Operators Manual

Parcel Dimensioner Shipping Scale

51535
Revision 1 04/21

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Amendment Record

Parcel Dimensioner
Shipping Scale

Document 51535

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SECTION 1: GENERAL INFORMATION

1.1. Description

The Fairbanks Scales Parcel Dimensioning System, powered by FreightSnap software, is designed to be used with the Fairbanks Scales ULTEGRA scale product line and is certified for trade in the United States. The dimensioning unit will sense the height, width, length, and weight of a unit placed on the scale in the field of view. The information will then display.

If enabled, an ethernet connection to the cloud allows for each package weight, dimensions, and an image of the product to be transmitted to the cloud for retrieval. This information can be used to show the condition of the package prior to shipping in the event of damage claims.

1.2. Dimensioning Specifications

	Length (in)	Width (in)	Height (in)
Maximum Parcel	48”	24”	24”
Minimum Parcel	6”	6”	2”

PARAMETER	SPECIFICATION
Model	Fairbanks Parcel Dimensioning System
Display	11” diagonal, 800 x 480 resolution TFT LCD with LED backlight Full graphic color
No. of Scales	One (1)
Scale Capacity	250 lbs.
Units	Lb or kg
Network Interface	Ethernet / Wireless connections
Motion Detection	Satisfies H-44 requirements
Scan Time	1 second
Scan Accuracy	+ / - .5”
Surface Characteristics	Most surfaces including glossy and transparent shrink wrap
Digital Filter (Scale)	Configurable
Clock	Real time clock, Day of the week, 12-hour AM/PM, Date (month/day/year)

ENVIRONMENTAL	SPECIFICATION
Enclosure	Nema 12
Operating Temperature	14°F to 104°F, (–10°C to 40°C).
POWER REQUIREMENTS	**SPECIFICATION**
Incoming Voltage Requirement	120VAC (2x)
Ground Requirements	For proper performance, the ground should have no more than 3.0 Ω resistance to true earth ground.
Approvals	**Scale**: NTEP CC: 19-146 MC:AM-6141C **Dimensioner**: 17-030A1
ACCESSORIES (INCLUDED)	**SPECIFICATION**
Logitech Wireless Keyboard	
Wireless Range	Up to 33 feet or 10 meters
Wireless Protocol	2.4 GHz
Battery Details	Size: AA, Quantity 2

SECTION 2: STANDARD INSTALLATION

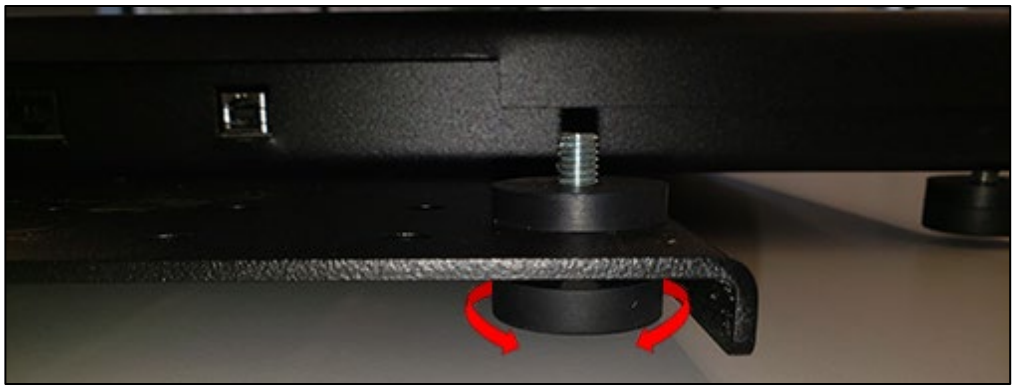
2.1. Setting Up the Pillar and Base

The height of the camera to the scale base is fixed and should not be altered. The Parcel dimensioner should be placed on as level of a surface as possible to ensure accurate weighments. Six screw on leveling feet allow for minor adjustments to be made on an unlevel surface.

