

CyberPower

User's Manual

EXTENDED BATTERY MODULE (EBM)

BPE36V60ART2US

BPE72V60ART2US

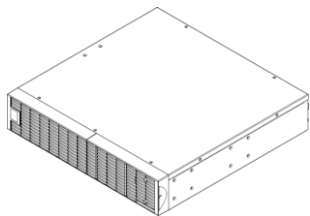
Cyber Power Systems, Inc.
www.cyberpower.com

K01-0000517-03

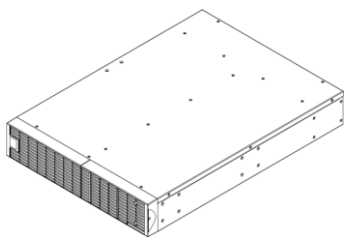
OVERVIEW

The CyberPower extended battery modules (BPE36V60ART2US / BPE72V60ART2US) support 50A polarized plugs, and are designed for variety of CyberPower UPS systems. When combining with the UPS, the EBM provides extended runtime with a 36VDC/72VDC external connection. Additional parallel-connected EBM provide the UPS for a longer extended runtime operation.

UNPACKING



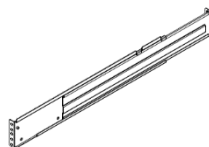
1K/1.5KVA or 2K/3KVA extended battery module



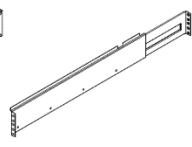
User's manual



Register card



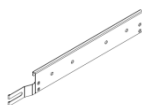
Rackmount left rail



Rackmount right rail



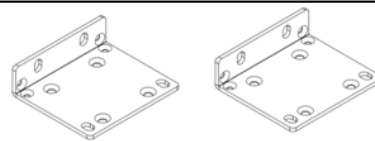
Left hanging bracket



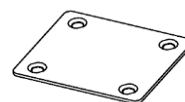
Right hanging bracket



Rubber feet (12)



Rackmount ears (Stands) (2)



Tie plate (1)



Flat head screws: M5X7L (8)



Pan head screws: M5X8L (12)



Pan head screws: M5X6L (6)



Guide screws: M5X10L (2)



Plastic washers (8)



Screw hole dust covers (12)

HARDWARE INSTALLATION

HARDWARE INSTALLATION

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

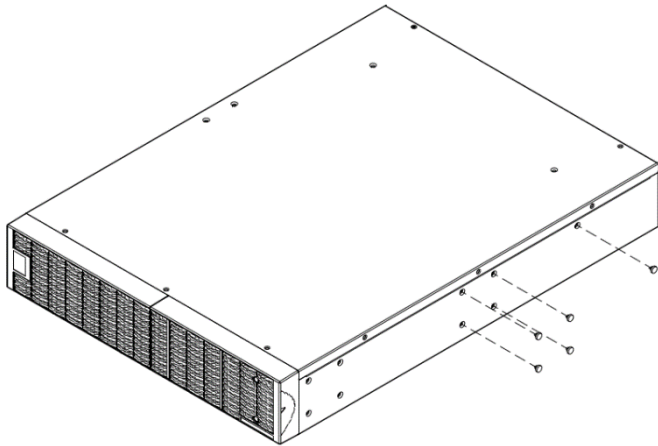
SAFETY PRECAUTIONS

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

RACKMOUNT INSTALLATION

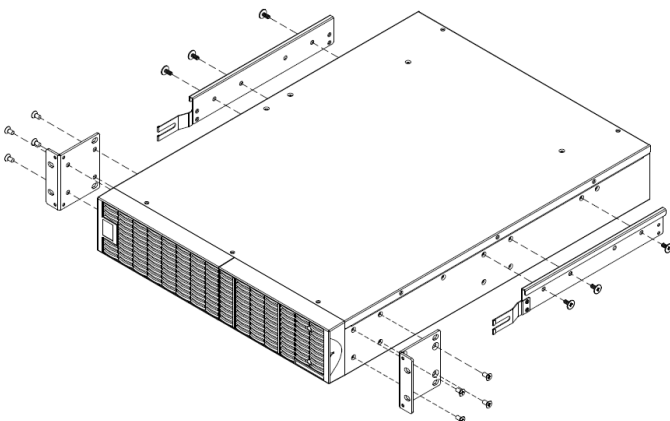
Step 1: Remove the dust covers

Remove the dust covers *5pcs from the screw holes.



