar. From here you can select from the various options (**Version**,

Settings, **Measure settings**, **Connection**, **Gate**, **Scale**, **Touchscreen** and **Log**, as displayed below:

Figure 13
Menu

Measuring/Weighing items

The measuring gate can measure opaque objects as small as 0.1 inch (2 mm). An image of the object is displayed on the touchscreen as it is measured. Take the following steps to measure and weigh an item using the touchscreen:

1. Verify that the Cubiscan 25v2 scale is at zero. The zero (**>0<**) indicator should be highlighted.

2. Place the object on the glass platform. The zero (**>0<**) indicator will go out.

NOTE *Do not lean on or touch the Cubiscan 25v2 platform or the object while an object is being measured. Any kind of contact with the platform during the measurement process can alter the weight or sensor reading.*

3. Move the measurement gate slowly using the handle until it has fully crossed the object. Once the gate has paused the measurement will register on the display. If the measurement was successful the length, width, height, and weight of the object are displayed.

4. Remove the object from the platform. Wait for the **zero** indicator to light before placing the next object on the platform.

5. If the **zero** indicator (**>0<**) does not highlight green, it means that the Cubiscan 25v2 needs to be zeroed. To zero the scale, make sure that the platform is free of all objects, then tap **[>0<]**.

Figure 14
Measuring gate

NOTE *Do not move the gate too quickly across the platform. A gate speed error will display on the touchscreen if you move it too quickly.*

A two-dimensional image of the object shows the top-down view of the object. An image of the side view of the object appears below the image of the top-down view. The length, width, height, and weight are displayed on the touchscreen.

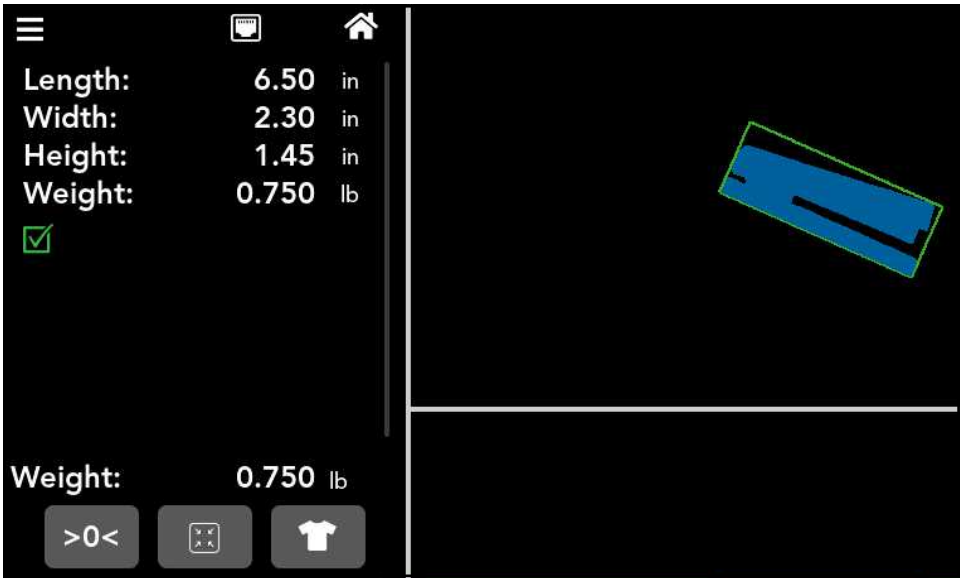


Figure 15
Measurement display

Depending on settings, to fully complete the measurement other actions must be taken. The green icons at the top the home screen display indicate what actions need to be taken. These may include:

- Scanning the barcode or multiple barcodes is required. When this is enabled a green barcode will display at the top of the left-side display panel next to the menu icon. To enable/disable this function, see "Barcode" on page 34.
- Waiting for confirmation from the server that data was sent and received. To enable/disable this function, see "Server Acknowledge" on page 46.
- Remeasuring without the compression plate in the case of apparel mode. To enable/disable this function, see "Measuring with apparel mode" on page 25.

When the measurement is complete a checkmark will appear in the left-side panel.

Figure 16
Measuring check box

Zeroing the Cubiscan 25v2

Tap the **[>0<]** button on the touchscreen to "zero" the Cubiscan 25v2. This sets all empty measurements and weight to zero. The weight when the platform is empty must be set to zero for the Cubiscan 25v2 to operate properly. The Cubiscan 25v2 tries to zero itself automatically. 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).
- The weight displayed when nothing is on the platform is negative.

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

Measuring with apparel mode

The following steps describe how to measure apparel in a way that allows you to measure average length, width, and height with filtering. This mode is a more efficient way to obtain measurements for accurate packaging of flexible items. To make the apparel mode function accessible on the home screen, see "Measuring with apparel mode" on page 25.

When measuring, the length and width measurement will be taken separate from the height measurement. Complete the following steps when measuring in apparel mode:

1. To enable apparel mode, tap the shirt icon at the bottom of the left-side panel of the home screen.

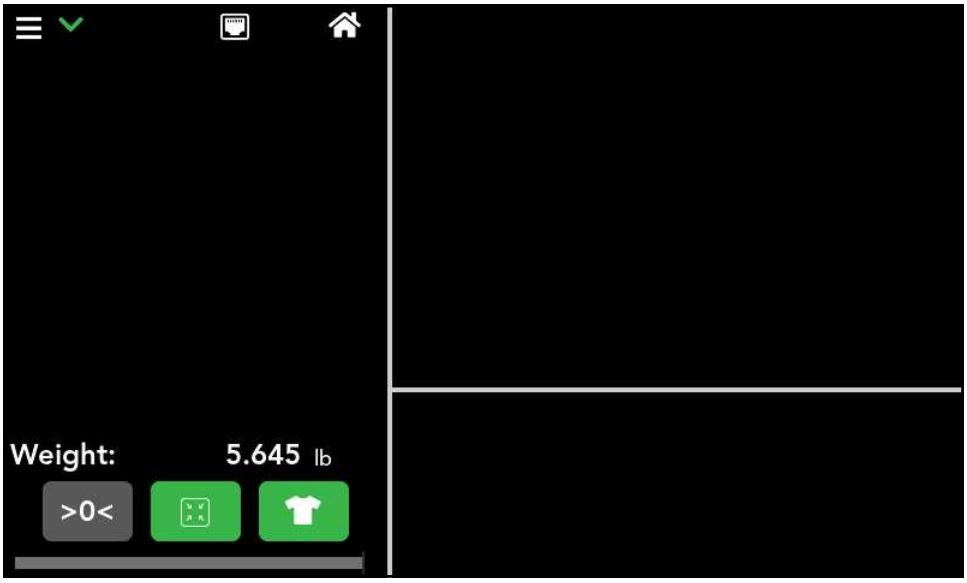


Figure 17
Apparel Mode

2. Begin by clearing all objects from the platform and ensuring the zero icon (**>0<**) is highlighted.

3. Place the apparel on the platform, followed by the compression plate.

4. Pass the gate over the apparel to complete the height measurement with the compression plate. Notice in the height display panel, a red line separates the boundary between the compression plate and the apparel. This allows for a more accurate measurement of height during

the second pass. No measurements are displayed in the left-side panel during first pass.

Figure 18
Apparel mode: first pass

5. Remove the compression plate, and pass the gate over the apparel again. Measurements will now display in the left-side panel with their respective adjustments. Notice in the height display, the red line is present, indicating the compressed height, along with a green line, indicating the non-compressed height.

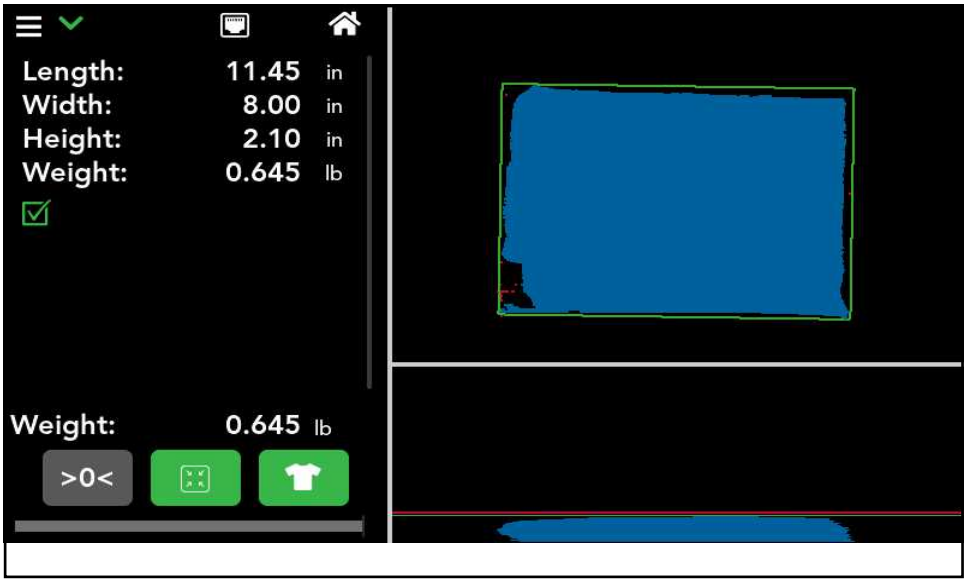


Figure 19
Apparel mode: second pass

6. Finish the measurement by performing any additional actions such as scanning the barcode.

CHAPTER 4
CONFIGURATION

This chapter provides instructions for using the Cubiscan 25v2 touchscreen to configure the length, width, and height measurements, as well as special features that the Cubiscan 25v2 offers. This chapter also provides instructions for configuring the units, dimensional weight factor, com port, and other settings. For information on calibrating the Cubiscan 25v2 gate, touchscreen, or scale, refer to Chapter 5 "Calibration".

