

CyberPower

User's Manual

EXTENDED BATTERY MODULE (EBM)

BPE36V60ART2U

BPE72V60ART2U

Cyber Power Systems Inc.

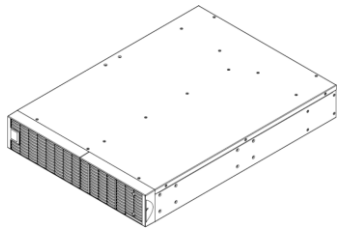
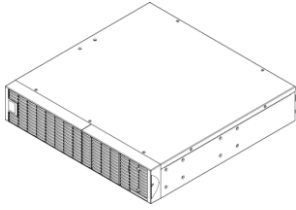
www.cyberpower.com

K01-0000516-01

OVERVIEW

The CyberPower Battery packs (BPE36V60ART2U / BPE72V60ART2U) support 50A polarized plugs, and are designed for variety of CyberPower UPS systems. When combining with the UPS, the Battery pack provides extended runtime with a 36VDC/72VDC external connection. Additional parallel-connected Battery packs provide the UPS for a longer extended runtime operation.

UNPACKING



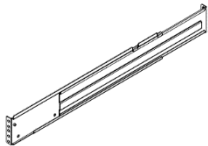
1K/1.5KVA or 2K/3KVA extended battery module



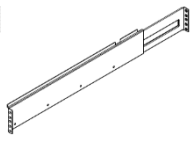
User's manual



Register card



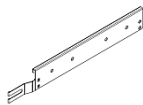
Rackmount left rail



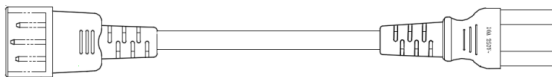
Rackmount right rail



Left hanging bracket



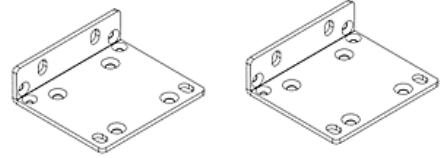
Right hanging bracket



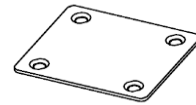
Power cord



Rubber feet (12)



Rackmount ears (Stands) (2)



Tie plate (1)



Flat head screws: M5X7L (8)



Pan head screws: M5X8L (12)



Pan head screws: M5X6L (8)



Guide screws: M5X10L (2)



Plastic washers (8)



Screw hole dust covers (12)

OVERVIEW

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.

