



Positiv[®]

Installation Manual

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Compatibility

Before installing PositiV®, it's important to verify its compatibility with your site. Because PositiV is a wireless, self-powered device, there are certain parameters that must be met for it to be considered a good fit for your facility. Please review the compatibility criteria prior to installation:

- A relatively clear line of sight and distance must be maintained between the indoor and outdoor PositiV devices. This means minimizing the quantity of materials between the two devices; the less material between the devices, the stronger the signal will be. Similarly, depending on the type of material between the devices, the distance between the indoor and outdoor devices should be less than 75 ft.
- Light levels at the indoor unit installation location should be >400 Lux and the outdoor unit should be south facing, receiving direct sunlight.
- An Android or Apple device is required to download the PositiV Cx app from Google Play or the App store. The app is required for configuration and calibration of the PositiV system. The app is free to download.
- To access building health data tracked by the PositiV system, user log-in credentials will be provided by Melink Corp to grant access to the Melink Portal. Google Chrome is the recommended browser to access the Melink Portal.

Installation Preparation

Before beginning installation and setup, please review the Compatibility section. This will help the installer understand what to look for when installing PositiV.

During the setup and preparation of PositiV, the installer will be unboxing, powering on the units, and scouting installation locations. This step is expected to take about 10 minutes. The installer should become familiar with both the indoor and outdoor PositiV units and the criteria for analyzing potential installation locations.

Installation Overview

Installation of PositiV is typically completed within one hour and consists of four main steps in two parts.

Part 1: Setup & Preparation

Step 1: Unboxing and Powering On

First, both the indoor and outdoor PositiV units will need to be unboxed and powered on.

Step 2: Location Identification

Next, the installer should attempt to identify installation locations for the indoor units. It is best to use the determined installation location of the outdoor unit to identify the best installation location of the indoor unit; the closer the units are to each other, the better.

Part 2: Configuration, Installation & Calibration

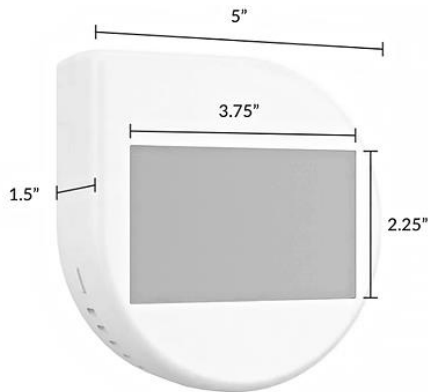
Step 3: PositiV Cx App Configuration & Device Installation

This step consists of configuring the indoor and outdoor PositiV devices and ultimately installing them at the identified locations from Step 2. For this step, the PositiV Cx app will need to be downloaded from the Google Play or App Store, respectively using an Android or Apple device.

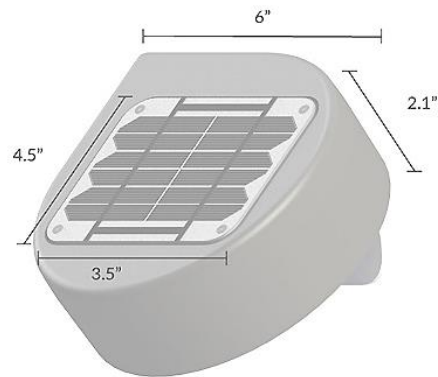
Step 4: Calibration

Lastly, the PositiV system will need to be calibrated by following the appropriate steps as outlined on the PositiV Cx app.

Technical Specifications



PositiV Indoor Unit



PositiV Outdoor Unit

PositiV Indoor Unit Weight: 0.38 lb.

PositiV Outdoor Unit Weight: 1.18 lb.

PositiV Indoor Unit Power & Lighting Requirements: 400 lux for 12 hours per day

PositiV Indoor Unit Operating Temperature: 0 °C – +50 °C

PositiV Outdoor Unit Operating Temperature: -40 °C – +80 °C

Wireless Communication: FCC ID's: S9NSPBTLERF, MCQ-XBEE3, MCQ-XB3C1, RI7XE866A1NA

Sustainability: Shipping packaging is 100% recyclable and certified by the Sustainable Forestry Initiative.

