# CERV2 Remote Touchscreen Setup and Installation Guide



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## Controller Overview

The CERV2 Remote Touchscreen Controller puts control of your indoor air quality literally into your hands, providing a gateway to the most advanced air quality management system available today. While the CERV uses complex algorithms and computations to optimize your indoor air quality, the touchscreen interface was built to be simple, easy to read, and intuitive. From the controller, you can easily view real time air quality and comfort conditions in your home and configure the CERV's settings or auxiliary devices. Refer to the CERV Operation Manual for more information on the CERV's system components, modes of operation, and recommended settings.

The CERV2 Remote Touchscreen Controller may be operated as a desktop device, with power supplied by the included USB cable and power supply, or it may be mounted to a wall with the included mounting screws.  In the wall-mount configuration, power may either be supplied by the USB connection on the bottom of the screen, or hardwired through the wall.

## What's Included



| Remote Touchscreen Controller (Black or White) | USB-C to USB-A Power Cable (6ft) | USB-A Power Supply | Mounting Screws & Drywall Anchors |

## Specifications

| SKU | Wireless-touchscreen-2 |
| --- | --- |
| Input | 5V DC, 0.2A (USB-C or interior wire terminals) |
| Dimensions | Desktop: 4.1" x 3.1" x 2.5" (104mm x 79mm x 64mm)<br>Wall-Mount: 4.1" x 2.9" x 0.9" (104mm x 74mm x 23mm) |
| Weight | Desktop: 9.7oz (275g)<br>Wall-Mount: 5.1oz (145g) |
| Screen | Capacitive Touch, 3.5" 480 x 320 pixel resolution |
| Communication | 902MHz, 80ft Typical Range<br>Contains FCC ID: SZV-TCM515U<br>The enclosed device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (i.) this device may not cause harmful interference and (ii.) this device must accept any interference received, including interference that may cause undesired operation. |
| Operating Conditions | For indoor use only |

