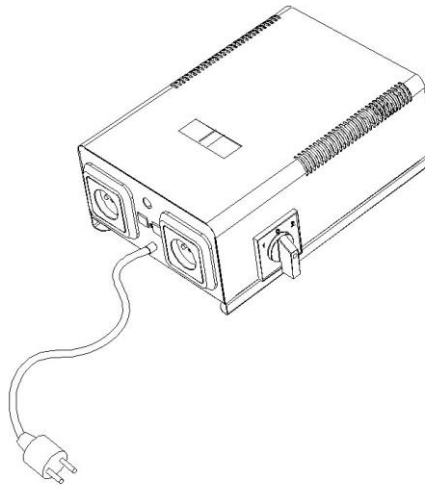


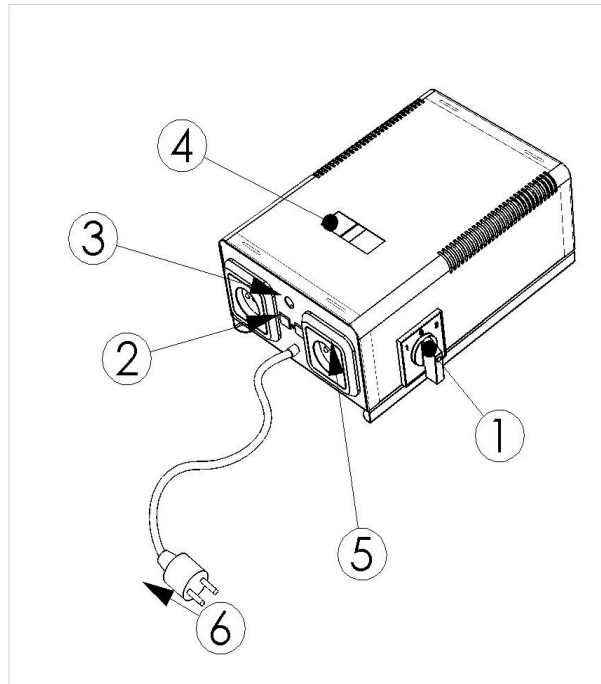
LEGA ENERGY ELECTRONIC



**RELAY VOLTAGE STABILIZER
500 – 1000 – 2000 – 3500 – 5000 VA**

USER MANUAL

Turkey



- 1- By-pass manual switch**
- 2- RJ-11 jacks**
- 3- Power signal lamp**
- 4- Stabiliser indication**
- 5- Output plugs**
- 6- Input plug**

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Important Notice!

Thank you for preferring us. Your product has been designed to protect your sensitive devices for years.

This manual contains very important information both as to specifications, installation and operation of regulator and as to safety of regulator and related loads. It is essential to thoroughly read and understand the manual and follow instructions for proper and safe operation and maximum performance of product.



Read completely and thoroughly the manual prior to installation!



Keep the manual for future reference!

Symbols Used



Indicates special attention in manual.



Indicates life-critical instructions.



Indicates damage to device and/or injury to user.

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▶ **Abbreviations and Imagery**

AVR: Fully Automatic Voltage Regulator
V: Volt (Voltage)
A: Ampere (Current)
P: Watt (Power)

▶ **Environments that aren't suitable for the operation of the AVR**

- **Detrimental fume / Powder / Abrasive Powder**
- **Moisture**
- **Explosive Dust**
- **Extreme Temperature Changes**
- **Bad Ventilation**
- **Intense Electromagnetic Fields**
- **Insects**

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I. SAFETY

This manual contains important instructions for RELAY series AVR/Voltage Stabilizer that should be followed during installation and maintenance.

IMPORTANT NOTICES

1. Read instructions carefully before operating the AVR
2. All warnings in the manual should be adhered to.
3. All operating instructions should be followed.
4. The unit should be supplied by a grounded outlet. Do not operate the unit without ground source.
5. Power cord of the AVR should be routed carefully so that they are not to be walked on.
6. Please save this manual.
7. Please save or recycle the packaging materials.

WARNING!

- Do not insert any object or water into ventilation holes or other openings.
- To reduce the risk of fire or electric shock, install in temperature and humidity controlled indoor area free of conductive contaminants.
- Do not remove the cover without authorized personnel
- Avoid rodent animals nearby the AVR.
- Avoid any flammable objects and objects which can be badly influenced by heat, to be around the AVR.
- To reduce the risk of fire, replace fuses with the same type and rating when necessary.
- Check outlook of the AVR once per month.
- Check switch and cables of the AVR once per month
- Check paint once per year
- All post modifications in the AVR must be suitable according to the AVR power rates.

CAUTION!

- **Only qualified personnel should repair or service your AVR.**
- **Risk of electric shock, do not remove cover. No user serviceable parts inside, refer servicing to qualified service personnel.**
- The output may be energized when the unit is not connected to a mains supply.
- **Risk of electric shock. Hazardous live parts inside this unit are energized when the input AC power is connected.**

II. ATTENTION



Examine the device once you receive. Although device is properly packed, it may get damaged during transportation. If there is any damage on packaging, contact transporter.



Check if customizations you demanded upon ordering have been made before starting up the device.

2.1 Handling



Device must be properly packaged for handling. Therefore, it is highly recommended to keep the original packaging.

2.2 Storing

Device must be stored in a dry environment away from any heaters and direct sunlight at temperature between $-25\text{ }^{\circ}\text{C}$ and $+55\text{ }^{\circ}\text{C}$.

Relative humidity in the environment must be between 20% and 95% (non-condensable).

2.3 Placement

Device must be placed in;

- ▶ With no direct sunlight;
- ▶ Dry; and
- ▶ Away from heating elements and well-ventilated place.
- ▶ Please select dusty and non-corrosive locations for the device.
- ▶ Please do not use the device where flammable or explosive materials are present.

Moreover:

- ▶ Environment must not contain extreme dust and
- ▶ Surfaces of device containing vents must be at a distance of at least 20 cm.

Regulator may operate in environment temperatures between $0\text{ }^{\circ}\text{C}$ and $+40\text{ }^{\circ}\text{C}$.

2.4 Connections



Connections may only be made by authorized service technicians. Any attempts by user to make connections may threaten life.



When device is switched from cold to hot, air humidity may concentrate inside. In such a case wait for at least two hours before making connections because it will be highly dangerous.

Connection terminals of device are either on front or back face. Cover on terminals must be disassembled to make connections.



<18 kg (<40 lb)



18–32 kg (40–70 lb)



32–55 kg (70–120 lb)



>55 kg (>120 lb)

III. INSTALLATION

- Before starting installation, make sure the Main Switch is “OFF”
- Plug in the grounded outlet to the Line.(keep your hands dry during this process)
- Let there be a ground line to avoid all sort electrical leakages.
- Plug in the grounded outlet of the load(apparel) to the output outlet of your AVR.
- Switch on your AVR by simply turning the main switch “ON”
- The AVR will give a sound signal
- On digital voltmeter display,first Inut voltage will appear. Then AVR Temperature and Output voltage will be displayed. During this process,the cooling fan will automatically function and turn off for testing.
- The AVR will give two signal sound and start to operate.
- Please check if the displayed Output Voltage is amongst 215 – 225 V. If displayed output voltage value is out of this range, please contact with authorized service in your country.

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IV. AVR SPECIFICATIONS AND BASIC INFORMATION

The AVR you purchased is a Line conditioner uniquely designed for small home appliances like Satellite TV, Music center, Combi water boilers. Your AVR is protected against High/Low Voltage, Over burden, Over current Short circuit. Under such circumstances, the AVR will protect it's mechanism and won't give output. When the conditions return to normal, it will give the output.

TECHNICAL SPECIFICATIONS					
Power	500 VA	1000 VA	2000 VA	3500 VA	5000 VA
Input Voltage	130 - 260 V				
Operation Interval					
Frequency Average and Min,Max	50 hz / (47- 65)				
Room Temperature, Humidity	- 10+60 C + 25% 98%				
Output Voltage	215-225 V +2%--2%				
Step Contact number	16+				
Efficiency	98%				
Cooling	Automatic Smart fan				
Full load	400 VA	800 VA	1600 VA	2800 VA	4000 VA
Demarrage load	1000 VA	2000 VA	4000 VA	7000 VA	10000 VA
Overload 300% Time	4 minutes				
MTBF	200.000 hrs				
Correction speed	100 V/sec				
Inner temp 60 C	Fans working				
Inner temp 55 C	Fans stop				
Inner temp 100 C	AVR turns off				
Inner temp 95 C	AVR turn on				
Short circuit (fuse)	3,15 A	4 A	10 A	16 A	20 A
High voltage protection Output	245 V				
Start up time	0,1 sec				
Input voltage display time	0,1 sec				
Inner temperature display time	2 sec				
Temperature display	2 sec				
RELAY type	AVR ATMEGA				
Signal sound	Start + Output + Temperature				
Protection	IP 30				
Impact protection	M1				

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Usage	Wall Mountable (Selectable)				
Warranty period	2 year				
-					
Dimensions					
Width (cm)	16,5	16,5	23	23	23
Depth (cm)	7,5	7,5	13,5	13,5	13,5
Height (cm)	26	26	33,5	33,5	33,5
Weight (kg)	2,8	4	12	14	16

V. TROUBLE SHOOTING

1. In case of any electrical leakage, check out the grounding.
2. In case of overload, high temperature and smell will occur. Control if the load is proper to AVR power rate.
3. When there is such smell or high temperature inside the AVR, avoid any usage and contact with authorized service in your country
4. Cut off the Input,in case of any water or object penetration inside the AVR.
5. If any damage occurs in connection cables due to the rodent animals or likely,stop using the AVR and let the authorized personnel replace the cables.
6. If the AVR often gives signal and not giving energy,contact with authorized service for capacity.

VI. LIMITED WARRANTY

The RELAY AVR/VOLTAGE STABILIZER is warranted against all defects in workmanship and materials under normal use for a period of two (2) year from the date of shipment to the original user. The conditions of this warranty and the extent of responsibility of

.....
 corporation under this warranty are as follows.

1.The warranty does not apply if the product has been subjected to physical abuse, improper installation, unauthorized service or modification.

2. The sole responsibility of

.....
 corporation under this warranty shall be limited to the repair or replacement of the product, at the sole discretion of

.....
 corporation.

3. If it becomes necessary to send a defecting unit to

.....
 corporation, the product should be shipped in its original carton or in suitable equivalent, and with shipping charges prepaid.

.....
 corporation will not assume any responsibility for any loss damage incurred in shipping.