USER'S MANUAL

Automatic Voltage Regulator

SVR-116-500VA
SVR-116-1000VA

Before operating this product, please read these instructions carefully.

PLEASEREADANDSAVETHISMANUAL

Congratulating you on selecting this Automatic Voltage Regulator(AVR)!

This manual is a guide to install and use the AVR properly, which includes important safety instructions.

This symbol gives information regarding the points important for user's health and safety, AVR operation and the safety of your data.

This symbol gives information, warnings, and other suggestions.

1. IMPORTANTSAFETYINSTRUCTIONS

- Make sure you carefully read all the instructions and warnings in this manual before installing and operating this AVR.
- To avoid any damage to the AVR, it is advised to transport the AVR in its own packing.
- Place all the cables in a proper place so that they are not be stepped on or get caught into people's feet.
- Don't drop any small materials (like clips, nails etc...) into the cabinet.
- In emergencies (such as damage to the cabinet, front panel, or power cord, splashing of liquid, dropping of any materials into the cabinet), switch off the AVR immediately, disconnect it from mains power, then inform the authorized dealer or service center.
- Don't connect any appliances to AVR, which exceeds its rated power capacity.


Earth cable should be chosen according to the current capacity! All units' earth connections, which are connected to AVR, should be done with earth cable. Without earth connection or unproved earth connected units is dangerous for user's health, and has high risk of electronic circuit board faults. Using earth cable with improper diameter could be dangerous for user's health and safety of the unit.

The AVR can only be repaired by the authorized technical service personnel. Any attempt to open and to repair by the user on his own could prove to be dangerous.

Placing magnetic storage media on the top of the UPS may result in data corruption.

When the AVRinput comes from a generator:

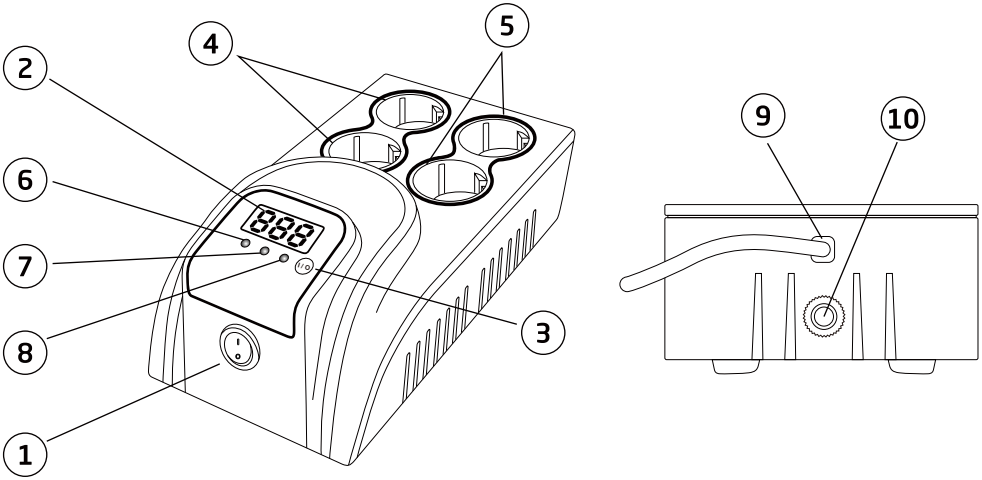
- **Output power capacity must be higher than the AVR rating, otherwise the AVR and generator may not work properly;**
- **Output frequency of generator must be in range of 45 to 65Hz, and waveform must be sine wave, otherwise the AVR and generator may not work properly.**

