CyberPower
THE POWER TO CONTROL THE POWER

Paragon Series

OL1000RMXL2U
OL1500RMXL2U
OL2000RMXL2U
OL3000RMXL2U

User Manual

Preface

About this Manual

Thank you for purchasing a CyberPower Systems product to protect your electrical equipment.

The **Paragon** series has been designed with the utmost care. We recommend that you take the time to read this manual to take full advantage of your UPS's many features.

The **Paragon** UPS and the optional battery packs that are covered in this manual are listed below:

- UPS OL1000RMXL2U (1000VA/700W).
- UPS OL1500RMXL2U (1500VA/1050W).
- UPS OL2000RMXL2U (2000VA/1400W).
- UPS OL3000RMXL2U (3000VA/2100W).
- ABP36VRM-2U (36Vdc, 7Ah, for OL1000RMXL2U and OL1500RMXL2U).
- ABP72VRM-2U (72Vdc, 9Ah, for OL2000RMXL2U and OL3000RMXL2U).

To learn more about our entire line of CyberPower Systems products and the options available for the **Paragon** series, visit our web site at www.cyberpowersystems.com or contact your local CyberPower Systems representative.

FCC Notice

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 into an outlet on a circuit different from that to which the receiver is connected
- Consult the dealer or an experience radio/TV technician for help

Environment

The Paragon UPS models OL1000RMXL2U, OL1500RMXL2U, OL2000RMXL2U, and OL3000RMXL2U are intended for installation in an environment within 0ºC to 40ºC and free of conductive contaminants.

CyberPower Systems pays great attention to the environmental impact of its products. Environmental protection measures for the Paragon series include:

- The eco-design approach used in product development.
- Provisions for the recycling of the **Paragon** unit at the end of its service life.

Icon Usage

Read the following section to familiarize yourself with the icons used in this manual:

Icon	Description
	Indicates a hazard to personnel or equipment. These warnings must always be followed.
	Indicates notes, useful tips, and helpful information.
	Indicates essential information.
	LED off.
	LED on.
	LED flashing.

Safety Instructions

Read before installing

SAVE THESE INSTRUCTIONS. This manual contains important instructions that should be followed during installation, operation, and maintenance of the UPS and batteries.

CAUTION: Personal Safety

- The UPS has its own internal power source (the battery). Consequently, the power outlets may be energized even if the UPS is disconnected from the AC power source.
- Dangerous voltage levels are present within the UPS. It should be serviced only by qualified service personnel.
- The UPS must be properly grounded. Measurements should be taken to ensure that the total leakage current of the UPS and the protected equipment does not exceed 3.5mA (maximum leakage current of the UPS = 2mA).
- The battery supplied with the UPS contains small amounts of toxic materials. The safety warnings below must be followed:
  - Never burn the battery (risk of explosion).
  - Do not attempt to open the battery (the electrolyte is dangerous for the eyes and skin).
  - Comply with all applicable regulations for the disposal of a battery.
  - Batteries constitute a danger (electrical shock, burns). The short-circuit current may be very high. Precautions must be taken when handling: remove watches, rings, bracelets and any other metal objects; use tools with insulated handles.
  - Do not lay tools or metal parts on top of batteries.

CAUTION: Product Safety

- ❑ The UPS connection instructions and operation described in the manual must be followed in the order indicated.
- ❑ The UPS must be connected to a nearby wall outlet that is easily accessible. The UPS can be disconnected from the AC power source by removing the power cord.
- ❑ Ensure that the electrical specifications on the rating plate for your AC powered system and the actual electrical consumption of all the equipment to be connected to the UPS are compatible.
- ❑ Never install the UPS near liquids or in an excessively damp environment.
- ❑ Never allow anything to penetrate the UPS.
- ❑ Never block the ventilation grates of the UPS.
- ❑ Never expose the UPS to direct sunlight or a source of heat.
- ❑ If the UPS must be stored prior to installation, storage must be in a dry place.
- ❑ The acceptable storage temperature range is -25ºC to +55ºC.

Special Precautions

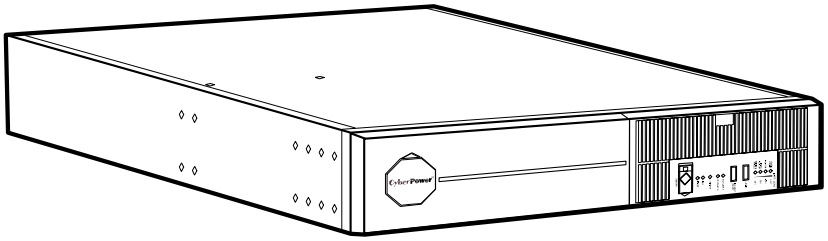
- ❑ At least two people are required to move or install the UPS safely.
- ❑ Once installed and connected to the AC power source for the first time, the battery will start to charge. A full charge requires at least 8 hours.
- ❑ If the UPS is inactive for an extended period, it must be charged for a period of 24 hours, at least once every 6 months. This avoids possible damage. During the replacement of the battery module, it is imperative to use the same type and number of batteries as the original battery module to maintain an identical level of performance and safety. In case of doubt, do not hesitate to contact our sales department or refer to our web site at www.cyberpowersystems.com.

Contents

1 Device Overview

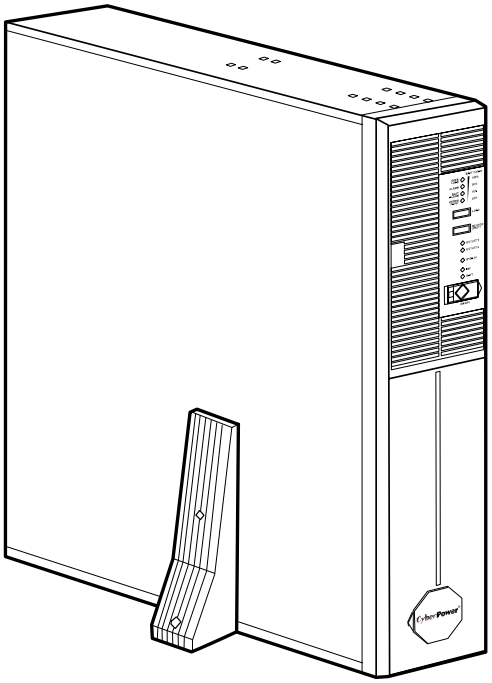
1.1 System configurations

Rack setup



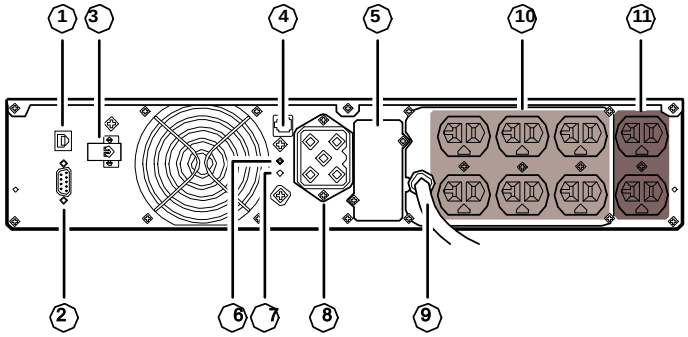
Model	Dimensions (WxDxH)(inch)	Weight (pound)
OL1000RMXL2U	17.24x18.66x3.41	43
OL1500RMXL2U	17.24x18.66x3.41	45.19
OL2000RMXL2U	17.24x25.69x3.41	70.11
OL3000RMXL2U	17.24x25.69x3.41	72.31

Tower setup

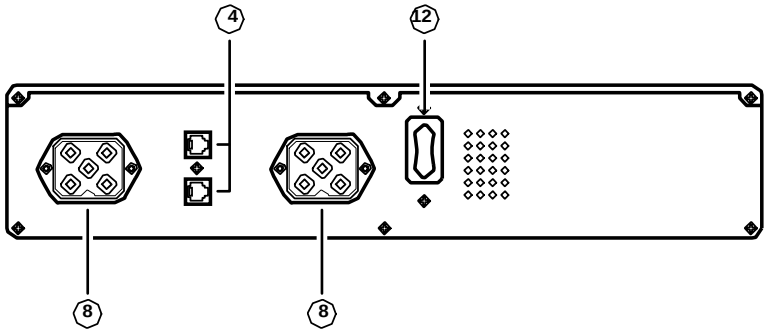


1.2 Rear panel

Paragon OL1000RMXL2U/OL1500RMXL2U

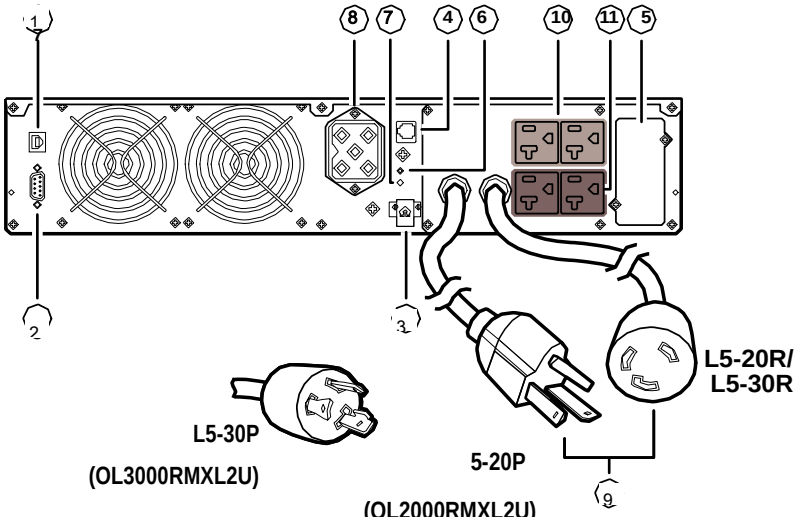


Paragon ABP36VRM-2U (optional)

