

Fan Speed Controller Installation Guide

Supported model

- C4-4SF120 Fan Speed Controller

Introduction

The Control4® Fan Speed Controller operates independently or as part of a Control4 home automation system to provide four quiet speeds plus an Off setting for standard paddle-type ceiling fans. It installs in a standard back box using typical wiring standards and communicates to the Control4 system using a wireless connection.

Box contents

- Fan Speed Controller
- Wire nuts
- Warranty card
- Fan Speed Controller Installation Guide* (this document)

Specifications and supported load types

The specifications are described below.

Model number	C4-4SF120-xx
Power requirements	120V AC +/-10%, 50/60 Hz This device requires a neutral connection. See the "Sample Wiring Configurations" later in this guide.
Power consumption	500mW
Load types and ratings	
Supported load types	Single, paddle-type ceiling fan
Maximum load	2A
Environmental	
Operational temperature	0 to 40 °C (32 to 104 °F)
Humidity	5% to 95% non-condensing
Storage	-20 to 70 °C (-4 to 158 °F)
Miscellaneous	
Control communications	Zigbee, IEEE 802.15.4, 2.4 GHz, 15-channel spread spectrum radio
Wallbox volume	5.75 cubic inches
Weight	0.05 kg (0.12 lb.)
Shipping weight	0.08 kg (0.18 lb.)

Warnings and considerations



WARNING! Turn OFF electrical power before installing or servicing this product. Improper use or installation can cause SERIOUS INJURY, DEATH or LOSS/DAMAGE OF PROPERTY.

ATTENTION! Coupez l'alimentation électrique avant d'installer ou de réparer ce produit. Une mauvaise installation ou utilisation peut entraîner des blessures graves, décès ou perte / dommages à la propriété.



WARNING! This device must be protected by a circuit breaker (20A max).

ATTENTION! Cet appareil doit être protégé par un disjoncteur (20A max.).



WARNING! Ground this device in accordance with the National Electric Code (NEC) requirements. DO NOT rely solely upon the yoke plate's contact with a metal back box for adequate grounding. Use the device's ground wire to make a secure connection to the safety ground of the electrical system.

ATTENTION! Cet appareil doit être en conformité avec le Code national de l'électricité (NEC). Ne comptez pas uniquement au contact de la plaque avant avec un boîtier mural métallique pour la mise à la terre adéquate. Utilisez cet appareil à la terre de l'appareil pour établir une connexion sécurisée au système électrique.



IMPORTANT! This device must be installed by a licensed electrician in accordance with all national and local electrical codes.



IMPORTANT! If you are unsure about any part of these instructions, consult a qualified electrician.



IMPORTANT! Use this device only with copper or copper-clad wire. Do not use aluminum wiring. This product has not been approved for use with aluminum wiring.



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. See "Troubleshooting."



IMPORTANT! Do NOT use a power screwdriver to install this device. If you do, you may overtighten the screws and strip them. Also, overtightening the screws may interfere with proper button operation.



IMPORTANT! This is an electronic device with intricate components. Handle and install with care!



IMPORTANT! This device must not be connected to a bathroom exhaust fan. This type of motor is not compatible.



IMPORTANT! When used in conjunction with an Auxiliary Keypad (C4-KA-xx), the wire connecting the Auxiliary Keypad to the Fan Speed Controller must not exceed 150 feet (45 m) at 120VAC, and 100 feet (30 m) at 277VAC.

Installation instructions

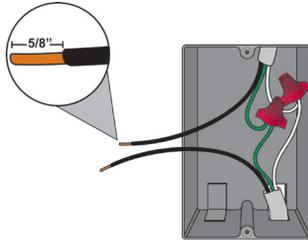
- Ensure that the location and intended use meet the following criteria:
 - If the ceiling fan being controlled is a fan/light combination, there must be separate load wires for the fan and light from the control location. A separate Control4 dimmer or switch must be used if the light is to be controlled. Do not use the Fan Speed Controller to control the light.
 - Do not exceed the load capacity requirements of the Fan Speed Controller. Refer to the load ratings in the specifications above for details.
 - Install in accordance with all national and local electrical codes.
 - The range and performance of the wireless control system is highly dependent on the following: (1) distance between devices; (2) layout of the home; (3) walls separating devices; and (4) electrical equipment located near devices.

- Turn off the local electrical power by either switching off the circuit breaker or removing the fuse from the fuse box. To ensure the wires do NOT have power running to them, use an inductive voltage detector.