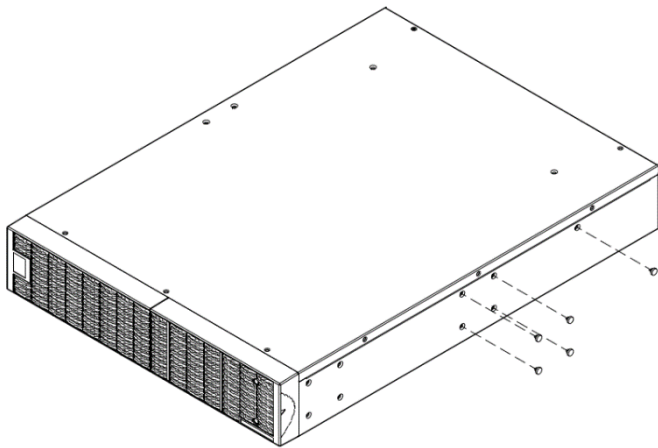
SAFETY PRECAUTIONS

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

RACKMOUNT INSTALLATION

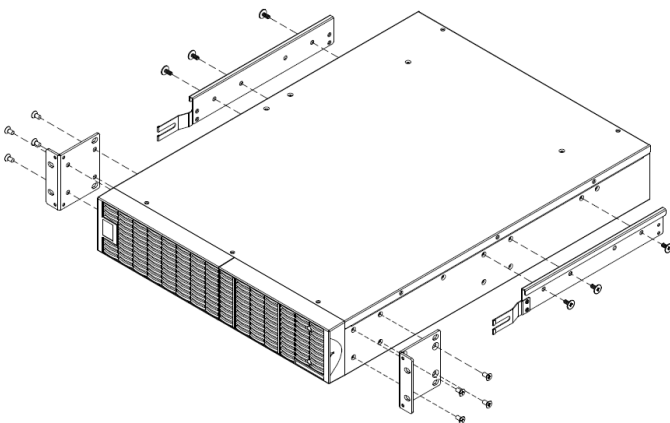
Step 1: Remove the dust covers

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



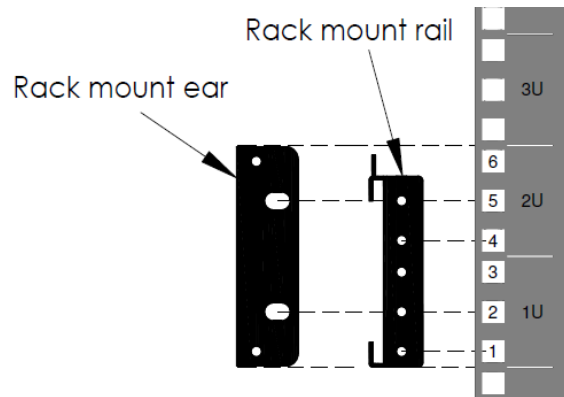
Step 2: Rackmount ears & hanging brackets installation

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

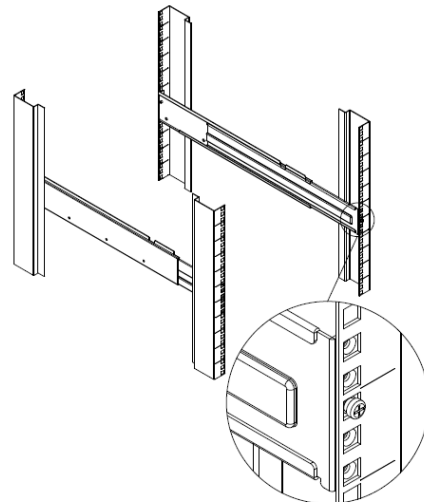


Step 3: Rackmount rail Installation

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.



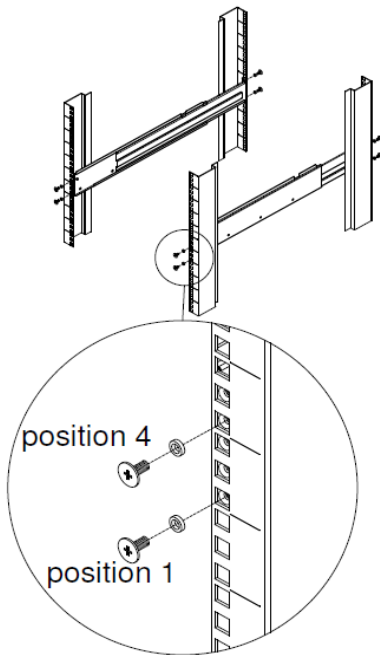
Position the guide screws on the rails into the rear rack square holes to temporarily support the rails in place. Tighten the front rail screws on the rack.



HARDWARE INSTALLATION

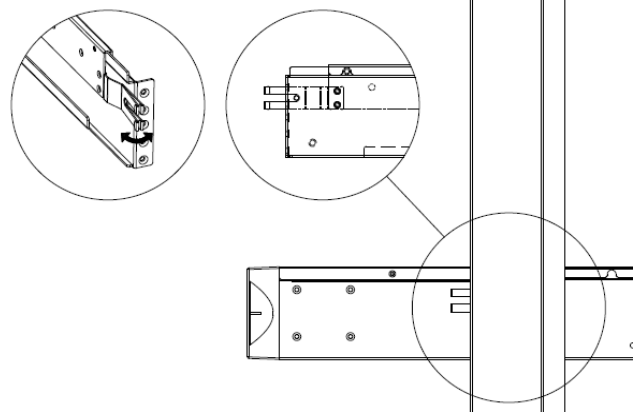
Step 4: Adjust rackmount rails to fit your rack

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.