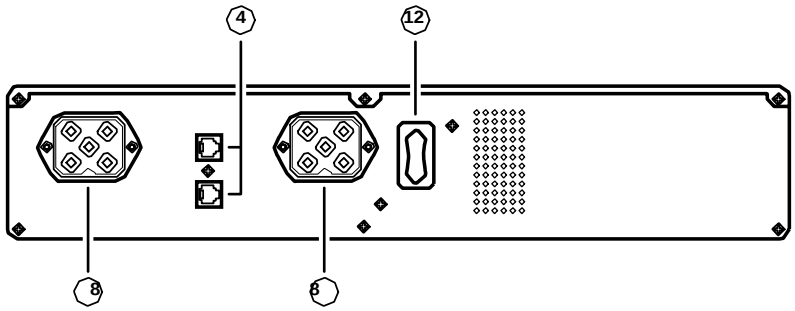


NO	Description
1	USB communication port.
2	RS232 communication port.
3	Connector for remote power off (RPO).
4	Connector for automatic detection of an additional battery pack.
5	Expansion slot for optional communication card.
6	Button to test phase/neutral inversion of AC power source.
7	LED indicating Site Wiring Alarm enabled, with flashing and periodic buzzer. Reset fault with rear panel button.
8	Connector for an additional battery pack.
9	NEMA 5-15P Input power plug for direct connection to AC power source.
10	Six NEMA 5-15/20R receptacles for connection to AC power source.
11	Two programmable NEMA 5-15/20R receptacles.
12	Circuit breaker for battery ON/OFF and protection.

Paragon OL2000RMXL2U/OL3000RMXL2U



Paragon ABP72VRM-2U (optional)

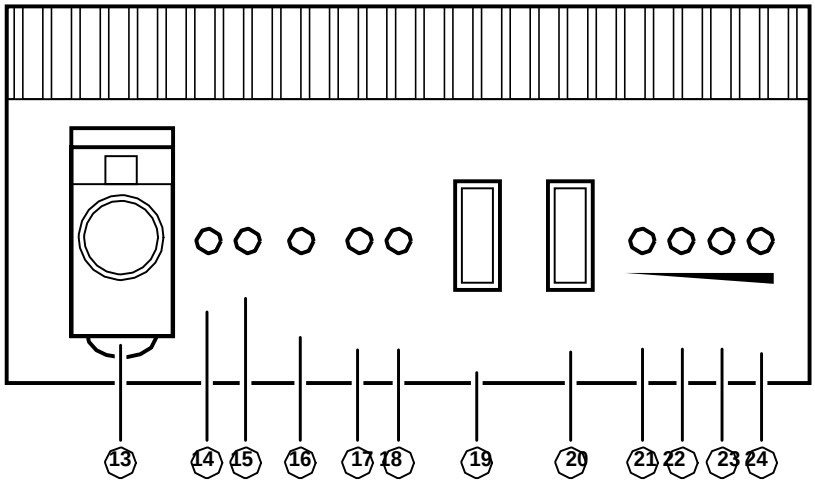


NO	Description
1	USB communication port.
2	RS232 communication port.
3	Connector for remote power off (RPO).
4	Connector for automatic detection of an additional battery pack.
5	Expansion slot for optional communication card.
6	Button to test phase/neutral inversion of AC power source.
7	LED indicating Site Wiring Alarm enabled, with flashing and periodic buzzer. Reset fault with rear panel button.
8	Connector for an additional battery pack.
9	Input/Output power cords for direct connection of protected equipment. (5-20P/L5-20R for OL2000RMXL2U; L5-30P/L5-30R for OL3000RMXL2U).
10	Upper two NEMA 5-15/20R receptacles for connection to AC power source.
11	Lower two NEMA 5-15/20R programmable receptacles.
12	Circuit breaker for battery ON/OFF and protection.

The compatibility of optional battery packs:
ABP36VRM-2U is for OL1000RMXL2U and OL1500RMXL2U UPS units.
ABP72VRM-2U is for OL2000RMXL2U and OL3000RMXL2U UPS units.

Refer to the tables in this chapter for all illustration numbering throughout this manual (unless specified otherwise).

1.3 Control panel



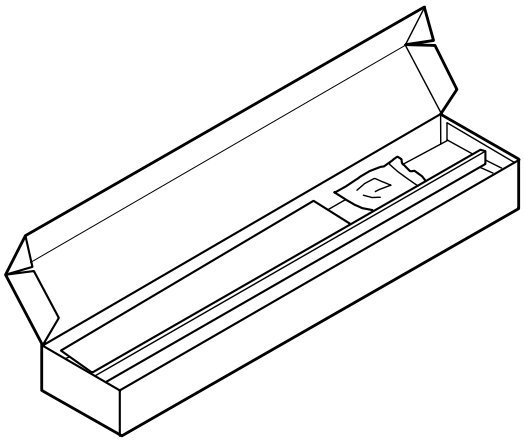
NO	Description
13	ON / OFF.
14	BATT: Operation on battery power.
15	INV: Operation in ON-LINE mode (backup power available).
16	BYPASS: Operation on bypass (no backup power available).
17	OUTLET 2: Status of programmable outlet 2.
18	OUTLET 1: Status of programmable outlet 1.
☼: LED on indicates the outlet is supplied with power. ☼: LED flashing indicates the outlet status change in progress.	
19	BZ STOP (TEST): ➢ Lamp test or buzzer OFF. ➢ Forced transfer to bypass and back by pressing the button three times within five seconds.
20	LOAD: Hold down to display percentage of load by LEDs 21 to 24.
Press 19 & 20 simultaneously at least three seconds to reset the "End of battery life" alarm.	
21	WIRING FAULT / Load 20%
22	BATT ALARM* / Load 50%
23	ALARM / Load 80%
24	OVER LOAD / Load 100%
Alarms are indicated by LED flashing (☼); percentage of load and battery remaining are indicated by LED illuminated (☼).	

* Flashing LED + buzzer: battery fault (battery must be replaced).
Flashing LED + long buzzer (once per hour): theoretical end of battery life (replacement recommended).

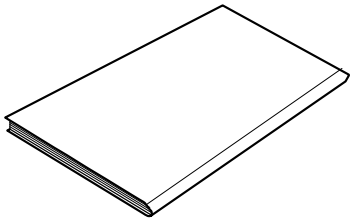
2 Installation

2.1 Unpacking

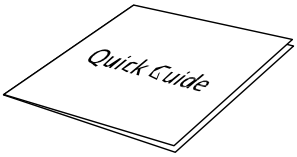
The following items are included in the box along with the UPS.



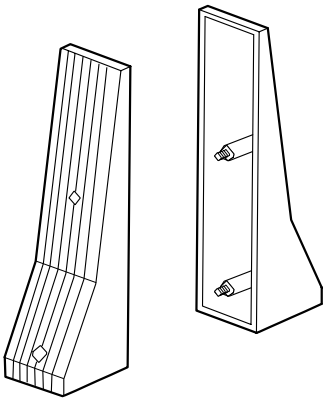
Telescopic rails for mounting in 19” rack with mounting hardware



