

AITEK ANB-BE3000P (110V)

AITEK ANB-BE3000P Pure Sine Wave UPS 3000VA 110V User Manual

Model: ANB-BE3000P (110V)

1. INTRODUCTION

The AITEK ANB-BE3000P Pure Sine Wave UPS 3000VA is designed to provide clean, stable, and continuous power to critical equipment. Utilizing online double conversion technology, this UPS constantly corrects electrical grid variations, ensuring a high level of security for professional environments, critical systems, and sensitive operations. Its pure sine wave output ensures compatibility with advanced computers, servers, precision equipment, soundboards, laboratory instruments, and communication systems, preventing noise, overheating, and internal damage, thereby extending device durability.

With a capacity of 3000VA and 2100W, this model supports multiple devices simultaneously without losing stability. The wide input voltage range (85V to 275V AC) allows reliable operation even in locations with significant electrical fluctuations, maintaining continuous supply and reducing impacts on internal components.

2. SAFETY INFORMATION

- **Read all instructions:** Before installing or operating the UPS, read all safety instructions and operating instructions.
- **Electrical Hazard:** This unit contains hazardous voltages. Do not attempt to disassemble the UPS. There are no user-serviceable parts inside. Refer servicing to qualified service personnel.
- **Battery Safety:** This UPS model is designed for external battery connection. Ensure proper polarity when connecting external batteries. Batteries can present a risk of electrical shock and high short-circuit current. Observe the following precautions:
 - Do not dispose of batteries in a fire. The batteries may explode.
 - Do not open or mutilate batteries. Released electrolyte is harmful to the skin and eyes. It may be toxic.
 - Replace batteries only with the same type and number of batteries as recommended by the manufacturer.
- **Environment:** Install the UPS in a controlled environment, free from excessive dust, humidity, and extreme temperatures. Ensure adequate ventilation around the unit.
- **Grounding:** The UPS must be connected to a grounded AC power outlet.

- **Overload:** Do not overload the UPS. The total power consumption of connected equipment should not exceed the UPS's rated capacity (2100W).

3. SETUP

3.1 Unpacking

Carefully unpack the UPS and inspect it for any shipping damage. The package should contain:

- 01 AITEK ANB-BE3000P Pure Sine Wave UPS 3000VA
- 01 Instruction Manual
- 01 SB50 Cable (for external battery connection)

3.2 Physical Placement

Place the UPS in a well-ventilated area, away from direct sunlight, heat sources, and excessive moisture. Ensure there is sufficient clearance around the unit for proper airflow, especially around the side and rear ventilation grilles.



A side profile of the UPS, highlighting the ventilation grilles essential for heat dissipation and optimal performance.

3.3 Connecting External Batteries

This UPS model requires external batteries for power backup. Use the provided SB50 cable to connect your external battery bank to the UPS. Ensure correct polarity (red to positive, black to negative) to prevent damage.



This image displays the specialized cable used to connect external batteries to the UPS, featuring ring terminals for battery posts and a red Anderson connector for secure attachment to the UPS.

3.4 Connecting to Power and Devices

Connect the UPS to a standard 110V AC grounded wall outlet. Then, connect your servers, computers, and other critical equipment to the six 110V output sockets on the rear panel of the UPS.





A detailed view of the UPS rear panel, displaying the RS-232 communication port, cooling fan vents, six 110V output sockets for connecting devices, and terminals for external battery connection.



This image shows the AITEK Pure Sine Wave UPS 3000VA integrated into a typical office or home setup, connected to a desktop computer and monitor, illustrating its role in providing stable power.

3.5 Initial Power On

After all connections are secure, press the power button on the front panel to turn on the UPS. The display will illuminate, showing operational status.





The front of the UPS, featuring its digital display and control buttons for monitoring and operation.

4. OPERATING INSTRUCTIONS

4.1 Power On/Off

- **To Power On:** Press and hold the power button (usually marked with a 'U' or power symbol) on the front panel for a few seconds until the display lights up.
- **To Power Off:** Press and hold the power button again until the display turns off. Ensure all connected devices are safely shut down before turning off the UPS.

4.2 Understanding the Display and Indicators

The front panel display provides real-time information about the UPS status, including input/output voltage, load level, battery charge, and operational mode. Refer to the specific icons and readings on your unit's display for detailed status.



The UPS front panel display, showing 'UPS POWER' and various status indicators, including battery level and output voltage.

