

User Manual Battery Pack

1. Important Safety Warnings

Please comply with all warnings and operating instructions in this instruction strictly. Read carefully the following instructions before installing the unit. Do not operate this unit before reading through all safety information and operating instructions carefully.

- Do not try to assemble or repair the unit yourself, contact your local supplier, seek for help of qualified technician
- To eliminate any overheating of the battery box, keep all ventilation openings free from obstruction and do not place any foreign objects on top of the battery bank. Keep the battery box 20 cm away from the wall.
- Make sure the battery box is installed within the proper environment as specified. (0-40°C and 30-90% non-condensing humidity)
- Do not install the battery box under direct sunlight. Your warranty will be void if the batteries fail due to overheating.
- This battery box is not designed for use in dusty, corrosive and salty environment.
- The warranty for this battery bank will be void if water or other liquid is spilled or poured directly onto the battery box. Similarly we do not warrant any damage to the battery box if foreign objects are deliberately or accidentally inserted into the battery box enclosure.
- The battery will discharge naturally if the system is unused for a period of time.
- It should be recharged every 2-3 months if unused. If this is not done, then the warranty will be null and void. During normal operation, the batteries will be automatically remained in charged condition.
- Servicing of batteries should be performed or supervised by trained personnel with knowledge of batteries and the required precautions.
- When replacing batteries, it is necessary to replace ALL batteries with the same quantity, type & capacity.
- CAUTION – Do not dispose of battery or batteries in a fire. The battery may explode.
- CAUTION – Do not open or mutilate the batteries. The electrolyte from the batteries is toxic and harmful to the skin and eyes.
- CAUTION – Risk of Electric Shock –Hazardous voltage may exist between battery terminals and ground. Test before touching with bare hands.

- CAUTION – A battery can present a risk of electrical shock and high short circuit current. The following precaution should be observed when working on batteries:
 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. Disconnect charging source prior to connecting or disconnecting battery terminals.
- Do not plug or unplug the battery connector if UPS works in DC (discharging) mode.

Installation and Setup

NOTE: Before installation, please inspect the unit. Be sure that nothing inside the package is damaged. Please keep the original package in a safe place for future use

Storage & Maintenance

The unit contains no user-serviceable parts. If the battery service life (3~5 years at 25°C ambient temperature) has been exceeded, the batteries must be replaced. In this case, please contact your dealer.

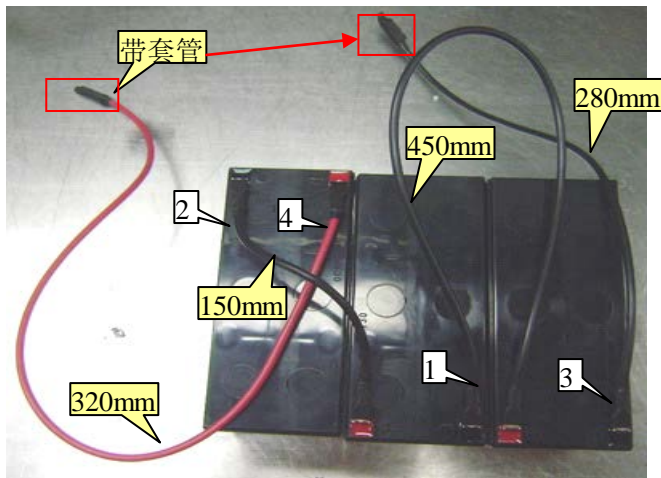
Be sure to deliver the spent battery to a recycling facility or ship it to your dealer in the replacement battery packing material.

