CyberPower

User's Manual Extended battery module (EBM)

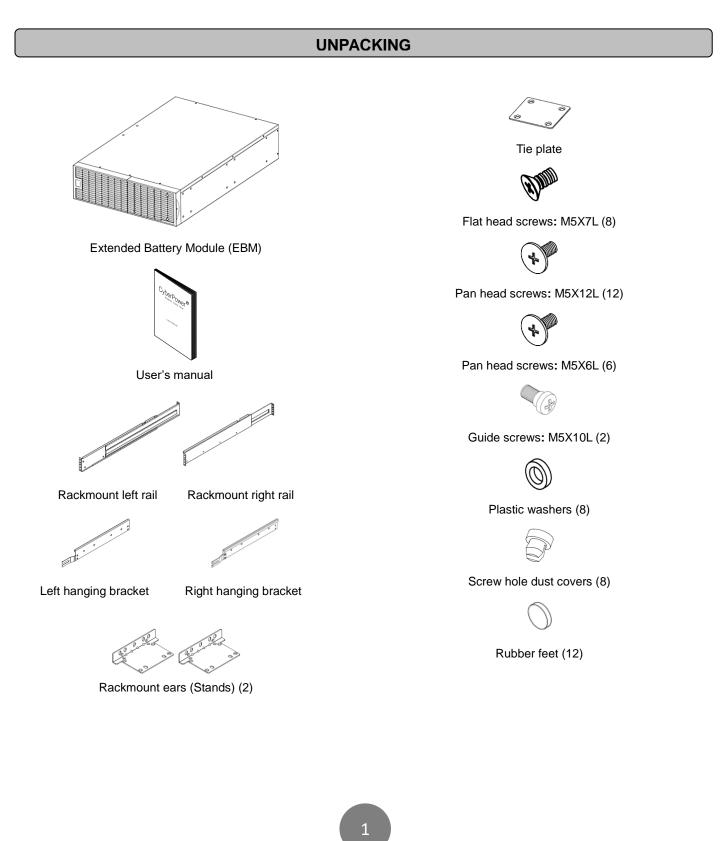
BM240V63ART3U

Cyber Power Systems Inc. www.cyberpower.com

K01-0000708-00

IMPORTANT SAFETY INSTRUCTIONS

The CyberPower extended battery modules (BM240V63ART3U) support 63A polarized plugs, and are designed for variety of CyberPower UPS systems. When combining with the UPS, the EBM provides extended runtime with a 240VDC external connection. Additional parallel-connected EBM provide the UPS for a longer extended runtime operation.



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HARDWARE INSTALLATION

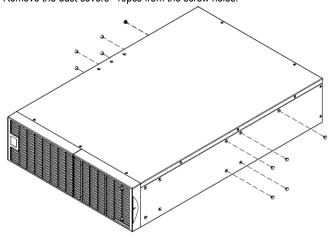
These versatile UPS systems can be mounted in a rackmount or vertical tower orientation. This versatility is especially important to growing organizations with changing needs that value having the option to position a UPS on a floor or in a rackmount system. Please follow the instructions below for the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

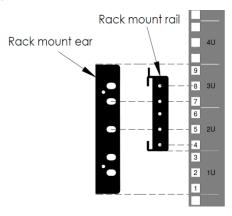
RACKMOUNT INSTALLATION

Step 1: Remove the dust covers Remove the dust covers *10pcs from the screw holes.

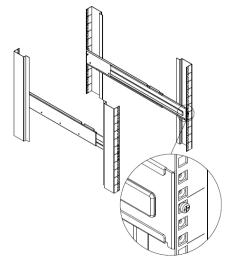


Step 3: Rackmount rail Installation

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 EBM in the rack. The EBM takes up position 1 through 9.

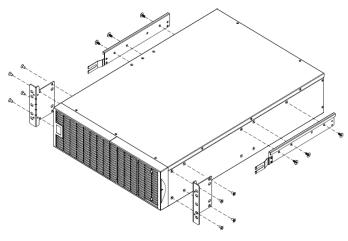


Position the guide screws on the rails into the rear rack square holes to temporarily support the rails in place. Tighten the front rail screws on the rack.