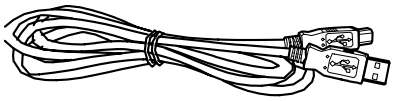
User’s manual



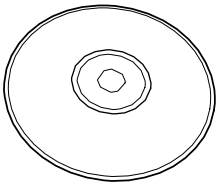
Quick Guide



Two tower supports for the vertical position



USB communication cable

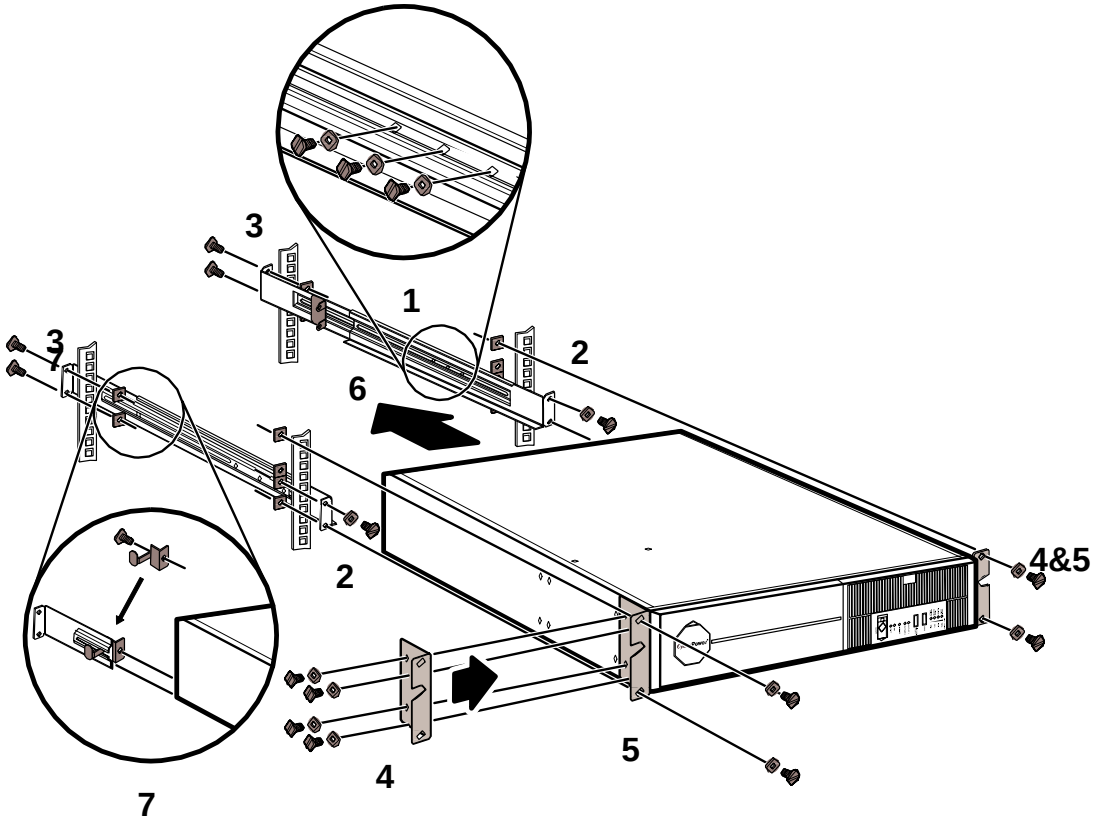


CD with the **PowerPanel Business Edition Agent** software

RS232 communication cable

2.2 Installing the UPS in a rack

Follow the steps below to rack mount the UPS on the rails. The telescopic rails and mounting hardware for rack mounting the UPS have been supplied.



A. Secure rails together with three screws (1).
B. Attach front rails to rack front (2).
C. Attach rear rails to rack rear (3).
D. Attach both front brackets (4&5) to each side of UPS and slide UPS into the rack (6).

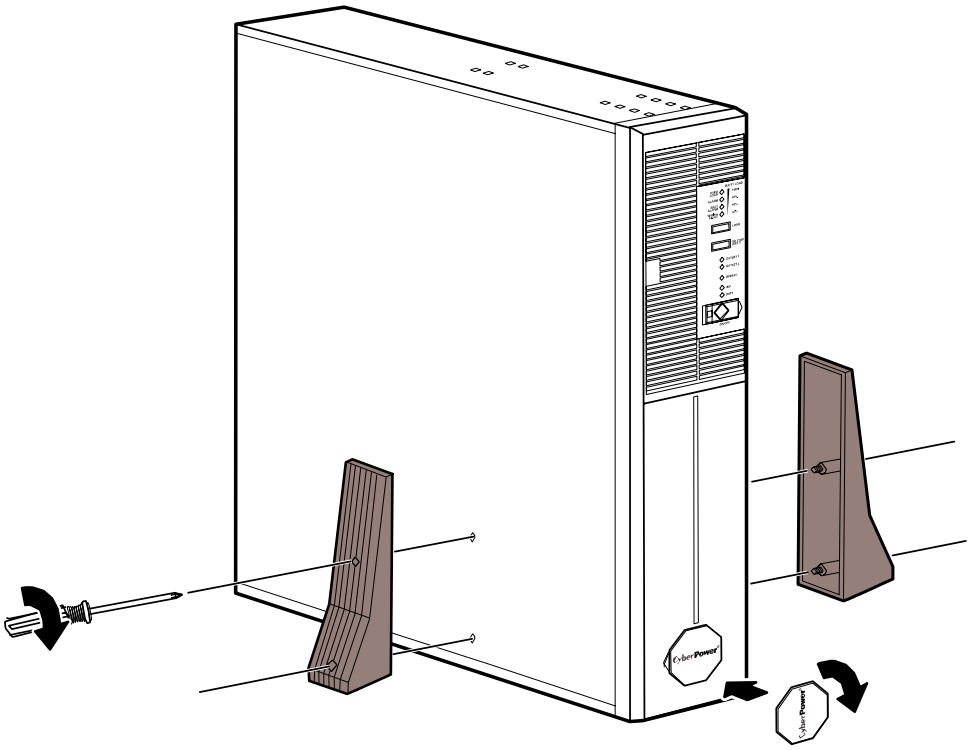
Do not lean or place objects on top of unit at any time.

During step D, the position of the front bracket may be adjusted.

2.3 Setting the UPS in the vertical position

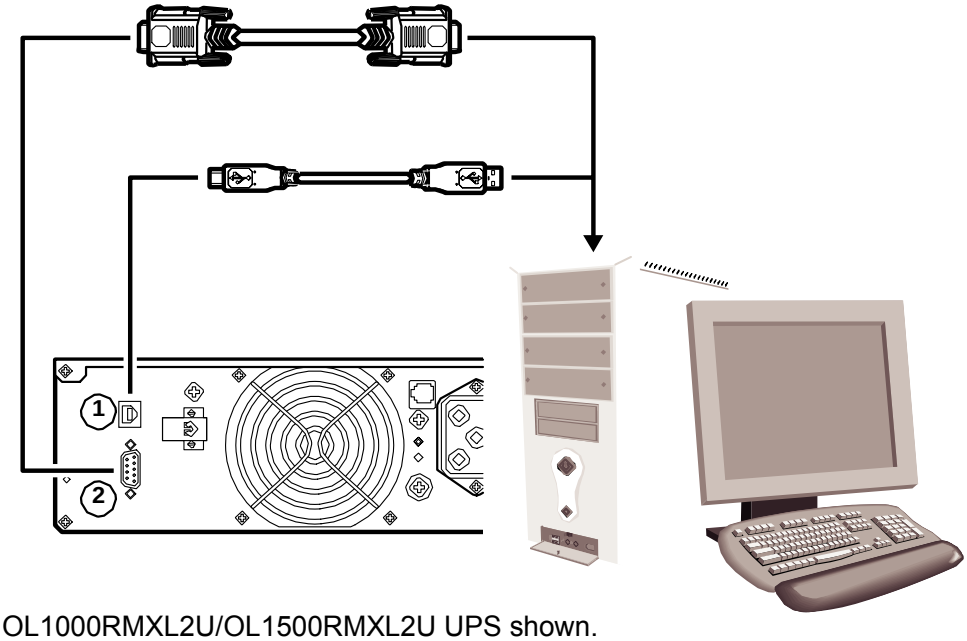
Attach the two tower supports to the UPS as shown below.

Pull out the CyberPower Logo plate, rotate it as shown, and replace it in the front of UPS.



2.4 Connecting the RS232 or the USB communication port (optional)

Connect the UPS to a PC using the RS232 or USB communication port as shown below.

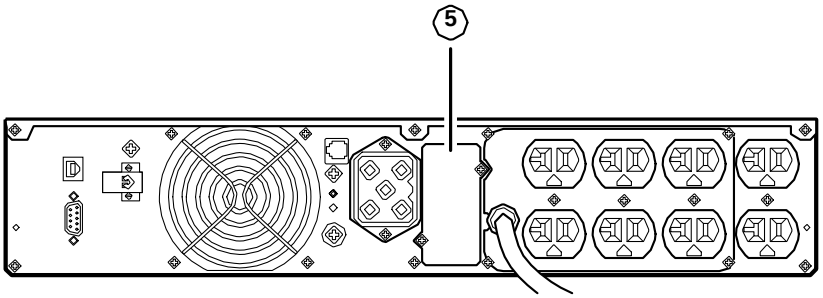


OL1000RMXL2U/OL1500RMXL2U UPS shown.

1. Connect the RS232 or the USB communication cable to the corresponding port on the computer.
2. Connect the other end of the communication cable to the either the RS232 ① or USB ② communication port on the UPS.

The RS232 and USB communication ports cannot be used at the same time.

