

# 8" and 10" T4 Series In-Wall Touchscreen Power Box Installation Guide

## Supported models

- C4-T4IW8-POE 8" T4 In-Wall PoE Touchscreen Power Box
- C4-T4IW10-POE 10" T4 In-Wall PoE Touchscreen Power Box
- C4-T4IW8-AC 8" T4 In-Wall AC Touchscreen Power Box
- C4-T4IW10-AC 10" T4 In-Wall AC Touchscreen Power Box

## Introduction

This installation guide shows how to install the T4 touchscreen power box (sometimes called the "mid-box"). The power box is the physical interface between the touch screen and the wall box.

See other installation guides:

- Wall box for new construction: [ctrl4.co/wallbox-new](http://ctrl4.co/wallbox-new)
- Wall box for retrofit: [ctrl4.co/wallbox-retro](http://ctrl4.co/wallbox-retro)
- T4 POE installation guide: [ctrl4.co/t4-inwall-ig](http://ctrl4.co/t4-inwall-ig)
- T4 AC installation guide: [ctrl4.co/t4ac-ig](http://ctrl4.co/t4ac-ig)

## Box contents

- Power box (to power the T4 touchscreen)
- Two screws (to attach the power box to the wall box)
- Four screws (to attach to standard double-gang box)
- Two wire nuts (AC model only)

## Accessories available for purchase

- Packedge 802.3at/af Gigabit PoE+ Injector (PI-30AT), or Araknis Networks Gigabit PoE+ Injector (AN-ACC-INJ-POE-30W), each sold separately.
- Wall box options (sold separately)—Metal and plastic, for new construction or retrofit installations.
  - In-Wall Touchscreen Wall Box Kits - New Construction
    - Plastic (C4-NWB57C-P)
    - Metal (C4-NWB57C-M)
  - In-Wall Touchscreen Wall Box Kits - Retrofit
    - Plastic (C4-RWB57C-P)
    - Metal (C4-RWB57C-M)
- Third-party products:
  - Arlington™ Double Gang Non-Metallic Box - 4 x 4 (FSR404BL)

## Wall-box requirements

- Standard 2-gang wall box with a minimum depth of 42 mm (1.65") and a minimum internal volume of 410 cm<sup>3</sup> (25 in<sup>3</sup>)
- Wall box must be certified by a NRTL and be UL listed to QCMZ or QCIT category

## Warnings

**Warning!** Install in accordance with all national, state, and local electrical codes.

**AVERTISSEMENT!** Installez selon tous les national, état, et codes électriques locaux.

**Warning!** This product generates heat. The room must have adequate ventilation or the ability to dissipate heat effectively.

**AVERTISSEMENT!** Ce produit produit de la chaleur. La salle doit avoir à ventilation proportionnée ou la capacité d'absorber la chaleur efficacement.

**Warning!** Use this product only in dry locations.

**AVERTISSEMENT!** Employez ce produit seulement dans des endroits secs.

**Caution!** Improper use or installation can cause DAMAGE OF PROPERTY.

**AVERTISSEMENT!** L'utilisation ou l'installation inexacte peut causer DAMAGE DE PROPRIÉTÉ.

**Important!** Using this product in a manner other than outlined in this document voids your warranty. Further, Control4 is NOT liable for any damage incurred with the misuse of this product. Visit [snapone.com/legal](http://snapone.com/legal) for more information.

**Important!** Utilisant ce produit en quelque sorte autre que décrit dans ce document vide votre garantie. De plus, Control4 n'est pas responsable d'aucun dommage encouru avec l'abus de ce produit. Visitez [snapone.com/legal](http://snapone.com/legal) pour plus d'informations.

## Specifications

Model Numbers	C4-T4IWMB-AC or C4-T4IWMB-POE
<b>Network</b>	Ethernet or Wi-Fi <ul style="list-style-type: none"><li>• 802.11b/g/n 2.4 GHz</li><li>• 802.11a/n/ac 5 GHz</li><li>• Security: WEP, WPA/WPA2 PSK, 802.1x EAP, PEAP</li></ul> <b>Notes:</b> (1) While technically the touchscreen can use 802.11b, 802.11b is not supported. (2) 802.11n is recommended for best performance. Even with 802.11n, broadcasting to several devices will degrade Video Intercom response time and images. Broadcasting to additional devices will further degrade performance. See "Wireless Network Limitations."
<b>Power supply</b>	PoE: 13W peak (IEEE 802.3af) AC: 100-240VAC AC box output: 5V DC 7.5W rms (10W peak)
<b>Dimensions (W x H x D)</b>	127 x 119 x 45 mm (5.0 x 4.67 x 1.77")
<b>Weight</b>	0.13 kg (0.29 lb)
<b>Operating temperature</b>	0 to 40 °C (32 to 104 °F)
<b>Storage temperature</b>	-20 to 70 °C (-4 to 158 °F)