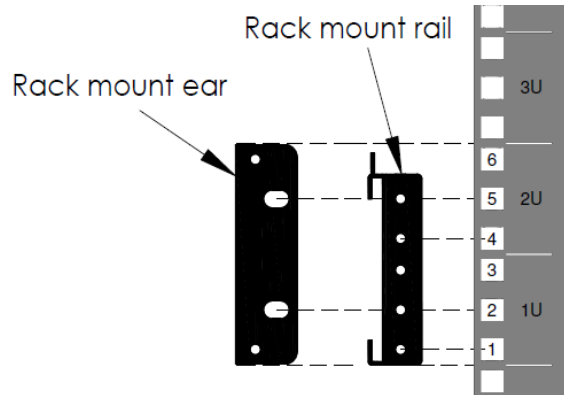
Step 2: Rackmount ears & hanging brackets installation

Attach two rackmount ears to the EBM using the provided M5X7L*8pcs screws and tighten two hanging brackets with the M5X6L*6pcs screws.

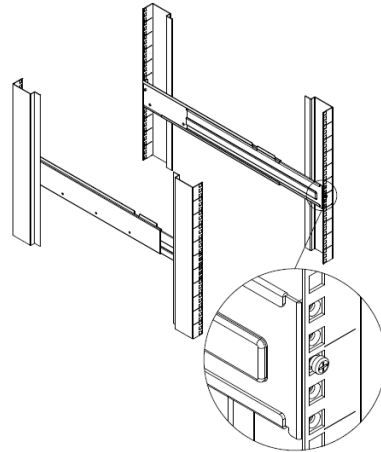


Step 3: Rackmount rail Installation

The rails adjust to mount in 48-cm (19-inch) wide racks from 52 to 91.5cm (20.5 to 36 inches) deep. Select the proper holes in the rack for positioning the EBM in the rack. The EBM takes up 2 rack units.



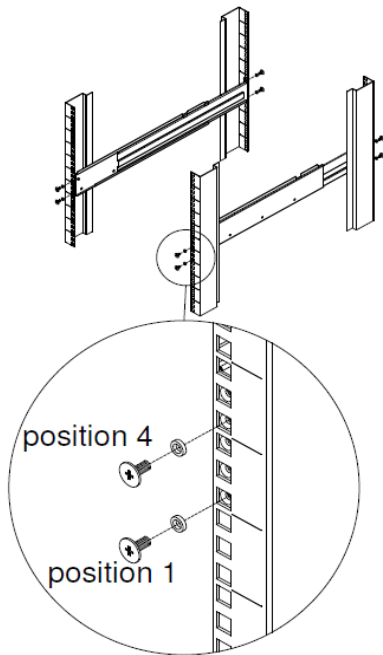
Position the guide screws on the rails into the rear rack square holes to temporarily support the rails in place. Tighten the front rail screws on the rack.



HARDWARE INSTALLATION

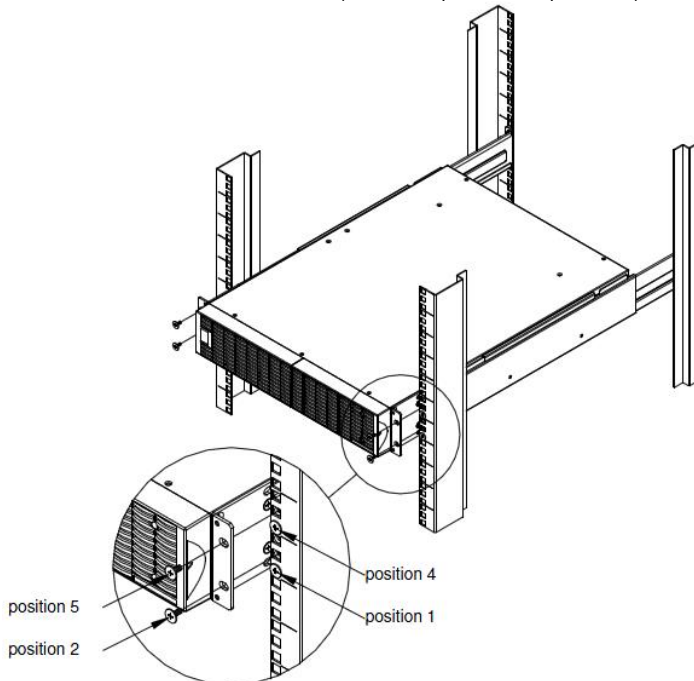
Step 4: Adjust rackmount rails to fit your rack