2.5 Installing the optional communication card



OL1000RMXL2U/OL1500RMXL2U UPS shown.

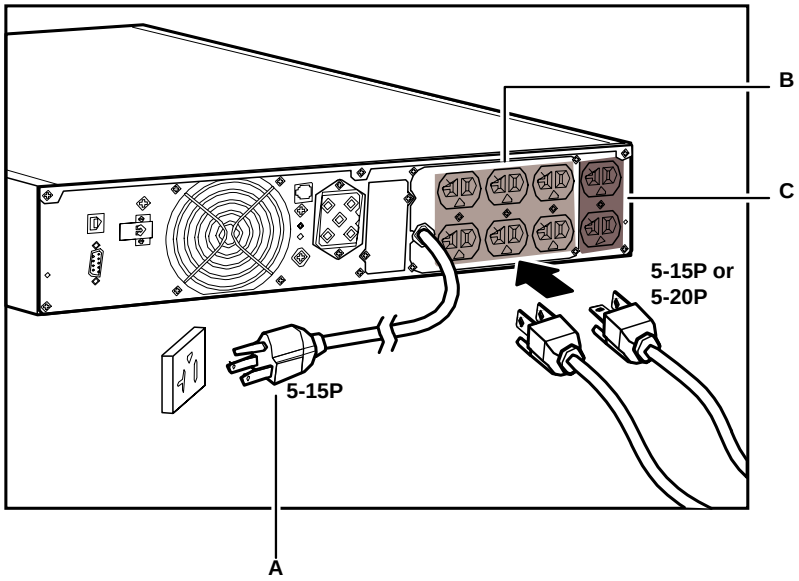
It is not necessary to shut down the UPS to install the communication card:

1. Remove the slot⑤ cover secured by two screws.
2. Insert the card in the slot.
3. Secure the card with the two screws.

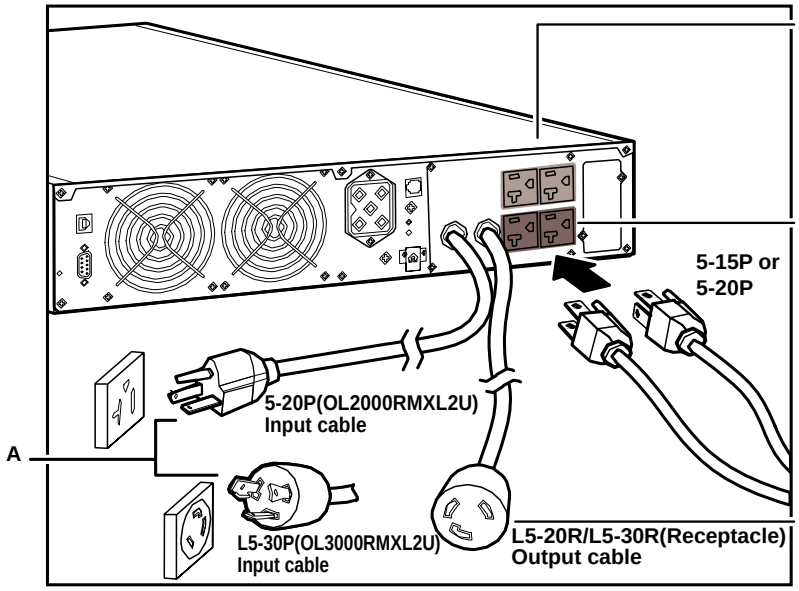
2.6 Connections

Check that the rating indicated on the back of the UPS corresponds to your AC-power system and to the actual electrical consumption of all the equipment to be connected to the UPS.

OL1000RMXL2U/OL1500RMXL2U UPS



OL2000RMXL2U / OL3000RMXL2U UPS



1. Connect the input power cord (A) to the AC-power wall receptacle.
2. Connect the protected equipment to the UPS. It is advisable to connect priority loads to the NEMA 5-15/20P outlets (B) and/or power cord (D) and any non-priority loads to the two programmable outlets (C).

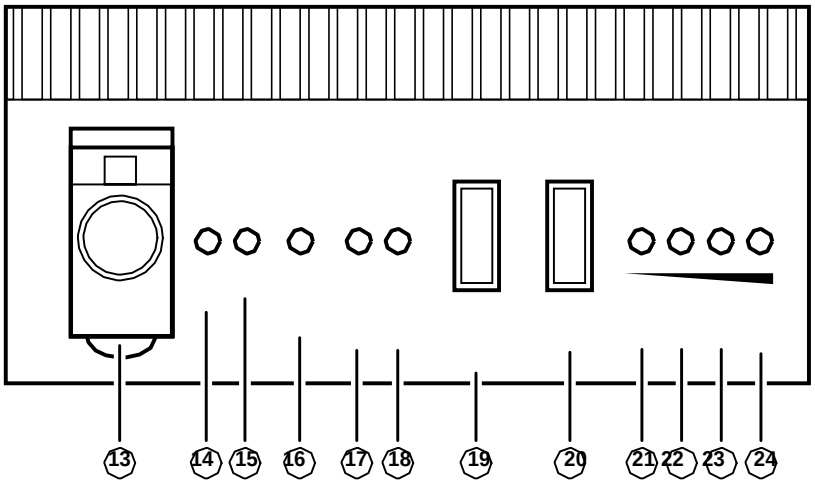
If the UPS is connected to a computer running CyberPower Systems' communication software, it is possible to program the interruption of power to the two programmable outlets (C) during operation on battery power, thus reserving backup power for the priority loads.

The battery begins charging the instant the UPS unit is connected to a power source. Eight hours are required to charge to fully charge the battery.

3 Operation

3.1 Start-up

The protected equipment connected to the UPS can be powered up, whether AC input power is available or not.



The AC input power source must be present when powered by the UPS for the first time.

Press the ON / OFF button. The UPS will boot in one of the following conditions:

- The buzzer sounds and all the LEDs light up.
- The buzzer sounds twice, then:
  - If AC input power is available, LED ⑮ lights up, indicating operation in ON-LINE mode.
  - If AC input power is not available and the UPS is configured for automatic restart mode, the buzzer beeps three times and LED ⑭ lights up, signaling operation on battery power.

All connected equipment is powered by the UPS.

If LEDs ⑭ or ⑮ do not turn ON or if LEDs ㉒ to ㉔ flash, there is a fault (see **Troubleshooting** on page 21).

3.2 LED indicators

LEDs ㉑ to ㉔ provide three different indications:

1. Remaining backup time as a percentage (during normal operation).
2. Percentage of load drawn by the protected equipment, when button ⑳ is pressed.
3. Operating faults (alarmed by flashing LED and beep):

LED	Alarm Condition
㉑	Site wiring fault
㉒	Battery fault or end of life warning
㉓	UPS fault
㉔	Overload

Description of LEDs ⑰ and ⑱ indicator status for programmable outlets 1 and 2:

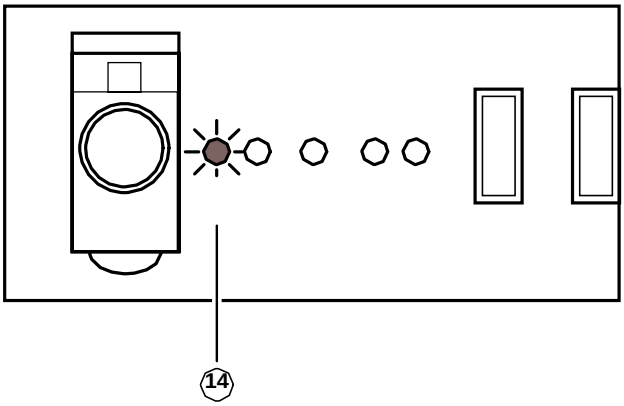
- OFF: The outlets are not supplied with power.
- Flashing: Status change in progress.
- ON: The outlets are supplied with power.

Outlets 1 and 2 can be remotely programmed and controlled.

They may be used for sequential start-up of the protected applications, shedding of non-priority applications during operation on battery power, and priority management at the end of battery backup time to reserve the longest possible backup time for the most sensitive applications. These outlets are programmed using **PowerPanel Business Edition Agent** software.

3.3 Operation on battery power (following AC input power failure)

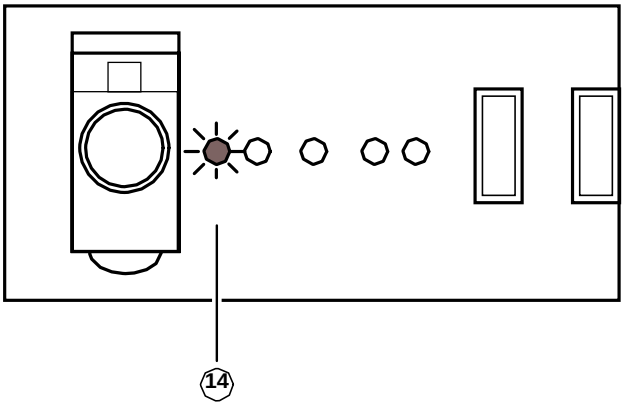
Transfer to battery power



The AC power source is out of tolerance, LED ⑭ is ON, the buzzer sounds three times.

