

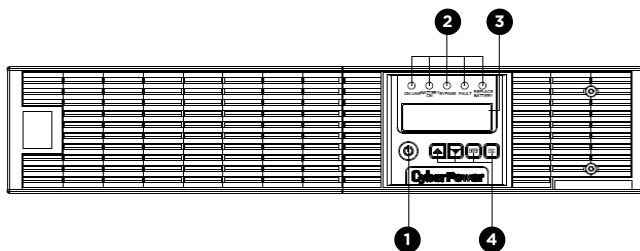
## SMART APP ONLINE UPS SERIES

### USER MANUAL

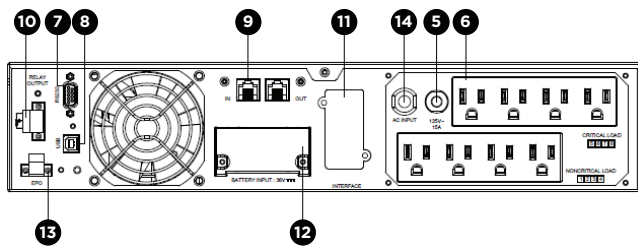
OL1000RTLX2U  
OL1000RTLX2UN  
OL1500RTLX2U

OL1500RTLX2UN  
OL2200RTLX2U  
OL2200RTLX2UN

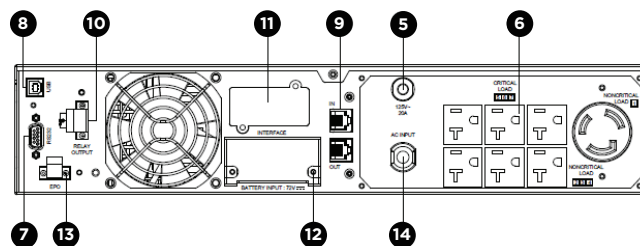
OL3000RTLX2U  
OL3000RTLX2UN  
OL3000RTLX2UHV



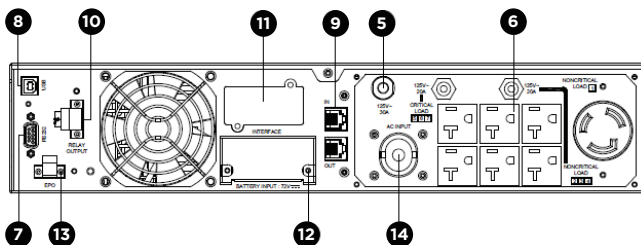
OL1000RTLX2U / OL1500RTLX2U / OL2200RTLX2U / OL3000RTLX2U / OL3000RTLX2UHV



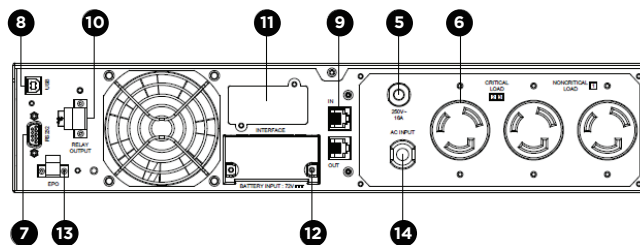
OL1000RTLX2U / OL1500RTLX2U



OL2200RTLX2U



OL3000RTLX2U



OL3000RTLX2UHV

- 1** Power Button / Power On Indicator
- 2** UPS Status / Fault / Replace Battery LED Indicator
- 3** Multifunction LCD Readout
- 4** Function Buttons
- 5** Input Circuit Breaker
- 6** Battery Backup & Surge Protected Outlets Critical / Noncritical Load
- 7** Serial Port
- 8** USB Port
- 9** Surge Protected Communication Ports RJ-45 / RJ-11
- 10** Relay Output Connector
- 11** Expansion Slot
- 12** Extended Runtime Battery Module Connector
- 13** EPO (Emergency Power Off) Connector
- 14** AC Input Inlet

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## **IMPORTANT SAFETY WARNINGS** (SAVE THESE INSTRUCTIONS)

This manual contains important safety 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!** The UPS must be connected to a grounded AC power outlet with fuse or circuit breaker protection. DO NOT plug the UPS into an outlet that is not grounded. If you need to power drain this equipment, turn off and unplug the unit.

**CAUTION!** The battery can power hazardous components inside the unit, even when the AC input power is disconnected.

**CAUTION!** The UPS should be placed near the connected equipment and easily accessible.

**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!** Risk of electric shock, do not remove cover. No user-serviceable parts inside. Refer servicing to qualified service personnel.

**CAUTION!** Risk of electric shock, battery circuit is not isolated from AC power source; hazardous voltage may exist between battery terminals and ground. Test before touching.

**CAUTION!** To reduce the risk of fire, connect the UPS to a branch circuit with 12 amperes (OL1000) / 15 amperes (OL15 00) / 20 amperes (OL2200) / 30 amperes (OL3000RTXL2U) / 16 amperes (OL3000RTXL2UHV) maximum over current protection in accordance with the National Electric Code, ANSI/NFPA 70.

**CAUTION!** The AC outlet where the UPS is connected should be close to the unit and easily accessible.

**CAUTION!** Please use only UL marked mains cable, (e.g. the mains cable of your equipment), to connect the UPS to the AC outlet.

**CAUTION!** Please use only UL marked power cables to connect any equipment to the UPS.

**CAUTION!** When installing the equipment, ensure that the sum of the leakage current of the UPS and the connected equipment does not exceed 3.5mA.

**CAUTION!** The OL1000 / OL1500 / OL2200 / OL3000 models may only be installed by qualified maintenance personnel.

**CAUTION!** Do not unplug the unit from AC Power during operation, as this will invalidate the protective ground insulation.

**CAUTION!** To avoid electric shock, turn off and unplug the unit before installing the input/output power cord with a ground wire. Connect the ground wire prior to connecting the line wires.

**CAUTION!** Do not use an improper size power cord as it may cause damage to your equipment and cause fire hazards.

**CAUTION!** Wiring must be done by qualified personnel.

**CAUTION! DO NOT USE FOR MEDICAL OR LIFE SUPPORT EQUIPMENT!** Under no circumstances this unit should be used for medical applications involving life support equipment and/or patient care.

**CAUTION! DO NOT USE WITH OR NEAR AQUARIUMS!** To reduce the risk of fire, do not use with or near aquariums. Condensation from the aquarium can come in contact with metal electrical contacts and cause the machine to short out.

**CAUTION!** Do not dispose of batteries in fire as the battery may explode.

**CAUTION!** Do not open or mutilate the battery, released electrolyte is harmful to the skin and eyes.

**CAUTION!** 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!** The unit has a dangerous amount of voltage. When the UPS indicators is on, the units may continue to supply power thus the unit's outlets may have a dangerous amount of voltage even when it is not plugged in to the wall outlet.

**CAUTION!** Make sure everything is turned off and disconnected completely before conducting any maintenance, repairs or shipment.

