CyberPower BRG850AVRLCD

CyberPower BRG850AVRLCD 850VA/510W UPS System User Manual

Model: BRG850AVRLCD

Brand: CyberPower

1. Introduction

The CyberPower BRG850AVRLCD Uninterruptible Power Supply (UPS) system is designed to provide reliable battery backup, surge protection, and automatic voltage regulation (AVR) for your electronic devices. This system safeguards personal computers, workstations, networking devices, and home entertainment systems from power interruptions, voltage fluctuations, and surges, preventing data loss and equipment damage.
This manual provides essential information for the proper installation, operation, and maintenance of your CyberPower BRG850AVRLCD UPS system.

2. Setup

2.1 Unpacking and Initial Inspection

Carefully unpack the UPS system and inspect it for any shipping damage. If damage is detected, do not operate the unit and contact your dealer or CyberPower support immediately. The package should contain the UPS unit and this instruction manual.

2.2 Placement Considerations

Place the UPS in a protected area away from excessive moisture, heat, or conductive contaminants. Ensure adequate airflow around the unit for proper ventilation. The unit can be placed on a desk, floor, or mounted in structured wiring closets, basements, or garages using its keyhole slots.

2.3 Connecting to AC Power

1. Plug the UPS power cord into a properly grounded 3-prong AC outlet.
2. Allow the UPS to charge for at least 8 hours before connecting any equipment to ensure maximum battery runtime.

2.4 Connecting Equipment

The CyberPower BRG850AVRLCD features 10 outlets. These are divided into two types:

- **Battery Backup & Surge Protected Outlets (5 outlets):** Connect critical equipment such as computers, monitors, and networking devices to these outlets. These outlets provide power from the UPS battery during power outages and protect against surges.
- **Surge-Only Protected Outlets (5 outlets):** Connect non-critical equipment like printers, scanners, or lamps to these outlets. These outlets provide surge protection but do not offer battery backup during power outages.

Ensure that the total load connected to the battery backup outlets does not exceed the UPS's capacity (510 Watts).

Figure 1: Front view of the CyberPower BRG850AVRLCD UPS system.

SENSITIVITY
LOAD
BATT.
MUTE
OUTPUT
120 V
ENTER
DISPLAY
MUTE
SETUP
USB
2.1A
USB
CyberPower
850 VA

Figure 2: Rear view of the CyberPower BRG850AVRLCD UPS system with various outlets and ports.

2.5 Connecting USB for Monitoring

Connect the provided USB cable from the UPS's USB port to your computer's USB port. This allows the PowerPanel Personal Edition software (available for download from the CyberPower website) to monitor and control the UPS system, providing detailed information on battery and power conditions.

3. Operating the UPS

3.1 Powering On/Off

- **To Power On:** Press and hold the power button (located on the front panel) for approximately 2 seconds until you hear a beep. The LCD display will illuminate.
- **To Power Off:** Press and hold the power button for approximately 2 seconds until you hear a beep. The LCD display will turn off.

3.2 LCD Display Functions

The intelligent multifunction LCD panel provides real-time information about the UPS status. Use the 'DISPLAY' button to cycle through various parameters:

- Input Voltage
- Output Voltage
- Battery Capacity
- Load Capacity
- Estimated Runtime

Figure 3: Detailed view of the LCD display on a CyberPower UPS.

3.3 Mute Function

Press the 'MUTE' button to silence audible alarms during a power event. This function is useful for temporary silencing but does not disable critical alerts.

3.4 USB Charging Ports

The UPS includes two USB charging ports (2.1A shared) on the front panel. These ports can be used to charge mobile devices, tablets, and other USB-powered electronics.

3.5 Automatic Voltage Regulation (AVR)

The AVR feature automatically corrects minor voltage fluctuations (sags and surges) without switching to battery power. This extends battery life and ensures a stable power supply to connected equipment.

Video 1: This video demonstrates the features of a CyberPower Intelligent LCD UPS System, including battery backup, surge protection, data line protection, automatic voltage regulation, and the PowerPanel Personal Edition software. While featuring a 1500VA model, the core functionalities are similar to the BRG850AVRLCD.

Video 2: This video explains why Active PFC circuits need Sine Wave Power, detailing how UPS systems provide backup power, surge protection, and automatic voltage regulation (AVR). It highlights the importance of true sine wave output for modern electronics with Active PFC.

4. Maintenance

4.1 Battery Replacement

The UPS battery has a typical lifespan of 3-5 years, depending on usage and environmental conditions. If the UPS indicates a battery fault or significantly reduced runtime, the battery may need replacement. Refer to the detailed battery replacement instructions in the full product manual or contact CyberPower support for assistance. The unit's warranty includes batteries for 3 years.

4.2 Self-Test Function

Regularly perform a self-test to ensure the UPS battery and internal circuitry are functioning correctly. This can typically be initiated via the PowerPanel Personal Edition software or by a dedicated button on some models (refer to the full manual for specific instructions for your model).

4.3 Cleaning

Keep the UPS clean and free of dust. Use a dry cloth to wipe the exterior. Do not use liquid or aerosol cleaners.

5. Troubleshooting

This section addresses common issues you might encounter with your UPS system.

5.1 UPS Does Not Turn On

- Ensure the UPS is properly plugged into a live AC outlet.
- Verify the power button is pressed and held for the required duration (approx. 2 seconds).
- Check the circuit breaker on the rear of the unit. If it has tripped, reset it by pressing it in.
- Confirm the battery is connected internally (refer to the full manual for battery connection details).

5.2 UPS Shuts Down Unexpectedly / Error F02

An unexpected shutdown or an 'Error F02' code often indicates an internal fault or a severely depleted/failed battery. If this occurs:

- Disconnect all connected equipment from the UPS.
- Attempt to restart the UPS.
- If the error persists, the battery may need replacement or there could be an internal issue. Contact CyberPower

support.

5.3 UPS Does Not Provide Expected Runtime

- Ensure the UPS battery has been fully charged (at least 8 hours).
- Reduce the load connected to the battery backup outlets. Overloading the UPS will significantly decrease runtime.
- The battery may be nearing the end of its service life and require replacement.

5.4 Audible Alarm Sounds Frequently

Frequent alarms can indicate power fluctuations or an overloaded UPS.

- Check the input voltage displayed on the LCD. If it's consistently high or low, the AVR is actively correcting it.
- Verify the load capacity on the LCD. If it's near or exceeding 100%, reduce the connected load.

6. Specifications

Feature	Specification
Model	BRG850AVRLCD
Capacity (VA/Watts)	850VA / 510W
Input Voltage	120V (AC)
Output Voltage	120V (AC)
Number of Outlets	10 (5 Battery + Surge, 5 Surge Only)
USB Charging Ports	2 (2.1 Amps shared)
Battery Type	Sealed Lead-Acid
Typical Runtime (Half Load)	11 minutes
Surge Protection Rating	1080 Joules
Dimensions (L x W x H)	25.9 x 9.9 x 24.6 cm
Weight	14.8 lbs
Form Factor	Tower
Color	Black
UPC	649532618279

7. Warranty and Support

7.1 Product Warranty

The CyberPower BRG850AVRLCD UPS system comes with a 3-year warranty, which includes the battery. This warranty covers defects in materials and workmanship under normal use.

7.2 Technical Support

For technical assistance, troubleshooting, or warranty claims, please contact CyberPower customer support. You may also visit the official CyberPower website for additional resources, FAQs, and software downloads.
Official CyberPower Website: www.cyberpowersystems.com

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