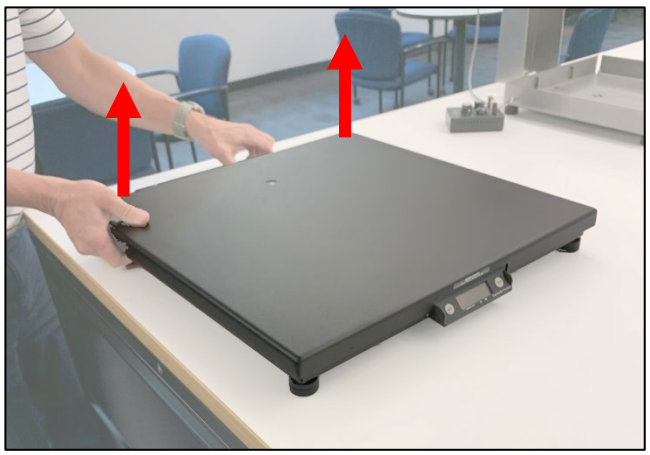
Use the following instructions to assemble the Parcel dimensioner:

1. Find a suitable location for the parcel dimensioner – away from sunlight on a level or nearly level surface.

2. Locate the Ultegra Max (scale base) and move into the location. Check the bubble level located on the top of the platform to determine if adjustments are required to the leveling feet. Adjustments may be made by lifting the scale base and turning the feet. There is a total of 6 feet on the base.

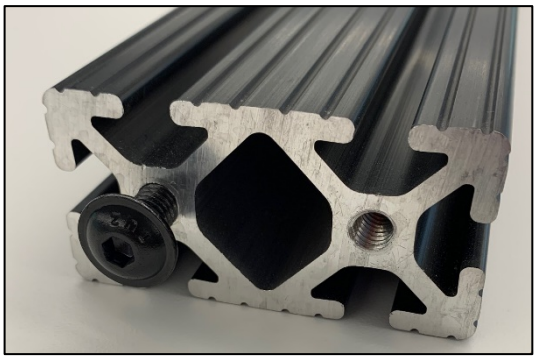


WARNING: ***The display on the front of the scale base may be damaged if the scale base is lifted by the display OR if the scale base is tilted from the back onto the front display.***



3. Once the scale base is level, add the pillars to the scale base. The two 30” pillars are not interchangeable.

   The pillar with the **tapped connection holes, connects to the scale base**.



Use one of the provided Allen wrenches to attach the pillar to the scale base using two socket head screws. (5/16 x 1.25”)

If working alone, setting the scale base on a platform with the back of the base overhanging, may be helpful while attaching the pillar from underneath.

4. Attach the 2nd 30” pillar to the pillar already attached to the scale base. Use the two included butt fasteners.

   Place the two fasteners in each hole on the bottom pillar.

5. **Connect the two vertical pillars**. Slide the top pillar on the bottom pillar aligning the butt fasteners through the holes.
6. Using the 5/16” Allen wrench, placed at an angle, tighten the 2 screws.

7. **Connect the 16” horizontal extrusion bracket to the top of the newly assembled pillar.**

   Attach the Socket head screw (5/16” x 1.25”) to the anchor cam fastener. Then, insert in the top of the vertical pillar (2x)

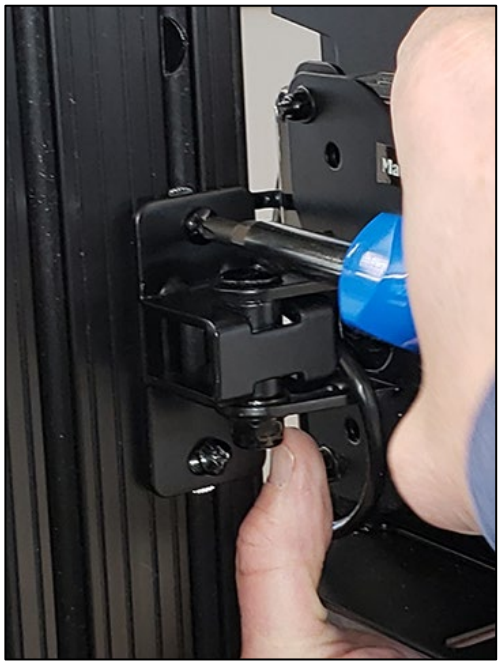
8. Slide the horizontal extrusion bracket into the anchor cam fastener until it is even with the back of the vertical pillar.

