

Hornet Line-Interactive UPS

Hornet 600va / 300watts

Hornet 1000va / 500watts

USER'S Manual

The Hornet Line-Interactive Uninterruptible Power System (UPS) protects your computer hardware from physical damage and will provide emergency battery backup power to prevent data loss in the event of power problems.

The main features include

- ◆ Automatic boost Voltage Regulation (AVR);
- ◆ Advanced equipment & data protection from blackouts, brownouts, sags, AC line noise and surges;
- ◆ Full analytical high performance micro-processor control with true RMS synchronous calculation;
- ◆ Intelligent battery management for battery status, battery power saving & battery replacement control;
- ◆ DC direct start-up capability, complete diagnostic indication and control;
- ◆ Built-in USB communication port for Hornet 1000.
- ◆ Phone jack for phone and fax lines for Hornet 1000.

Operation & Installation

The Hornet Line-Interactive UPS can protect your equipment from all power problems such as surge, spikes, blackouts, brownouts and line noise. When AC power is present and the ON/OFF switch is turned on, the Hornet Line-Interactive UPS continues to charge the battery and provide the power to the equipment directly from the AC line. The battery can provide stable power to complete your work, save your data and safely shut down your system when the utility power has failed.

The Hornet Line-Interactive UPS is simple to operate and install. Following are the installation steps to connect the equipment to the UPS.

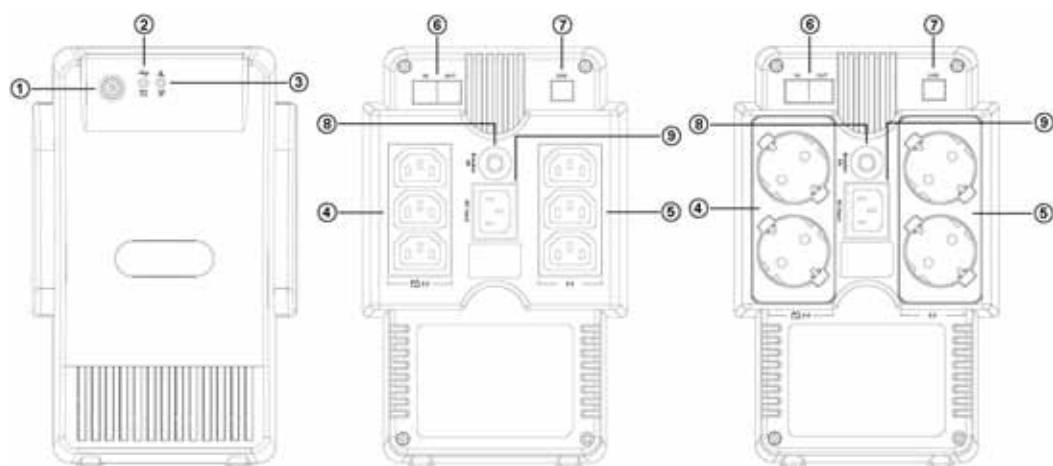
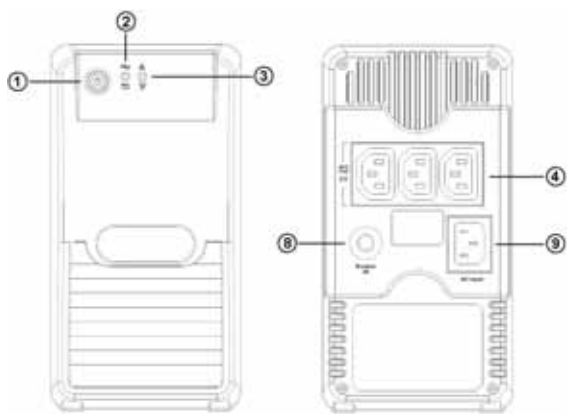
1. Connect the Hornet Line-Interactive UPS to grounded AC power Outlets.
2. Charge the battery at least 8 hours for a full charge before use.
3. Plug your computer and monitor into the "Battery Backup & Surge Protection" outlets. (These outlets will provide emergency battery backup power during power problems as well as surge protection from surge and spike.)

CAUTION: Do NOT plug LASER PRINTERS into any of the "Battery Backup" outlets.

