



# User's Manual

## BATTERY PACK

BPE36V60ART2US

BPE72V60ART2US

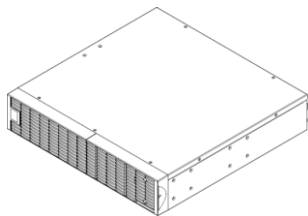
CyberPower Systems Inc.  
[www.cpsww.com](http://www.cpsww.com)

K01-0000517-00

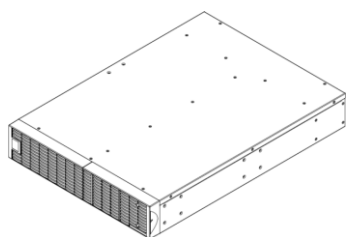
## OVERVIEW

The CyberPower Battery packs (BPE36V60ART2US / BPE72V60ART2US) 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



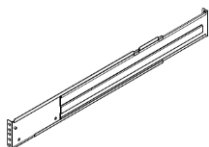
1K/1.5KVA or 2K/3KVA Battery pack



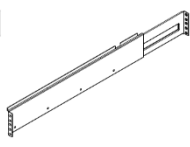
User's manual



Register card



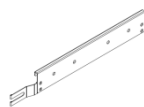
Rackmount left rail



Rackmount right rail



Left hanging bracket



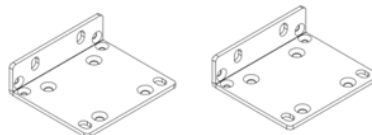
Right hanging bracket



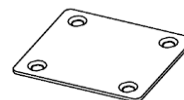
Power cord



Rubber feet (12)



Rackmount ears (Stands) (2)



Tie plate (1)



Flat head screws: M5X7L (8)



Pan head screws: M5X12L (4)



Pan head screws: M5X6L (14)



Guide screws: M5X10L (2)



Plastic washers (8)



Screw hole dust covers (12)

# HARDWARE INSTALLATION

## **HARDWARE INSTALLATION**

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

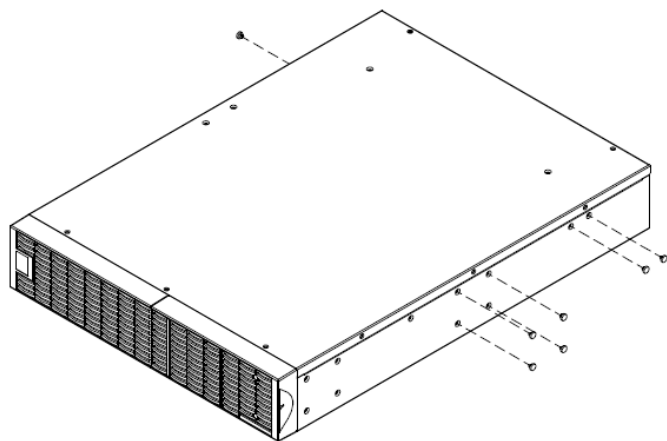
## **SAFETY PRECAUTIONS**

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

## **RACKMOUNT INSTALLATION**

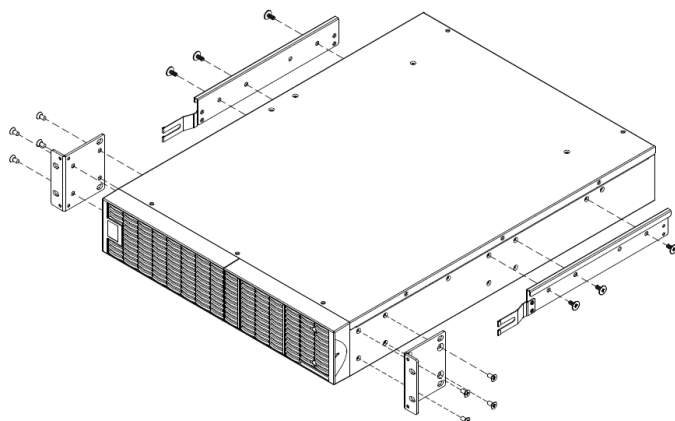
### **Step 1: Remove the dust covers**

Remove the dust covers \*7pcs from the screw holes.



