Thank you for purchasing a CyberPower product. Please take a few minutes to register your product at www.cprew.com/registration. Registering your product’s warranty, confirms your ownership in the event of a product loss or theft and entitle you to free technical support.

**PRODUCT REGISTRATION**

**IMPORTANT SAFETY WARNINGS**

(SAVE THESE INSTRUCTIONS)

This manual contains important safety instructions. Please read and follow all instructions carefully. Failure to comply with these instructions may violate applicable laws, create a safety hazard, and/or void the warranty. As an added precaution, please refer to electrical codes and standards in accordance with the National Electric Code, ANSI/NFPA 70.

**WARNING**

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

**CAUTION**

To reduce the risk of electric shock, do not remove the cover (or back). There are no serviceable parts inside. If the UPS unit is damaged, it must be returned to the factory for repair.

**CAUTION**

Hazardous live parts inside can be energized by the battery even when the AC input power is disconnected. Do not touch the battery terminals or circuit board.

**CAUTION**

The UPS must be connected to an AC power source with fuse or circuit breaker protection. Do not plug into an outlet that is not grounded. If you need to de-energize this equipment, turn off and unplug the unit.

**CAUTION**

To avoid electric shock, turn the unit off and unplug it from the AC power source before installing a computer component.

**CAUTION**


**CAUTION**

To reduce the risk of fire, connect only to a circuit provided with a 20 A maximum branch circuit over current protection in accordance with the National Electric Code, ANSI/NFPA 70, and the local electrical codes.

**CAUTION**

Risk of explosion if battery is replaced by an incorrect type. Batteries shall be installed by service personnel, and the replacement of the battery shall be made only with the same or equivalent type.

**CAUTION**

Do not dispose of batteries in a fire. The batteries may explode.

**CAUTION**

Do not open or mutilate battery. Released electrolyte is harmful to the skin and eyes. It may be toxic.

**DO NOT USE WITH OR NEAR AQUARIUMS!**

Applications. DO NOT USE FOR MEDICAL OR LIFE SUPPORT EQUIPMENT!

**DO NOT USE WITH OR NEAR AQUARIUMS!**

To reduce the risk of fire or electric shock, do not use with or near aquariums. Condensation from the aquarium can cause the unit to short out.

**INSTALLING YOUR UPS SYSTEM**

**UNPACKING**

Handle the UPS upon receipt. The box should contain the following:

- (UPS unit) (user’s manual) (AC power cord) (USB device cable) (PowerPanel Personal Edition software) (manuals) (warranty card)

Please visit www.cpsww.com and go to the Software section for the latest software updates.

**HOW TO DETERMINE THE POWER REQUIREMENTS OF YOUR EQUIPMENT**

1. Ensure that the equipment plugged into the UPS does not exceed the UPS unit’s rated capacity. (See capacities for EC450G, EC550G for EC450G, EC650G for EC650G, EC850G for EC850G.) If the load capacity of the unit is exceeded, an overload condition may occur and cause the UPS unit to shut down or the output voltage to drop.

2. Calculate the load capacity by adding all the equipment connected to the UPS. The power consumption of the equipment plugged into an UPS must not exceed the rated capacity of the UPS as follows:

EC450G / EC550G / EC750G

EC650LCD / EC850LCD

- Model Switch (EC650LCD and EC850LCD only)

Press the Model Switch for approximately 3 seconds to enter setup mode. Select four functions: Utility High Voltage Range, Utility Low Voltage Range, ECO OFF/DON (EC650LCD/EC850LCD), LCD sleep OFF (EC850LCD). When the function is selected, press Model Switch for 3 seconds to save options. When an option is selected, wait for 8 seconds for the setting to be confirmed. After the setting has been confirmed the LCD screen will leave setup mode and go back to status display.

3. Power Switch

To turn on the UPS, press the power button for approximately 2 seconds - you will hear a constant tone (1 second) - and release after short beep. To turn the UPS OFF, press the power button for approximately 2 seconds - you will hear a constant tone (1 second) - and release after two short beeps.

4. Power Indicator (green)

This LED is illuminated when the utility power is normal and the UPS outputs are providing power, free of surges and spikes.

**5. Mode Switch (EC650LCD and EC850LCD only)**

Press the Model Switch for approximately 3 seconds to enter setup mode to select four functions: Utility High Voltage Range, Utility Low Voltage Range, ECO OFF/DON (EC850LCD), and LCD sleep OFF (EC850LCD). When a function is selected, press Model Switch for 3 seconds to save options.

6. ECO Indicator

This LED will show the condition of ECO Section. For more information, refer to ECO Function Setup section.

**7. Communication Protection Ports**

Communication protection ports will protect any standard modem, fax, or telephone lines (RJ11).

8. Circuit Breaker

Located on the side of the UPS, the circuit breaker serves to provide overload and fault protection.

9. USB Port to PC

The USB port allows communication and connection between the USB port on the computer and the UPS. The UPS communicates its status to the PowerPanel® Personal Edition software. The USB port is also used for powering the UPS in ECO mode. For more information, refer to ECO Function Setup section.

**10. Outlets Designed for AC Adapters**

The UPS unit has four widely spaced outlets to AC power adapters can be plugged into the UPS without overlapping or blocking adjacent outlets.

**ECO FUNCTION SETUP**

**ECO Function**

When the ECO function is active the UPS can detect which is the PC connected that is turned on or off. If the PC is turned off, the UPS will turn off the ECO controlled outlets and cut the power to the devices connected to them in order to save power. Generally, these are peripherals that are not used when the PC is not turned on.

**ECO Controlled Outlets**

These are the ECO-only outlets are also ECO controlled outlets. When the PC that is connected to the USB port is turned on, the UPS will turn off the ECO controlled outlets to save energy.

**ECO Setup**

The ECO function is default OFF. ECO can only be enabled/disabled and will only stay active when the UPS is resolving utility power and not in battery mode.

1. For the EC650/850LCD, press the Mode switch for approximately 3 seconds to enter setup mode and select the ECO function. When the ECO function is selected, press the Mode switch for 3 seconds to turn on the ECO function. Once ON is selected, wait 8 seconds for the setting to be confirmed and the LCD screen will return to status mode. For the EC450/550G/TSSS, press the ECO button for 3 seconds to turn ON/OFF the ECO function.

2. When the ECO function is OFF, utility power from the ECO outlets will always be on. When the ECO function is ON, utility power from the ECO outlets will turn off if the PC connected to the UPS via the USB port is turned off or if there is no PC connected to the UPS via USB.

**ECO Indicator**

The LED will blink when the ECO function is turned on the DC BUS is either OFF or not connected. The LED will be on if the ECO function is turned on and the DC BUS is OFF if the ECO function is disabled. See below table for more information.

**DEFINITIONS FOR ILLUminated LED INDICATORS**

**DESCRIPTION**

- Battery and Surge Protected Outlets
- ECO Controlled Outlets
- Battery Surge Protection Outlets

**BASIC OPERATION**

**POWER ON**

Press the ON button. The LCD display will show one 20% capacity segment remaining and the battery will begin charging.

**ALARM**

When the UPS reaches a low battery state, the LED will blink or steadily light. The UPS will enter battery mode and will shut down if the battery is depleted.

**OFF**

The input voltage meter will show one 20% capacity segment remaining when the UPS is battery mode.

**NORMAL**

This icon appears when the UPS is working under normal conditions.

**BATTERY ICON**

The indicator light will be lit when a UPS's battery is charging and the color will change to orange when the battery is fully charged. The UPS will automatically switch to battery mode when the battery is depleted.

**INPUT voltage meter**

This meter measures the AC voltage that the UPS system is receiving from the utility wall outlet. The UPS is designed to continuously supply connected equipment with stable output voltage. In the event of a complete power loss, severe brownout, or over-voltage, the UPS input meter will indicate the line voltage to supply power to the connected equipment. The INPUT voltage meter cannot be used as a diagnostic tool to identify poor-quality input power.

**OUTPUT voltage meter**

This meter measures the AC voltage that the UPS system is providing to the computer during normal AC utility Power mode, and battery backup mode. The voltage meter will show the output voltage of the UPS. The ESTIMATE RUN TIME: This display shows the run time estimate of the UPS with the current battery capacity and load.

**DEFINITIONS FOR ILLUMINATED LCD INDICATORS**

**INPUT**

This meter measures the AC voltage that the UPS system is receiving from the utility wall outlet. The UPS is designed to continuously supply connected equipment with stable output voltage. In the event of a complete power loss, severe brownout, or over-voltage, the UPS input meter will indicate the line voltage to supply power to the connected equipment. The INPUT voltage meter cannot be used as a diagnostic tool to identify poor-quality input power.

**OUTPUT**

This meter measures the AC voltage that the UPS system is providing to the computer during normal AC utility Power mode, and battery backup mode. The voltage meter will show the output voltage of the UPS.

**ESTIMATE RUN TIME**

This display shows the run time estimate of the UPS with the current battery capacity and load.

**NORMAL**

This icon appears when the UPS is working under normal conditions.
CyberPower Systems (USA), Inc. ("CyberPower") provides this Limited Warranty.

What Does This Warranty Cover?
This warranty covers defects in materials and workmanship in the Product under normal use and conditions. It also covers equipment that was connected to the Product and damaged because of the failure of the Product.

What is the Period of Coverage?
This warranty covers the Product for three years. Connected equipment is covered for as long as you own the Product.

Who Is Covered?
This warranty only covers the original purchaser. Coverage ends if you sell or otherwise transfer the Product.

How Do You Get Service?
1. Call us at (877) 297-6307 or write to us at Cyber Power Systems (USA), Inc., 4241 12th Ave. E., STE 400, Shakopee, MN 55379, or send us an e-mail message at claims@cpsweb.com for instructions.
2. When you contact CyberPower, identify the Product, the Purchase Date, and the item(s) of Connected Equipment. Have information on all applicable insurance or other resources of recovery/payment that are available to the initial Customer and Request a Claim Number.
3. You must provide a dated Proof-of-Purchase receipt (or other proof of the original purchase) and provide a description of the defect.

How Do You Open a Connected Equipment Claim?
1. Call us at (877) 297-6307 or write to us at Cyber Power Systems (USA), Inc., 4241 12th Ave. E., STE 400, Shakopee, MN 55379, or send us an e-mail message at claims@cpsweb.com for instructions, within 10 days of the occurrence.
2. When you contact CyberPower, identify the Product, the Purchase Date, and the item(s) of Connected Equipment. Have information on all applicable insurance or other resources of recovery/payment that are available to the initial Customer and Request a Claim Number.
3. You must provide a dated purchase receipt (or other proof of the original purchase) and a description of the damage to your connected equipment.
4. Pack and ship the Product to CyberPower and, if requested, the item(s) of Connected Equipment, a repair cost estimate for the damage to the Connected Equipment, and all claim forms that CyberPower provides to you. Show the Claim Number on the shipping label or include it with the product. You must prepay all shipping costs, you are responsible for packaging and shipment, and you must pay the cost of the repair estimate.

How Long Do I Have to Make A Claim?
All claims must be made within one year of the occurrence.

What Will We Do To Correct Problems?
CyberPower will inspect and examine the Product.

If the Product is defective in material or workmanship, CyberPower will repair or replace the Product at its expense. If CyberPower is unable to repair or replace the Product (if defective) within a reasonable time, CyberPower will refund you the full purchase price you paid for the Product (purchase receipt showing price paid is required).

If it appears that our Product failed to protect any equipment plugged into it, we will also send you forms for making your claim for the connected equipment. We will repair or replace the equipment that was repaired or replaced because of the failure of our Product or pay you the fair market value (NOT REPLACEMENT COST) of the equipment at the time of the damage. We will use Orion Blue Book, or another third-party valuation guide, or aisle, catalog, or other source to establish that amount. Our maximum liability is limited to $100,000 for each EC5850G, EC750G, EC750LCD, and EC950LCD.

Who Pays For Shipping?
We pay when we send items to you; you pay when you send items to us.

What isn't covered by the warranty?
1. This Warranty does not cover any software that was damaged or needs to be replaced due to the failure of the Product or any data that is lost as a result of the failure or the restoration of data or records, or the reinstallation of software.
2. This Warranty does not cover or apply to misuse, modification, operation or storage outside environmental limits of the Product or the equipment connected to it, or for damage while in transit or in storage, or if there has been improper operation or maintenance, or if you have not designed or intended for use with the Product, such as laser printers, appliances, aquariums, medical or the support devices, etc.

What are the limitations?
The sole and exclusive remedies to the Initial Customer are those provided by this Warranty. This Warranty does not apply unless the Product and the equipment that was connected to it were connected to properly wired and grounded outlets (including compliance with electrical and safety codes of the most current electrical code), without the use of any adapters or other connections.

1. The Product must have been plugged directly into the power source and the equipment connected to the Product must be directly connected to the Product and not "daisy-chained" together in serial fashion with any extension cords, another Product or device similar to the Product, surge suppressor, or power tap. Any such installation voids the Limited Warranty.
2. The Product and equipment connected to it must have been used properly in a suitable and proper environment and in conformance with any license, instruction manual, or warnings provided with the Product and the equipment connected to it.
3. The Product must have been used at all times within the limitations on the Product’s VARI Watt capacity.

The Product was designed to eliminate damaging effects of surges and momentary (less than 1ms) voltage spikes or sags. However, if used in same line or other power transmitter, it can be shown that a voltage spike lasting longer than 1ms has occurred, the occurrence will be deemed outside the rated capabilities of the Product and the Limited Warranty is void.

CyberPower Does Not Cover or Undertake Any Liability in Any Event for Any of the Following:
1. Loss of data or damage to data, records, or software in the restoration of data or records, or the reinstallation of software.
2. Damage from causes other than AC Power Line Transients, sags, or sags on properly installed primary grid and code-compliant 120 volt power lines in the United States and Canada; transients, sags or spikes on standard telephone land lines, PBX telephone equipment lines or Base 10 Ethernet lines, when properly installed and connected. (This exclusion applies, for example, to fluctuations in data transmission or reception, by CATV or RF transmission or fluctuations, or by transients in such transmission.)
3. Damage from any circumstance described as excluded above with respect to the Product.
4. Damage from the flood, wind, rain, rising water, leakage or breakage of plumbing, abuse, misuse or alteration of either the product or the Connected Equipment.
5. CyberPower excludes any liability for personal injury under the Limited Warranty and Connected Equipment Guarantee. CyberPower excludes any liability for direct, indirect, special, incidental or consequential damages, whether for damage to or loss of property (EXCEPT FOR AND ONLY FOR) the specific limited agreement of CyberPower to provide certain warranty benefits regarding “Connected Equipment” under the Warranty, loss of profits, business interruption, or loss of information or data. NOTE: Some States or Provinces do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation may not apply to you.
6. The Product is not to be used in hazardous environments requiring fail-safe performance, or for use in any circumstance in which the operation of the Product could lead directly to death, personal injury, or severe physical or property damage, or that affect operation or safety of any medical or life support device (collectively, “High Risk Activities”). CyberPower expressly disclaims any express or implied warranty of fitness for High Risk Activities or in any aquariums. CyberPower does not authorize use of any in High Risk Activities or in any aquariums. ANY SUCH USE IS IMPROPER AND IS A VIOLATION OF THE PRODUCT.