9. Tighten the socket head screw in the anchor cam using the 5/16” Allen wrench to secure the horizontal bracket. (2x).

2.2. Connecting the Components

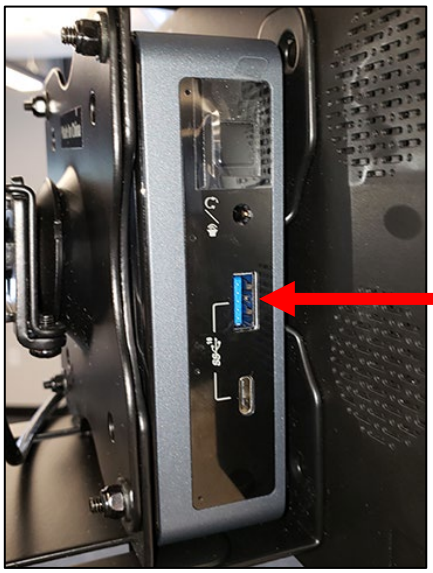
1. Connect the Mini PC/Monitor mounting bracket to the top of the vertical pillar - approximately, ±1” below the horizontal pillar.

   Use button head socket (1/4” x 5/8” long) and 1/4” T-Nut to secure (2x)



   Leave adequate space for the Mini PC. (If not already, adjusted)

2. Add the Mini PC behind the monitor on the bracket. The Mini PC will just rest in the space.



USB 3.0 port is blue to distinguish from USB 2.0

3. **Add the 3-D camera assembly** to the end of the horizontal extrusion bracket.

   The 3-D camera assembly is held to the horizontal bracket with 4 screws and T-Nuts.

   Slide two T-Nuts onto each side of the horizontal extrusion bracket.

4. Hold the 3-D camera assembly to the end of the bracket aligning the nuts to the holes in the camera assembly
5. Insert the 4 socket head screws (#10 x 5/8”) into the 3-D camera assembly and nuts.

   The 3-D camera assembly is now mounted to the horizontal extrusion bracket.

6. To provide ease of installation: Make required connections to devices in the dimensioning head while the mast is horizontal. Verify all connections are secure.

   - Connect the 3-D camera to the USB 3.0 input (blue) on the Mini PC. Push the cable into the slot on the top of the horizontal extrusion bracket.

- Connect the HDMI cable from the monitor to the HDMI input on the Mini PC.

- Connect the gray USB cable from the scale base to the Mini PC. Type “B” USB is inserted into the scale base and Type “A” into the Mini PC. Push the USB cable into the slot in the vertical pillar.

USB to Scale base

USB to Mini PC

- Connect the power supplies to the Mini PC and to the monitor. The power supply cords can be inserted into the slot in the vertical pillar. (Along with the USB cable).
- Plug the power supplies into two 120 volt outlets or power strip.

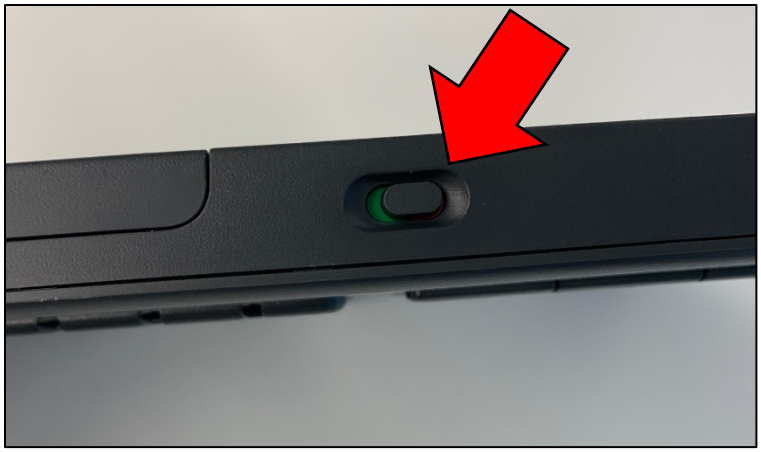
2.3. Keyboard

A wireless keyboard with touchpad comes standard with the Parcel Dimensioning System. A keyboard is not required for standard operations, but the keyboard/mouse is necessary for navigation and to perform configuration changes.

To Install the keyboard with touchpad:

1. Verify (2) AA batteries are installed in the keyboard.
2. Plug the Receiver into the empty USB port on in the Mini PC.

3. Verify the keyboard off/on switch is in the on position. **Red** is off, **Green** is on.



The keyboard and touchpad should now be functional and connected to the Dimensioner.

