

# Delta UPS - Amplon Family

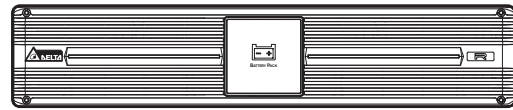
Delta External Battery Pack for  
Amplon R 1/ 2/ 3kVA UPS

## Installation & Operation Quick Guide

ENGLISH

### 1 Product Introduction

The Delta External Battery Pack is applicable to Delta Amplon R 1/ 2/ 3kVA UPS. When the UPS is operating during a power outage, the battery pack provides DC power, which maintains inverter operation to supply power to the critical loads connected to the UPS.



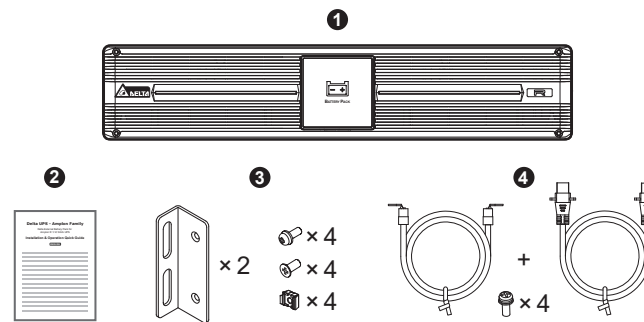
(Figure 1: Delta External Battery Pack Front View)

### 2 Important Safety Instructions

- Servicing of batteries and battery packs must be performed or supervised by qualified service personnel knowledgeable in batteries, battery packs and the required precautions. Keep unauthorized personnel away from batteries and battery packs.
- A battery can present a risk of electric shock and high short-circuit current.
- To reduce the risk of fire or electric shock, install the battery pack in a temperature and humidity controlled indoor area free of conductive contaminants.
- Forbid opening or removing the cover of the battery pack to avoid high voltage electric shock.
- The risk of dangerous high voltage is possible when the batteries are still connected to the UPS even though the UPS is disconnected from the mains. Do not forget to disconnect the battery cable to completely cut off the battery source.
- Turn off the UPS and cut off the AC source before performing battery/ battery pack replacement.
- Only use the same type of batteries from the same supplier. Never use old, new and different Ah batteries at the same time.
- The number of batteries must meet UPS requirements.
- Do not reverse or short circuit the polarity + and - when connecting the batteries because this will destroy the device and constitute a risk of electric shock or fire.
- Use a voltage meter to measure whether the total voltage, after battery pack connection, is around  $12.5V_{dc} \times$  the total number of batteries.
- The external slits and openings in the battery pack are provided for ventilation. To ensure reliable operation of the battery pack and to protect the battery pack from overheating, these slits and openings must not be blocked or covered. Do not insert any object into the slits and openings that may hinder ventilation.
- Do not allow liquid or any foreign object to enter the battery pack.
- Do not place beverages or any other liquid-containing vessels on or near the battery pack.
- Do not dispose of the battery or batteries in a fire. The batteries may explode.

- Do not open or mutilate the battery or batteries. The released electrolyte is harmful to the skin and eyes and may be toxic.
- Observe the following before replacing 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 the top of batteries.
  5. Disconnect charging source prior to connecting or disconnecting batteries' terminals.

### 3 Package List

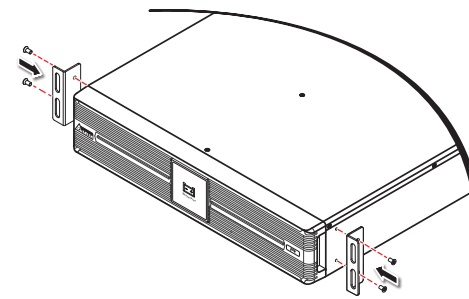


No.	Item	Q'ty
1	Delta External Battery Pack	1 PC
2	Installation & Operation Quick Guide	1 PC
3	Bracket Ear	1 SET
4	Battery Cable & Grounding Cable	1 SET

### 4 Installation Procedures

#### • Rack Mounting:

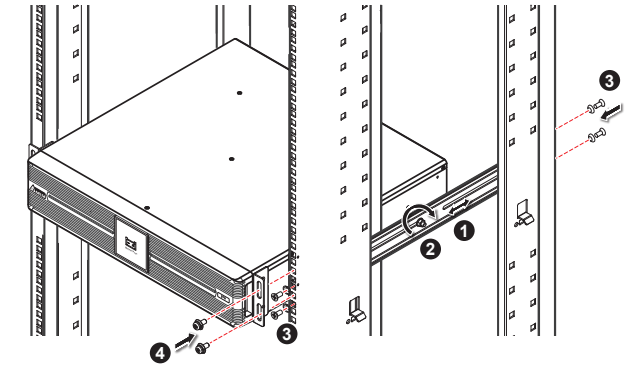
- 1 Attach the included bracket ears to the lateral mounting holes of the Delta external battery pack. See **Figure 2**.