Storage

Before storing, charge the unit 4 hours. Store the unit covered and upright in a cool, dry location. During storage, recharge the battery in accordance with the following table:

Storage Temperature	Recharge Frequency	Charging Duration
-25°C - 40°C	Every 3 months	1-2 hours
40°C - 45°C	Every 2 months	1-2 hours

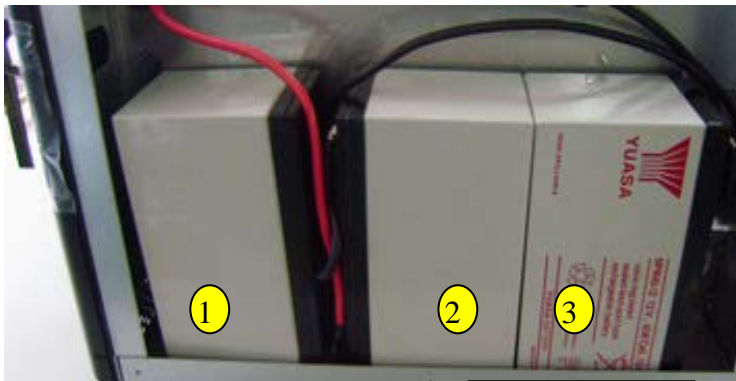
SOP – How to assemble Battery Pack with 12 batteries (BP A72T-12x9Ah)



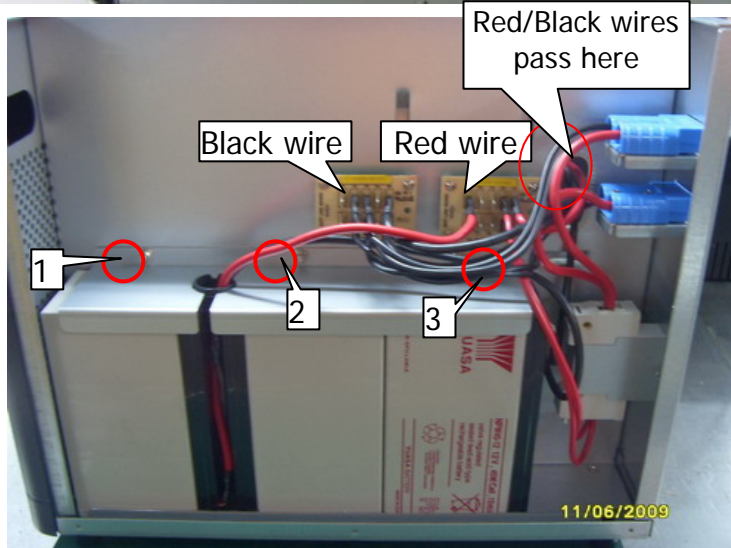
1. As shown, please use three batteries (12V/7Ah or 12V/9Ah) and check the date code (it's necessary to use batteries with same date code in a UPS unit). Serial connect batteries with three black wires in 450, 280, 150 mm length. Slip the end of black wire with 280mm length into the tube.

2. Connect red wire with 380mm length to battery and slip red wire into the tube.

NOTE: This will prevent short circuit from direct contact of terminal.



3. Put the three batteries in order as shown in chart. **Hint:** Install the left one and keep battery terminal heading the bottom. Then, install the middle one and keep battery terminal heading upwards. At least, install the right one and keep battery terminal heading upwards.

