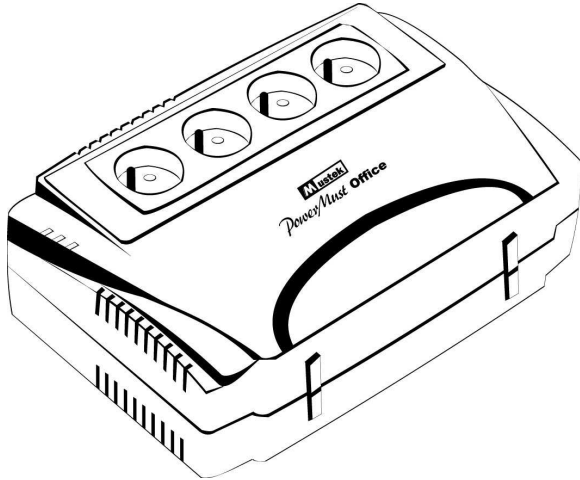


USER MANUAL

PowerMust Office



Uninterruptible Power System

IMPORTANT SAFETY INSTRUCTIONS

SAVE THESE INSTRUCTIONS

This manual contains important instructions for Models PowerMust Office series that should be followed during installation and maintenance of the UPS and batteries.

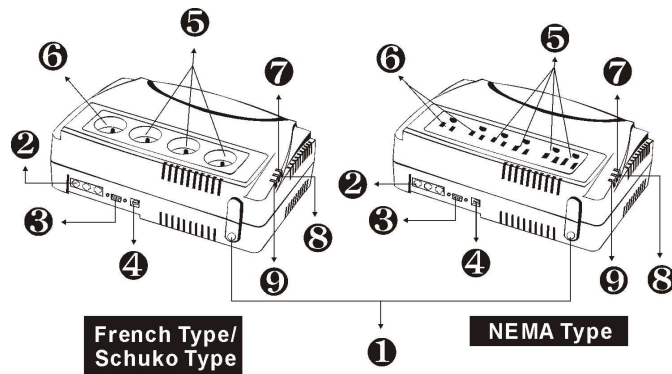
- Symbol for each ground is displayed and defined.
- Symbol for "ON/OFF" is displayed and defined.
- Symbol for identifying communication ports not telephone connection is displayed and defined.
- Internal battery voltage is 12Vdc.
- UPS with user replaceable batteries should only be used in a suitable temperature controlled indoor area free of conductive contaminants.
- The maximum ambient temperature rating is 40°C.
- This equipment should be installed from service personnel.
- With the installation of this equipment, it should be prevented that the sum of the leakage current of the UPS to the connected consumer exceeds 3.5mA.
- Attention, hazardous through electric shock. Also with disconnection of this unit from the mains, hazardous voltage still may be accessible through supply from battery. The battery supply should be therefore disconnected in the plus and minus pole at the quick connectors of the battery when maintenance or service work inside the UPS is necessary.
- When replacing the batteries, use the same number and type of batteries.
- Do not dispose of batteries in a fire. The battery may explode. Do not open or mutilate the battery or batteries. Released electrolyte is harmful to the skin and eyes.
- A battery can present a risk of electric shock and high short circuit current. The following precaution should be observed when working on batteries:
 - 1) Remove watches, rings, or other metal objects.
 - 2) Use tools with insulated handles.
- **CAUTION!! DO NOT** connect the conductive loads to the battery backup outlets on the UPS. The conductive loads mean Laser Printers, Scanners, Electric Fans, Refrigerators, Hair Dryers and other equipment which is built-in with motors. The huge starting current of these conductive loads would damage the UPS.

Damages to the UPS caused by improper use will void the warranty of the product.

WARNING: This is a UPS Class C2. In residential subdivision the product may cause harmful interference, then the users have to take additional measures."

