

Owner's Manual

Automatic Voltage Switch

Model: AVS5D



Introduction

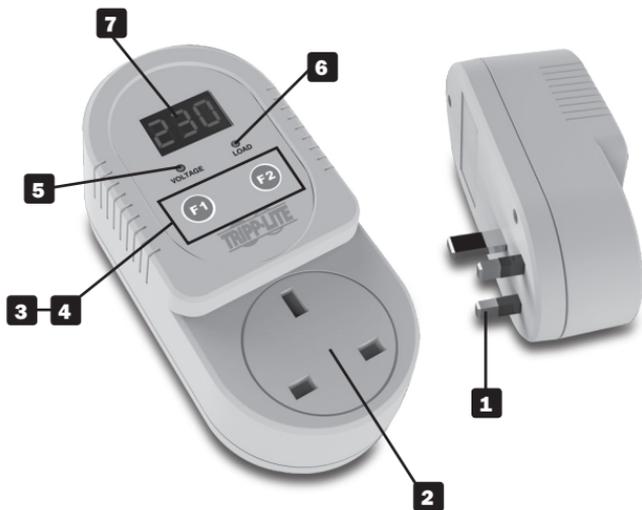
The AVS5D is a 5 amp rated automatic voltage switch that protects appliances from high voltages, low voltages (including brownouts), power surges, spikes and lighting. It does this by switching off connected equipment if the power flowing to it goes outside preset limits, and will reconnect automatically when power returns to normal (except in the case of an overload condition). There will be a delay before the reconnection to ensure power stability.



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Product Overview



- 1 BS 1363 Plug** Connects to wall outlet.
- 2 BS 1363 Outlet** Connects to appliance plug.
- 3 F1 & F2 Program Buttons** Using the two buttons, you can set the output over/under voltage, overload protection value, browse settable parameters and change digital display mode. During normal operation, you can press F2 to display the load. After 3 seconds, the switch returns to the voltage display.
- 4**
- 5 Voltage LED** Illuminates when the digital display shows voltage.
- 6 Load LED** Illuminates when the digital display shows the load in watts.

Product Overview

7 **Digital Display** Shows voltage, wattage, status and settings.

A) U-H Output Overvoltage Protection Status

When output voltage exceeds the preset limit and doesn't return to within the preset limits after 1 second, your equipment will be disconnected by the switch. U-H will flash on the display every .5 seconds as long as the overvoltage condition exists.

B) U-L Output Undervoltage Protection Status

When output voltage goes lower than the preset limit and doesn't return to within the preset limits after 1 second, your equipment will be disconnected by the switch. U-L will flash on the display every .5 seconds as long as the undervoltage condition exists.

C) P-H Overload Protection Status

When the load exceeds the preset range (nominally 110-120%) and lasts longer than 6 seconds (within this 6 seconds no action will be taken by the AVS5D), the switch will disconnect from power. P-H will flash on the display every .5 seconds as long as the overload condition exists.

When the load exceeds the preset range (nominally 150%) and lasts longer than 1 second, the switch will disconnect from power. P-H will flash on the display every .5 seconds as long as the overload condition exists.

Overload Faults - You must power cycle the unit to restore the current flow. The unit does not reset automatically from this type of fault.

D) Start Up Delay

When first powered up, the unit will count down a set number of seconds (default is 6) before monitoring voltage.

E) Parameter Setting Codes

E-0 Delay setting

E-1 Undervoltage protection value setting

E-2 Overvoltage protection value setting

E-3 Overload protection value setting

E-4 Displays output voltage or loading power value after startup
(U= voltage, P= watts)

E-5 Restores default settings

Note: The code and value flash alternately every second while changing settings.

Installation & Operation



Caution: Don't use this switch with any device that needs to be continually powered, as the switch is designed to cut power when unstable voltages occur.

- 1) Plug switch into outlet and plug in appliances.
- 2) After the switch is plugged in, it will display a 6 second countdown (default) before supplying power to your appliance and showing the voltage on the Digital Display.
- 3) If the default settings aren't appropriate for your situation, you can change them by following the procedure below.

Notes:

- We strongly recommend you use the default settings to ensure safe operation of the switch.
- It's possible to adjust the parameters at any time. Changing the delay setting requires a power cycle for the new delay to take effect.

Changing Settings

Press and hold **F1** for three seconds to enter settings mode.

Setting Codes: E-0 will be displayed.

(See **Switch Settings** chart for code explanations)



Press **F1** to cycle through the available codes.



Press **F2** to select the code you wish to change.



Press **F2** to adjust the value (the code and value will flash alternately every second). Each value changes by a certain increment every time you press **F2** (See **Switch Settings** chart).



Press **F1** to confirm the value.



Don't press anything for 10 seconds to exit and save the settings.

Switch Settings

Code	Item	Default	Settable Range	Increment	# of Increments
E-0	Delay Setting	6 seconds	6-120 seconds	6 seconds	20
E-1	Undervoltage Protection	180V	120V-200V	5V	16
E-2	Overvoltage Protection	255V	210V-270V	5V	12
E-3	Overload Protection	700W	100W-1000W	150W	7
E-4	Digital Display	Shows output voltage or loading power value after startup (U= voltage, P= watts)			
E-5	Restore Defaults	Restores all default settings. Unit will display defaults once confirmed, then reset and count down.			

Specifications

Current Rating	5 amps
Voltage Rating	230V (220-240V)
Frequency	50/60 Hz
Response Time Over/undervoltage	1 second
Reflex Voltage Over/undervoltage	5~10V
Spike/Surge Protection (Joules)	190J
Spike/Surge Protection (Amps)	4500KA (8/20us)
Spike/Surge Protection (Response Time)	10 nanoseconds
Dimensions (HxWxD)	110x65x85 mm
Weight	.15 kg

Warranty

7-Year Limited Warranty

TRIPP LITE warrants its products to be free from defects in materials and workmanship for a period of seven (7) years from the date of initial purchase. TRIPP LITE's obligation under this warranty is limited to repairing or replacing (at its sole option) any such defective products. To obtain service under this warranty, you must obtain a Returned Material Authorization (RMA) number from TRIPP LITE or an authorized TRIPP LITE service center. Products must be returned to TRIPP LITE or an authorized TRIPP LITE service center with transportation charges prepaid and must be accompanied by a brief description of the problem encountered and proof of date and place of purchase. This warranty does not apply to equipment, which has been damaged by accident, negligence or misapplication or has been altered or modified in any way.

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Under the Waste Electrical and Electronic Equipment (WEEE) Directive and implementing regulations, when customers buy new electrical and electronic equipment from Tripp Lite they are entitled to:

- Send old equipment for recycling on a one-for-one, like-for-like basis (this varies depending on the country)
- Send the new equipment back for recycling when this ultimately becomes waste

Use of this equipment in life support applications where failure of this equipment can reasonably be expected to cause the failure of the life support equipment or to significantly affect its safety or effectiveness is not recommended. Do not use this equipment in the presence of a flammable anesthetic mixture with air, oxygen or nitrous oxide.

Tripp Lite follows a policy of continuous improvement. Product specifications are subject to change without notice.



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