

Cubiscan® 75 Pro



Operations and technical manual

Version 1.0

Quantronix, Inc.
Cubing and weighing systems

380 South 200 West
P.O. Box 929
Farmington, Utah 84025
U. S. A.
Phone 801.451.7000
Website: <http://www.cubiscan.com>



Cubiscan 75 Pro operations and technical manual

Cubiscan® and the Quantronix logo are registered trademarks of Quantronix, Inc.

Scanning New Dimensions™, Qbit™, QbitWIN™, and The FreightWeigh System™ are trademarks of Quantronix, Inc.

Windows® is a registered trademark of Microsoft Corporation.

Cubiscan® software and firmware are Protected by international and domestic copyrights.

Cubiscan® 150 measurement Products are Protected by one or more of U.S. Patents Re42,430 and D490,328 and foreign patents.

Cubiscan® 110 measurement Products are Protected by one or more of U.S. Patent Re42,430 and foreign patents.

Cubiscan® 125 measurement Products are the subject of U.S. Patent 8,928,896. Another U.S. patent is pending.

Cubiscan® 225 measurement Products are Protected by one or more U.S. patents, refer to U.S. Patent 9435637.

This document and website Copyright® 2018 by Quantronix, Inc. All rights reserved.



CAUTION

The Cubiscan 75 Pro should only be serviced by qualified personnel.

Observe precautions for handling electrostatic sensitive devices when setting up or operating the Cubiscan 75 Pro.



WARNING

Disconnect all power to the Cubiscan 75 Pro before servicing or making any connections.

Limited warranty Quantronix new Product

Statement of Warranty. Quantronix, Inc.'s, warranty obligations are limited to the terms set forth below: Quantronix (hereinafter referred to as the "Seller") warrants that its new Product is in accordance with Seller's published specifications (or those agreed upon with Buyer in writing) at the time of sale or lease and that it is free from non-cosmetic defects in materials and workmanship under normal use for a period of one (1) year from the date of sale or the commencement date under a written equipment lease or rental agreement (the "Warranty Period"). If a hardware defect arises and a valid claim is received within the Warranty Period, at its option, Seller will either (i) repair the hardware defect at no charge, using new or refurbished replacement parts, or (ii) exchange the Product or defective part(s) with a Product or part(s) that are new or which has been manufactured from new or serviceable used parts and is at least functionally equivalent to the original Product or part, or (iii) refund the purchase price of the Product after Buyer has returned the Product to Seller. For purposes of this warranty agreement, "Buyer" shall mean and refer to (i) the party which originally – whether from Seller directly, or from an authorized distributor, agent or reseller who is authorized by Seller – purchases, or leases under a written equipment lease or rental agreement, the Seller's Product which is the subject of this warranty, or (ii) any subsequent purchaser or transferee that acquires valid title to the equipment within the Warranty Period.

In the event of the occurrence of a claim under this warranty, the Buyer shall have thirty (30) days to notify Seller in writing of the nature and specifics of the claimed defect; Provided, however, that any and all claims must be received before the expiration of the Warranty Period. Failure to notify Seller within such time period shall void this warranty. Any claim of a warranted defect is subject to inspection and analysis by Seller, prior to and/or after Buyer ships the Product to Seller, to conclusively identify or confirm the nature and cause of failure and application of this warranty. In the event that the defect or damage is excluded from warranty the Seller may at its option either (i) Provide Buyer with a quote to make any such repairs or replacements which are not covered under this warranty, or (ii) give Buyer twenty (20) days to pay for return shipping and upon receipt return the Product to Buyer. If Buyer fails to pay for return shipping after twenty (20) days' notice and after repairs are made or warranty coverage is determined not applicable, Seller may dispose of or scrap the Product.

This is a factory warranty and any defective components, mechanical or electrical, will be repaired or replaced, at the discretion and authorization of Seller, at Seller's facilities in Utah. It shall be the Buyer's responsibility to return the faulty equipment or components to Seller at Buyer's expense as well as pay for all return shipping. This warranty does not include the cost, reasonable expenses to travel, and labor at Buyers or others facility. All replaced or exchanged parts becomes Property of Seller. Buyer shall first receive written confirmation to ship the Product before sending it. Written confirmation to ship is not a guarantee that the defect or damage to the Product is covered by this warranty. Seller is not obligated to pay for labor, material, reasonable travel expenses, or service charges involved in the removal, return, or installation of equipment or components. Seller reserves the right to incorporate imProvements in material and design of its Products without notice and is not obligated to incorporate the same imProvements in equipment previously manufactured.

Exclusions and Limitations. This limited one (1) year warranty is applicable exclusively to original equipment Products and components that were manufactured by Seller. Seller also warrants its replacement parts, subject to the terms and conditions set forth herein, for the lesser period of ninety (90) days from the date of delivery or until the expiration of the original warranty, whichever is greater. Seller does not warrant, for any purpose, any external accessories, or integrated parts, including but not limited to computers, controllers and/or barcode scanners, that are manufactured by another manufacturer and sold under a separate label, even if they are packaged or sold with Seller's Product. Seller's obligation and liability under this warranty is expressly limited to repair or replacement (at its option) of the warranted equipment or components within the Warranty Period. A purchase by Buyer

of equipment that it had first leased or rented shall not start a new Warranty Period. Seller does not warrant that the operation of the Product will be uninterrupted or error-free.

This warranty shall not apply to equipment or components which has/have:

1. Been the subject of an accident, or repairs or modifications attempted or made and not authorized by Seller.
2. Been used with incompatible Products.
3. Been operated under abnormal conditions, excessive heat or cold, highly corrosive environments, or in an unintended manner.
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 Seller's control.
6. Had serial numbers altered, defaced or removed.
7. Been operated beyond capacity.
8. Not been manufactured by Seller including parts, accessories, or components which have been integrated into, used alongside of, or in conjunction with a Product manufactured by Seller.

TO THE EXTENT PERMITTED BY LAW, THIS WARRANTY AND THE REMEDIES SET FORTH ABOVE ARE EXCLUSIVE AND IN LIEU OF ALL OTHER WARRANTIES, REMEDIES AND CONDITIONS, WHETHER ORAL OR WRITTEN, STATUTORY, EXPRESS OR IMPLIED. TO THE MAXIMUM EXTENT ALLOWED BY LAW, SELLER SPECIFICALLY DISCLAIMS ANY AND ALL STATUTORY OR IMPLIED WARRANTIES, INCLUDING, WITHOUT LIMITATION, WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND WARRANTIES AGAINST HIDDEN OR LATENT DEFECTS. IF SELLER CANNOT LAWFULLY DISCLAIM STATUTORY OR IMPLIED WARRANTIES THEN TO THE EXTENT PERMITTED BY LAW, ALL SUCH WARRANTIES SHALL BE LIMITED IN DURATION TO THE DURATION OF THIS EXPRESS WARRANTY AND TO REPAIR OR REPLACEMENT SERVICE AS DETERMINED BY SELLER IN ITS SOLE DISCRETION. This statement sets forth the full extent of Seller's liability for breach of any warranty or deficiency in connection with the sale or use of the Product. No employee, representative or reseller of Seller is authorized to change this warranty in any way or grant any other warranty.

EXCEPT AS PROVIDED IN THIS WARRANTY AND TO THE EXTENT PERMITTED BY LAW, SELLER IS NOT RESPONSIBLE FOR DIRECT, INDIRECT, SPECIAL, PUNITIVE, INCIDENTAL OR CONSEQUENTIAL DAMAGES RESULTING FROM ANY BREACH OF WARRANTY OR CONDITION, OR UNDER ANY OTHER LEGAL THEORY, INCLUDING BUT NOT LIMITED TO LOSS OF USE; LOSS OF REVENUE; LOSS OF ACTUAL OR ANTICIPATED PROFITS (INCLUDING LOSS OF PROFITS ON CONTRACTS); LOSS OF THE USE OF MONEY; LOSS OF ANTICIPATED SAVINGS; LOSS OF BUSINESS; LOSS OF OPPORTUNITY; LOSS OF GOODWILL; LOSS OF REPUTATION; LOSS OF, DAMAGE TO OR CORRUPTION OF DATA; OR ANY INDIRECT OR CONSEQUENTIAL LOSS OR DAMAGE HOWSOEVER

CAUSED INCLUDING THE REPLACEMENT OF EQUIPMENT AND PROPERTY, AND ANY COSTS OF RECOVERING, PROGRAMMING, OR REPRODUCING ANY PROGRAM OR DATA STORED OR USED WITH SELLER PRODUCTS. BUYER WAIVES THE RIGHT TO SEEK TOTAL COMBINED DAMAGES FROM SELLER IN EXCESS TO THAT WHICH WAS PAID TO SELLER AND SELLER SHALL BE LIMITED FROM ANY AND ALL CLAIMS RELATED TO THIS WARRANTY TO BE NO MORE THAN WHAT WAS PAID TO SELLER FOR THE NEW PRODUCT.

CONSUMER PROTECTION LAWS. FOR CONSUMERS WHO ARE COVERED BY CONSUMER PROTECTION LAWS OR REGULATIONS IN THEIR COUNTRY OF PURCHASE OR, IF DIFFERENT, THEIR COUNTRY OF RESIDENCE, THE BENEFITS CONFERRED BY THIS WARRANTY ARE IN ADDITION TO ALL RIGHTS AND REMEDIES CONVEYED BY SUCH CONSUMER PROTECTION LAWS AND REGULATIONS. Some countries, states and Provinces do not allow the exclusion or limitation of incidental or consequential damages or exclusions or limitations on the duration of implied warranties or conditions, so the above limitations or exclusions may not apply to you. This warranty gives you specific legal rights, and you may also have other rights that vary by country, state or Province.

This document was created with the purpose of Providing the most accurate and complete information.

Manual updated September 15, 2023.