## Connecting the Remote Touchscreen Controller

The remote touchscreen uses a local wireless signal to communicate with the CERV. While the wireless network used is often robust enough to allow access throughout the entire home, it is recommended to pair and test the touchscreen near the CERV before installing it in a permanent location. **If the touchscreen is to be wall-mounted, it is highly advisable to first power it in the default desktop mount configuration in the location where it is to be permanently mounted to ensure that it has good communication with the CERV2 before the final installation.** An optional CERV Wireless Signal Repeater can be used to increase signal strength for a desired remote touchscreen location.
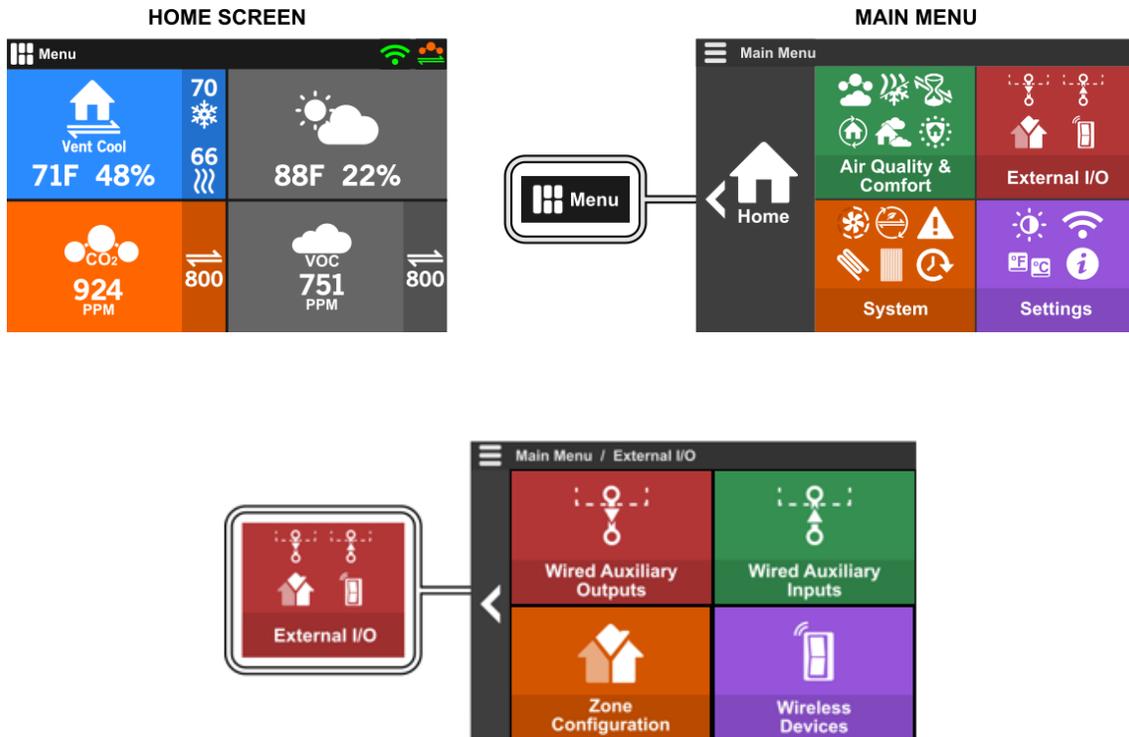
To pair the wireless touchscreen controller with the CERV, make sure that both the touchscreen and CERV are powered. If the screen has previously been paired to the CERV it should link automatically and display CERV Successfully Linked.
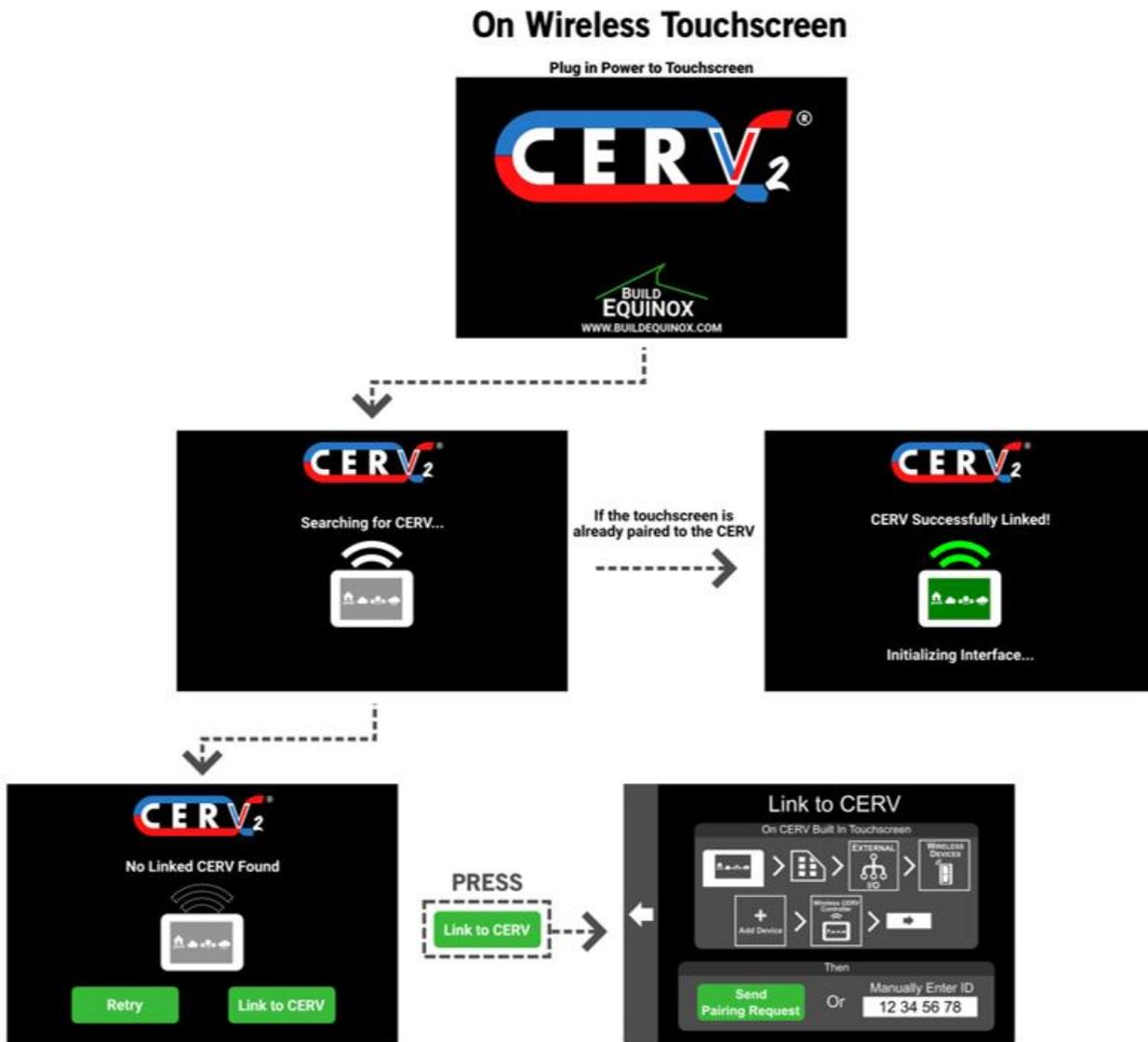


