

## Inverter Charger Switches Explanation

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Switch Number	Switch Function	Position: 0	Position: 1
<b>SW 1 (AC Priority)</b>	Low Battery Disconnect	10.0VDC	10.5VDC
<b>SW 1 (Battery Priority)</b>		10.5VDC	11.5VDC
<b>SW 2</b>	AC Input Range	100-130 VAC	90-130 VAC (40Hz+)
<b>SW 3</b>	Power Saver	Inverter Off	Detect load every 3s
<b>SW 4</b>	Frequency Switch	50Hz	60Hz
<b>SW 5</b>	Battery/AC Priority	AC Priority	Battery Priority

### SW 1 (Low Battery Disconnect):

This switch can change the low battery disconnect between 10.0V-11.5V. Depending on whether shore power is present or not the low voltage set point will change. For most applications, the voltage should be set to 11.5V to prevent the batteries from being depleted.

**NOTE: The switch positions are dependent on SW 5**

### SW 2 (AC Input Range):

Most electronics have a recommended AC voltage range and staying within this range will allow the electronic to function normally and safely. Some electronics will function between 100-130VAC 60Hz while other accept a lower frequency 40-60HZ. Failure to meet electronics AC input range might result in damaging the electronic itself.

**NOTE: If the AC source falls below 50Hz or 100VAC, then position 1 will need to be used**

### SW 3 (Power Saver):

The inverter-charger's power saver mode is activated when position 1 is selected. The inverter will detect a load for 250ms every 3 seconds and if a load is detected the inverter will start outputting AC power.

**NOTE: If the switch is set to position 0, and power saver mode is selected on the main power switch, then no AC power will be outputted unless there is shore power connected to the inverter-charger**

### SW 4 (Frequency Switch):

The inverter can be set to output 50Hz or 60Hz using this switch

### SW 5 (Battery/AC Priority):

When the inverter is set to battery priority (position 1), it will invert power from the battery bank to the AC outlets until the low voltage set point is reached. If there is an AC source connected while under battery priority it will charge the battery after the low voltage is reached and use the AC source to power the AC outlets. When the battery is fully charged, the inverter will switch to battery power.

When choosing AC priority (Position 0) the battery power will only be used when there is no shore power connected to the inverter. Once AC power is connected the inverter will start charging the battery bank. If shore power is present for 15 continuous days, then the inverter will use the battery bank for one cycle. This cycle is used to prolong battery life.