Support & Limited Warranty: Visit <https://melinkcorp.com/terms> for related terms and conditions.

In the Box

- 1 Indoor PositiV Unit
- 1 Outdoor PositiV Unit
- 1 Pipe Clamp
- 2 Sheet Metal Screws
- 2 Masonry / Concrete Screws (5/32" bit will be needed for pilot holes)
- 2 Dry Wall Screws
- 1 Welcome Card

Suggested Tools

- 1 Philips Head Screwdriver
- 1 Android or Apple Device
- 1 5/16" Crescent Wrench (If mounting the outdoor unit using the attached bracket)

Step 1: Unboxing and Powering On

- 1.1** Remove the contents from the PositiV shipping box.

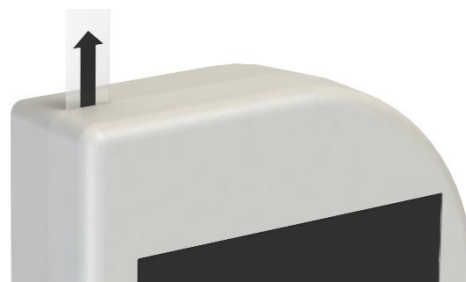


PositiV® Indoor Unit



PositiV® Outdoor Unit

- 1.2** Pull the clear tab from the top of the indoor unit. This will power on the unit. Once the tab is pulled, tighten the screws on the back of the unit.



- 1.3** Unscrew the 5 screws from the back of the outdoor PositiV unit.



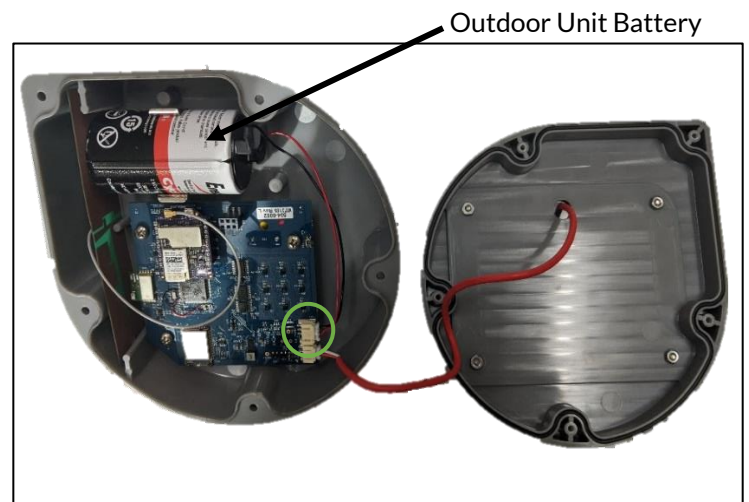
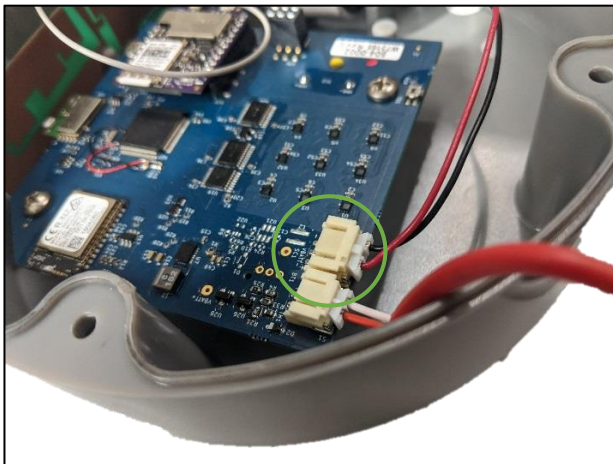
- 1.4** Once the screws are removed, pull the front cover from the outdoor unit to expose the inside. Once the cover is separated from the base, place it to the right of the base (solar collector down) as shown in step 1.5.