Adjust the rail depth to match your rack depth. Attach the rackmount rail to your rack with two screws and two plastic washers at the front of the rack. (Located in position 1 & position 4) Tighten the M5X8L screws on the front bracket. Secure the rail to the rear of the rack with two M5X8L screws and two plastic washers.



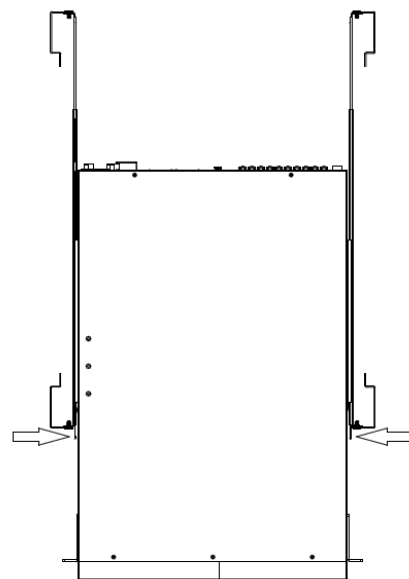
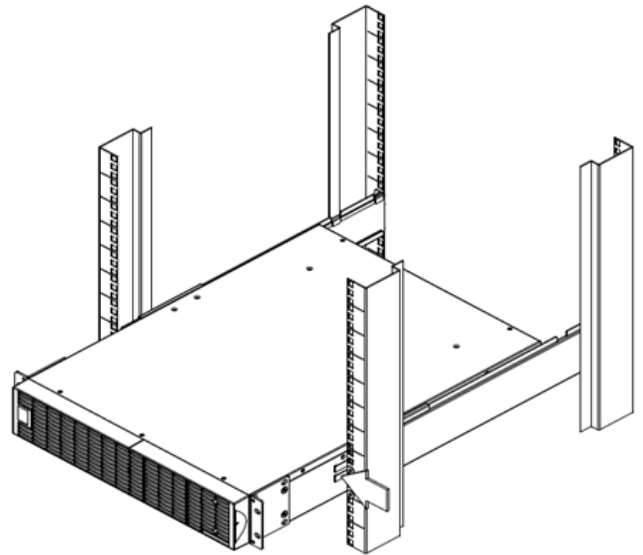
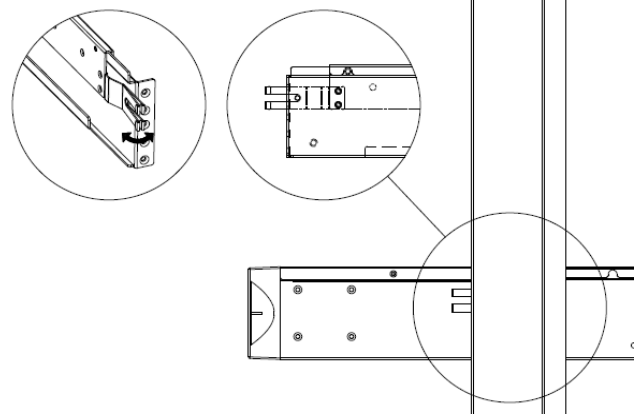
Step 5: Place and secure the EBM on the rails

Slide the hanging brackets on the EBM into the rails mounted in the rack with the front of the unit facing toward you. Secure the EBM to your rack with four M5X8L screws at the front of the rack. (Located in position 2 & position 5)



