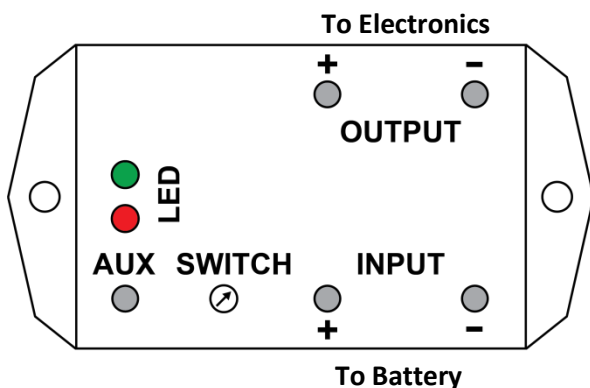


**Operation**

The voltage sensing APS-12 is an automatic switch designed for 12 volt vehicle electrical systems with negative ground. The model APS-12 is rated at 25 amps continuous duty. Using the 10 position rotary switch, you can select the following timer settings of: 2, 15 or 30 minutes and 1, 2, 3, 4, 5, 8 & 12 hours.

Two LED lights are built in to show APS-12 current status. When the engine is running, a solid GREEN LED light means the timer is passing power through the unit (13.0~14.5V). When the vehicles engine is shut off, a voltage drop will occur and a FLASHING GREEN LED light is displayed and turns ON the timer (12.6V or less). A red flashing LED light will display when its output power to your electronics reaches the users preset timer setting (2 minutes to 12 hours). No ignition connection is required.

APS-12 includes an Over Voltage Protection System which will automatically shut off your electronics if the voltage reaches over 16 volts. A solid RED LED light will display until the over voltage condition is corrected.



**Hook-up & Installation**

The APS-12 should be installed in between the vehicle battery and the DC load. Typically, the load is a two-way mobile radio, mobile computer and other vehicle DC electronics. Standard installation involves installing the APS-12 in between the battery and the DC feed side of the radio using the supplied ring terminals. When installing the APS-12, you need to connect (positive and negative DC power IN & positive and negative DC power OUT). No ignition connection is required. This model can be installed inside of the vehicle or engine compartment as these units are waterproof.

**CAUTION:** Make sure you connect the + / – leads to the correct polarity on both input and output. Make sure you also use the supplied star washers and do not over tighten the ring terminal screws.

**Rotary Switch Settings**

Set the Rotary Selector to the desired setting.

Use a small flat screwdriver to change the rotary switch position.

Detailed settings are also located on the side of your unit.

0:	2 minutes
1:	15 minutes
2:	30 minutes
3:	1 hour
4:	2 hours
5:	3 hours
6:	6 hours
7:	7 hours
8:	8 hours
9:	12 hours

**Emergency Override Switch**

An extra ring terminal position is located next to the LED lights. By momentary applying 12V to this terminal (with a user supplied switch) it will automatically override and energize the timed out timer and give you an additional 15 minutes of use for emergency operation.



### Specifications

- **Amperage Rating:** 25 Amps max @ 12V continuous duty
- **Low Standby Current Draw:** 4mAh in standby mode, 100 mAh normal operation mode
- **Compact Size:** 3½" L x 2" W x 1½" H
- **Weight:** 0.5 lbs. (229 grams)
- **Construction:** Potted water proof design. Can be mounted inside an engine compartment.
- **LED Status Indicators:**
  - Solid Green LED light = Timer OFF power passing through
  - Flashing Green LED light = Timer ON
  - Flashing Red LED light = Timer has expired, load is OFF
  - Solid Red LED light = Overvoltage Condition
- **Connections:** +/- Power IN from Battery. +/- Power OUT to electronics (no ignition wire required). Emergency Override Switch.

### Troubleshooting

#### *Unit will not turn ON:*

- Check for reverse polarity on Input and Output connections
- Check that Battery power is connected to the Input connection

#### *LED Lights Not Working:*

- Check (-) Negative connections for good ground to battery
- Check Input (+) positive connection

#### *Red LED Light Solid ON:*

- Alternator is defective putting out over 16V, reduce output below 16V

### Warranty:

Powerwerx support policy is simple; we want you to be happy! If you have a problem, please feel free to contact us and we will do our best to get you up and running as soon as possible.

The Powerwerx ATS-12 has a one-year limited warranty. We will repair or replace your ATS-12 if you encounter any problems within one year of purchase. We reserve the right to charge a reasonable fee for repairing units with user-inflicted damage. It is your responsibility to ship the defective unit back to Powerwerx. We will pay for shipping the replacement to you within the warrantee period.

### Also Look at our Other Models:

#### **LVD-35 – DC Low Voltage Disconnect**

- Heavy Duty design rated at 35A continuous duty
- LVD includes user selectable disconnect settings of: 10.6, 10.8, 11.0, 11.2, 11.4, 11.8, 12.0, 12.1, 12.2VDC
- Auto Reconnects when Voltage returns to safe level

#### **ITS-12 – DC Timer/LVD – Battery Guard**

- Heavy Duty design rated at 35A continuous duty
- Selectable low voltage disconnect (11.3 or 10.9VDC)
- User selectable timer positions (2, 15, 30minutes, 1, 2, 3, 4, 5, 8, 12 hours)
- Auto Reconnects when Voltage returns to safe level

More information at: [www.powerwerx.com](http://www.powerwerx.com)