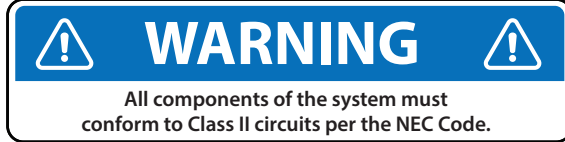
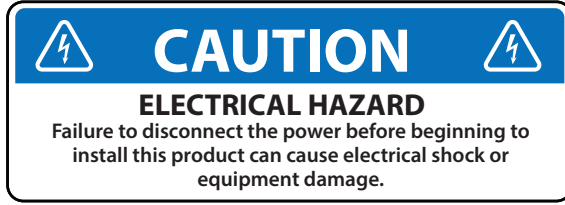


START INSTALLATION PROCESS HERE



Package Includes: AQ INDOOR Display
2 Wall Anchors with Screws
2 Wire Nuts

The XCSpec AQ Indoor Display can be used as a standalone device to display CO2 level status with green, amber, and red LED's based on default or user set configurations. The AQ Display can also display ventilation when paired with an externally mounted Pressure Transmitter. When the pressure at the AQ Display is higher than the externally mounted Transmitter, the blue airflow LED will illuminate. If you will be connecting a Transmitter and utilizing the blue ventilation LED, please refer to the instructions that are included in the Transmitter packaging.

1 Recommended Mounting

We recommend mounting the Display in a location with good visibility for the room occupants as well as close to a power source. Some state mandated programs have additional location requirements such as height or distance from a window. Mount the unit to a flat wall using the 2 screws and drywall anchors provided. Standard wall-mounted thermostats have 24Vac power terminals that can be used. If no 24Va power source is available, a low-cost off-the-shelf transformer available at any hardware store can be used.

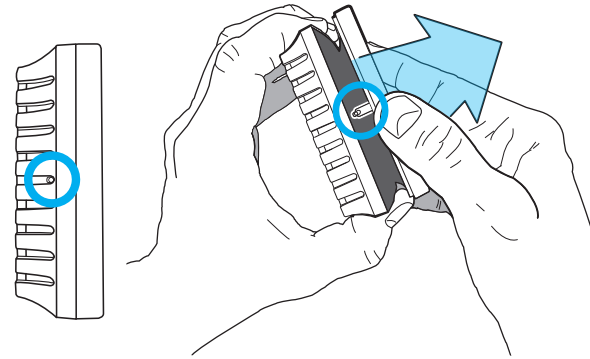


2 Removing The Top Cover

The Top Cover must be removed before the unit can be mounted to the wall.

CAUTION: Be sure not to damage the ribbon cable connecting the top cover and housing!

To remove top cover, locate the small tab on the left side visible through the case slots (blue circle). While holding the housing in one hand, press down on the cover plate next to the tab and separate the two pieces.



Before closing the cover, record the unit password printed on the inside of the cover! (take a photo with your cell phone). After successfully installation, the cover can be put back on the unit by sliding the cover to the left and then gently pushing down on the right side of the cover.

3 Wiring Unit to a 24V Power Source

Attaching Receiver to Thermostat Wires.

The **RED** Wire should be attached to the thermostat Rc or Rh terminal, which ever terminal is powered on the thermostat. The **BLACK** Wire should attach to the thermostat C terminal.

Attach unit Red Wire to 24Vdc/ac source. Attach unit Black Wire to common.

The power leads should exit the unit through the oval opening as illustrated, or through a slot in the side and hidden into the wall or dressed outside the unit along the wall with wiremold covering. thermostat C terminal.

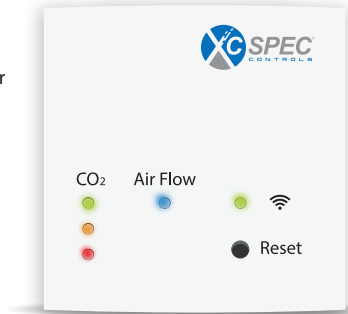
4 Display LED Indication Status

No LED's illuminated: check power. New Display connected to power: one CO2 LED will turn on based on CO2 levels. Provisioned to Transmitter: Blue LED on, Wi-Fi Green. Connection to Transmitter lost: Blue LED off, Wi-Fi Red. Provisioned to Wi-Fi network with or without internet: Wi-Fi LED will turn green. Connection to Wi-Fi network lost, the Wi-Fi LED will turn red. Wi-Fi connected but internet lost: Wi-Fi LED will flash green when space is unoccupied. Device can be reset as a diagnostic measure.

CO2 LED
Green-Red: Levels based on default or custom user configuration.

