GFCI RECEPTACLE

User Manual

Intertek

Please read these instructions completely before starting installation.

Test GFCI once a month

⚠ CAUTION

- To prevent severe shock or electrocution, always turn the power OFF at the service panel before working with wiring.
- Use this GFCI receptacle with only copper or copper-clad wire. Do not use with aluminum wire.
- Do not install this GFCI receptacle on a circuit that powers life support equipment because if the GFCI trips it will shut down the equipment.
- For installation in wet locations, protect the GFCI receptacle with a weatherproof cover that will keep both the receptacle and any plugs dry.
- Must be installed in accordance with national and local electrical codes.

Introduction

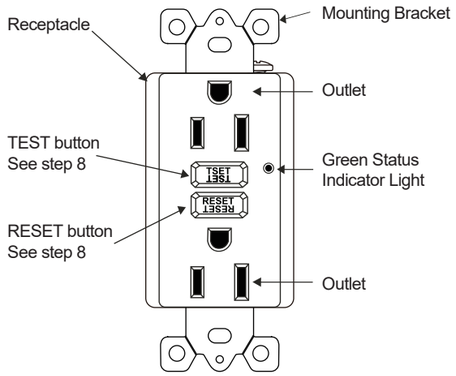
GFCI stands for Ground Fault Circuit Interrupter. A GFCI receptacle is different from a conventional receptacle as it will trip and shut off power within milliseconds of detecting a ground fault. This can prevent serious injury.

Definition of a ground fault:
Instead of following its normal safe path, electricity passes through an alternate path, such as a person's body, to reach the ground. For example, a defective appliance can cause a ground fault.

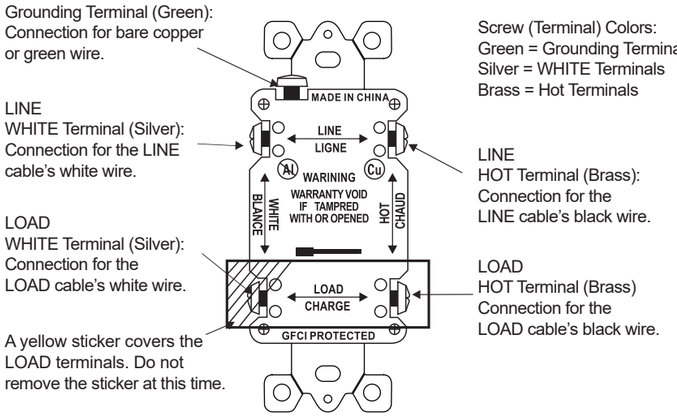
A GFCI receptacle dose not protect against circuit overloads, short circuits, or shocks. For example, you can still be shocked if you touch bare wires while standing on a non-conducting surface, such as a wood floor.

Features

FRONT VIEW



BACK VIEW



Should you install it?

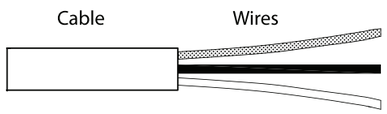
Installing a GFCI receptacle can be more complicated than installing a conventional receptacle. Make sure that you:

- Understand what is required for installation, wiring principles and techniques.
- Can interpret wiring diagrams.
- Have circuit wiring experience.
- Are prepared to take a few minutes to test your work, making sure that you have wired the GFCI receptacle correctly.

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

LINE vs LOAD

A cable consists of 2 or 3 wires.

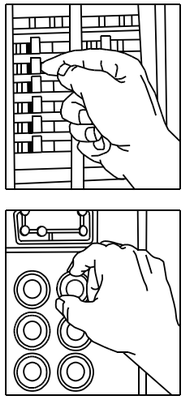


LINE Cable:
Delivers power from the service panel (breaker panel or fuse box) to the GFCI. If there is only one cable entering the electrical box, it is the LINE cable. This cable should be connected to the GFCI's LINE terminals only.

LOAD Cable:
Delivers GFCI protected power from the GFCI receptacle to another receptacle in the circuit. This cable should be connected to the GFCI's LOAD terminals only.
The LOAD terminals are under the white sticker. Do not remove the sticker at this time.

1. Turn the power OFF

Turn power off at circuit breaker or remove fuse. Ensure power is off with a tester or meter known to be in good working order.