The AC power to equipment connected to the UPS is supplied by the battery.

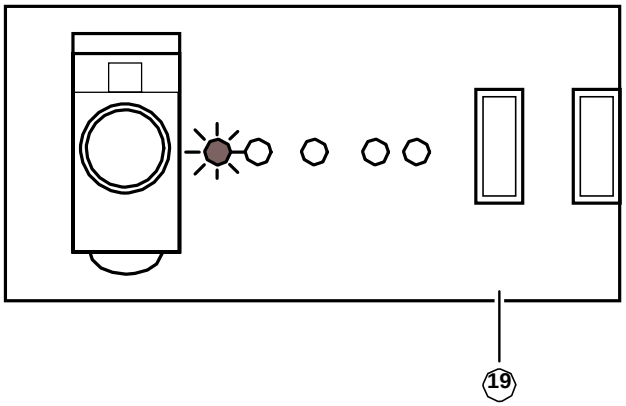
Threshold for the low-battery warning



The low-battery warning threshold can be set by the user, with the **PowerPanel Business Edition Agent** software (see **Personalization (option)** on page 15). LED ⑭ flashes. The buzzer sounds every three seconds.

There is very little remaining battery backup time. Close all applications; UPS automatic shutdown is imminent.

End of backup time



The buzzer sounds continuously. Press button ⑲ to turn the buzzer OFF.

The equipment is no longer supplied with power.

The UPS goes into sleep mode at the end of the battery backup time, until complete shutdown.

Make sure that the automatic-restart function has been enabled (**Personalization (option)** on page 15) for the return of AC input power.

3.4 Personalization (option)

Function

Personalization parameters can be set and modified using the **PowerPanel Business Edition Agent** software installed on a computer that is connected to the UPS (see **Connecting the RS232 or the USB communication port (optional)** on page 9).

Check that the RS232 or USB communication cable is properly connected.

PowerPanel Business Edition Agent installation:

1. Insert the provided CD containing the **PowerPanel Business Edition Agent** software into the computer's CD ROM drive.
2. The installation software should load automatically. If not, open the file manager and select the CD-ROM drive.
3. Launch "software\setup.exe".
4. Follow the instructions to install the software.

You can download the **PowerPanel Business Edition Agent** software from the CyberPower Systems web site at www.cyberpowersystems.com, or contact a CyberPower representative in your area. Once **PowerPanel Business Edition Agent** has been installed, the UPS parameters listed below can be
modified.

Battery Backup Configuration

The **PowerPanel Business Edition Agent** software provides the following options for battery backup configuration.

To enable a function, check the box before the item.

To set the options with values, specify them from the drop-down menu or enter the new values in the blank field.

When all the configurations are set, click the **Apply** button on the bottom of the page.

Output
Wake up Battery Backup when utility power restored.
Options: Enabled / Disabled Default: Enabled
Battery Backup will attempt to restore power from a shorted circuit condition.
Options: Enabled / Disabled Default: Disabled
Enter bypass mode once Battery Backup is overloaded.
Options: Enabled / Disabled Default: Enabled

Allow to bypass even if utility power is out of range.
Options: Enabled / Disabled Default: Disabled
Battery Backup supplies power at the specified voltage.
Options: 110 / 120 / 127 Default: 120
Output Frequency Determination
- Following utility frequency when it is within the specified tolerance. (default) [When checked, the value can be modified from the drop-down box.] Options: 1~10% Default: 5% - Fixed on the specified frequency. [When checked, the value can be modified from the drop-down box.] Options: 50/60 Hz Default: 60 Hz
Outlet #1 / Outlet #2
Turn off if battery capacity is below the specified percentage. Options: Enabled / Disabled Default: Disabled Percentage: 0~100% Turn off when utility power has failed for the specified time. Options: Enabled / Disabled Default: Disabled Time: 0~120 minutes Turn on when utility power has been restored for the specified time. Options: Enabled / Disabled Default: Disabled Time: 0~120 minutes

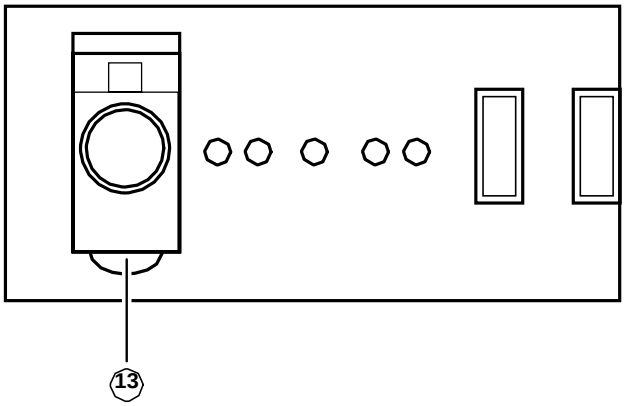
Battery

Prohibit battery from discharging over 4 hours.
Options: Enabled / Disabled Default: Disabled
Battery Backup will shut down to save energy if power failed without any load after 5 minutes.
Options: Enabled / Disabled Default: Disabled
Perform a battery test once during the specified period.
Options: every week / every month Default: every week
The latest battery replaced date.
Format: yyyy/mm/dd (the date of the latest battery)
Restore power when battery has been charged for having the specified time of remaining runtime.
Time: 0~65535 minutes Default: 0 minute (immediately)
Restore power when battery has been charged for having the specified percentage of battery capacity.
Percentage: 0~100% Default: 0 minute (immediately)
Battery is critically low when the capacity is below a percentage.
Percentage: 0~90% Default: 20%

System

Force to reboot the Battery Backup when utility power is restored early.
Options: Enabled / Disabled Default: Disabled
Battery Backup will alarm.
Options: Enabled / Disabled Default: Enabled
Output gives an overload warning when its load exceeds the specified percentage.
Options: 0~110% Default: 110%

3.5 UPS Shutdown

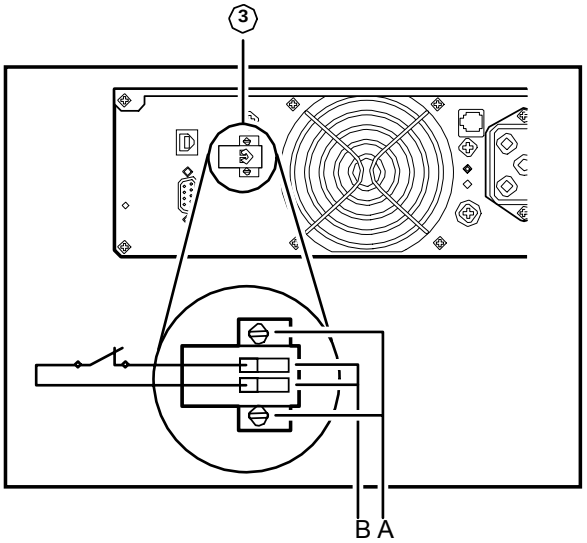


Press button ⑬ to turn off the UPS.

The connected equipment is no longer supplied with power.

3.6 UPS Remote Power Off

The **Paragon** UPS is equipped with a Remote Power Off function (RPO) that can cut power from all the devices connected to the UPS using a remote-operated contact. The function is implemented by opening a contact connected to the two terminals of connector ③ on the back of the UPS.



OL1000RMXL2U/OL1500RMXL2U UPS shown.

Installation and test of the remote power off function

1. Check that the UPS is shut off and disconnected from the AC power source.
2. Remove the RPO connector ③ by undoing the screws (A).
3. Connect an insulated dry contact (NC, 60V DC, 30V AC max., 20mA max., cable size 0.75mm) to the two terminals of the RPO connector (B).
4. Put the RPO connector ③ back in place on the back of the UPS.
5. Connect the UPS to the AC-power source and restart it as indicated previously.
6. Activate the RPO external contact to test the function.
7. To return to normal operation, deactivate the RPO external contact and restart the UPS using button ① ③ (press once to shut down the UPS, and press it again to restart the UPS).

4 Maintenance

4.1 Troubleshooting

If any of LEDs ㉒ ㉓ or ㉔ flash, there is an alarm or an abnormal operation. See the table below for problems and solution.

If an LED flashes, the bargraph data is no longer displayed.

Indication	LED ㉔ flashes and the buzzer sounds.
Signification	UPS overload. Overload is too long or too high. - If AC power is present and within tolerance, the UPS changes to bypass mode (supplied directly by the AC outlet). LED ⑮ flashes. The buzzer sounds every second. - If AC power is not present or not within tolerances, the connected equipment is no longer supplied with power. The buzzer sounds continuously.
Correction	Check the power drawn by the equipment and disconnect any short current or non-priority devices.