Note: The solar collector is connected to the circuitry. Be sure to pull the cover with caution. Additionally, pulling the cover from the base may be difficult.



- 1.5** Connect the outdoor unit's battery connector to the receiver on the circuit board.

Note: After this step, leave the cover off the exterior unit.



Step 2: Location Identification

2.1 Identify a suitable installation location for the indoor unit.

Key compatibility attributes:

- Minimal airflow interference
- Limited impact from nearby equipment
(Radio frequencies, IoT, metal fixtures and equipment, etc.)
- Installed away from high-traffic areas where damage from occupants or employees could occur
- Sufficient ambient light (400 Lux)
- Centrally located within the facility, if possible

2.2 Identify a suitable installation location for the outdoor unit.

Key compatibility attributes:

- South facing with direct sunlight (ideally)
- Available space on (a.) exhaust vent / permanent pipe, (b.) RTU, or (c.) masonry
- As clear as possible line of sight from the indoor unit to the outdoor unit

Note: Approx. 75 ft. max distance depending on building materials and line of sight clarity.

- Do not install the outdoor unit on a gas pipe.
- Do not install the outdoor unit in a shaded area.

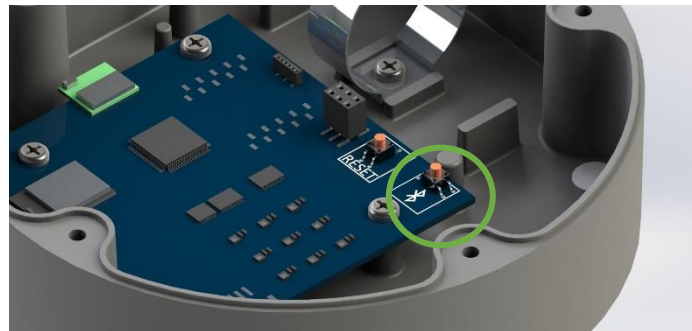
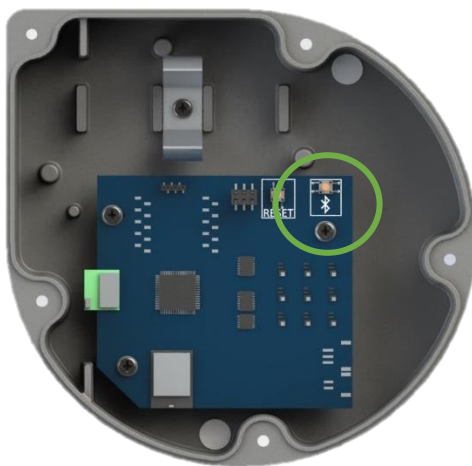
Step 3: PositiV Cx App and Configuration

During this step, the installer will be using his or her phone to configure the PositiV system. During configuration, the installer will enable Bluetooth communication between the devices; sync the devices; range test the connectivity strength between the indoor and outdoor PositiV units; and, ultimately, install the units at their tested locations.

- 3.1 Download Melink Corporation's PositiV Cx app from the Google Play Store or App Store.



- 3.2 With the indoor and outdoor units next to each other, press the Bluetooth button on the circuit board of the outdoor unit.



3.3 Screw the cover onto the back of the outdoor unit.

Note: Ensure (a.) the rubber gasket is flush with the cover, (b.) there are no twists in the gasket, and (c.) no wires are being clamped between the base and cover of the outdoor unit. Without overtightening, ensure there is no gap between the base and cover. The cover is tight enough when there is no longer a gap between the base and cover. Do not overtighten.