**CAUTION!** Connect the Protection Earth (PE) safety conductor before any other cables are connected.

**WARNING!** To reduce the risk of fire, replace only with the same type and rating of fuse.

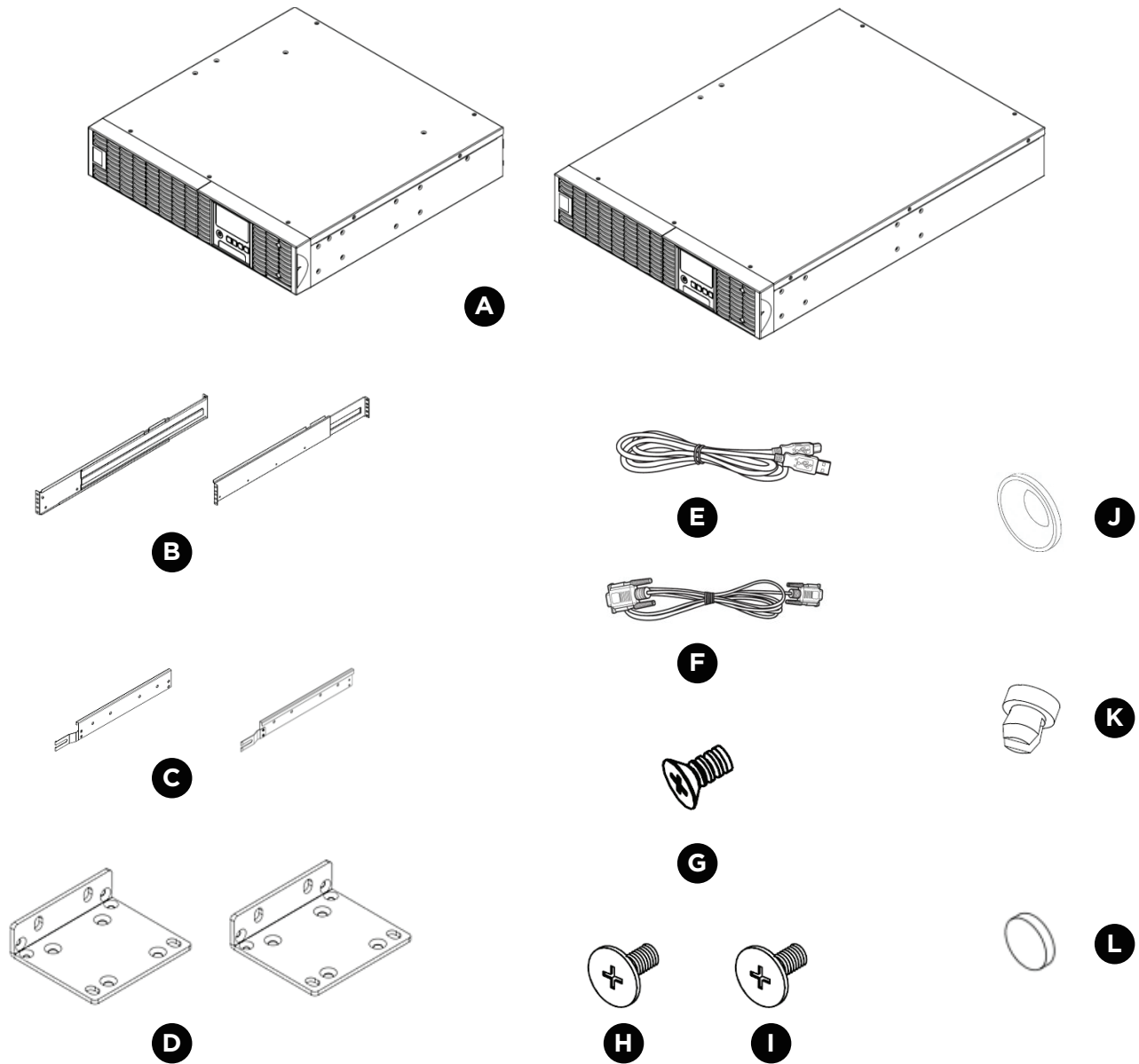
**DO NOT install the UPS where it would be exposed to direct sunlight or near a strong heat source.**

**DO NOT block off ventilation openings around the housing.**

**DO NOT connect domestic appliances such as hair dryers to UPS output sockets.**

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

## INSTALLING YOUR UPS SYSTEM - PACKAGE CONTENTS



- |  |  |  |
|--|--|--|
| <b>A</b> 1K/1.5KVA or 2.2K/3KVA UPS      | <b>F</b> Serial Interface Cable (RS-232)   | <b>K</b> 12 x screw hole dust covers   |
| <b>B</b> Left and right rackmount rails  | <b>G</b> 8 x M5X7L black flat head screws  | <b>L</b> 12 x rubber pads  |
| <b>C</b> Left and right hanging brackets | <b>H</b> 12 x M5X12L black pan head screws | <b>M</b> User's manual, Registration card, PowerPanel® Management Software download card |
| <b>D</b> Rackmount ears (stands)         | <b>I</b> 6 x M5X6L silver pan head screws  |  |
| <b>E</b> USB communication cable         | <b>J</b> 8 x plastic washers               |  |

## HARDWARE INSTALLATION - RACKMOUNT INSTALLATION FOR 4-POST RACK

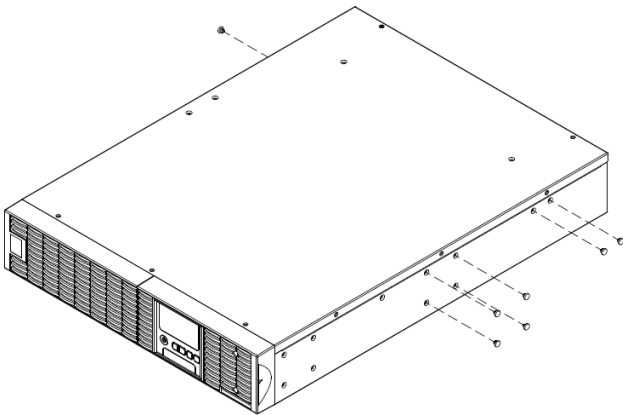
These versatile UPS systems can be mounted in a rackmount or vertical tower orientation. This versatility is especially important to growing organizations with changing needs that value having the option to position a UPS on a floor or in a rackmount system. Please follow the instructions below for the respective mounting methods.



CAUTION!

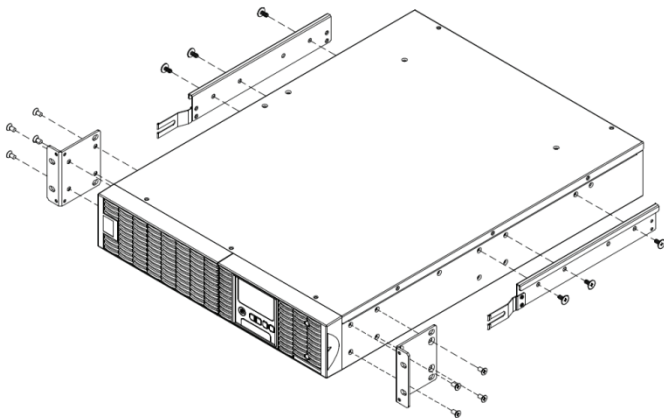
**CAUTION! To prevent the risk of fire or electric shock, only use the supplied hardware to attach the mounting brackets.**

**Step 1: Remove the dust covers from the screw holes.**



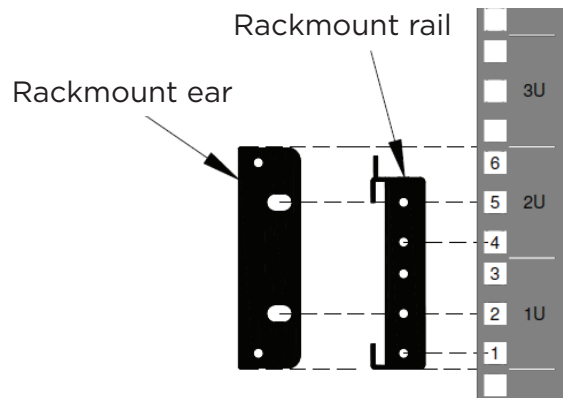
**Step 2: Rackmount ears and hanging brackets installation**

Attach two rackmount ears to the UPS using eight black M5X7L screws. Attach the included hanging brackets using six silver M5X6L screws.

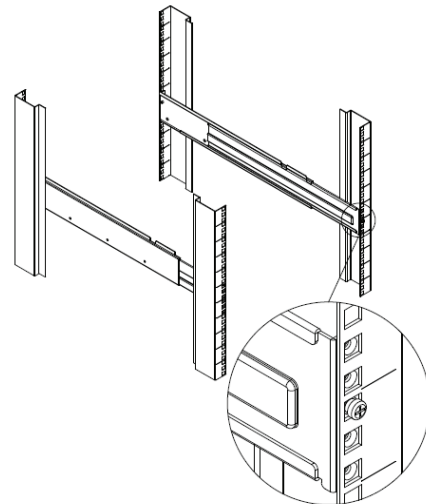


**Step 3: Rackmount Rail Installation**

The mounting depth of the included rackmount rails can adjust from 20.5 inches to 36 inches / 52 cm to 91.5 cm. Select the proper holes in the rack for positioning the UPS in the rack. The UPS takes up two rack units for rack hole positions 1 through 6.



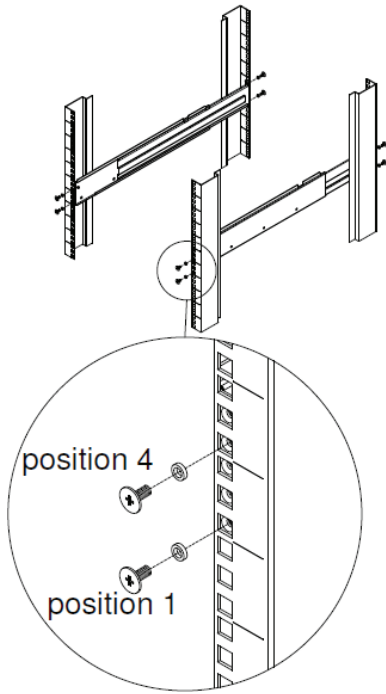
Position the guide screw on the back of the rackmount rails into the rear rack square holes to temporarily support the rails in place.