System Description

- | | |
|---------------------------------------|-------------------------------------|
| 1. Power On/Off Switch | 6. Surge protected only receptacles |
| 2. Modem/phone line surge protection | UPS status LED – |
| 3. RS-232 Communication Port | 7. Fault LED – Red LED |
| 4. USB port | 8. AC Mode – Green LED |
| 5. Battery power supplied receptacles | 9. Battery Mode – Yellow LED |

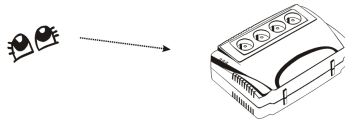


Installation & Operation

Installing the UPS is as easy as following the steps shown. Be aware of the Power Switch must be kept in the "ON" position and all equipment must be plugged into the "Battery Power Supplied Receptacles", otherwise, the UPS will be disabled and your equipment will not be protected during a power failure.

1. Inspection

Remove the UPS from its packaging and inspect it for damage that may have occurred during shipping. If any damage is discovered, repack the unit and return it to the place of purchase.



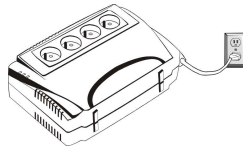
2. Placement

Install the UPS unit in any protected environment that provides adequate airflow around the unit, and is free from excessive dust, corrosive fumes and conductive contaminants. DO NOT operate your UPS in an environment where the ambient temperature or humidity is high.



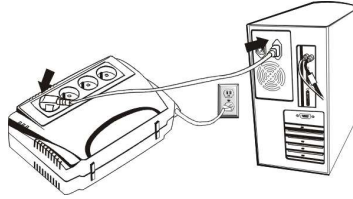
3. Charging

This unit is shipped from the factory with its internal battery fully charged, however, some charge may be lost during shipping and the battery should be recharged prior to use. Plug the unit into an appropriate power supply and allow the UPS to charge fully by leaving it plugged in for at least 24 hours with no load (no electrical devices such as computers, monitors, etc.) connected.



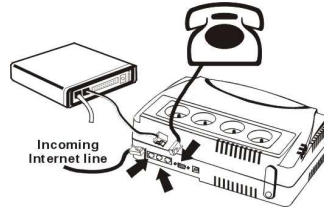
4. Computer Connection

Connect one computer-related device into one of the battery supplied receptacles on the top of UPS. Please refer to System Description for the detailed locations of battery supplied receptacles.



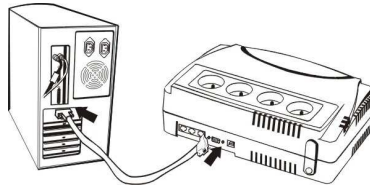
5. Network(RJ-45) Connection

Plug incoming internet line into the "In" socket at the panel of the UPS. Use one more internet line cable and plug one end of the internet line cable to the "Out" socket of the UPS. Use another internet line cable and plug to telephone or fax as shown below.



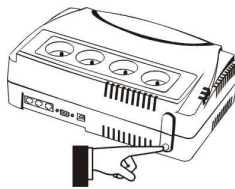
6. Serial Cable Connection

To allow for unattended system shutdown for your operating system, connect the RS-232 serial cable as per diagram below. For the USB serial cable, just simply plug into the UPS and PC and it will be auto detected.



7. Turn On/Off

Press power switch to turn on the UPS. Press power switch again to turn off the UPS.



8. DC Start Function

DC Start Function enables UPS to be started up when AC utility power is not available and battery is fully charged. Just simply press the power switch to turn on the UPS.

9. Battery Removal

Follow the charts below to replace the batteries.

Step1: Remove the screws located on the bottom of the UPS to open the battery cover.

Step2: After removing the battery cover, gently extract batteries from the case.

Step 3: Disconnect the two wires connecting it to the UPS and replace the same type of batteries. Dispose of the old batteries properly at an appropriate recycling facility.