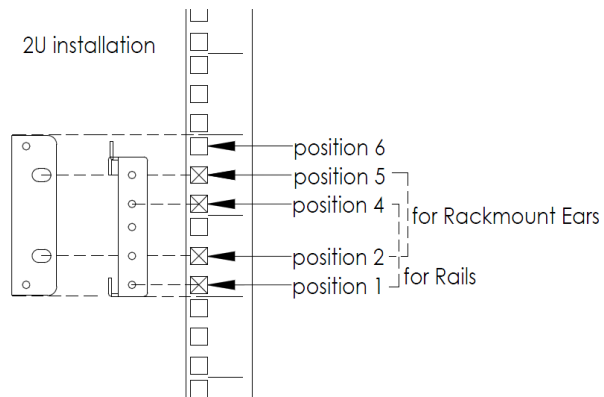
### **Step 2: Rackmount ears & hanging brackets installation**

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

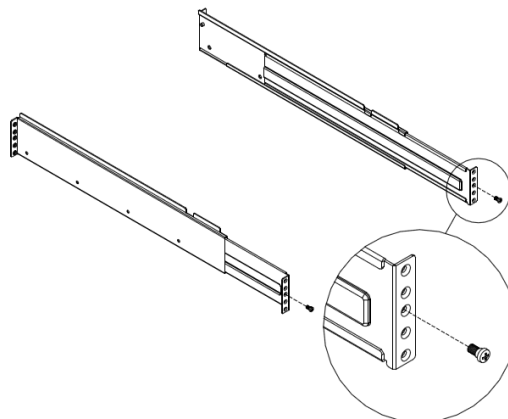


### **Step 3: Rackmount rail Installation**

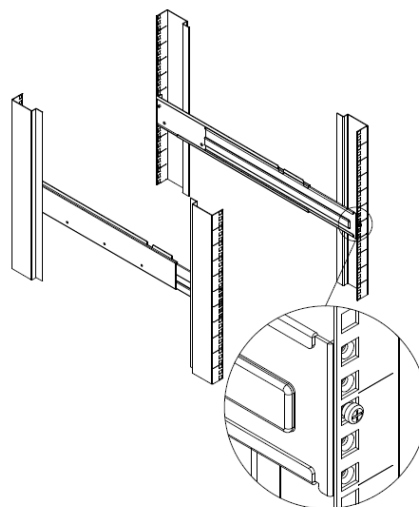
The rails adjust to mount in 48-cm (19-inch) panel racks from 52 to 91.5cm (20.5 to 36 inches) deep. Select the proper holes in the rack for positioning the Battery pack in the rack. The Battery pack takes up position 1 through 6.



Tighten the provided M5X10L\*2pcs guide screws on the center hole of the rear side for each rail.



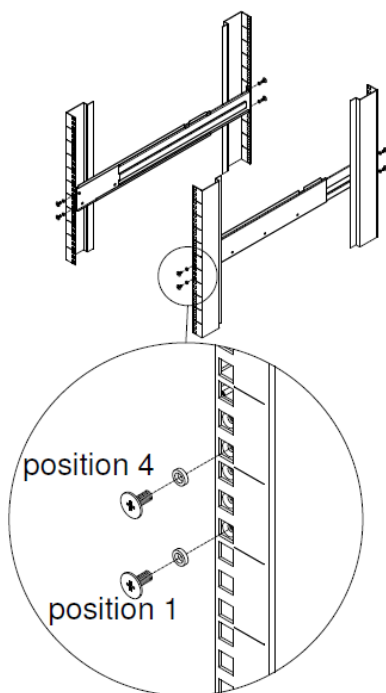
Position the guide screws on the rails into the rear rack square holes to temporarily support the rails in place. Tighten the front rail screws on the rack.



## HARDWARE INSTALLATION

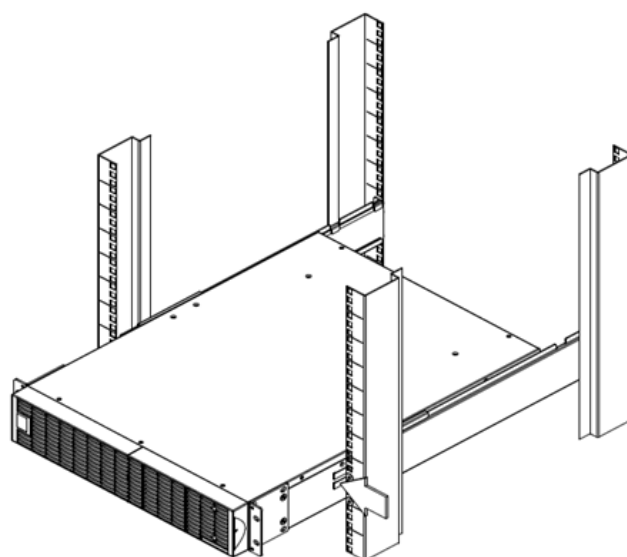
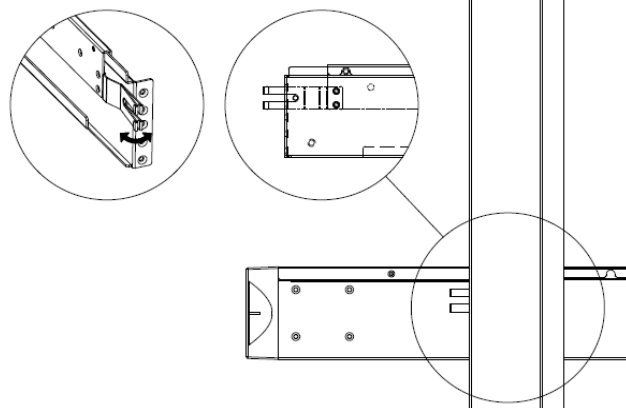
### Step 4: Adjust rackmount rails to fit your rack

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 M5X6L screws on the front bracket. Secure the rail to the rear of the rack with two M5X6L screws and two plastic washers.



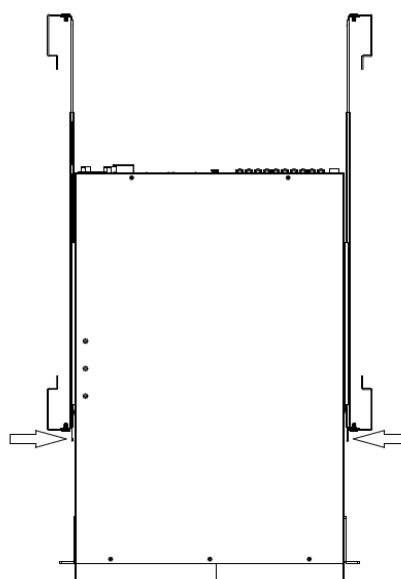
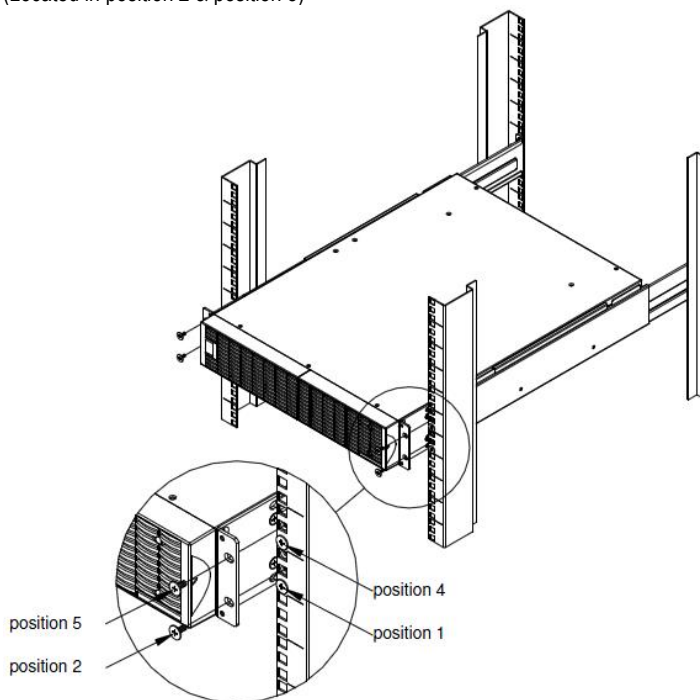
### How to Slide out Battery pack from rail

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



### Step 5: Place and secure the Battery pack on the rails

Slide the hanging brackets on the Battery pack into the rails mounted in the rack with the front of the unit facing toward you. Secure the Battery pack to your rack with four M5X12L\*4pcs screws at the front of the rack. (Located in position 2 & position 5)

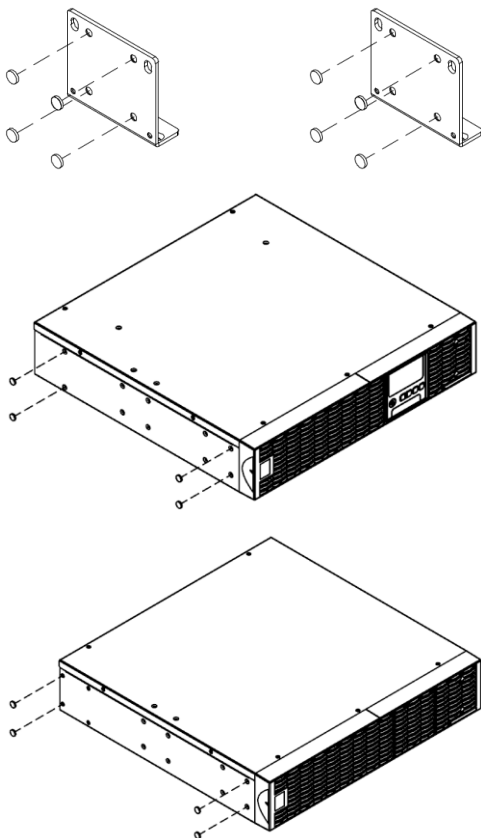


## HARDWARE INSTALLATION

### VERTICAL/TOWER INSTALLATION

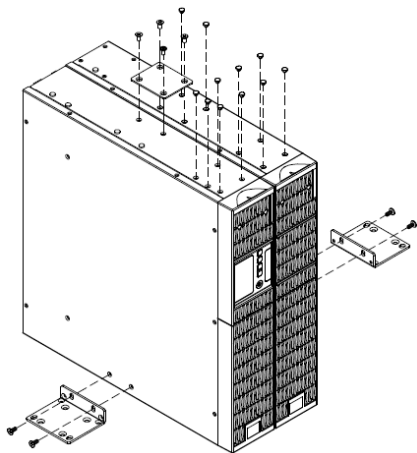
#### **Step 1: Adhere the rubber feet on the bottom side of base stands**

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



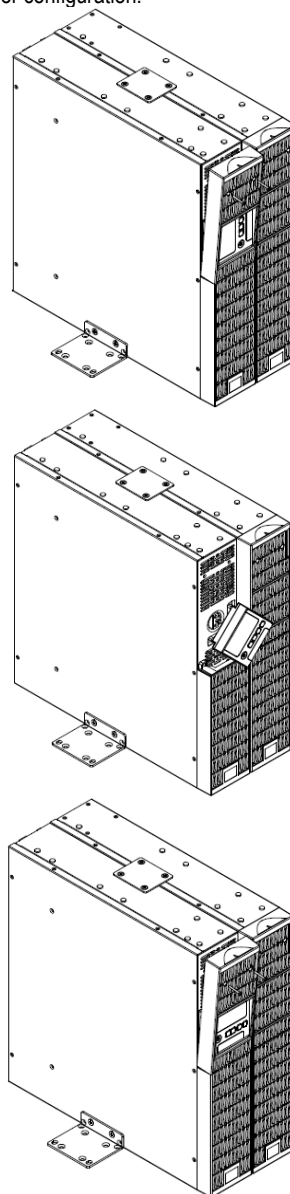
#### **Step 2: Attach the base stands and attach the dust covers**

Secure the tie bracket with the screws (M5X7\*4pcs). Tighten the screws (M5X12\*4pcs) of the base stands (rackmount ears) onto the bottom of the UPS and Battery pack. 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 Battery pack where excessive moisture or heat is present (Please see specifications for acceptable temperature and humidity range).

**CAUTION!** Never install a Battery pack, 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**

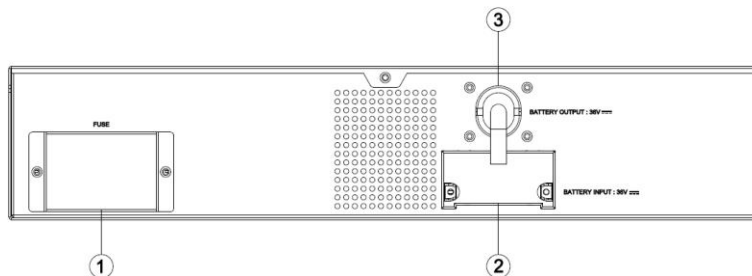
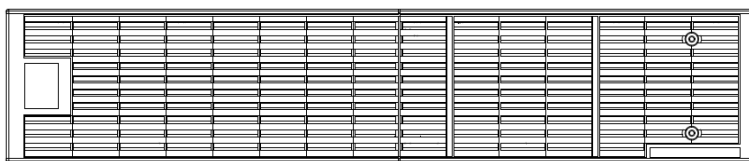
Replaceable fuse is accessible from the rear panel. It must be done by qualified personnel.

**2. Input Connector**

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

**3. Output Cable**

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



**BPE36V60ART2US / BPE72V60ART2US**

### **CONNECTION #1 : UPS WITH ONE BATTERY PACK**

**Step 1:** Turn off the DC breaker of the Battery pack.

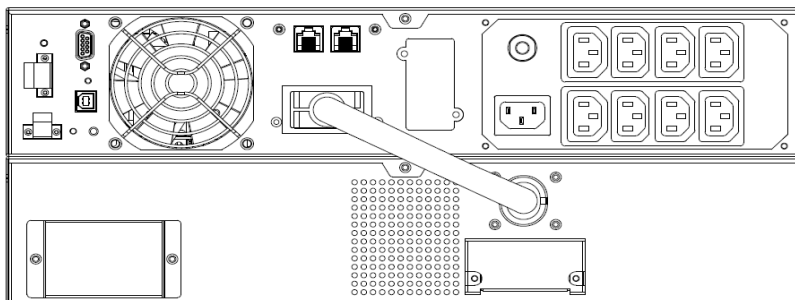
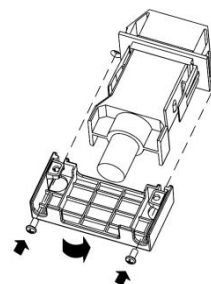
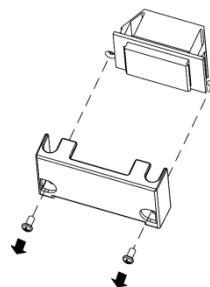
**Step 2:** Loosen the two screws to remove the battery cable retention bracket of the UPS.

**Step 3:** Use the output cable of the Battery pack to connect the Battery pack to the UPS.

**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 battery pack into a wall receptacle.

**Step 6:** Turn on the DC breaker of the Battery pack.



## BASIC OPERATION

### CONNECTION #2 : UPS WITH MULTIPLE BATTERY PACKS

Step 1: Connect the 1<sup>st</sup> Battery pack to the UPS using the instructions above.

Step 2: Turn off the DC breaker of the 2<sup>nd</sup> Battery module.

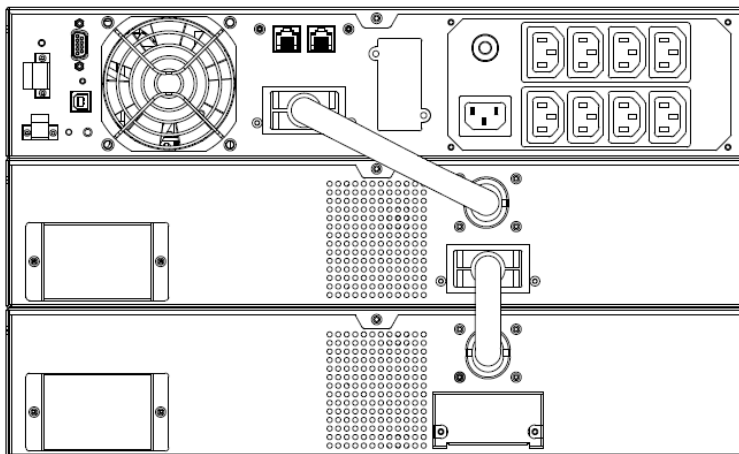
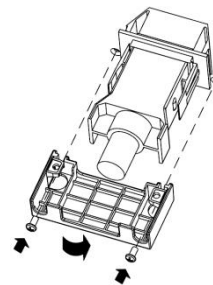
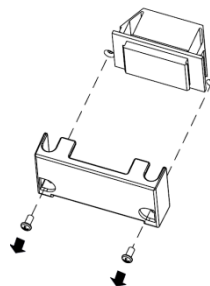
Step 3: Loosen the two screws to remove the battery cable retention bracket of the 1<sup>st</sup> battery pack.

Step 4: Use the output cable of the 2<sup>nd</sup> Battery pack to connect the 2<sup>nd</sup> Battery pack to the 1<sup>st</sup> Battery pack.

Step 5: Rotate the battery cable retention bracket and tighten the two screws to fix battery cable.

Step 6: Use a power cord to plug AC input inlet of the 2<sup>nd</sup> battery pack into AC output outlet of the 1<sup>st</sup> Battery pack.

Step 7: Turn on the DC breaker of the 2<sup>nd</sup> Battery module.



### 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
<b>EBP Number</b>	= [0] [1] [2] [3] [4] [5] [6] [7] [8] [9] [10]	0



## MAINTENANCE

### Storage

To store your UPS for an extended period, cover it and store with the battery fully charged. Recharge the battery every three months to ensure battery life.

### Battery Replacement

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

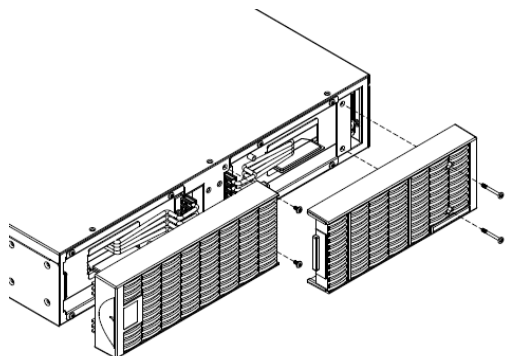
Please refer to the front side of the Battery pack for the model number of the correct replacement batteries. For battery procurement, log onto [www.CPSwww.com](http://www.CPSwww.com), or contact your local dealer.

### Battery Disposal

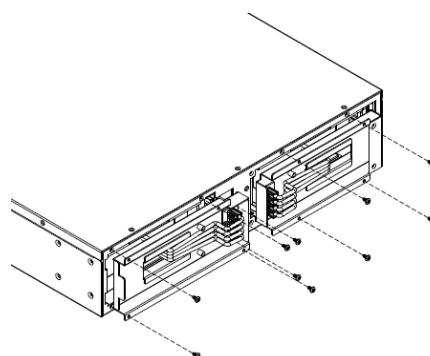
Batteries are considered hazardous waste and must be disposed of properly. Contact your local government for more information about proper disposal and recycling of batteries. Do not dispose of batteries in fire.

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 to the local regulations of your state.

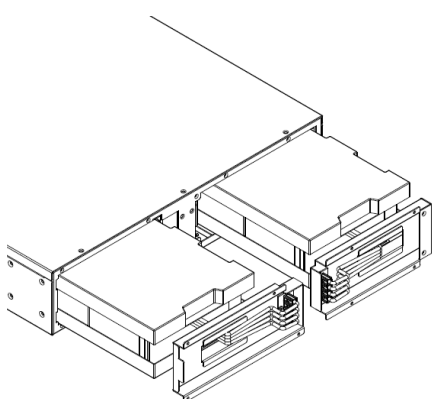
### Battery Replacement



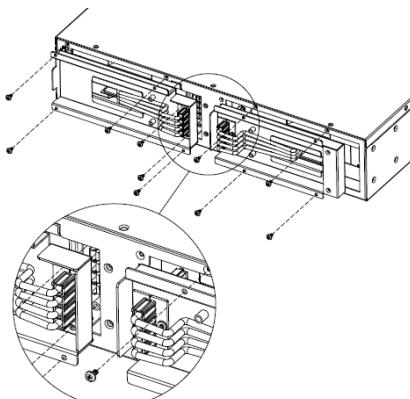
Step 1: Remove the front panels



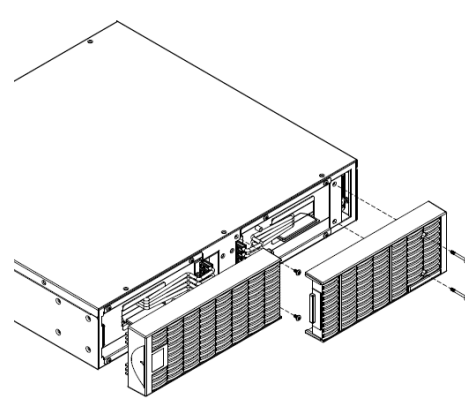
Step 2: Remove the retaining screws from the cable protection cover and then remove the cover itself



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

## TECHNICAL SPECIFICATIONS

Model	BPE36V60ART2US	BPE72V60ART2US
<b>Configuration</b>		
AC Input Voltage	100~125Vac	
DC Output Voltage	36Vdc	72Vdc
Amperage	60A	
<b>Physical</b>		
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)
<b>Battery</b>		
Specifications	(6) (12V9AH) (2 x Banks of 3 Batteries)	(12) (12V9AH) (2 x Banks of 6 Batteries)
Recharge Time (Typically)	4 hours (0~90%)	
Interface	PP45	
Sealed, Maintenance Free	Yes	
Hot-Swappable	Yes	
Built-in Charger	Yes	
<b>Environment</b>		
Operating Temperature	32°F to 104°F (0°C to 40°C)	
Operating Relative Humidity	0 to 90% Non-Condensing	
<b>Safety</b>		
Conformance Approvals	EAC, CE, RCM	
RoHS	RoHS Compliant	
<b>Warranty</b>		
Product Warranty	3-year limited warranty, Free Tech Support	

## TROUBLE SHOOTING

Problem	Possible Cause	Solution
<b>Warning</b>		
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.
<b>Fault</b>		
Over Charge	Battery is overcharged.	1. Remove battery connector and check charger voltage. 2. Contact CyberPower for repair.
Charger Failure	Charger has failed.	

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