## Requirements

### Network

- **If using Ethernet:** Ethernet network installed and available that includes a gateway/router/switch. One Ethernet Cat 5/6 cable that runs from the Ethernet gateway/router/switch to the Ethernet connection in the touchscreen's wall box.
- **If using Wi-Fi:** Wireless network (IEEE 802.11b/g/n) installed and available with a wireless access point (AP). Security can be WEP, WPA/WPA2 PSK, 801.1x EAP, or PEAP.

### Power

- If using PoE:
  - Control4 PoE Injector (model #AC-POE1-B) or another third-party, UL/ANSI-certified PoE injector or switch.
  - Two Ethernet Cat 5/6 cables: (1) one that runs from the Ethernet gateway/router/switch to the PoE injector/switch and (2) one that runs from the PoE injector/switch to the Ethernet connection in the touchscreen's wall box.
- If using AC:
  - Access to in-wall AC power (neutral connection required).
  - A 14-gauge electrical wire long enough to pull between the touchscreen and the power source.

**Warning!** Use 16 AWG through 10 AWG only  
**AVERTISSEMENT !** Utiliser 16 AWG par 10 AWG uniquement.

**Warning!** For supply connections, use wires suitable for at least 60 °C (140 °F)  
**AVERTISSEMENT !** Utiliser des fils convenant à une température de 60 °C pour les connexions d'alimentation.

### Touchscreen placement

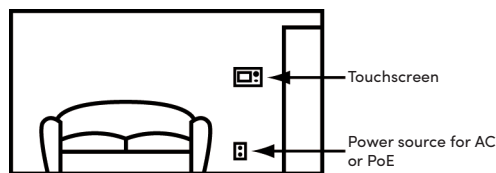
Place the touchscreen in a convenient location at eye level, typically near the entrance of the room, about 145 to 155 cm (57 to 61 inches) from the floor (Figure 1).

**Note:** Consider the camera on the panel and the height of the people in the home who will use the camera for Video Intercom.

**Important:** The top of the touchscreen must be mounted no higher than 2 m (6.6 ft.) above the floor.

**Important :** Le haut de l'écran tactile ne doit pas être monté à plus de 2 m (6,6 pi) au-dessus du sol.

Figure 1: Touchscreen placement



## Installation

**Important!** Before you can complete the instructions below, you must have an 8" or 10" Touchscreen wall box installed according to the documentation provided in the wall box kit. See "Accessories" for details.

**Important !** Avant de lire les instruction ci-dessous, il vous faut un support mural installé suivant la documentation fournie avec le kit du support mural. Plus de détails dans la partie << Accessoires >>.

**Important!** When cutting the opening for the wall box, **do not** cut the opening too large. Be conservative and cautiously enlarge it as needed.

**Important !** En coupant l'ouverture pour le support mural, ne faites pas une ouverture trop grande. Soyez prudent, et agrandissez la avec précaution.

## Power and network installation options

This device uses an Ethernet or Wi-Fi network connection and can be powered using PoE or AC power. Whichever method you use, you need to install only one cable going to the power box.

Choose one of the following options to install the power and network communication.

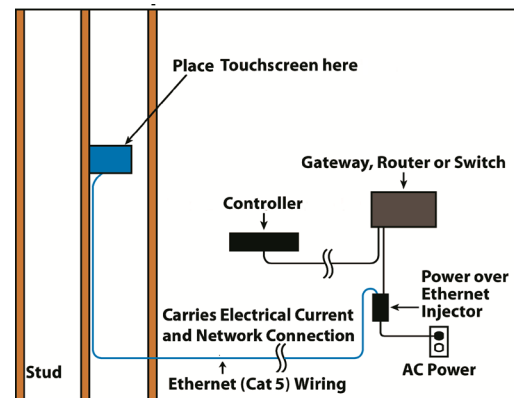
### Option 1: PoE power and Ethernet

PoE supplies DC power on the Ethernet cable using a PoE Injector (model #AC-POE1-B) or a PoE-enabled port on a network switch. The touchscreen also works with most third-party PoE injectors. In this configuration, both power and the network's data connection travel along the same cable.