If the remote touchscreen cannot find a linked CERV, you can either press **Retry** to try to find a previously linked CERV again or press **Link to CERV** for a new pairing. After reaching the Link to CERV screen, __STOP__, leave the remote touchscreen on this screen and now move to the base CERV2's touchscreen to put it into pairing mode so the two can be linked together.  Each remote touchscreen can only link to one CERV system, so use the CERV2 that you want paired to the remote touchscreen.

Follow the instructions below to navigate to the Wireless Devices screen on the base CERV. Depending on your base CERV's touchscreen software version, the interface may slightly differ.

**Current Touchscreen Interface**

HOME SCREEN                                                                MAIN MENU





**Legacy Touchscreen Interface**

A new Wireless Device will be added for the remote touchscreen. In the wireless Device overview, **Add Device** and then choose **Wireless CERV Controller**. You may now pair the touchscreen with the green **Send Pairing Request** button on the wireless remote touchscreen. The Device ID should then appear in the box on the CERV's touchscreen. Alternatively, the wireless touchscreen's Device ID may be manually entered (ID shown on the wireless touchscreen's Link to CERV screen). You may then finish by naming the touchscreen.
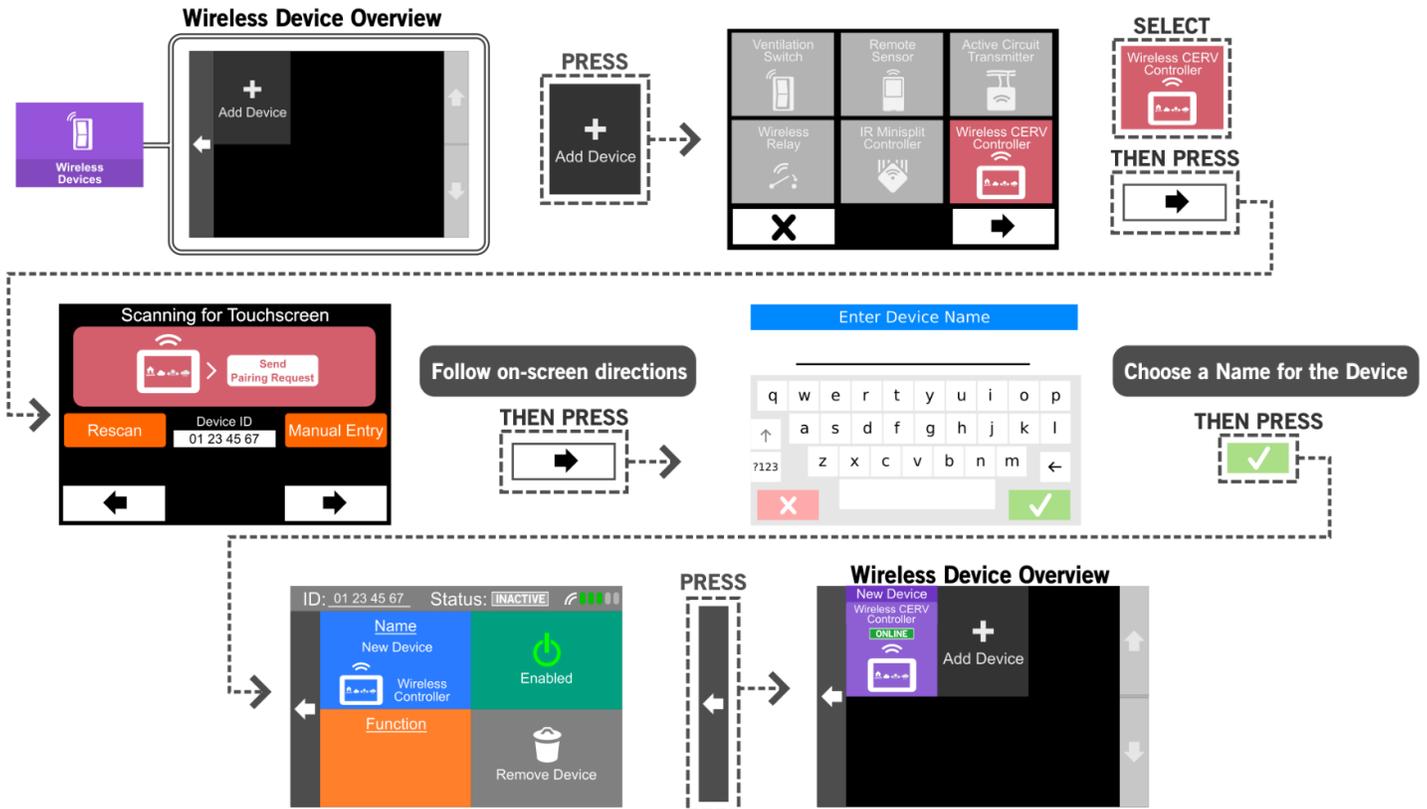