If you have a computer connected to the Cubiscan 25v2 with Qbit installed, you can use Qbit to set up the measurement and dimensional weight units, select the Cubiscan 25v2 communications port, 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 flash drive with the Qbit application, or you can download it from the Cubiscan website at www.Cubiscan.com.

Settings

General settings

The Cubiscan 25v2 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.

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

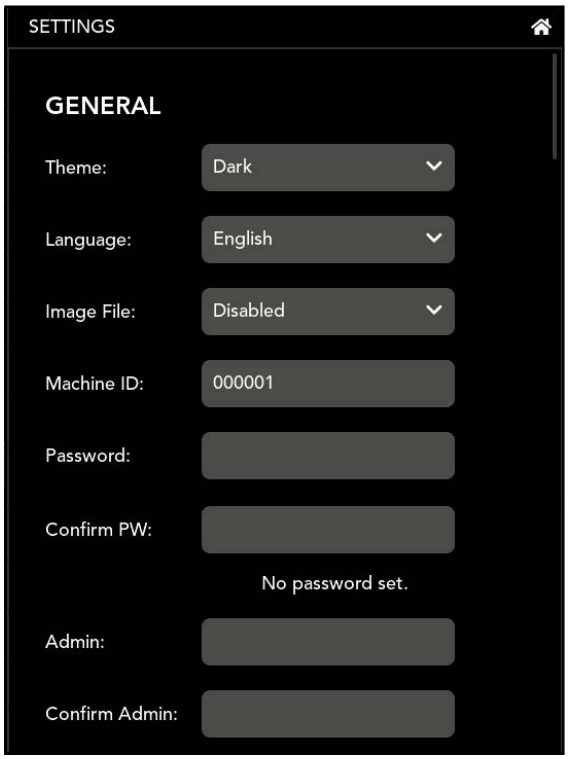


Figure 20
General settings

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**.

Image File Images posted from the machine may be set to **XY BMP**, **XY&Z BMP**, or **disabled**.

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.**

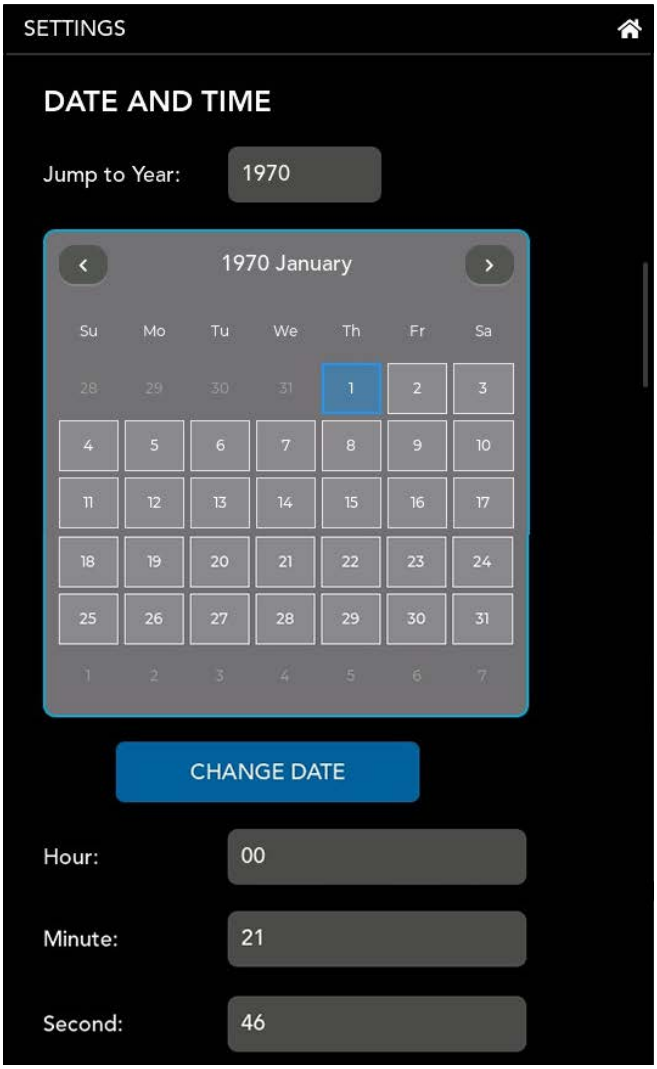


Figure 21
Date and Time

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.

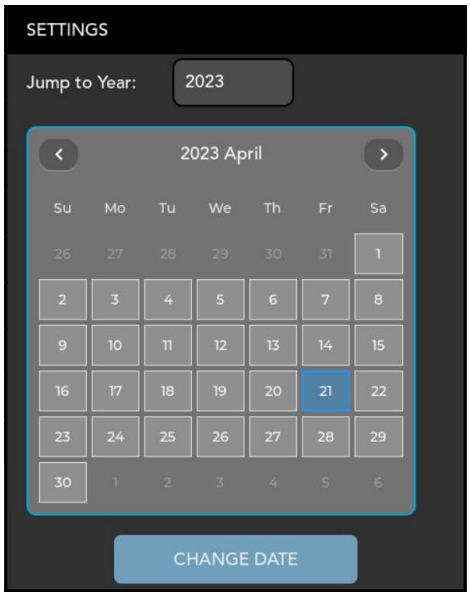


Figure 22
Date settings

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

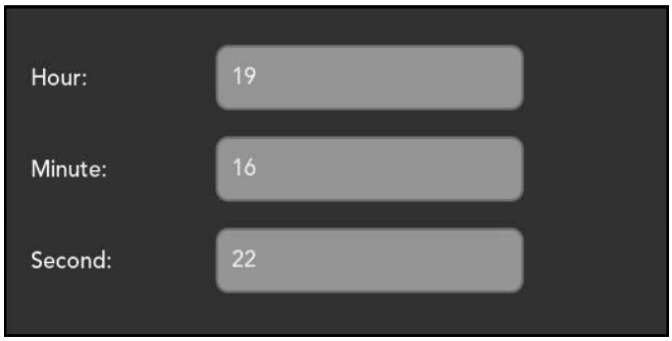


Figure 23
Time settings

System Reset

In the event that settings need to be reset back to factory defaults, the Cubiscan 25v2 has a system reset. By initiating system reset, all settings including custom settings will be reset back to their initial presets. Reseting

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

Figure 24
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 25v2. 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.

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

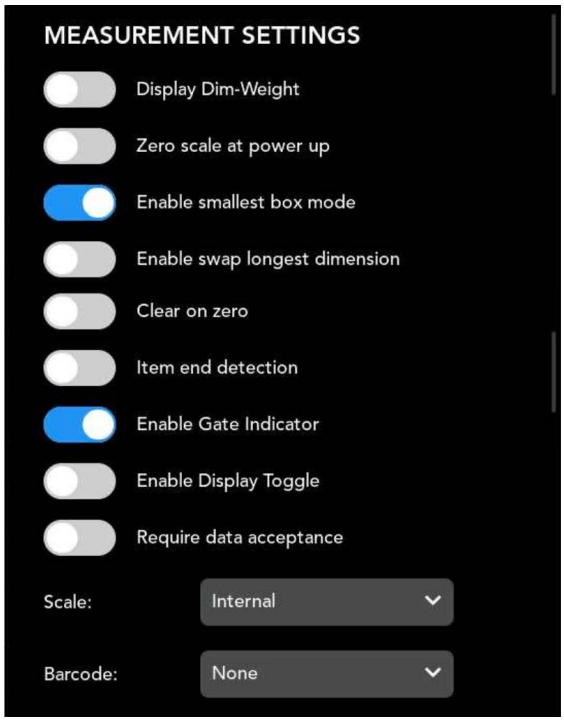


Figure 25
Measure Settings

Display Dim Weight Toggle this switch to display the dim weight and factor on the home screen.

Zero Scale at Power Toggle to have the scale zeroed automatically when powered on.

Enable Smallest Box Check this box if you want to enable the smallest box mode. This mode boxes items into the smallest box possible, the placement of the item on the platform makes no difference. Turning off the smallest box mode measures items depending on their placement on the platform.

Enable Swap Longest 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.

Item End Detection Toggle item end detection on or off. This will enable an error message if a measurement is started but no end is detected.

Enable Gate Indicator

Toggle to enable or disable the gate indicator bar on the home screen. The bar shows the position and movement of the gate.

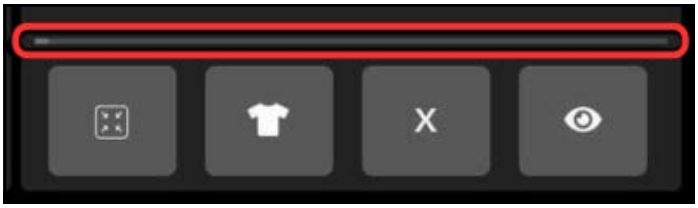


Figure 26
Gate indicator

Enable Display Toggle

Toggle to enable or disable the display toggle button in the bottom of the right panel. This button allows the user to toggle between a simplified view of the display or a more detailed view.