 **NOTE:** The back box wiring shown in this document is an example. Your wire colors and functions may differ. If you are not sure which wires are the Line In/Hot, Neutral, Load, Traveler, and Earth Ground wires, have a trained electrician perform the installation.

- Prepare each wire. Wire insulation should be stripped back 16 mm (5/8 in.) from the wire end (see Figure 1).

Figure 1. Strip wire insulation



- Identify your wiring application, and then see the appropriate wiring diagram in the "Sample Wiring Configurations" section below.

 **IMPORTANT!** Not grounding this product, as described in the section "Warnings and Considerations," may result in an installation less immune to damage caused by electrical disturbances, such as ESD or lightning, and may void the warranty.

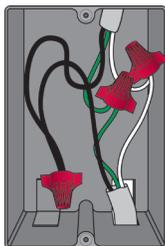
- Identify and connect the Fan Speed Controller wires to the back box wires using the wire nuts.

 **IMPORTANT!** The yellow wire is not a traditional traveler. It cannot directly power a load. It must be used only to connect to a Control4 Auxiliary Keypad. See "Sample Wiring Configurations."

 **TIP:** If you are using a Control4 push-on (screwless) faceplate in a multi-gang installation, attach the black faceplate sub-plate to all of the devices that will be installed into the wallbox prior to attaching the devices to the wallbox. This will help ensure that all the devices are properly aligned and on the same plane after installation.

- Fit the wires back into the back box. Bend the wires in a zigzag pattern so that they easily fold into the back box (Figure 2).

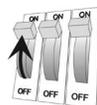
Figure 2. Bend the wires



- Align the Fan Speed Controller to the back box (the load rating label should be at the bottom) and fasten it with screws. Tighten the screws until the back side of the yoke plate is even with the wall surface, but no further. Overtightening can warp the dimmer and cause mechanical malfunction.

- Install the Control4 Faceplate following the instructions in the *Faceplate Installation Guide* or attach a standard Decora-style faceplate.

- Turn ON power at the circuit breaker or replace the fuse from the fuse box.



Operation and configuration

On initial power up, all status LEDs on the Fan Speed Controller will illuminate green indicating that the device has power. To set up the Fan Speed Controller for use with a Control4 system, refer to the *Composer Pro User Guide*.

 **IMPORTANT!** If the fan speed can be adjusted via a pull chain, remote control, etc., set the fan to high speed using that method prior to operating with the Control4 Fan Speed Controller.

To operate the Fan Speed Controller as a stand-alone device:

- Click the **top** button to turn the fan on at high speed.
- Click the **second** button to turn the fan on at medium-high speed.
- Click the **third** button to turn the fan on at medium speed.
- Click the **fourth** button to turn the fan on at low speed.
- Click the **bottom** button to turn the fan off.

Button tap sequences

The button tap sequences are defined in the table below. Button tap sequences that require a single button should use the top button.

Function	Button sequence
Identify	4
Zigbee channel	7
Reboot	15
Factory reset	9-4-9
Leave mesh and reset	13-4-13

Troubleshooting

If the fan does not turn on:

- Ensure at least one LED on the face of the Fan Speed Controller is lit.
- Ensure the light bulb is not burned out and is screwed in tightly.
- Ensure that the circuit breaker is not turned OFF or tripped.
- Check for proper wiring (see "Sample Wiring Configurations").
- For help on the installation or operation of this product, email or call the Control4 Technical Support Center. Please provide your exact model number. Contact support@control4.com or see the web site www.control4.com.

Care and cleaning

- Do NOT paint the Fan Speed Controller or its wall plate.
- Do NOT use any chemical cleaners to clean the Fan Speed Controller.
- Clean surface of the Fan Speed Controller with a soft damp cloth as needed.

Warranty and legal notices

Find details of the product's Limited Warranty at snapav.com/warranty or request a paper copy from Customer Service at 866.424.4489. Find other legal resources, such as regulatory notices and patent information, at snapav.com/legal.