Once the wireless touchscreen is paired, it will start receiving data from the CERV and configuration screens will be active. On the home screen of the wireless touchscreen controller, the "connected" icon will change to show the following icon: 
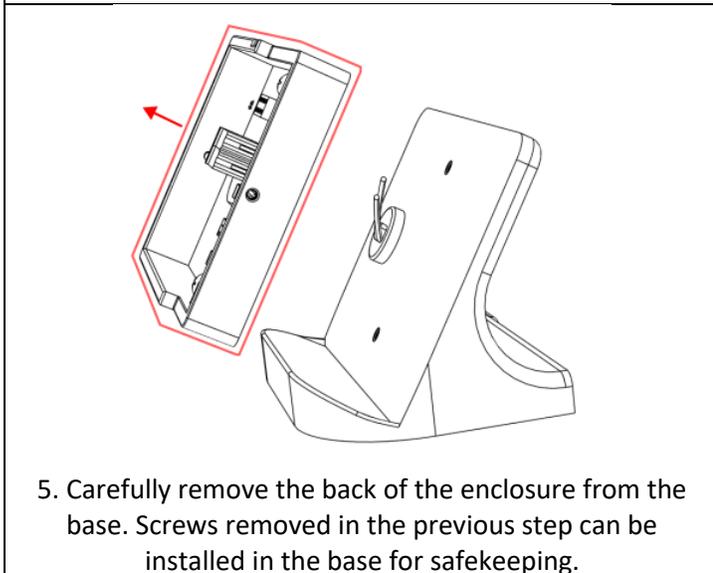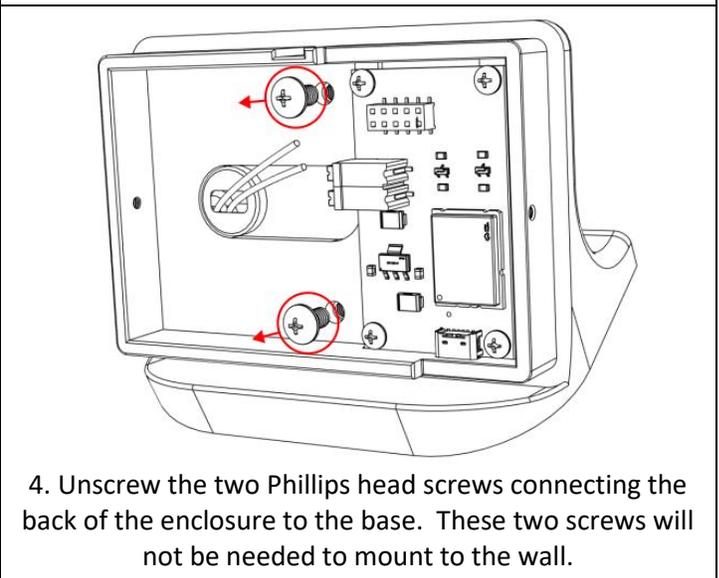