



## Table of contents

- Important safety instructions
- Introduction
- Installation and operation
- System description
- Specifications
- Trouble shooting guide

Thank you for purchasing a Forza FVR-2201 Automatic Voltage Regulator. To enjoy all the features and benefits of this unit, please read and follow all installation and operation instructions thoroughly before unpacking, installing or operating this device.

## Important safety instructions (Save these instructions)

This manual contains important instructions for the Forza FVR-2201. Read the following information carefully and save this manual for future reference.

### CAUTION!

- Failure to follow these safety instructions may cause fatal or serious injury, and also equipment damage.
- Risk of electric shock. Disconnection of AC sources is required to de-energize this unit before servicing.
- Risk of electric shock. Do not remove the cover. The unit contains no user-serviceable parts; do not attempt to disassemble the unit. Only factory service technicians can perform maintenance on the unit.
- To reduce the risk of fire, replace blown fuse only with another with the same rating.

## Introduction

### Overview

Forza's FVR-2201 Automatic Voltage Regulator – also known as line conditioner – provides rugged and reliable protection against overvoltages, undervoltages and severe brownouts. Capable of handling loads of up to 1100W, this unit perfectly combines excellent stabilization capabilities with electrical noise filtering in order to deliver "clean", regulated AC power to a wide range of appliances, as well as home and office equipment. The FVR-2201, with its wide tolerance to power fluctuations, has been specially engineered to perform under the most demanding operating environments.

### Features:

- Automatic Voltage Regulator (AVR)
- Instantaneously switches to correct output voltage by closely monitoring the input voltage
- Power protection for all your sensitive electronics and peripherals in a space saving design
- Internet, network, telephone, fax and modem protection
- Built-in advanced thermofuse protection -- it disconnects power when input voltage is dangerously high
- Can be mounted on the wall

## Installation and operation

The installation of the AVR is very easy. Simply follow the steps included below.

Avoid plugging washers, hair dryers, heaters, multifunction printers or any other large electrical device with power consumption of 2200VA or above in the AVR. The current drawn by these loads can cause the unit to overload.

Loads plugged in the 115 volt-outlets should not exceed 1100 watts.

### 1. Inspection

Remove the AVR from its package and inspect it for damages that may have occurred during shipping. If any damage is discovered, re-pack the unit and return to the place of purchase.

### 2. Installation

Install the AVR in any protected environment that provides adequate airflow around the unit and is free from excessive dust, corrosive fumes and conductive contaminants. DO NOT operate your AVR in an environment where the ambient temperature or humidity is high.

### 3. Computer connection

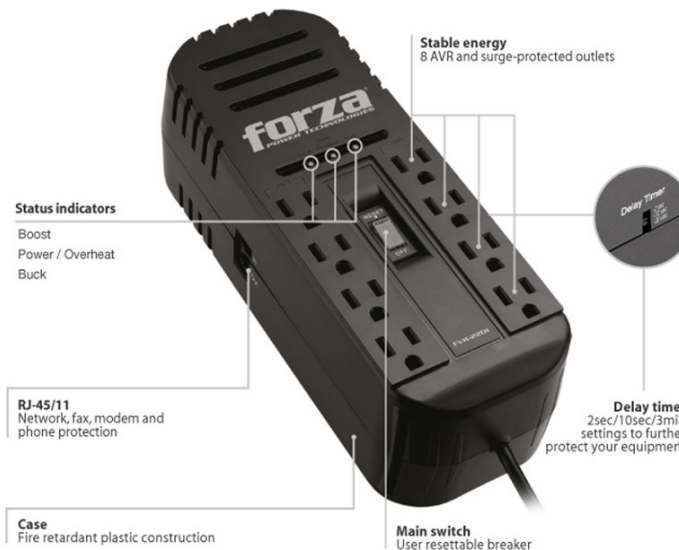
Connect your computer, monitor and any externally powered data storage device (Zip drive, Jazz drive, Tape drive, etc...) into the output receptacles on the top of the AVR.

### 4. Phone line connection

To protect a fax, telephone, modem line or network cable, connect a telephone cable or network cable from the wall Jack outlet to the IN Jack at the side panel of the AVR. Then connect a telephone cable or network cable from the OUT jack on the AVR to the modem, computer, telephone, fax machine, or network device.

### 5. On/Off Switch

Press power switch to turn on the AVR. To turn off the unit, press the button again.



## Specifications

MODEL	FVR-2201	
CAPACITY	VA/W	2200VA/1100W
INPUT	Voltage	115V
	Voltage range	86-138VAC
	Frequency range	50/60Hz (autosensing)
	Joules	320J
	Max. spike current	4500A
	AC plug style	NEMA 5-15P
OUTPUT	Outlet type	8 (NEMA 5-15R)
	Voltage range	104-126VAC
	Frequency range	50/60Hz
	Delay timer	2sec-10sec-3min
	Regulation steps (2)	2 boost / 1 buck
	Overload protection	Thermofuse
DATA PROTECTION	Network protection	RJ-45
	Phone/modem/fax protection	RJ-11
VOLTAGE REGULATION	Voltage regulation	115V
	Boost I	108VAC
	Boost II	100VAC
	Buck	122VAC
VISUAL INDICATORS	LEDs	3
	Power on	Green
	Boost	Green
	Buck	Green
	Overheat/Cut-off	Red
ENVIRONMENT	Operating temperature range	32-104°F
	Storage temperature	5-113°F
	Relative humidity	0-95%, non-condensing
	Audible noise	<40dB at 1m
PHYSICAL APPEARANCE	Switch	Lighted
	Housing	Flame retardant plastic
	Color	Black
	Cord length	3.9ft
	Dimensions (LxWxH)	9.8x3.7x3.1in
	Net weight	4.9lb
WARRANTY	Warranty	2 years

## Trouble shooting

When the Forza AVR is not working normally, please refer to the following trouble shooting table for solving installation or operation problems.

Symptom	Possible cause	Remedy
AVR shuts down after a few seconds and is circuit breaker protected	1. AVR output is short-circuited 2. Overload	Remove the least critical load and reset breaker
The AVR fails to turn on and no LED lights up	Utility power exceeds voltage rating	Verify that the voltage matches the AVR capability specified in the specifications
The red LED is on but there is no output	The unit is overheated or overloaded	Verify that the load matches the AVR capability specified in the specifications. If the unit is overheated, wait until the unit cools down before using it again within the rated load.

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