CAUTION: Do NOT plug **ACCESSORY SURGE** strip into any of the "Battery Backup & Surge Protection" outlets.

4. Plug your peripheral equipment (printer, scanner, fax, speaker, etc.) into the "Surge Protection" outlets. (These outlets will **NOT** provide battery backup power during a utility power failure).
5. Switch on the Hornet offline UPS product while the connected equipment is off.
6. Turn on your connected equipment when the "AC mode" LED light is illuminated.

Indicators



1. On/Off Switch

This On/Off switch controls power to your equipment and performs a self-test to detect inverter, line, battery status & LEDs.

NOTE: Turn on the UPS.

Press and hold the switch for more than two seconds and release the switch after the beep. The UPS will start and provide the stable power to your equipments.

NOTE: Turn off the UPS.

Press and hold the switch for more than two seconds and release the switch. The UPS will shut down completely.

NOTE: Perform Self-test.

The UPS will perform self-test for about 10 seconds when the UPS is turned on.

2. Line / Battery LED (Green LED)

Indicates the UPS is providing AC power to your equipment. When the LED is blinking the UPS is providing power from the battery.

3. Warning LED (Red)

When in AC or DC mode the blinking LED could indicate that the battery should be replaced. When the LED is always on it indicates an overload condition or UPS fault.

For details please see Indicator Table.

4. Battery Backup & Surge Protection Outlets

These outlets not only provide full time surge protection but also provide emergency battery backup power.

5. Surge Protection Outlets (Bypass outlets)

These outlets provide full time protection from surge and spike (**for Hornet 1000 only**).

6. Phone/Fax Protection

Built-in RJ11 jacks protect the phone or fax line from surges (**for Hornet 1000 only**).

NOTE: The UPS will operate normally without this connection.

7. USB Communication Port

The built-in USB port connects to your computer. The software will shut down your computer automatically in case of power failure. It prevents the possibility of damaging your files with an abrupt power outage. The software can also provide the information regarding the status of your utility power line (**for Hornet 1000 only**).



Install the software to the computer:

If auto play is not enabled on the computer, please follow instructions below:

- Double-click on My Computer on the desktop.
- Double-click on the CD-Rom drive icon and follow the on-screen instructions.

8. Circuit Breaker

The button will protrude when the overload condition occurs. The UPS will switch off of utility power. If the button protrudes, disconnect some non-essential equipment and reset the circuit breaker by pushing the button inward.

9. AC Inlet

Please plug the AC power cord into this connector.

Safety Instructions

Once you have received the Hornet Line-Interactive UPS product, you should remove and inspect the product for shipping damage. If any damage is found, please notify the carrier and your dealer. Please keep the shipping carton and the packing foam in the event the product must be returned to the factory for service.

SAFETY INSTRUCTIONS

1. Place the Hornet offline UPS indoors in an area that has adequate airflow and is free from excessive dust. Do NOT allow the UPS to be exposed to moisture, rain, excessive heat or direct sunlight.
2. Use of the Hornet offline UPS product in life support applications where failure of this equipment can reasonably be expected to cause failure of life support equipment or to significantly affect its safety or effectiveness is NOT recommended.
3. Always disconnect the input power cord from the wall outlet before replacing the battery.
4. Do NOT dispose of the battery in a fire: the battery may explode.
5. Do NOT open or mutilate the battery. Batteries contain an electrolyte that is toxic

and harmful to both the skin and eyes.

- Proper disposal of the battery is required. Please refer to your local laws/regulations regarding battery disposal.
- Use tools with insulated handles to replace the battery to avoid personal injury. Due to energy hazards, please remove wrist watches and jewelry such as rings when replacing battery.

Indicator Table

1. Status Indicators

The UPS will provide the operator with both visual and audible status indicators. Visual indicators consist of two LED's. One LED indicates that the UPS is in AC model or DC model. The other one indicates that the UPS is in fault or over load conditions.

