Frequently Asked Questions

SmartlockPro® Dual Function AFCI/GFCI Receptacle

- *What is the difference between an AFCI and a GFCI?*
  The function of an AFCI is to provide protection against potentially dangerous arc-faults helping to reduce the likelihood of the home's electrical system being an ignition source of a fire, potentially injuring people and damaging homes. The function of a GFCI is to directly protect people from the potentially fatal hazards of electric shock that could occur if parts of an electrical appliance or tool they are using become energized due to a ground fault. The Dual Function AFCI/GFCI Receptacle contains both technologies and offers both fire and shock protection in one smart device.

- *Why would I need a receptacle that has both AFCI and GFCI protection?*
  In 2014, the National Electrical Code® (NEC®) introduced AFCI requirements for kitchens and laundry rooms. The code had previously required that these locations needed only GFCI protection, but for added safety they are now required to have both AFCI and GFCI protection.

  Additionally, there has long been a requirement for adding GFCI protection when replacing non-grounding type receptacles. Newer requirements include adding AFCI protection when replacing receptacles in various locations such as living rooms and bedrooms. The Dual Function AFCI/GFCI Receptacle provides an ideal solution for replacing receptacles in these circumstances.

- *Does every receptacle in my home have to be a Dual Function AFCI/GFCI?*
  No. The latest National Electrical Code requires both AFCI and GFCI protection only in kitchens and laundry rooms. And within those rooms, the Dual Function AFCI/GFCI Receptacle provides what is called "feed-through" protection, which means it provides protection for all wiring and extensions attached to the load side. If the Dual Function AFCI/GFCI replaces the first receptacle in the branch circuit, it will provide protection to the remaining outlets on that circuit.

- *How do I know where the first outlet in the branch circuit is?*
  Unless you are familiar with your home's wiring, contact an electrician. If you are comfortable with replacing receptacles, to begin, TURN THE BREAKER OFF AND US A HAND HELD VOLTAGE TESTER TO CONFIRM POWER IS OFF at the outlet that you believe is the most likely to be first in the circuit. Remove the outlet and cap the wires. Turn the breaker back on and test the other outlets. If you chose correctly, all the others will be dead. If you chose incorrectly, TURN THE BREAKER OFF and put the original outlet back in and try another. Repeat the process until the first receptacle in the circuit is found.

- *Does the self-test (auto-monitoring) feature in the Dual Function AFCI/GFCI Receptacle apply to both the GFCI and AFCI functionality?*
  No. Self-test is required as a standard for GFCI functionality. It works by periodically checking internal device components and trips on detection of a ground fault. There are no specific self-test requirements for the AFCI functionality.

- *Does the Dual Function AFCI/GFCI Receptacle require a neutral wire to work?*
  Yes, all outlets require a neutral wire to work.

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- *Can the same neutral wire be used for the installation of more than one Dual Function AFCI/GFCI Receptacle?*
  While Dual Function AFCI/GFCI Receptacles can work with a shared neutral on the line side, please refer to specific code requirements regarding acceptable methods for feeding an AFCI/GFCI receptacle. If you are unfamiliar with the function of a neutral wire, contact an electrician.

- *Are Leviton Dual Function AFCI/GFCI Receptacles UL listed?*
  Yes, all Leviton Dual Function AFCI/GFCI Receptacles meet UL Standard 1699A (Arc-Fault Circuit-Interrupters, Outlet Branch Circuit Type) for AFCI, UL Standard 943 for Ground-Fault Circuit-Interrupters, and UL Standard 498 for outlets.

- *How many outlets are protected downstream from the Dual Function AFCI/GFCI Receptacle?*
  All Dual Function AFCI/GFCI Receptacles are rated as 20A feed-through. This means they can protect all outlets downstream on both 15A and 20A branch circuits.

- *Where can Dual Function AFCI/GFCI Receptacles be purchased?*
  The Dual Function AFCI/GFCI Receptacles are available through electrical distributors, retail and online merchants. Visit www.leviton.com/dfci and click "where to buy" for more information.

- *Can a separate AFCI Receptacle and a GFCI Receptacle be used on the same circuit?*
  Yes, they both can be used on the same circuit; however, the Dual Function AFCI/GFCI Receptacle offers the option of providing both AFCI and GFCI protection in a single device.

