



# 3-Way/Multi-Switch Installation Guide

3-Wire Switches & Dimmers

#### A WARNING: RISK OF ELECTRIC SHOCK

This product installation requires handling 120 volt wiring. Follow each step carefully.

If any concerns handling wiring, hire a qualified electrician. Ensure all work meets applicable local and national codes.

### **Simple DIY Setup**











### **Compatibility Requirements**

Rating 120V AC 60Hz

Neutral wire is not required (Wire is usually white or grey and is not required)

Ground wire is required (Wire is usually green, green with a yellow stripe, or copper)

Wi-Fi 802.11 b/g/n @ 2.4 GHZ is required

Works with halogen, incandescent and LED bulbs, including C by GE Smart Bulbs.

LED up to 1.25 amps

Incandescent/halogen up to 5 amps

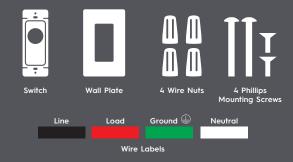
#### ! IMPORTANT NOTE ON 3-WAY WIRING:

Some lights have one wall switch, while others are controlled by two or more wall switches (such as stair lights, which have a switch at both the top and bottom of the stairs). If your lights have more than one switch (called a 3-way), we've created instructions for how to install and enable the capability.

Visit cbyge.com/switch-support for 3-way installation instructions and how-to-videos.

### Let's Do It

#### **INCLUDED**



#### YOU'LL NEED





Approximately
30 minutes of your day
to install and setup
the switch

### You Got This!

And we're here to help.
For in-depth instructional videos
and a guided tour through the installation,
go to cbyge.com/switch-support.

Installing C by GE smart switches on a 3-Way or Multi-Way circuit requires ALL switches on the same circuit to be a C by GE smart switch. 3-way circuits can vary depending on the method used at the time the home was wired.

The instructions below are based on the most commonly used method.

If your wiring does not line up with these instructions, we recommend contacting C by GE Customer Service before removing wires from the existing switch. Although our team is trained to help with these installs, there are some situations that could require help from a licensed electrician. For the best result when calling support, be prepared to provide the customer service team with photos of the wiring so the switch terminals and wires can be identified.

NOTE: When installing a 3-Way with our 3-Wire, No-Neutral switches, your traveler wires can be used interchangeably. In this example, we'll use the red traveler with line and the black traveler with load, but you can switch that if you'd like. We'll explain more further down.

#### BEFORE YOU DO ANYTHING: Step 1

### **Turn Off The Power!**

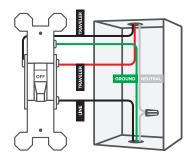
- 1. Turn off the power for the switch location at the circuit breaker box.
- 2. Remove wall plates and mounting screws for both switches you are replacing.
- 3. Gently pull switches out from their boxes so wiring can be viewed.
- Test the wires with a voltage tester to ensure power is off. If multiple switches
  are in the same box, test them as well. Additional breakers may need to be
  turned off.

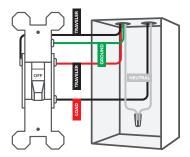


### **Check For Compatible Wiring**

- Do not disconnect any wires at this stage. We recommend taking a picture of your wiring before proceeding for future reference.
- Wiring colors may vary. In this diagram, ground is green. The red and black wires connected to brass terminals are traveler wires. The wires connected to the black (common) terminals are the line and load (we'll identify which one is which in STEP 4).
- 3. If all necessary wiring is present, you can proceed with the installation.

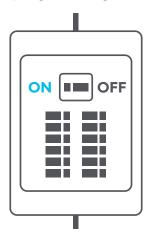
#### Wiring should look similar to this:





### Restore Power

- 1. Restore power to the switches at the circuit breaker box.
- Because the wires are now disconnected and exposed, be careful not t touch the wires with anything but a voltage tester.



### Identify The LINE And LOAD

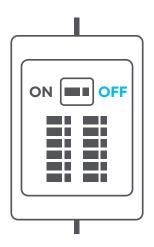
 Make sure that the light is off. Then, check the black common terminals on both switches using a voltage tester. One of them should test positive for voltage, and the other one should not.

> Wire that has voltage = LINE Wire that doesn't have voltage = LOAD

The wire box that houses your line wire will be your line side box/switch while the box that houses your load wire will be your load side box/switch.

## Turn Off The Power!

Turn off the power for the switch location at the circuit breaker box.



### **Identify And Label Wires**

 Before disconnecting the wires from the switch, label each wire with the provided labels.