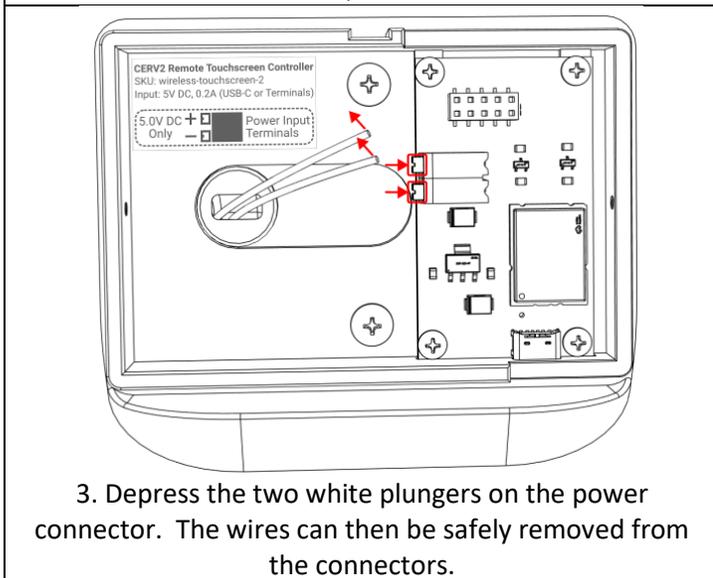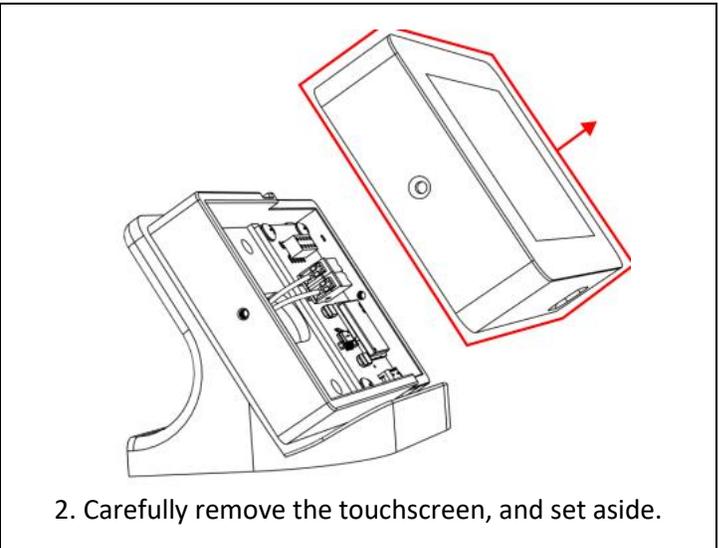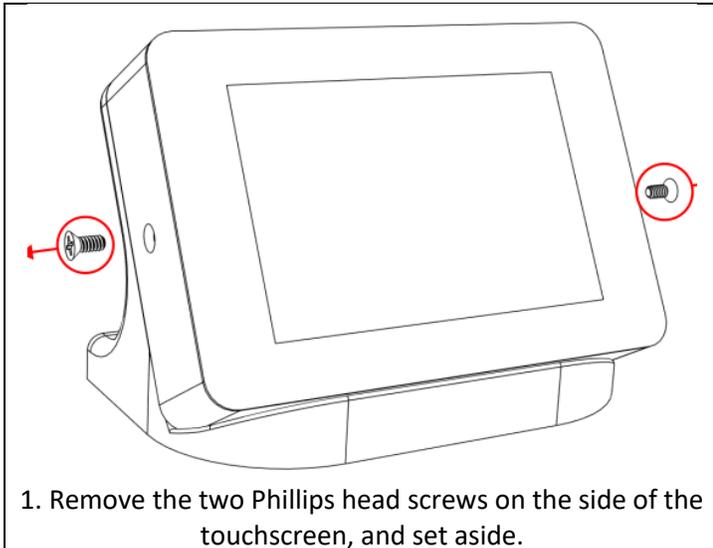
## Installation – Desktop
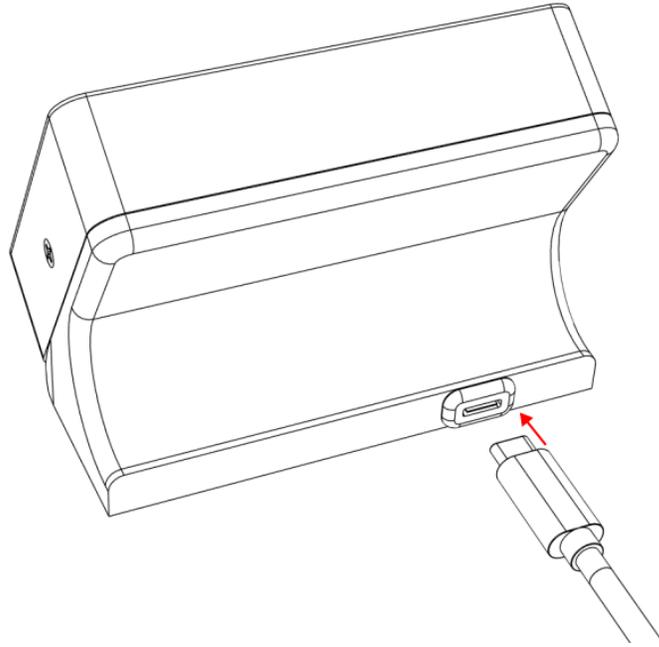
Plug the included USB cable into the USB-C port on the back of the touchscreen base.  The USB Power supply may be plugged into any standard 110VAC wall outlet.