(Figure 2: Mount the Bracket Ears)

- 2 Follow steps 1 to 4 to install the Delta external battery pack in Delta's rail kit (optional). See **Figure 3**.

- Step 1: Adjust the length of the rails according to your rack.
- Step 2: Tighten the rails' nuts.
- Step 3: Fix the rails on your rack.
- Step 4: Insert the Delta external battery pack in your rack and tighten the provided screws.

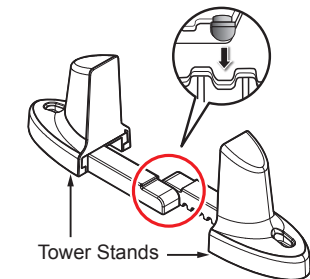


(Figure 3: Insert the Delta External Battery Pack to Your Rack)

**NOTE:** If you want to use a non-Delta rail kit, please only follow step 4.

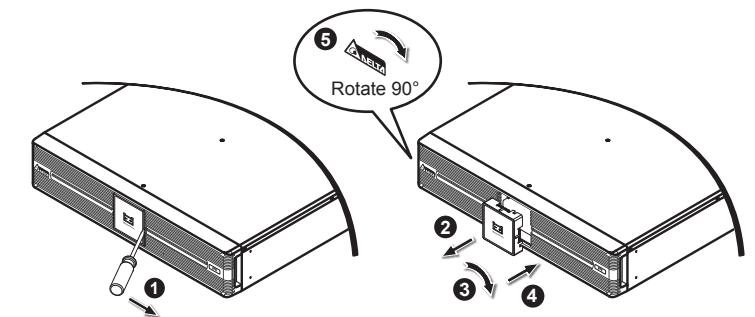
#### • Tower Mounting:

- 1 Assemble the tower stands (optional) by inserting the tenons into the grooves. See **Figure 4**.



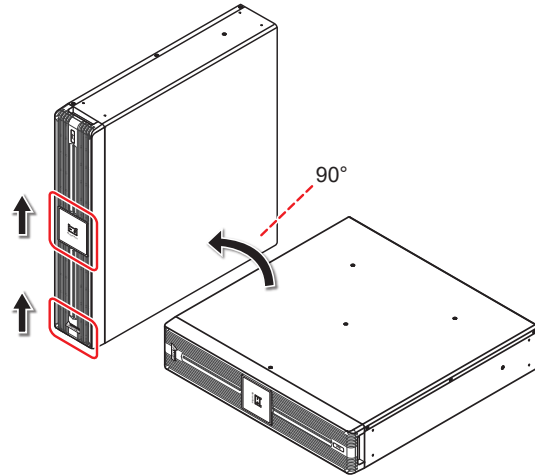
(Figure 4: Assemble the Tower Stands)

- 2 Pull out the Delta external battery pack's control panel (1 & 2), rotate it 90° clockwise (3) and re-insert the control panel (4). After that, rotate the Delta logo nameplate 90° clockwise (5). See **Figure 5**.



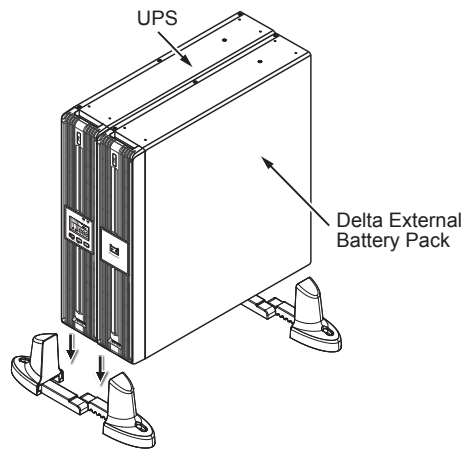
(Figure 5: Rotate the Delta External Battery Pack's Control Panel & Delta Logo Nameplate)

- 3 Carefully lift the Delta external battery pack upright with the Delta logo  and the battery icon  facing up. A minimum of two people are required. See **Figure 6**.



(Figure 6: Place the Delta External Battery Pack Upright)

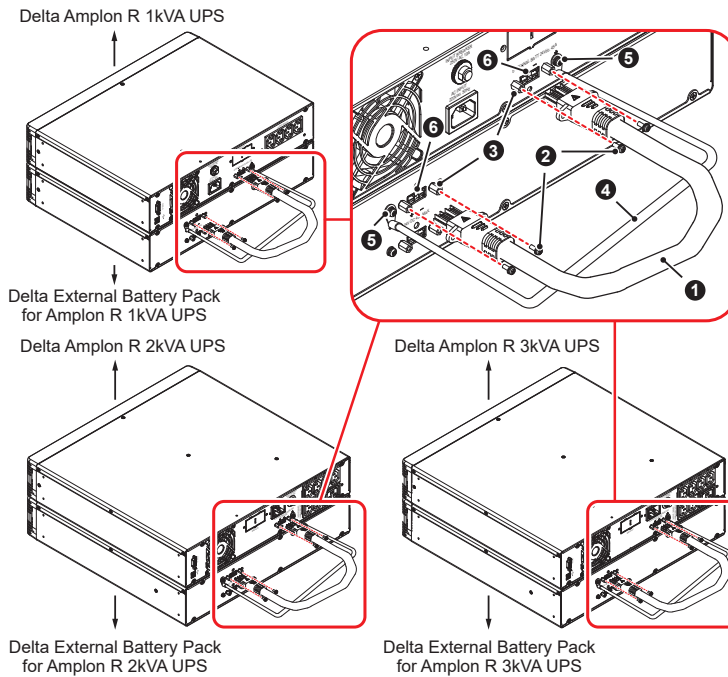
- 4 Place the Delta external battery pack and the UPS inside the tower stands. See **Figure 7**.