How to slide the EBM out from the rack

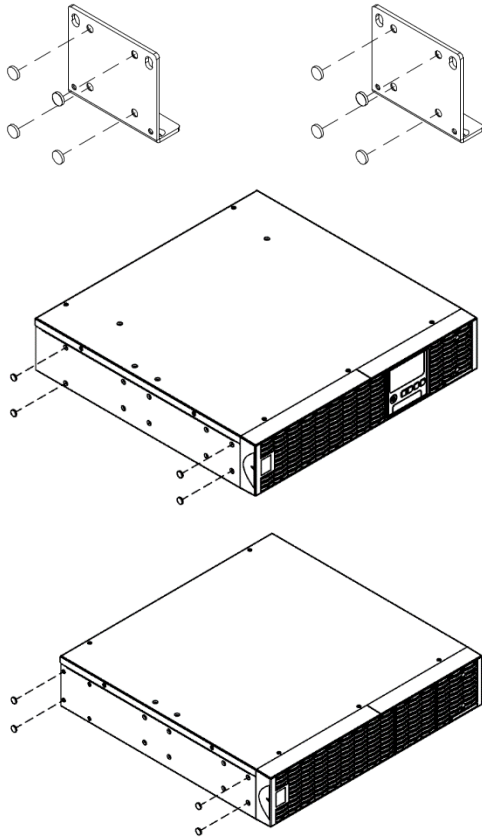
The EBM will be secured by a safety locking mechanism midway of pulling it out of the rack. Use both hands to hold the EBM and press the safety locking tab to pull the EBM out.



HARDWARE INSTALLATION

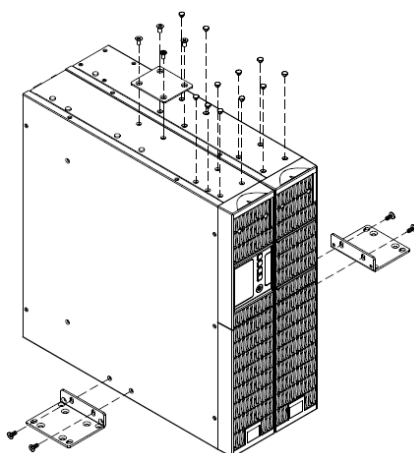
VERTICAL/TOWER INSTALLATION

Adhere the protective rubber feet on the bottom side of base stands (rackmount ears) UPS system and EBM.



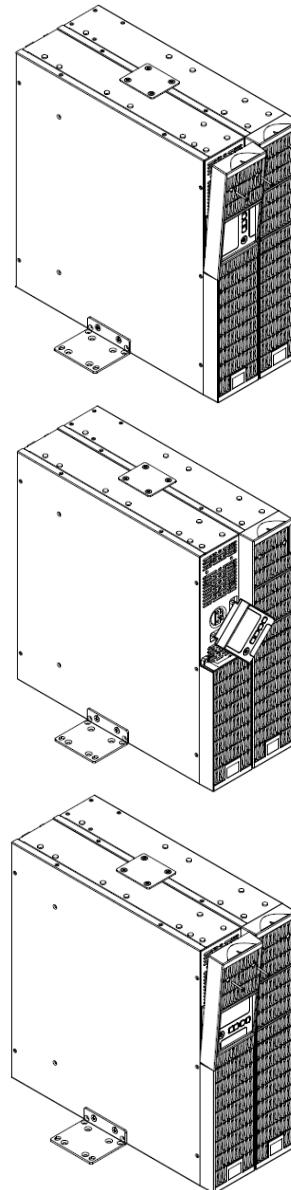
Step 2: Attach the base stands and attach the dust covers

Secure the tie plate with the screws (M5X7*4pcs). Tighten the screws (M5X8*4pcs) of the base stands (rackmount ears) onto the bottom of the UPS system and EBM. Insert dust covers into the screw holes that are not being used.



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. Rotate it to the tower orientation. Reinstall it for a tower configuration.



SAFETY PRECAUTIONS

CAUTION! Installation environment should be in a temperature and humidity controlled indoor area free of conductive contaminants. Do not install this EBM where excessive moisture or heat is present (Please see specifications for acceptable temperature and humidity range).

CAUTION! Never install an EBM, or associated wiring or equipment, during a lightning storm.

CAUTION! Do not work alone under hazardous conditions.

CAUTION! In case of the risk of electric shock, do not remove the top cover.