4.3 Battery Mode Operation

In the event of a power outage or significant voltage fluctuation, the UPS will automatically switch to battery mode, providing continuous power to connected devices. An audible alarm may sound, and the display will indicate battery operation. The duration of backup power depends on the load connected and the capacity of your external battery bank.

4.4 Overload Protection

The UPS features intelligent overload protection. If the connected load exceeds the UPS's capacity (2100W), it will emit progressive alerts. In severe overload situations, the UPS may automatically shut down to protect itself and connected equipment. Reduce the load by disconnecting non-essential devices if an overload warning occurs.



*Proteção contra
sobrecarga de bateria*



Potência 3000VA



*Proteção contra
sobrecarga de energia*



*Proteção contra curto-
circuito*

This image illustrates key protective features of the AITEK Pure Sine Wave UPS 3000VA, including safeguards against battery overload, general energy overload, and short circuits, alongside its 3000VA power capacity.

4.5 Monitoring via RS-232

The UPS includes an RS-232 port for advanced monitoring. Connect the UPS to a computer using a compatible cable and software to monitor its operation in real-time. This feature is particularly useful for racks, technical rooms, corporate networks, and locations requiring continuous supervision.

5. MAINTENANCE

5.1 Battery Maintenance

Since this UPS uses external batteries, their maintenance is crucial for optimal performance and lifespan. Follow the battery manufacturer's guidelines for charging, discharging, and replacement. Regularly inspect battery terminals for corrosion and ensure connections are secure.

5.2 Cleaning

Keep the UPS clean and free of dust. Use a soft, dry cloth to wipe the exterior. Do not use liquid or aerosol cleaners. Ensure ventilation openings are clear of obstructions to maintain proper airflow.

5.3 Environmental Considerations

Maintain the UPS in a stable environment. Avoid exposing it to extreme temperatures, high humidity, or corrosive substances. Proper environmental conditions contribute to the longevity and reliability of the unit.

6. TROUBLESHOOTING

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

Problem	Possible Cause	Solution
UPS does not turn on	No input power; Power button not pressed correctly; External battery not connected or discharged.	Check power cord connection to wall outlet; Ensure wall outlet has power; Press and hold power button for a few seconds; Verify external battery connection and charge level.
UPS beeps continuously / Overload alarm	Connected load exceeds UPS capacity.	Disconnect non-essential equipment to reduce the load. Ensure total load is within 2100W.
Short backup time	External batteries are old or not fully charged; Excessive load.	Allow batteries to fully charge; Reduce connected load; Consider replacing old external batteries.
UPS switches to battery mode frequently	Unstable input power; High sensitivity setting.	Check the quality of your input power supply; Consult the advanced settings via RS-232 software if available to adjust sensitivity (if applicable).

7. SPECIFICATIONS

Feature	Specification
Model	ANB-BE3000P (Saída 110V)
Capacity & Power	3000VA / 2100W
Technology	Online Double Conversion, fully stabilized energy
Waveform	Pure Sine Wave
Output Voltage	110V AC
Input Voltage Range	85V - 275V AC
Efficiency	85% in AC mode
Overload Protection	Progressive alerts and automatic shutdowns

Feature	Specification
Noise Level	Less than 45 dBA at 1 meter
Harmonic Distortion (THD)	≤ 3% THD (linear load), ≤ 6% THD (non-linear load)
Frequency	60 Hz
DC Voltage (Extended Mode)	96 Vdc
Power Factor	≥ 0.99 (input)
Ports	RS-232 for monitoring
Composition	Metal, Plastic, Electronic Components
Dimensions (L x W x H)	44.0 x 19.2 x 34.0 cm (19.2P x 44L x 34A cm)
Net Weight	18.2 kg (18.7 Kilograms)

8. WARRANTY

This AITEK UPS comes with a manufacturer's warranty of **90 days** from the date of purchase. Please retain your proof of purchase for any warranty claims. The warranty covers defects in materials and workmanship under normal use. It does not cover damage caused by misuse, accidents, unauthorized modifications, or improper installation.

9. SUPPORT

For technical assistance, troubleshooting beyond this manual, or warranty inquiries, please contact AITEK customer support. Refer to the contact information provided with your product packaging or visit the official AITEK website for the most up-to-date support details.

When contacting support, please have your product model (ANB-BE3000P) and purchase information readily available.

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