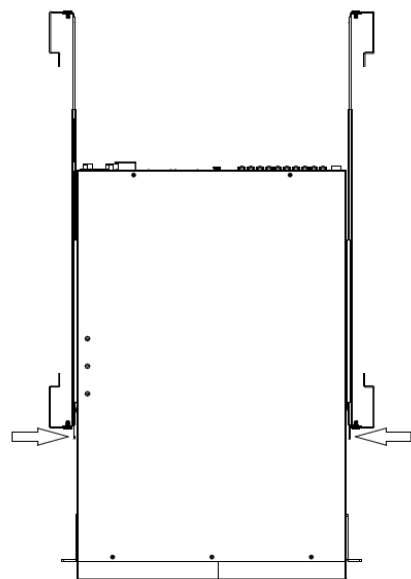
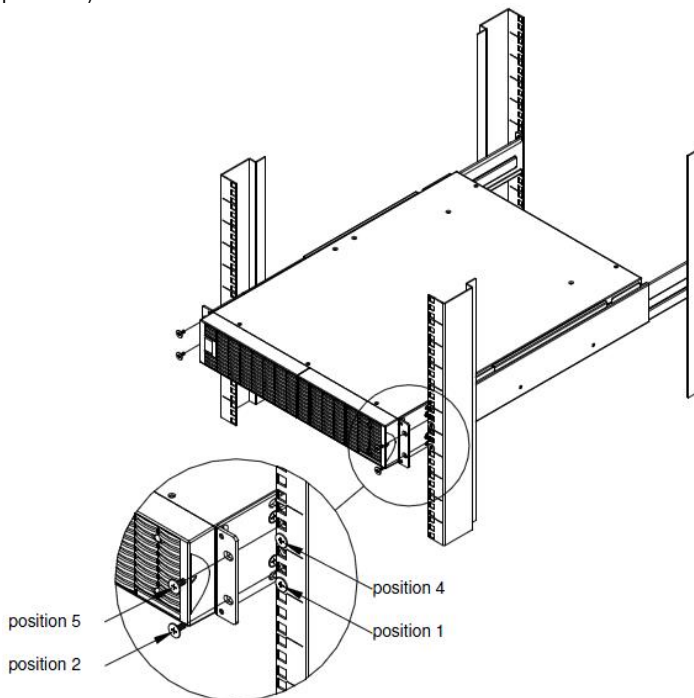
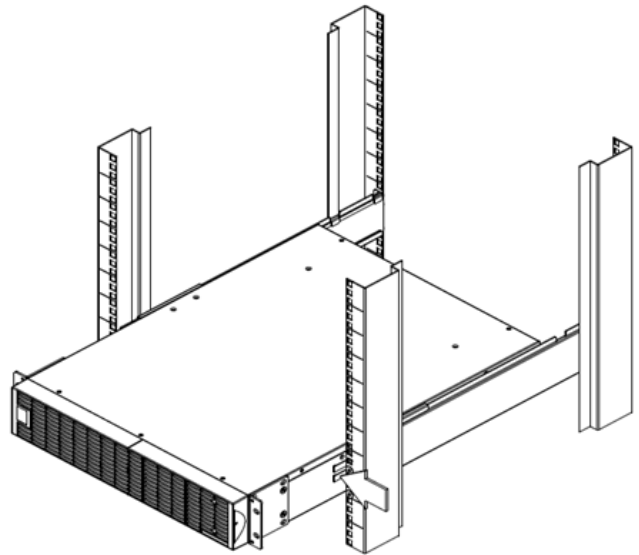
How to slide the EBM out from the rack

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.



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)

