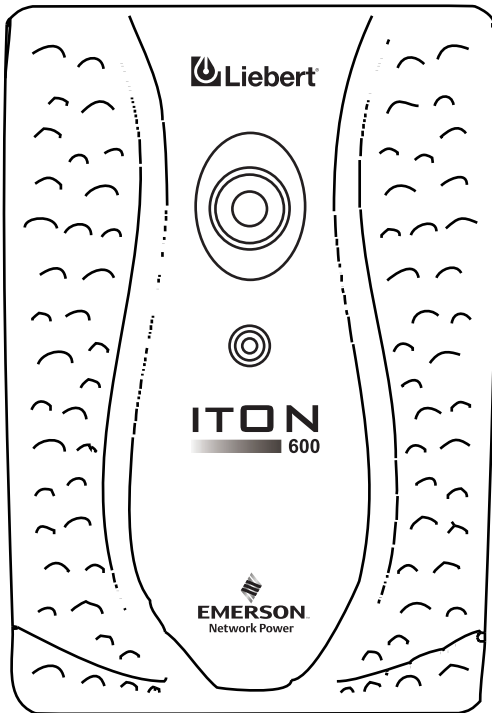


USER MANUAL

ITON



Uninterruptible Power Supply



Introduction

This UPS is specially designed for Personal Computer with multi-functions. Its light weight, compact design perfect fits to the limited working environment. The line of UPS is equipped with boost and buck AVR to stabilize input voltage range. It is also built-in with DC start function. This function enables the UPS to be started up without AC power supplied. Although it's a small UPS, it's equipped with Smart RS-232 Communication Port to offer users more benefits. The download software helps users monitor UPS inside status. The main features of the UPS are listed below:

- ◆ Microprocessor control guarantees high reliability.
- ◆ Equipped with Boost and Buck AVR to stabilize the input voltage.
- ◆ DC Start Function.
- ◆ Built-in RS-232 Communication Port.
- ◆ Free Software bundled. (Please check UPS Monitoring Software for detail information).
- ◆ Green Power Function for energy saving.
- ◆ Auto restart while AC recovery.
- ◆ Compact size, Light weight.
- ◆ Provides Modem and Phoneline Surge Protection.
- ◆ Provide AC Overload Protection.

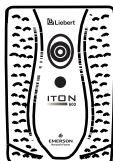


Installation and Operation

Installing the UPS is as easy as following the steps shown. Be aware of the power Switch must be kept in the “ON” position, otherwise, the UPS will be disabled and your equipment will not be protected during a power failure.

1 Inspection

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

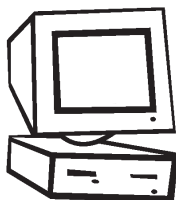


2 Placement

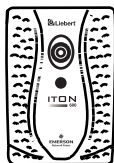
Install the UPS unit in any protected environment that provides adequate airflow around the unit, and is free from excessive dust, corrosive fumes and conductive contaminants. Do not operate your UPS in an environment where the ambient temperature or humidity is high.



On the other hand, place the UPS unit away from the monitor at least 20cm to avoid interference.



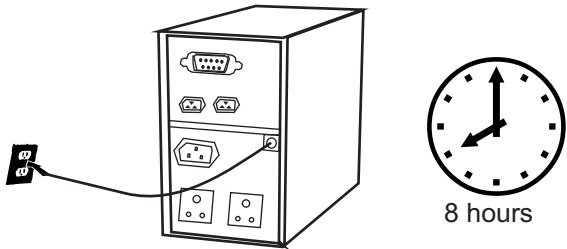
20 cm



3

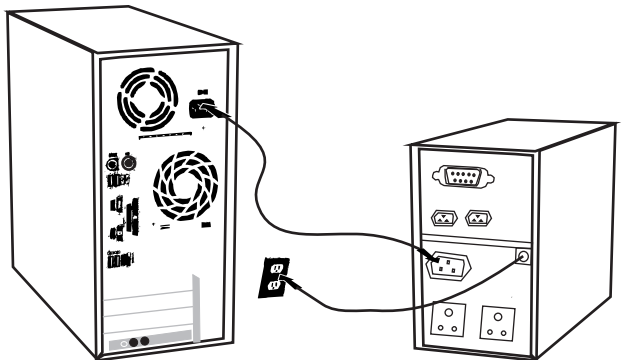
Charging

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 8 hours.