Figure 27
Simplified view

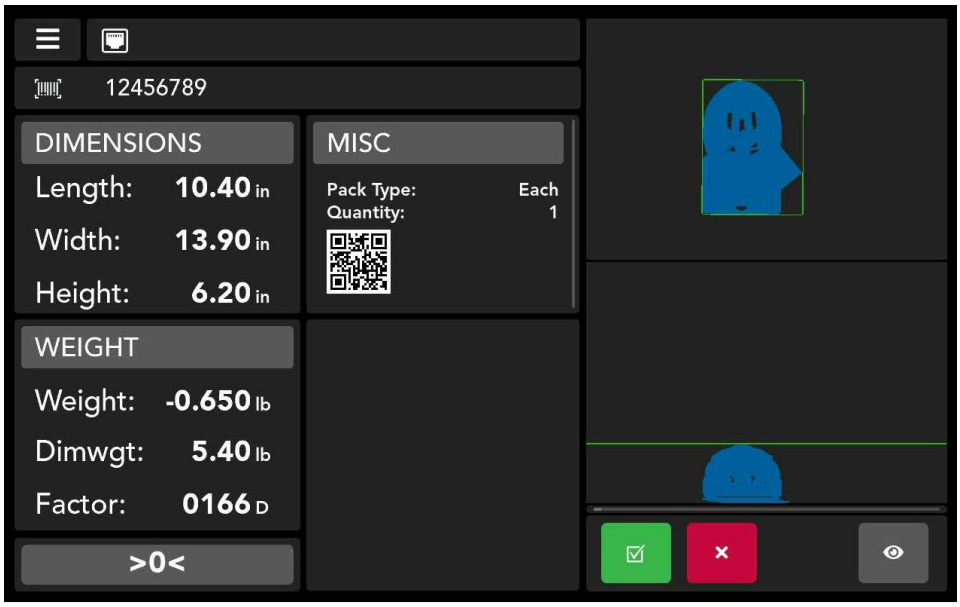


Figure 28
Detailed view

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.

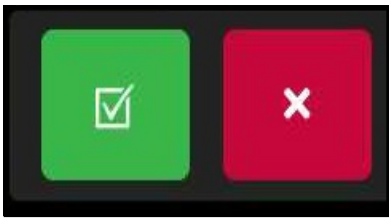


Figure 29
Data-acceptance

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.

Figure 30
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, 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 25v2 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.

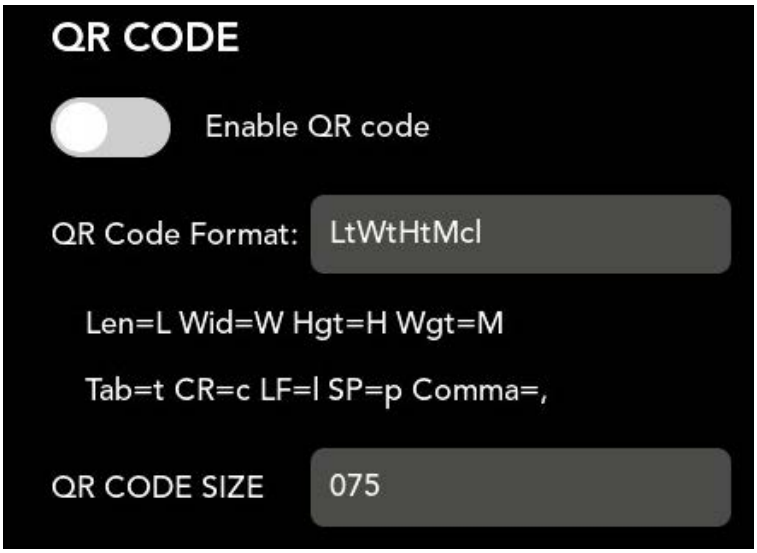


Figure 31
Barcodes

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. See "Cubing and weighing" on page 18.

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.

Filter

The filter mode is to designed to filter out unwanted objects or artifacts that are not associated with the object being measured.

Figure 32
Filter

Method Select from the options **XY&Z** or **XY only**. Selecting **XY only** will display length and width only. Selecting **XY&Z** to display length, width, and height.

Mode The Filter Mode options are **disabled**, **enabled**, **auto-off**, and **lock-on**.

When **Disabled** is selected, the check box will not be visible on the home screen.

When **Enabled** is selected, a filter mode check box will be visible on the home screen, and the mode can be enabled or disabled from the home screen.

When **Auto-Off** is selected, the operator will need to manually select the check box for each measurement.

When **Lock-On** is selected, the check box will always be checked and the Cubiscan 25v2 will take measurements in filter mode until the mode option is changed.

Apparel

Figure 33
Apparel

Method This drop-down menu offers different methods for measuring apparel.

- **Cmp Hgt** This method produces compressed height results when using a compression plate.
- **Avg Hgt** Some items have uneven heights. This method enables you to obtain the average height of an item.
- **Avg Len & Wid** Some items have overstated lengths and widths. This method enables you to obtain the average dimensions of an item that may not have straight edges.
- **Cmp Hgt, Avg Len & Wid** When using this method with a compression plate, the results will show the compressed height, and the average length and width of an item that may not have straight edges.
- **Avg Hgt, Len, & Wid** This option is ideal to obtain realistic dimensions for apparel and other flexible objects without the use of a compression plate. The results will display the average height, length, and width of an item.

Mode This drop-down menu offers different modes for using the apparel method feature. The options are disabled, enabled, auto-off, and lock-on.

When **Disabled** is selected, the check box will not be visible on the home screen.

When **Enabled** is selected, an apparel mode check box will be visible on the home screen.

When **Auto-Off** is selected, the operator will need to manually select the check box for each apparel measurement.

When **Lock-On** is selected, the check box will always be checked and the Cubiscan 25v2 will take measurements in apparel mode until the mode option is changed.

Plate Hgt-mm This field displays the height (85 mm) of the compression plate provided by Cubiscan. If a different compression plate is used, you'll need to change the value in this field so that the Cubiscan 25v2 can subtract the height of the compression plate from measurements in which it is used.

Pack types

From this section, users may enable, set, and edit pack types.

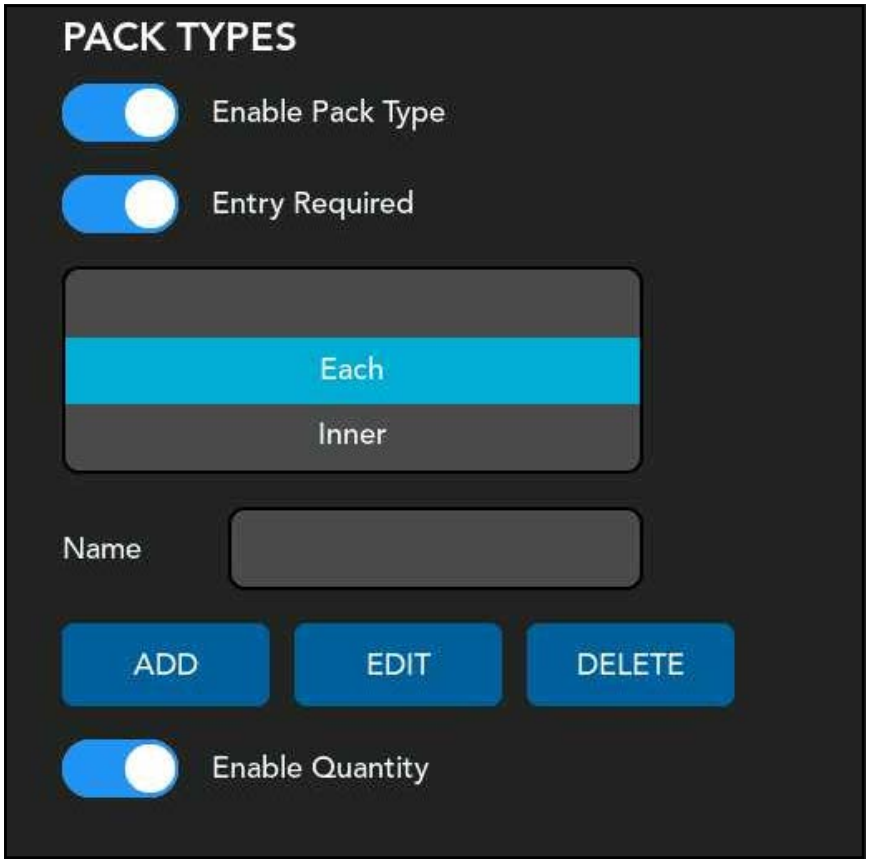


Figure 34
Pack types

Enable Pack Type Toggle to enable or disable the use of pack types in posted data.

Entry Required Toggle to enable or disable to require the user to enter pack type data for measurement.

Enable Quantity Toggle to enable or disable the use of a quantity field in user data.

