

LoadShedder

Energy Management System

Eliminates Tripped Pedestal Breakers!



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LoadShedder Information Sheet

Today's motorhomes are loaded with electrical equipment that consumes power. 50 amp shore power feeds are needed to run all of this technology but not every campground has 50 amp service available. A 30 amp service just doesn't have enough juice to power up all of the modern conveniences that we desire in our RVs. Whenever we exceed this 30 amp threshold, the pedestal breaker trips and we have to make a trip out to the pedestal to reset the breaker and turn off some of the extra loads so that we can operate the desired appliance. Sometimes this can happen at night or during a rain storm, making it even less attractive.

The **Load Shedder** eliminates those unwanted trips to the pedestal by automatically monitoring and managing your loads so that you can continue enjoying your RV instead of wearing a path between your front door and the campground pedestal.

It knows when you are on a 50 amp service or when running the generator and it knows when you are on a 30 amp shore power feed. Whenever it senses that you are on a 30 amp feed it automatically manage the power so that it does not exceed 30 amps. It does this by monitoring your total power consumption and shedding certain circuits temporarily to keep the total load below 30 amps. As soon as the extra load is removed, the original circuit will be restored automatically. There is no user intervention required!

Imagine the following scenarios:

A) Your electric water heater is currently on and draws 8 amps. Two air conditioners are running and each unit draws 10 amps when running but requires 18 amps for a while when the compressor first kicks in. This means you are consuming a total of 28 amps on your 30 amp shore power feed. The thermostat shuts down one of the air conditioners for a bit and then it restarts, pulling 18 amps. This is a total draw of 36 amps. The **Load Shedder** then will temporarily shut down the water heater circuit, reducing the total load to only 28 amps. Once the air conditioner's compressor settles in and pulls 10 amps, total load is reduced to 20 amps so the hot water heater automatically comes back on line.

B) You are running the refrigerator on automatic mode, which means it's currently drawing 4 amps of AC power. Your inverter/charger is powering the 12 volt side of things and charging batteries and is now drawing 3 amps of AC power. The electric water heater is drawing 10 amps and one air conditioner is drawing 11 amps. That's a total load of 27 amps. Someone walks over to the microwave to heat some water for a cup of coffee. The microwave draws another 13 amps, for a total of 41 amps. The **Load Shedder** will then switch off the water heater, dropping the total load to 31 amps. That's still not enough so the **Load Shedder** goes down the list and then removed the refrigerator from the power grid. The refrigerator then defaults to operating on propane and the total current draw is now reduced to 27 amps. As soon as the microwave is finished, both of the previously shed circuits are switched back on. If someone was to switch on a hairdryer or other power consuming appliance before the microwave was finished, the **Load Shedder** would simply move down the list and temporarily switch off the air conditioner.

The **Load Shedder** controls up to four 120 volt AC circuits. In addition it has two low voltage relay circuits. These relays can be used to control any low voltage devices such as the engine block heater relay, hot water heater relay, or even the compressors on the air conditioners. There's no end to the possible configurations available with this system and you decide which priority best suits your needs when setting up the **Load Shedder**.

The **Load Shedder** uses proven technology from Intellitec. The remote display panel indicates whether or not you are on generator power, 50 amp shore power, 30 amp shore power, or even a 20 amp circuit. It also displays the current being used on an LED ammeter display and six LEDs indicate which circuits are active and which circuits have been shed. The display placard is customizable to your unique configuration.

Installation is easy. You do not need to replace your original AC breaker panel nor do you need to mount the load shedder in a wall mounted location. Simply slide it behind the existing breaker panel and connect the unit to the desired circuits with the included quick disconnect connectors. Simply run a 12 volt hot and ground wire from the included harness to your nearby 12 volt fuse panel and run a third wire to your generator start-stop switch or hourmeter. Finally find a place to mount to attractive remote display panel and connect it to the **Load Shedder** with the plug in harness. That's about as close to "plug and Play" as it gets!

Sample Load Shedding Schemes:

Example A - Coach with two air conditioners and RV refrigerator:

- 1st - Hot Water Heater
- 2nd - Refrigerator
- 3rd - Air Conditioner #1
- 4th - Air Conditioner #2
- 5th - Not Used
- 6th - Not Used

Example B - Large diesel powered coach with 3 air conditioners, hydronic heating, and residential refrigerator:

- 1st - Engine Block Heater
- 2nd - Air Conditioner #2
- 3rd - AquaHot Electric Heating Element
- 4th - Air Conditioner #3
- 5th - Air Conditioner #1
- 6th - Not Used

Almost any configuration can be arranged to meet any specific requirements. The above are merely examples of popular configurations.

The **LoadShedder** is a complete package with all main unit, remote display panel, all necessary wiring harnesses, and a complete service and installation manual.

For more information, contact:

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