# **User Manual**

# Line-interactive UPS ECO II-800/ ECO II-800/ ECO II-850

#### **IMPORTANT SAFETY INSTRUCTIONS**

This manual contains important instructions. Please read and follow all instructions carefully during installation and operation of the unit. Read this manual thoroughly before attempting to unpack, install, or operate your UPS.

**CAUTION!** To prevent the risk of fire or electric shock, install in a temperature and humidity controlled indoor area, free of conductive contaminants. (Please see specifications for acceptable temperature and humidity range).

**CAUTION!** To reduce the risk of overheating the UPS, do not cover the UPS' cooling vents and avoid exposing the unit to direct sunlight or installing the unit near heat emitting appliances such as space heaters or furnaces.

**CAUTION!** Do not attach non-computer-related items, such as medical equipment, life-support equipment, microwave ovens, or vacuum cleaners to UPS.

**CAUTION!** Do not allow liquids or any foreign object to enter the UPS. Do not place beverages or any other liquid-containing vessels on or near the unit.

**CAUTION!** In the event of an emergency, press the OFF button and disconnect the power cord from the AC power supply to properly disable the UPS.

**CAUTION!** Unplug the UPS prior to cleaning and do not use liquid or spray detergent.

Servicing of batteries should be performed or supervised by personnel knowledgeable of batteries and the required precautions. Keep unauthorized personnel away from batteries.

#### INSTALLING YOUR UPS SYSTEM

#### **UNPACKING**

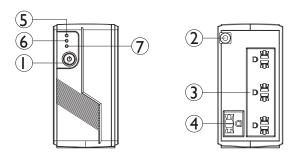
The box should contain the following:(1) UPS Unit x 1; (2) User Manual x 1

#### HARDWARE INSTALLATION GUIDE

- 1. Your new UPS may be used immediately upon receipt. However, recharging the battery for at least 8 hours is recommended to ensure that the battery's maximum charge capacity is achieved. Charge loss may occur during shipping and storage. To recharge the battery, simply leave the unit plugged into an AC outlet. The unit will charge in both the on and off position.
- 2. With the UPS unit off and unplugged, connect the computer, monitor, and any externally powered data storage device (Zip drive, Jazz drive, Tape drive, etc.) into the battery power supplied outlets. DO NOT plug a laser printer, copier, space heater, vacuum, paper shredder or other large electrical device into the UPS. The power demands of these devices will overload and possibly damage the unit.
- 3. Plug the UPS into a 2 pole, 3 wire grounded receptacle (wall outlet). Make sure the wall branch outlet is protected by a fuse or circuit breaker and does not service equipment with large electrical demands (e.g. air conditioner, refrigerator, copier, etc.) Avoid using extension cords.

- 4. Press the power switch to turn the unit on. The power on indicator light will illuminate and the unit will "beep".
- 5. If an overload is detected, an audible alarm will sound and the unit will emit one long beep. To correct this, turn the UPS off and unplug at least one piece of equipment from the outlets. Wait 10 seconds. Make sure the circuit breaker is depressed and then turn the UPS on.
- 6. To maintain optimal battery charge, leave the UPS plugged into an AC outlet at all times.
- 7. To store your UPS for an extended period, cover it and store with the battery fully charged. Recharge the battery every three months to ensure battery life.

#### **BASIC OPERATION**



ECO II-800 / ECO II-800I / ECO II-850

#### 1. Power Switch

Press the switch for 2 seconds to turn the UPS ON or OFF.

Alarm setting: The audible alarm can be turned OFF or ON by quickly pressing the POWER button twice. The default setting is for the Alarm On. To turn the Alarm Off, quickly press the power button twice. You will hear two short beeps when the Alarm is turned off. To turn the Alarm back on, quickly press the power button twice. You will hear a single short beep when the Alarm is turned on.

#### 2. Input Power Cord

Connect to utility power through the input power cord.

#### 3. Battery Backup & Surge Protected Outlets

Provides battery backup and surge protection. They ensure power is provided to connected equipment over a period of time during a power failure.

#### 4. Surge Protected Outlets

Provides surge protection for devices that don't require battery backup.

#### 5. AC Mode LED

The green LED will light when utility power is normal.

#### 6. Battery Mode LED

The yellow LED will light when input power is abnormal and the unit will work in battery mode.

#### 7. Fault LED

The red LED will light when fault or over load occurs.

# DEFINITIONS FOR ILLUMINATED LED INDICATORS

	LED Status	Alarm
Normal	Green LED lighting	Off
Battery Discharge	Yellow LED flash once every 30 seconds	Beep once every 30 seconds
Battery Low	Yellow LED flash once every 2 seconds	Beep once every 2 seconds
Overload	Red LED flash once every 0.5 seconds	Beep once every 0.5 seconds
Off charging mode	All LEDs off	Off
Fault	Red LED lighting	Continuous alarm

# TECHNICAL SPECIFICATIONS

Model	ECO II-800	ECO II-800I	ECO II-850			
Capacity (VA/W)	800/360	800/480	850/480			
Input						
Nominal Voltage	220Vac					
Nominal Frequency		50/60Hz				
Output						
On Battery Output Voltage	Simulated Sine Wave at 220Vac+/-10%					
On Battery Output Frequency	50Hz +/-1%					
Overload Protection	Fuse					
Physical	Physical					
Maximum Dimensions (W x H x D) (mm)	87 x 165 x 276mm					
Battery	Battery					
Sealed Maintenance Free Lead Acid Battery	12Vx1					
Typical Recharge Time	8 Hours					
Warning Diagnostics	Warning Diagnostics					
Indicators	Power On / Using Battery / Fault					
Audible Alarms	On Battery, Low Battery, Overload, Fault					
Environment						
Operating Temperature	0°C to 40°C					
Relative Humidity	0 to 90%					
Management						
Auto-Charger	Auto-Charger					
Auto-Restart	Auto-Restart					

# TROUBLESHOOTING

Problem	Possible Cause	Solution
The UPS does not perform expected runtime.	Battery not fully charged.	Recharge the battery by leaving the UPS plugged in.
	Battery is slightly worn out.	Contact Technical Support.
The UPS will not turn on.	The unit is not connected to an AC outlet.	The unit must be connected to a 220Vac 50/60Hz outlet.
	The battery is worn out.	Contact Technical Support.
	Mechanical problem	Contact Technical Support.
Outlets do not provide power to equipment.	Fuse is blown or breaker is tripped due to overload.	Turn the UPS off and unplug at least one piece connected equipment. Unplug the power cord of the UPS then replace the blown fuse with a spare one or press the circuit breaker knob. Connect power cord then turn the UPS on. Make sure that your spare fuse meets the specification.
	Batteries are discharged.	Allow the unit to recharge for at least 4 hours.
	Unit has been damaged by a surge or spike.	Contact Technical Support.



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