Step 2: Rackmount ears & hanging brackets installation

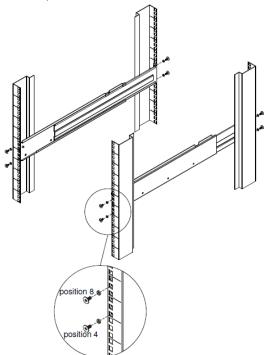
Attach two rackmount ears to the UPS using the provided M5X7L*8pcs screws and tighten two hanging brackets with the M5X6L*6pcs screws.



HARDWARE INSTALLATION

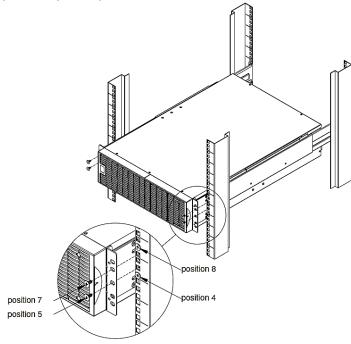
Step 4: Adjust rackmount rails to fit your rack

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 4 & position 8) 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.



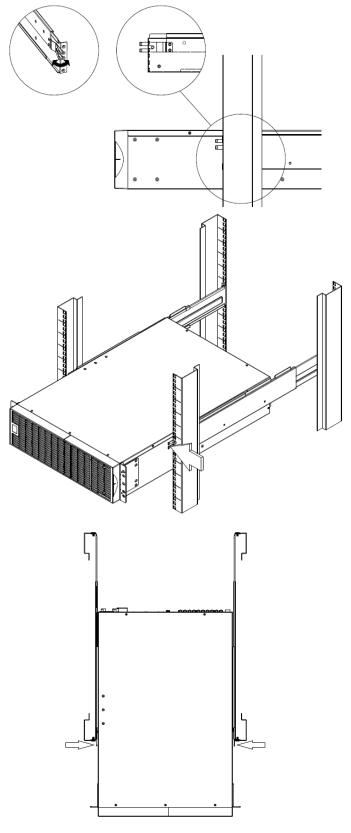
Step 5: Place and secure the EBM on the rails

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 M5X12L*4pcs screws at the front of the rack. (Located in position 5 & position 7)



How to Slide out EBM from rail

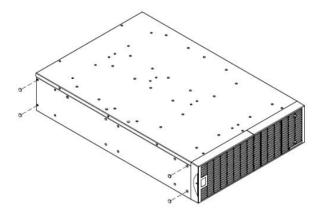
The Battery pack will be secured by a safety locking mechanism midway of pulling it out of the rack. Use both hands to hold the Battery pack and press the safety locking tab to pull the Battery pack out.



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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 EBM.



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

Secure the tie bracket with the screws (M5X7*4pcs). Insert dust covers into the screw holes that are not being used.

ELECTRICAL INSTALLATION

After completing the hardware installation of the EBM, you are now ready to plug in the UPS and connect your equipment.

SAFETY PRECAUTIONS

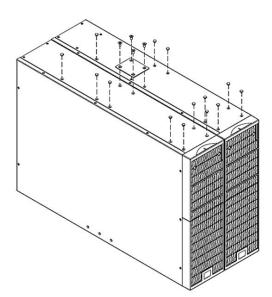
CAUTION! Installation environment should be in a temperature and humidity controlled indoor area free of conductive contaminants. Do not install this EBM where excessive moisture or heat is present (Please see specifications for acceptable temperature and humidity range).

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. It must be done by qualified personnel.

2. Input Connector

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

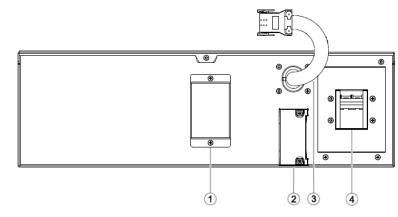
3. Output Cable

Use this output cable to connect the EBM to the Power module or to the next EBM.

4. DC Breaker

Use the DC breaker to disconnect battery output.