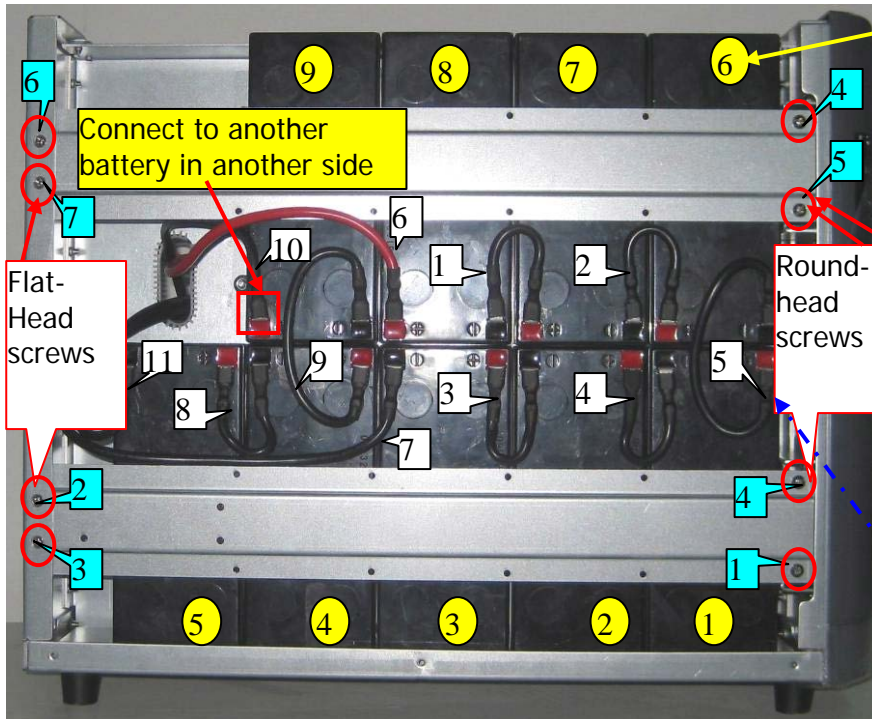


4. Put grommet inside the hole of battery divider and allow red and black wire passing through the hole. Screw tightly the battery divider with screw nuts. (as shown in 1, 2 areas), M4 screw nuts: 38-210003-00G*2
Torque: 8KGF-CM

5. Disconnect red wire from P1 of small board and pass through divider with black wire.
6. Connect P5 and P10 on the small board with 2 black wires (450mm). Connect P5 with red wire (320mm) and pass through divider with 2 black wires.

Tool: electric screwdriver, crosshead screwdriver, nipper

CAUTION: 1. Be sure all wires are plugged correctly and tightly. Do NOT break any wire tubes. 2. Do NOT connect battery terminal to any metals. Otherwise, it will cause short circuit. 3. Any screw should be screwed tightly without missing.



Flat-Head screws

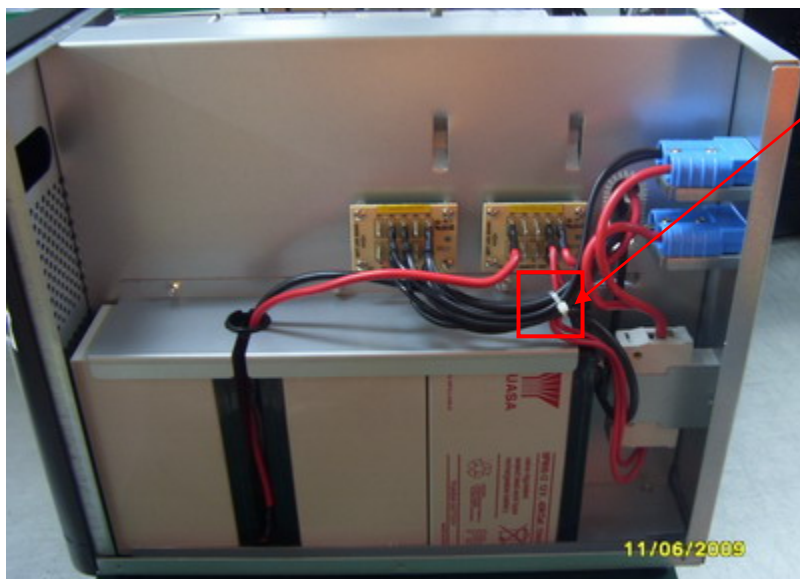
Connect to another battery in another side

Round-head screws

7. As shown, please use all batteries (12V/7Ah or 12V/9Ah) with the date code (it's necessary to use batteries with same date code in a UPS unit). Put all batteries inside of case one by one.

8. Screw two battery dividers to main column tightly. M3*6 round-head screws, M3*6 flat-head screws. Torque: 8KGF-CM

9. Serial connect battery terminals with wires. **CAUTION: Be sure all wires are plugged correctly and tightly. To avoid short circuit, do NOT let nipper direct connect to battery terminals.**



10. Organize black and red wires with a cable tie.

Tool: electric screwdriver, crosshead screwdriver, nipper

CAUTION: 1. It's necessary to use batteries with the same date code. During battery installation, do not battery terminal directly contact with any metal to avoid battery short circuit.
 2. Any screw should be screwed tightly without missing.
 3. Be sure all wires are plugged correctly and tightly. Do NOT break any wire tubes.
 4. Organize the wires well.