## HARDWARE INSTALLATION - RACKMOUNT INSTALLATION FOR 4-POST RACK - CONT.

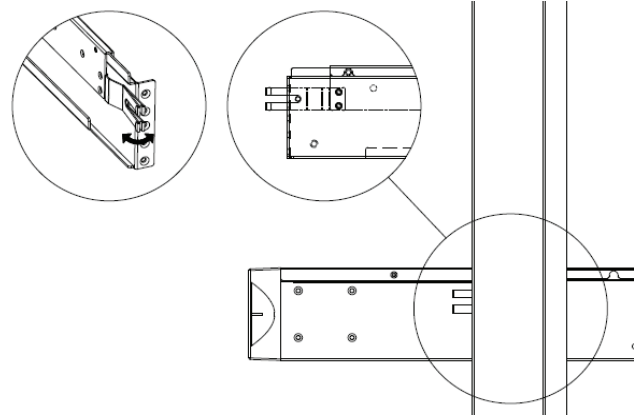
### Step 4: Adjust rackmount rails to fit your rack

Adjust the rail depth to match your rack depth. Attach each rackmount rail to your rack with two black M5X12L screws and two plastic washers at the front of the rack (square holes 1 and 4 as shown below). Secure the rail to the rear of the rack with two black M5X12L screws and two plastic washers.



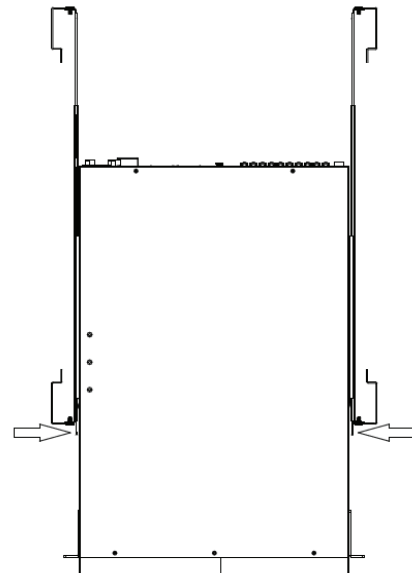
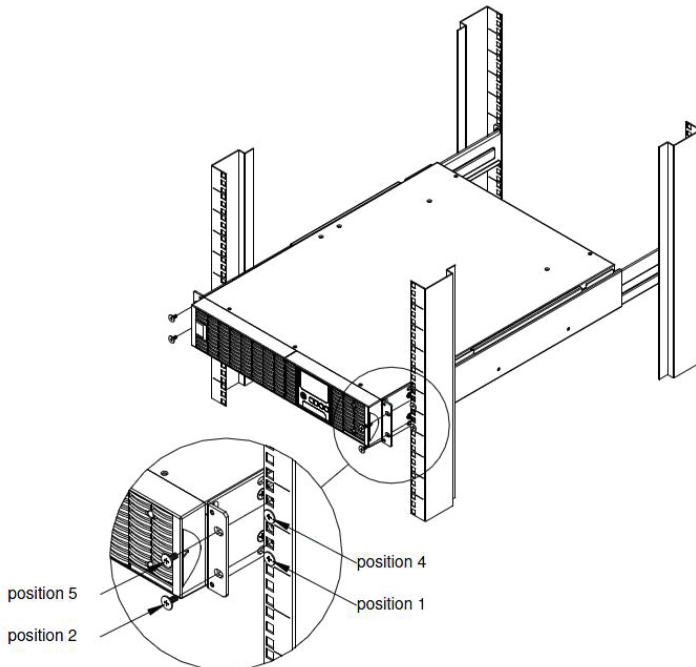
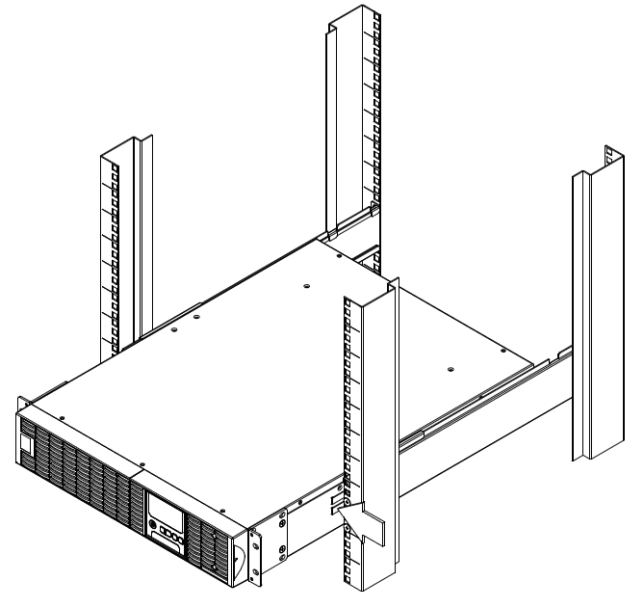
### How to slide the UPS out from the rack

The UPS will be secured by a safety locking mechanism midway of pulling it out of the rack. Use both hands to hold the UPS and press the safety locking tab to pull the UPS out.







### Step 5: Place and secure the UPS on the rails

Slide the hanging brackets on the UPS on to the rails mounted in the rack with the front of the unit facing toward you. Secure the UPS to your rack with four black M5X12L screws at the front of the rack (square holes in position 2 and position 5 as shown below).

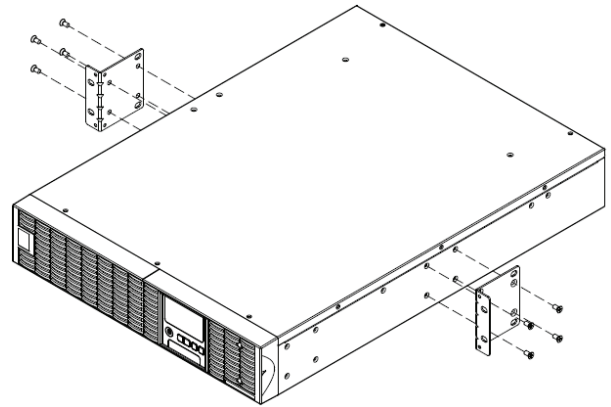


## HARDWARE INSTALLATION - RACKMOUNT INSTALLATION FOR 2-POST RACK

 CAUTION!	<b>Due to the weight of this unit, it is strongly recommended to install it at the bottom of the rack.</b>
 CAUTION!	<b>Prior to installing the unit, remove internal batteries to reduce the weight of the unit. Refer to the battery replacement section in this user manual for instructions.</b>
 CAUTION!	<b>It is strongly recommend having two to three people assist during the installation process.</b>
 CAUTION!	<b>It is strongly recommended that the 2-post rack be bolted to the floor prior to the installation of the UPS.</b>

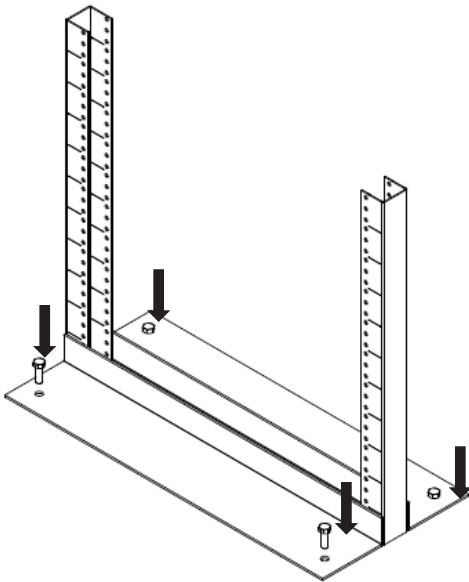
### Step 2: Rackmount ears installation

Attach the rackmount ears to the center holes on the sides of the UPS using eight black M5X7L screws.

