

GFCI Products Buying Guide



A Ground Fault Circuit Interrupter (GFCI) is an important safety device to have in a home to help protect people from electrical shocks due to hazardous ground faults. Ground faults occur when a current flows along an unintended path, such as through water or a person. For example:

- Operating electrical equipment in wet or damp conditions
- Electrical current leaks from appliances or tools
- Electrical wiring becomes frayed or damaged

How GFCIs Work

GFCI outlets are designed to help prevent people from receiving dangerous shocks. When a ground-fault occurs and electricity from an appliance passes through a person's body, the resulting shock can cause serious injury or even death. GFCIs have special circuitry built into them to help prevent this from happening. When any item is plugged into a GFCI outlet, it receives power, just as if it's plugged into a regular outlet. But the GFCI monitors this power to ensure it's only flowing where it should. If a ground-fault is detected, the GFCI shuts off power to the item in a fraction of a second and helps prevent serious injury to people.

Where to Install GFCI Outlets

The National Electrical Code® (NEC®) requires the installation of GFCIs in the following areas of the home: kitchens, bathrooms, laundry rooms, workshops, basements, garages/carports and outdoor areas such as pools, decks and patios. GFCI outlets not only protect what's plugged into them, but also provide feed-through protection to ordinary outlets wired downstream (other outlets on the same circuit).



Benefits of Leviton SmartlockPro® GFCI Outlets

Leviton GFCI outlets have a patented reset lockout feature that prevents it from being reset if it is not wired or operating correctly. Some older GFCIs may allow reset even if they are no longer providing protection. The SmartlockPro® RESET button will not engage if:

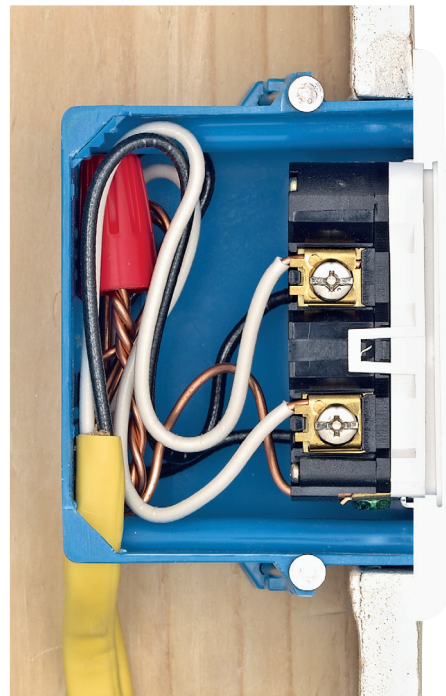
- The GFCI is miswired due to reversal of the line and load leads
- There is no power being supplied to the GFCI
- The GFCI cannot pass its internal test

Leviton SmartlockPro GFCIs also have a slim design, taking up to 25% less space in the wallbox vs. other GFCIs. Reduced depth makes them easier to install in any electrical box, even shallow ones. Plus, the terminals allow for easy wiring options, with back and side wire capabilities.*








Typical GFCI









SmartlockPro GFCI



Types of GFCIs

Options Available 15 Amp and 20 Amp	Benefit	Applications
<p>Self Test GFCI</p> 	<p>By cutting off power in a fraction of a second if a ground-fault is detected, our GFCI receptacles are engineered to help protect people from the hazards of electric shock and electrocution. A patented reset lockout feature prevents the device from being reset if it is not working properly, if protection has been compromised or if the line and load wires were reversed during installation. LED indicators provide simple, intuitive feedback on power and protection status.</p>	<p>The National Electrical Code® requires the installation of GFCIs in the following areas of the home: kitchens, bathrooms, laundry rooms, basements, garages/carports, pool areas.</p>
<p>GFCI Combination USB</p> 	<p>This GFCI offers the trusted safety of Leviton GFCI protection with the advantage of powerful USB charging. It delivers maximum power for faster charging. Our smart chip technology recognizes and optimizes the charging requirements of the connected device, ensuring it is getting the right amount of power for fast and efficient charging. Choose from GFCI combination USB Type A/C or Type A/A charger options.</p>	<p>Code-compliant for use in kitchens and bathrooms.</p>
<p>Weather-Resistant GFCI</p> 	<p>This GFCI is designed to be used outdoors in wet and damp locations when paired with a weather-resistant cover. Look for the WR symbol on the face to ensure it is rated for outdoor use.</p>	<p>Outdoor locations such as decks, patios, and pool areas.</p>
<p>Dual Function AFCI/GFCI</p> 	<p>Satisfies NEC requirements for both AFCI and GFCI protection. Offers protection from electrical fires that could result from arc-faults and from electrical shock due to ground-faults in one device.</p>	<p>Kitchens and laundry areas in new construction, modifications/extensions, and replacements as well as a replacement for ungrounded receptacles.</p>
<p>GFCI with Audible Trip Alert</p> 	<p>GFCIs may be in an out-of-the-way place, such as a back corner or storage area, making daily visual checks for tripping unlikely. When a condition exists causing the GFCI to trip, users are alerted by the sounding of an audible alarm.</p>	<p>Perfect for garages, basements or any out-of-the-way locations of the home.</p>
<p>Wi-Fi® Certified Smart GFCI</p> 	<p>An upgrade from the GFCI Outlet with Audible Trip Alert, receive notifications and alerts directly to your smartphone using the My Leviton app. For safety, the app does not provide on/off control of the device.</p>	<p>Ideal for refrigerators, sump pumps, and other appliances in out-of-the-way locations such as a garage or basement. Also great for second homes and other remote locations where daily visual checks are unlikely.</p>
<p>GFCI with Guide Light</p> 	<p>This GFCI has the added benefit of a built-in guide light that provides additional light at night or in dark areas while still allowing use of both outlets.</p>	<p>Most common area for use would be a bathroom or laundry room.</p>