**4**

Computer Connection

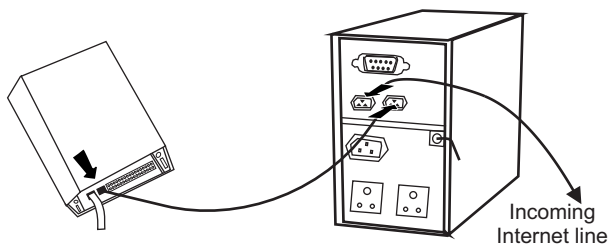
Connect one computer-related device into each of the power receptacles supplied on the back of the UPS.



5

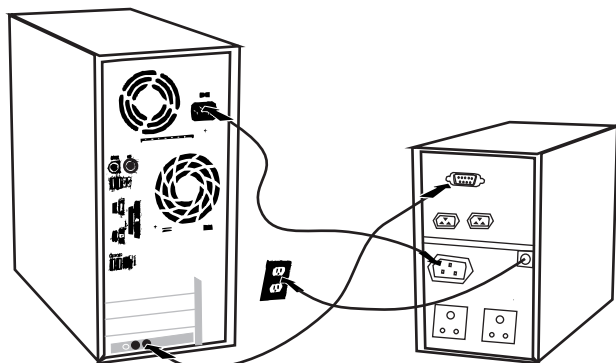
Modem / Phonenumber Connection

Plug incoming internet line into the “In” socket at the back of the UPS. Use one more Internet line cable and plug one end of the Internet line cable to the “Out” socket at the back of the UPS. Plug the other end of the modem input socket as shown below.

**6**

Serial cable Connection

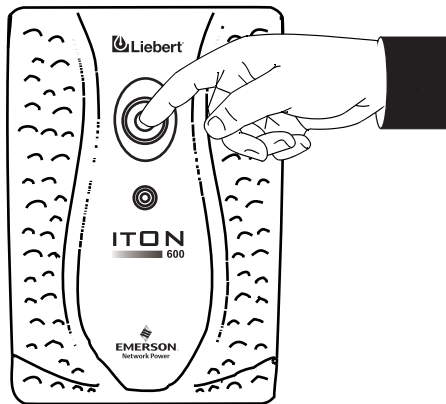
To allow for unattended system shutdown for your operating system, connect the serial cable as per diagram below.



7

Turn On / Off

To turn on the UPS, just simply press power switch. Please Do Not punch it for extended life of the power switch.



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

Green Power Function

All these Series are equipped with Green Power Function. If no load connects to the UPS, it will automatically shut down in 45 seconds for energy saving while power failure. The UPS will restart while AC recovery.



UPS Monitoring Software – WinPower –

Every unit is bundled with UPS monitoring software - WinPower. This is a unique uninterruptible power supply (UPS) control software that offers you unprecedented convenience for the control of any UPS.

The software is available for Windows 95 / 98 / NT / 2000, Novell and Linux. Please follow the steps below to install the software.

1. Just simply insert bundled CD into CD-ROM drive.
2. Follow the on-screen instruction to install the software.
3. If no screen shows up after inserting the CD, please execute setup.exe for initiating installation software.

Note: The software CD supplied along with the UPS has online help.

Features:

- ◆ Saves files before shutdown occurs
- ◆ Scheduled system shutdown
- ◆ Graphic display of UPS status
- ◆ Warning notification via E-mail
- ◆ User-friendly interface
- ◆ Multi-language versions



System Description

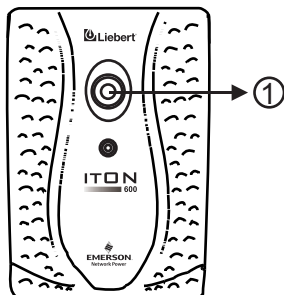
Front panel –

1. Power Switch

LED Indicators

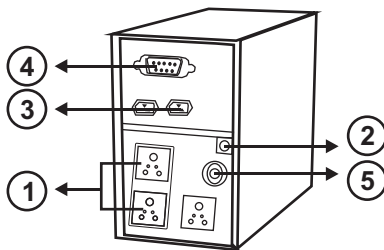
AC Mode: Green LED on

Battery Mode: Green LED flashing



Back Panel --

1. Output receptacles
2. AC Input
3. Modem / Phoneline Surge Protection
4. Communication Port
5. Circuit Breaker





Specification

MODEL		ITON 600	ITON 1000
CAPACITY	VA/W	600VA/360W	1000VA/600W
INPUT	Voltage Range	0-300 VAC	
	Frequency	45-65 Hz (Auto sensing)	
OUTPUT	Voltage		
	Voltage Regulation (Batt. Mode)	+/- 10%	+/- 5%
	Frequency	50Hz or 60Hz	
	Frequency Regulation (Batt. Mode)	+/- 1Hz	
	Output Waveform	Stepped Sinewave	
	Overload	110% for 5 minutes as "Mains" mode	
	BATTERY	Battery Type & Number	12V/7AH 1Pc
Backup Time (at a PC load with monitor)		15 min typical	30 min typical
Recharge Time		8 hours to 90% after complete discharge	
TRANSFER TIME	Typical	4-8 ms	
INDICATOR	AC Mode	Green Lighting	
	Backup Mode	Green flashing	
AUDIBLE ALARM	Backup Mode	Sounding every 10 seconds	
	Low Battery	Sounding every second	
	Overload	Sounding every 0.5 seconds	
	Battery Replacement	Sounding every 2 seconds	
	Fault	Continuously Sounding	
PROTECTION	Full Protection	Discharge, overcharge, and overload protection	
PHYSICAL	Dimension (mm), DxWxH	330x100x140	369x141x181
	Net Weight	6 kg	13.5 kg
ENVIRONMENT	Operating Environment	0-40 C, 0-90% relative humidity (non-condensing)	
	Noise Level	Less than 40 dB	
INTERFACE	RS-232	Support windows 95/98/NT/2000/XP, and Linux	



Trouble Shooting

Symptom	Possible Cause	Remedy
No LED display on the front panel	1. Missing battery	1. Charge battery up to 4 hours
	2. battery defect	2. Replace with the same type of battery
Alarm buzzer beeps continuously when AC supply is normal	Overload of the UPS	Verify that the load matches the UPS capability specified in the specs
When power failure, back-up time is reduced	1. Overload of the UPS	1. Remove some non-critical load
	2. Battery voltage is too low	2. Charge battery for 4 hours or more
	3. Battery defect due to high temperature operation environment, or improper operation of the battery	3. Replace with the same type of battery
Mains normal but LED is flashing	1. Breaker is flicked on	1. Reset the Breaker
	2. Power cord is loose	2. Reconnect the power cord properly

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



INSTRUCTION

SAVE THESE INSTRUCTION-This manual contains important instructions for model ITON 600 Plus that should be followed during installation and maintenance of the UPS and batteries.

Safety -- Caution!!

- ◆ This UPS utilize voltage that may be hazardous. Do not attempt to disassemble the unit. The unit contains no user replaceable parts. Only factory service personnel may perform repairs.
- ◆ Internal battery voltage for ITON 600 is 12Vdc and for ITON 1000 is 24Vdc.
- ◆ Connection to any other type of receptacle other than a two-pole, three-wire grounded receptacle may result in shock hazard as well as violate local electrical codes.
- ◆ 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.
- ◆ Do not allow any liquids or any foreign object to enter the UPS. Do not place beverages or any other liquid-containing vessels on or near the unit.
- ◆ This unit intended for installation in a controlled environment (temperature controlled, indoor area free of conductive contaminants). Avoid installing the UPS in locations where there is standing or running water, or excessive humidity.
- ◆ Do not plug the UPS input into its own output.
- ◆ Do not attach a power strip or surge suppressor to the UPS.
- ◆ Do not attach non-computer-related items, such as medical equipment, life-support equipment, microwave ovens, or vacuum cleaners to UPS.
- ◆ 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 heater or furnaces.
- ◆ Unplug the UPS prior to cleaning and do not use liquid or spray detergent.

Safety – Caution!!

- ◆ Do not dispose of batteries in a fire as they may explode.
- ◆ Do not open or mutilate the battery or batteries. Release electrolyte is harmful to the skin and eyes. It may be toxic.
- ◆ A battery can present a risk of electrical shock and high short circuit current. The following precautions should be observed when working on batteries:
 - 1) Remove watches, rings, or other metal objects from the hands.
 - 2) Use tools with insulated handles.
 - 3) Wear rubber gloves and boots.
 - 4) Do not lay tools or metal parts on top of batteries.
 - 5) Disconnect charging source prior to connecting or disconnecting batteries terminal.
- ◆ Servicing of batteries should be performed or supervised by personnel knowledgeable of batteries and the required precautions. Keep unauthorized personnel away from batteries.
- ◆ When replacing batteries, replace with the same number and type of sealed lead-acid battery.