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

BASIC OPERATION

EXTENDED BATTERY MODULE FRONT/REAR PANEL DESCRIPTION

1. On-board Replaceable Fuse Cover

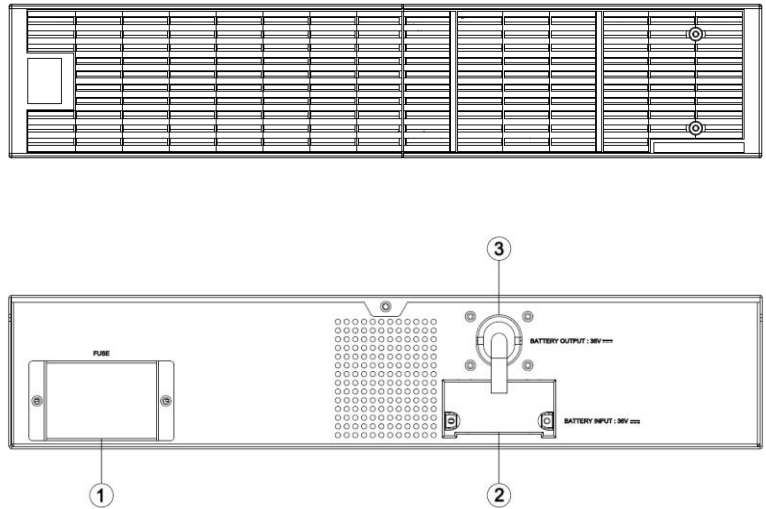
Replaceable fuse is accessible from the rear panel. Service to be performed by qualified personnel only.

2. Input Connector

Use this input connector to daisy chain the next EBM. Remove the connector cover for access.

3. Output Cable

Use this output cable to connect the EBM to the UPS or to the next EBM.



BPE36V60ART2US / BPE72V60ART2US

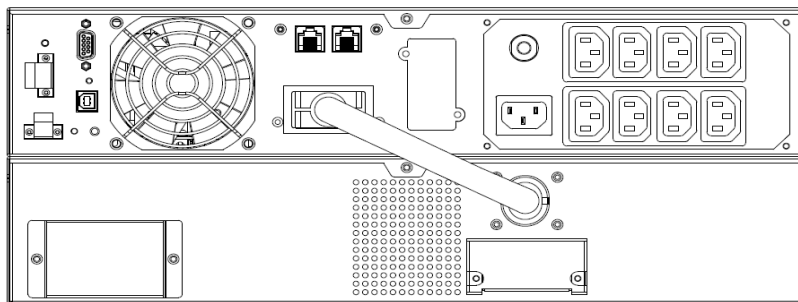
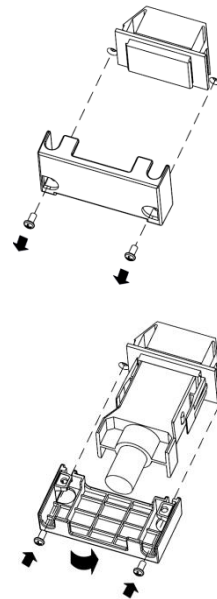
CONNECTION #1 : UPS WITH ONE EXTENDED BATTERY MODULE

Step 1: Loosen the two screws to remove the battery cable retention bracket of the UPS.

Step 2: Use the output cable of the EBM to connect the EBM to the UPS.

Step 3: Rotate the battery cable retention bracket and tighten the two screws to fix battery cable.

Step 4: Use a power cord to plug AC input inlet of the battery.