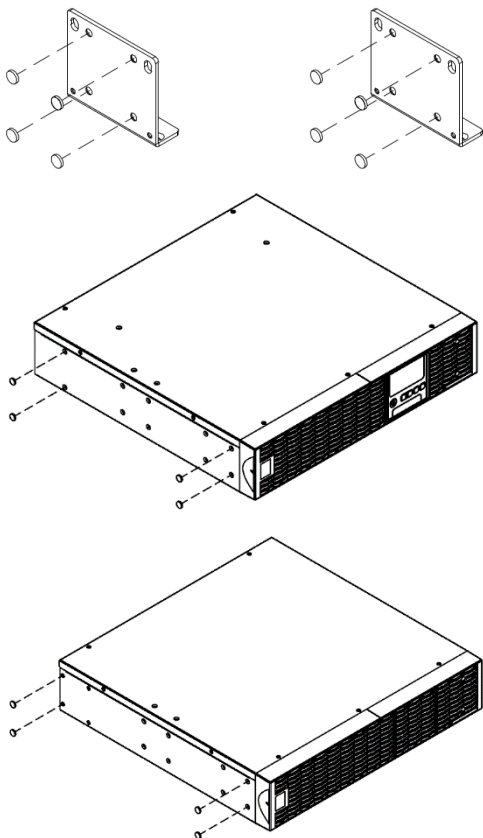


HARDWARE INSTALLATION

VERTICAL/TOWER INSTALLATION

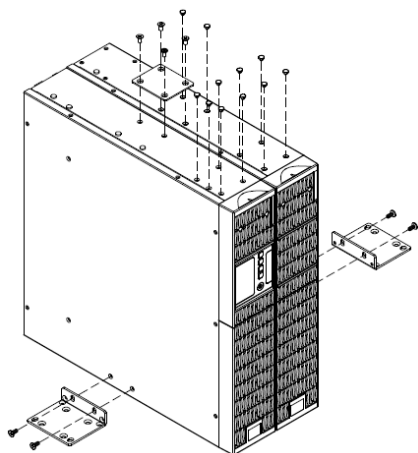
Step 1: Adhere the rubber feet on the bottom side of base stands

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



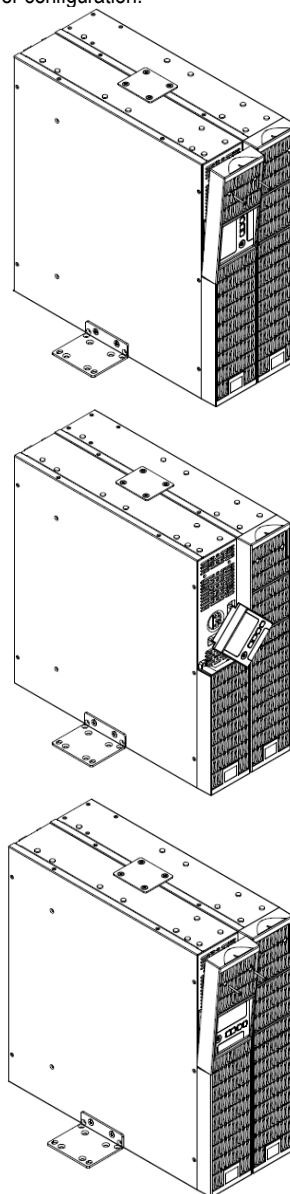
Step 2: Attach the base stands and attach the dust covers

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

BATTERY PACK FRONT/REAR PANEL DESCRIPTION

1. On-board Replaceable Fuse Cover
Replaceable fuse is accessible from the rear panel. It must be done by qualified personnel.

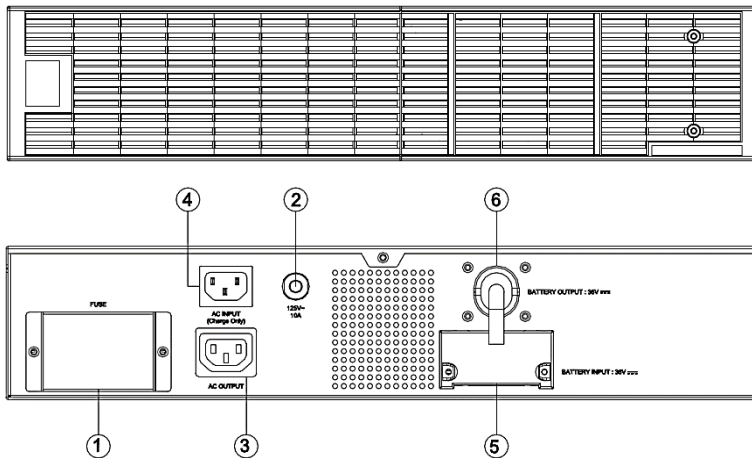
2. AC Circuit Breaker
Provides overload and fault protection.

