

Simran AR-20000

Simran AR-20000 20,000W Power Converter Regulator Stabilizer

Instruction Manual

INTRODUCTION

This manual provides essential information for the safe and effective operation of your Simran AR-20000 Power Converter Regulator Stabilizer. This unit is designed to convert voltage between 110/120V and 220/240V, and to stabilize fluctuating voltage supplies, ensuring consistent power output for your electronic devices. Please read this manual thoroughly before use and retain it for future reference.

SAFETY INSTRUCTIONS

- **Single Phase Power Only:** This voltage regulator is designed for SINGLE PHASE power systems only. It will not function with 2-Phase 220 Volt power. Attempting to use it with incompatible power systems may result in damage to the unit or connected devices.
- **Hardwire Input Required:** The unit requires a hardwired input connection. Ensure all connections are made by a qualified professional according to local electrical codes.
- **Proper Grounding:** Always ensure the unit is properly grounded to prevent electrical shock.
- **Ventilation:** Do not block ventilation openings. Ensure adequate airflow around the unit to prevent overheating.
- **Overload Protection:** The unit features a built-in thermal fuse for protection against voltage fluctuations. Do not exceed the maximum capacity of 20,000 watts.
- **Indoor Use Only:** This device is intended for indoor use in dry environments. Avoid exposure to moisture or extreme temperatures.
- **Children and Pets:** Keep the unit out of reach of children and pets.

PRODUCT OVERVIEW

The Simran AR-20000 is a robust power converter and voltage stabilizer. Familiarize yourself with its components:



Figure 1: Front Panel - Displays the output meter, power indicator, and on/off switch. The model number AR-20000 is visible on the lower right.





Figure 2: Rear Panel - Features the hardwire input terminals, output terminals, and various AC outlets (110V and 220V/240V compatible with US and Euro/Asian plugs).

Key Components:

- **Output Meter:** Displays the current output voltage.
- **Power ON/OFF Switch:** Controls the unit's power. Includes an indicator lamp.
- **AC Outlets:** Five outlets on the front panel, accepting 3-prong US plugs, 2-prong US plugs, and 2-prong Euro/Asian plugs.
- **Hardwire Input Terminals:** For connecting the main power supply.
- **Heavy-Duty Carrying Handles:** For easier transport of the unit.
- **Built-in Thermal Fuse:** Provides protection against electrical overloads and voltage fluctuations.

SETUP

1. **Unpacking:** Carefully remove the unit from its packaging. Inspect for any signs of damage during transit.
2. **Placement:** Place the stabilizer on a stable, flat surface in a well-ventilated area, away from direct sunlight, heat sources, and moisture. Ensure sufficient space around the unit for airflow.
3. **Input Voltage Selection:** Locate the input voltage selector on the rear of the unit. **IMPORTANT:** Set this selector to match the voltage of your main power supply (e.g., 110V/120V or 220V/240V). Incorrect selection can damage the unit and connected devices.
4. **Hardwire Input Connection:** Connect your main power supply to the hardwire input terminals on the rear of the unit. This connection must be performed by a qualified electrician to ensure safety and compliance with electrical codes. Ensure proper grounding.
5. **Output Connection:**
 - For devices requiring 110V/120V, plug them into the appropriate outlets on the front panel.
 - For devices requiring 220V/240V, plug them into the appropriate outlets on the front panel.
 - Alternatively, use the hardwire output terminals for permanent installations, also performed by a qualified electrician.

6. **Initial Check:** Before powering on, double-check all connections and ensure the input voltage selector is correctly set.

OPERATING INSTRUCTIONS

1. **Power On:** Ensure all devices connected to the stabilizer are switched off. Flip the Power ON/OFF switch on the front panel to the 'ON' position. The indicator lamp will illuminate.
2. **Monitor Output:** Observe the output meter on the front panel. It should display the stabilized output voltage (approximately 110V or 220V/240V, depending on your setup).
3. **Connect Devices:** Once the stabilizer is powered on and displaying the correct output voltage, you can switch on your connected devices.
4. **Capacity Limit:** Do not exceed the maximum rated capacity of 20,000 watts. Overloading the unit can trigger the thermal fuse and potentially damage the stabilizer or connected equipment.
5. **Power Off:** To turn off the unit, first switch off all connected devices, then flip the Power ON/OFF switch on the stabilizer to the 'OFF' position.

MAINTENANCE

- **Cleaning:** Disconnect the unit from the power supply before cleaning. Use a soft, dry cloth to wipe the exterior. Do not use liquid cleaners or solvents.
- **Ventilation:** Regularly check that the ventilation openings are clear of dust and debris to ensure proper cooling.
- **Connection Checks:** Periodically inspect all hardwired connections for tightness and signs of wear.
- **Storage:** If storing the unit for an extended period, ensure it is clean, dry, and stored in a cool, well-ventilated area.

TROUBLESHOOTING

Problem	Possible Cause	Solution
Unit does not power on.	No input power. Power switch is off. Internal fuse tripped.	Check main power supply and hardwire connections. Ensure the ON/OFF switch is in the 'ON' position. Contact qualified service personnel for fuse inspection/replacement.
Output voltage is incorrect or unstable.	Incorrect input voltage selector setting. Overload condition. Faulty internal components.	Verify the input voltage selector matches your power supply. Reduce the load connected to the unit. Contact qualified service personnel.
Unit makes unusual noises or smells.	Internal component issue. Overheating.	Immediately power off the unit and disconnect from the main supply. Ensure adequate ventilation. Contact qualified service personnel.

SPECIFICATIONS

Feature	Detail
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Feature	Detail
Model	AR-20000
Maximum Capacity	20,000 Watts
Input Voltage Range	AC 75V-130V or 180V-260V (selectable)
Output Voltage	AC 110V $\pm$ 4% or AC 220V $\pm$ 4%
Frequency Compatibility	50Hz / 60Hz
Conversion Type	Step Up (110/120V to 220/240V) or Step Down (220/240V to 110/120V)
Outlets	5 front outlets (accepts 3-prong US, 2-prong US, and 2-prong Euro/Asian plugs)
Safety Features	Built-in Thermal Fuse Protection
Input Connection	Hardwire (terminal connectors included)
Product Dimensions	16 x 16.5 x 22 inches
Item Weight	142 pounds
Manufacturer	VCT Electronics

WARRANTY AND SUPPORT

For warranty information, technical support, or service inquiries, please contact VCT Electronics, the manufacturer of your Simran AR-20000 Power Converter Regulator Stabilizer. Refer to the product packaging or the manufacturer's official website for the most current contact details.

When contacting support, please have your model number (AR-20000) and purchase date available.

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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

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Email

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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

Answered questions about this manual

How can I repair or rebuild the electronic circuit board for the Simran AR-20000W voltage stabilizer, and where can I find the technical documentation?

The official instruction manual for the Simran AR-20000 does not include internal circuit schematics or component-level repair instructions. For safety reasons, the manufacturer recommends that all internal repairs, including fuse replacement or circuit board...

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