BASIC OPERATION

CONNECTION #2 : UPS WITH MULTIPLE EXTENDED BATTERY MODULES

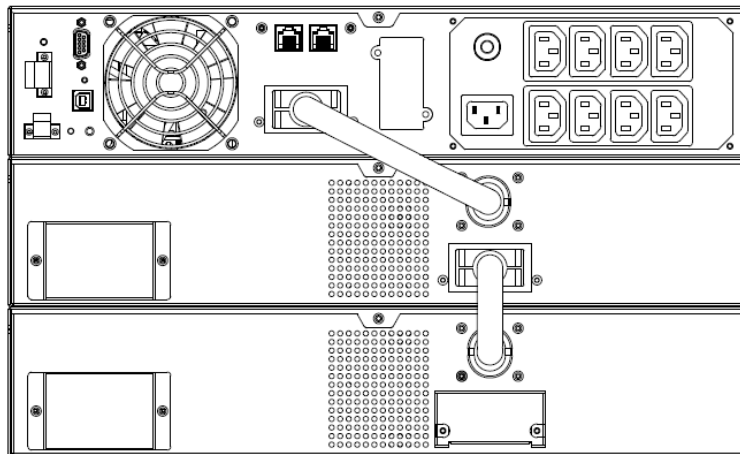
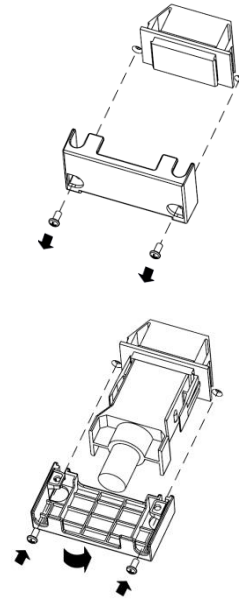
Step 1: Loosen the two screws to remove the battery cable retention bracket of the 1st EBM.

Step 2: Use the output cable of the 2nd EBM to connect the 2nd EBM to the 1st EBM.

Step 3: Rotate the battery cable retention bracket and tighten the two screws to fix battery cable.

Step 4: Use a power cord to plug AC input inlet of the battery.

Step 5: Set the EBM number to the respective setting to match the number of installed units. To do this via the LCD control panel, go to the Configuration Menu, then scroll to EBM Number setting, select the appropriate number and Save. This operation can also be done if there is an RMCARD installed in the UPS, or via PowerPanel® Business Edition Agent. Please see their respective User



EXTENDED BATTERY MODULES CONFIGURATION

The UPS can be configured to reflect the correct estimated run-times for the number of EBM installed by using the LCD Control Panel to select the number of EBM installed.

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 **"EBM Number"** option.
5. Press the **"ENTER"** button to select the **"EBM Number"** submenu.

The first configuration number will be displayed on the second column of LCD display.

6. Press the **"▲"** and **"▼"** buttons to scroll through the number of attached EBM.
7. Press the **"ENTER"** button to select the number of EBM installed.

You may be prompted to save the selection, if so press the **"ENTER"** button to save the setting.

8. Press the **"ESC"** button to cancel or return to the previous LCD menu.

Configure Submenu	Available Settings	Default Settings
EBM Number	= [0] [1] [2] [3] [4] [5] [6] [7] [8] [9] [10]	0

MAINTENANCE

Storage

To store your extended battery modules for a long period of time, turning DC breaker off, cover it and store with the batteries 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 EBM number.

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 EBM 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.

Replacement Batteries

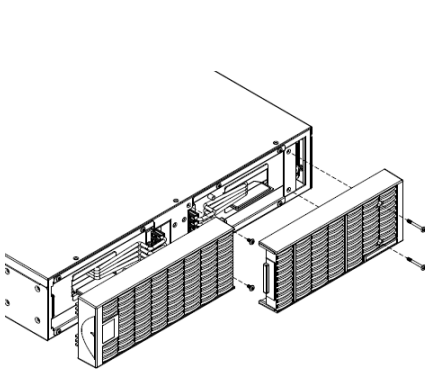
Please refer to the front side of the EBM for the model number of the correct replacement batteries. For battery procurement, log onto www.cyberpower.com, or contact your local dealer.

Battery Disposal

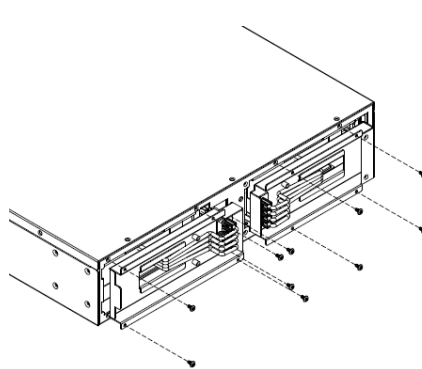
Batteries are considered hazardous waste and must be disposed of properly. Contact your local government for more information about proper disposal and recycling of batteries. Do not dispose of batteries in fire.

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.

