

# APS POWER SUPPLY FAQ SHEET

## Models: 15, 30, 45, 55, 75, 90,100



### 1) Within what range of input voltage will APS power supplies operate?

APS power supplies will operate within an input voltage range of 90 to 140 volts. The APS unit is protected against low line voltage as well as spikes coming from the AC power source or from improperly adjusted generators. If the input voltage should drop below 90, or rise above 140 volts, the APS unit will simply shut off.

### 2) How efficient are APS power supplies?

APS power supplies are 90% efficient. The advanced switch mode technology and externally mounted cooling fan allow it to achieve high levels of efficiency.

### 3) Do APS supplies provide a stable level of current output?

Tight line or load regulation means from no load to full load the output voltage holds steady to within a few tenths of the no load voltage setting. This keeps audio and video equipment, motors and lights working at the correct voltage, even at full load.

### 4) When will the external fan turn on?

The ultra quiet fan will seldom come on. However, during times of heavy load demands, the automatic circuitry will activate the fan before thermal stress can occur on any components. Reliability and durability is built into all APS models.

### 5) What will happen if I accidentally wire the converter incorrectly?

In the event the batteries or the APS unit is wired incorrectly, the APS power supply is protected from damage. The external fuses can be quickly and easily replaced. Replace fuses with same size and type.

### 6) Do I need to use a battery with the APS power supply?

APS power supplies may be used with or without a battery. When used as a power supply, the APS unit will only supply what is required by the load. When not in use it is essentially off, reducing electricity costs. Audio equipment can require peaks that are in excess of the APS maximum capacity. The addition of a parallel battery can increase transient capacity by 400%.

### 7) Will the power supply create much heat?

No. Even with its subcompact size, the APS power supply, at full load, has a case temperature half that of some competitors switch mode electronic models. This means substantially longer life and safer operation.

### 8) Do the APS units have dual voltage capability?

APS power supplies feature a snap-in, two step voltage jumper to allow the customer the ability to switch from the long term float voltage of 13.4vdc to 14.1vdc for quicker charging.  
(with the exception of the APS-100)

### 9) Will the APS power supply damage my batteries in any way?

The APS power supply will not damage batteries if left in its factory, 13.4 voltage setting. This will only produce current equivalent to what is being drawn by the system. The 14.1 volt setting is designed for rapid recharge of batteries. If left on this setting and connected to a battery, in a short amount of time the increased voltage can damage battery cells by "boiling" them.

### 10) How does the APS power supply recharge my battery?

The APS charger quickly and efficiently charges batteries at its full rated output, then maintains the battery, only putting into the battery what is required by load or self discharge, cutting back to milliamps as the battery requires.

### 11) How clean is the current output of the APS supply?

Exceptionally clean DC output ensures audio, video, fans, motors and lighting will operate noise free. This means longer life for any connected load; no AC ripple to cause static or premature failure of radio or television equipment. In addition, the APS power supply meets FCC class "B" certification.

### 12) Do I need to connect the chassis bonding lug to the vehicles chassis?

No, it is not required that you connect this element to the vehicle chassis. Normally, it is only used in RV environments where the extra ground protection is beneficial.

### 13) Which power supply will work best for my application?

Choosing the correct power supply should be based on overall current consumption or the "load". What is the peak(max) current draw? Once this is determined add 10% to the max current draw to determine which model and how many will be required.

### 14) Do I need to install a solenoid or an isolator when using an APS/PC unit?

No, it is not necessary to do so.

### 15) Are APS power supplies noisy?

Thanks to advanced mosfet circuitry, APS power supplies switch voltage at 62khz. This is inaudible compared to a transformer style power supply which produces a noticeable 60hz low frequency hum.