3.4 With the units still next to each other, press and release the Bluetooth button on the indoor unit.



3.5 On your phone, turn Bluetooth "On" and open the PositiV Cx app.

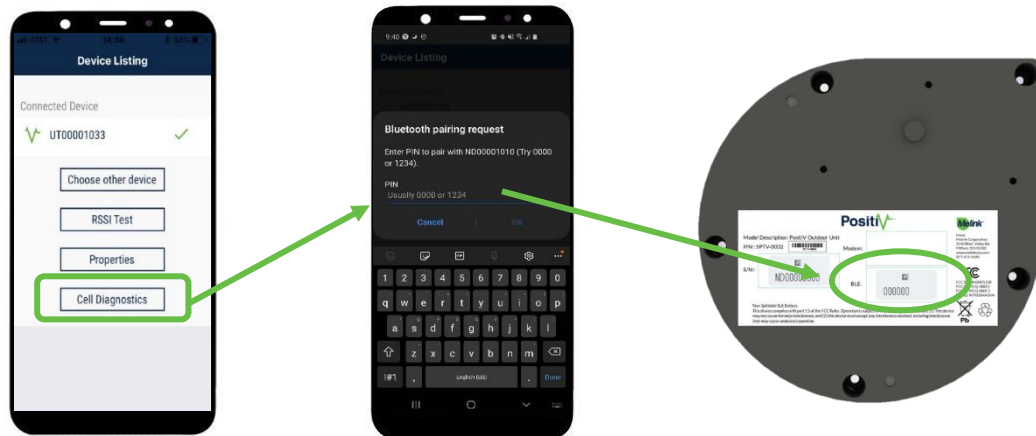


- 3.6 A.** When prompted to “Choose a Device”, select the PositiV device with a serial number (S/N) that matches the serial number on the back of the outdoor unit (circled in blue).
- B.** Chose the option “Cell Diagnostics”. Then, when asked to “Enter the Pair Code,” enter the BLE # on the back of the outdoor unit (circled in green).

A.

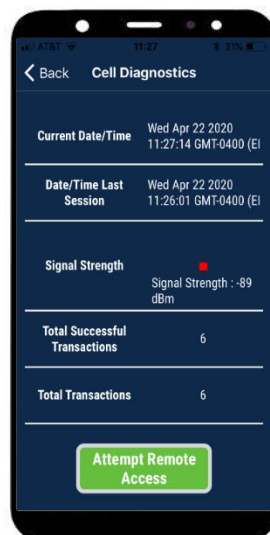


B.



- 3.7** On the Cell Diagnostics page, scroll to the bottom and click “Attempt Remote Access”. You will see a message asking if you are sure, click “Yes”.

Note: It may take several minutes for the device to run the cellular diagnostics



- 3.8** When the outdoor device reappears on the “Device Listing” screen, signaling that the process is complete, click into the “Cell Diagnostics” tab on the outdoor device again. Successful diagnostics will show no errors. If the cell diagnostics show fields such as Cell Access Status Code, Last HTTP Error Code, Last Timeout Error Code, or Power Loss, the test is considered unsuccessful. Reference the Cellular Diagnostics Troubleshooting Guide for possible remedies to the error.