SECTION 3: OPERATION

3.1. Startup

After all assembly steps and connections have been completed, proceed with the following:

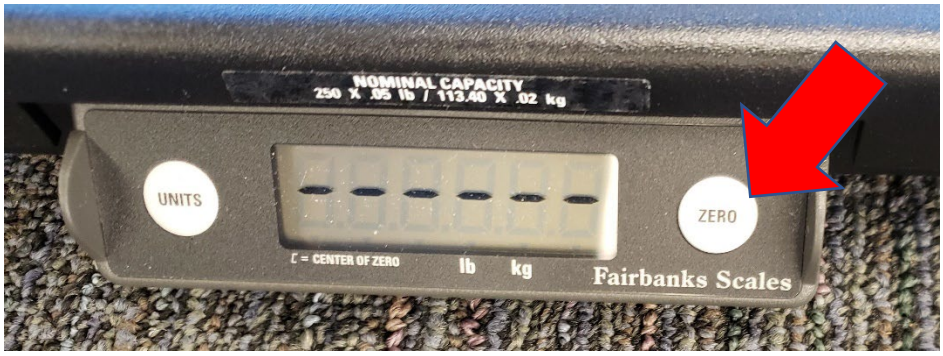
BEFORE powering on the system:

- Remove any boxes or objects from the scale base.
- Verify the power is on verified by the red LED on the top of the monitor.

To Begin Using the Parcel Dimensioner:

1. Press the Power ON button on the Mini PC. Once the Mini PC has completed booting, the indicator lights will appear, as shown below.

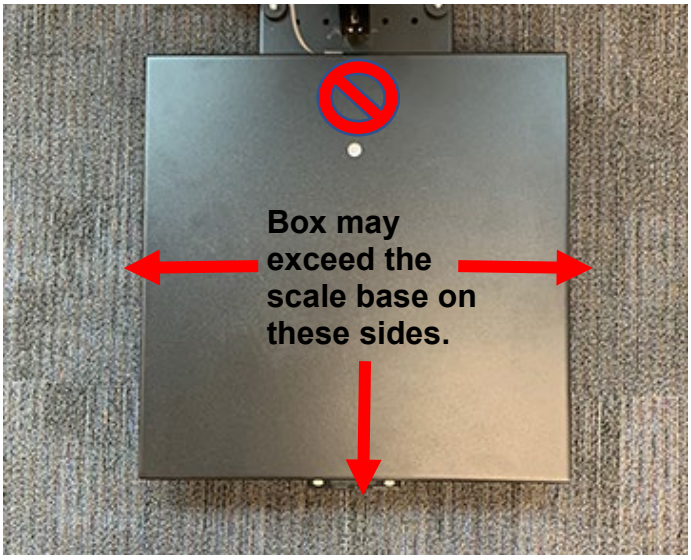
2. Once the system has completed booting, the next step is to “zero” the scale. Dashes will appear on the display. Press the **ZERO** key.



All zeros should then display.

3.2. Operating the Parcel Dimensioner

The parcel dimensioner measures square objects accurately within half an inch. A box may exceed the size of the scale base on the front and both sides. A box should not extend over the **back of the scale** base because of potential interference with the vertical pillar and support. See Adjusting the Scan Size to adjust