Indication	ED ㉒ flashes and the buzzer sounds.
Signification	A battery fault was detected during the automatic battery test. - Replace battery modules (see **4.2 Replacement of the battery module** on page 23).
Correction	Check that the battery connector is fully pushed in.

Indication	LED ㉒ flashes and the buzzer emits a long beep once per hour.
Signification	The battery has reached the end of its service life. Replace battery modules (see **4.2 Replacement of the battery module** on page 23).
Correction	- Reset the alarm by pressing buttons ⑲ and ⑳ simultaneously for three seconds. - It is advisable to replace the entire battery module with a new battery module that has the same rating as the battery module that is being replaced.

Indication	The yellow LED (21) flashes, the red indicator light (7) behind the UPS comes on and the buzzer sounds continuously.
Signification	The phase and neutral positions of your electrical network are showing reversed positions.
Correction	Directly grounded neutral type networks: Check the cabling of phase and neutral on your electrical network. For all other network types, de-activate the detection function (this function is only operational for directly grounded neutral electrical networks): Press the Test Phase button (6) located on the rear of the UPS, for at least five seconds (UPS will stop and re-connect to the network within 30 minutes).

Indication	LED (23) flashes and the buzzer sounds continuously.
Signification	UPS has detected a fault. Depending on the UPS personalization parameters (see **3.4 Personalization (option)** on page 15). There are two possibilities: - The equipment connected to the UPS continues to be supplied with power, but it is directly from the AC power source (via the automatic bypass (LED (16) ON). - The equipment is no longer supplied with AC power.  The equipment connected to the UPS is no longer protected.
Correction	Call the technical support department or e-mail tech@cyberpowersystems.com.

4.2 Replacement of the battery module

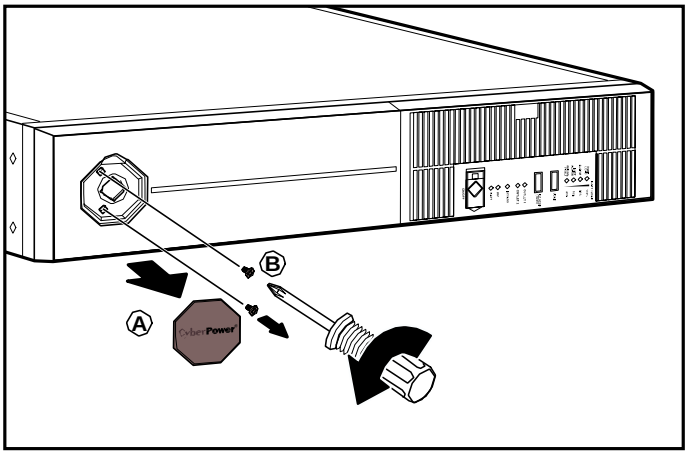
Load will not be protected during this procedure!
Batteries constitute a danger (electrical shock, burns). The short-circuit current may be very high. Precautions must be taken when handling.

Safety Rules:

Remove all watches, rings, bracelets and any other metal objects that may come into contact with the battery modules.

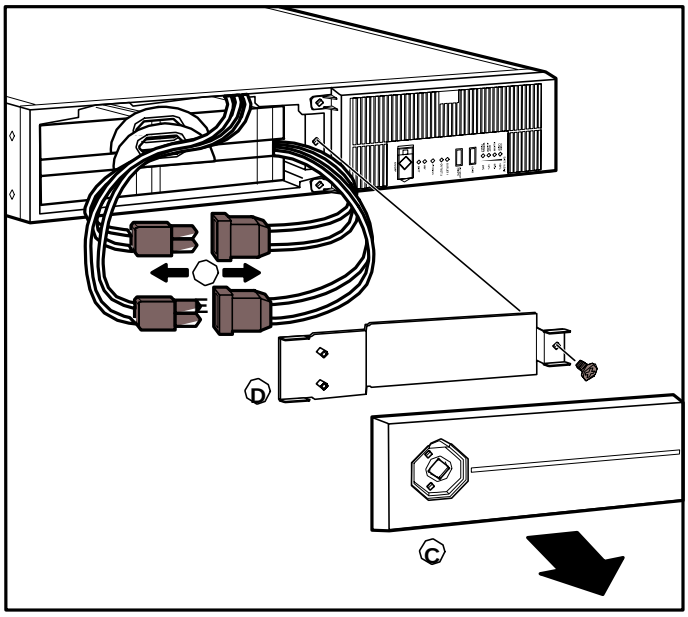
Use tools with insulated handles.

Removal of the battery modules



Ⓐ : Unclip the small plate with the CyberPower Systems logo on the UPS front panel.

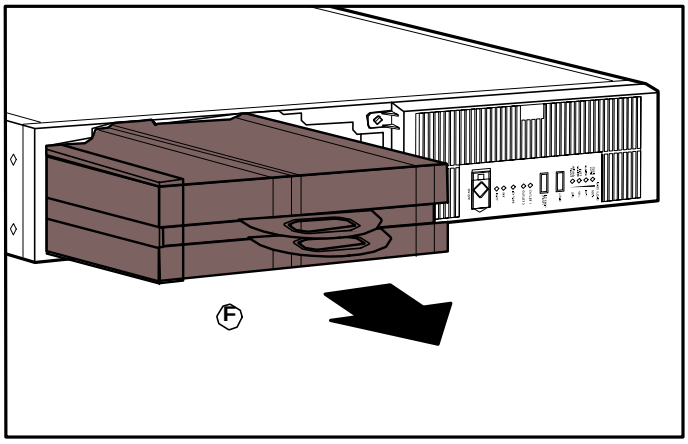
Ⓑ : Remove the two screws.



Ⓒ : Remove the left part of the front panel.

Ⓓ : Remove the screw and cover plate.

Ⓔ : Disconnect the connectors.



Ⓕ : Remove the battery modules.

Reinstallation of the battery modules

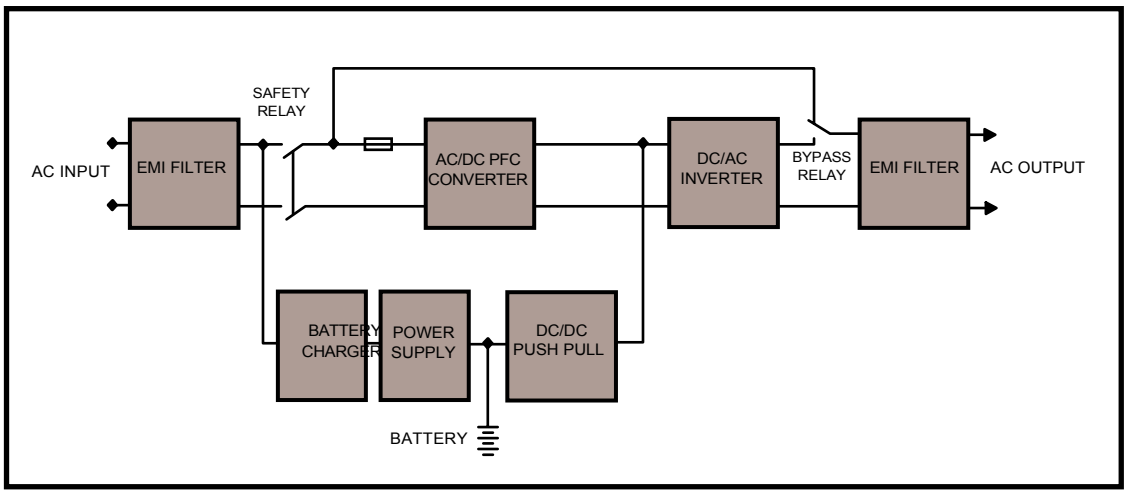
To reinstall the battery modules, perform this procedure in reverse order.

To maintain an identical level of performance and safety, use battery modules identical to those previously mounted in the UPS.

Press the two parts of the battery connector tightly together to ensure proper connection.