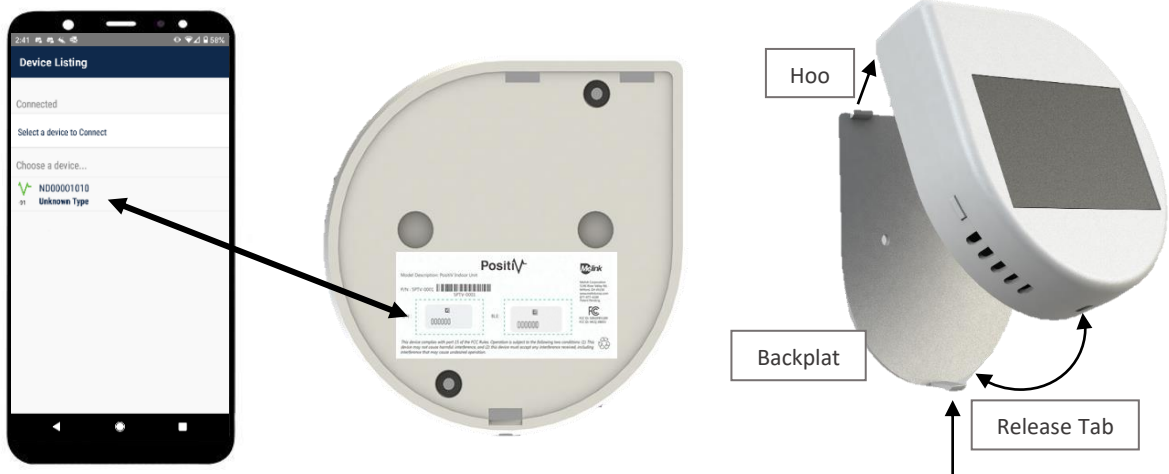
Successful: No Errors Shown



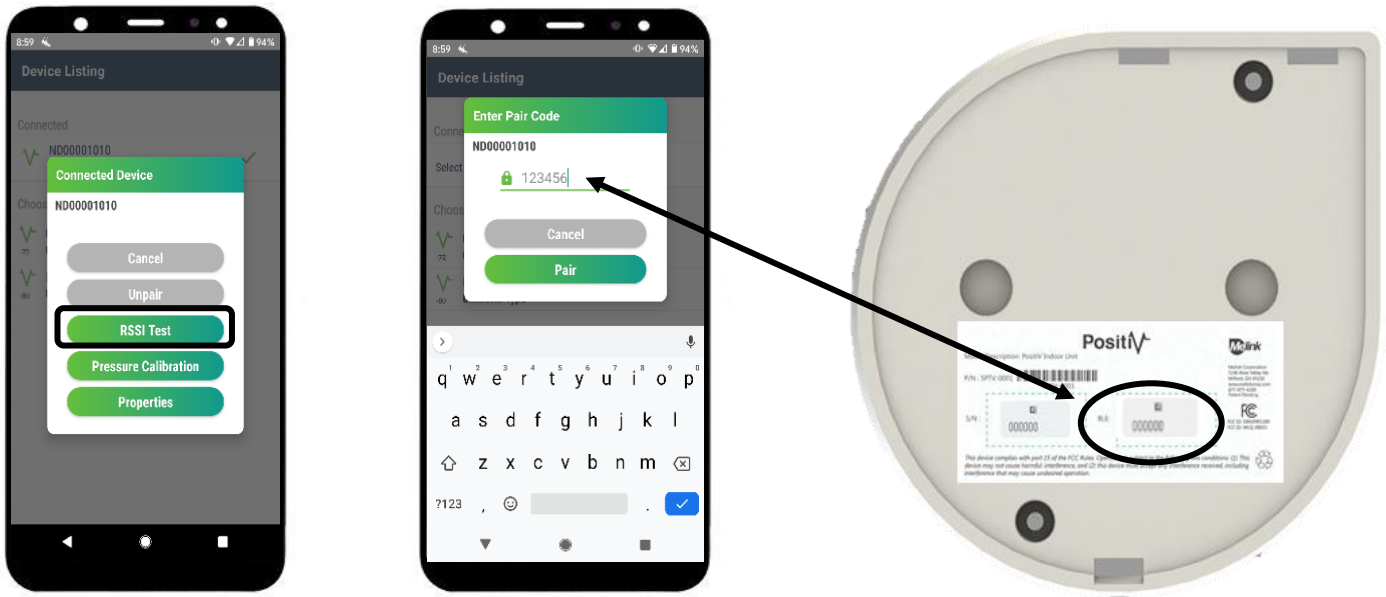
Unsuccessful: Additional field are shown. Cell Access Status Code contains an error.

- 3.9** Go back to the “Device Listing” screen and select the PositiV device with the serial number that matches the serial number on the back of your indoor unit.

Note: The indoor unit label is found behind the backplate on the indoor unit. The PositiV system may take up to a minute to be located on the app.