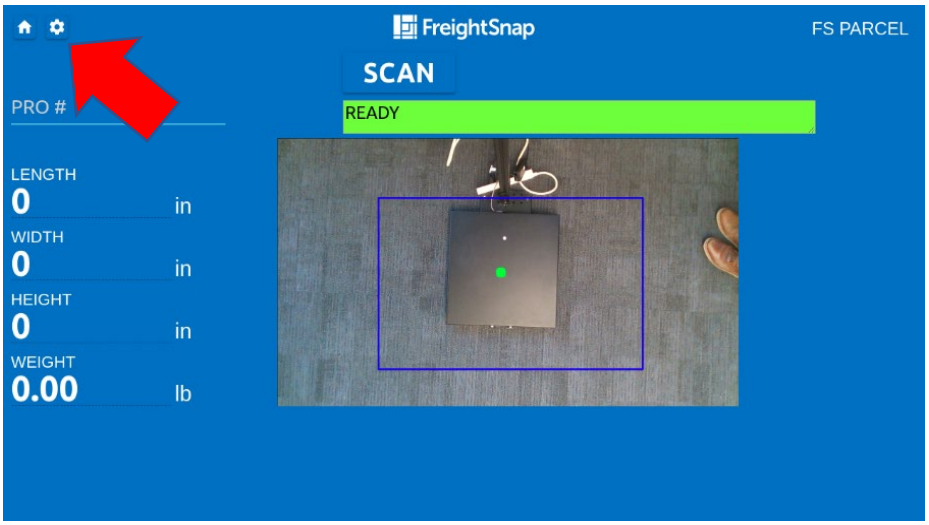


3.3. Adjusting the Scan Size

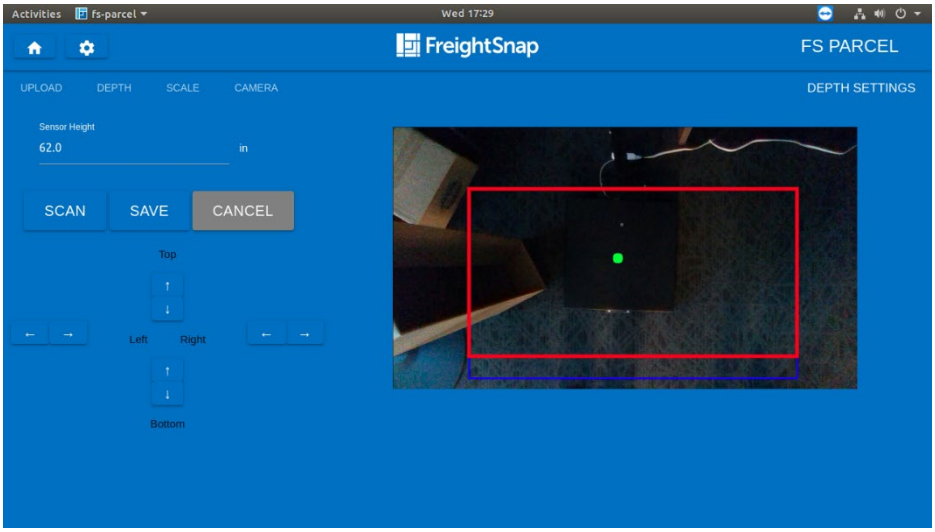
The distance a box can extend over the front and sides of the scale base is adjustable.

To adjust the scan dimensions:

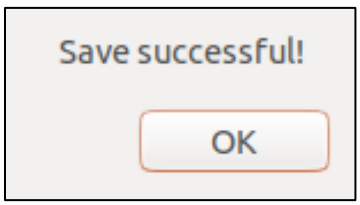
4. Click the **SETTINGS** (gear) icon in the corner of the screen.



5. The following screen appears. Click the arrows to adjust the size of the scan. The new parameter box will appear in **red** and the **blue** box will show the current settings.



6. Click the **SAVE** button to keep the new setting. A confirmation button appears.

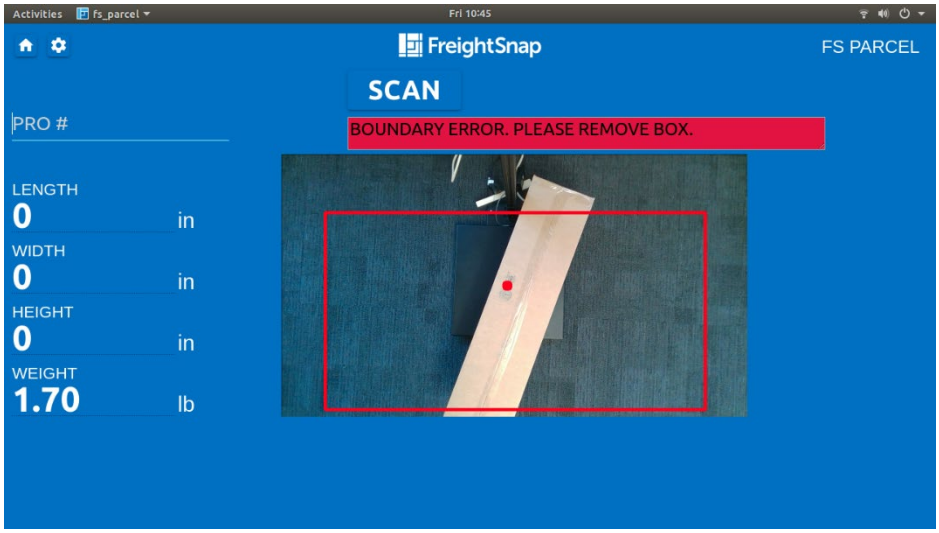


3.4. Performing a Scan and Weighment

1. After completing the Startup procedures, place a box on the scale base.
2. View the monitor and verify the box fits within the blue parameter box on the screen. The length, width, height, and weight of the box will display.