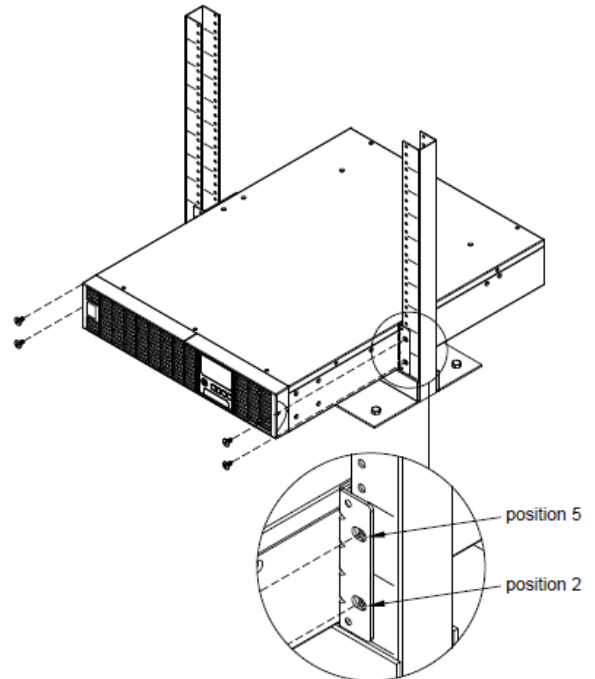
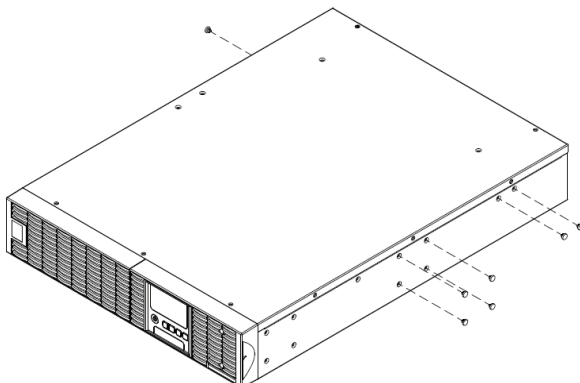


### Step 3: Secure the UPS to the rack



Secure the UPS to your rack with four black M5X12L screws at the front of the rack (square holes in position 2 and position 5 as shown below).






Step 1: Remove the dust covers from the screw holes.



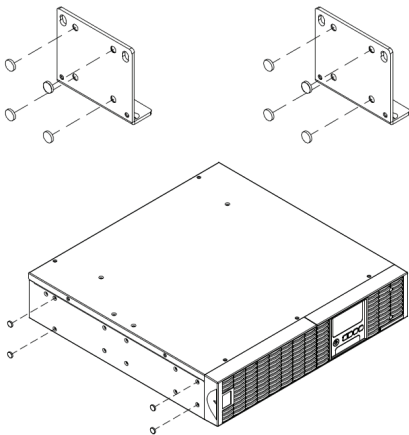
## HARDWARE INSTALLATION - VERTICAL / TOWER INSTALLATION

 <b>CAUTION!</b>	<p><b>Installation environment should be in a temperature and humidity controlled indoor area free of conductive contaminants. Do not install this UPS where excessive moisture or heat is present (Please see specifications for acceptable temperature and humidity range).</b></p>
 <b>CAUTION!</b>	<p><b>Never install a UPS, or associated wiring or equipment, during a lightning storm.</b></p>

 <b>CAUTION!</b>	<p><b>Do not work alone under hazardous conditions.</b></p>
 <b>CAUTION!</b>	<p><b>In case of the risk of electric shock, do not remove the top cover.</b></p>
 <b>CAUTION!</b>	<p><b>The battery can energize hazardous live parts inside even when the AC input power is disconnected.</b></p>

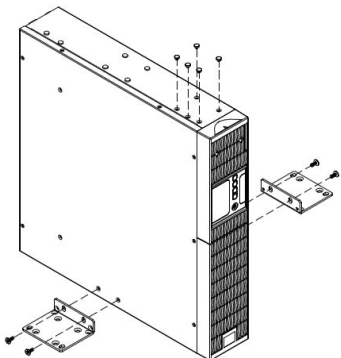
### Step 1: Adhere the rubber feet on the bottom side of base stands

Adhere the protective rubber pads to the left hand side of the UPS and to the rackmount ears. The rackmount ears will be used as tower stands.



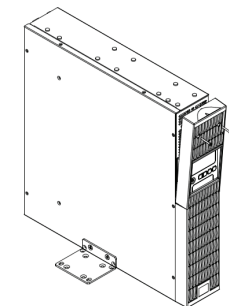
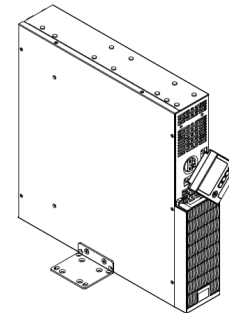
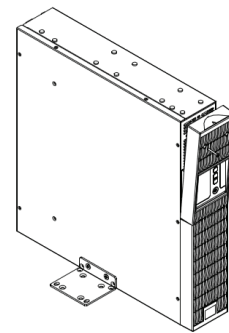
### Step 2: Attach the base stands and attach the dust covers

Stand the UPS system on its side and attach the tower stands using four black M5X12 screws onto the bottom of the UPS. Insert five dust covers into the open screw holes on top.



### Step 3: Rotate the Multifunction LCD Module

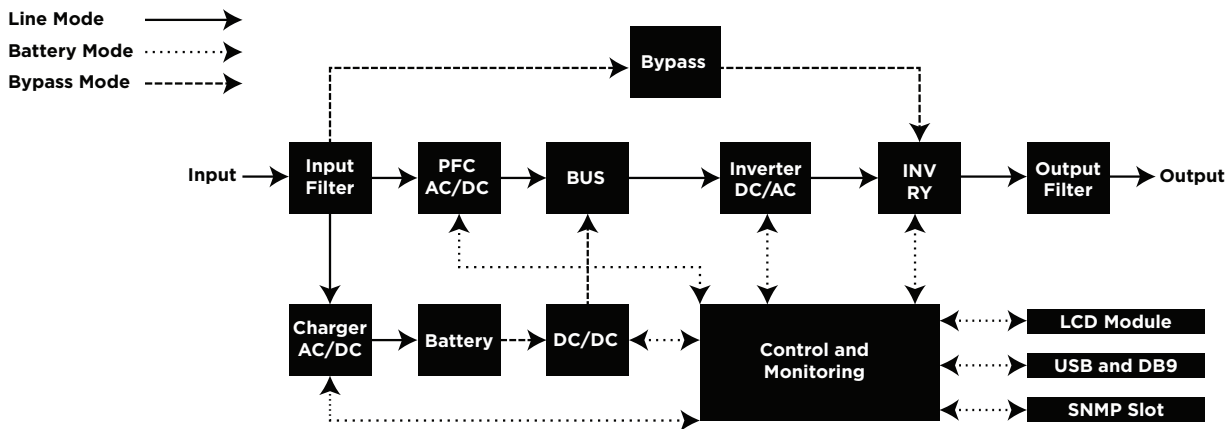
Unscrew the upper panel of the UPS. Separate the upper panel from the UPS. Gently lift the LCD module out and rotate it to the tower orientation. Reinstall the LCD module for a tower configuration.



## ELECTRICAL INSTALLATION

After completing the hardware installation of the UPS, you are now ready to plug in the UPS and connect your equipment.

## SYSTEM BLOCK DIAGRAM



## HARDWARE INSTALLATION GUIDE

1. Battery charge loss may occur during shipping and storage. Before using the UPS, it is strongly recommended to charge batteries for four hours to ensure the batteries' maximum charge capacity. To recharge the batteries, simply plug the UPS into an AC outlet.
2. When using the included software, connect either the serial cable or the USB cable between the computer and the corresponding port on the UPS.  
Note: If the USB port is used, the serial port will be disabled. They cannot be used simultaneously. After connecting to either the USB port or the serial port on the UPS, a computer with the PowerPanel® Business Edition Agent software installed can control the operating schedule, battery test, outlets, as well as obtain UPS status information. However, other computers with PowerPanel® Business Edition Client software can only obtain UPS status information via LAN connection.
3. Connect your computer, monitor, and any externally-powered data storage device (Hard drive, Tape drive, etc.) into the outlets only when the UPS is off and unplugged. 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.
4. To protect a fax machine, telephone, modem line or network cable, connect the telephone or network cable from the wall jack outlet to the jack marked "IN" on the UPS and connect a telephone cable or network cable from the jack marked "OUT" on the UPS to the modem, computer, telephone, fax machine, or network device.
5. Press the ON/OFF switch to turn the UPS on. The Power-On indicator light will display when activated. If an overload is detected, an audible alarm will sound and the UPS will continuously emit two beeps per second. For resetting the unit, unplug some equipment from the outlets. Make sure your equipment carries a load current within the unit's safe range, (refer to the technical specifications).
6. This UPS is equipped with an auto-charge feature. When the UPS is plugged into an AC outlet, the battery will automatically charge, even when the unit is switched off.
7. To maintain an optimal battery charge, leave the UPS plugged into an AC outlet at all times.
8. Before storing the UPS for an extended period of time, turn the unit OFF. Then cover it and store it with the batteries fully charged. Recharge the batteries every three months to ensure good battery capacity and long battery life. Maintaining a good battery charge will help prevent possible damage to the unit from battery leakage.
9. The UPS has one USB port (default) and one serial port that allows connection and communication between the UPS and any attached computer running the PowerPanel® Business Edition Agent software. The UPS can control the computer's shutdown during a power outage through the connection while the computer can monitor the UPS and alter various programmable parameters. Note: Only one communication port can be used at a time. The port not in use will automatically become disabled or the serial port will be disabled if both ports are attached.
10. EPO (Emergency Power Off) Port: EPO ports allow administrators the capability to connect the UPS unit to customer-supplied EPO switches. These installations give operators a single access point to immediately power-off all equipment connected to the UPS during an emergency.
11. To avoid electric shock, turn the unit OFF and disconnect the unit from utility power before hardwiring the UPS (in/out power cord). The in/out power cord MUST be grounded.
12. Please note the internal UPS temperature will increase when fans are not in operation or ventilation is obstructed. When the high temperature sensor activates protection, the UPS generates an alarm and shuts down to avoid unexpected equipment damage. When the over temperature occurs, please check the Trouble Shooting section of this manual. If the condition persists, please contact CyberPower for technical support.