3. AC Output Outlet
Use this outlet to connect to the AC Input Inlet of a downstream Battery pack.

4. AC Input Inlet (Charge Only)
AC power connectivity to wall receptacle.

5. Input Connector
Use this input connector to daisy chain the next Battery pack. Remove the connector cover for access.

6. Output Cable
Use this output cable to connect the Battery pack to the UPS or to the next Battery pack.



BPE36V60ART2U / BPE72V60ART2U

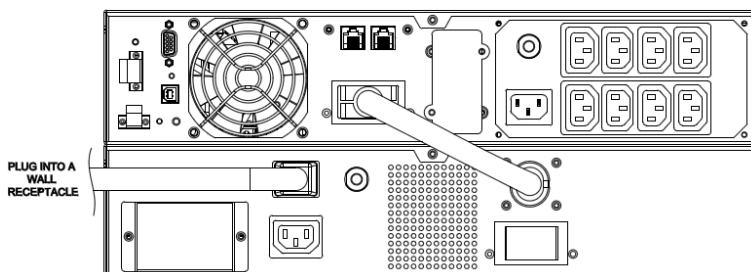
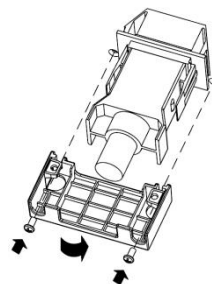
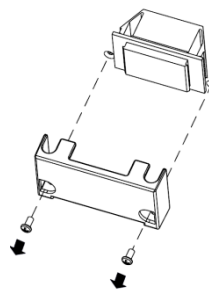
CONNECTION #1 : UPS WITH ONE BATTERY PACK

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

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

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

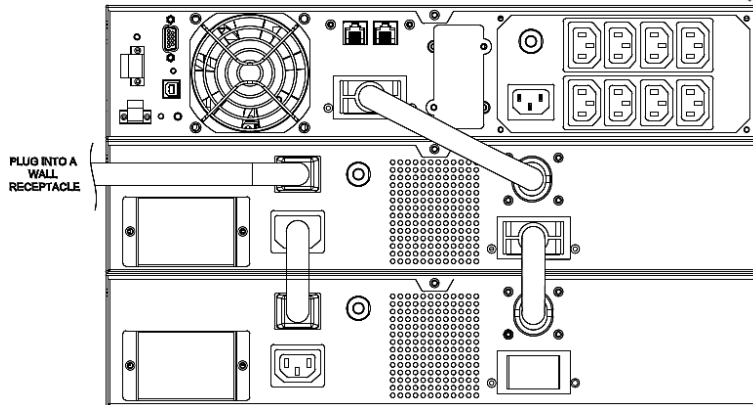
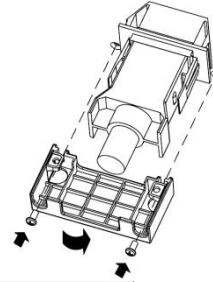
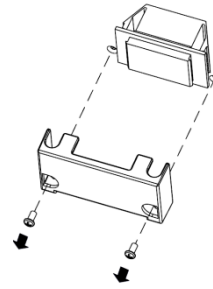
Step 4: Use a power cord to plug AC input inlet of the battery pack into a wall receptacle.



BASIC OPERATION

CONNECTION #2 : UPS WITH MULTIPLE BATTERY PACKS

- Step 1: Connect the 1st Battery pack to the UPS using the instructions above.
- Step 2: Loosen the two screws to remove the battery cable retention bracket of the 1st battery pack.
- Step 3: Use the output cable of the 2nd Battery pack to connect the 2nd Battery pack to the 1st Battery pack.
- Step 4: Rotate the battery cable retention bracket and tighten the two screws to fix battery cable.
- Step 5: Use a power cord to plug AC input inlet of the 2nd battery pack into AC output outlet of the 1st Battery pack.



EXTERNAL BATTERY PACKS CONFIGURATION

External Battery Packs can be configured by the user to display correct estimated battery runtimes.

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 “**EBP Number**” option.
5. Press the “**ENTER**” button to select the “**EBP 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 Battery packs.
7. Press the “**ENTER**” button to select the number of Battery packs 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
EBP 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 Cyber Power 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

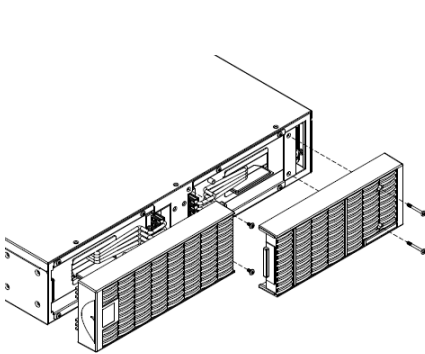
Please refer to the front side of the EBM for the model number of the correct replacement batteries. For battery procurement, log onto www.CPSww.com, or contact your local dealer.

