

The power behind competitiveness

Delta UPS - Amplon Family

External Battery Box
for RX 3 kVA

User Manual

www.deltapowersolutions.com



DELTA
Smarter. Greener. Together.

Save This Manual

This manual contains important instructions and warnings that you should follow during the installation, operation, storage and maintenance of this product. Failure to heed these instructions and warnings will void the warranty.

Copyright © 2016 by Delta Electronics Inc. All Rights Reserved. All rights of this User Manual (“Manual”), including but not limited to the contents, information, and figures are solely owned and reserved by Delta Electronics Inc. (“Delta”). The Manual can only be applied to the operation or the use of this product. Any disposition, duplication, dissemination, reproduction, modification, translation, extraction, or usage of this Manual in whole or in part is prohibited without the prior written permission of Delta. Given that Delta will continuously improve and develop the product, changes may be made to the information in this Manual at any time without obligation to notify any person of such revision or changes. Delta will make all possible efforts to secure the accuracy and the integrity of this Manual. Delta disclaims any kinds or forms of warranty, guarantee, or undertaking, either expressly or implicitly, including but not limited to the completeness, faultlessness, accuracy, non-infringement, merchantability or fitness for a particular purpose of the Manual.

Table of Contents

Chapter 1 : Important Safety Warnings -----	1
Chapter 2 : Product Overview and Setup -----	3
2.1 Rear Panel View-----	3
2.2 Installation and Connection-----	3
Chapter 3 : Type of Battery Required -----	6
Chapter 4 : Battery Installation -----	7
Chapter 5 : Wiring Diagram -----	10
Chapter 6 : Storage & Maintenance -----	12
Appendix 1 : Warranty -----	13

Chapter 1 : Important Safety Warnings

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

- Do not try to repair the unit yourself, contact your local supplier or your warranty will be void.
- 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 spilt 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.

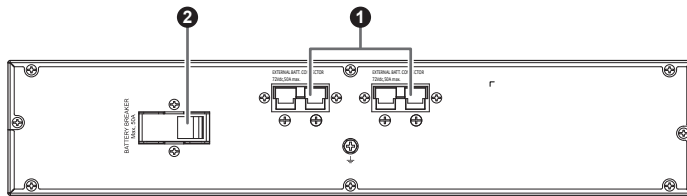
- CAUTION – Do not open or mutilate the batteries. The electrolyte from the batteries is toxic and harmful to the skin and eyes.
- CAUTION – Risk of Electric Shock – Hazardous voltage may exist between battery terminals and ground. Test before touching with bare hands.
- CAUTION – A battery can present 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.

Chapter 2 : Product Overview 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.

2.1 Rear Panel View



- ❶ External battery connector: connects to either UPS or the 2nd battery box.
- ❷ Battery breaker: battery over-current protection breaker.

2.2 Installation and Connection

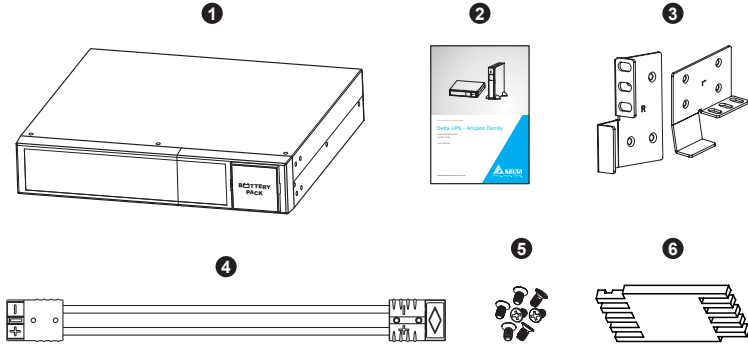
• Unpacking & Inspection

1. Remove the battery box from the packing.



NOTE: The battery box is very heavy, be cautious when unpacking and lifting the unit to avoid injury.