## BASIC OPERATION

### 1. Power Button / Power on Indicator

Master ON/OFF for the UPS. Indicates that the UPS is on and supplying power.

### 2. UPS Status / Fault / Replace Battery LED Indicator

Indicates the status of the UPS, displaying whether it is operating in Line, Battery or Bypass Mode, if it has an internal fault or if the battery needs to be replaced.

### 3. Multifunction LCD Readout

Shows UPS status, information, settings and events.

### 4. Function Buttons

Scroll up, scroll down, Enter, and Escape.

### 5. Input Circuit Breaker

Provides input overload and fault protection.

### 6. 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.

#### Critical / Noncritical Load

Allows the creation of load priorities to ensure that battery power reserves are transferred to specified outlets during a power outage. The unit can be programmed to provide additional runtime for equipment connected to the "CRITICAL" outlets, while stopping the power supply to equipment connected to "NONCRITICAL" outlets after a designated period of time.

### 7. Serial Port

Serial port provides communication between the UPS and the computer. The UPS can control the computer's shutdown during a power outage through the connection while the computer can monitor the UPS and alter its various programmable parameters.

### 8. USB port

This is a connectivity port which allows communication and control between the UPS and the connected computer. It is recommended to install the PowerPanel® Business Edition Agent software on the computer connected with the USB cable

### 9. Surge Protected Communication Ports RJ45/RJ11

These ports are used to protect standard RJ45/RJ11 based products (ADSL, LAN, Phone/ Modem Lines) and cabling systems from surges.

### 10. Relay Output Connector

Convert UPS signals into real potential free Dry Contacts for industrial control.

### 11. Expansion slot

Slot to install optional remote management card. Remote Management Card is pre installed in select models.

### 12. Extended Runtime Battery Module Connector

Connection for additional CyberPower External Battery modules.

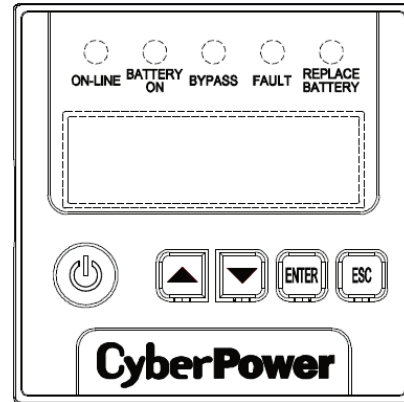
### 13. EPO (Emergency Power Off) Connector

Enables an emergency UPS Power Off from a remote location.

### 14. AC Input Inlet

Connect the AC power cord to a properly wired and grounded outlet.

## OPERATION INSTRUCTIONS FOR LCD MODULE



### LED INDICATORS - UPS STATUS

LED Indicators	Color	UPS Status Description
On-Line	White	UPS power is on.
ON/OFF	Green	UPS is operating in Line Mode.
Battery ON	Yellow	UPS is operating in Battery Mode.
Bypass	Yellow	UPS is operating in Bypass Mode, Manual Bypass or ECO (Economy) Mode.
Fault	Red	UPS has an internal fault. See "Trouble Shooting" for additional information.
Replace Battery	Red	Battery will soon need to be replaced due to insufficient runtime.

### LCD SCREEN - UPS STATUS

LCD Screen	UPS Status Description
Line Mode	UPS is operating in Line Mode.
Battery Mode	UPS is operating in Battery Mode.
Bypass Mode	UPS is operating in Bypass Mode.
Manual Bypass	UPS is operating in Manual Bypass.
ECO Mode	UPS is operating in ECO (Economy) Mode

### BUTTON OPERATION

Button	Operation Description
ON/OFF	Press this button to turn on or turn off UPS.
▲	Press this button to scroll up in the LCD menu.
▼	Press this button to scroll down in the LCD menu.
Enter	Press this button to select an option.
ESC	Press this button to cancel or return to previous LCD menu.

## LCD SETUP FUNCTIONS

### MULTI-FUNCTION LCD MAIN MENU

Press **Enter** button to activate **MAIN MENU**

**Information** - Displays the UPS information.

**Configure** - Displays the UPS settings that can be configured by the user.

**Event Log** - Displays the 5 most recent events, by event count, time (day/hour/minute), and event description.

### LCD INFORMATION READOUT

1. Press the **ENTER** button to activate the **MAIN MENU**.
2. Press the **▲** and **▼** buttons to scroll to the **Information** option.
3. Press the **ENTER** button to select the **Information** submenu.
4. Press the **▲** and **▼** buttons to scroll through the **Information** submenu in the following table.
5. Press the **ESC** button to return to UPS Status.

Information Submenu	Description
O/P Volt = XXX.X V	Displays the Output Voltage
O/P Freq = XX.X Hz	Displays the Output Frequency
I/P Volt = XXX.X V	Displays the Input Voltage
I/P Freq = XX.X Hz	Displays the Input Frequency
O/P Load = XXX %	Displays the Output Load as a Percentage of Maximum load
O/P Amp = X.X A	Displays the Output Current
O/P Watt = XXXXX W	Displays the Output Wattage
O/P VA = XXXXX VA	Displays the Output VA
Load Energy = XXXX.X KWh	Display UPS Load Energy Consumption
BAT Volt = XXX.X V	Displays the Battery Voltage
BAT Cap = XXX %	Displays the Estimated Percentage of Battery Capacity
BAT Runtime = XXX M	Displays the Estimated Battery Runtime in Minutes
EBM Number = X	Displays the External Battery Module Number
TEMP = XX °C / XX °F	Displays the Approximate Inside Temperature of the UPS
SBM = XXXXX XH (M)	Displays the stage of Smart Battery Management with Operation Time
Rating = XXK VA	Displays the UPS Rating
MCU Ver = XXXX	Displays the MCU Firmware Version
Model Name	Displays the UPS Model Name
Date & Time - - - - / - - / - - -- : - -	Displays the present Date & Time
Next BATT Change XX / XXXX	Displays the next Battery Change Date & Time
IP XXXXX X XXX.XXX.XXX.XXX	Display the network IP address
Subnet Mask XXX.XXX.XXX.XXX	Display the network Subnet Mask
Gateway XXX.XXX.XXX.XXX	Display the network Gateway
MAC XX-XX-XX-XX-XX-XX	Display the network card MAC address

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## LCD SETUP FUNCTIONS

### LCD EVENT LOG

1. Press the **ENTER** button to activate the **MAIN MENU**.
2. Press the **▲** and **▼** buttons to scroll to the **Event Log** option.
3. Press the **ENTER** button to select the **Event Log** submenu.
4. Press the **▲** and **▼** buttons to scroll through the **Event Log** submenu as shown.
5. Press the **ESC** button to return to UPS Status.

Event Log Submenu	Description
(X)	XXDXXHXXM (without PowerPanel® Business or RMCARD) -- / -- -- : -- (with PowerPanel® Business or Event Content

### MULTI-LANGUAGE INTERFACE

Users can configure one of the four available languages for display:

English, Español / Spanish, Français / French, Deutsch / German

1. Press the **ENTER** button to activate the **MAIN MENU**.
2. Press the **▲** and **▼** buttons to scroll to the **Configure** option.
3. Press the **ENTER** button to select the **Configure** submenu.
4. Press the **▲** and **▼** buttons to scroll through the **Language** options.
3. Press the **ENTER** button to select the **Language** submenu.
6. Press the **▲** and **▼** buttons to scroll to the language that you want to select.  
You may be prompted to save the selection, if so press the **ENTER** button to save the setting.
7. Press the **ESC** button to cancel or return to previous LCD menu.