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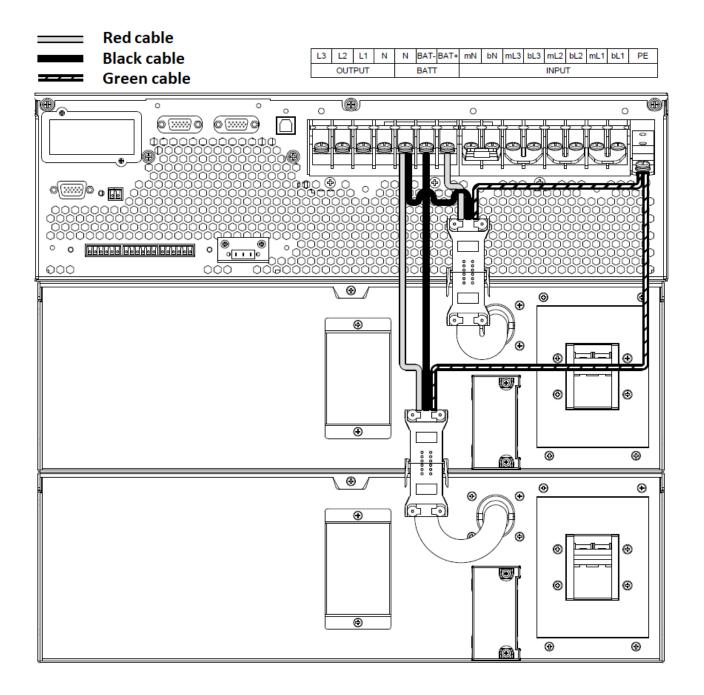
BASIC OPERATION

CONNECTION #1 : POWER MODULE WITH ONE SET BATTERY MODULE

Step 1: Turn off the DC breaker of the EBM.

Step 2: Follow the diagram as below to connect the cables.

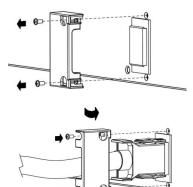
Step 3: Turn on the DC breaker of the EBM.

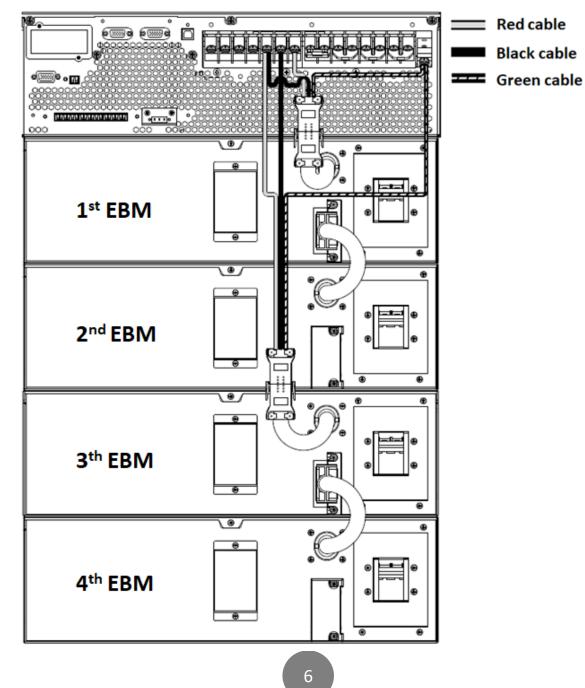


BASIC OPERATION

CONNECTION #2 : POWER MODULE WITH MULTIPLE EXTENDED BATTERY MODULES

- Step 1: Turn off the DC breaker of all the EBMs.
- Step 2: Connect the 1st EBM to the Power module according the diagram as below.
- Step 3: Loosen the two screws to remove the battery cable retention bracket of the 1st EBM.
- Step 4: Use the output cable of the 2nd EBM to connect the 2nd EBM to the 1st EBM.
- Step 5: Rotate the battery cable retention bracket and tighten the two screws to fix battery cable.
- Step 6: Follow the Step2-Step5 to connect 3th EBM and 4th EBM.
- Step 7: Turn on the DC breaker of all the EBMs.

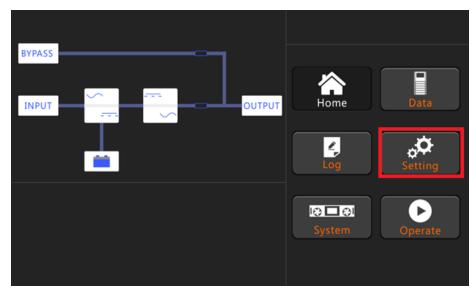




EXTENDED BATTERY MODULES CONFIGURATION

Extended Battery Modules can be configured by the user.