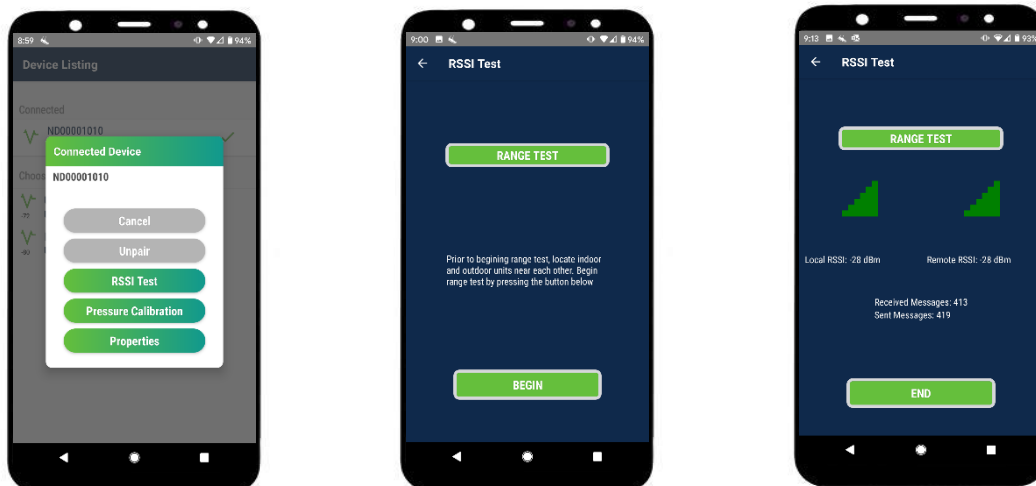


- 3.10** On your phone, select “RSSI Test.” You will then be prompted to “Enter Pair Code.” Enter the BLE# found on the back of your indoor PositiV unit (circled).



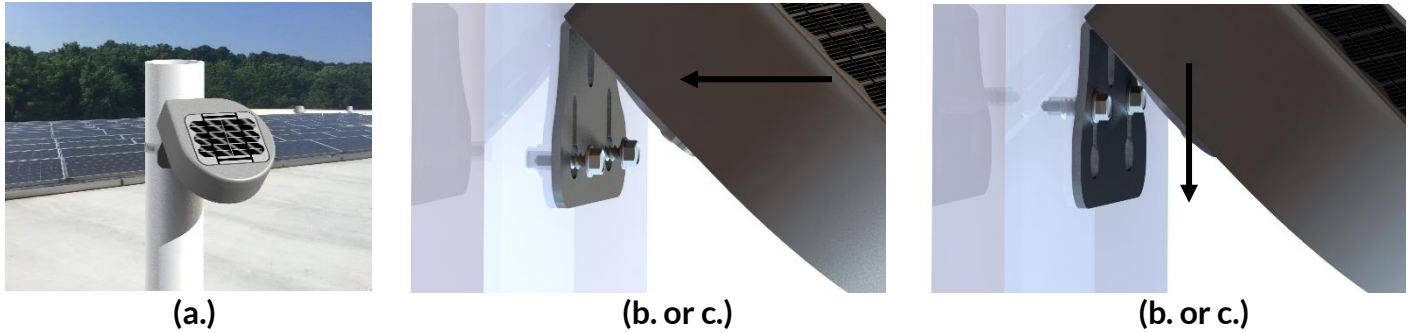
- 3.11** You should now see that the selected device is connected. Begin the RSSI test. Verify that the connection between the units is greater than -95 dBi.

Note: If device connectivity is less than -95 dBi, reevaluate the installation locations. Ensure the line of sight is as clear as possible and the distance between the units is minimized. If required, identify new installation locations and reconfigure the devices.



- 3.12** With both units, walk to the desired installation location of the outdoor unit. Mount the outdoor unit by either (a.) banding the unit to an exhaust vent using the provided pipe clamp, (b.) screwing the unit to an RTU / air handling equipment, or (c.) screwing the unit to concrete or masonry.

Note: A 5/32" drill bit will be required to drill the pilot hole for the masonry screws.



(Please note the correct orientation of the outdoor unit in the image above.)

