EXTENDED BATTERY MODULE

BP48VP2U01 / BP48VP2U02

USER MANUAL

FEATURES

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INTRODUCTION

Thank you for purchasing the CyberPower Extended Battery Module BP48VP2U01/ BP48VP2U02 for your Uninterruptible Power Supply! The Extended Battery Module is designed for various CyberPower UPS systems and can be used in either rack or tower installations. The heavy gauge power cord has a plug-n-play DC connector for easy installation. When combining with UPS, the Extended Battery Module provides extended runtime with a 48VDC external connection. Further, additional parallel-connected Extended Battery Modules will provide a longer extended runtime for the UPS.

IMPORTANT SAFETY WARNINGS (SAVE THESE INSTRUCTIONS)

This manual contains important instructions that should be followed during installation and maintenance of the Extended Battery Module and batteries. Please read and follow all instructions thoroughly before and during the installation and operation of the product.

CAUTION! The Extended Battery Module must be connected to a grounded AC power outlet with fuse or circuit breaker protection. DO NOT plug the Extended Battery Module into an outlet that is not grounded.

CAUTION! The battery can energize hazardous live parts inside even when the AC input power is disconnected.

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

CAUTION! To reduce the risk of electric shock, do not remove the cover, except to service the battery. There are no serviceable parts inside, except for the battery.

CAUTION! DO NOT USE THE UPS ON ANY TRANSPORTATION! To reduce the risk of fire or electric shock, do not use the unit on any transportation such as airplanes or ships. The effect of shock or vibration caused during transit and the damp environment can cause the unit to short out.

CAUTION! Dispose of or recycle the unit after the end of its life, it should be in accordance with local regulations.

CAUTION! Please use only VDE-tested, CE-marked or UL/ CSA certified mains cable, (e.g. the mains cable of your equipment), to connect the Extended Battery Module to the AC outlet.

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

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 INSTALL THE UNIT WHERE IT WOULD BE EXPOSED TO DIRECT SUNLIGHT OR NEAR A STRONG HEAT SOURCE!

CAUTION! DO NOT BLOCK OFF VENTILATION OPENINGS AROUND THE HOUSING!

CAUTION! A single AC inlet can only support 10 Extended Battery Modules at most. If connecting more than 10 modules, split them up onto multiple circuits to avoid an overload.

CAUTION! Do not connect the Extended Battery Module to itself.

CAUTION! For ground protection, plug AC power connectivity to wall receptacle with ground line before using the Extended Battery Module.
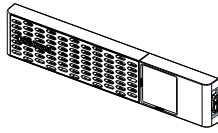
UNPACKING

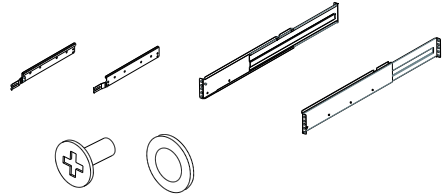When you receive the unit, the package should contain the following items:

1 Extended Battery Module

2 Faceplate

3 Rail Kit CP2RAIL02

4 Management Cable

5 Power Cords

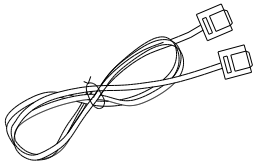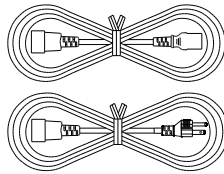**6** Mechanical Accessories
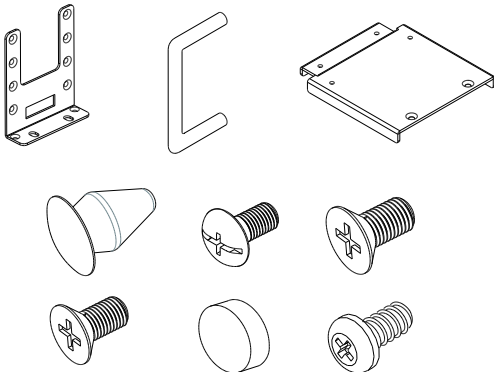
7 User's Manual
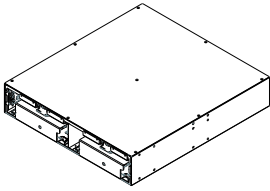
1

2

3 (14) M5 Pan Head Screws
(8) Plastic Washers
Note: It is available for BP48VP2U02