# Installation – Wall Mount

**Disassemble the desktop enclosure**



1. Remove the two Phillips head screws on the side of the touchscreen, and set aside.



2. Carefully remove the touchscreen, and set aside.



CERV2 Remote Touchscreen Controller
SKU: wireless-touchscreen-2
Input: 5V DC, 0.2A (USB-C or Terminals)

5.0V DC Only / Power Input Terminals

3. Depress the two white plungers on the power connector. The wires can then be safely removed from the connectors.



4. Unscrew the two Phillips head screws connecting the back of the enclosure to the base. These two screws will not be needed to mount to the wall.



5. Carefully remove the back of the enclosure from the base. Screws removed in the previous step can be installed in the base for safekeeping.

**Determine Mounting Location**

--------------------------------------------------------------------------------------------------------------------



5/8"
(15.9mm)

Available Wire
Entry Hole Area

$1\ ^{13}/_{16}$"
(46mm)

$1\ ^{5}/_{8}$"
(57.2mm)

Drywall Anchor Hole Size: 3/16"

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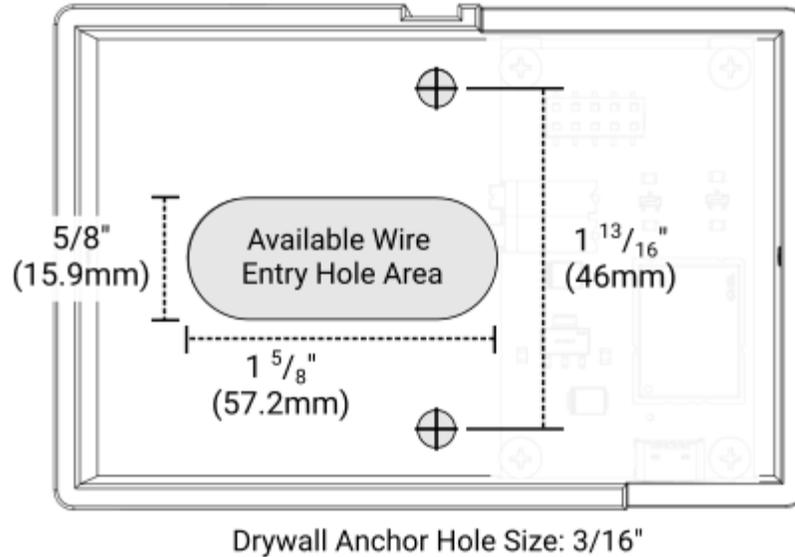
After the ideal location for the touchscreen is identified, use the above guide to mark the mounting holes and wire entry location (if hardwiring 5V DC power to the interior terminals).  When mounting to drywall, use the included drywall anchors.  The image above is at 1:1 scale, and may be used as a template with the dotted lines for leveling.

There are two options for supplying power to the touchscreen:

A.  Wall-Mount with Hardwired 5V DC Power:  In this configuration, power may be run through the wall by a 2-conductor (22ga) cord (not supplied) and connected through the back of the touchscreen enclosure to the internal power terminals.
B.  Wall-Mount with included USB-C cable: In this configuration the included USB-C cable may be used to supply power to the touchscreen, using the external USB-C port at the bottom right corner of the touchscreen enclosure.

Instructions for the two methods may be found on the following pages.