(Figure 7: Place the Delta External Battery Pack and the UPS inside the Tower Stands)

• **Connect the Delta External Battery Pack with the UPS**

- 1 Connect one end of the provided battery cable (1) to the external battery connector (6) on the UPS, and connect the other end to the external battery connector (6) on the Delta external battery pack. Make sure that the positive cable (+) connects to the positive pole (+) and the negative cable (-) connects to the negative pole (-). See **Figure 8**.
- 2 Install the two ends of the provided grounding cable (4) on the two grounding screws (5) located beside the UPS and Delta external battery pack's battery connectors (6). Please see **Figure 8**.




(Figure 8: Connect the UPS and the Delta External Battery Pack)


 **NOTE:** There are two identical external battery connectors (6) on the Delta external battery pack, and you may use either of the battery connectors (6) to connect to the UPS.

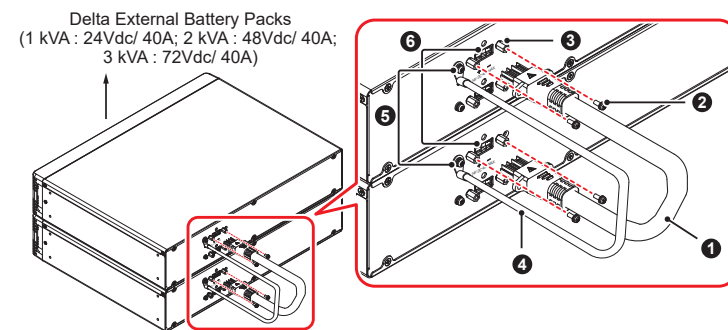
• **Parallel the Delta External Battery Packs**

To extend the backup time, you may parallel the Delta external battery packs before connecting them to the UPS.


 **WARNING:** For parallel application, only use the same type of Delta external battery packs (same material No.).

- 1 Connect the provided battery cable (1) to one of the battery connectors (6) on each Delta external battery pack. Make sure that the positive cable (+) connects to the positive pole (+) and the negative cable (-) connects to the negative pole (-). Please see **Figure 9**.
- 2 Install the two ends of the provided grounding cable (4) on the two grounding screws (5) located beside each Delta external battery pack's battery connector (6). Please see **Figure 9**.

 **NOTE:** If you want to connect more than two Delta external battery packs, follow the steps mentioned above.



(Figure 9: Parallel the Delta External Battery Packs)


 **NOTE:** Once the parallel connection is completed, please refer to the steps mentioned in '**Connect the Delta External Battery Pack with the UPS**' to connect any of the parallel Delta external battery packs to the UPS.

## 5 Operation Procedures

- 1 Follow **Delta Amplon R Series 1/ 2/ 3kVA UPS Installation & Operation Quick Guide** to execute input/ output connection.
- 2 Follow **4 Installation Procedures** to connect the UPS and the Delta external battery pack.
- 3 Follow **Delta Amplon R Series 1/ 2/ 3kVA UPS Installation & Operation Quick Guide** to turn on the UPS.


## 6 Optional Accessories

No.	Item	Function
1	Rail Kit	Mounts the UPS or the external battery pack to your rack and allows easy removal and maintenance.
2	Tower Stand	Mounts the UPS or the external battery pack in an upright position.

 **NOTE:** If you need any rail kit or tower stand for installation, please contact your local dealer or customer service.

## 7 Technical Specifications

Delta External Battery Pack		R-1KB	R-2KB	R-3KB
<b>Applicable to Amplon R Series UPS</b>		1kVA	2kVA	3kVA
<b>Battery</b>	Type	VRLA		
	Q'ty	2 x 2 x 12V/ 9 Ah	2 x 4 x 12V/ 9 Ah	2 x 6 x 12V/ 9 Ah
<b>Dimensions (W x D x H)</b>		440 x 335 x 88 mm	440 x 430 x 88 mm	440 x 565 x 88 mm
<b>Weight</b>		15.2 kg	27.4 kg	39 kg
<b>Environment</b>	Operating Altitude	1000 meters (without derating)		
	Operating Temperature	0 ~ 40°C		
	Relative Humidity	5 ~ 95% (non-condensing)		

 **NOTE:**

1. Please refer to the rating label for the safety rating.
2. All specifications are subject to change without prior notice.

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