

# **The Smart Leviton Load Center** Single Panel Solution for Managing Essential and Nonessential Circuits With A Generator

## Why have two Load Centers when you only need one?







Traditional Generator installations require Essential and Nonessential circuits to be divided into two separate enclosures. When grid power fails, the Automatic Transfer Switch powers on the Generator, and routes backup power to the Essential Loads Panel. This traditional approach to Generator integration is a practical solution, but lacks flexibility - the Electrician and Customer are required to make firm decisions on which circuits are Essential vs. Nonessential. If the customer's needs change down the line, significant labor and time are required to reroute circuits.

**Note:** 1st Gen Smart Circuit Breakers are compatible with the Whole Home Energy Monitor (LWHEM-2); however, they cannot be controlled as a Nonessential circuit. Only 2nd Gen Smart Circuit Breakers can be configured as Nonessential and shed loads when backup power is active. All standard (non-smart) and 1st Gen Smart Circuit Breakers will remain ON unless physically turned OFF.





#### A flexible approach to managing Essential and Nonessential circuits

With Leviton's Smart Load Center, Essential and Nonessential circuits can be installed in a single enclosure, reducing installation time and cost, and simplifying the Homeowner's electrical system. The Whole Home Energy Monitor (LWHEM-2) connects to the Generator's Automatic Transfer Switch via the Auxiliary Contact, and automates shedding of Nonessential circuits when backup power becomes active. Homeowners can designate circuits as Essential or Nonessential in the My Leviton app.

Thanks to its modular, fully plug-on design, Standard and Smart Circuit Breakers can be intermixed in the Leviton Load Center, providing even more cost savings compared with alternative Smart Panels. Avoid the high upfront cost of "all-in-one" Smart Panels, and the headaches of additional wiring and sacrificed panel space with add on Control Relays. Leviton Smart Circuit Breakers take up the same footprint as Standard versions and require no additional wiring.

Install Standard or Smart Circuit Breakers (1st Gen or 2nd Gen) on Essential circuits to prioritize those circuits when backup power is active. 2nd Gen Smart Circuit Breakers must be installed on Nonessential circuits to enable automated circuit shedding.



### Automatic Transfer Switch Auxiliary Contact

For reference, a wiring diagram utilizing the Auxiliary Contact on Generac RWSC100A3, RWSC200A3, RWS-W100A3, RWSW150A3 and RWSW200A3 Automatic Transfer Switches is shown.

Consult the Installation Instructions for your Automatic Transfer Switch to determine the location of the Auxiliary Contact and wiring steps.

NOTE: Auxiliary Contact is rated 10 amps at 125 or 250

ACAUTION

(000134a)

Equipment damage. Exceeding rated voltage and current will damage the auxiliary contacts. Verify that voltage and current are within specification

volts AC, and 0.6 amps at 125 volts DC.

before energizing this equipment.





To automate the shedding of Nonessential circuits when the backup Generator is active, a Leviton Whole Home Energy Monitor (LWHEM-2) must be connected to the Generator's Automatic Transfer Switch via the blue wire loop found behind the sticker on the bottom of the device.

The blue wire should be cut and extended to the Auxiliary Contact on the Automatic Transfer Switch. During normal operation, the contact will be closed. When a grid outage occurs, the Automatic Transfer Switch will open the contact and the Leviton Load Center will turn OFF 2nd Gen Smart Circuit Breakers designated as Nonessential in the My Leviton app.

When grid power is restored, the Automatic Transfer Switch will close the Auxiliary Contact and return to normal operation. The Whole Home Energy Monitor (LWHEM-2) will recognize that the blue wire loop has closed and return Nonessential 2nd Gen Smart Circuit Breakers to their normal operating state.

- Remove the sticker located on the bottom of the Whole Home Energy Monitor (LWHEM-2) directly below the CT ports to access the blue wire loop
- Cut the blue wire loop
- Use conductors with proper insulation for the application to extend the blue wires and connect them to the Auxiliary Contact on the Automatic Transfer Switch
- If an Auxiliary Contact is not available, a contactor may be needed to isolate 120 VAC from the Whole Home Energy Monitor's (LWHEM-2) blue loop connection

**NOTE:** DO NOT APPLY VOLTAGE. Any connection other than dry contact will damage the Whole Home Energy Monitor (LWHEM-2)



#### Learn more at leviton.com/loadcenter



Leviton Manufacturing Co., Inc.

Tech Line: 1-800-824-3005 Mon-Fri 8am-10pm EST, Saturday 9am-7pm EST, Sunday 9am-5pm EST For 24/7 product support visit **www.leviton.com/support** 

#### Visit our Website at: www.leviton.com

© 2023 Leviton Manufacturing Co., Inc. All rights reserved. All trademarks are the property of their respective owners.