Adding pack types

Complete the following steps to add pack type options to the drop down list:

1. Enter the pack type to add in the Name field.
2. Tap **[ADD]** to add the pack type to the drop down list.

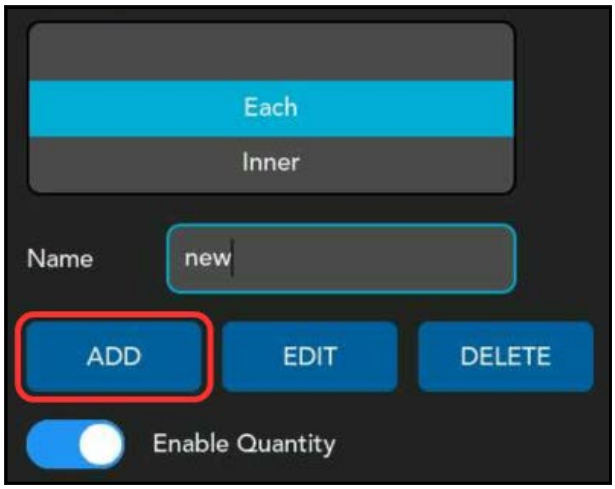


Figure 35
Adding pack types

Editing pack types

Complete the following steps to edit pack type options to the drop down list:

1. Select the pack type to edit.
2. Enter the new pack type name in the Name field.

3. Tap **[EDIT]** to edit the pack type to the drop down list.

Figure 36
Editing pack types

Delete pack types

Complete the following steps to edit pack type options to the drop down list:

1. Select the pack type to delete.

2. Tap **[DELETE]** to delete the pack type to the drop down list.

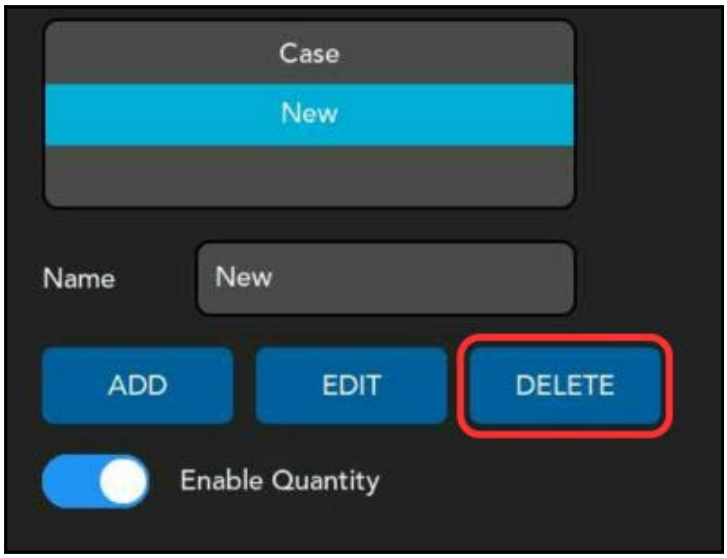
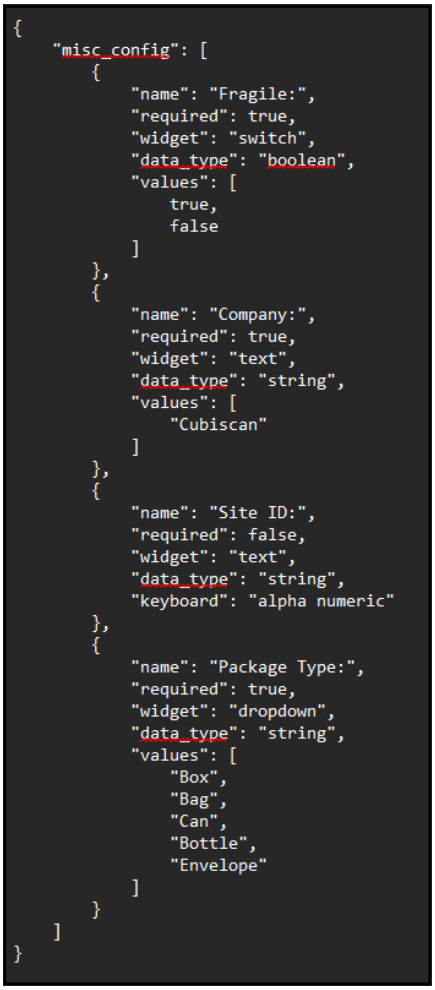


Figure 37
Deleting pack types

miscconfig.txt

Text, toggles, drop downs, and text boxes may be configured through the **miscconfig.txt** found in the root directory of the unit. When set, these items will appear in the user data window.



```
{
    "misc_config": [
        {
            "name": "Fragile:",
            "required": true,
            "widget": "switch",
            "data_type": "boolean",
            "values": [
                true,
                false
            ]
        },
        {
            "name": "Company:",
            "required": true,
            "widget": "text",
            "data_type": "string",
            "values": [
                "Cubiscan"
            ]
        },
        {
            "name": "Site ID:",
            "required": false,
            "widget": "text",
            "data_type": "string",
            "keyboard": "alpha numeric"
        },
        {
            "name": "Package Type:",
            "required": true,
            "widget": "dropdown",
            "data_type": "string",
            "values": [
                "Box",
                "Bag",
                "Can",
                "Bottle",
                "Envelope"
            ]
        }
    ]
}
```

Figure 38
miscconfig.txt

The following sample code is an illustration of the four types of items that may be set in the miscconfig.txt. Contact your system integrator or call **Cubiscan Technical Assistance** at **801.451.0500** for further assistance.

Text

Use the following sample code to set text such as Company name. This text can not be changed by user and will appear with user data.

```
{
    "name": "Company:",
    "required": true,
    "widget": "text",
    "data_type": "string",
    "values": [
        "Cubiscan"
    ]
},
```

Figure 39
miscconfig.txt: text

Text boxes

Use the following sample code to set text box field where users may input information. The text in the field will appear with user data.

```
{
    "name": "Site ID:",
    "required": false,
    "widget": "text",
    "data_type": "string",
    "keyboard": "alpha numeric"
},
```

Figure 40
miscconfig.txt: text boxes

Toggles

Use the following sample code to set toggles. The toggle will appear with user data, giving a boolean of true or false.

```
{
    "misc_config": [
        {
            "name": "Fragile:",
            "required": true,
            "widget": "switch",
            "data_type": "boolean",
            "values": [
                true,
                false
            ]
        },
```

Figure 41
miscconfig.txt: toggle

Drop down

Use the following sample code to set drop down lists. The drop down will appear in the user data popup where the user may select an option. The selected option will appear with the user data.

```
        {
            "name": "Package Type:",
            "required": true,
            "widget": "dropdown",
            "data_type": "string",
            "values": [
                "Box",
                "Bag",
                "Can",
                "Bottle",
                "Envelope"
            ]
        }
```

Figure 42
miscconfig.txt: drop down

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 325.

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 325: **MAC Address**, **IP Address**, **Subnet**, and **Gateway**.

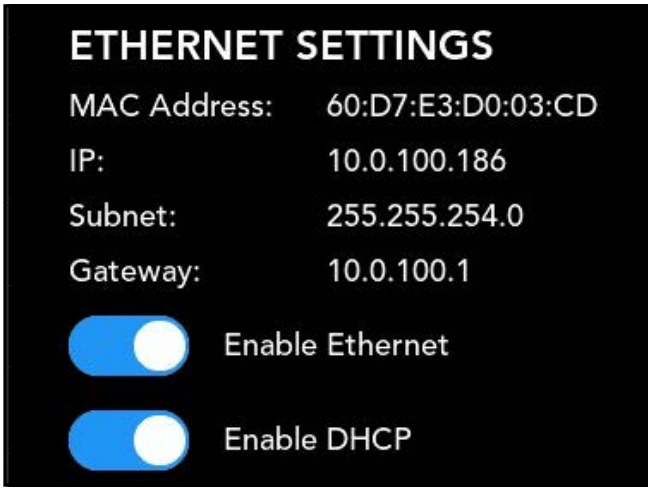


Figure 43
Connection

Enable Ethernet Toggling this option enables or disables the Cubiscan 25v2'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 25v2.

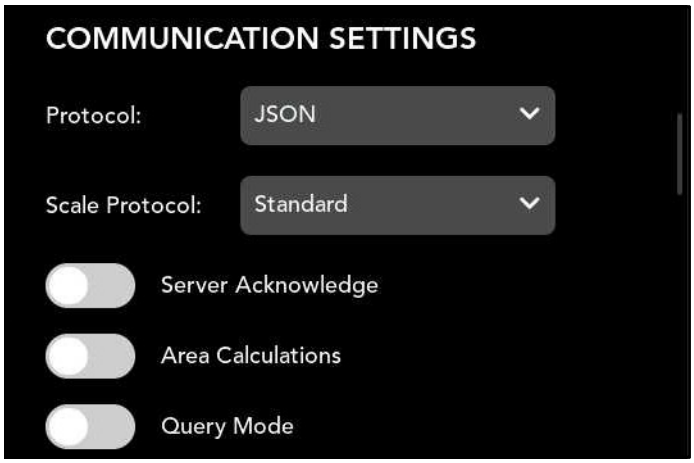


Figure 44
Communication settings

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

Scale Protocol

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 "Cubing and weighing" on page 18

Area Calculations Toggle to enable/disable the area calculation function. When enabled, the Cubiscan 25v2 will calculate an estimate of the area of the object in the XY plane. This calculation is not meant to be an accurate representation of area, but is an estimate used for tracking purposes.

Web-server

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

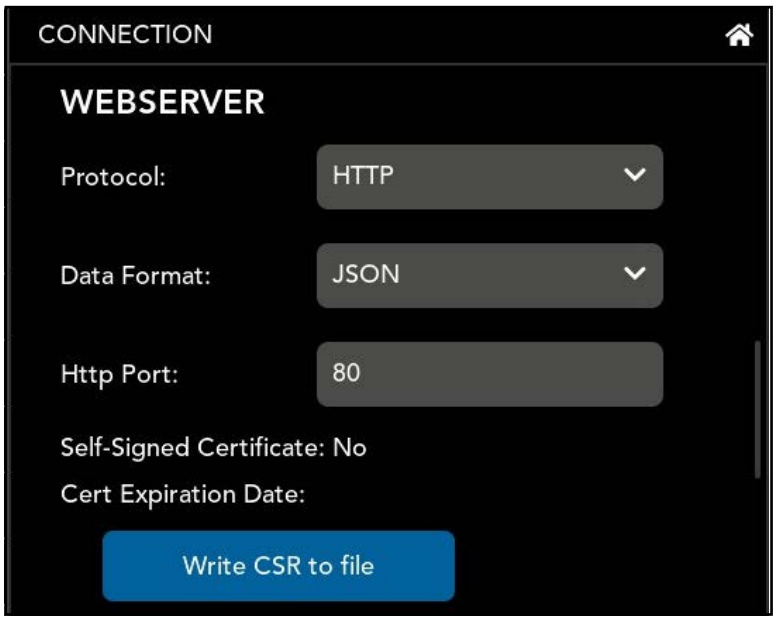


Figure 45
Connection - Protocol

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** or **JSON**.