   - **Possible Error**: If the box is outside the blue parameter box, a **Boundary Error** will occur.

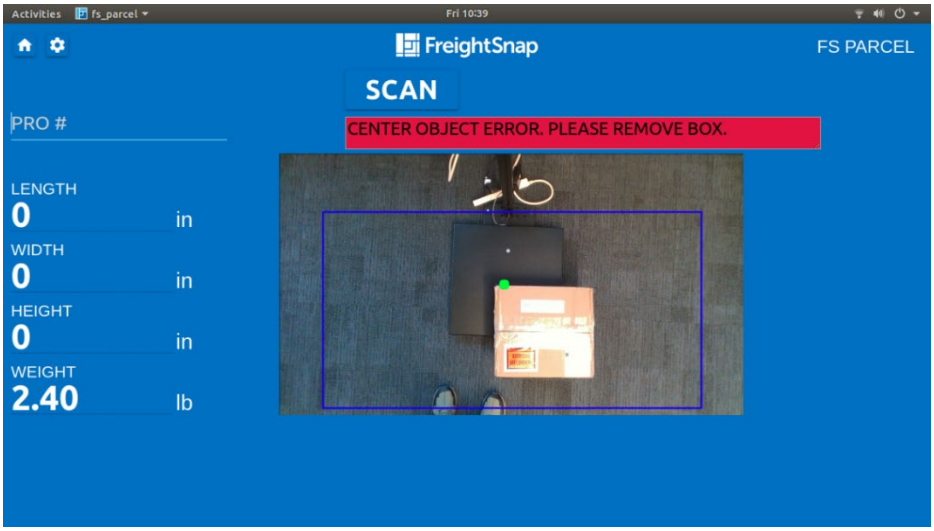
     Solution: Move the box to within the parameters.



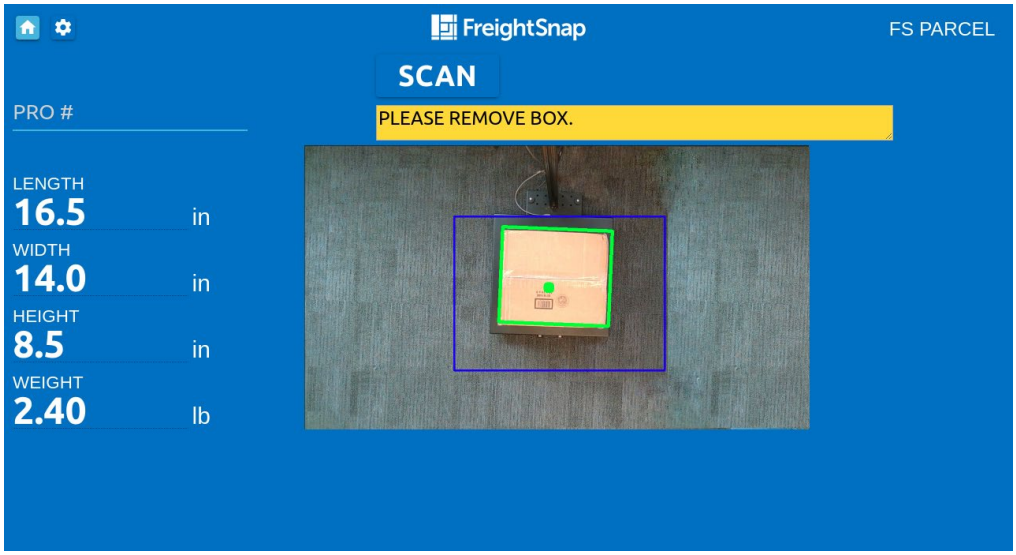
NOTE: A **Boundary Error** also may occur if any other object is in the boundary line (other than a box) such any an object lying next to the scale base or a person standing too closely to the scale base.

   - **Possible Error**: If the box is not centered on the scale base, a **Center object error** will occur.

     Solution: Move the box as close as possible to the center of the scale base.



3. Record weight/measurement (if weight and dimension data is not being sent via ethernet). To transmit data via Ethernet, follow the instructions in Output Data to the FreightSnap Cloud.