5 Appendix

5.1 Technical Characteristics



5.2 Technical Specifications

OL1000RMXL2U / OL1500RMXL2U / OL2000RMXL2U / OL3000RMXL2U	
Capacity (VA/W)	**OL1000RMXL2U:** 1000/700 **OL2000RMXL2U:** 2000/1400 **OL1500RMXL2U:** 1500/1050 **OL3000RMXL2U:** 3000/2100
Operation Technology	True On-Line & Double Conversion
AC Input	
Number of Phase	Single phase (1ψ2W+G)
Voltage Range	60Vac~142Vac (Based on percentage of load)
Frequency Range	40~70 ± 0.2Hz
Input Power Factor	≥ 0.95 @ Full load
AC Output	
Number of Phase	Single phase (1 ψ2W+G)
Nominal Voltage	110 / 120 / 127Vac
Voltage Regulation	± 3%
Voltage T.H.D	4% max @ Full linear load, 6% @ Full RCD load (9% max @ During last 30 seconds of backup time)

Load Crest Factor Ratio	3:1
Frequency Regulation	(50Hz / 60Hz) ± 0.5% (Battery mode)
Efficiency	**OL1000RMXL2U/OL1500RMXL2U:** >87% @100% R Load; >86% @100% RCD Load **OL2000RMXL2U:** >86% @100% R Load; >84% @100% RCD Load **OL3000RMXL2U:** >88% @100% R Load; >86% @100% RCD Load
Over Load Capacity	100% < Load < 110% overload warning only; 110% < Load < 130% warning, transfer to bypass after 12 seconds; 130%≤ load warning, transfer to bypass after 1.5 seconds
Transfer Time	0 ms (zero transfer)
Output Receptacles	**OL1000RMXL2U/OL1500RMXL2U:** (8) NEMA 5-20R **OL2000RMXL2U:** (4) NEMA 5-20R + (1) NEMA L5-20R **OL3000RMXL2U:** (4) NEMA 5-20R + (1) NEMA L5-30R
Overload Protection	Yes
Surge Protection & Filtering	
Lightning / Surge Protection	Yes
Network / Phone / Fax / Modem Surge Protection	N/A
Battery	
Voltage x Rating x Quantity	**OL1000RMXL2U:** 12V x 7 AH x 3 **OL1500RMXL2U:** 12V x 9 AH x 3 **OL2000RMXL2U:** 12V x 7 AH x 6 **OL3000RMXL2U:** 12V x 9 AH x 6
Run Time (Full load)	>5min @ 25 degree C and full load conditions
Recharging Time	3 hours to 90%
Charging Current (Max.)	**OL1000RMXL2U/OL1500RMXL2U:** 1A **OL2000RMXL2U/OL3000RMXL2U:** 1.3A
Battery Voltage	**OL1000RMXL2U/OL1500RMXL2U:** 36 Vdc **OL2000RMXL2U/OL3000RMXL2U:** 72 Vdc
Battery Type	Sealed maintenance-free lead acid
Management	
PowerPanel® Business Edition Software	Windows98/ME/2000/XP, Server 2003

Communications	RS-232/USB
AS400	AS 400 Card (Optional)
Remote Capability	HTTP/SNMP Card (Optional)
Emergency Power Off (EPO)	Yes
Agency	
Safety	UL1778/cUL CSA22.2
EMI / RFI	**OL1000RMXL2U/OL1500RMXL2U:** FCC47 CFR Part 15, Class B **OL2000RMXL2U/OL3000RMXL2U:** FCC47 CFR Part 15, Class A
EMS	IEC 61000-4-2 ESD level 4, IEC 61000-4-3 RS level 3, IEC 61000-4-4 EFT level 4, IEC 61000-4-5 SURGE level 4, IEC 1000-2-2 LFS 10Vrms, 140~360Hz Waveform
Immunity (Harmonics & Flicker)	IEC 61000-3-2 Current Harmonic, IEC 61000-3-3 Voltage Fluctuation
Environmental	
Operating Temperature	0ºC~40ºC
Storage Temperature	-20ºC~50ºC
Relative Humidity	20~90% Non-condensing
Altitude	10,000 ft (3,000m)
Audible Noise	**OL1000RMXL2U/OL1500RMXL2U:** < 45 dBA @1m **OL2000RMXL2U/OL3000RMXL2U:** < 47 dBA @1m

Battery Pack		
Model	**ABP36VRM-2U**	**ABP72VRM-2U**
Compatible	OL1000RMXL2U/ OL1500RMXL2U	OL2000RMXL2U/ OL3000RMXL2U
Battery Voltage	36V	72V
Voltage x Rating x Quantity	12V x 7 AH x 6 (2 Strings of 3 in Serial)	12V x 9 AH x 12 (2 Strings of 6 in Serial)
Long Backup Time (External Battery Pack)	>20 Minutes Unit + 1 Battery Pack >40 Minutes Unit + 2 Battery Pack >60 Minutes Unit + 3 Battery Pack >80 Minutes Unit + 4 Battery Pack	
Dimensions (W x D x H) (inch)	17.24x18.66x3.41	17.24x25.69x3.41
Weight (pound)	56	94.58

Limited Warranty and Connected Equipment Guarantee

In purchasing a OL1000RMXL2U/OL1500RMXL2U/OL2000RMXL2U/OL3000RMXL2U in the United States or Canada, the original end user receives a Limited Warranty and Connected Equipment Guarantee from Cyber Power Systems (USA), Inc. (for ease of reading, referred to as "CyberPower"). The Limited Warranty and the Connected Equipment Guarantee are intended to be the original end-user's exclusive rights and remedies. The Limited Warranty and the Connected Equipment are separate, all though they are related.

Limited Warranty. The original end user (referred to as the "Initial Customer") receives an express limited warranty (referred to as the "Limited Warranty") for the OL1000RMXL2U/ OL1500RMXL2U/OL2000RMXL2U/OL3000RMXL2U purchased from CyberPower (referred to as the "Product"). The Limited Warranty is for the Product itself. The terms of the Limited Warranty are explained below.

Connected Equipment Guarantee. CyberPower also provides the Initial Customer with protection in the event that the Product is not free from defects in materials and workmanship, and certain equipment connected to the Product is damaged (the "Connected Equipment Guarantee"). The Connected Equipment Guarantee protects the Initial Customer for damage to equipment plugged into the Product. The terms of the Connected Equipment Guarantee are explained below.

The Limited Warranty and the Connected Equipment Guarantee are subject to the terms set forth below. Additionally, State or Provincial law may adjust the terms of the Limited Warranty or the Connected Equipment Guarantee or the State or Province may impose additional obligations, or additional "implied warranties." To the extent necessary to comply with those laws, the terms of the Limited Warranty and the Connected Equipment Guarantee should be read to adjust to those requirements only to the extent necessary to comply with such local law.

If you are an Initial Customer, you are asked to read the following terms and conditions carefully before using the Product. By using the Product you consent to be bound by and become a party to the Limited Warranty and Connected Equipment Guarantee. If you do not agree to the terms and conditions of the Limited Warranty and Connected Equipment Guarantee, you should return the Product for a full refund prior to using it.

REGISTRATION

CyberPower requests that you complete and return the Warranty Registration Card enclosed with the Product or register the Product at its website (www.cyberpowersystems.com) to establish that you are the Initial Customer of the Product, and therefore entitled coverage under the Limited Warranty and the Connected Equipment Guarantee. (Registration is not required for Limited Warranty coverage, but note, if you do not complete a registration card you will be required to provide proof of purchase, as described below, to have the benefits of this Limited Warranty.)

LIMITED WARRANTY

CyberPower warrants to you, the Initial Purchaser, that the Product will be free from defects in material and workmanship for three years from the date of original purchase, subject to the terms of this Limited Warranty.

Any Implied Warranty of Merchantability or for Fitness for a Particular Purpose, if applicable to the Product, is limited in duration to the period of ownership by the Initial Customer. This provision shall NOT create any Implied Warranty or Merchantability or of Fitness for a Particular Purpose that would not otherwise apply to the Product.

NOTE: Some States and Provinces do not allow limitations on how long an implied warranty lasts, so the above limitation may not apply to you.

To be covered you must still be the owner of the Product at the time of the failure that results in the claim made under this Limited Warranty.

Exclusive Remedies Under Limited Warranty.

Your exclusive remedy and CyberPower's' sole obligations are as follows for the Product: If (a) the CyberPower Product you purchased and still own is defective in material or workmanship under this Limited Warranty or any applicable warranty imposed by law, and

(b) all Limited Warranty requirements have been met, CyberPower will repair or replace the Product if it proves to be defective in material or workmanship during the Warranty Period.

Making a Limited Warranty Claim.

To make a Limited Warranty claim on a Product, you must do the following:

1 Complete and return the CyberPower Warranty Registration Card, or provide reasonable proof of purchase (for example, a sales receipt) that establishes you as the Initial Customer (the original end-user consumer purchaser) of the Product and prove that the Product was purchased within three (3) years of the event for which you want to make a claim for warranty service.

2 Call CyberPower at (952) 403-9500 or (877) 297-6937 (toll free), write to CyberPower at 5555 12th Ave. East, Suite 110, Shakopee, MN 55379, or e-mail CyberPower at claims@cyberpowersystems.com, within ten (10) days of the event for which you want to make a claim.

3 When you contact CyberPower, identify the Product, the Purchase Date, and request Return Materials Authorization (RMA) information from CyberPower.

4 Pack and ship the Product to CyberPower as instructed in your RMA. Show the RMA code on the shipping label or include it with the Product. **You MUST prepay all shipping costs and you are responsible for packaging and shipment.**

CyberPower will inspect and examine the Product within ten (10) days of receipt. If the Product is not as warranted, CyberPower will repair or replace the Product and return it to you at CyberPower's expense, or, if CyberPower is unable to or decides not to repair or replace the Product (if defective) within a reasonable time, CyberPower will refund to you

the full purchase price you paid for the Product (purchase receipt showing price paid is required).