### LCD SETTINGS CONFIGURATION

1. Press the **ENTER** button to activate the **MAIN MENU**.
2. Press the **▲** and **▼** buttons to scroll to the **Configure** option.
3. Press the **ENTER** button to select the **Configure** submenu.
4. Press the **▲** and **▼** buttons to scroll to the **Configure** submenu in the following table.
5. Press the **ENTER** button to select the setting you want to configure. The first configuration parameter will be displayed on the second column of LCD screen.
6. Press the **▲** and **▼** buttons to scroll through the different parameters.
7. Press the **ENTER** button to select the parameter you want to change.  
You may be prompted to save the selection, if so press the **ENTER** button to save the setting.  
Some options are saved and started automatically. (See the following table for additional details.)
8. Press the **ESC** button to cancel or return to the previous LCD menu.

## LCD SETUP FUNCTIONS

Configure Submenu	Available Settings	Default Setting
Output Voltage	= [100V] [110V] [115V] [120V] [125V] <sup>1</sup> = [200V] [208V] [220V] [230V] [240V]	120 V 208 V
Sync Freq Window	Range= [+/- 1%] [+/- 2%] [+/- 3%] [+/- 4%] [+/- 5%] [+/- 6%] [+/- 7%] [+/- 8%] [+/- 9%] [+/- 10%]	+/- 5%
Bypass V Window	Range= [+10% / -10%] [+10% / -15%] [+10% / -20%] [+15% / -10%] [+15% / -15%] [+15% / -20%]	+10% / -15%
Bypass Condition	[Check Freq/Volt] [Check Volt Only] [No Bypass]	Check Freq/Volt
ECO Mode <sup>2</sup>	[Disable] [Enable]	Disable
	[V Range= +/- 15%] [V Range= +/- 10%] (for [Enable])	V Range= +/- 10%
Manual Bypass	[Disable] [Enable]	Disable
UPS Diagnostic	[Battery Test] [Alarm Test] [Indicator Test] [FanTest]	[Battery Test]
	[Activate?]	None
Audible Alarms	[Disable] [Enable]	Enable
EBM Number	= [0] [1] [2] [3] [4] [5] [6] [7] [8] [9] [10]	0
Wiring Fault <small>Not applicable on OL3000RTXL2UHV model</small>	[Disable] [Enable]	Disable
NCL Control	[Outlet On] [Outlet Off]	Outlet On
Language	[English] [Español-Spanish] [Français-French] [Deutsch-German]	English
Generator Mode <sup>3</sup>	[Disable] [Enable]	Disable
Communication	[Disable] [Enable]	Enable
Dry Relay Set	[I/P Power Fail] [Battery Low] [Summary Alarm] [UPS On Bypass] [UPS Fail]	I/P Power Fail
Converter Mode <sup>4</sup>	[Converter Off] [O/P Freq = 50Hz] [O/P Freq = 60Hz]	Converter OFF
Screen Saver	[Disable] [1 minute] [5 minutes]	5 minutes
Clear Event Log	[Activate?]	None
Button OFF LOCK	[Disable] [Enable]	Disable
Charger Function	[SBM] [Constant]	SBM
Signal Inputs	[Disable] [EPO] [ROO]	Disable
Charger Check	[Disable] [Enable]	Disable
Reset Replace BAT	[Activate?]	None
IP Address	[Mode: DHCP] [Mode: Manual]	Mode: DHCP
	[IP Address] [Subnet Mask] [Gateway] (for [Mode: Manual])	None
Reset Load Energy	[Activate?]	None
Low Bat Capacity <sup>5</sup>	Threshold= [20%][25%] [30%][ 35%].....[55%][60%][65%]	20%
Low Bat Runtime <sup>6</sup>	Threshold= [0min][1min][2min][3min].....[29min][30min]	5 min
Period Battery Test	[Disable <sup>6</sup> ][1 Week][2 Weeks] [3 Weeks] [4 Weeks]	Disable

<sup>1</sup> For OL1500/2200/3000RTXL2U, 100V is derated by 20%, 110/115 V is derated by 10%  
Output voltage default setting varies by country.

<sup>2</sup> This function cannot be set when Manual Bypass, Generator Mode or Converter Mode is enabled.

<sup>3</sup> UPS has no bypass when Generator Mode is enabled.

<sup>4</sup> UPS has no bypass when Converter Mode is enabled. This function can only be set before the UPS is on.

<sup>5</sup> The Low Battery threshold setting will only affect the warning of Power Management Software (PowerPanel® Business) and RMCARD interface.

<sup>6</sup> If function is disabled, the Smart Battery Management (SBM) carries out battery tests when certain operating conditions are met.

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## LCD SETUP FUNCTIONS

### SILENCING AUDIBLE ALARMS

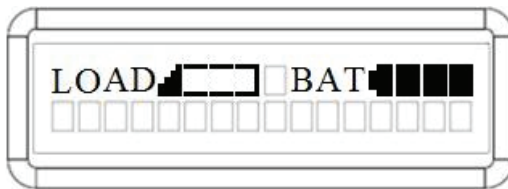
1. Press any of four function buttons on the LCD module.  
Note: the alarm can not be turned off for a **Battery Low** condition. This condition will still result in an audible alarm.
2. Change the **Audible Alarms** option to **Disable** in the LCD screen and it will no longer give an audible alarm for any malfunction.

### MANUAL BATTERY TEST

Select **Activate** in the **Battery Test** portion of the LCD screen and the unit will perform a manual battery test.

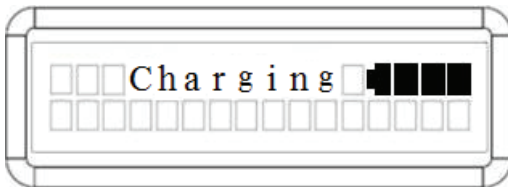
### GRAPHICAL LOAD/BATTERY CAPACITY DISPLAY

1. Press the **ESC** button to return to UPS Status.
2. Press the **▲** and **▼** buttons to scroll to the **LOAD** and **BAT** Capacity.
3. Press the **▲** and **▼** buttons to scroll to the **Charging** and **Discharging** Capacity.



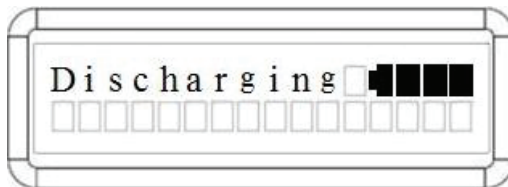
#### LOAD and BAT Capacity

The LCD screen displays the Load and Battery capacity with a graphical icon.



#### Charging Capacity



The LCD screen displays the battery capacity during charging with a graphical icon while on Line Mode.



#### Discharging Capacity

The LCD screen displays the remaining battery capacity with a graphical icon while on Battery Mode.

## LCD MODULE REMOTE CONTROL AND WALL MOUNTING INSTRUCTIONS

 CAUTION!	<b>CAUTION!</b> These operations must be done by qualified personnel.
 CAUTION!	<b>CAUTION!</b> To avoid electric shock, turn off and unplug the unit before installing remote control or mounting on wall.

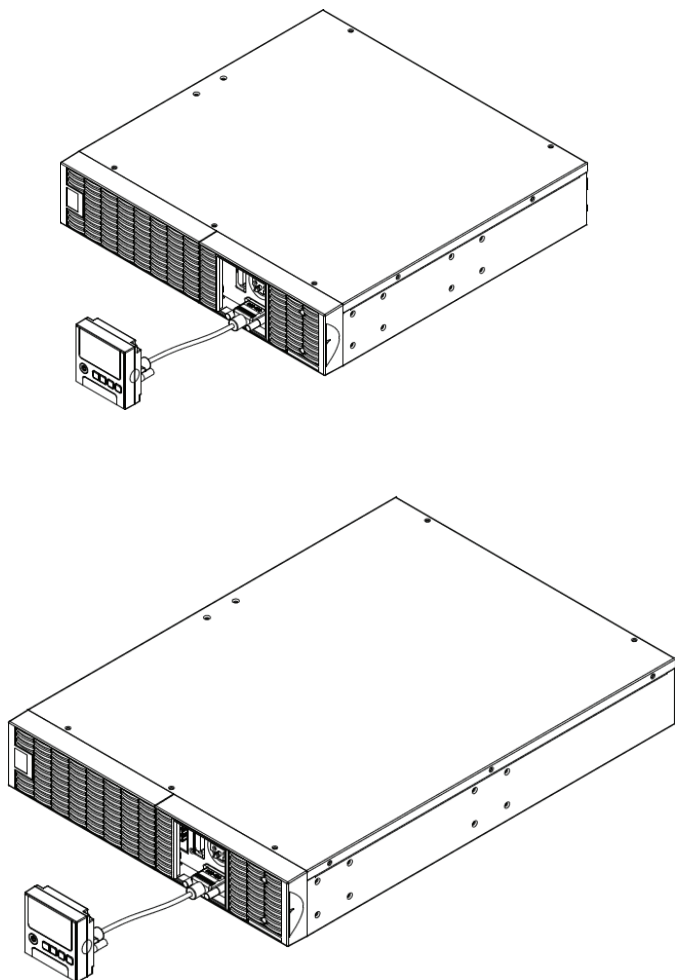
### REMOTE CONTROL

#### Step 1: Remove the Multifunction LCD Control Panel

Unscrew the right panel of the UPS. Separate the right panel from the UPS. Gently lift the LCD module out. Reinstall the right panel.