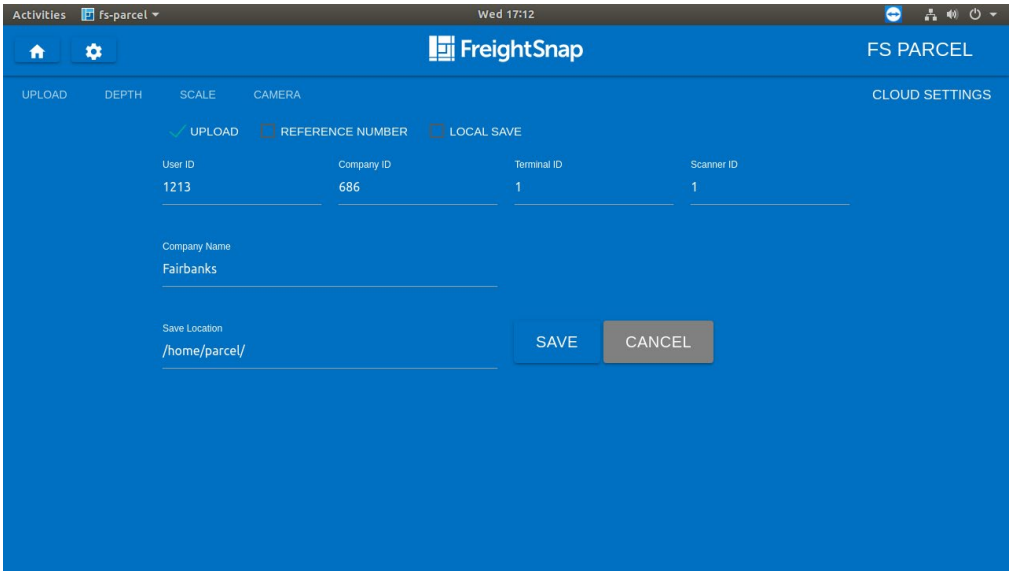


3.5. Output Data to the FreightSnap Cloud

The parcel dimensioner standard Ethernet output pushes all transaction data to the cloud. This data can be viewed from any web browser with a secure logon. This data includes a *shipment ID*, *Scan date*, *location ID*, *Camera*, *Dimensions* (L x W X H), *CFT* (Cubic Feet), *Weight*, *Freight Class*, *Density*, and the *Shipper name*. A photo also can be attached of the package at the time it was dimensioned. This can be very handy in the event there is a freight claim. Also, straight from the cloud there is a quick link to share data via email. If different information is desired, custom integration can be done for each customer.

To output data to the FreightSnap Cloud:

1. Click the **SETTINGS** (gear) icon in the corner of the screen.
2. Click **UPLOAD**. The following screen appears.



3. Complete all fields.

   User ID: Identifies the user at the site

   Company ID: # provided by FreightSnap to each client.

   Terminal ID: Identifies the terminal at site (if there are multiple terminals)

   Scanner ID: Identifies the scanner at site (if there are multiple scanners)

   Company Name: The company name

   Save Location: Folder location on PC where each weighment/dimensioning will be saved.

4. Click **SAVE** when finished.

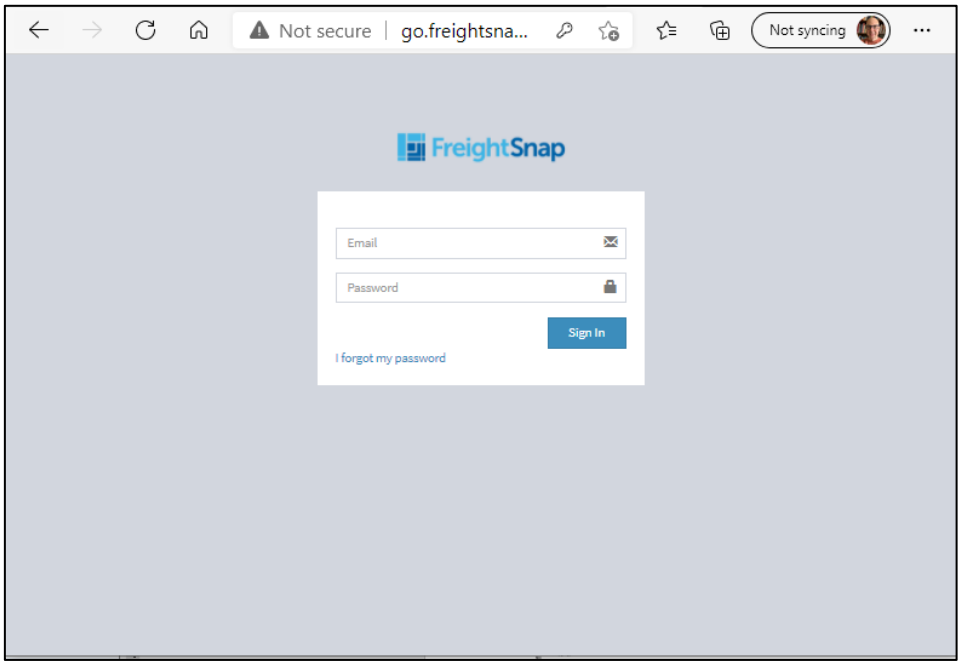
Reserved for future expansion (optional Steps 5-10) To add a camera:

Click the **SETTINGS** (gear) icon in the corner of the screen.

5. Click **Camera**. The following screen appears.
6. Click **ADD CAMERA.**
7. Verify that the settings are correct.

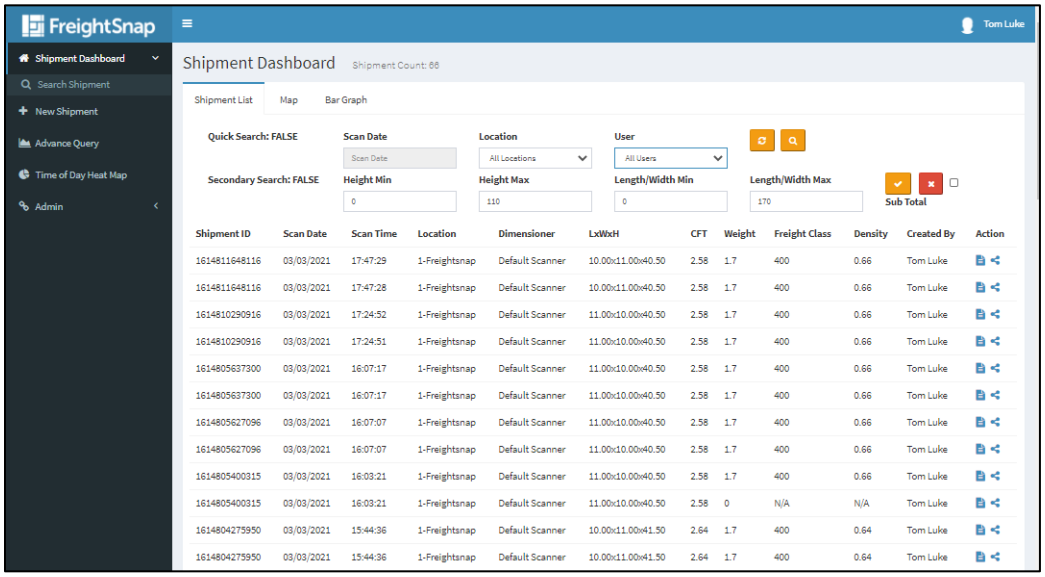
   Perform a transaction by adding and removing a box from the scale/dimensioner.

8. Log into the Fairbanks Scales Cloud. Open a web browser and go to http://go.freightsnap.com/



9. Login with email and password and click **Sign In**. If you do not have a login ID, email support@freightsnap.com

10. A Shipment Dashboard appears. Use the options boxes to narrow your search results.



SECTION 4: TROUBLESHOOTING

With all computing devices, it is a good practice to reboot the device, so that it is in an initial state before troubleshooting.

Scale Instrument Prompts

Prompt	Description
HiCAP	Load 150 lbs or greater - over capacity. *Remove or reduce the load.*
LoCAP	Scale is below normal Zero range - under capacity. *Remove any load on the scale then press the Zero button.*
"------"	Shown at startup. Indicates the scale is not within the center-of-zero range. *Press the Zero button to go to weigh mode.*
" ---- "	Shown at startup. Motion is preventing the scale from entering weigh mode

Problem	Possible Source/Remedy
Monitor not showing **READY**	• Ensure the scale USB cable is connected and the scale is displaying zero. • Ensure the scale is reading zero.
Unit reads weight but not dimensions	• Make sure there is no movement in the field of view. • Adjust the field limits to focus the view area. (See service manual)
Scale Pushbuttons (Zero & Units) Will Not Operate	• First unplug, then plug in the AC adapter to reset the power cord, which resets the program.
Scale Display Locked or Inoperative	• First unplug, then plug in the AC adapter to reset the scale.
Keyboard not connecting	• Be sure switch on the wireless keyboard is turned "On" • Replace the two "AA" batteries.

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