#### Line:

Based on STEP 4, label the LINE wire that did test positive for voltage.

#### Load:

Based on STEP 4, label the LOAD wire that did not test positive for voltage.

#### Neutral:

Standard switches do not require them, but the neutral wires may be present in the box. C by GE 3-wire switches and dimmers do not require Neutral wires to operate. If Neutral wires are present in the junction box, cap the neutral wires and do not connect to the C by GE switches or dimmers.

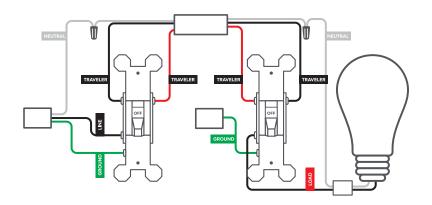
#### Ground:

These are usually an individual or group of bare copper or green wires that are sometimes connected to the green ground terminal of the original switch. If not connected to the original switch, they should be in the back of the box.

#### Travelers:

The traveler wires are connected to the brass screws on the original switches. These wires are in the same sheathed cable and should be different colors that can vary between black, white, or red. One of these wires will be used to provide power to the C by GE Smart Switch on the load side of the circuit. C by GE 3-wire switches require both travelers to be used. We'll explain how further down.

### **Identify And Label Wires**

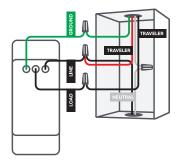


### **Install The Switches**

 Now that you have successfully identified and labeled each wire, you can disconnect the wires and remove the original switches.

#### **Line Side**

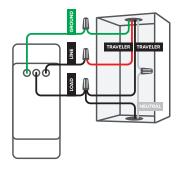
- Connect the LINE wire and one of the TRAVELER wires from the wall to the black LINE wire on the C by GE smart switch. In this example, we used the red traveler but you can use either one.
- Connect the second remaining TRAVELER wire from the wall to the black LOAD wire on the C by GE Smart Switch. For our example, we'll use the black traveler.
- Connect the GROUND wire from the wall to the green GROUND wire on the C by GE Smart Switch.



### **Install The Switches**

#### **Load Side**

- Connect the same TRAVELER you connected to LINE on the first switch to the LINE wire on this switch. We used the red wire in our example.
- Connect the LOAD wire from the wall and the same TRAVELER that we connected to the LOAD on the first switch to the LOAD on this switch. We used the black traveler in our example.
- Connect the GROUND wire from the wall to the green GROUND wire on the C by GE Smart Switch.



### **Check For Functionality**

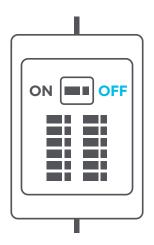
IMPORTANT: Only the load switch will turn the light on/off until the two smart switches are linked in the C by GE app. The dimmer buttons will not work on either switch until the two smart switches are linked in the C by GE app. We will handle the app setup in STEP 12.

- Restore power to the switches at the circuit breaker box.
- The light ring on both switches will flash blue indicating the switches are wired correctly. If you see this, proceed to STEP 9.
- 3. Light ring may not illuminate if wired incorrectly.
- 4 The light ring will flash red if the circuit is overloaded. Max load rating is 150W for LED and 450W for incandescent/halogen.
- 5. If the light rings don't turn on:
  - Check that the air gap on the bottom of switch is fully inserted (dimmer/motion switches only).
  - · Check that power to the switch is back on at the breaker.
  - Turn power off at the breaker, return to the switch to confirm the wires are securely and properly wired according to the installation guide.

### BEFORE YOU DO ANYTHING: Step 9

### **Turn Off The Power!**

1. Turn off the power for the switch location at the circuit breaker box.



### **Secure The Switch**

- 1. Neatly push the wires back into the boxes.
- 2. Using the screws provided, secure the switch to the wall until level and flush.
- 3. Using the screws provided, secure the face plate bracket.
- 4. Snap the face plate cover onto the bracket.

### **Restore Power**

1. Restore power to the switches at the circuit breaker box.



# Enable 3-Way Control in The C by GE App

NOTE: Only the Load switch will turn the light on/off until the two smart switches are linked in the C by GE app. Dimmer mode can be enabled during the setup.

- 1. Download the C by GE app.
- Add the devices to the C by GE app, following all instructions given during setup.
- Add both switches to the same Room in the C by GE app. They must be placed in the same Room to enable three-way control.
- The light ring for each switch should change from flashing blue to solid white when setup has successfully completed and the switch is connected via WiFi.
- 5. Test that your 3-way switches operate correctly.