#### To set up your PoE and Ethernet connection:

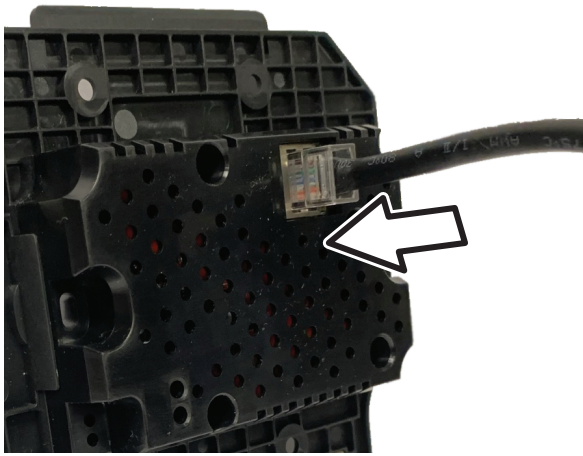
- 1 If you need to install a PoE injector, attach it between the non-PoE switch and the touchscreen, according to the instructions in the PoE injector's documentation (Figure 2).

Figure 2: PoE power and Ethernet



- a For the Control4 PoE injector, connect the injector to an AC outlet using the power cord.
- b Connect one of the LAN ports on the network switch to the PoE injector's LAN port using Cat 5/6 Ethernet cable.
- c Pull a cable going from the PoE injector's PWR LAN-OUT port to the location where you want to install the touchscreen, then through one of the touchscreen's left-side wall box knockout holes (Figure 3).

Figure 3: Insert Ethernet cable into power box



**Note:** The Ethernet port on the power box does not have functioning indicator LEDs.

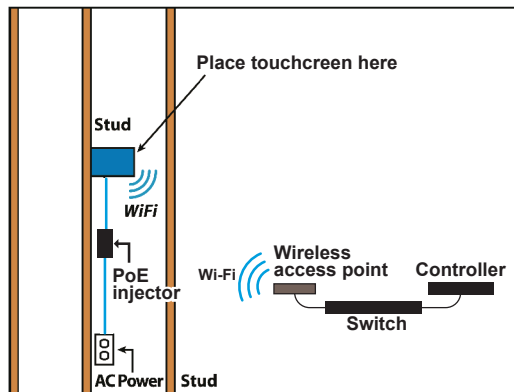
### Option 2: PoE power and Wi-Fi

If you're unable to run a network cable from the network switch to the touchscreen location, you can install a PoE injector to use household wiring as the power source, and run a network cable from the injector to the touchscreen power box. The touchscreen works with the Control4 PoE Injector or any compatible third-party PoE Injector. This configuration uses Wi-Fi for communication with the network.

#### To set up a PoE injector:

- 1 Attach the PoE injector between the non-PoE switch and the touchscreen, according to the instructions in the PoE injector's documentation (Figure 4).

Figure 4: PoE power and Wi-Fi



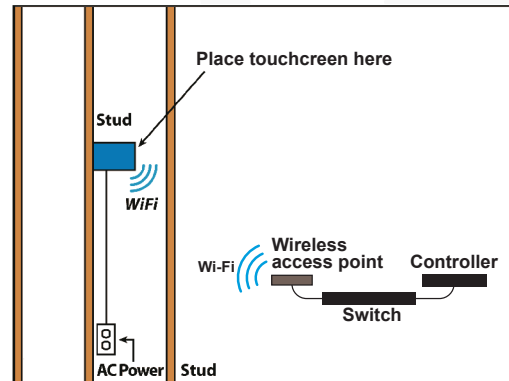
- a For the Control4 PoE injector, connect the injector to an AC outlet using the power cord.
- b Connect one of the LAN ports on the network switch to the PoE injector's **LAN** port using Cat 5/6 Ethernet cable.
- c Pull a cable going from the PoE injector's **PWR LAN-OUT** port to the location where you want to install the touchscreen, then through one of the touchscreen's left-side wall box knockout holes (Figure 3, above).

### Option 3: Wi-Fi with AC power

#### To connect AC power:

- 1 Place the touchscreen above a power source, for example, an outlet. Make sure the location is within distance of your Wi-Fi signal. (Figure 5).