**Option A: Wall-Mount with Hardwired 5V DC Power**

Note: this installation method should be done only by those comfortable with running wire through wall cavities. Wire and hardwired power supply for this type of installation are not supplied with the touchscreen.

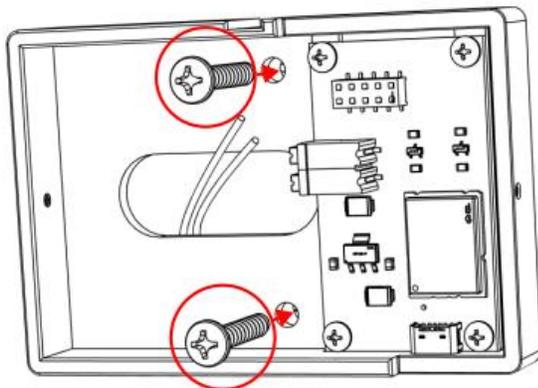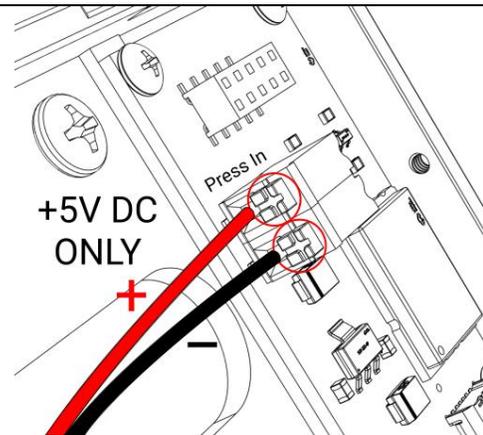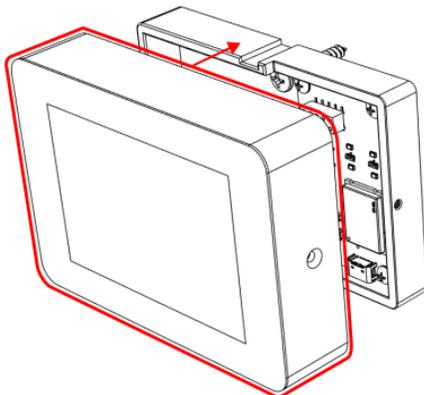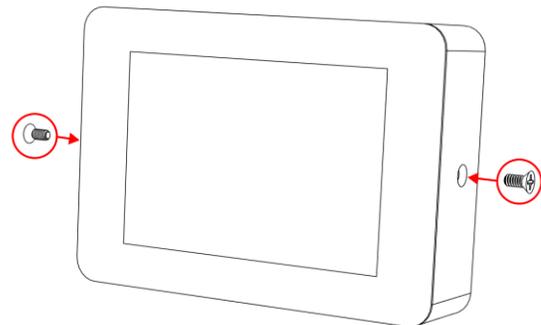| Example – USB With Pigtails | Example – hardwired power supply |
|---|---|
|  |  |
| Like a home alarm system: if the touchscreen is installed on the same wall cavity as an outlet, you may fish a USB cable with bare wire ends through the wall cavity. The USB-A connector then plugs into the supplied USB Power Supply, and the bare wires attach to the touchscreen. | If the power supply for the touchscreen must be located farther away from the touchscreen, or no outlet is nearby, a dedicated 5V DC power supply may be used along with 2-conductor 22ga wire to provide power. |

| | |
|---|---|
|  |  |
| 1. After wire has been pulled through the wall, and pilot holes drilled / drywall anchors installed, secure the enclosure back to the wall using the included Phillips head screws. Hand-tighten until snug – <u>overtightening may result in cracking the plastic enclosure</u>. | 2. One wire at a time, depress the white plastic plunger on the circuit board's power connector, and then insert the bare end of the wire. Lightly wiggle the wire to ensure that it is secured. Ensure that there are no wire whiskers that could short and that wire polarity is correct. |
|  |  |
| 3. The touchscreen front may now be pressed on to the enclosure back. | 4. Re-install the two flat-head Phillips screws to secure the touchscreen front to the enclosure back. Finally, plug the power supply into an outlet or turn on the hardwired power supply to power the screen. |