- *What are some differences between an AFCI breaker and an AFCI/GFCI receptacle?*
  An AFCI breaker is located in the service panel. Also, when tripped, an AFCI breaker requires the user to reset the breaker at the service panel. An AFCI/GFCI receptacle replaces a standard outlet and when tripped, requires the user to reset by pressing a button located on the outlet, often a more convenient option.

- *Are AFCI/GFCI Receptacles required by the National Electrical Code®?*
  The NEC® identifies areas of the home that require AFCI protection and others that require GFCI protection as well as some that require both AFCI and GFCI protection. Dual Function AFCI/GFCI receptacles offer an NEC compliant option for AFCI/GFCI protection in kitchens and laundry areas for new construction, modifications/ extensions and replacement receptacles. For more information on code requirements visit www.leviton.com/protection or http://www.nema.org/Technical/FieldReps/Pages/National-Electrical-Code.aspx

- *Is the "Dual Function" AFCI/GFCI the same as a "Combination" AFCI*
  No, a combination type AFCI refers to a circuit breaker AFCI that offers both parallel and series arc protection. The term "combination" refers to parallel and series arc protection and does NOT refer to combined AFCI and GFCI protection; the term "dual" however does refer to AFCI and GFCI protection. Therefore, the Dual Function

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AFCI/GFCI Receptacle provides protection against arc-faults **as well as** ground faults in a single device.
In line with this, dual function AFCI/GFCI breakers offer both "combination" type (parallel and series) AFCI protection and GFCI protection.

AFCI receptacles also offer both series and parallel protection and are referred to as Outlet Branch Circuit (OBC) AFCI receptacles.

- *Why would I use an AFCI/GFCI Receptacle instead of breaker?*

  The AFCI/GFCI Receptacle can be a great alternative depending on the circumstance. The AFCI/GFCI Receptacle works with any type of wiring and is not dependent on the type of breaker in the panel. It is also easily accessible and has a level of familiarity with users with the TEST and RESET buttons that are also present on a GFCI receptacle.

- *What is an arc-fault?*

  The UL Standard for AFCIs defines an arc-fault as an unintentional arcing condition (sparking) in a circuit (wiring). Arcing creates high intensity heat (may exceed 10,000 degrees Fahrenheit) resulting in burning particles that may over time ignite surrounding material such as wood framing or insulation.
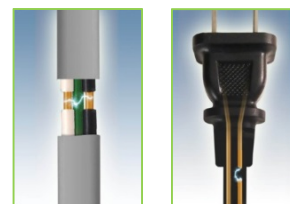
- *What causes an arc-fault?*

  There are a wide range of conditions that may cause arcing, which is like an electrical spark:

  Wire Degradation
  - Natural degradation through age
  - Humidity or heat
  - Extended mechanical stress
  - Extended voltage stress

  Physical Damage
  - Animals chewing through insulation
  - Nails, tacks from construction or picture hanging driven into a wall puncturing or damaging a wire(s)
  - Extension or power supply cord damage from sharp bends or furniture pressing on or against cords
  - General cord damage
  - Poor wiring or connection at devices/j-boxes
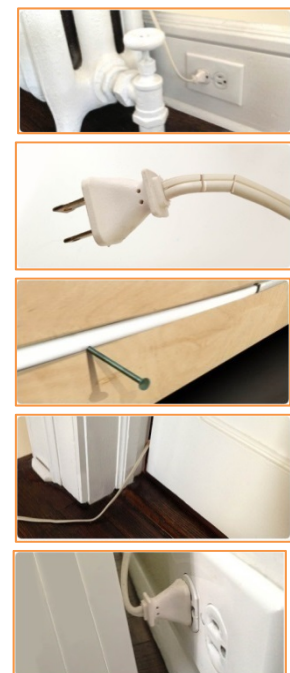
- *Are Dual Function AFCI/GFCI Receptacles tamper-resistant?*

  Yes. Leviton Dual Function AFCI/GFCI Receptacles are tamper-resistant to meet the latest National Electrical Code® child safety requirements. The shutter mechanism inside the outlet blocks access to the contacts unless a two-pronged plug is inserted.