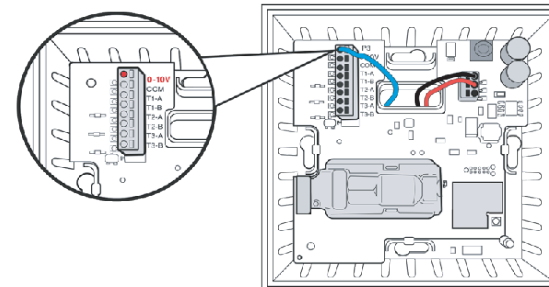
Air Flow LED
Solid Blue: Positive
Flashing Blue: Negative

Wi-Fi LED
Green: Connected,
Red: Disconnected



5 DCV Control Wiring

The AQ Indoor Display can be used with Demand Control Ventilation systems such as outside air dampers directly or through an Economizer using the 0-10V or 2-10V output wiring terminal in the Display. The output can be found inside the Display on the top left wiring terminal block. Use #20 to #26 AWG wire, strip 3/16" and insert in round hole as illustrated below. To remove wire, insert a very small screwdriver in the rectangular slot on the right side of the terminal. Set air damper low and high setpoints in the CO2 Commissioning web interface as described in #6 on the back page.



6 Note on CO2 Calibration

The AQ Display have Self-Calibration enabled. Self-Calibration only works if the installation space has unoccupied durations that allows CO2 levels to drop to a level similar to outside air or 400 parts per million for one hour each day over a 7-day period. Most "9 to 5" business or spaces that have regularly scheduled unoccupied times such as offices, retail, and schools should meet this requirement. If this unit is installed in a 24/7 occupied space, we recommend manually calibrating the unit every 6 months using "Forced Calibration" as described in step 6 on page 2 of this document.

Please go to our website www.xcspec.com to find an overview, set up, and commissioning videos on the XCSpec AQ Indoor Display



Installation
Quick Start Guide

XCSpec
500 Tamel Plaza, Ste. 502
Corte Madera, CA 94925

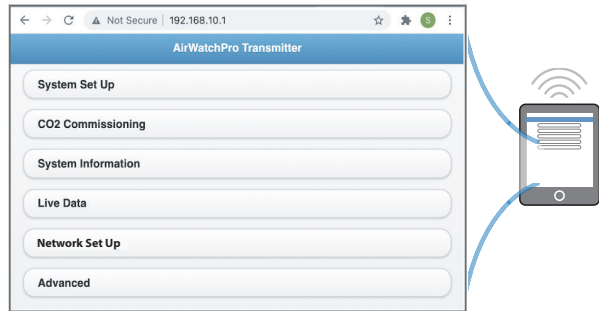
support@xcspec.com
415.463.8037

Set Up and Commissioning

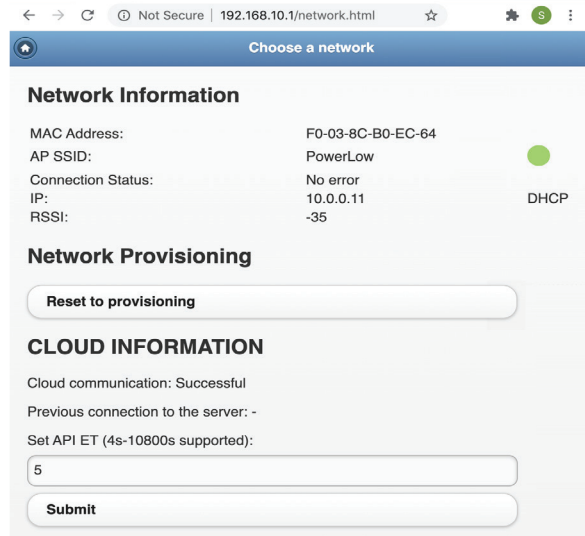
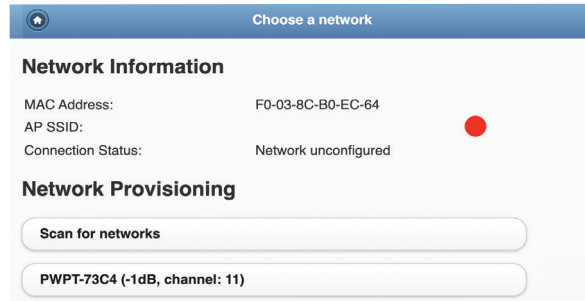
The AQ Indoor Display (AQD) has a Web Server that allows you to set up and commission the unit through a mobile device or computer capable of establishing a Wi-Fi connection and running a browser. You must be within Wi-Fi communications distance to the Display you will be connecting to. On your device, open the list of Wi-Fi networks and select the device named AWPR and the last 4 numbers of the MAC printed on the AQD box. Select this network and enter the device password printed on the box or inside the cover. After correctly entering the password, your device will show a successful connection to the Transmitter.

Click **“ENTER”** after making configuration changes!