2. Check the inside package:



No.	Item	Quantity
1	External battery box	1 PC
2	User manual	1 PC
3	Ear	2 PCS
4	Battery connection cable	1 PC
5	Screw	8 PCS
6	Extended stand	2 PC

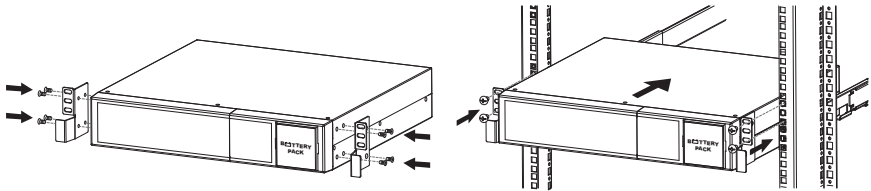
• **Selecting Installation Position**

It is necessary to select a proper environment to install the unit, in order to minimize the possibility of damage to the battery box and extend the life of the batteries. Please follow the instructions below:

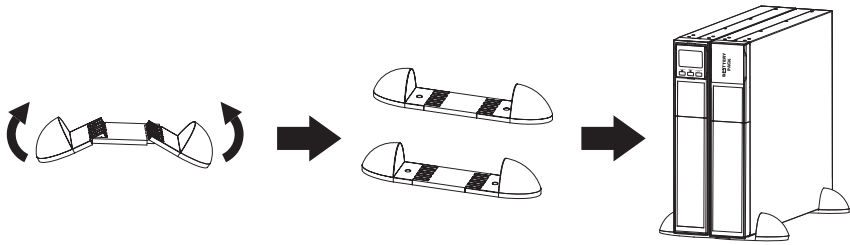
1. Keep at least 20cm (8 inches) clearance from the rear panel of the unit from the wall or other obstructions.
2. Do not block the air-flow to the ventilation openings of the unit.
3. Please ensure the installation site environmental conditions are in accordance with the unit's working specifications to avoid overheat and excessive moisture.
4. Do not place the unit in a dusty or corrosive environment or near any flammable objects.
5. This unit is not designed for outdoor use.

This unit can either be mounted or placed vertically on the desk.

- **Rack Installation**

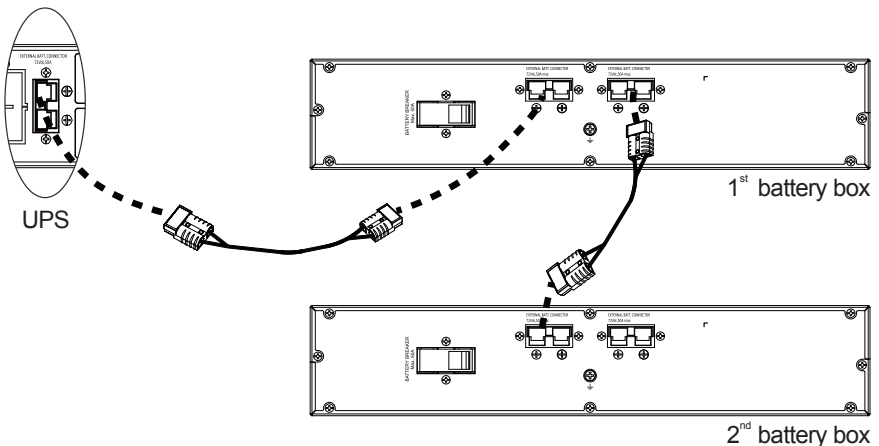


- **Tower Installation**



- **Connecting with UPS and Other Battery Box**

Follow below installation chart to connect with UPS and other battery box with included cable.



Chapter 3 : Type of Battery Required

This battery box has been designed to operate with the following types of batteries:

1. 72V/ 9Ah Version: 6 pieces of 12V 9Ah batteries.
2. 72V/ 18Ah Version: 12 pieces of 12V 9Ah (6+6) batteries.

Chapter 4 : Battery Installation

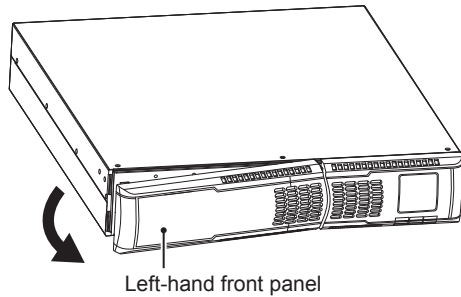
If your battery box is not installed with batteries, please follow proper procedure to put batteries inside of the unit.