Http Port Enter the port number for the webserver.

Write CSR to file Tap **[Write CSR to file]** to copy the certificate signing request to file. If you would like to use a different certificate for https than the self-signed, you may download the CSR file to create your own. After creating the CSR, upload it with the name "cert.pem".

Post

The Post section provides a toggle to enable or disable the posting of data.

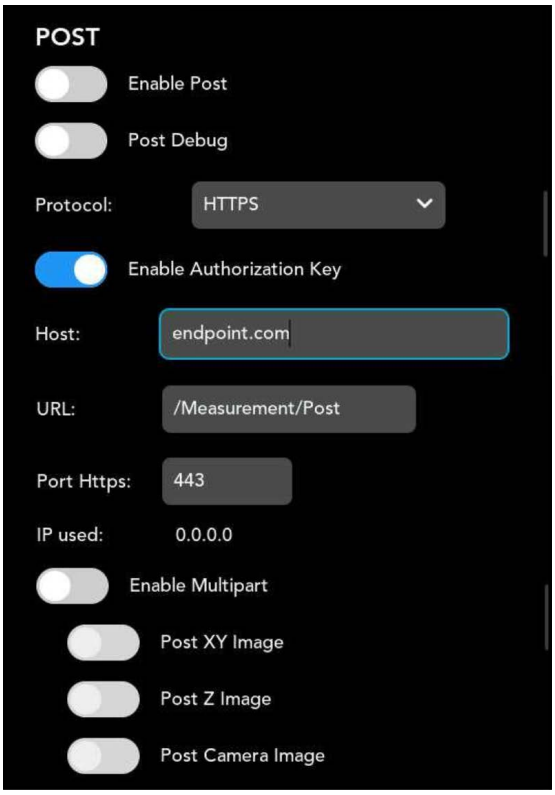


Figure 46
Connection - post

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

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 Toggle to enable or disable the use of an authorization key.

When HTTPS protocol is selected, an option to enable Authorization Key will appear.

Host Enter host address of network to post data.

URL Enter the address of the network to post data.

Port Https Enter the network port used to post data.

IP used Enter IP of the network to post data.

Post XY Image Toggle to enable the posting of XY images with data packet. The XY image is the image that appears in the upper box of the middle panel and depicts an overhead view of the measured object.

Post Z Image Toggle to enable the posting of Z images with data packet. The Z image is the image that appears in the lower box of the middle panel and depicts a side view of the measured object.

Post Camera Image Toggle to enable the posting of the camera image with data packet.

Scale Setting

The Cubiscan 25v2 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**.

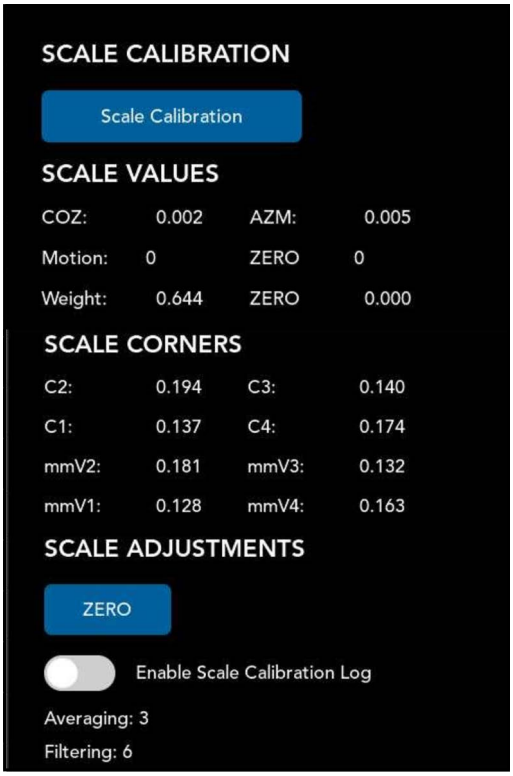


Figure 47
Scale status drop-down selection

Calibrate Scale Tap button to begin scale calibration. See "Calibrating the Scale" on page 59.

Scale Values Displays information from scale including weight and zero.

Zero Tap button to zero the scale.

Enable Scale Calibration Log Toggle to enable or disable the use of the scale calibration log. When enabled the unit will log scale measurements and other important diagnostic information.

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.

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.

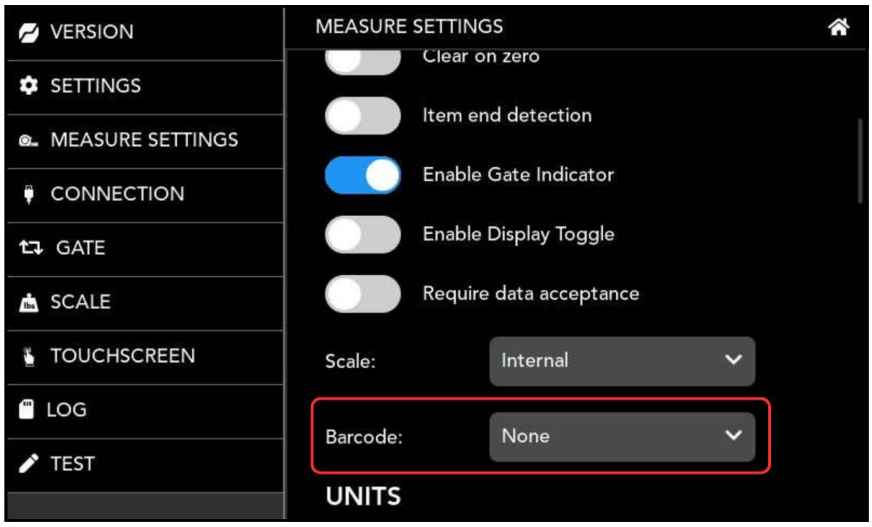


Figure 48
Select barcode

NOTE *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 Communication Settings and set the following:

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

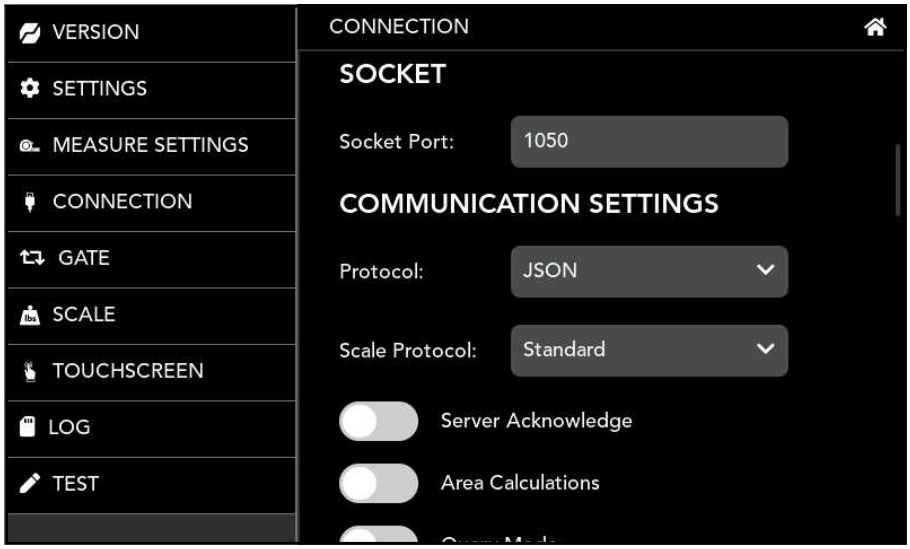


Figure 49
Communication settings

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.

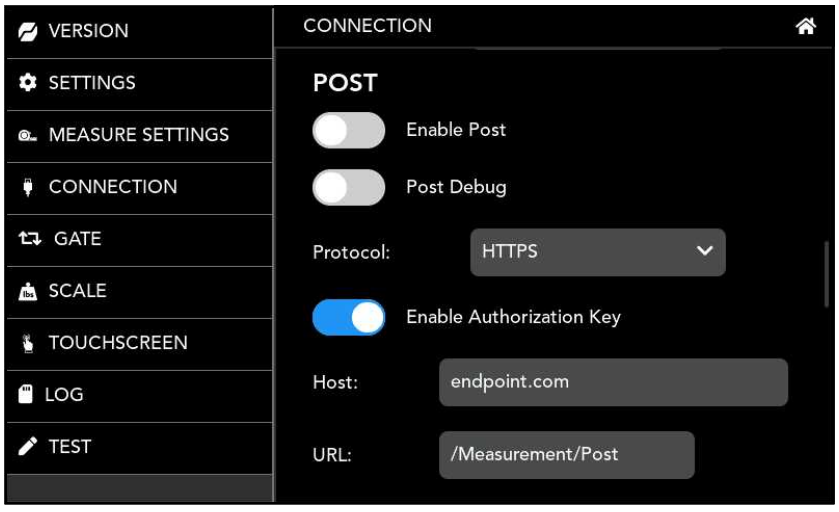


Figure 50
Post settings

4. Use the following settings if no DNS lookup exists for the endpoint:

Enable Static IP: ON
Protocol: Choose 'HTTP'
Static IP: Enter the IP of the endpoint.

5. If 'HTTPS' is selected, contact Cubiscan before enabling Authorization Key.

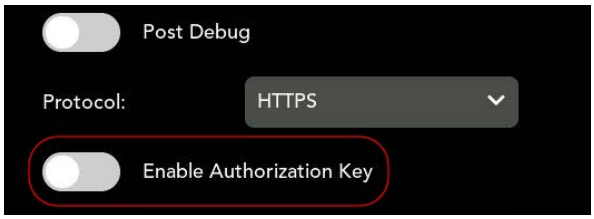


Figure 51
Enable Authorization Key

6. For troubleshooting purposes, enable Post Debug.

Figure 52
Enable Post Debug

Testing Post

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

1. With the Home screen displayed, scan an item barcode.

2. Move the gate of the Cubiscan over the item to initiate measurement. The barcode, length, width, height, and weight will display on the Home screen.