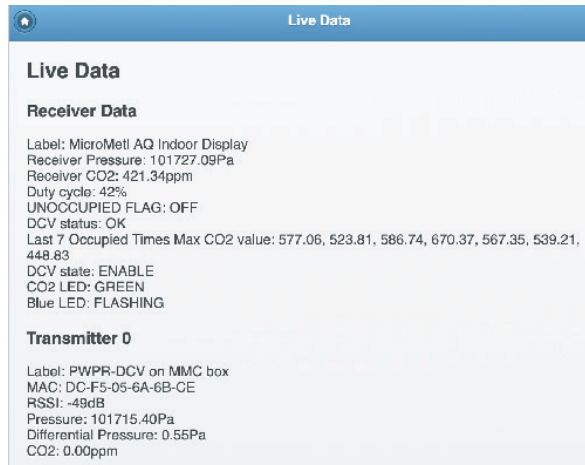
1 HOME PAGE Launch a browser and enter 192.168.10.1 into the address line. The Landing Page shown below should appear. You can always get back to the landing page by tapping on the HOME ICON in the upper left corner of the page. Suggested browsers: Chrome, Safari, or Firefox.



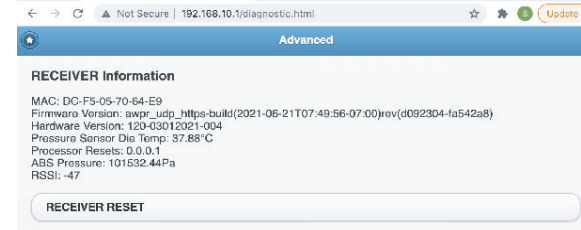
2 The Network Set Up Page allows you to connect or “provision” a single or multiple Displays with a Transmitter. A non-provisioned Display appears with a RED dot. Selecting the “SCAN” button allows you to see a list of available Wi-Fi networks. Select the Transmitter you are connecting to such as AWPTXXXX from the list. Enter the Transmitters provided password and click Submit. The dot turns GREEN when they are connected and shows the device MAC I.D. If this does not occur tap on the “REPROVISION” button and repeat instructions above. Verify you have the Transmitter’s correct password. Note- RSSI (Wi-Fi signal strength) should not be less than -98 DB for a reliable connection.



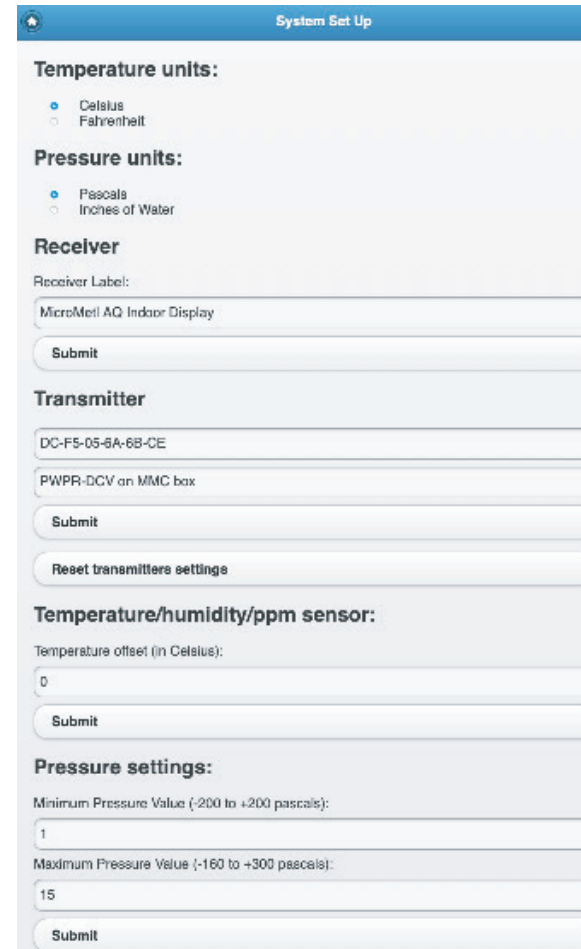
3 The Live Data Page displays the live data of the Display as well as from the Transmitter when connected. This data is continuously updated while you are on the page, and should change slightly to represent realtime conditions.



4 Advanced information is for advanced users and factory troubleshooting. The Reset button resets the Transmitter’s processor as a diagnostic measure.



5 The System Set Up page is for configuring temperature and pressure units, assigning a device label, and entering a Transmitter MAC address. There are windows to enter up to 4 MAC addresses- only use the top window.



6 CO2 Commissioning The first Low and High PPM input fields define the range that the DCV control output wire will open and close an outdoor air damper. Use this feature to test State of California Demand Control Ventilation Systems.

Select 0/10 Volt or 2/10 Volt output for DCV control.

The second PPM input fields are used to set the range of LED lights on the display. When CO2 levels are below the low input value, the LED will show GREEN. CO2 levels between low and high values will be ORANGE, and above High will be RED. CO2 LED presets are based on California AB 841.

A Damper test is provided to confirm correct wiring and operation. Input is shown as a percentage. At 100% the damper will be fully open and 0% fully closed.

Use “Force calibration” to manually calibrate. By entering a known PPM value, the unit will use this value as the current baseline of operation.