Battery Disposal

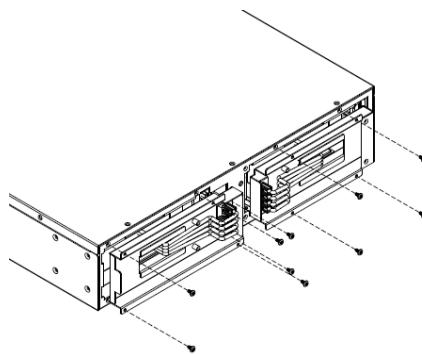
Batteries are considered hazardous waste and must be disposed of properly. Contact your local government for more information about proper disposal and recycling of batteries. Do not dispose of batteries in fire.

Cyber Power 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.

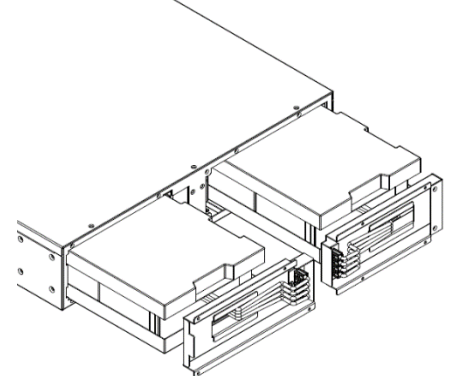
Battery Replacement



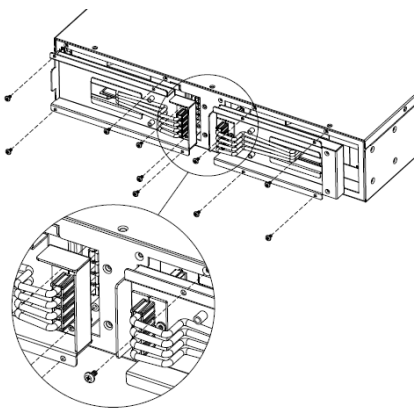
Step 1: Remove the front panels



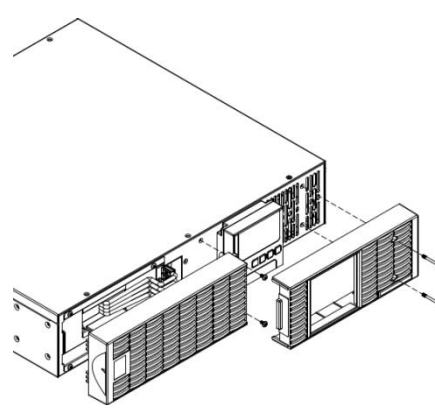
Step 2: Remove the retaining screws from the cable protection cover and then remove the cover itself



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



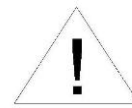
Step 5: Install the front panels, then to execute battery test via the LCD control panel, go to the Configuration Menu, then scroll to the UPS Diagnostic then select battery test and Activate, then scroll to Reset ReplaceBAT to reset the battery replacement date. This operation can also be done via PowerPanel®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

TECHNICAL SPECIFICATIONS


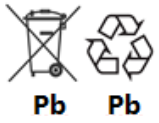
Model	BPE36V60ART2U	BPE72V60ART2U
Configuration		
AC Input Voltage	200~240Vac	
DC Output Voltage	36Vdc	72Vdc
Amperage	60A	
Physical		
Dimensions (L x W x H =)	16.9 x 17 x 3.5in. (430 x 433 x 88mm)	23.6 x 17 x 3.5in. (600 x 433 x 88mm)
Net Weight	50.6lbs(23.0Kg)	96.8lbs(44.0Kg)
Battery		
Specifications	(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 in 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

	<p>Disposal</p> <p>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.</p>
	<p>Battery Disposal</p> <p>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.</p> <p>Note: Most retailers that sell lead-acid batteries collect used batteries for recycling, as required by the local regulations.</p>

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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