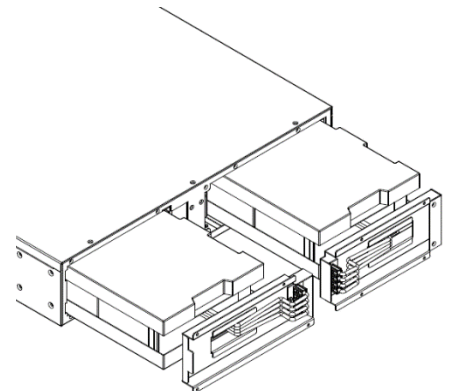
Battery Replacement



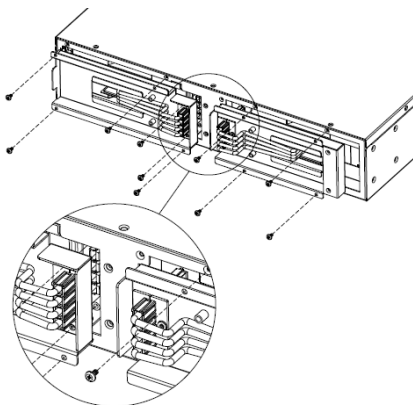
Step 1: Remove the front panels



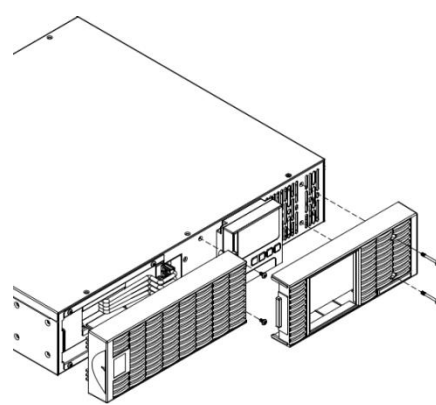
Step 2: Remove the retaining screws from the cable protection cover and then remove the cover itself



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



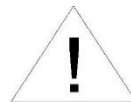
Step 5: Install the front panels, then to execute battery test via the LCD control panel, go to the Configuration Menu, then scroll to the UPS Diagnostic then select battery test and Activate, then scroll to Reset ReplaceBAT to reset the battery replacement date. This operation can also be done via PowerPanel® Business or RMCARD web interface if it is installed. Please see their respective User Manuals for detailed instructions.

TECHNICAL SPECIFICATIONS

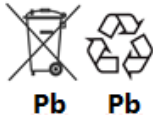
Model	BPE36V60ART2US		BPE72V60ART2US	
Configuration				
	AC Input Voltage	200~240Vac		
	DC Output Voltage	36Vdc	72Vdc	
	Amperage	60A		
Physical				
	Dimensions (L x W x H =)	16.9 x 17 x 3.5in. (430 x 433 x 88mm)	23.6 x 17 x 3.5in. (600 x 433 x 88mm)	
	Net Weight	50.6lbs(23.0Kg)	96.8lbs(44.0Kg)	
Battery				
	Specifications	(3) 12V/9AH x2	(6) 12V/9AH x2	
	Recharge Time (Typically)	4 hours		
	Interface	PP45		
	Sealed, Maintenance Free	Yes		
	Hot-Swappable	Yes		
	Built-in Charger	Yes		
Environment				
	Operating Temperature	32°F to 104°F (0°C to 40°C)		
	Operating Relative Humidity	0 to 90% Non-Condensing		
Safety				
	Conformance Approvals	EAC, CE, RCM		
	RoHS	RoHS Compliant		
Warranty				
	Product Warranty	2-year limited warranty, Free Tech Support		

TROUBLE SHOOTING

Problem	Possible Cause	Solution
Warning		
BAT Disconnected	Missing battery power.	Check battery connector and battery breaker.
Battery Failure	UPS has failed a Battery Test.	1. Check battery connector and battery breaker. 2. Contact technical support to replace the battery.
Replace Battery	Battery will soon need to be replaced due to insufficient runtime.	Contact technical support to replace the battery.
Fault		
Over Charge	Battery is overcharged.	1. Remove battery connector and check charger voltage. 2. Contact CyberPower for repair.
Charger Failure	Charger has failed.	



Disposal

	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.
	Battery Disposal 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.

For more information, please contact

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Manufacturer	Cyber Power Systems, Inc.	11F., No.26, Jinzhuang Rd., Neihu Dist., Taipei City 114, Taiwan.	Tel: +886 2 8792 9510 Fax: +886 2 8792 9621	tw.service@cyberpower.com

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