**Option B: Wall-Mount with included USB-C cable**

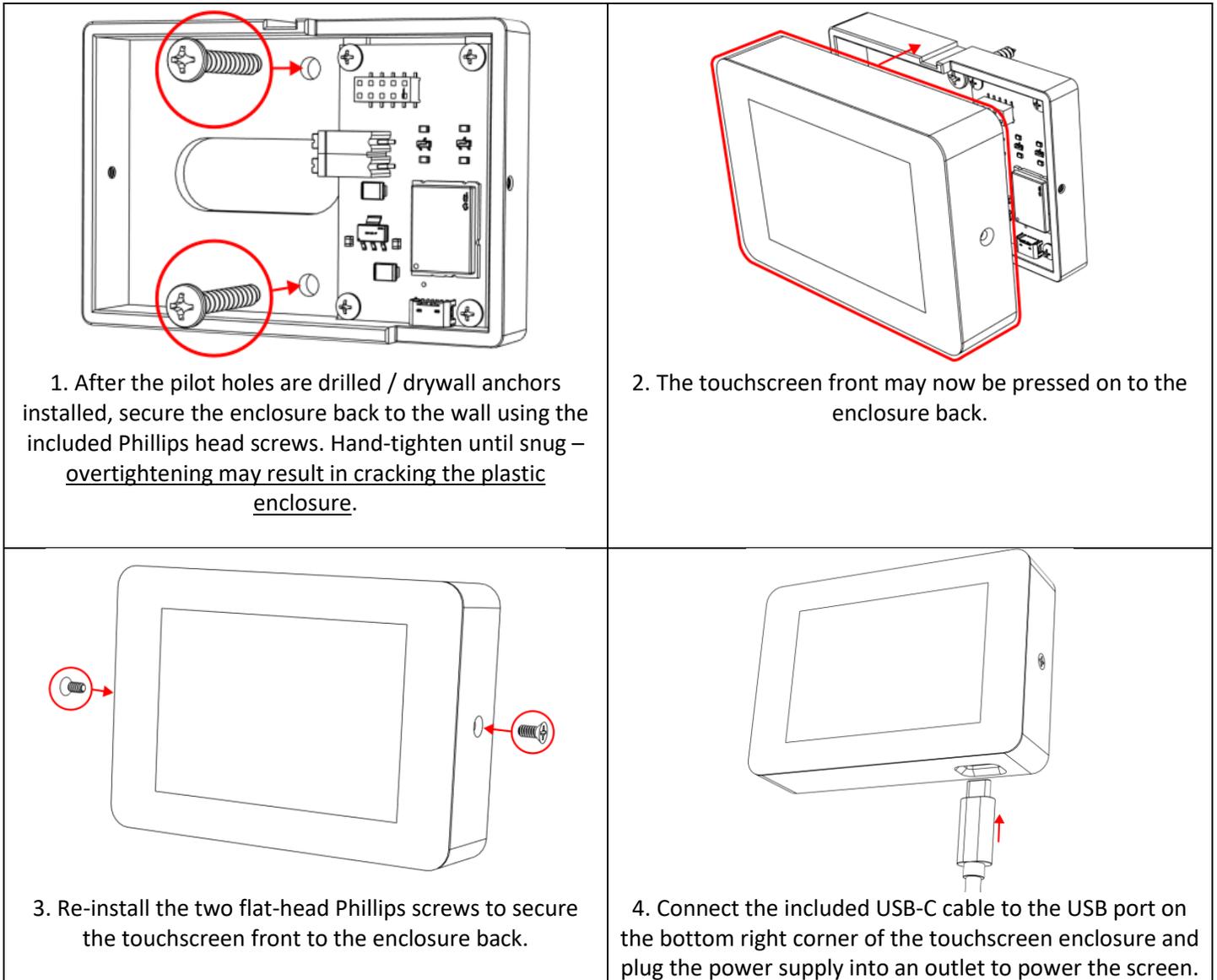| | |
|---|---|
| <br>1. After the pilot holes are drilled / drywall anchors installed, secure the enclosure back to the wall using the included Phillips head screws. Hand-tighten until snug – <u>overtightening may result in cracking the plastic enclosure</u>. | <br>2. The touchscreen front may now be pressed on to the enclosure back. |
| <br>3. Re-install the two flat-head Phillips screws to secure the touchscreen front to the enclosure back. | <br>4. Connect the included USB-C cable to the USB port on the bottom right corner of the touchscreen enclosure and plug the power supply into an outlet to power the screen. |

With this mounting method, the USB-C cable will be mounted exterior to the wall cavity.  It is important to protect the cable and touchscreen, so the use of wire clips is highly recommended.