4 (1) BM Cable

5 (1) IEC C13-C14, 1 ft (auxiliary)
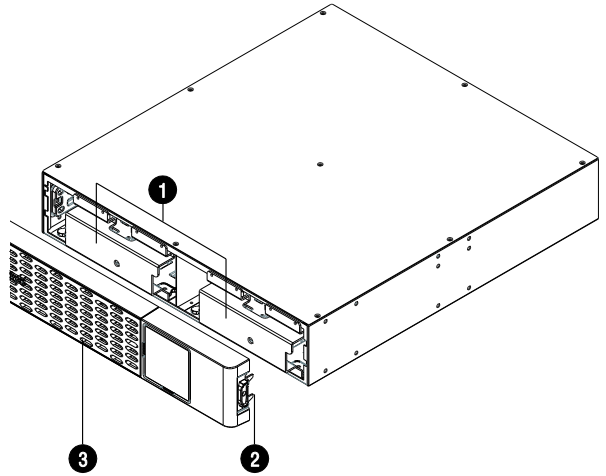(1) IEC C13-NEMA 5-15P, 10 ft
(1) IEC C13-C14, 6 ft

6 (2) Rack-Mount Bracket CPEAR04
(2) Rack-Mount Handle
(1) Extended Baseplate
(12) Dust Cover
(4) M5 Truss Head Screw
(8) M5 Flat Head Screw
(4) M4 Flat Head Screw
(4) Rubber Foot
(4) M4 Round Head Screw
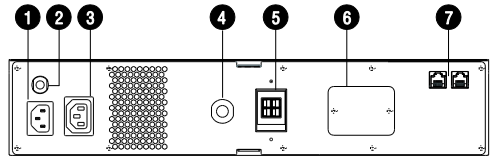
PRODUCT OVERVIEW - BASIC CONFIGURATION

Front Panel

1 Battery Cover

2 Front Panel Access Tabs

3 Faceplate

Rear Panel

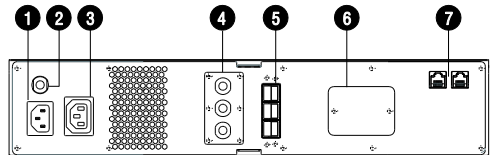**1** AC Inlet

2 Input Circuit Breaker

3 AC Outlet

4 Extended Battery Module Connector Plug

5 Extended Battery Module Connector Socket

6 Fuse Cover

7 BM Port

BP48VP2U01

BP48VP2U02

BM Port

Connection port for built-in battery management module on UPS and Extended Battery Module. Refer to Basic Operation section in Product Overview.

INSTALLATION

The product is designed for tower installation and rack installation for 2-post rack and 4-post rack. Read and follow the procedures thoroughly before and during your installation of the product. The installation videos are available on our website, visit www.cyberpower.com or scan the QR code below for detailed information.

Preparation

CAUTION! It is strongly recommended to have an additional person assist this installation process if the product is heavy.

CAUTION! It is strongly recommended that the 2 post rack be bolted to the floor prior to the installation of the product.

1. Remove all equipment connected to the product.
2. Make sure the product is disconnected from AC power source.
3. Remove internal batteries to reduce weight of the unit before the installation. Refer to BATTERY REPLACEMENT section for instructions.

Reminder: If you would like to have the UPS installed at the same time, turn off the UPS first and repeat above steps to your UPS.

Rack Installation for 2-post Rack
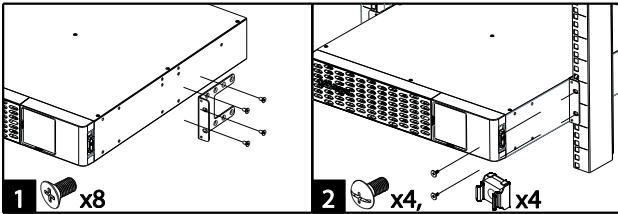
1. Attach the brackets with provided M5 flat head screws.
2. Affix the product to the rack with suitable M5/M6 screws and cage nuts. (M5 pan head screws are provided with the product in the mechanical accessory box.)

Rack Installation for 4-post Rack
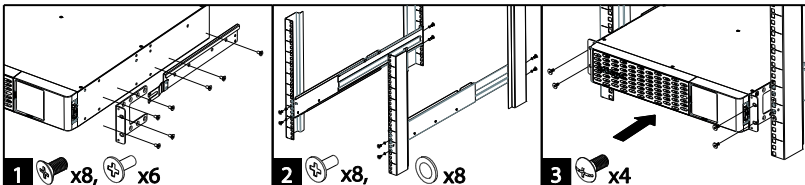
1. Use the provided M5 flat head screws to attach the brackets and provided M5 pan head screws for hanging brackets.
2. Screw the hanging rails to the rack with provided M5 pan head screws and plastic washers.
3. Lift the product upon the hanging rails and slide the unit into the rack. Affix the product to the rack with provided M5 pan head screws. If handles are needed, affix them to the brackets with M4 flat head screws.

INSTALLATION - CONTINUED

Tower Installation
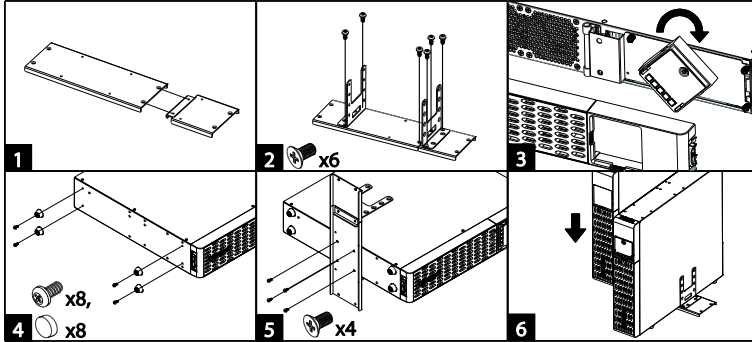
1. Combine the extended baseplate to the tower baseplate that comes with the UPS accessories.
2. Screw in the baseplates and attach the brackets to the combined baseplate with the provided M4 flat head screws that come with both the UPS and Extended Battery Module.
3. Remove the faceplate and rotate the LCD module of the UPS, then re-install the faceplate.
4. Screw the rubber feet with provided M4 round head screws that come with both the UPS and Extended Battery Module.
5. To ensure stability, screw the UPS to the baseplate using provided M5 flat head screws.
6. Put the Extended Battery Module onto the assembled tower stand. You can also put the dust covers in the screw holes on the top side of the units to prevent dust from falling into the units.

BASIC OPERATION

Normal Use

1. Plug the Extended Battery Module into a grounded receptacle/ wall outlet.
2. Connect the Extended Battery Module to your UPS by plugging the extended battery module connector plug into the connector socket on the rear panel of the UPS. Ensure the color coded connector plug lines up correctly with the colors in the UPS socket, such as red to red, black to black and green to green.
3. Connect the BM/ENV port from UPS rear panel to BM port marked "IN" on the rear panel of the Extended Battery Module using the provided BM cable.
4. Check and modify the Extended Battery Module Quantity setting on your UPS through the LCD module, PowerPanel® Business software or RMCARD interface (if installed) to ensure the UPS reports an accurate runtime.

Connecting Multiple Extended Battery Modules

Additional Extended Battery Modules are connected in parallel, the voltage maintains the same, yet the battery amp-hour capacity depends on the numbers of Extended Battery Modules in the set-up. Follow the steps described below to add multiple Extended Battery Modules to your UPS.

1. Use the auxiliary power cord to connect the AC inlet from one Extended Battery Module to the AC outlet of another Extended Battery Module.
2. Plug the Extended Battery Module into a grounded receptacle/ wall outlet.
3. Connect the Extended Battery Module to your UPS by plugging the extended battery module connector plug into the connector socket on the rear panel of the UPS. Ensure the color coded connector plug lines up correctly with the colors in the UPS socket, such as red to red, black to black and green to green.
4. Connect the BM/ENV port from UPS rear panel to BM port marked "IN" on the rear panel of the Extended Battery Module using the provided BM cable, and then connect another BM cable between BM port marked "OUT" and BM port marked "IN" of another Extended Battery Module. Refer to illustration below.
5. Check and modify the Extended Battery Module Quantity setting on your UPS through the LCD module, PowerPanel® Business software or RMCARD interface (if installed) to ensure the UPS reports an accurate runtime.
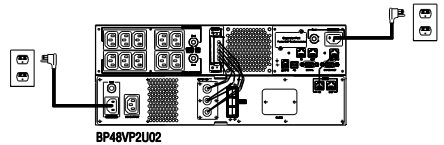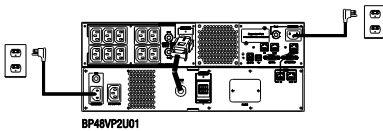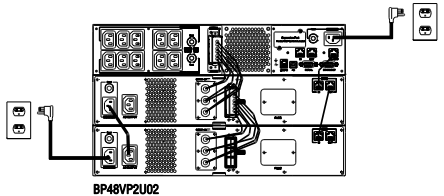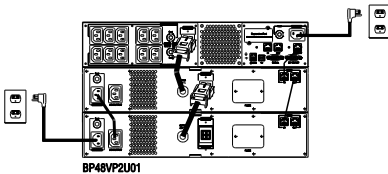
Normal Use

BP48VP2U01   BP48VP2U02

Multiple Use

BP48VP2U01   BP48VP2U02

Be aware of the following statements:

1. Your Extended Battery Module may be used immediately upon receipt. However, charging the battery for at least 12 hours before connecting to UPS is recommended to ensure the battery reaches its maximum charge. Charge loss may occur during shipping and storage. To recharge the battery, simply leave the unit plugged into an AC outlet.
2. To maintain optimal battery charge, leave the Extended Battery Module plugged into an AC outlet at all times.
3. Always plug the Extended Battery Module into a grounded receptacle/ wall outlet. Make sure the wall branch outlet is protected by a fuse or circuit breaker and does not service equipment with large electrical demands, e.g. air conditioner, refrigerator, copier, etc. Avoid using extension cords.
4. DO NOT plug the AC power cord from the Extended Battery Module into a UPS.
5. To prevent risk of electric shock, it is necessary to plug the Extended Battery Module into a grounded receptacle before connecting to the UPS, or turn the UPS off first, connect the Extended Battery Module as above steps and then turn the UPS on.

CLEANING AND MAINTENANCE

CAUTION! To reduce the risk of electric shock, do not remove the cover except to service the battery. There are no user serviceable parts inside except for the battery. For battery replacement, please refer to BATTERY REPLACEMENT section.

CAUTION! Turn off the unit and unplug it from the AC power source before cleaning.

CAUTION! Never immerse the unit in water or other liquids. Only use a soft, slightly damp cloth to wipe the surface of the unit. Do not use a spray directly to clean or disinfect the unit.

To store the product for an extended period, cover it and store with the battery fully charged. While in storage, recharge the battery every three months to ensure battery life.

OPERATION AND STORAGE ENVIRONMENT

To prevent risk of fire or electric shock, install or place the unit in a temperature and humidity controlled indoor area, free of conductive contaminants.

Operation	Temperature	+ 32°F to 104° F / 0° C to 40° C
	Relative Humidity	0 to 95% non-condensing
	Elevation	0 – 9,843 feet / 0 – 3,000 meters
Storage	Temperature	+ 5°F to 113° F / - 15 C to 45° C
	Relative Humidity	0 to 95% non-condensing
	Elevation	0 – 49,213 feet / 0 – 15,000 meters

TROUBLESHOOTING

Problem	Possible Cause	Solution
UPS does not perform expected runtime.	UPS does not recognize the correct quantity of Extended Battery Modules.	Adjust the setting of Extended Battery Module Quantity on your UPS to correct numbers via UPS LCD module, PowerPanel® Business software or RMCARD interface (if installed).
	Batteries are degraded.	Contact CyberPower about replacement batteries.
The Extended Battery Module does not work.	Batteries are not fully charged.	Allow the Extended Battery Module to charge for at least 12 hours.
	Batteries are degraded.	Contact CyberPower about replacement batteries.
	The fuse blew.	Contact CyberPower for repair.

BATTERY REPLACEMENT

Read and follow the important safety instructions before servicing the batteries. Visit CyberPower official website www.cyberpower.com or contact your dealer for more information on replacement batteries.

The battery replacement video is available on our website, visit www.cyberpower.com or scan the QR code below for detailed information.

CAUTION! RISK OF EXPLOSION IF BATTERY IS REPLACED BY AN INCORRECT TYPE. When replacing batteries, replace with the same number of the following battery: CyberPower RB1270X4H for BP48VP2U01, CyberPower RB1290X4J for BP48VP2U02.

**CAUTION!** Risk of Energy Hazard, 12V, maximum 9 Ampere-hour battery.

CAUTION! The used batteries are considered hazardous waste and must be disposed through recycling. Most retailers that sell lead-acid batteries collect used batteries for recycling, as required by local regulations. Do not dispose of batteries in a fire. The batteries may explode.

CAUTION! Do not open or mutilate batteries. Released material is harmful to the skin and eyes. It may be toxic.

Take the following precautions before replacing the battery:

1. Remove watches, rings, or other metal objects.
2. Use tools with insulated handles.
3. Wear rubber gloves and boots.
4. Do not lay tools or metal parts on top of batteries.
5. Determine if battery is inadvertently grounded. If inadvertently grounded, remove source from ground. CONTACT WITH ANY PART OF A GROUNDED BATTERY CAN RESULT IN ELECTRICAL SHOCK. The likelihood of such shock can be reduced if such grounds are removed during installation and maintenance (applicable to equipment and remote battery supplies not having a grounded supply circuit).

Battery Replacement Procedure
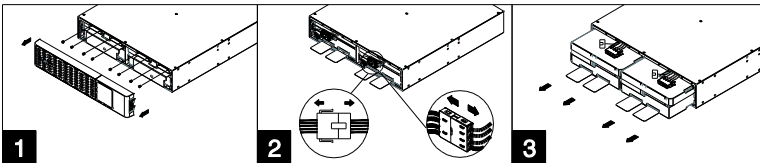
1. Disconnect the Extended Battery Module from your UPS, remove faceplate and unscrew the screws on battery cover and then remove the battery cover.
2. Disconnect the battery and battery management module connector.
3. Insert the new battery pack. Assemble the connectors, screws, battery cover and faceplate. Recharge the unit for at least 12 hours to ensure the Extended Battery Module performs expected runtime and then connect the Extended Battery Module to your UPS.
4. Reminder: Check and modify the Extended Battery Module Quantity setting on your UPS through the LCD module, PowerPanel® Business software or RMCARD interface (if installed) to ensure the UPS reports an accurate runtime.

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TECHNICAL SPECIFICATIONS

Model	BP48VP2U01	BP48VP2U02
Input		
Input Voltage Range	100V - 240V	
Input Frequency	50 / 60 Hz	
Plug Type	IEC 320 C14	
Output		
Output Voltage	48 Vdc	
Rated Output Current	60 A	70 A
Overload Protection	Fuse	
Battery		
Battery Type	Sealed Maintenance Free Lead Acid Battery	
Replacement Battery Pack	RB1270X4H	RB1290X4J
RBP Quantity	2	
Typical Recharge Time	6 hours	
Built-in Charger	Yes	
User Replaceable	Yes	
Compatible UPS Model	PR750RTXL2U PR1000RTXL2U	PR1500RTXL2U PR2000RTXL2U PR2200RTXL2U PR3000RTXL2U
Physical		
Dimensions	2U Rack, 17.1" x 3.4" x 16.2" 433 x 86.5 x 412 mm	2U Rack, 17.1" x 3.4" x 16.7" 433 x 86.5 x 500 mm
Weight	50.2 lbs / 22.8 kg	61.2 lbs / 27.8 kg
Conformance		
Approvals	UL1778 / CSA C22.2 No 107.3 / FCC Part 15 Class B VCCI Class B / CE / RCM	
Environmental	RoHS Compliant	

Additional troubleshooting information can be found at www.cyberpower.com.

DISPOSAL

The Waste Electrical and Electronic Equipment (WEEE) Directive aims to contribute to sustainable production and consumption by contributing to the efficient use of resources and the retrieval of secondary raw materials through re-use, recycling and other forms of recovery. The symbol on this product and/or its packaging indicates that the product must be disposed of separately from ordinary household wastes at its end of life. Contact your related WEEE management authority, local office, or your household waste disposal service about information on the recycling drop off site.
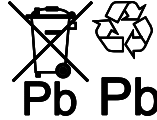
This product contains non-spillable lead acid batteries. The used batteries are considered hazardous waste and must be disposed through recycling. Do not dispose of used batteries with your ordinary household wastes. Dispose of the batteries according to the local regulations.

Note: Most retailers that sell lead-acid batteries collect used batteries for recycling, as required by the local regulations.

REGULATORY COMPLIANCE

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)

VCCI Compliance Statement

この装置は、クラス B 情報技術装置です。この装置は、家庭環境で使用することを目的としていますが、この装置がラジオやテレビジョン受信機に近接して使用されると、受信障害を引き起こすことがあります。取扱説明書に従って正しい取り扱いをして下さい。ＶＣＣＩ－Ｂ

LIMITED WARRANTY AND CONNECTED EQUIPMENT GUARANTEE

Please visit 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**.

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.