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

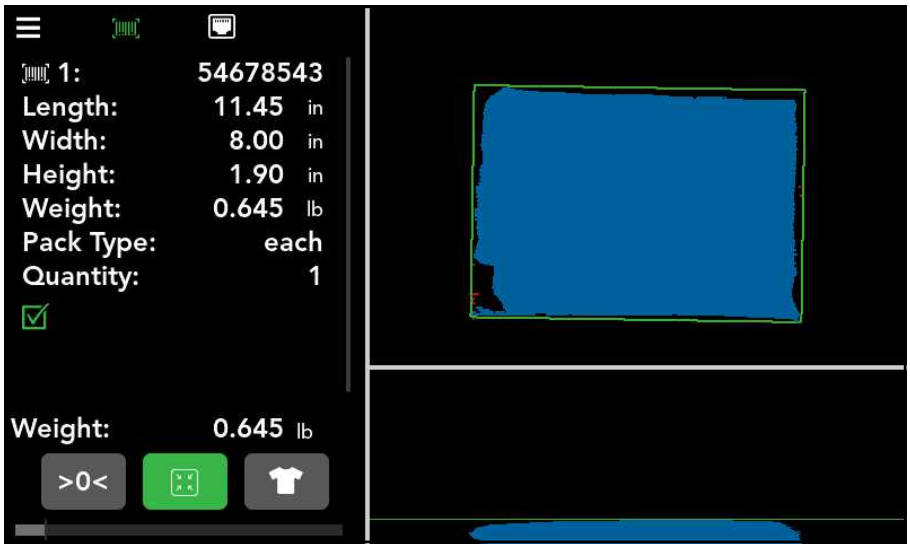


Figure 53
Test Posting

4. From the side menu, select **Log**.

5. Select "POSTSENT.TXT" and tap **[OPEN FILE]**. The log of the sent post will display.

Figure 54
Post sent log

6. 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.

Figure 55
Post sent log

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

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


```
{
   "measurement": {
      "status": "0",
      "cubiscan_id": "0962152272080032O3",
      "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 56
JSON log

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


```
{
   "csMeasureData": {
      "Status": "00",
      "Cubiscan_ID": "0962152272080032O3",
      "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 57
JSON (Legacy) log

NOTE 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 25v2 touchscreen, measurement gate, and scale (load cells). The Cubiscan 25v2 is calibrated at the factory; however, some circumstances in which recalibration may be required include the following:

- Calibrate the touchscreen if you have trouble making selections on the screen.
- Calibrate the Cubiscan 25v2 if you have problems cubing and weighing after assembly and setup.
- Calibrate the Cubiscan 25v2 if it is subjected to any type of mechanical shock or collision with a heavy object.
- Calibrate the Cubiscan 25v2 as part of a regular maintenance schedule. Calibration of the scale is recommended at least annually. If the Cubiscan 25v2 is used heavily, scale calibration should be performed monthly.
- Perform quality checks as needed, depending on how critical the accuracy of the data is to you. Recalibrate if you are outside the tolerance of +/- 0.05 inches (+/- 0.1 cm) for the gate or +/- 0.010 pounds (+/- 0.005 kg) for the scale.

During quality checks or when calibrating, make sure that the Cubiscan 25v2 is not affected by external forces that may affect readings, such as sunlight, vibration, or fans.

Before you begin

Before calibrating the Cubiscan 25v2, remove all items or other material from the platform and blow any dust off the measurement sensors. Refer to page 64 for information on cleaning the sensors.

NOTE

The following sections provide instructions for calibration using the Cubiscan's touchscreen. For instructions on calibrating the Cubiscan 25v2 using Qbit, refer to the Qbit User Guide.

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 25v2 scale.

NOTE

When calibrating the scale, the Cubiscan 25v2 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.

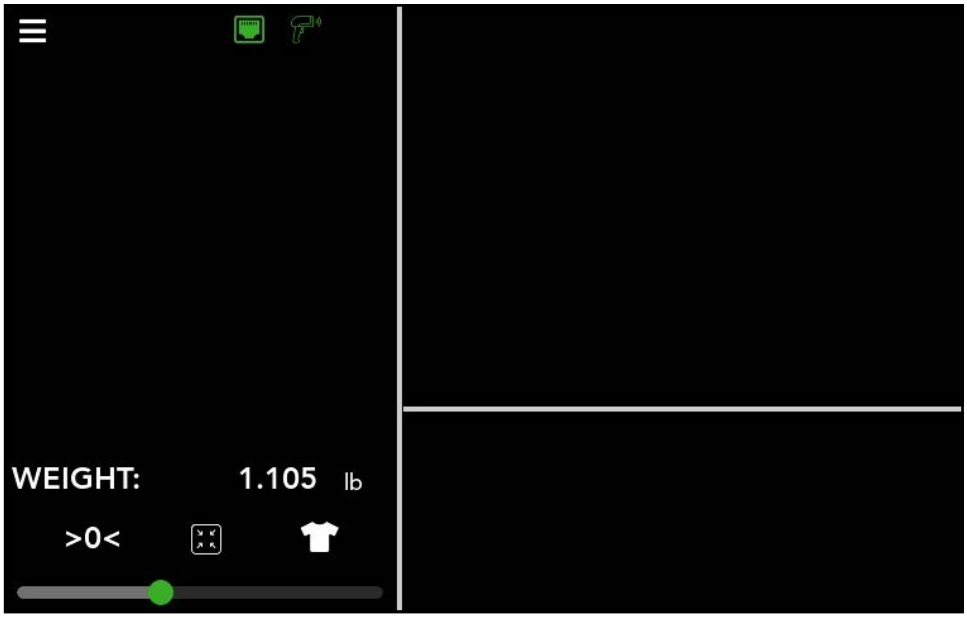


Figure 58
Home screen

NOTE

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

2. Tap **Scale**. Tap the **[Calibrate Scale]** button to begin the scale calibration.

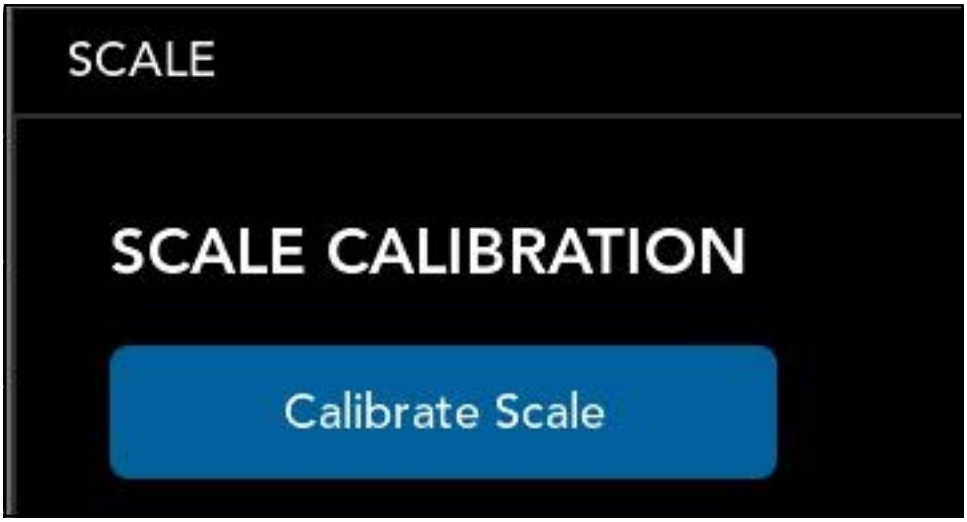


Figure 59
Scale screen

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

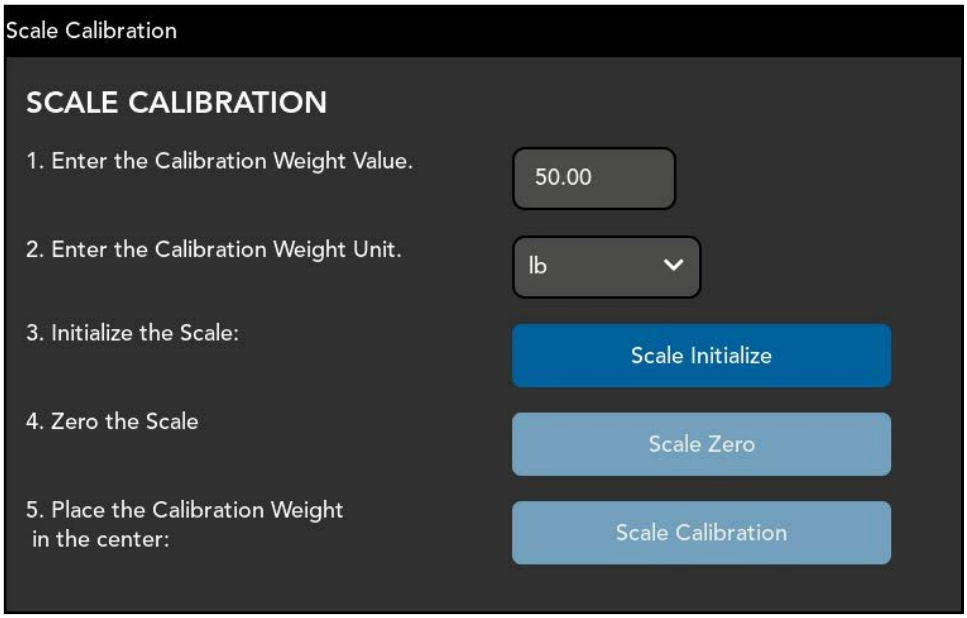


Figure 60
Second scale calibration screen

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 61
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 tape **[Scale Calibration]**. A message will display when calibration is complete.