TABLE OF CONTENTS

CHAPTER 1

Specifications	3
----------------------	---

CHAPTER 2

Unpacking	6
Placement	7
Assembling the Cubiscan 75 Pro	7
Attaching the post to the platform	8
Bolting the platform in place	9
Connecting cables	10
Turning off the Cubiscan 75 Pro	11
Connecting to a computer	12
Communicating via Ethernet	12
Installing and configuring the Ethernet driver	12
Communicating via serial	13
Installing Qbit	13
Camera Calibration	13
Setting up the scale	15
Measurement trigger	16
Setup checklist	17

CHAPTER 3

Cubiscan 75 Pro display	18
Dimensioning options	20
Cuboidal	20
Irregular	20
Flats mode	20
Measurement Trigger	21
Using Qbit software	21
Using Web Services	21
Dimensioning objects	22

CHAPTER 4

Settings	23
General settings	23
Create Theme	24
Date and Time	25
System Reset	27
Measure Settings	28
Units	31
Connection	31
Ethernet Settings	32
USB Settings	32
Communication Settings	33
Web-server	33
Post	34
Scale Setting	34
Custom scale settings	35
Camera Setting	39
Calibrate Camera	41
Touchscreen	41

CHAPTER 5

Precautions	43
Cleaning the camera covers	44

CHAPTER 6

No response when you turn power on	45
Dimension readings are not accurate	45
Measurement error	46
Version	47
Software	47
Diagnostics	48
Diagnostics Log	48
Config-Audit	49
Calib-Audit	50
Alibi	50

LIST OF FIGURES

Figure 1	Cubiscan 75 Pro	2
Figure 2	Measurement area	4
Figure 3	Attaching the base	8
Figure 4	Top post	8
Figure 5	Attaching top post	9
Figure 6	Securing the top post	9
Figure 7	Cubiscan 75 Pro platform	10
Figure 8	Touchscreen ports	11
Figure 9	Camera calibration	14
Figure 10	Calibration screen	14
Figure 11	Calibration complete	15
Figure 12	Measurement trigger	16
Figure 13	Home screen	18
Figure 14	Home screen (live view mode)	19
Figure 15	Measurement results	22
Figure 16	General settings	23
Figure 17	Custom theme	25
Figure 18	Theme	26
Figure 19	Date settings	27
Figure 20	Time settings	27
Figure 21	System reset	28
Figure 22	Measure settings	29
Figure 23	Units	31
Figure 24	Connection	32
Figure 25	USB setting	32
Figure 26	Communication settings	33
Figure 27	Connection - Protocol	33
Figure 28	Connection - post	34
Figure 29	Scale status drop-down selection	35
Figure 30	Custom scale settings	36
Figure 31	Parse settings	37
Figure 32	Sample string	38
Figure 33	Scale connection settings	39
Figure 34	Cameras	40
Figure 35	Camera calibration	41
Figure 36	Touchscreen calibration	42
Figure 37	Calibration complete	42
Figure 38	Camera maintenance	44
Figure 39	Version	47
Figure 40	Diagnostics screen	48
Figure 41	Diagnostics log	49
Figure 42	Configuration audit	49
Figure 43	Calibration audit	50
Figure 44	Alibi	51

CHAPTER 1

PRODUCT DESCRIPTION

The Cubiscan 75 Pro is a static, overhead cubing system that uses innovative 3D camera technology to dimension objects. The simple overhead design grants access from almost any direction. There are no moving parts—allowing for effortless setup and use.

Any scale with a TCP/IP or serial output can be used with the Cubiscan 75 Pro, creating a complete cubing and weighing system. Measurements are quickly taken by placing an object on the platform or scale (if a scale is being used), scanning a barcode, or tapping the Measure button—resulting in fast, easy, and accurate data gathering.

The Cubiscan 75 Pro can be used for storage space planning, creating shipment manifests, and obtaining detailed dimensioning data. It has an integrated touchscreen that shows a color-depth map of the measured object or a live view of the measurement area, as well as the measurement results. The 3D camera measures to a precise increment of 0.2 inches.

Each unit has an Ethernet and a serial port, enabling the Cubiscan 75 Pro to communicate with a computer. Proprietary Qbit software is used to interface with the Cubiscan 75 Pro, allowing for menu-driven operator control, data storage and transfer, as well as diagnostics. Alternatively, documented communications Protocol can be used to create custom software.

The Cubiscan 75 Pro uses powerful camera technologies to create a flexible and economical solution for today's most demanding cubing applications.



Figure 1
Cubiscan 75 Pro

Specifications

Power requirements

100-240 VAC, 50-60 Hz

Environmental

Operating temperature: 32° to 104° F (0° to 40° C)

Humidity: 5 to 95% non-condensing

Dimensioning sensor

3D camera

Dimensioning capacities

The Cubiscan 75 Pro has a pyramid-shaped measurement area—a long, short box is more likely to fit in the measurement area than a compact, tall box. The figure below indicates the measurement area. See the tables below for specific maximums and minimums.



Figure 2
Measurement area

Dimensional ranges for Non-LFT

Minimum length, width, height: 2.0 x 2.0 x 2.0 in (5.0 x 5.0 x 5.0 cm)

Minimum length, width, height, flats mode: 2.0 x 2.0 x 0.0 in (5.0 x 5.0 x 0.0 cm)

Height	Max length	Max width
2.0 in (5.0 cm)	55.0 in (140.0 cm)	31.0 in (80.0 cm)
12.0 in (30.0 cm)	43.0 in (110.0 cm)	27.0 in (70.0 cm)
18.0 in (45.0 cm)	37.0 in (94.0 cm)	25.0 in (63.0 cm)
24.0 in (60.0 cm)	30.0 in (75.0 cm)	22.0 in (55.0 cm)
36.0 in (90.0 cm)	18.0 in (45.0 cm)	13.0 in (33.0 cm)

Measurement increment cuboidal: 0.2 in (0.5 cm)

Measurement increment non-cuboidal: 0.5 in (1.0 cm)

Note: Small features of non-cuboidal objects may be omitted from the measured dimensions.

Note: Minimum display height for objects in flats mode is 0.5 in (1.0 cm). Measurements under the display height will show as 0.

Other

Measurement time

Platform or scale trigger: approximately 2 seconds

Manual or barcode trigger: < 1 second

Object colors: Opaque

Physical

Length: 25.1 in (63.8 cm)

Width: 16 in (41.6 cm)

Height: 60.5 in (153.7 cm)

Weight: 35 lb (16 kg)

User Interface

Minimum PC specifications:

Windows 10/8.1/8/7/XP/95/98/NT/2000, Pentium II Processor, 20 megabytes of disk space, screen resolution setting of 800 X 600

Cubiscan's QBIT™ software can be used to interface with the Cubiscan 75 Pro.

Display:

Integrated touchscreen displays L, W, H, Dim Wgt, unit of measure, color-depth image, and status.

Outputs:

Ethernet (1), Serial (2)

CHAPTER 2

SETUP

This chapter Provides instructions for assembling and setting up the Cubiscan 75 Pro. Perform the steps to set up the Cubiscan 75 Pro in the following order.

- Unpack the Cubiscan 75 Pro (page 6)
- Place the Cubiscan 75 Pro where you will be using it (page 7)
- Assemble the Cubiscan 75 Pro (page 7)
- Remove the shipping material (page 7)
- Connect power to the Cubiscan 75 Pro (page 10)
- Turn the Cubiscan 75 Pro on (page 11)
- Connect the Cubiscan 75 Pro to a computer (page 12)
- Install the Qbit software (page 13)
- Complete the camera calibration (page 13)
- Set the scale (optional) (page 15)
- Determine measurement trigger (page 16)

Unpacking



1. Carefully remove the Cubiscan 75 Pro from the crate, and place the Cubiscan 75 Pro on a solid, stable surface for assembly. See “Placement” on page 7.
2. Remove the cables and accessories.

Examine the container and the Cubiscan 75 Pro carefully for any damage. If, after unpacking, you discover any damage to the Cubiscan 75 Pro, contact the carrier immediately.

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

Placement



The Cubiscan 75 Pro 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 75 Pro to extremes in temperature or humidity. Locate the Cubiscan 75 Pro away from open freight doors.
- Protect the Cubiscan 75 Pro from static electricity, especially the display.
- The Cubiscan 75 Pro is typically set on a table or similar working surface so that objects are easier to place in the measurement area. You must bolt the Cubiscan down, bolts are Provided.
- Place the Cubiscan 75 Pro on a flat, sturdy surface as free from vibration as possible. You must bolt the Cubiscan 75 Pro platform in place using the bolts Provided in the shipping container. Bolting the Cubiscan 75 Pro in place will prevent it from falling or being knocked over and damaged.
- Place the computer as close to the Cubiscan 75 Pro as possible. The operator may need to use the keyboard and mouse while dimensioning objects.
- Orient the Cubiscan 75 Pro so that the display faces the operator.
- Place the Cubiscan 75 Pro away from direct sunlight or bright lights, such as halogen spotlights.

Assembling the Cubiscan 75 Pro



The Cubiscan 75 Pro is almost completely assembled when shipped. You only need to remove the shipping materials, attach the post to the base platform, and bolt the platform down.

Attaching the post to the platform

1. Attach the lower post to the platform using the four large screws.

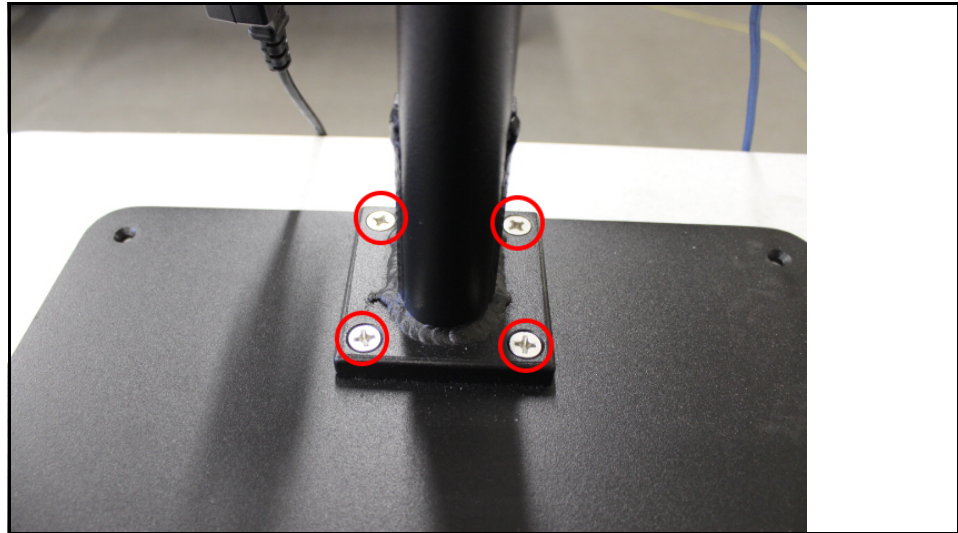


Figure 3
Attaching the base

NOTE > *The stand must be attached to the platform for the height calibration to work properly. The Cubiscan 75 Pro will not work if it is mounted any other way.*

2. Slide the top post into the lower post. Ensure the screw is loose enough to slide into the channel.

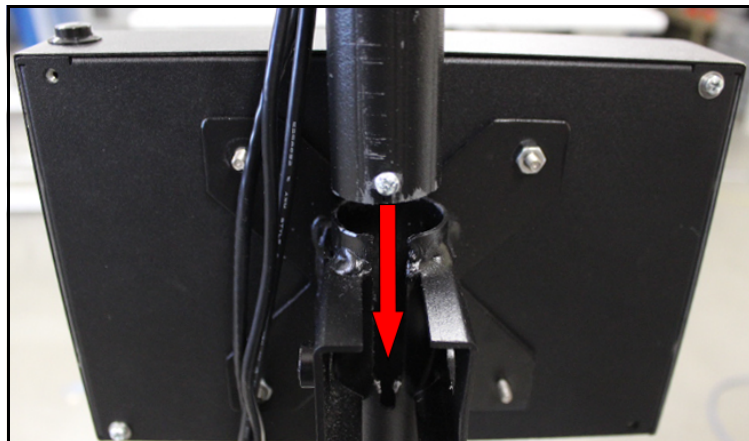


Figure 4
Top post

3. Tighten the top post screw using a phillips screwdriver.

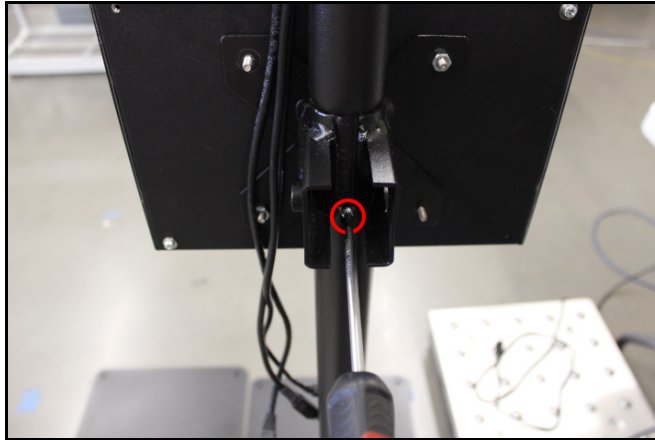


Figure 5
Attaching top post

4. Slide the large-grip plastic-head thumb screw through the holes on the brace and twist clockwise to tighten. Continue to turn until hand tight.