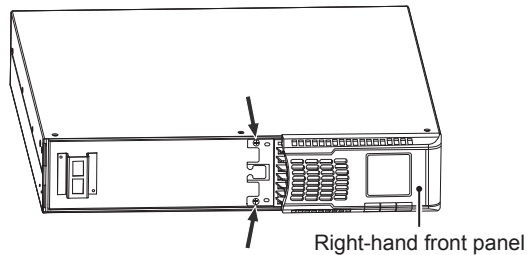
NOTE: Make sure that the battery box is disconnected from the UPS before performing the following sequence of operations.

• Battery Box 72V

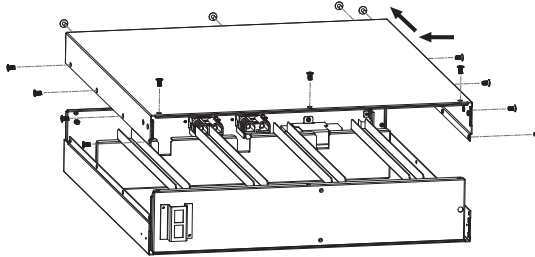
- 1 Open the package and place the battery box on a horizontal plane.
- 2 Remove the removable left-hand front panel by pulling it from the lower extremity.



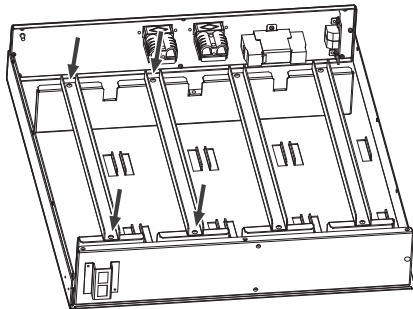
- 3 Remove the 2 screws present and remove the right-hand front panel.



- 4 Remove the metal top cover of the battery box by unscrewing the 8 screws present on the two sides (4 on the right side and 4 on the left side), 3 screws on the top and 4 screws on the back side.

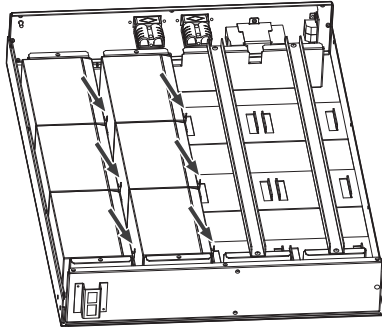


- 5 Once the battery box is opened, remove the two battery fixing plates present on the left side of the battery box by unscrewing the 4 screws present.



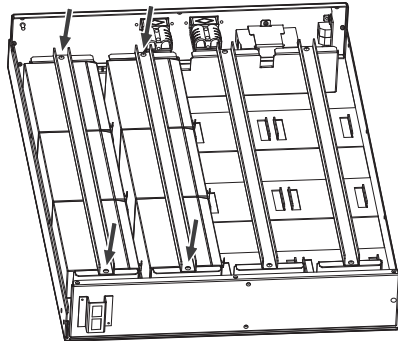
NOTE: To install the second branch of batteries, repeat the same procedure on the two battery fixing plates on the right side of the battery box.

- 6 Now, it is possible to put the batteries inside following below picture (in the following drawing is indicated the fasten positions for the correct batteries placing).



NOTE: To install the second branch of batteries, repeat the same procedure on the right side of the battery box.

- 7 Connecting all batteries following the wiring diagram shown in **Chapter 5: Wiring Diagram**.
- 8 Put all batteries inside and re-install the battery fixing plates.