Sample wiring configurations

Figure 3. Single device location

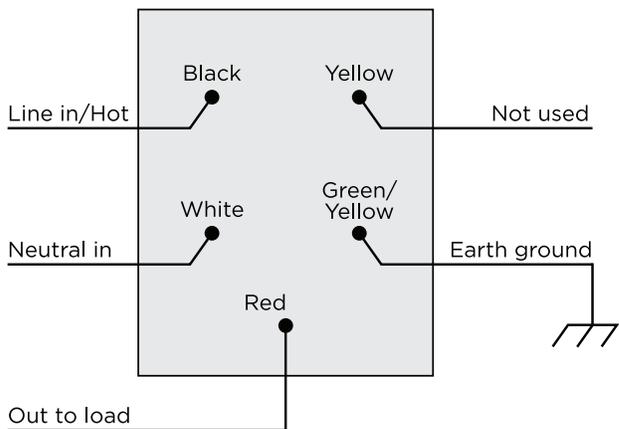


Figure 5. Multiple device location using Configurable Keypad

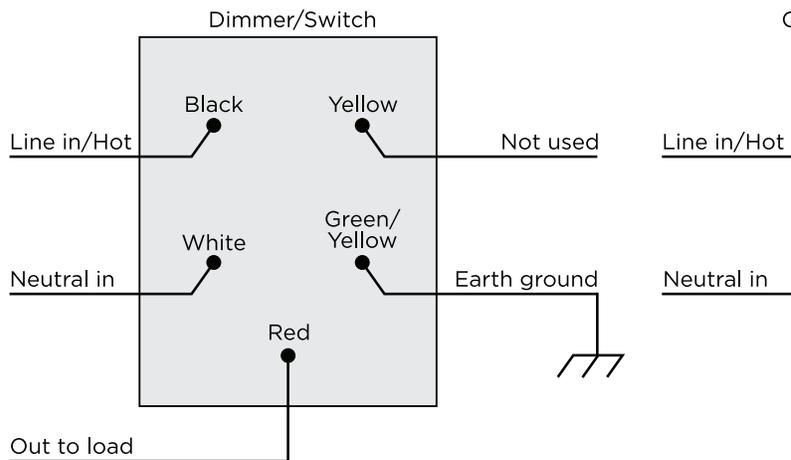
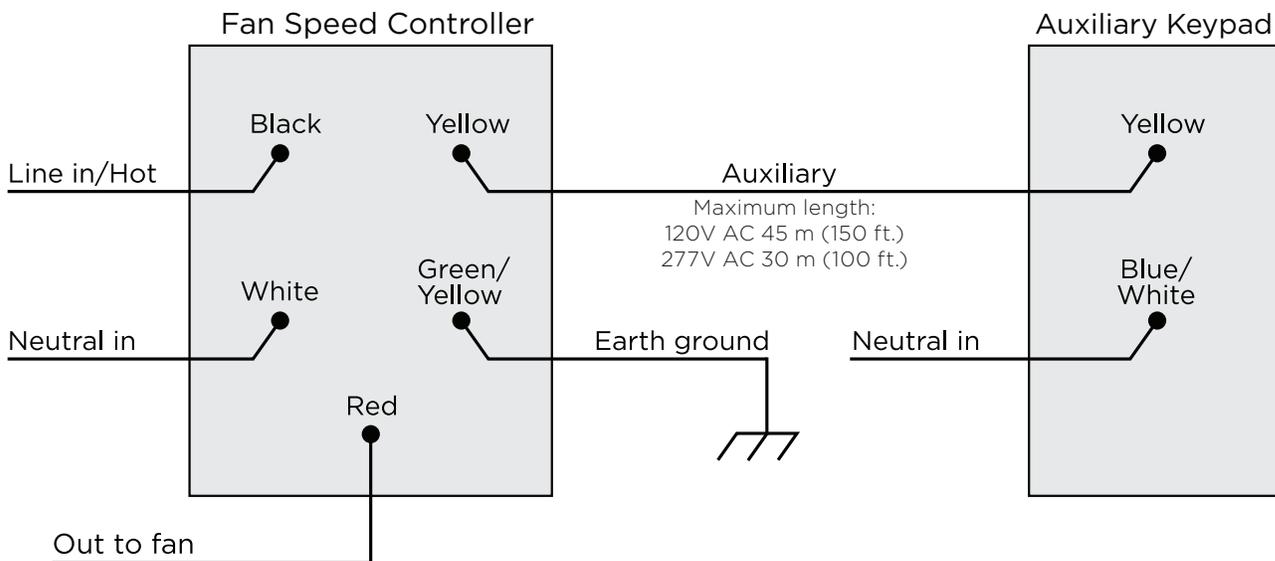


Figure 4. Multiple device location using Auxiliary Keypad



IMPORTANT! When used in conjunction with an Auxiliary Keypad (C4-KA-xx), the wire connecting the Auxiliary Keypad to the Fan Speed Controller must not exceed 45 m (150 ft.) at 120V AC, and 30 m (100 feet) at 277V AC.

Configurable Keypad