2. LED Display & Audio Alarm

Green LED	Red LED	Alarm	UPS Status Indication
On	X	X	AC Mode (Operation)
On	On	4 beeps @ 0.25 sec / per 10 sec	Self Test Mode
On	On	1 beep @ 2 sec	Over Load (AC Mode)
Blinking	On	On	Over Load 110% (DC Mode)
X	On	On	Over Load 120% (DC Mode)
X	On	On	Short (DC Mode)
Blinking	X	4 beeps @ 0.25 sec / per 10 sec	DC Mode (Operation)
Blinking	On	1 beep @ 1 sec	Low Battery Voltage
On	Blinking	1 beep @ 20 sec	Battery Failure
On	Blinking	X	Charge Mode Abnormal
X	Blinking	X	Battery Voltage Over Spec. (15 Voltage)

Specification

Model	Hornet 600	Hornet 1000
Capacity	600VA / 300 Watts	1000VA / 500 Watts
Input Voltage Range	174~263Vac	174~263Vac
Output Voltage Range	203~262Vac	203~262Vac
Automatic voltage Regulation (AVR)	-12% to 13% of nominal	
Frequency	50 / 60 Hz auto sensing	
Outlets	3 IEC Surge Protection & Battery Backup	3 IEC outlets for Surge Protection & Battery Backup + 3 IEC outlets for Surge Protection 2 Shuko outlets for Surge Protection & Battery Backup + 2 Shuko outlets for Surge Protection
Lighting / Surge Protection	220 Joules	220Joules
Transfer Time to Battery/AC	8ms typical	
Battery Type	Sealed and leak proof maintenance free lead-acid battery	
Battery Specification	12V / 5Ah	12V / 9Ah
Typical Backup Time	3 minutes at full rated load	
Phone / Fax Protection	N/A	RJ11
Short Circuit Protection	Circuit Breaker	
Communication Port	N/A	USB
Operation Temperature	0 ~ 40	
Operation Relative Humidity	0 to 95% non-condensing	
Storage Temperature	-15 ~ 50	
Net Weight	4.5 kg	7.04 kg
Dimensions (HxWxL) mm	154 x 110 x 211	181 x 154 x 242

- Specification change without notice.

Troubleshooting

Symptom	Possible Cause	Action to Take
The UPS will not turn on.	UPS is not turned on.	Switch on the ON/OFF switch. If the power is not present, please make sure your circuit breaker on the building is not accidentally turned off.
	Circuit Breaker has tripped.	Reduce the amount of equipment plugged into the "Battery Backup & Surge Protection" outlets of the UPS. Next, reset the circuit breaker by pushing it back in.
The UPS is making a continuous sound and the "Overload" indicator is light.	The "Battery Backup & Surge Protection" outlets are overload.	Turn off the UPS and reduce the amount of equipment connected to these outlets.
The UPS does not provide expected runtime.	Due to age the battery does not hold a full charge.	Remove all connected equipment from the UPS and charge the battery for at least 8 hours.
		Return for service or you can replace the battery by ordering one from your dealer.
Connected equipments lose power while connected to the UPS	The "Battery Backup & Surge Protection" outlets are overloaded.	Refer to the Indicator Table "Hornet offline UPS is making a continuous sound and the Overload indicator is lit."
	The UPS has depleted the battery.	The Hornet offline UPS will turn off when the battery has been depleted during the failure of utility power. Allow UPS to re-charge before continuing use of the UPS.
	Connected equipment is connected to the wrong outlet.	Ensure that the equipment you want to stay powered during a failure of utility power is plugged into the "Battery Backup & Surge Protection" outlets.
	The UPS may be faulty.	Please Call your dealer for further troubleshooting.

Service and Support

For questions and/or problems, please call your local Distributor or the Help Desk at one of the following telephone numbers and ask for a UPS technical representative.

In the United States:

Europe, Middle East, Africa:

Asia:

Australia:

Please have the following information ready when you call the Help Desk:

- Model number
- Serial number
- Version number (if available)
- Date of failure or problem
- Symptoms of failure or problem
- Customer return address and contact information

If repair is required, you will be given a Returned Material Authorization (RMA) Number.

This number must appear on the outside of the package and on the Bill of Lading (if applicable). Use the original packaging or request packaging from the Help Desk or distributor. Units damaged in shipment as a result of improper packaging are not covered under warranty. A replacement or repair unit will be shipped, freight prepaid for all units under warranty.