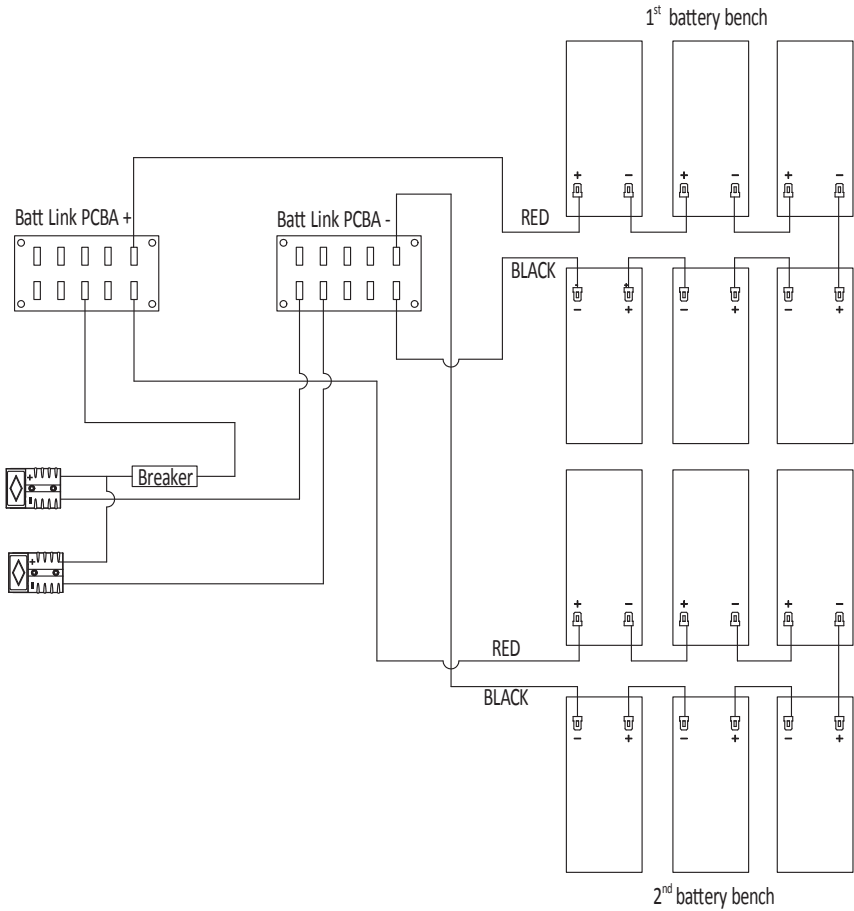


NOTE: To install the second branch of batteries, repeat the same procedure on the right side of the battery box.

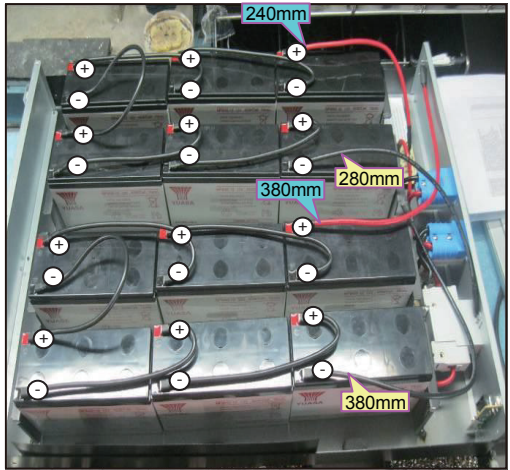
- 9 Put metal top cover back to the unit. Reinstall the right-hand front panel and secure it with the original 2 screws. After that, replace the left-hand front panel.
- 10 Connect the battery box to the UPS.

Chapter 5 : Wiring Diagram

- Battery Box 72V



Picture example as below:



NOTE: The cable connection from external battery connector to PCB is already present inside the battery box. All the other cable connection should be followed by wiring diagram.

Chapter 6 : 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

Appendix 1 : Warranty

Seller warrants this product, if used in accordance with all applicable instructions, to be free from original defects in material and workmanship within the warranty period. If the product has any failure problem within the warranty period, Seller will repair or replace the product at its sole discretion according to the failure situation.

This warranty does not apply to normal wear or to damage resulting from improper installation, operation, usage, maintenance or irresistible force (i.e. war, fire, natural disaster, etc.), and this warranty also expressly excludes all incidental and consequential damages.

Maintenance service for a fee is provided for any damage out of the warranty period. If any maintenance is required, please directly contact the supplier or Seller.



WARNING:

The individual user should take care to determine prior to use whether the environment and the load characteristic are suitable, adequate or safe for the installation and the usage of this product. The User Manual must be carefully followed. Seller makes no representation or warranty as to the suitability or fitness of this product for any specific application.

Version Date : 2016_12_19