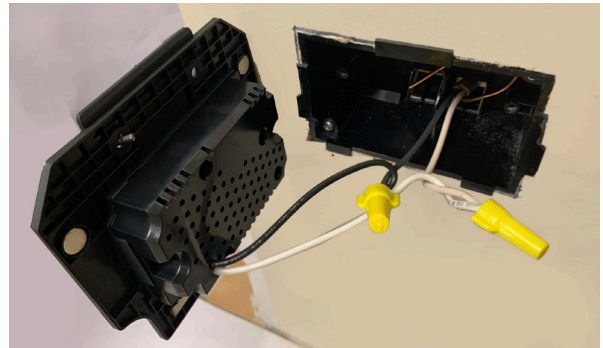
Figure 5: AC power with Wi-Fi



- 2 Prepare the plastic power box for installation into the wall box by inserting the AC power cable into the power box.

**Caution:** Use only 14 AWG wire for AC connections. For supply connections, use wires suitable for at least 60 °C (140 °F).

- 3 Connect the wires to the AC power source for the touchscreen according to national and local electrical codes. Installation may require alternative wires.



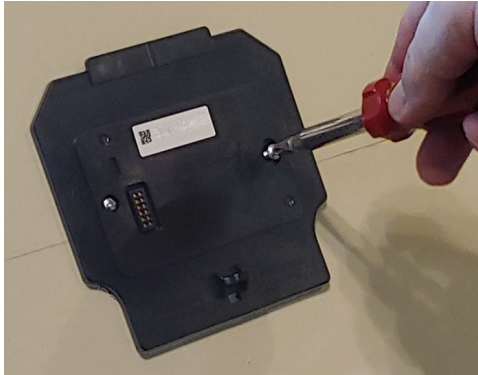
- 4 Pull the power cable through a right-side knockout hole of the wall box to the wire leads on the power box.
- 5 Strip the black and white power wire ends to 6 mm (about 1/4"), as necessary.
- 6 Use wire nuts to connect the AC power wiring to the two wired power leads from the power box.
- 7 If using a plastic wall box with an exposed bare copper ground, wrap the ground in electrical tape or heat shrink tape/tubing. If using a metal wall box, attach the ground wire to the wall box.

## Attach the power box and touchscreen

### To install the power box into the wall box:

- 1 Align and bend the wires to fit them inside the wall box.
- 2 Slide the power box into the wall box, then secure the power box to the wall box using the two screws provided (Figure 6).

Figure 6: Secure power box to wall box



**OR**, if using a standard double-gang wall box, use the four screws provided (Figure 7).

Figure 7: Secure power box to wall box



**Caution:** Do not use an electric driver to tighten the screws. Overtightening can result in the power box becoming slightly warped, resulting in a poor electrical docking connection. Use only a hand screwdriver to tighten the screws.

**Tip:** If overtightened screws result in the power box warping, loosen the screws until the power box is flush to the wall.

**Note:** The power box must be installed straight, level, and flush to the wall. The mounting holes of the power box may be drilled out using a 5 mm (7/32") drill bit to align with the holes in the wall box. This may be needed if the wall box is not installed squarely or is misaligned during installation of drywall

- 3 See your touchscreen installation guide for information on touchscreen setup:

- T4 POE installation guide: [ctrl4.co/t4-inwall-ig](http://ctrl4.co/t4-inwall-ig)
- T4 AC installation guide: [ctrl4.co/t4ac-ig](http://ctrl4.co/t4ac-ig)

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## Additional resources

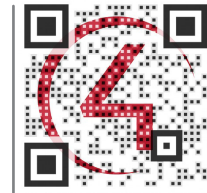
### The following resources are available for additional support.

- Knowledgebase and forums in Technician Community: [tech.control4.com](http://tech.control4.com)
- Technical Support
- Control4 website: [www.control4.com](http://www.control4.com)
- Composer documentation in its online help.

## Warranty and legal notices

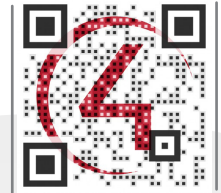
Find details of the product's Limited Warranty and other safety, patent, and legal resources at [snapone.com/legal](http://snapone.com/legal) or request a paper copy from Customer Service at **866.424.4489**.

WALL BOX INSTALL: NEW CONSTRUCTION



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WALL BOX INSTALL: RETROFIT



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