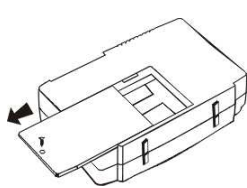


Chart 1

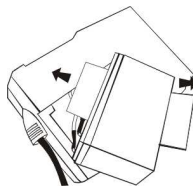


Chart 2

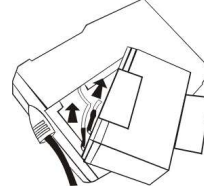
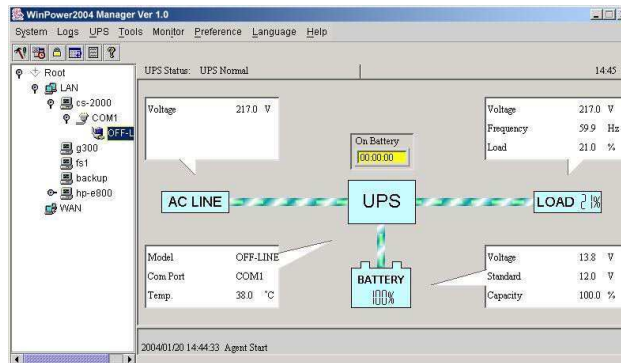


Chart 3

WinPower software Installation

WinPower is a brand new UPS monitoring software, which provides user-friendly interface to monitor and control your UPS. This unique software provides safely auto shutdown for computer system while power failure. With this software, users can monitor and control any UPS on the same LAN no matter how far from the UPSs.



FOR WINDOWS O/S:

1. Insert the installation CD into CD-ROM drive and then follow the on-screen instructions. If there no screen shows when inserting the CD after 1 minute, please execute setup.exe for initiating installation software.
2. Enter Serial No: 511C1-01220-0100-478DF2A to install the software.

When your computer restarts, the WinPower software will appear as a green plug icon located in the system tray, near the clock.

Note: The load level detection function is not available on the PowerMust Office UPS. The load level will be set to 30% all time as its default value.

Specification

MODEL		PowerMust Office 350	PowerMust Office 650
CAPACITY	VA	350VA	650 VA
	W	210W	390W
INPUT	Voltage	120 VAC or 220/230/240VAC	
	Phase	Single	
OUTPUT (Inverter Mode)	Voltage Range	120 VAC or 220/230/240VAC \pm 10%	
	Frequency	50Hz or 60 Hz \pm 1Hz	
	Waveform	Modified Sinewave	
TRANSFER TIME	Typical	2-6ms	
BATTERY	Battery Type	12V4.5Ah	12V7Ah
	Battery Number	1	1
	Recharging Time	24 Hours up to 90%	
	Backup Time (at a PC load with 17" monitor)	6 minutes	16 minutes
DISPLAY	LED	Power on, Backup Mode	
AUIBLE ALARM	Battery Mode	Sounding Every 10 Seconds	
	Low Battery	Sounding Every Second	
	Battery Replacement	Sounding every 2 seconds	
	Fault	Continuously Sounding	
PROTECTION	Full Protection	Deep Discharge, Overcharge, Short Circuit Protection RJ 45 Modem/Telephone Protection x 3	
PHYSICAL	Dimension (DxWxH)	297X192X90 (mm)	
	Net Weight	4.3kgs	6.2kgs
OUTLETS	NEMA type	6 outlets (2 for bypass, 4 for backup)	
	Schuko type	4 outlets (1 for bypass, 3 for backup)	
	French type	4 outlets (1 for bypass, 3 for backup)	
ENVIRONMENT	Operation Temperature	0-40 \square	
	Operation Humidity	20% -90%	
INTERFACE	RS-232 Port	Windows 98/NT/2000/XP/2003, Linux, Sun Solaris, IBM Aix, Compaq True64, SGI IRIX, FreeBSD, HP-UX, and MAC	
	USB Port	Windows 98/2000/ME/XP	

Trouble Shooting

If the UPS failed to operate properly, please review the following points firstly.

Symptom	Possible Cause	Remedy
Yellow LED is lighting, but audible alarm is heard intermittently.	UPS is not connected properly to the mains.	Connect the UPS according to the installation guide.
Red LED is lighting, but audible alarm is heard intermittently.	Battery low	Please change the same rating battery
Red LED is lighting, but audible alarm is heard continuously.	UPS short circuit	Check the output connect is OK?

If any abnormal situations occur that are not listed above, please call service people immediately.