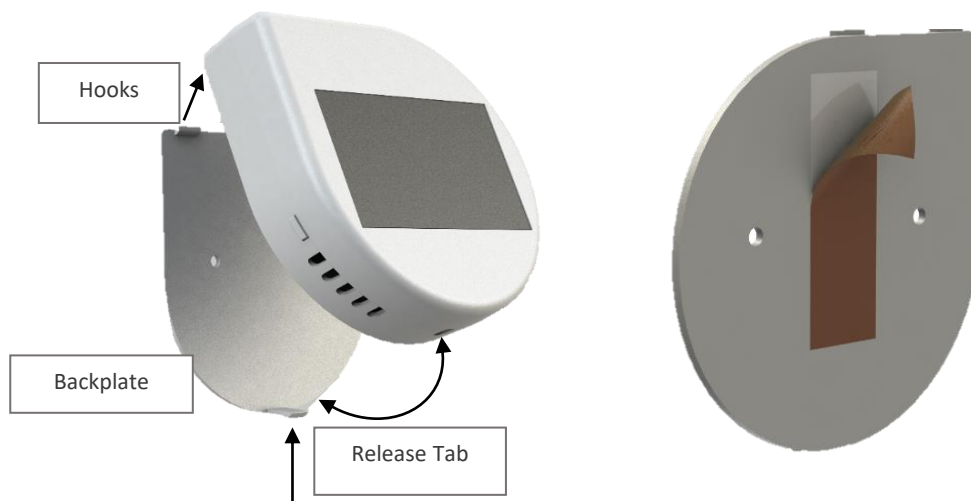
- 3.13** Once the outdoor unit is mounted, take the indoor unit to its desired installation location.

- 3.14** At the desired installation location, verify that the connection between units is sufficient (> -95 dBi) using the RSSI Test from Step 3.11.

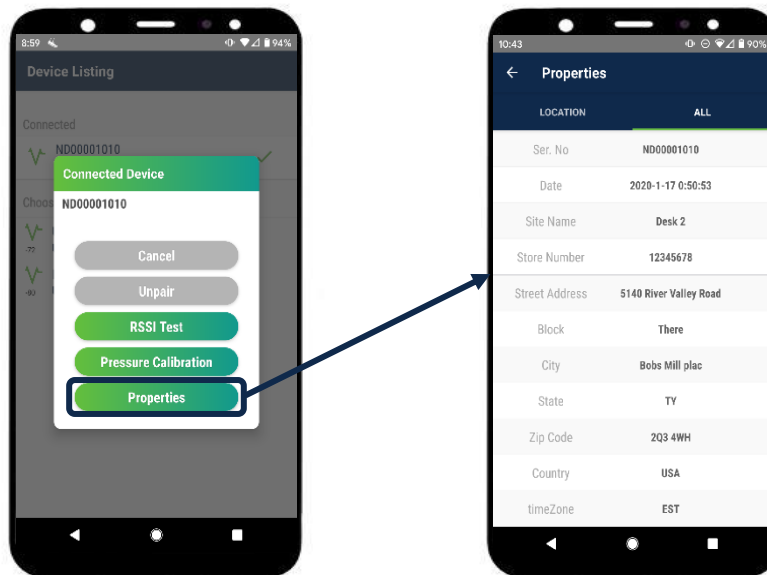
Note: If device connectivity is less than -95 dBi, reevaluate the installation locations. Ensure the line of sight is as clear as possible and the distance between the units is minimized. If required, identify new installation locations and reconfigure the devices.

- 3.15** If the device connection is sufficient, click the “End” button in the RSSI Test, and mount the indoor unit’s backplate to the wall by peeling the double-sided tape and pressing it to the wall for 15-30 seconds.

Note: To ensure proper adhesion, clean the wall and mount the backplate to the wall before reattaching the indoor unit. Attempting to press the adhesive to the wall with the indoor unit mounted to the backplate could result in poor adhesion or damage to the solar collector.