Types of GFCIs

Options Available 15 Amp and 20 Amp	Benefit	Applications
<p>Combination GFCI/Switch (15 Amp only)</p> 	<p>Save space by combining GFCI protection and a switch in one device.</p>	<p>Ideal in small scale kitchens, bathrooms and laundry rooms where a switch and GFCI are both needed.</p>
<p>Blank Face GFCI</p> 	<p>When downstream protection is a priority this GFCI provides the necessary safeguards with a clean appearance that blends into the wall space.</p>	<p>Install these GFCIs upstream of hard-to-reach outlets such as behind a hot tub or spa.</p>
<p>Pilot Light GFCI</p> 	<p>Pilot light GFCI outlets from Leviton have high-visibility LEDs that provide a visual indication of power status - ideal for applications where receptacles are not easily accessible, as well as in poor lighting conditions. They are also perfect for dedicated circuit locations since there is only one outlet available for use.</p>	<p>These devices are ideal for use in storage areas, under sinks for garbage disposals or dishwashers, and in basements and garages.</p>
<p>Pop-Up Floor Box w/GFCI</p> 	<p>Offers a modern, practical way to attractively conceal electrical wiring devices, while still providing accessibility to power when needed. Featuring a sleek low profile and stylish metal cover that recesses neatly into the floor when not in use, it takes only the press of a button to make the receptacle available. Meets or exceeds UL 514A including scrub water test. IP 44 rated protection from ingress water spray from any direction when closed.</p>	<p>Great rooms, floor to ceiling windows, other open concept spaces. Can be used with a variety of flooring types: tile, stone, wood, laminate, carpet, concrete, and vinyl.</p>
<p>Portable GFCI Cord Sets & User-Attachable Devices</p> 	<p>For temporary power equipment that requires GFCI protection, manual or automatic reset portable GFCIs can be used. Automatic reset models immediately provide power to a load when plugged in and automatically restore power to connected equipment after a power interruption; manual reset models require the simple push of a button to provide power to the connected equipment.</p>	<p>Used in a variety of temporary power applications, such as electric gardening equipment, electric power tools, power washers, boat hoists, holiday decorations, portable pools, and portable generators. For portable tools or equipment, manual-reset versions are recommended as they provide an extra level of protection against unintentionally powering a device while it's in the 'on' position.</p>
<p>GFCI Branch Circuit Breaker</p> 	<p>Leviton GFCI circuit breakers have set the new standard for home safety. They are the first GFCIs on the market that meet the newest/May 2021 UL standard for End of Life protection, locking out users if ground-fault protection is lost. Line-side powered LED indicator lights allows users to easily identify the trip condition and type of fault and remain lit, even when a circuit breaker has tripped. Color indicators in each rocker handle for operational status at-a-glance.</p>	<p>Designed specifically for use with the Leviton Load Center.</p>

*Dimensions vary depending on specific product

Testing a GFCI Outlet

A GFCI outlet must be tested immediately after installation and once a month thereafter. If the GFCI is wired incorrectly, it may not be able to detect a ground-fault and prevent personal injury or death. If the LINE wires are mistakenly connected to the LOAD terminals, the GFCI will not reset, preventing it from providing power to itself and any downstream outlets.

How to Test a GFCI Outlet



1. Plug a lamp into the GFCI outlet and turn it ON.



2. Push the TEST button on the GFCI. The GFCI will trip and the power to the lamp will be cut OFF.



3. Push the RESET button on the GFCI. If the GFCI is working properly, the power will be restored, and the lamp will turn ON. If you cannot push the RESET button, the GFCI is damaged or wired incorrectly.



Important Reminder:

GFCIs can become damaged over time. They must be tested monthly to ensure they are providing protection.

FAQs

I thought circuit breakers would protect my family from electrical shock. Why do I need GFCIs?

Circuit breakers and fuses protect against electrical shock and fire caused by dangerous current overloads. They will trip when a circuit is overloaded; however, the current level needed to trip a circuit breaker is many times greater than the amount that can deliver a powerful shock to a person. GFCIs are much more sensitive and trip at lower levels of dangerous current, protecting people from shock and electrocution.

What is the benefit of a “Slim” GFCI?

Most of the Leviton SmartlockPro® GFCIs take up to 25% less space in the wallbox than traditional GFCIs. This makes installation easier.

What is Reset/Lockout?

The patented Reset Lockout feature on SmartlockPro® GFCIs prevents reset of the device if it is unable to respond to a ground-fault for any reason or if it is not wired correctly and receiving power. Some older GFCIs may allow reset of the device even if they are no longer providing protection.

I just installed my GFCI outlet and it’s not working. What could the problem be?

If your GFCI does not reset after installation this is often the result of reversing the LINE and LOAD wires. You can diagnose this when you flip the breaker to reconnect power and the indicator light is green while the GFCI will not allow you to reset. This can easily be addressed by correcting the wiring. Look at the back of the device you are installing to note which side is the LINE and which side is the LOAD and attach the wires accordingly. Leviton GFCIs protect against being reset unless they are properly wired, operating correctly, and connected to power.

Where should GFCIs be installed? Is there a Code requirement?

GFCIs are required by the National Electrical Code® (NEC®) to be installed in wet or damp locations. This would include kitchens, bathrooms, basements, laundry rooms, garages, porches and any other areas where a water source is present.

Why do you need to test a GFCI?

Self-Test GFCIs perform a periodic internal self-test to confirm that protected power is available. Although Leviton SmartlockPro® GFCIs are self-testing, a manual test adds an additional level of protection to users. It is recommended that GFCIs be tested monthly to ensure protected power is present.

Visit our Website at: www.leviton.com/gfci

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