2. Identify cables/wires

IMPORTANT

Do not install the GFCI receptacle in an electrical box containing (A) more than 4 wires (not including the grounding wires) or (B) cables with more than two wires (not including the grounding wire). Contact a qualified electrician if either (A) or (B) is true.

If you are replacing an old receptacle, pull it out of the electrical box without disconnecting the wires.

- If you see one cable (2-3 wires), it is the LINE CABLE. The receptacle is probably in position C (see diagram to the right). Remove the receptacle and see step 3A.
- If you see two cables (4-6 wires), the receptacle is probably in position A or B (see diagram). Follow steps a-e of the following procedure.

Procedure: box with two cables (4-6 wires)

(a) Detach one cable's white and hot wires from the receptacle and cap each one separately with a wire connector. Make sure that they are from the same cable.

(b) Re-install the receptacle in the electrical box, attach the faceplate, then turn the power ON at the service panel.

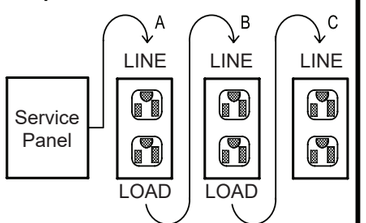
(c) Determine if there is power at the receptacle. If so, the capped wires are the LOAD wires. If not, the capped wires are the LINE wires.

(d) Turn the power OFF at the service panel, label the LINE and LOAD wires, then remove the receptacle.

(e) Go to step 3B.

Placement in circuit:
The GFCI's place in the circuit determines if it protects other receptacles in the circuit.

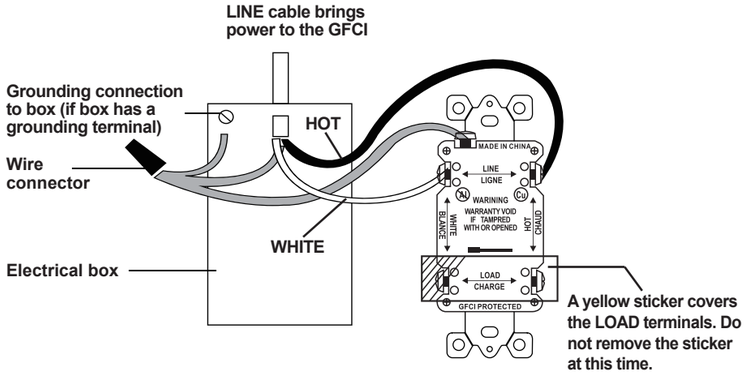
Sample circuit:



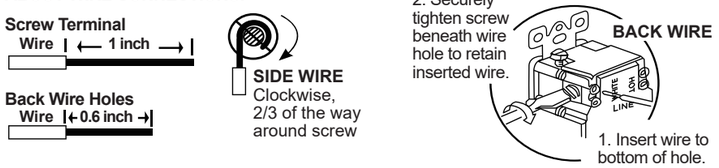
Placing the GFCI in the position A will also provide protection to the "load side" of receptacles B and C. On the other hand, placing the GFCI in the position C will not provide protection to receptacles A or B. Remember that receptacles A, B and C can be in different rooms.

3. Connect the wires

A: One cable (2 or 3 wires) entering the box



ABOUT WIRE CONNECTIONS:



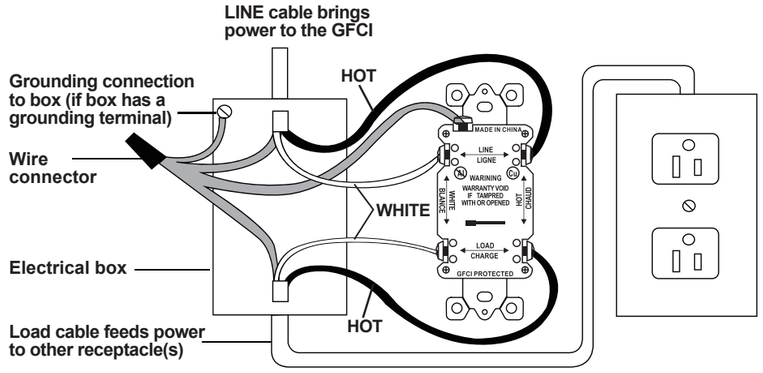
Connect the LINE cable to the LINE terminals:
- The white wire connects to the WHITE terminal (Silver)
- The black wire connects to the HOT terminal (Brass)

Connect the grounding wire (only if there is a grounding wire):
- For a box with no grounding terminal (diagram not shown): Connect the LINE cable's bare copper (or green) wire directly to the grounding terminal on the GFCI receptacle.
- For a box with a grounding terminal (diagram shown above): Connect a 1-inch bare copper (or green) 12 or 14 AWG wire to the grounding terminal on the GFCI. Also connect a similar wire to the grounding terminal on the box. Connect the ends of these wires to the LINE cable's bare copper (or green) wire using a wire connector. If these wires are already in place, check the connections.