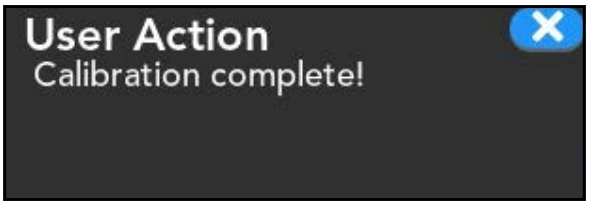


Figure 62
Scale calibration complete

Calibrating height

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

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

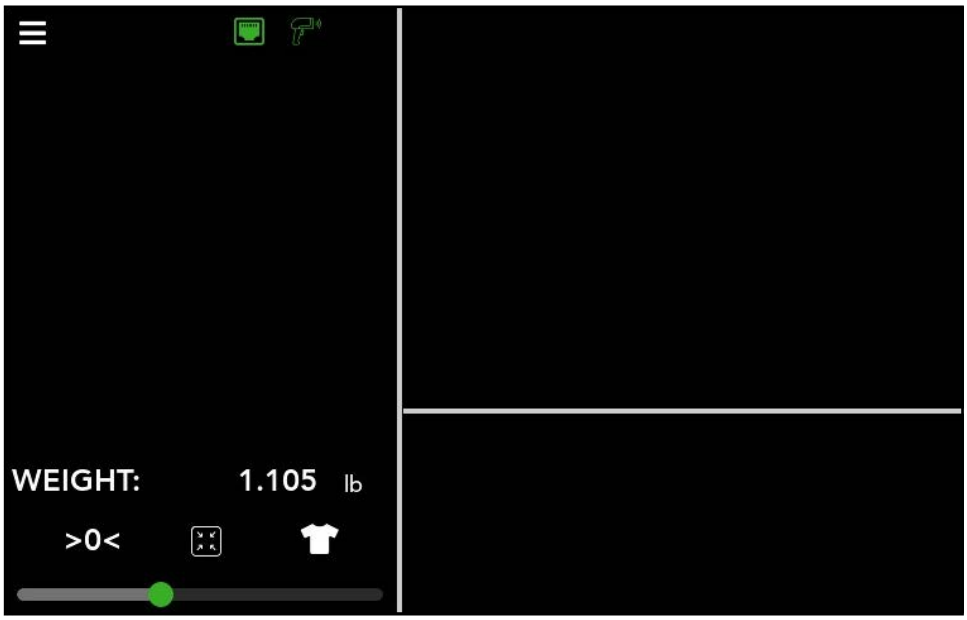


Figure 63
Home screen

2. Select **GATE** from the menu selection.

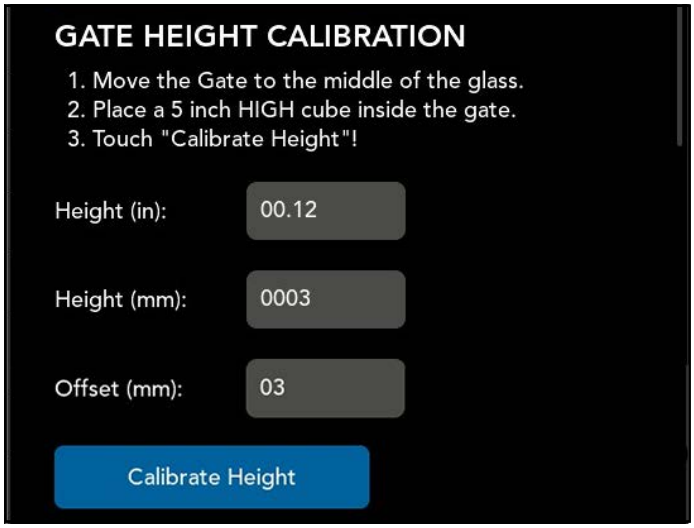


Figure 64
Gate calibration screen

3. The 5" measuring cube is required for calibration.

The **Height (in)** and **Height (mm)** fields display live values and will change when the 5" box has been placed in the gate. The Offset (mm) field will display the offset value after tapping the **[Calibrate Height]** button.

Follow the instructions displayed under the GATE HEIGHT CALIBRATION section to finish gate calibration.

4. Move the Gate to the middle of the glass.

5. Place the 5" calibration cube inside the gate and tap [Calibrate Height].

CHAPTER 6
MAINTENANCE

This chapter provides information on the care and maintenance of the Cubiscan 25v2. Routine maintenance and careful handling will help keep the Cubiscan 25v2 in good operating condition and prevent service calls or repairs.

Precautions

The Cubiscan 25v2 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 6.

Do not put packages on the platform that are known to be over 15 pounds (6 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 25v2 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 gate filters

This section describes how to clean the gate filters. The gate filters 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 the gate filters, use a clean, damp (if needed) microfiber cloth. Use water to dampen the cloth; do not clean the gate filters with a solvent as this could cause damage.

Removing the controller

If you suspect that there is a problem with the Cubiscan 25v2 controller, first review the Troubleshooting chapter and take any recommended action. If the problem persists, contact Quantronix Technical Assistance at 801.45.0500 for assistance.

If Quantronix recommends removing the controller and returning it for service, proceed as follows.

1. Turn off the power switch, and disconnect the power cord from the controller.

2. Remove the glass platform from the Cubiscan 25v2 base. It can simply be lifted out.

3. Place the platform in a safe location where it will not get stepped on or broken.

4. Move the gate to the far left position.

5. Locate the controller (the black box located below the gate's home position).

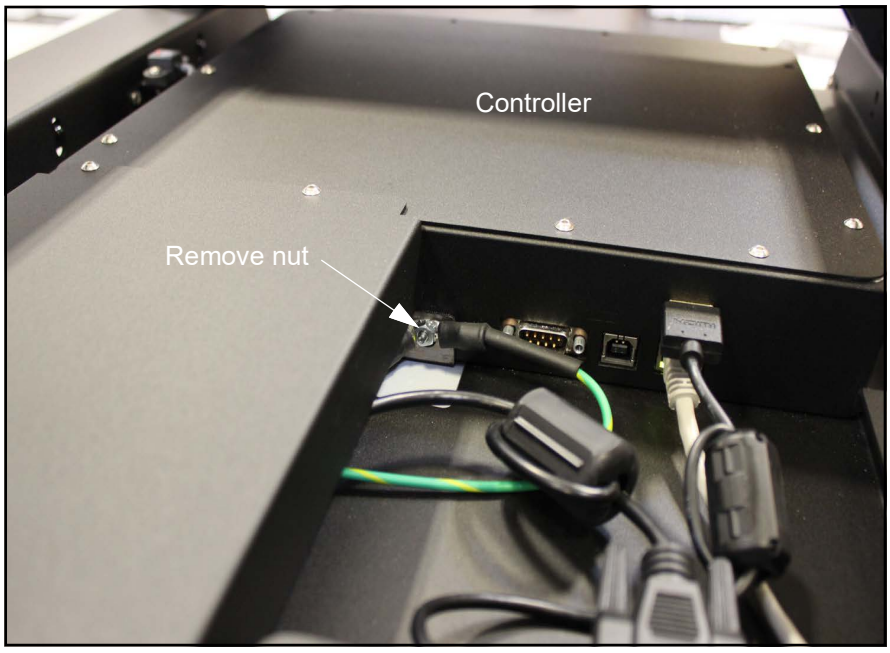


Figure 65
Controller box

6. Remove the nut using a 3/8'' nut driver (see Figure 65 above).

7. Remove the two screws using a 5/64'' Allen wrench (see Figure 66).

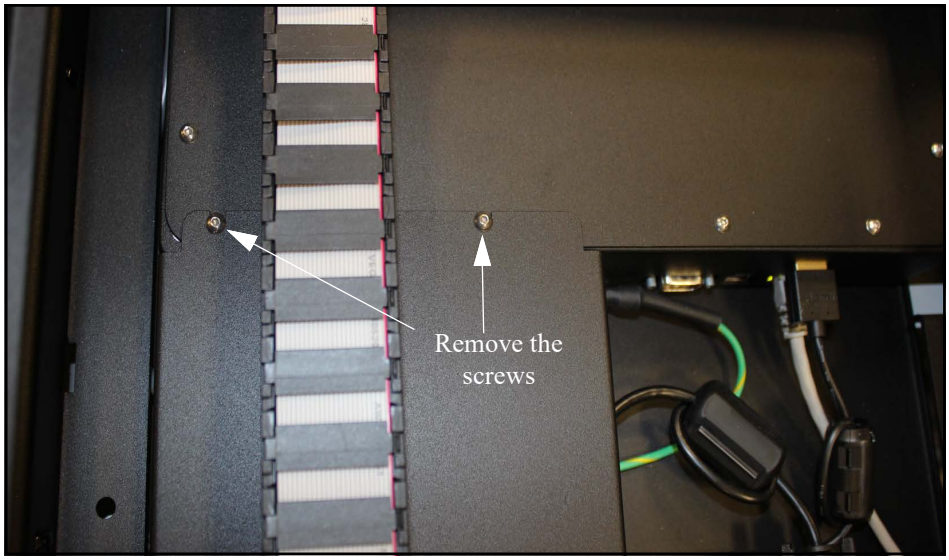


Figure 66
Screw removal

8. Move the gate back into the home position.

9. Remove the two nuts using a 3/8'' nut driver (see Figure 67).

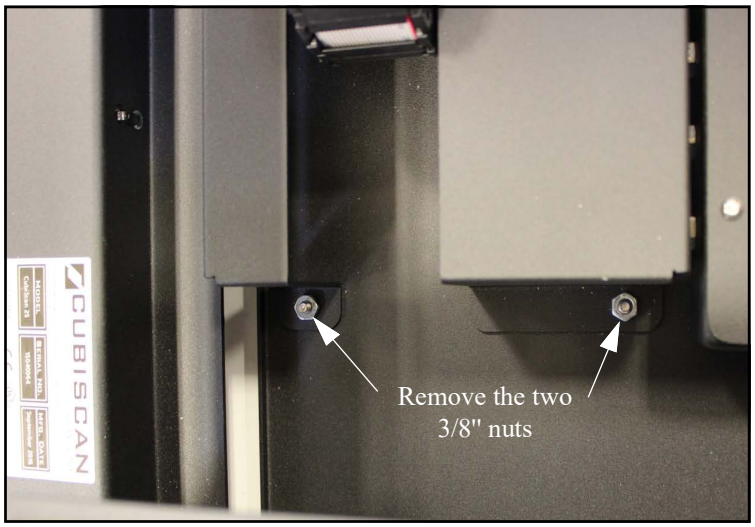


Figure 67
Cover box nut removal

10. Move the gate to the far left position.

11. Gently remove the cover that was held in place by the two 3/8'' nuts by carefully lifting it up and towards the controller.

