

EmerGen Switch

Operation Guide

Post this document on or near your EmerGen Switch

In the event of a power outage, the following steps should be taken to provide generator power to your home:

1. Leave all switches on the EmerGen Switch in the LINE position. It is not necessary to shut off the MAIN breaker in your breaker panel.
2. Move your generator to its operating location. Use care to ensure that carbon monoxide gas from the generator exhaust does not enter your home.
3. Plug the power cord into the generator and the Inlet Box.
4. Start generator and allow 10 minute warm up time.
5. Switch the desired circuits to the GEN position. Take note of the wattage indicated on the two watt meters. Attempt to balance the two meters to within 1000W of each other. Do not exceed the maximum wattage printed on the meters.

When Utility power is restored, take the following steps to return to Utility power:

1. Move any switches that are in the GEN position to the LINE position.
2. Shut down the generator. NOTE – never start or shut down your generator with any of the switches in the GEN position.
3. Unplug and store the power cord.

Frequently Asked Questions

Load Balancing

Attempt to balance the loads indicated on the two EmerGen watt meters to within 1000 watts of each other. This will prevent undue wear on the generator. Load balance has no effect on the EmerGen transfer switch.

Max Load per Circuit

The maximum size circuit breaker in the homes utility panel that can be connected through the EmerGen Switch is 20A. Connecting to a circuit breaker larger than 20A will damage the internal components and wiring of the switch.

Max Power Cord length from generator

The National Electrical code recommends a maximum voltage drop of 3% of the supply voltage. Based on the 3% rule, the max cord length in various wire gauges is:

<u>30A</u>	#6 AWG, 100ft. max	#8 AWG, 75ft max	#10 AWG, 40ft max
<u>20A</u>	#8 AWG, 100ft. max	#10 AWG, 75ft max	#12 AWG, 40ft max

Do I have to turn off Main circuit breaker in my utility panel?

It is not necessary to turn off the main circuit breaker or any branch circuit breaker in the homes utility panel when operating the generator with the EmerGen Switch. The double pole switches provide the necessary isolation. The generator power will not back-feed into the utility panel.

Internal circuit breakers on EmerGen Switch

The circuit breakers built into the EmerGen Switch are active only when the Line/Gen selector is in the GEN position. The 15A EmerGen circuits can be connected to either a 15A or 20A breaker in the utility panel. The 20A EmerGen circuits should be connected only to 20A circuits in the utility panel.

My utility panel has Ground and Neutral wires on same bar

If the utility panel has ground (bare wires) and neutral wires (white wires) connected to the same bar, then the EmerGen Switch Green and White wires can connect to the same bar. If the ground and neutral wires are on separate bars in the utility panel, then the EmerGen Green must connect to the ground bar and the EmerGen White must connect to the Neutral bar.

There is no movement on my watt meters

The watt meters on the EmerGen Switch operate only when utilizing generator power. These analog meters may be somewhat inaccurate in the lower 1/3 of their range. Accuracy increases at the higher end of the meter scale. There is a zero adjustment screw on the face of the meters. Make sure that the meter is properly zeroed with no generator power operating. The best way to test the meters is with appliances containing heating elements such as coffee pot, hair dryer, toaster or electric heater. These appliances will draw enough power to move the meters.