#### Step 2: Connect the DB26 Cable

Connect a DB26 cable (not included) from LCD control panel to the Remote Control Port on the front panel.



### WALL MOUNTING INSTRUCTIONS

#### Step 1: Remove the Multifunction LCD Control Panel

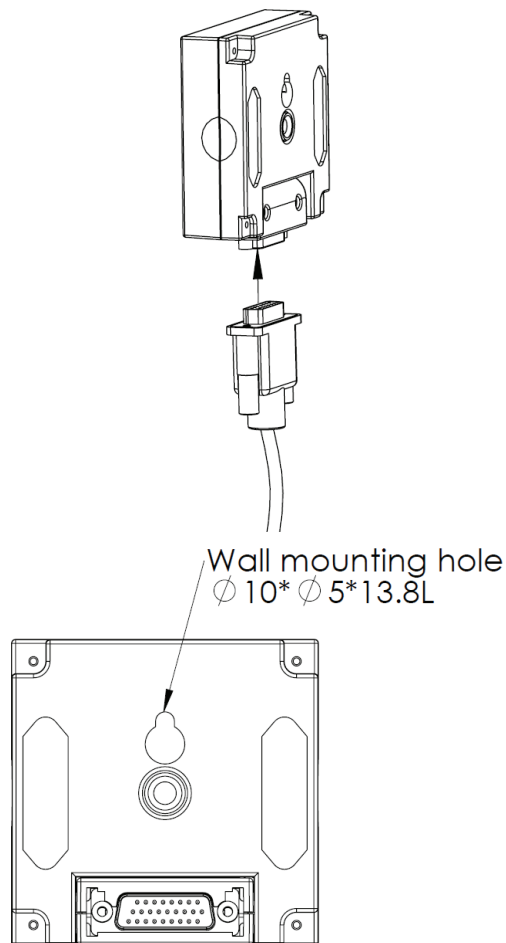
Unscrew the right panel of the UPS. Separate the right panel from the UPS. Gently lift the LCD Control Panel out. Reinstall the right panel.

#### Step 2: Rotate the DB26 Connector of LCD Control Panel

#### Step 3: Connect the DB26 Cable

Connect a DB26 cable (not included) from LCD Control Panel to the Remote Control Port on the front panel as shown in the following figure.

#### Step 4: Mount LCD Control Panel on the Wall



## MAINTENANCE

### Storage

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.

### Battery Replacement

Please read and follow the Safety Instructions before servicing the battery. Battery replacement should be performed by trained personnel who are familiar with the procedures and safety precautions. Make a note of the replacement battery tray number.

### Replacement Batteries

Please refer to the front side of the UPS for the model number of the correct replacement batteries. For battery procurement, log onto [www.cyberpowersystems.com](http://www.cyberpowersystems.com) or contact your local dealer.

### Battery Disposal

Batteries are considered hazardous waste and must be disposed of properly. Contact your local government for more information about proper disposal and recycling of batteries. Do not dispose of batteries in fire. CyberPower Systems encourages environmentally sound methods for disposal and recycling of its UPS products. Please dispose and/or recycle your UPS and batteries in accordance with local regulations.

### Safety Precautions

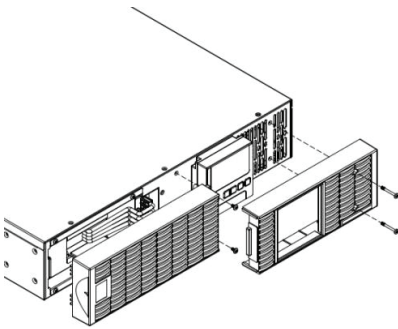
**CAUTION!** Only use replacement batteries which are certified by CyberPower Systems. Use of incorrect battery type is an electrical hazard that could lead to explosion, fire, electric shock, or short circuit.

**CAUTION!** Batteries contain an electrical charge that can cause severe burns. Before servicing batteries, please remove any conductive materials such as jewelry, chains, wrist watches, and rings.

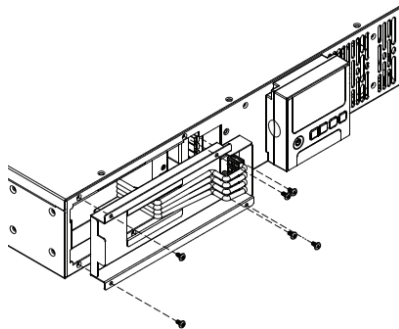
**CAUTION!** Do not open or mutilate the batteries. Electrolyte fluid is harmful to the skin/eyes and may be toxic.

**CAUTION!** To avoid electric shock, turn off and unplug the UPS from the wall receptacle before servicing the battery.

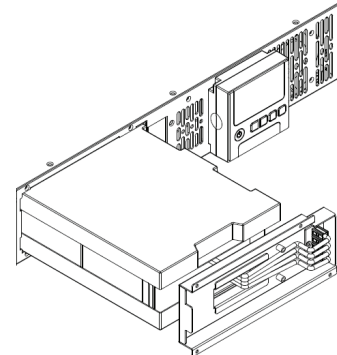
**CAUTION!** Only use tools with insulated handles. Do not lay tools or metal parts on top of the UPS or battery terminals.



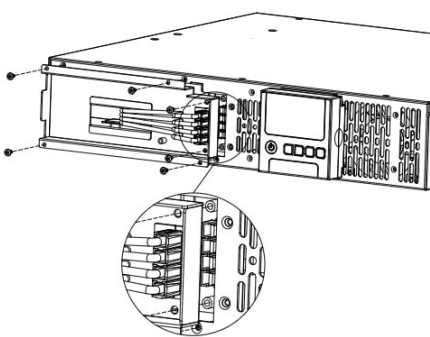
**Step 1:** Remove the front panels.



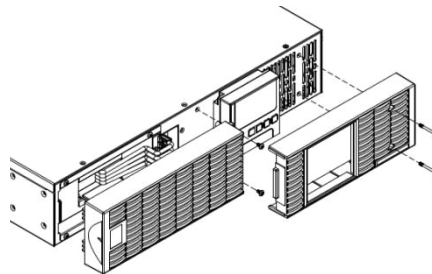
**Step 2:** Remove the retaining screws from the cable protection cover and then remove the cover itself.



**Step 3:** Pull the battery tray out slowly and then put the new battery tray back into the compartment.



**Step 4:** Fasten back the connectors on the battery retaining cover. Then insert the battery connectors and tighten the screws of battery retaining cover.



**Step 5:** Install the front panels. Execute a battery test via the LCD control panel, go to the Configuration Menu, then scroll to the UPS Diagnostic then select battery test and Activate, then scroll to ResetReplaceBAT to reset the battery replacement date. This operation can also be done via PowerPanel® Business Edition Agent or RMCARD web interface. Please see their respective User Manuals for detailed instructions.