1. Press the "Setting" from display of RT series UPS.



2. Press the "BATTERY" and type the password "2334".

| Battery Number | | | BATTERY SETTING | | |
|------------------------------|-------|---------|-----------------|----------|--|
| Battery Capacity | | АН | | | |
| Float Charge Voltage/Cell | | v | Home | Data | |
| Boost Charge Voltage/Cell | | V | | * | |
| Charge Current Percent Limit | | % | Log | Setting | |
| Please Confirm | | | | | |
| DATA&TIME LANGUAGE COM | IM. | USER | System | Operate | |
| BATTERY SERVICE RAT | TE CO | NFIGURE | | | |

3. You could follow the specification of battery to setting the values.

| Battery Number | Setting the number of the battery (12V) | | |
|------------------------------|--|--|--|
| Battery Capacity | Setting of the AH of the battery | | |
| Float Charge Voltage/Cell | Setting the floating Voltage for battery cell (2V) | | |
| Boost Charge Voltage/Cell | Setting the boost Voltage for battery cell (2V) | | |
| Charge Current Percent Limit | Charge current (percentage of the rated current) | | |

4. Press the " \checkmark " button to save when you finish the setting.

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 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

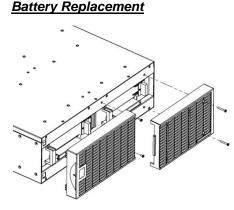
Please refer to the front side of the EBM for the model number of the correct replacement batteries. For battery procurement, log onto www.CPSww.com, or contact your local dealer.

Battery Disposal

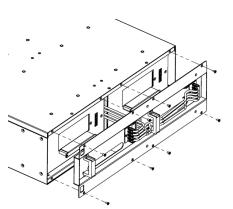
Batteries are considered hazardous waste and must be disposed of properly. Contact your local government for more information about proper disposal and recycling of batteries. Do not dispose of batteries in fire.

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.

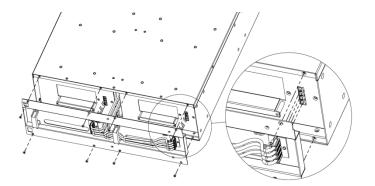


Step 1: Remove the front panels

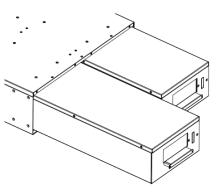


Step 2: Remove the retaining screws from the cable protection cover and then remove the cover itself

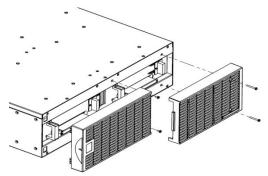
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Step 4: Insert the battery connectors and tighten the screws of battery retaining cover



Step 3: Pull the battery trays out slowly and then put the new battery trays back into the compartment



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 Edition Agent or RMCARD web interface if it is installed. Please see their respective User Manuals for detailed instructions.

TECHNICAL SPECIFICATIONS

| Configuration | | | | | | |
|-----------------------------|--|--|--|--|--|--|
| DC Output Voltage | 240Vdc | | | | | |
| Amperage | 63A | | | | | |
| Physical | | | | | | |
| Dimensions | L x W x H = 26 x 17 x 5.2in. (660 x 433 x 132mm) | | | | | |
| Net Weight | 171.6lbs(78Kg) | | | | | |
| Battery | | | | | | |
| Specifications | (20) 12V/9AH | | | | | |
| Interface | PP45 | | | | | |
| Sealed, Maintenance Free | Yes | | | | | |
| Hot-Swappable | Yes | | | | | |
| Environment | | | | | | |
| Operating Temperature | 32°F to 104°F (0℃ to 40℃) | | | | | |
| Operating Relative Humidity | 0 to 90% Non-Condensing | | | | | |
| 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. | Check battery connector and battery breaker. 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 Failure | Charger has failed. | charger voltage. Contact CyberPower for repair. | | | |

Cyber Power Systems Inc.

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