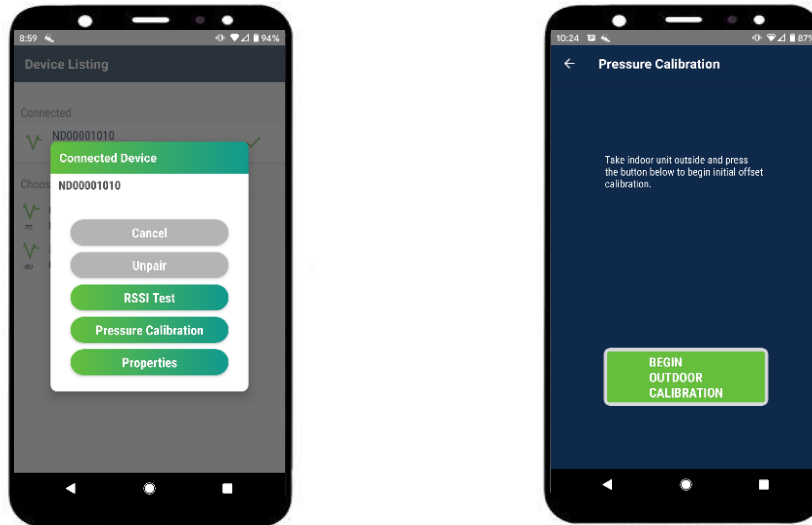


- 3.16** If the device connection is NOT adequate (< -95 dBi), reevaluate the installation location of both the indoor and outdoor units. Ensure they are as close together as possible, and their line of sight is as clear as possible.
- 3.17** Once the indoor and outdoor PositiV units are mounted, click into the “Properties” tab and select the “ALL” option to set up site name, store number, address, block, city, state, zip code, and time zone.



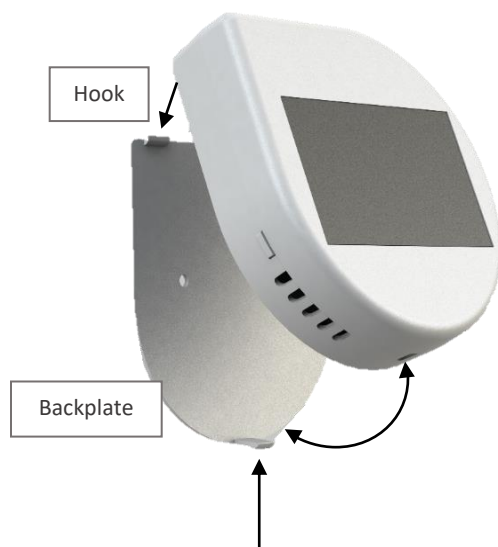
Step 4: Calibration

4.1 Click “Pressure Calibration” on the PositiV Cx app.



4.2 Follow the steps as described on the PositiV Cx app.

4.3 After calibration has completed, clip the indoor unit to the backplate as shown.



Please note the correct orientation of the PositiV indoor unit in the image above.

Troubleshooting & FAQ

What do I do if my PositiV system shows no connectivity or signal strength?

Reevaluate the installation locations. Ensure the line of sight is as clear as possible and the distance between the units is minimized. If required, identify new installation locations and reconfigure the devices.

If PositiV signal strength is undetectable, but the units have a clear line of sight and are less than 50' apart, there could be interference from on site IoT equipment. If this is the case, it can be best to set up the PositiV system during unoccupied or 'closed' hours when radio frequency interference is less noticeable.

What do I do if my PositiV system does not show up when I open the PositiV Cx app?

Verify that Bluetooth is enabled on your phone. Then, close and reopen the app. It may take up to a minute for the PositiV units to appear on the app.

What do I do if my PositiV Cx app crashes during installation?

Ensure the app is fully closed out after the crash. Re-open the PositiV Cx app and continue from the beginning of the step where the crash occurred.

Is it necessary to install the outdoor unit on the roof?

It is not necessary but recommended. If there is an installation location on the exterior of the building that meets all outdoor unit installation requirements, then it can be installed there.

Who do I contact for further help and support?

Melink's PositiV team can be reached at 513-965-7300 (M-F, 8 a.m. – 5 p.m. EST/EDT).