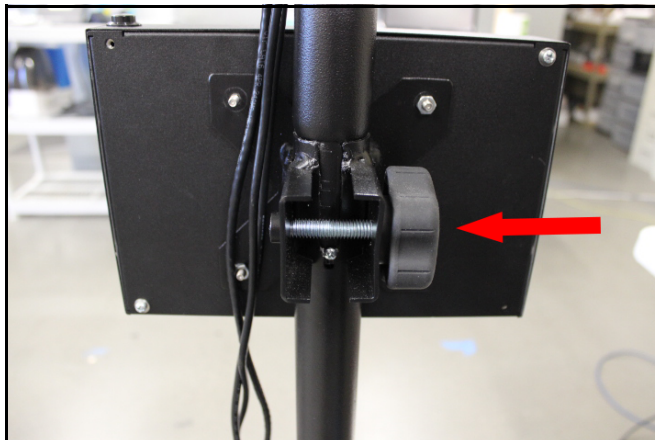


Figure 6
Securing the top post

Bolting the platform in place

Bolting the platform in place is required to prevent the Cubiscan 75 Pro from falling or being knocked over.

1. Place the Cubiscan 75 Pro where you will be using it. Typically, the Cubiscan 75 Pro is placed on a table or similar surface.

2. Mark where you will be drilling the six holes. The image below shows where the six holes in the Cubiscan 75 Pro platform are located.

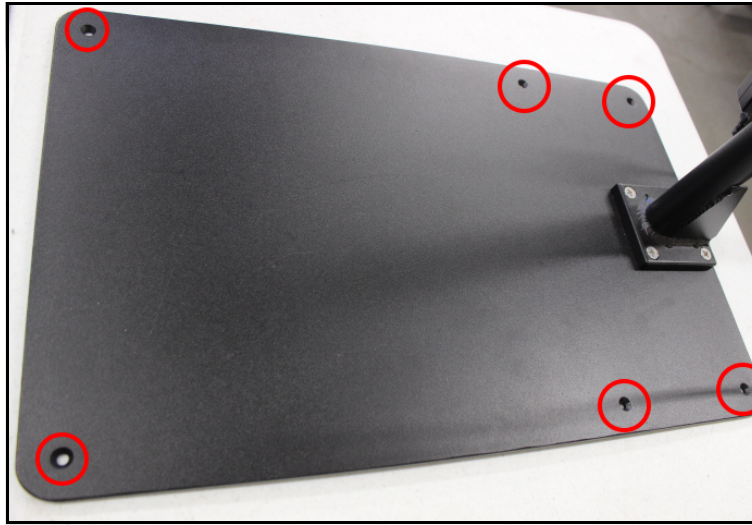


Figure 7
Cubiscan 75 Pro platform

3. Move the Cubiscan 75 Pro to the side and drill the holes.
4. Move the Cubiscan 75 Pro back into place and secure it using the hardware Provided. The washer will go flush against the underside of the table (or the surface to which you are bolting the Cubiscan 75 Pro), followed by the lock washer and nut.

Connecting cables



Take the following steps to connect cables to the Cubiscan 75 Pro.

1. Locate the camera cables (camera power, USB input, network input). Attach the cables in their appropriate ports on the bottom of the touchscreen as shown in the image.



Figure 8
Touchscreen ports

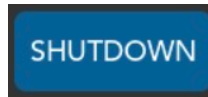
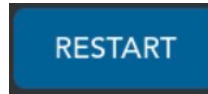
2. Connect the touchscreen power cable to the far left port.
3. Connect the other end of the power cable to a standard power outlet.
4. Use the power button located on the top right corner of the touchscreen to turn the Cubiscan 75 Pro on. Allow the Cubiscan a few minutes to power up the first time you turn it on.
5. If connecting to the Ethernet, connect the Ethernet cable in the far right port. This port is for other connection such as the network or computer.

Turning off the Cubiscan 75 Pro

To turn the Cubiscan off, 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 **VERSION**.
3. Scroll down to **Power** section. There are options for **REBOOT**, **RESTART**, or **SHUTDOWN**.



4. Tap [Shutdown], to shutdown the device.

Connecting to a computer



To connect the Cubiscan 75 Pro to a computer, you can use an Ethernet cable or a serial cable. Both methods are described below. For more information on connecting the Cubiscan to a network or computer, see "Connection" on page 31.

Communicating via Ethernet

Complete the following steps to communicate with the Cubiscan using Ethernet.

If you have an available Ethernet port on your computer, you can use the Ethernet cable without using the USB to Ethernet adapter if you prefer. See "Connecting cables" on page 10.

Installing and configuring the Ethernet driver

1. Plug the white TRENDnet USB to Ethernet adapter into the computer. The driver should be automatically installed. If the driver is not installed successfully, refer to TRENDnet support.
2. Plug the Ethernet cable into the Ethernet port located on the underside of the Cubiscan 75 Pro touchscreen.
3. Route the Ethernet cable down the back of the Cubiscan post, using the zip ties Provided to secure the cable against the post. Make sure

that the cable is not in the measurement area. The measurement area includes the Cubiscan platform and extends 18 inches in each direction around the platform.

4. Plug the other end of the cable into the TRENDnet adapter.

Communicating via serial

1. Plug the serial cable into the serial port located on the underside of the Cubiscan 75 Pro touchscreen.
2. Route the serial cable down the back of the Cubiscan post, using the zip ties Provided to secure the cable against the post. Make sure that the cable is not in the measurement area. The measurement area includes the Cubiscan platform and extends 18 inches in each direction around the platform.
3. Connect the serial cable to a free port on your computer. Use an adapter if necessary.
4. Tighten both screws at each end of the cable. It is important that the cable be secure.

Installing Qbit



A flash drive is available containing the Qbit software application, which can be used to operate the Cubiscan 75 Pro.

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.

Camera Calibration



You must complete the Cubiscan 75 Pro height calibration Procedure before dimensioning. Complete the following steps to calibrate the camera.



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

- From the menu side panel, select **CAMERAS**. This will take you to the **Calibration** screen.
- Ensure the measurement area is clear of objects.
- Tap the **[START CALIBRATION]** button.

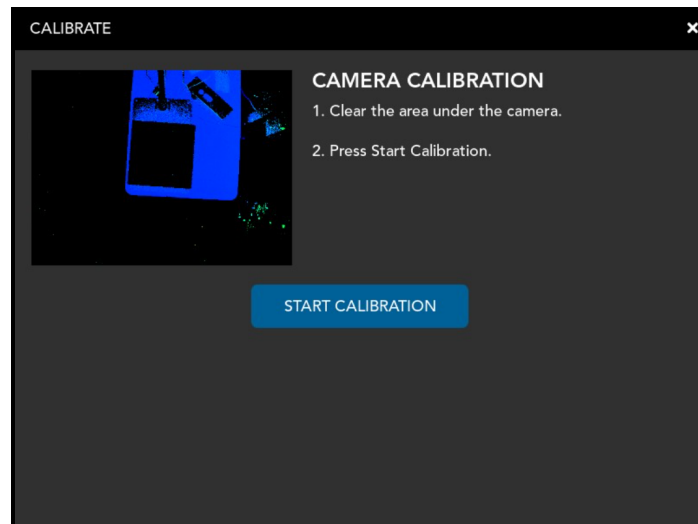


Figure 9
Camera calibration

- Place the scale if you are using one on the plate. Then place the flats background on top of the scale. If you are not using a scale place the flats background directly on the plate.
- Tap **[Continue]**.

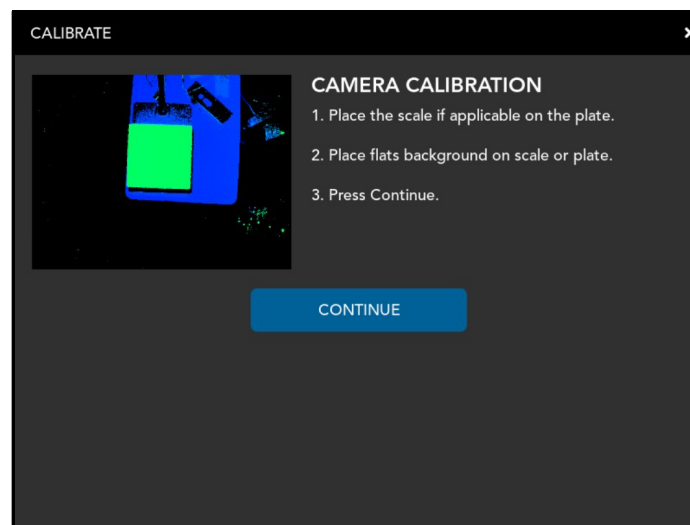


Figure 10
Calibration screen

7. Place the 12" calibration cube Provided on the flats background plate. The measurement area should be clear of all other objects.
8. Tap **[CONTINUE]**. The calibration Process will begin.
9. If the calibration is successful, the original calibration screen will appear with the message **Calibration Complete**. If an error occurs the calibration Process will abort and an error message will appear on the screen.

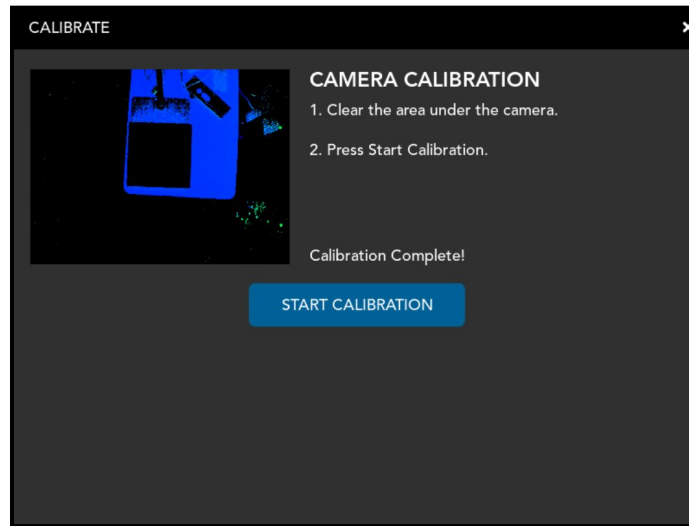


Figure 11
Calibration complete

10. Once the calibration is complete, return to the Homescreen and run a measurement to ensure that it is working Properly.

If you notice that your measurements are outside tolerance (+/- 0.2 inches), go through the calibration Procedure again, especially if your Cubiscan has experienced temperature change, movement, or stress.

If you ever begin using a scale with the Cubiscan, repeat the calibration Procedure.

Setting up the scale



The Cubiscan 75 Pro can be used with any third-party scale. The scale may need some configuration in order to connect with the Cubiscan, see "Scale Setting" on page 34.

1. Place the scale in the center of the Cubiscan platform. Make sure the scale platform is cleared of any items.
2. Plug the scale USB cable into a USB port on the Cubiscan 75 Pro display screen. The scale display will cycle through a start-up routine, then display a zero weight. If the display does not display a zero weight, press the **Zero** button on the scale.

Measurement trigger



The Cubiscan 75 Pro has three types of measurement triggers: **object detection**, **barcodes filled**, and **manual only**. The default is manual only.

To select the desired measurement trigger setting, complete the following steps:



1. Tap the menu icon in the upper left corner of the home screen.
2. Select **Measurement Settings** from the menu.

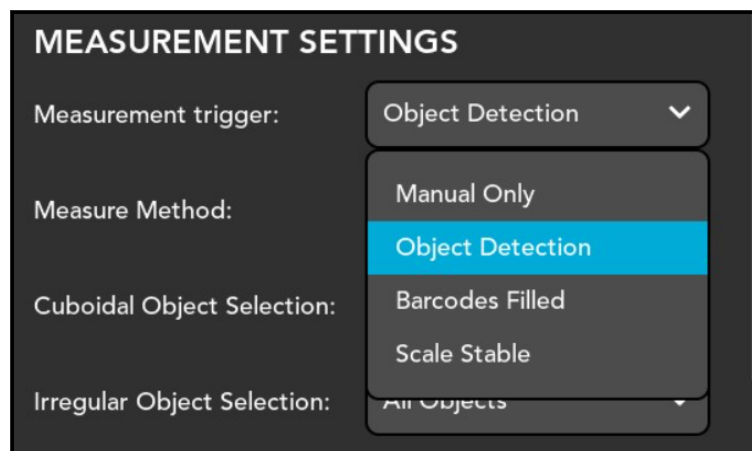


Figure 12
Measurement trigger

3. Choose from the following measurement trigger options:
 - **Manual Only**
The manual only option Prompts a measurement only when the **[MEASURE]** button is tapped from the home screen.
 - **Object Detection**
The object detection trigger automatically Prompts a measurement when a stable object is detected on the Cubiscan 75 Pro platform.

– **Barcodes Filled**

The barcodes filled trigger when a barcode is scanned when set to one in barcode settings. If set to two measurement triggers after second barcode is scanned.

– **Scale Stable**

With scale stable selected, the Cubiscan Pro will measure an object placed on the scale after the scale has come to stable state. This option is only available when a scale is connected to the Cubiscan.

Measurements may be manually triggered at any time while the *object detection*, *barcodes filled*, and *scale stable* measurement triggers are selected.

Setup checklist



Before using the Cubiscan 75 Pro for the first time, verify the following:

1. Is the Cubiscan 75 Pro and the computer placed in the Proper operating environment? (page 7)
2. Is the Cubiscan 75 Pro fully assembled? (page 7)
3. Is the Cubiscan platform bolted in place? (page 9)
4. Have all shipping materials been removed? (page 7)
5. Is the AC power cable connected correctly? (page 10)
6. Is the Cubiscan 75 Pro connected to the computer? (page 12)
7. Has the Qbit software been installed on your computer? (Refer to the *Qbit User Guide* for information.)
8. Have you completed the camera calibration Procedure? (page 13)
9. Is the scale connected to the Cubiscan 75 Pro? (page 15)
10. Have you selected your preferred measurement trigger? (page 16)

CHAPTER 3 OPERATION

This chapter Provides instructions for operating the Cubiscan 75 Pro. Before operating the Cubiscan, be sure that it is bolted down and that the camera is properly calibrated.

Cubiscan 75 Pro display



The Cubiscan 75 Pro home screen displays measurement results and dim weight results. When enabled the screen may display a color-depth image that uses a color scale to indicate the height of the object being measured. The other display window option is a live view mode of the measurement area.

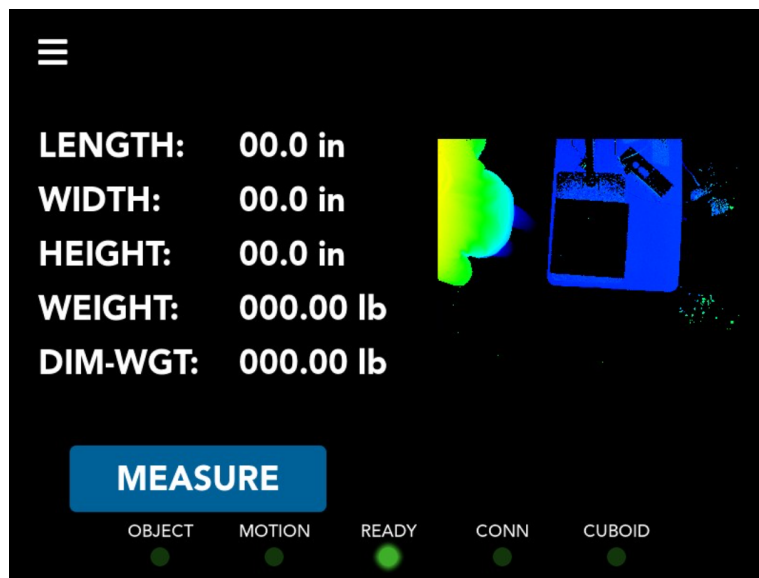


Figure 13
Home screen



Figure 14
Home screen (live view mode)

To configure the Cubiscan 75 Pro display, see “From the menu side panel, select **CAMERAS**.” on page 40.

Length: This field displays the length of the measurement in inches (in) or centimeters (cm) as selected.

Width: This field displays the width of the measurement in inches (in) or centimeters (cm) as selected.

Height: This field displays the height of the measurement in inches (in) or centimeters (cm) as selected.

Dwgt: This field displays the dim weight result of the measurement in pounds (lb) or kilograms (kg) as selected. The dim weight depends on your selected dim weight factor.

To configure the units, see “Units” on page 31.

MEASURE

Tap the measure button to initiate a measurement. After you tap this button, make sure you remove your hand from the measurement area quickly.

Connection and Device status	<p>This field displays the current connection and status of the Cubiscan 75 Pro. Lights indicate whether the following are valid:</p> <ul style="list-style-type: none">• an object is present in the camera field.• motion is detected in the camera field.• the device is ready to measure.• the device has a viable connection for data collection.• measurement taken was cuboid (only in auto mode).
Display window	<p>Displays the view of the camera field. The display window can be set to different views depending on preferences, see "Camera Setting" on page 39.</p>

Dimensioning options



The Cubiscan 75 Pro can be used to measure opaque objects as small as 2.0 x 2.0 x 2.0 in (5.0 x 5.0 x 5.0 cm) (refer to "Specifications" on page 3 for specifications and size limitations). Below is an explanation of the shapes the Cubiscan 75 Pro can measure.

Cuboidal

Cuboidal objects are any shape that closely resembles a cube. The most commonly measured cuboidal objects are boxes. It is much easier for the Cubiscan Pro to measure objects that more closely resemble a geometric shape. This setting is specifically for objects that resemble a box.

Irregular

The Cubiscan 75 Pro can identify and measure a wide variety of irregular shapes. However, the Cubiscan may more easily measure packages that closely resemble known geometric shapes such as triangles, rectangles, and spheres. For example, packages, tubes, and, boxes are much easier for the Cubiscan 75 Pro to measure.

Flats mode

The innovative camera system of the Cubiscan 75 Pro allows it to measure and dimension flats. These are thinner packages in large envelopes. When in flats mode, the Cubiscan 75 Pro can measure flats as small as 2.0 x 2.0 x 0.0 in (5.0 x 5.0 x 0.0 cm) (refer to "Specifications" on page 3 for specifications and size limitations).

Measurement Trigger

You can select from multiple options to trigger a measurement. The options available are:

- Motion Trigger
- Scale Trigger
- Barcode Trigger
- Manual only

For more information on selecting your measuring trigger, see “Measurement trigger” on page 16.

Using Qbit software



Refer to the *Qbit User Guide* for instructions on measuring and other functions in Qbit. The *Qbit User Guide* is Provided on a flash drive or you can download it from the Cubiscan website at www.cubiscan.com.

Using Web Services



The Cubiscan 75 Pro can take the role of a web server, allowing a computer or device to communicate with the Cubiscan 75 Pro via Web Services. The following instructions will get you started. For more information refer to *Web Services Instructions* and *API Documentation Guide*.

Send an HTTP GET request to the csMeasureData. The URL will be the IP address of the Cubiscan 75 Pro plus 'csMeasureData'. Example:
`http://10.1.100.100/csMeasureData`

The response will match the XML or JSON format.

The call to /csMeasureData will have the Cubiscan 75 Pro perform a measurement of the current object on the machine. This call will return the data containing the measurement data.

Dimensioning objects

The Cubiscan 75 Pro is designed to work with third-party scales to Provide weight and dim-weight measurements along with the dimensions of an object. To setup a scale with the Cubiscan see "Setting up the scale" on page 15.

To dimension objects using the Cubiscan 75 Pro, complete the following steps:

1. Turn the Cubiscan 75 Pro on. The power button is located on the top right edge of the touchscreen. If this is the first time you are turning the system on, allow it a few minutes to boot up.
2. Make sure the measurement area is free of all objects. When the Cubiscan is ready for measurement, the green light will appear under **READY**.
3. Place the object you are measuring in the measurement area. The green light will appear under **OBJECT**.
4. Depending on the measurement trigger you selected, the Cubiscan 75 Pro will measure the object (you may need to Prompt a measure event using your selected measurement trigger). The measurement results will be displayed on the screen.



Figure 15
Measurement results

CHAPTER 4 CONFIGURATION

This chapter Provides instructions for configuring the Cubiscan 75 Pro. This chapter also Provides instructions for configuring the units, dimensional weight factor, and other settings.


If you are using Qbit software, see the *Qbit User Guide* located on your flash drive. The Qbit User Guide can also be downloaded from the Cubiscan website at www.cubiscan.com.

Settings



General settings

The Cubiscan 75 Pro 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**.

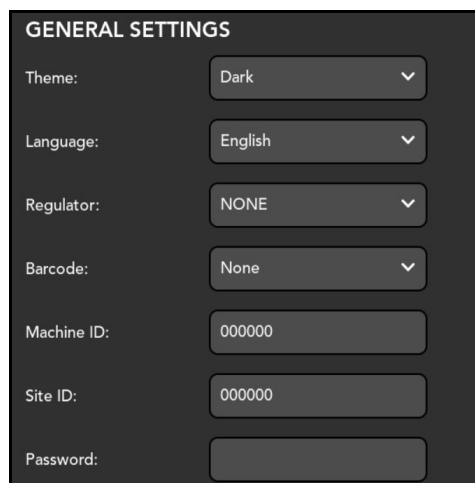


Figure 16
General settings

Theme	Aside from light and dark themes, a custom theme may be created, see “Create Theme” on page 24.
Language	Select your desired language from the following options: English, French, Spanish, Japanese, and Chinese.
Regulator	Choose the regulator standard from the drop-down menu. Options include: none, Australian, European/Middle Eastern, and United States/Canada. The default is <i>none</i> .
Barcode	Select from the drop-down menu to enable up to two barcode scanners. The default is <i>none</i> .
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.
Site ID	Optional Site ID may be set for the Cubiscan. This is helpful to distinguish tracking data received from multiple Cubiscans from different sites.
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 Password . This password will also block the web interface administration page.

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.

Create Theme



The interface for the Cubiscan 75 Pro may be customized to suit your preferences and needs. You may select from the preset light or dark themes or create a new custom theme. Complete the following steps to create your own custom theme:

1. Tap the menu icon in the upper left corner of the home screen.
2. From the menu side panel, select **SETTINGS**.
3. Select *Custom* from the drop-down menu next to **Theme** in the General Settings. A button will appear reading, **Create Theme**.

4. Tap [Create Theme].

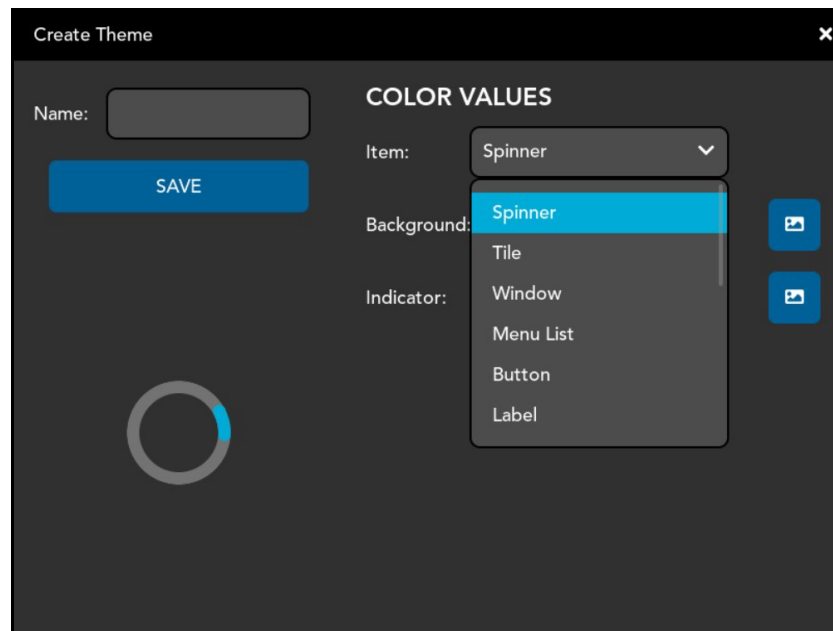


Figure 17
Custom theme

5. Enter a name for the customized theme in the text box next to **Name**.
6. Select an item to customize from the drop-down menu next to **Item**. Options include: spinner, tile, window, menu list, button, and label.
7. With the item selected you may make changes to appearance and color. When complete select the next item to customize.
8. Before leaving the customization screen, tap [**Save**] to keep changes.
9. You may now select the custom theme from the **Theme** drop-down on the General Settings screen.

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**.

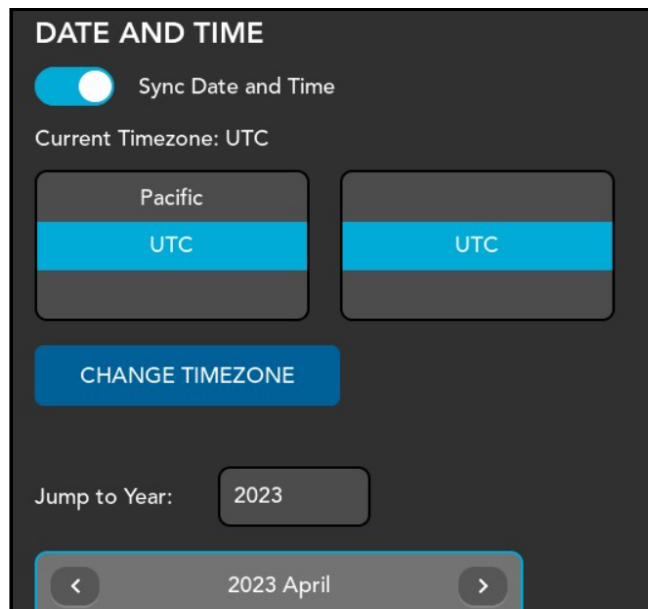


Figure 18
Theme

The following settings are available:

- | | |
|-----------------------------|---|
| Sync Date & Time | The option is available to set the Cubiscan to sync date and time. In order for the Cubiscan to sync a connection must be set up. |
| Current Timezone | Set the timezone for the Cubiscan. Be sure to tap [Change Timezone] after making any changing the timezone settings. |

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.

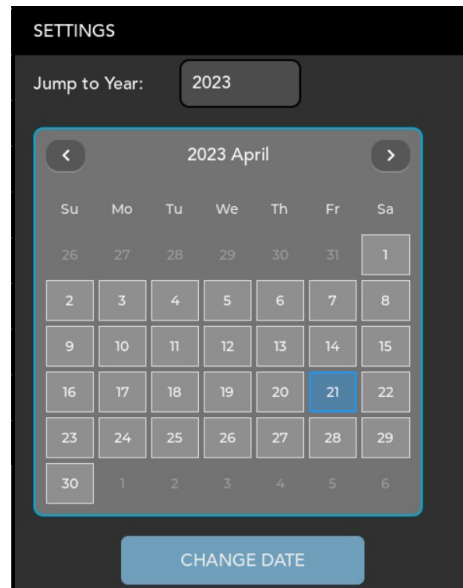


Figure 19
Date settings

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

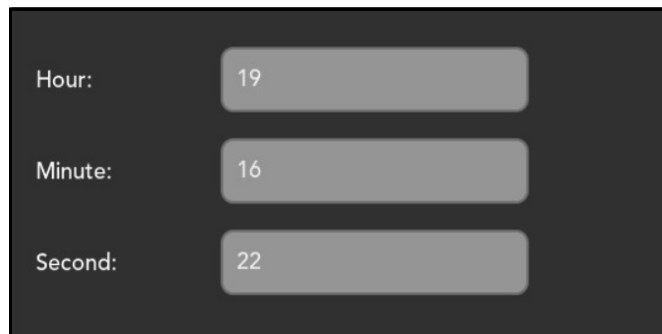


Figure 20
Time settings

System Reset

In the event that settings need to be reset back to factory defaults, the Cubiscan 75 Pro 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.

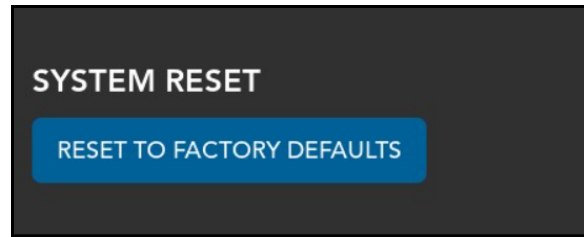



Figure 21
System reset

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 75 Pro. 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**.

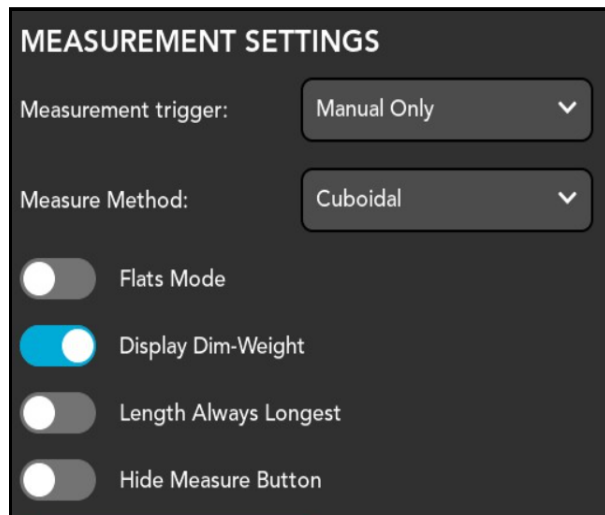


Figure 22
Measure settings

Measurement Trigger	The Cubiscan 75 Pro has four options for triggering a measurement: manual only, object detection, barcodes filled, and scale stable.
Measurement Method	<p>Select from the drop-down the method of measurement from three options:</p> <ul style="list-style-type: none"> – Cuboidal <p>With cuboidal selected, the Cubiscan 75 Pro will detect and measure those objects that are cuboidal in nature. See “Dimensioning options” on page 20.</p> – Irregular <p>If objects are not cuboidal, it is still possible for the Cubiscan 75 Pro to measure them. Irregulars represent those objects that are not cuboidal, but can be a geometric shape or some other non-congruous shape.</p> – Auto-Detect <p>The 3D camera technology of the Cubiscan 75 Pro allows it to detect whether an object is Cuboidal or irregular. Choose this option if you have Product of both types and do not want to toggle the setting between the two.</p>
Cuboidal and Irregular Object Selection	The Cuboidal and Irregular object selections allow you to determine which objects the Cubiscan 75 Pro should focus on. This will allow the Cubiscan to Provide more accurate results by excluding unwanted objects in the measurement area.

- **Highest**

The object closest to the camera will be dimensioned with all other objects excluded. This is best for taller object.
 - **Most pixels**

The object that has the greatest number of pixels in the measurement area will be dimensioned with all other objects excluded. This is best for larger objects.
 - **Closest to center**

The object that resides closest to the center of the measurement area will be dimensioned with all other objects excluded. This is best if objects measured tend to vary.
 - **Error if Multiple**

Rather than determining which object to measure, the Cubiscan will display an error message if multiple objects are detected in the measurement area.
 - **All Objects**

This option allows the Cubiscan to determine which objects are measured without exclusion.
- Flats Mode** When this option is enabled the Cubiscan 75 Pro will measure objects in large envelopes that are typically too small for conventional dimensioners.
- Display Dim Weight** Toggle this switch to display the dim weight and factor on the home screen.
- Length Always Longest** When enabled, this option ensures that no matter how an object is oriented, the greatest dimension measurement will be assigned to length.
- Hide Measure Button** Toggle this switch, to remove the **[Measure]** button from the home screen. This may be helpful if the Cubiscan is configured for measurement triggers such as *scale stable* or *barcodes filled*.

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.

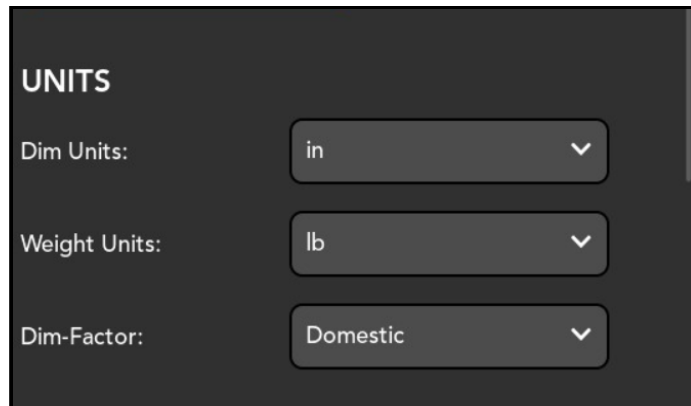


Figure 23
Units

Dim units In this field you can select **inches**, **centimeters**, or **millimeters** for your dimensional unit.

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.

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 75 Pro.

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 75 Pro: **MAC Address**, **IP Address**, **Subnet**, and **Gateway**.

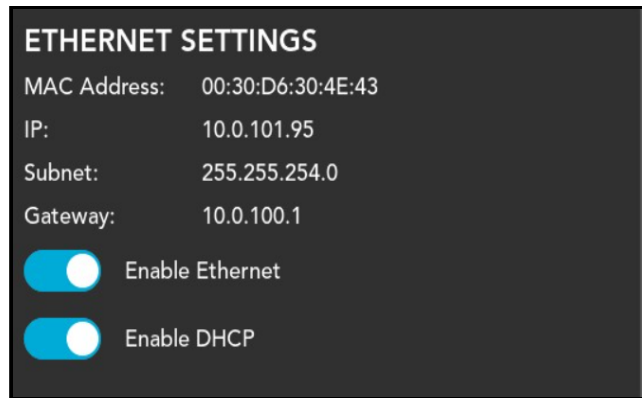


Figure 24
Connection

Enable Ethernet Toggling this option enables or disables the Cubiscan 75 Pro’s ability to communicate via Ethernet.

Enable DHCP Toggling this option enables or disables a Dynamic Host Configuration Protocol (DHCP) connection.

USB Settings

The USB Setting allows the user to set up the device USB type. Select whether to enable the **Virtual Serial** by selecting the option from the drop down menu next to Device USB Type.

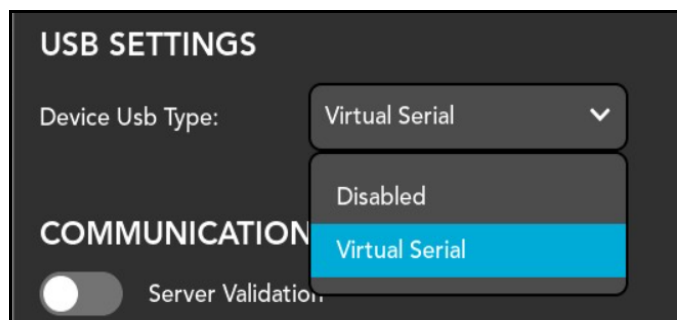


Figure 25
USB setting

Communication Settings

The Communication Settings Provides a toggle for server validation. Toggle the **Server Validation** to enable or disable server-side validation.

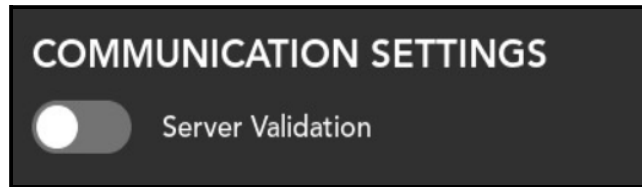


Figure 26
Communication settings

Web-server

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

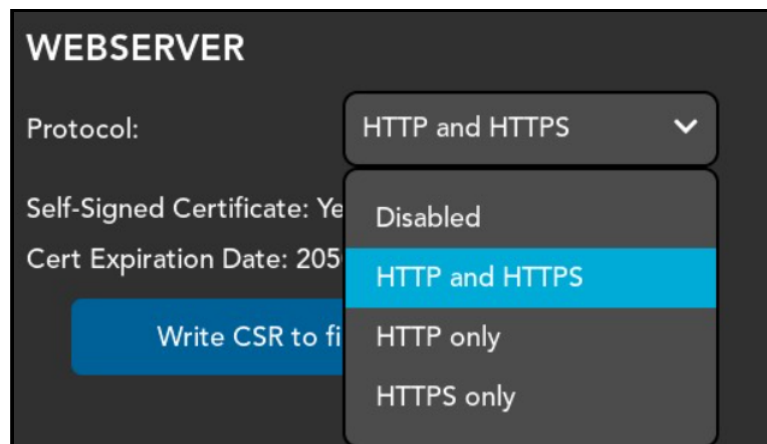


Figure 27
Connection - Protocol

Protocol Enable or disable Protocol and set desired Protocol. Options include: **HTTP AND HTTPS**, **HTTP only**, and **HTTPS only**.

Write CSR to file Tap **[Write CSR to file]** to copy the certificate signing request to file. If you would like to 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.

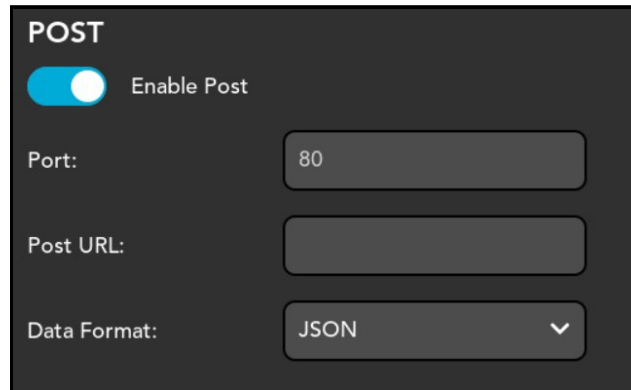


Figure 28
Connection - post


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

- Port** Enter the network port used to transfer data.
- Post URL** Enter the address of the computer or network to which the data will be transmitted.
- Data Format** Select the format of the data to be transmitted. Options include JSON and XML.

Scale Setting



The Cubiscan 75 Pro can be configured to function with various third-party scales. 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**.

3. Under the drop-down menu next to **Scale**, select the option for your scale.

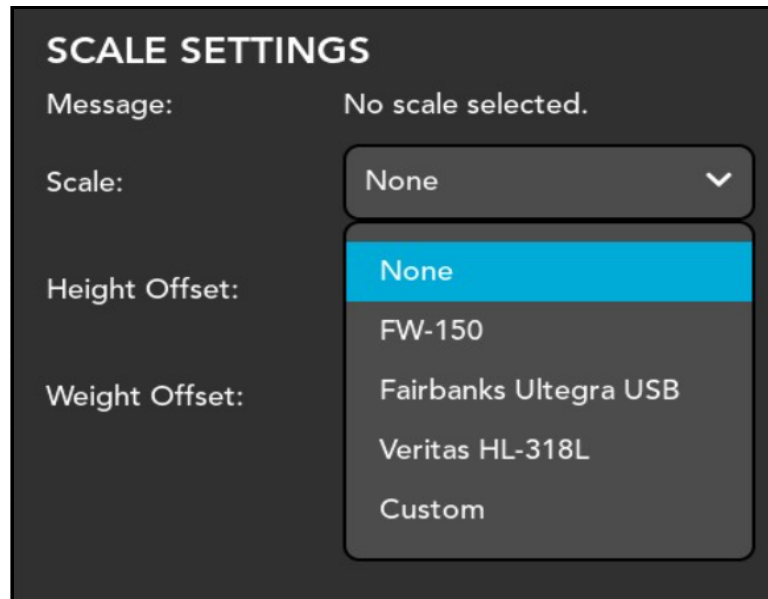


Figure 29
Scale status drop-down selection

Custom scale settings

If your scale does not show up in the list, you may choose custom scale settings by entering the scales settings on the parse setting and connection setting screens. Be sure to tap **[SAVE SCALE CONFIG]** to save configuration.

Parse Settings

1. Select **Custom** from the drop down menu. *Custom Scale Settings* will appear.

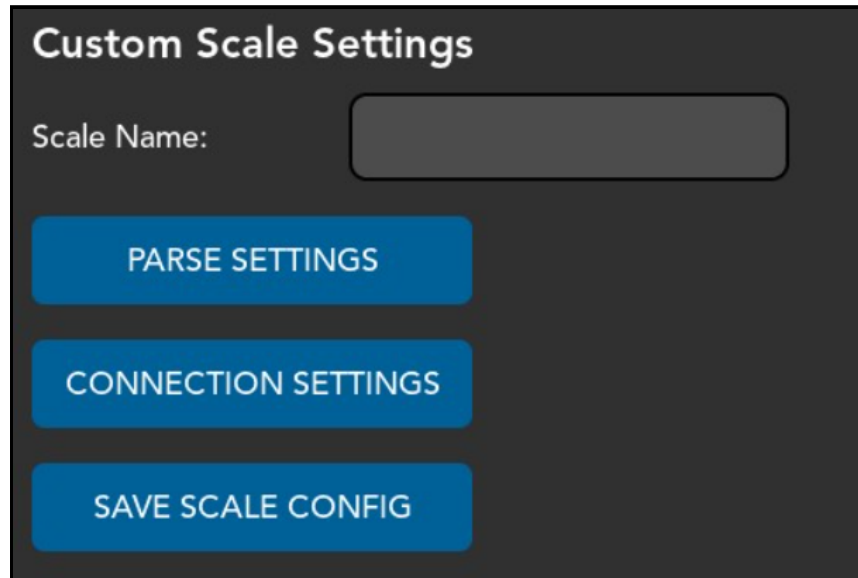


Figure 30
Custom scale settings

2. Enter the name of the scale by tapping in the text box.

Parse Settings

To enter the parse settings for the scale, tap **[PARSE SETTINGS]**. This will bring you to the Parse Settings screen. From here you can enter the values manually in the text fields according to the strings in the scale data packet.

You may need to consult the scale manufacturer for setting details. The following information is needed:

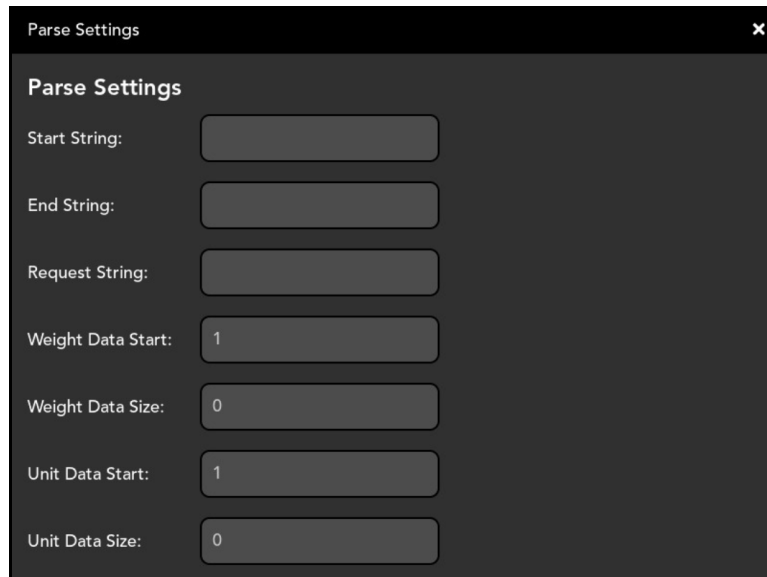


Figure 31
Parse settings

- Start String** The start string is the series of characters that mark the beginning of the scale data packet.
- End String** The end string is the series of characters that mark the end of the scale data packet.
- Request String** The request string is the series of characters that are sent to the scale to request measurement. If the scale is continuously sending data, this field will be left blank.

Start strings, end strings, and request strings often have control characters that cannot be entered directly through the keyboard. To allow these characters, a # symbol followed by 2 hex numbers may be used. These will be converted to their ASCII equivalent of the numbers.

Common characters used in strings are STX, ETX, CR, and LF. The following are their hex numeric equivalent:

Character	Hex Number Equivalent
STX	#02
ETX	#03
CR	#0D
LF	#0A

```
Scale request: <STX>s<ETX><CR><LF>
Scale data packet: <STX>sAK0000.000,lb<ETX><CR><LF>

Start String: #02
End String: #03#0D#0A
Request String: #02s#03#0D#0A
Weight start position: 5
Weight data size: 8
Unit start position: 14
Unit data size: 2
```

Figure 32
Sample string

- | | |
|-------------------|---|
| Weight Data Start | The weight data start determines the position of the first character in the scale's weight data. |
| Weight Data Size | The weight data size determine how long the weight data should be. |
| Unit Data Start | The unit data start determines the position of the first character in the scale's unit data (typically lb or kg). |
| Unit Data Size | The unit data size determine how long the unit data should be. |

Connection Settings

To configure the connection settings for the scale, tap [CONNECTION SETTINGS]. Enter values for the scale connection in the text fields

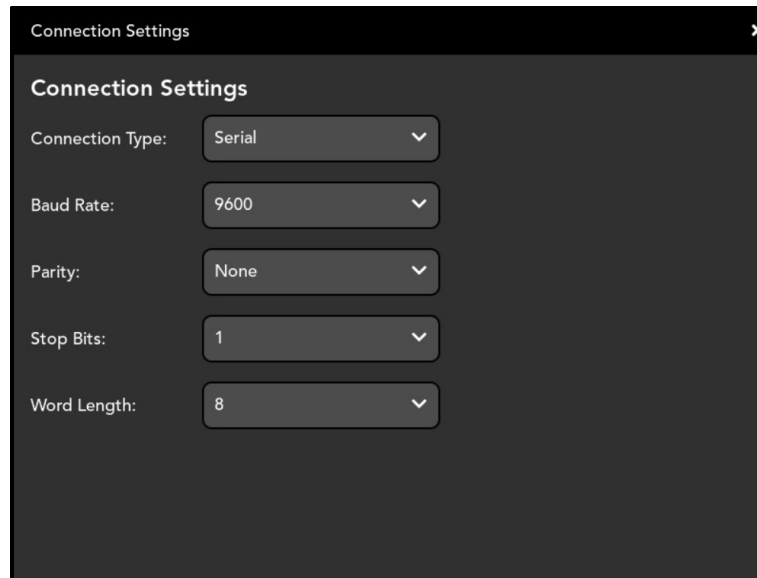


Figure 33
Scale connection settings

Once scale settings are entered, tap [SAVE SCALE CONFIG] to keep the new settings.

Camera Setting



The Cameras section Provides options to configure the camera Provided with the Cubiscan 75 Pro. It also allows for the calibration of the camera.

To access the connection settings, perform the following steps:



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

- From the menu side panel, select **CAMERAS**.

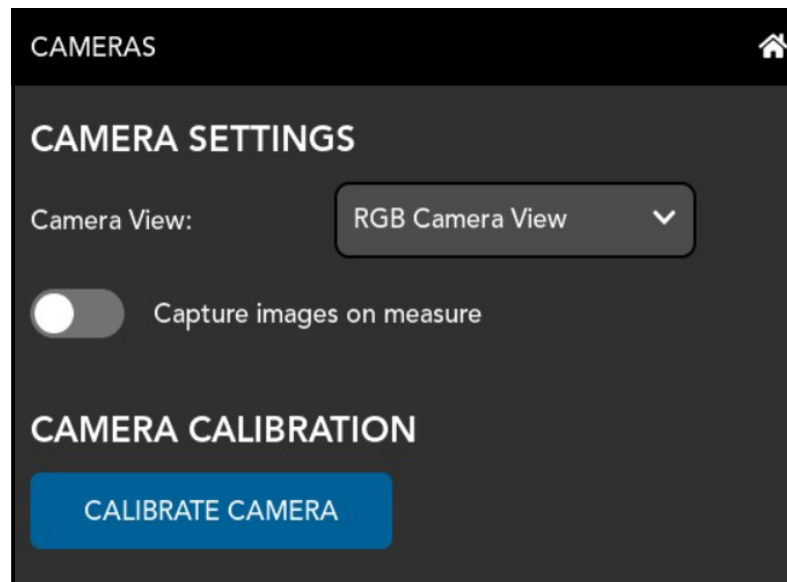


Figure 34
Cameras

Camera View Select the desired camera view for the display window on the home screen:

– **RGB Camera View**

Selecting RGB Camera View will display a live color image of the measurement area.

– **Depth Camera View**

Selecting Depth Camera View will display a color-coded overlay of the live view, where each color represents the distance from the camera. Pixels toward the red spectrum represent distances closer to the camera and pixels toward the blue spectrum represent distances farther from the camera.

– **3D View**

Selecting 3D View will display a 3D rendering of the scanned object.

– **Object View**

Selecting Object View will display a color-coded view similar to the Depth Camera View, but only for the scanned object. This view is mainly for diagnostics for the camera and is not recommended for regular measurements.

Capture images on measure

Toggle Capture images on measure to have the Cubiscan save pictures of objects measured. These images are saved to disk. They may be downloaded from the administration screen on the webserver or directly from the URL (`downloads/image.jpg`).

Calibrate Camera

Tap [Calibrate Camera] to begin camera calibration. First clear area under the camera of all debris. Then, tap [Start Calibration]. For more details on calibrating the camera, see "Camera Calibration" on page 13.

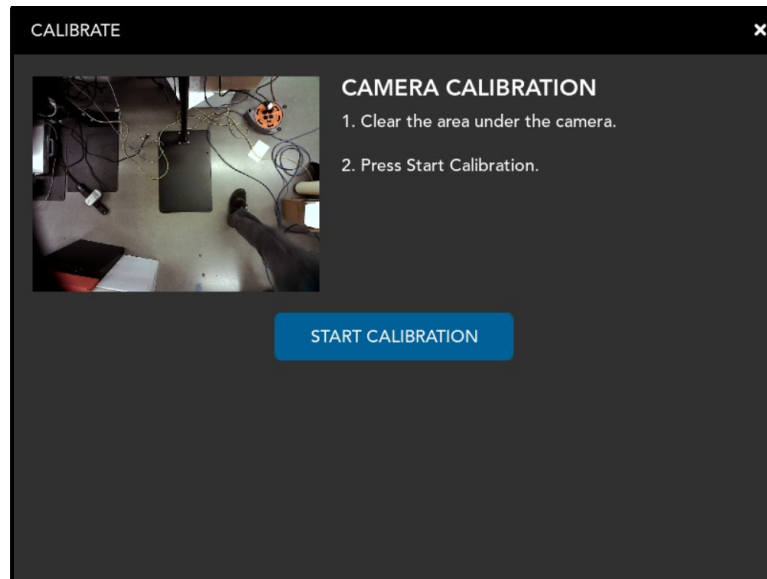


Figure 35
Camera calibration

Touchscreen



The touchscreen for the Cubiscan 75 Pro is calibrated before it is shipped to the customer. However, there may be occasion where a calibration may be needed. To calibrate the touchscreen, 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 **TOUCHSCREEN**.

3. Tap [Calibrate Touchscreen] to begin the calibration.

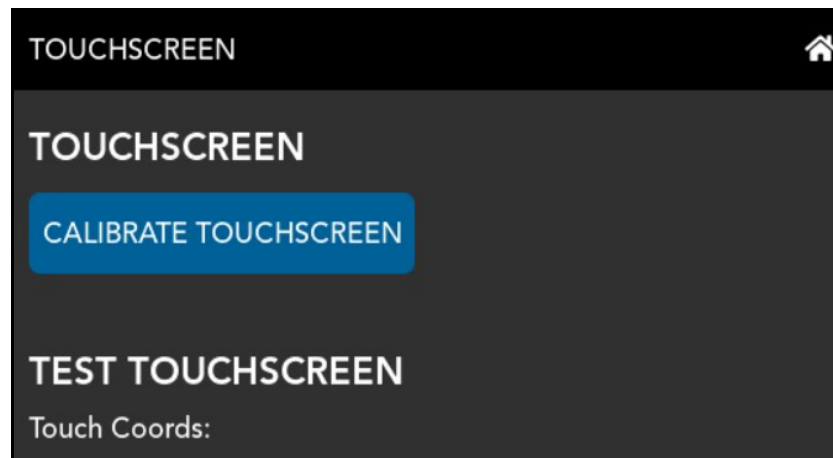


Figure 36
Touchscreen calibration

4. When Prompted, tap the + on the screen
5. Once complete, a green check mark will appear, indicating the calibration is complete.

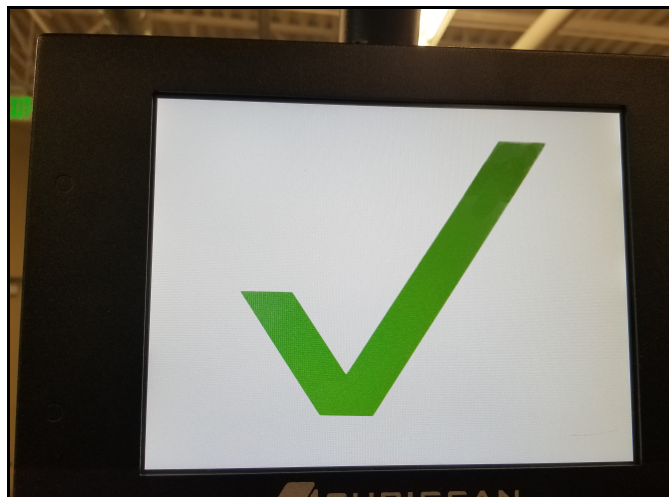


Figure 37
Calibration complete

CHAPTER 5

MAINTENANCE

This chapter Provides information on the care and maintenance of the Cubiscan 75 Pro. Routine maintenance and careful handling will help keep the Cubiscan 75 Pro in good operating condition and prevent service calls or repairs.

Precautions



The Cubiscan 75 Pro should not be subjected to extremes in temperature or humidity, nor should it be subjected to excessive vibration. For environmental recommendations, see "Specifications" on page 3

Cleaning the camera covers



The RGB camera has a cover that must be maintained, while the depth camera does not have a cover. Still, the lens on the depth camera may need some maintenance.



Figure 38
Camera maintenance

While dust normally won't interfere with operation of the Cubiscan 75 Pro, the cover and lens of the cameras should be cleaned routinely to prevent the possibility of interference.

To clean the cover and lens, use a clean microfiber cloth and gently wipe the cover and lens located on the underside of the Cubiscan 75 Pro head. Do not get cover or lens wet and do not use solvents or compressed air to clean them as this may damage the camera.

CHAPTER 6

TROUBLESHOOTING

This chapter Provides assistance in identifying and solving common Problems with the Cubiscan 75 Pro. 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 **801.451.7000** for assistance.

No response when you turn power on



If there is no response when you power on the Cubiscan 75 Pro, do the following:

1. Wait at least 30 seconds after powering on for signs that the system is booting up. The system may take a few minutes to boot, especially if this is the first time that it is being turned on.
2. The power cable consists of two cables that plug into each other, make sure these cables are undamaged and securely plugged into each other.
3. Make sure that both ends of the power cable are securely plugged in and the power cable is connected to an active outlet or alternative power source.
4. Contact **Cubiscan Service and Support** at **801.451.7000** if you require additional help.

Dimension readings are not accurate



If you suspect that the Cubiscan 75 Pro dimension readings are inaccurate (varying by more than $\pm 0.2''$), do the following:

1. Make sure that no other objects are interfering with measurements. An area of at least 18" around the measurement area should be

- maintained. This area should be clear of all objects that are not being measured.
2. Sometimes black, shiny surfaces are difficult for the Cubiscan 75 Pro to dimension. Try measuring an object with a different surface to see if the surface is causing a Problem.
 3. Check the color-depth image to see what is being measured. Make sure that hands, arms, or other items are not included in measurements.
 4. Direct sunlight can interfere with Cubiscan 75 Pro measurements. Move the Cubiscan 75 Pro if direct sunlight is in the measurement area.
 5. Cycle the power.
 6. Repeat the camera calibration Process, for more information, see "Camera Calibration" on page 13.
 7. Contact Cubiscan at **801.451.7000** if you require additional help.

Measurement error



If the Cubiscan 75 Pro reports a measurement error, complete the following steps.

1. Ensure the measurement area is free from objects not being measured, including hands that may be captured during the measurement. It may be helpful to use a different display mode to identify any unwanted measurements.
2. In some case a recalibration may be needed to ensure the Cubiscan is measuring properly, see "Camera Calibration" on page 13.
3. If problem persists, cycle the power and remeasure.
4. If you are still receiving a sensor error, contact Cubiscan at **801.451.7000**.

Version

This section describes the Version menu of the Cubiscan 75 Pro. The Version menu contains useful information and records of the Cubiscan 75 Pro.

To access the version information, 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 **VERSION**.

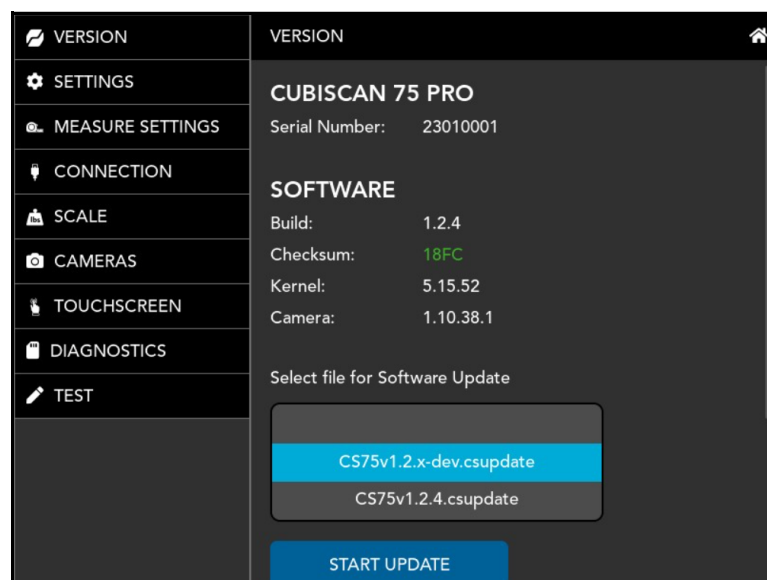


Figure 39
Version

Version The model and firmware version of the Cubiscan is displayed at the top of the Version screen.

Serial Number This field displays the serial number of the Cubiscan.

Software

Build This field displays the version of the software.

Checksum This field displays the checksum for the software.

Kernel This field displays the version of the operating system kernel running on the Cubiscan.

Software Update To update system software, select the update software from menu and tap [Start Update].

Diagnostics

The following options can be used for diagnostic purposes of your Cubiscan 75 Pro. Three types of logs exist with diagnostic information about the system: **the diagnostic log, config-audit log, and calibration audit log**. Use these logs and other information available in the **Diagnostics** menu to troubleshoot possible issues with the CS 75 Pro.

To access the diagnostic information, 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 **DIAGNOSTICS**.
3. Select the diagnostic information you wish to view.

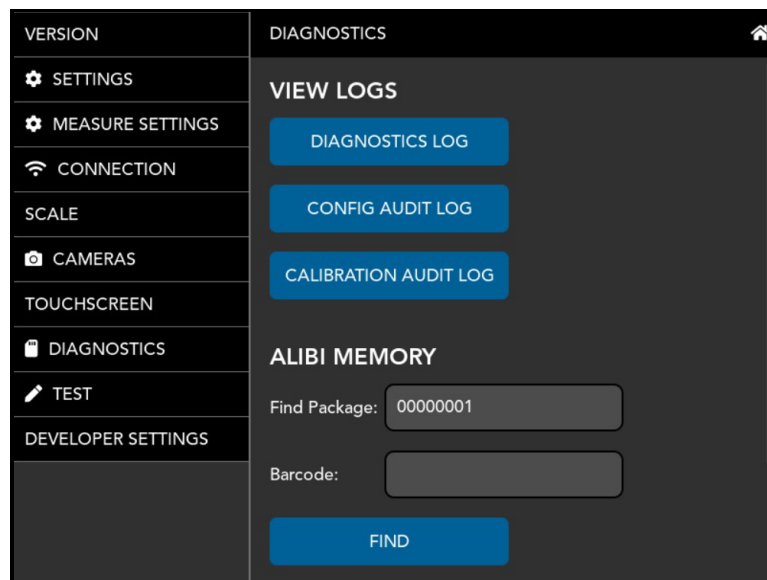


Figure 40
Diagnostics screen

Diagnostics Log

The diagnostics log displays system messages, including error messages. Each entry is stamped with the date and time that it occurred.

To access the diagnostics log, tap **[DIAGNOSTICS LOG]** from the **Diagnostics** menu. The Diagnostics Log will display on the screen.

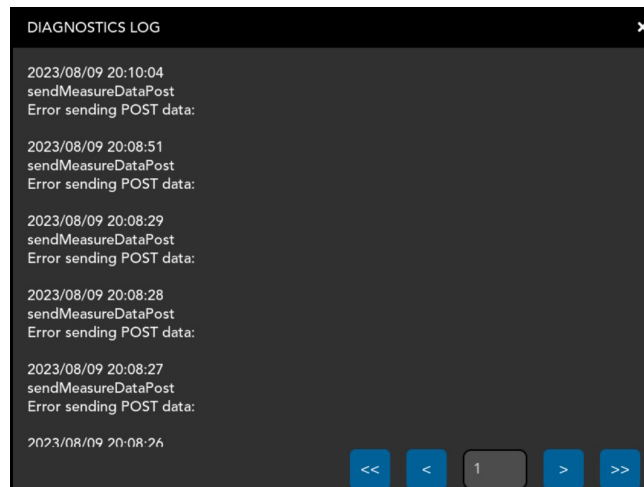


Figure 41
Diagnostics log

Config-Audit

The Config Audit displays the configuration audit trail. When configuration changes are made to the Cubiscan 75 Pro, the changes are recorded here. Changing dimension units, weight units, and dim factors are examples of the changes that are stored here.

To access the configuration audit log, tap **[CONFIG AUDIT LOG]** from the **Diagnostics** menu. The Configuration Audit Log will display on the screen.

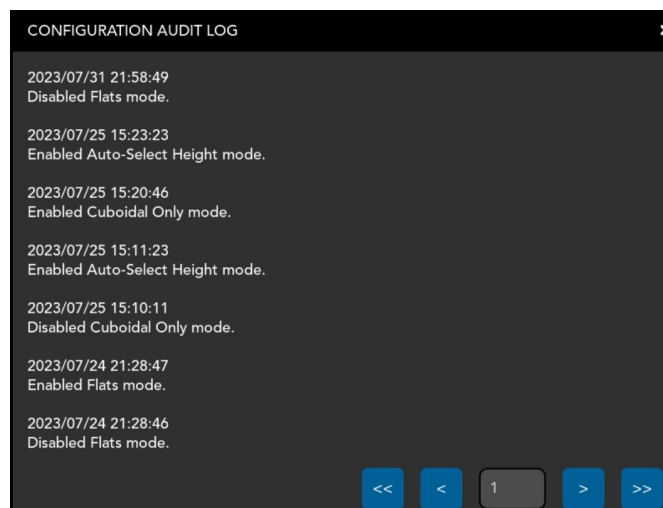


Figure 42
Configuration audit

Calib-Audit

The Calib-Audit displays the calibration audit trail. You can view the calibration history of the sensor here.

To access the configuration audit log, tap [CALIBRATION AUDIT LOG] from the **Diagnostics** menu. The Calibration Audit Log will display on the screen.

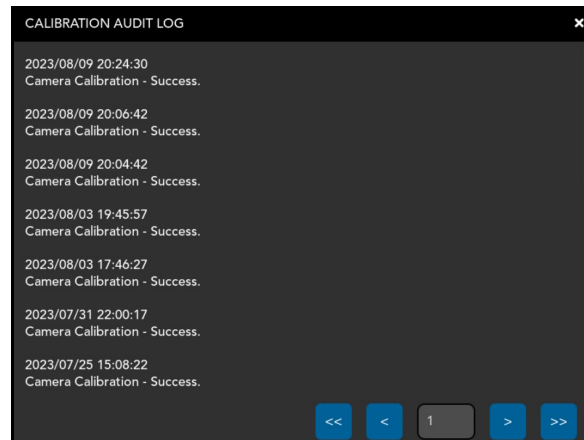


Figure 43
Calibration audit

Alibi

Alibi Memory lets you look up a specific package number. Measurements are recorded sequentially starting with the number one. While the Alibi memory can hold up to 2,500,000 records, any measurements older than 90 days are deleted.

To access the configuration alibi memory, enter the package ID or scan the barcode, then tap **[FIND]**. The alibi memory log will display on the screen.

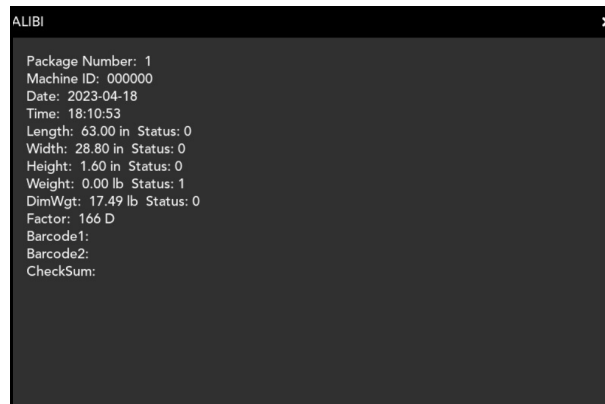


Figure 44
Alibi