2. SPECIFICATIONS

2.1. Main Specification

Model	SVR-116-500VA	SVR-116-1000VA
Rated Power	500VA/250W	1000VA/500W
Input Voltage	150-275 V~ (±3%)	
Input Frequency	50Hz	
Output Voltage	230V~ (-13% / +10%)	
Output Frequency	50Hz	
Delay Time	6 seconds	
Surge Protection	Max 320J	
Output Socket	2xCEE7/4 (Regulated+Surge Protection) + 2 xCEE7/4 (Surge Protection only)	
Input Plug	CEE7/7	
Indicators	Green LED: Power on	
	Yellow LED: Delaying	
	Green LED: Protecting	
Protection	Over voltage, under voltage, over temperature, short circuit	
IP Class	IP20	
Operating Temperature	-10°C - +40°C	
Operating Humidity	<90%, non-condensing	
Dimension	L230 x W110 x H130 mm	

2.2.INTRODUCTION OFTHEAVR



1: Power Switch (“-” : power on; “O” : power off)
2: Display for input voltage and output voltage
3: I/O Button
press it to switch display betweeninput voltage and output voltage
4: AVR Output Socket
5: BYPASS Output Socket
same voltage as input voltage, no regulating
6: Green LED: Power on
7: Yellow LED: Delaying
8: Red LED: Protecting
9: AC Input Cable
10: Input Circuit Breaker

3. PACKINGCONTENTS

Delivered pack includes:
AVR.....1 piece
User’s Manual.....1 piece

4. INSTALLATION AND OPERATION OFTHEAVR

Install the AVR in a cool, dry and clean place, away from windows, dust, moisture and cold to prevent fire or electrical shock, do not expose the AVR to rain or water.

• Install the AVR in a place where the children can't reach for.
• Do not install the AVR in or near water.
• Do not place AVR on an unstable cart, stand or table.
• Do not place AVR under direct sunlight or excessive humidity.
• Keep away from fire and heat sources.
• Keep away from corrosive gas or fluid.

4.1. Connect the Electrical Appliances to the AVR

• Make sure all appliances are turned "***OFF*** ", and put the ***Power Switch*** of AVR to "***OFF*** " position.

• Plug the appliances into the ***Output Socket*** of the AVR

AVR Output Socket: The output is regulated and surge protected.
Bypass Output Socket: The output is not regulated, only surge protected.

Make sure that the correct output socket is selected!
Make sure the AVR is not overloaded!

4.2. Switch on the AVR

• Push the ***Power Switch*** to "***ON***" position to switch on the AVR.

• Switch on the appliances one by one.
If more than one appliance is connected, please switch on from the big capacity at first, then the smaller one, and the smallest one at the last.

4.3. LED Indicators

Green Indicator: When it **lights on**, it means AVR is connected to mains power

Yellow Indicator: When it's **flashing**, it means output of AVR is under delaying

Red Indicator: When it **lights on**, it means output of AVR is cut off (in a protecting status)

5. PROTECTIONS

5.1. Over Voltage (High Voltage) Protection

- In case the input voltage is exceeding the normal range, the output will be cut off automatically, in the same time the ***RED Indicator*** will light on.
- When input voltage returns to normal range, the AVR will restoreoutput automatically.

5.2. Under Voltage (Low Voltage) Protection

- In case that input voltage is below the normal range, the output will be cut off automatically, in the same time the ***RED Indicator*** will light on.
- When input voltage returns to normal range, the AVR will restore output automatically.

5.3. Over Temperature Protection

- In case that the temperature of transformer windings is beyond the normal range, the output will be cut off automatically, in the same time the ***RED Indicator*** will light on.
- When temperature of transformer windings returns to normal range, the AVR will restore output automatically.

5.4. Short Circuit Protection

- In case a short circuit happens to the AVR or appliances, the ***Input Circuit Breaker*** will trip off to cut off the input power supply.
- Check if the appliances have been short circuited, if so, please remove them.

6. TROUBLE SHOOTING

Error Code	*AVR Status*	*What to do*
	*under voltage protection*	*Wait till input voltage increases to normal range*
	*over voltage protection*	*Wait till input voltage decreases to normal range*
	*Over temperature protection for Transformer windings*	*Wait till the temperature of Transformer windings decreases to normal range*