CONNECTED EQUIPMENT GUARANTEE

If you are the Initial Purchaser and the Product is still covered by the Limited Warranty, the Connected Equipment Guarantee provides protection for damage to equipment connected to the Product ("Connected Equipment"), subject to certain terms and limitations.

The Connected Equipment Guarantee is not "first dollar" coverage. It is secondary. If you have any other source of payment for your loss, such as insurance, another warranty, or an extended warranty or purchase protection plan (“Primary Coverage”), CyberPower’ will pay only to the extent that the Primary Coverage does not cover the loss. CyberPower's obligation is reduced by any amounts that you are entitled to recover from the Primary Coverage, whether or not you make a claim for recovery under any applicable Primary Coverage.

The Limited Warranty does not cover Connected Equipment, but as is explained below, to be covered under the Connected Equipment Guarantee, the Connected Equipment must have been damaged due to a failure of the Product. The Connected Equipment must have been damaged due to a defect in materials or workmanship of the Product.

In the event of damage to the Connected Equipment, your exclusive remedies, and CyberPower’s sole obligations, are as follows for Connected Equipment. If (a) the Product purchased and owned by you is defective in material or workmanship; (b) the Limited Warranty requirements have been met (except that the three year limitation of the Limited Warranty does not limit the Connected Equipment Guarantee, which is for the lifetime of the Product), and; (c) none of the limitations or exclusions on warranty coverage apply (or than the three year limit), CyberPower will (as CyberPower elects, as permitted by law), repair, replace, or pay the Agreed Damage Amount (defined below) for, the item(s) of your electronic equipment directly and properly connected to the product (the "Connected Equipment") if that Connected Equipment is (x) damaged by AC power line transients, spikes, or surges on properly installed, grounded, and code-compliant 120 volt power lines in the United States and Canada, or by transients, surges or spikes on standard telephone equipment lines, or Base 10/100T Ethernet lines that are properly installed and connected (a "Power Disturbance") and (y) is directly plugged into and properly connected to a CyberPower Product in its original condition which is properly operated when a Power Disturbance passes through the CyberPower Product and (y.1) exhausts the protection capacity of the CyberPower Product or (y.2) damages the CyberPower Product. This provision sets out the only liability of any character of CyberPower for direct, indirect, special, consequential, and/or incidental damages under our Limited Warranty, applies only to Connected Equipment, and all such Liability is limited to the Agreed Damage Amount.

Making a Connected Equipment Guarantee Claim.

To make a Warranty claim for damage to Connected Equipment under the Connected Equipment Guarantee, you must do the following:

1 Complete and return the CyberPower Warranty card or provide reasonable proof of purchase, for example, a sales receipt that establishes you as the original end-user consumer purchaser of the Product.

2 Call CyberPower at (952) 403-9500 or (877) 297-6937 (toll free), write to CyberPower at 5555 12th Ave East, Suite 110, Shakopee, MN 55379, or e-mail CyberPower at claims@cyberpowersystems.com within ten (10) days of the date of the event for which you wish to make a claim for warranty service.

3 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 the name of the power utility supplier for the location of the Connected Equipment and Request a Claim Number.

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. **Initial Customer shall prepay all shipping costs, must pay the cost of the repair estimate, and is responsible for packaging and shipment.**

CyberPower's Duties.

CyberPower will inspect and examine the Product and the item(s) of Connected Equipment (or at CyberPower's election, your written statement and repair cost estimate for those item(s)). You must return the product for inspection.

If the damage to Connected Equipment is covered by the Connected Equipment Guarantee, CyberPower will (in addition to Limited Warranty remedies for the CyberPower Product itself) repair (or pay the costs of repair) or replace the Connected Equipment or, at the option of CyberPower, as permitted by law, pay to the Initial Customer the "Agreed Damage Amount" (up to the aggregate limits stated below) for all item(s) of Initial Customer's Connected Equipment. The "Agreed Damage Amount" for all items of Initial Customer's Connected Equipment shall be the lesser of the amount determined under Clause (1) or (2) below, reduced by any amounts described in Clause (3) below:

1 The fair market value of the Connected Equipment as established by the lower of (a) the price list of Orion Blue Book on the date of occurrence (or if such price list is no longer published, a published or announced price list reasonably selected by CyberPower), or (b) the average price the same or similar items are being sold for on E-bay, or (c) the lowest price the same or similar items can be purchased for in the United States; or

2 The aggregate ceiling amount for all Connected Equipment: $400,000.00.

3 The amount(s) of all payment you have or are entitled to receive from insurance, other warranties, extended warranties, or from other sources or persons for the Connected Equipment or damage to such equipment so that CyberPower's maximum liability shall be reduced to reflect all such other payments or sources of recovery.

If CyberPower replaces the connected equipment or pays to the Initial Customer the Agreed Damage Amount, the Initial Customer shall transfer ownership of all item(s) to CyberPower without warranty by the Initial Customer, but free of lien or other interest.

CONDITIONS COMMON TO THE LIMITED WARRANTY AND THE CONNECTED EQUIPMENT GUARANTEE

The Limited Warranty and the Connected Equipment Guarantee are the only and the exclusive express warranty of CyberPower with respect to the Product. This exclusion of other express warranties applies to written and oral express warranties.

LIMITATION: THE LIMITED WARRANTY AND THE CONNECTED EQUIPMENT GUARANTEE DOES NOT COVER

The Limited Warranty and the Connected Equipment Guarantee are intended to exclusive rights and remedies and replace any other rights, to the extent allowed by law.

1 As to the CyberPower Product, the limited warranty **does not** cover or apply to: misuse, modification, operation or storage outside environmental limits for the Products, in transit, in shipment, or in storage, damage or deterioration, improper operation or maintenance, or use with items or equipment not designed or intended for use with the product.

2 As to Connected Equipment, the Connected Equipment Guarantee covers only damage within the specific terms of the Connected Equipment Guarantee to Connected Equipment (and only up to the applicable aggregate ceiling amount).

3 The Connected Equipment Guarantee does not cover damage to Connected Equipment or apply if the Product has been operated in a failure mode or not in compliance with CyberPower operating instructions and manuals, or if the Connected Equipment has been operated in a failure mode or not in compliance with the instructions and manuals of its manufacturer/vendor.

The Limited Warranty and the Connected Equipment Guarantee Do Not Apply Unless The Initial Customer:

1 Has properly connected the Product and the Connected Equipment to properly wired and grounded outlets (including compliance with electrical and safety codes of the most current electrical code (ANS/NFPA 70), without the use of any adapters, extension cords or other connectors.

2 Has provided a suitable and proper environment for use and installation of the Product and Connected Equipment.

3 Has properly installed and operated the CyberPower Product and Connected equipment.

4 Has operated the Product at all times within the limitations on the Product's VA capacity as stated in this User Manual.

CyberPower Does Not Cover or Undertake Any Liability in Any Event for Any of the Following:

1 Loss of or damage to data, records, or software or the restoration of data or records, or the reinstallation of software.

2 Damage from causes other than AC Power Line Transients, spikes, or surges on properly installed, grounded and code-compliant 120 volt power lines in the United States and Canada; transients, surges or spikes on standard telephone land lines, PBX telephone equipment lines or Base 10T 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 Damages from fire, flood, wind, rain, rising water, leakage or breakage of plumbing, abuse, misuse or alteration of either the product or the Connected Equipment.

Exclusion of Consequential and Other Damages.

The sole and exclusive remedies of the Initial Customer are those provided by the Limited Warranty and Connected Equipment Guarantee. 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 "CYBERPOWER Connected Equipment Guarantee"], 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.

DO NOT USE FOR MEDICAL OR LIFE SUPPORT EQUIPMENT OR OTHER HIGH RISK ACTIVITIES.

CyberPower does not sell the Products for use in high-risk activities. The Product is not designed or intended for use in hazardous environments requiring fail-safe performance, including the operation of nuclear facilities, aircraft navigation or communication systems, air traffic control, weapons systems, life support or medical applications or for use in any circumstance in which the failure of the Product could lead directly to death, personal injury, or severe physical or property damage, or that would 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. CyberPower does not authorize use of any of its products use in any High Risk Activities.

ANY SUCH USE IS IMPROPER AND IS A MISUSE OF A CYBERPOWER PRODUCTS.

The Limited Warranty and the Connected Equipment Guarantee are governed by the laws of the United States and the State of Minnesota, without reference to conflict of law principles. The application of the United Nations Convention of Contracts for the International Sale of Goods is expressly excluded.

Contact Information: CyberPower's address is 5555 12th Ave East, Suite 110, Shakopee, MN 55379 and its phone number is (952) 403-9500 or Toll-free: (877) 297-6937. CyberPower is the warrantor under this Limited Warranty. You may also contact CyberPower on the Internet at www.cyberpowersystems.com.