## TECHNICAL SPECIFICATIONS

MODEL	OL1000RTXL2U	OL1500RTXL2U	OL2200RTXL2U	OL3000RTXL2U	OL3000RTXL2UHV
Configuration					
Capacity (VA)	1000VA	1500VA	2200VA	3000VA	3000VA
Capacity (Watts)	900W	1350W	1800W	2700W	2700W
Form Factor	Rackmount / Tower				
Energy-saving Technology	≥ 94%	≥ 95%			≥ 97%
Input					
Input Power Plug	NEMA 5-15P		NEMA 5-20P	NEMA L5-30P	NEMA L6-20P
Input Voltage Range	100 - 125Vac				200 - 240Vac
Input Frequency Range	50 / 60Hz				
Input Power Factor	0.99				
Cold Start	Yes				
Output					
Output Waveform	Sine wave				
Output Voltage (Configurable)	100, 110, 115, 120, 125Vac +/- 2% <sup>1</sup>				200, 208, 220, 230, 240Vac +/- 2%
Output Frequency	50 / 60Hz (Auto-Sensing or Configurable) +/- 0.25Hz				
Transfer Time (Typical)	0ms				
Rated Power Factor	0.9	0.9	0.82	0.9	0.9
Harmonic Distortion	THD < 3% at Linear Load, < 5% at Non-linear Load				
Crest Factor	3 : 1				
ECO Mode Bypass Voltage Range	+/- 10%, +/- 15% (Configurable)				
UPS Outlets	(8) NEMA 5-15R	(6) NEMA 5-20R, (1) L5-20R	(6) NEMA 5-20R, (1) L5-30R	(2) NEMA L6-20R, (1) NEMA L6-30R	
Protection					
Surge Protection	IEC 61000-4-5 Level 3				
	1780 J		1335 J		445 J
Phone / Network Surge Protection	RJ11/RJ45 (One In/One Out)				
Overload Protection	Line Mode: 105-125% Load for 1 min / 126-150% Load for 10 sec Battery Mode: 105-130% Load for 10 sec / 131-150% Load for 2 sec				
Short Circuit Protection	UPS Output Cut off Immediately or Input Fuse / Circuit Breaker Protection				

(continued)



**TECHNICAL SPECIFICATIONS - CONT.**

MODEL	OL1000RTXL2U	OL1500RTXL2U	OL2200RTXL2U	OL3000RTXL2U	OL3000RTXL2UHV
Battery					
Specifications	(3) 12V / 9 Ah		(6) 12V / 9 Ah		
Recharge Time 0-90% (Typical)	4 hours (0-90%)				
Sealed, Maintenance- Free	Yes				
Hot-Swappable	Yes				
Status Indicators					
LCD Screen	Multi-Language Interface / (24) Types of Read Out (28) Types of Function Setting / (5) Event Logs				
LED Indicators	Power On (White) / Line Mode (Green) / Battery Mode (Yellow) Bypass Mode (Yellow) / Fault (Red) / Replace Battery (Red)				
Audible Alarms	Battery Mode / Battery Low / Overload / UPS Fault				
Environment					
Operating Temperature	32°F to 104°F (0°F to 40°C)				
Operating Relative Humidity	0 to 90% non-condensing				
Management					
On-Device Features	Start-up Self Test, Auto-Charge, Auto-Restart, Auto-Overload Recovery				
Connectivity Ports	(1) Serial Port (RS232), (1) USB Port, (1) Relay Out				
Expansion Slot	(1) Expansion Slot for optional remote management cards				
Software					
Power Management Software	PowerPanel® Business				
Physical					
Dimensions Length/Width/ Height	16.9 x 17 x 3.5 in. / 43 x 43.3 x 8.8 cm		23.6 x 17 x 3.5 in. / 60 x 43.3 x 8.8 cm		
Net Weight	39.6lbs. / 18 kg		68.2 lbs. / 31 kg		
Certifications					
Safety	UL1778 / CSA C22.2 NO.107.3 FCC Part 15 Class B		UL1778 / CSA C22.2 NO.107.3 FCC Part 15 Class A		
Environmental	RoHS compliant				

<sup>1</sup> For OL1500/2200/3000RTXL2U, 100V is derated by 20%, 110/115V is derated by 10%

## TROUBLESHOOTING

Problem	Possible Cause	Solution
Warning		
O/P Overload	Your equipment requires more power than the UPS can provide. If the UPS is in Line Mode then it will transfer to Bypass Mode; if the UPS is in Battery Mode it will shutdown.	Shut off non-essential equipment. If this solves the overload problem, the UPS will transfer to normal operation.
Load Over XXX%	Your equipment requires more power than the setting in the Power Management Software (PowerPanel® Business) will allow.	Shut off the non-essential equipment or increase the level in the Power Management Software.
Battery Mode	UPS is operating on battery power.	Save your data and perform a controlled-shutdown.
Battery Low	UPS is operating on battery power and will be shutting down soon due to extremely low battery voltage.	UPS will restart automatically when acceptable utility power returns.
BAT Disconnected	Missing battery power.	Check battery connector and battery breaker.
Battery Failure	UPS has failed a Battery Test.	<ol style="list-style-type: none"> <li>1. Check battery connector and battery breaker.</li> <li>2. Contact technical support to replace the battery.</li> </ol>
Replace Battery	Battery will soon need to be replaced due to insufficient runtime.	Contact technical support to replace the battery.
EPO OFF	Missing the EPO connection.	Check the EPO connection.
Wiring Fault Not applicable on OL3000RTXL2UHV	Line and neutral wires are reversed.	Exchange line and neutral wires.
	Missing ground wire.	Connect ground wire.
	No ground wire.	Disable Wiring Fault alarm on LCD panel.
Line Abnormal	Wrong utility power backed up during UPS auto- restart.	Check whether voltage or frequency of utility power is out of range.
Output Short	Output short circuit.	Your attached equipment may have problems, please remove them and check again.
Over Temperature	High temperature sensor activates protection.	Check the fan for operation and if the ventilation hole has been covered.
Coldstart Lock	UPS is locked to prevent consuming battery power during shipping.	Plug into utility power for first-time operation.
Autorestart Lock	“Automatic Restore” is disabled in Power Management Software (PowerPanel® Business)	Press <b>ON/OFF</b> button to turn on UPS.
Replace Battery	Battery will need to be replaced soon due to insufficient runtime.	Install new batteries, execute battery test, and reset the replace battery date.
Service Battery	The Battery Replacement Date has reached the recommended three-year maintenance period.	<ol style="list-style-type: none"> <li>1. Perform a runtime calibration to verify battery capacity is sufficient and acceptable.</li> <li>2. If batteries have been recently replaced, then reset the Battery Replacement Date using PowerPanel® Business Agent software, RMCARD interface (if installed) or through the LCD control panel on the UPS.</li> </ol>

(continued)

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**TROUBLESHOOTING - CONT.**

<b>Problem</b>	<b>Possible Cause</b>	<b>Solution</b>
Fault		
Over Charge	Battery is overcharged.	1. Remove battery connector and check charger voltage. 2. Contact CyberPower for repair.
Charger Failure	Charger has failed.	
High O/P V	Output voltage is too high.	1. Shut down UPS and turn off input breaker. 2. Contact CyberPower for repair.
Low O/P V	Output voltage is too low.	
Bus Fault	Internal DC bus voltage is too high or too low.	
Fan Error	Internal Fan has failed.	

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## PRODUCT REGISTRATION

Thank you for purchasing a CyberPower product. This UPS is designed to provide unsurpassed power protection, operation, and performance during the lifetime of the product. Please take a few minutes to register your product at: [www.CyberPowerSystems.com/registration](http://www.CyberPowerSystems.com/registration).

Registration certifies your product's warranty, confirms your ownership in the event of a product loss or theft, and entitles you to free technical support. Register your product now to receive the benefits of CyberPower ownership.

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### CYBERPOWER GREENPOWER UPS™ TECHNOLOGY

#### Advanced Energy-Saving Design

The GreenPower UPS™ has a high-efficiency charger, which makes it the most energy-efficient UPS in its class. The advanced high-frequency charging system significantly improves charging efficiency and conserves energy. As a result of this advanced design, the GreenPower UPS™ uses less energy compared to competitive models. The GreenPower UPS™ is manufactured in accordance with the Restriction on Hazardous Substances (RoHS) directive making it one of the most environmentally-friendly UPS systems on the market today.



### FCC COMPLIANCE STATEMENT

This device complies with part 15 of the FCC rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.



Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment to an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Warning: Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

**Canadian Compliance Statement**  
CAN ICES-3 (B)/NMB-3(B)

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### LIMITED WARRANTY AND CONNECTED EQUIPMENT GUARANTEE

Please visit [www.CyberPowerSystems.com](http://www.CyberPowerSystems.com) for a copy of the Limited Warranty and Connected Equipment Guarantee.

#### Where Can I Get More Information?

The application of the United Nations Convention of Contracts for the International Sale of Goods is expressly excluded. CyberPower is the warrantor under this Limited Warranty. For further information please feel free to contact CyberPower at: Cyber Power Systems (USA), Inc. 4241 12th Ave E., STE 400, Shakopee, MN 55379; call us at **(877) 297-6937**; or submit a web ticket online at [cyberpowersystems.com/support](http://cyberpowersystems.com/support).

Cyber Power Systems (USA), Inc. encourages environmentally sound methods for disposal and recycling of its UPS products. Please dispose and/or recycle your UPS and batteries in accordance to the local regulations of your state.

WARNING: This product can expose you to chemicals including bisphenol A (BPA) and styrene, which is known to the State of California to cause reproductive harm and cancer. For more information, go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov).