

Simran AR-10000

Simran AR-10000 Automatic Voltage Regulator and Power Converter Instruction Manual

Model: AR-10000 | Capacity: 10000W

INTRODUCTION

Welcome to the instruction manual for your Simran AR-10000 Automatic Voltage Regulator and Power Converter. This device is designed to provide stable power by converting voltages between 110/120V and 220/240V, and regulating input voltage fluctuations. Please read this manual thoroughly before operation to ensure safe and efficient use of your equipment.

SAFETY INFORMATION

- Always ensure the unit is placed on a stable, level surface.
- Do not expose the unit to moisture, rain, or extreme temperatures.
- Ensure adequate ventilation around the unit to prevent overheating. Maintain at least 6 inches of clear space on all sides.
- Do not open the casing of the unit. Refer all servicing to qualified personnel.
- Verify the input voltage selector on the back of the unit is set correctly for your power source. Incorrect setting can damage the unit and connected devices.
- Connect the unit to a properly grounded electrical outlet.
- Do not overload the unit beyond its maximum capacity of 10000W. Calculate the total wattage of all connected devices.
- Disconnect power before cleaning or performing any maintenance.

PACKAGE CONTENTS

- Simran AR-10000 Automatic Voltage Regulator and Power Converter
- User Manual (this document)
- Power Cord (may include a US-EU converter plug depending on region)
- Terminal Connectors (for hardwire input/output)

PRODUCT OVERVIEW

The Simran AR-10000 features a robust design for reliable voltage conversion and regulation. Below is an illustration of the front panel and its key components.



Figure 1: Front Panel Layout

This image displays the front panel of the Simran AR-10000. Visible components include the analog output voltage meter on the left, the 'Simran' brand logo, 'AUTOMATIC VOLTAGE REGULATOR MODEL: AR-10000' label, a red 'POWER ON' indicator light, and a circuit breaker switch labeled 'OFF'. Below these are five output sockets: three for 110V (compatible with 3 or 2 prong US plugs and 2 prong Euro/Asian plugs) and two for 220V (compatible with 3 or 2 prong US plugs and 2 prong Euro/Asian plugs). The unit also features ventilation grilles on the top surface.

Front Panel Components

- **Output Meter:** Displays the regulated output voltage.
- **Power ON Indicator:** Illuminates when the unit is powered on.
- **Circuit Breaker:** Provides overload protection. Use to turn the unit ON/OFF.
- **110V Output Sockets:** Three outlets providing 110-120V output. These accept 3 or 2 prong US plugs and 2 prong Euro/Asian plugs.
- **220V Output Sockets:** Two outlets providing 220-240V output. These accept 3 or 2 prong US plugs and 2 prong Euro/Asian plugs.

Rear Panel Components

- **Input Voltage Selector:** A switch to select between 75V-130V and 180V-260V input ranges. *Ensure this is set correctly before connecting to power.*
- **Hardwire Input/Output Terminals:** For direct wiring connections for permanent installations.
- **Grounding Terminal:** For connecting to an earth ground for enhanced safety.

SETUP

- 1. Unpacking:** Carefully remove the unit from its packaging. Inspect for any shipping damage. Due to the unit's weight, internal components may shift during transit. It is recommended to gently shake the unit or inspect for loose connections if any rattling is heard.
- 2. Placement:** Place the voltage regulator on a flat, stable, and well-ventilated surface. Ensure there is sufficient space around the unit for airflow.
- 3. Input Voltage Selection:** Locate the input voltage selector switch on the rear panel. Set it to match your local power supply voltage (e.g., 110V-120V or 220V-240V). *Incorrect selection can cause damage to the unit and connected devices.*
- 4. Power Connection:**
 - **For Plug-in Use:** Connect the provided power cord to the unit and then to a grounded wall outlet. If using a US-EU converter plug, ensure it is securely attached and grounded.
 - **For Hardwire Use:** Consult a qualified electrician for hardwiring the input and output connections using the provided terminal connectors. Ensure all connections are secure and properly insulated according to local electrical codes.
- 5. Device Connection:** Ensure the circuit breaker on the front panel is in the 'OFF' position. Connect your appliances to the appropriate 110V or 220V output sockets on the front panel. Do not exceed the unit's 10000W capacity.

OPERATING INSTRUCTIONS

- 1. Powering On:** After connecting your devices, switch the circuit breaker on the front panel to the 'ON' position. The 'POWER ON' indicator light will illuminate.
- 2. Voltage Monitoring:** Observe the output meter on the front panel. It should display the stable output voltage (approximately 110V or 220V, depending on the selected output).
- 3. Automatic Regulation:** The unit will automatically regulate the output voltage, compensating for fluctuations in the input voltage within its specified range (AC 75V-130V or 180V-260V input, with AC 110V±4% or AC 220V±4% output).
- 4. Powering Off:** To turn off the unit, switch the circuit breaker to the 'OFF' position. Disconnect appliances before unplugging the unit from the wall outlet.

MAINTENANCE

- **Cleaning:** Disconnect the unit from power. Use a soft, dry cloth to clean the exterior. Do not use liquid cleaners or solvents, as they may damage the finish or internal components.
- **Ventilation:** Regularly check that the ventilation grilles are free from dust and obstructions to ensure proper airflow and prevent overheating. Use a soft brush or vacuum cleaner to remove dust.
- **Fuse Protection:** The unit features a built-in thermal fuse for protection against overloads and severe voltage fluctuations. If the unit stops functioning, it may be due to the thermal fuse tripping. Disconnect all devices, turn off the unit, and allow it to cool down. If it still does not operate, consult a qualified technician for inspection and repair. Do not attempt to bypass or replace the internal fuse yourself.
- **Storage:** If storing the unit for an extended period, ensure it is clean, dry, and stored in a cool, well-ventilated area away from direct sunlight and moisture.

TROUBLESHOOTING

Problem	Possible Cause	Solution
Unit does not power on.	No power from wall outlet.	Check the wall outlet with another device to confirm power.

Problem	Possible Cause	Solution
	Circuit breaker is in the OFF position.	Switch the circuit breaker on the front panel to the 'ON' position.
	Internal thermal fuse tripped due to overload or fault.	Disconnect all devices, turn off the unit, and wait approximately 15 minutes for the fuse to reset (if applicable) and the unit to cool. Then try again. If it still doesn't work, contact support.
Output voltage is incorrect or unstable.	Incorrect input voltage selector setting.	Verify the input voltage selector on the rear panel matches your power source voltage.
	Overload on the unit.	Reduce the total wattage of connected appliances. Ensure the total load does not exceed 10000W.
Unit makes unusual noise or smells burnt.	Internal fault or severe overload.	Immediately turn off and disconnect the unit from power. Do not use. Contact customer support or a qualified technician.
Connected device not working.	Device not properly plugged into the correct voltage output socket.	Ensure the device is securely plugged into the appropriate 110V or 220V output socket.
	Connected device fault.	Test the connected device with a known working power source to rule out a device malfunction.

SPECIFICATIONS

Feature	Detail
Model	AR-10000
Brand	Simran
Maximum Capacity	10000 Watts
Input Voltage Range	AC 75V-130V or 180V-260V (selectable)
Output Voltage	AC 110V $\pm 4\%$ or AC 220V $\pm 4\%$
Frequency	50Hz/60Hz compatible
Output Sockets	3 x 110V (US/Euro/Asian compatible), 2 x 220V (US/Euro/Asian compatible)
Protection	Fuse protected with built-in thermal fuse
Dimensions (L x W x H)	18.5 x 14.5 x 14.5 inches
Item Weight	65 pounds
Included Components	Voltage Regulator, Terminal Connectors

Feature	Detail
Manufacturer	VCT Electronics
UPC	810128011891, 810128011853

WARRANTY AND SUPPORT

For warranty information or technical support, please refer to the documentation provided with your purchase or contact Simran customer service directly. Keep your purchase receipt as proof of purchase.

For additional assistance, you may visit the [Simran brand page on Amazon](#) or contact your retailer.

© 2023 Simran. All rights reserved.

ASK A QUESTION ABOUT THIS MANUAL

Ask about setup, troubleshooting, compatibility, parts, safety, or missing instructions. Manuals+ will review the question and use this page’s manual context to help answer it.

Name

Anonymous

Email

you@example.com

After a successful submission, we securely hash the supplied account or form email before sending it to Microsoft Advertising for conversion attribution. [Privacy details](#).

Question

Example: How do I reset this device or fix this error?

Details

Model number, symptoms, what you tried, or the section of the manual you are using.

Submit question