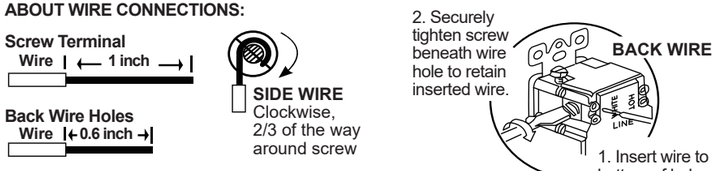
Complete the installation:
- Fold the wires into the box, keeping the grounding wire away from the White and Hot terminals. Screw the receptacle to the box and attach the faceplate.
- Go to step 4.

OR

B: Two cables (4 or 6 wires) entering the box



ABOUT WIRE CONNECTIONS:



Connect the LINE cable wires to the LINE terminals:
- The white wire connects to the WHITE terminal (Silver)
- The black wire connects to the HOT terminal (Brass)

Connect the LOAD cable wires to LOAD terminals:
- Remove the yellow sticker to reveal the LOAD terminals
- The white wire connects to the WHITE terminal (Silver)
- The black wire connects to the HOT terminal (Brass)

Connect the grounding wires as shown above (only if there is a grounding wire):
- Connect a 1-inch bare copper (or green) 12 or 14 AWG wire to the grounding terminal on the GFCI. If the box has a grounding terminal, also connect a similar wire to the grounding terminal on the box. Connect the ends of these wires to the LINE and LOAD cable's bare copper (or green) wire using a wire connector. If these wires are already in place, check the connections.

Complete the installation:
- Fold the wires into the box, keeping the grounding wire away from the White and Hot terminals. Screw the receptacle to the box and attach the faceplate.
- Go to step 4.

4. Test your work

- If you mis-wire the GFCI, it may not prevent personal injury or death due to a ground fault (electrical shock).
- If you mistakenly connect the LINE wires to the LOAD terminals, the GFCI will not provide power.

Procedure:

(A) This GFCI is shipped from the factory in the tripped condition. It can not be reset until it is wires correctly and power is supplied to the device. Plug a lamp or radio into the GFCI (and leave it plugged in). Turn the power ON at the service panel. Press the RESET button. Make sure the lamp or radio is ON. If the lamp or radio is still Off or the RESET button can not turn the power on, go to Troubleshooting section because the LINE and LOAD wiring connection have been reversed.

(B) Press the TEST button in order to trip the device. This should stop the flow of electricty, making the radio or lamp shut OFF. If the radio or lamp is on, go to Troubleshooting, If the power goes OFF, you have installed the GFCI receptacle correctly. To restore power, press the RESET button.

(C) If you installed your GFCI using step 3B, plug a lamp radio into surrounding receptacles to see which one(s), in addition to the GFCI, lost power when you pressed the TEST button. Do not plug life-saving devices into any receptacles that lost power. Place a "GFCI PROTECTED" sticker on every receptacle that lost power.

(D) The Status Indicator Light should always be ON (Green). when working and power is on.

Status Indicator Light	
ON (Green)	working / tripped
OFF	no power / mis-wired / mfunction

(E) Press the TEST button (then RESET button) every month to assure proper operation.

Trouble Shooting

Issues	Solutions
After installation, when the power at the breaker ON, the GFCI green LED indicator is OFF and no power from the sockets.	1. Press the reset button, ensure the wires are securely connected to the LINE terminals. 2. Check with a meter that there is power at the terminals. 3. GFCI is at end of life.
After installation, when the power at the breaker ON, the GFCI green LED indicator is ON. But the test button will not turn off the power in the sockets when testing.	Ensure the wires are connected to the LINE terminals.

If all troubleshooting steps have been carefully followed and the problem continues please contact customer support.