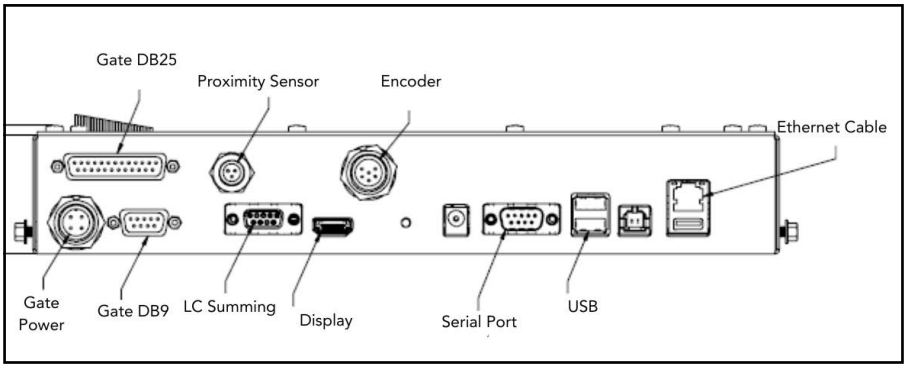


Figure 68
Controller box inputs

12. Disconnect all connectors that are attached to the controller box (refer to Figure 55 as needed), as follows:

    - To remove the Ethernet cable connector, press the tab on the connector to release it, and pull it straight out.
    - To remove the USB and display cable, simply pull it straight out using even pressure.
    - To remove the serial and load cell cables, loosen the screws and pull the cable connectors out using even pressure.
    - To remove the gate DB9 connector and the gate DB25 connector, use a Phillips head screwdriver to loosen the screws, and pull the cables straight out.
    - To remove the gate power, proximity sensor, and encoder cables; unscrew the cables and pull them straight out.
    - Remove the nut holding the ground cables in place and detach the ground cables from the controller.

13. Verify that all cables have been removed from the controller, then lift the box up and pull it out sideways (to the right) until it is clear of the metal frame of the Cubiscan 25v2.

CHAPTER 7
TROUBLESHOOTING

This chapter provides assistance in identifying and solving common problems with the Cubiscan 25v2. 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, some problems are caused either by incorrect cabling or because the system setup is not correct. If you are having problems with the Cubiscan 25v2, first verify that all cables attached to the controller box (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. For information on the setup, refer to Chapter 2 "Setup" or to the Qbit User Guide.

Problems with your computer may affect operation of the Cubiscan 25v2 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 you turn power on

If there is no response when you power on the Cubiscan 25v2, do the following:

1. Verify that the AC power cord is pressed firmly into the power socket.
2. Check the fuse in the fuse drawer next to the power switch.
3. Verify that the AC power source is working properly.

Contact Cubiscan if you require additional help.

Scale readings are not accurate

If you suspect that the Cubiscan 25v2 scale readings are inaccurate, do the following:

1. Zero the Cubiscan 25v2 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 the **[Zero]** button on the touchscreen.)

2. Make sure that the Cubiscan 25v2 is on a level surface.

3. Move the Cubiscan 25v2 if it is located close to open freight doors or where air is blowing on it. Extreme air flow can affect the accuracy of the Cubiscan 25v2. Refer to "Placement" on page 6 for information.

4. Recalibrate the Cubiscan 25v2. Refer to page 58 for instructions.

Dimension readings are not accurate

If you suspect that the Cubiscan 25v2 dimension readings are inaccurate, do the following:

1. Check the glass platform and gate filters for dirt or debris. Clean the glass platform with a clean, damp cloth.

2. Verify that the image is representative of the measured item. If not, check gate diagnostics of the Cubiscan 25v2.

Computer error messages

The following error messages generated by Qbit indicate a communications problem between the Cubiscan 25v2 and the computer.

No Communications with Cubiscan 25v2

This message indicates that no communication is taking place between the computer and the Cubiscan 25v2.

Transmission Error

This message indicates that erroneous or garbled data is being sent from the Cubiscan 25v2.

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

1. Is the Cubiscan 25v2 turned on and securely connected to power?
2. Is the serial cable or Ethernet cable connected to both the Cubiscan 25v2 and the computer or network, and are both connections secure?
3. (Computer connection) Is the serial cable connected to the computer at either the COM1 or COM2 port?
4. (Computer connection) Is the Com Port in the Options dialog box (Tools menu) configured for the correct port?
5. (Network connection) Is the Cubiscan 25v2 properly configured for TCP/IP communication? (Qbit software is used to configure the Cubiscan 25v2.)
6. Is there a problem with the Cubiscan 25v2? Perform the Status function in Qbit to check the status of the Cubiscan 25v2.
7. Is there a problem with the computer or network? Refer to your computer manual for information on troubleshooting the computer, or contact your network administrator.

Version

This section discusses the options available on the Version menu. To access the version screen, tap the menu icon in the upper left corner of the home screen.

Figure 69
About version

The following information will display about the Cubiscan 325 and its Firmware.

MAC Address The Media Access Control (MAC) address.

Serial Number The product number that is unique to each Cubiscan 325.

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 325.

Firmware The firmware version used for the main controller, including build and Kernel.

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.

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**.

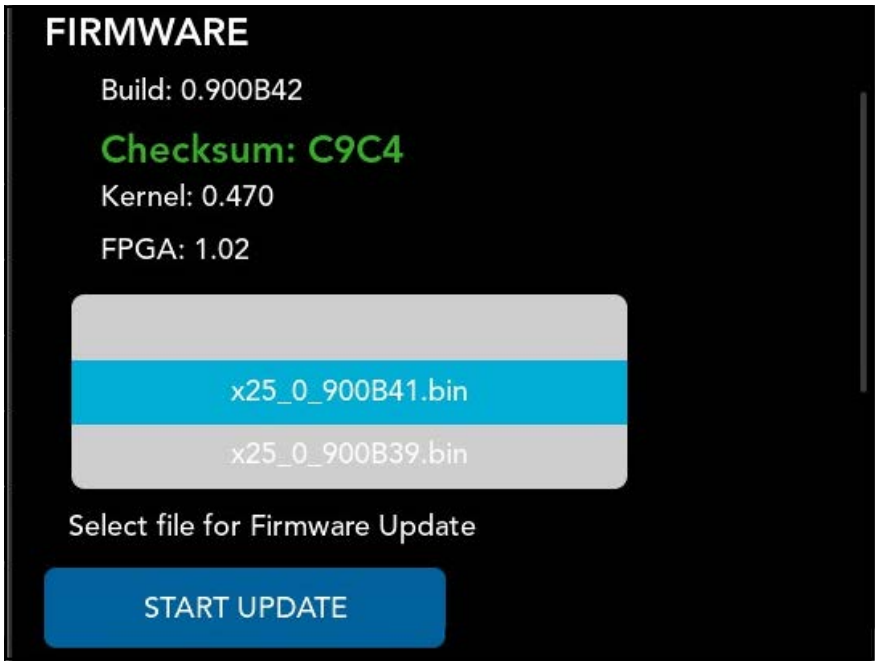


Figure 70
Updating firmware

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

Soft Reset

There may be an occasion that the Cubiscan 325 will need a soft reset. This is a reset of the operating system without shutting off the power to the

machine. A soft reset may be necessary if the operating system is not working as intended or is running sluggish.

Complete the following steps to initiate a soft reboot:

1. From the Version Screen, go to the Reset section

Figure 71
Soft Reset

2. Tap **[SOFT RESET]**, to initiate soft reset.

APPENDIX A
PARTS LIST

Following is a list of parts that can be purchased for the Cubiscan 25v2 as spare parts or if replacement is necessary.

Part No.	Description	Quantity/Unit
10083	AC Power Cord	1
12344	1/2'' Diameter Ball	4
13340	Proximity Sensor	1
13411	USB to Ethernet Adapter	1
16924	Ethernet RJ45 Cable Assembly	1
11493	DB9F Serial Cable Assembly 10ft	1
12997	USB to Serial Adapter	1
13624	Calibration Cube, 5'' x 3'' x 2''	1
14066	Leveling Foot	4
16420	Touchscreen Assembly (display)	1
16422	Main Controller Assembly	1
14119	Glass Plate	1
14159	Motion Encoder	1
14161	Encoder Magnet	1
14309	10 kg Load Cell	4