



Alpha Sentra XL Battery Pack

User Manual

Document #: 0320000-J0

Effective 04/2012

Alpha Sentra XL Battery Pack

NOTE:

Photographs contained in this manual are for illustrative purposes only. These photographs may not match your installation.

NOTE:

Operator is cautioned to review the drawings and illustrations contained in this manual before proceeding. If there are questions regarding the safe operation of this powering system, contact Alpha Technologies or your nearest Alpha representative.

NOTE:

Alpha shall not be held liable for any damage or injury involving its enclosures, power supplies, generators, batteries, or other hardware if used or operated in any manner or subject to any condition inconsistent with its intended purpose, or if installed or operated in an unapproved manner, or improperly maintained.

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1. Important Safety Instructions

Save These Instructions

This section contains important instructions that must be followed during the installation and maintenance of the equipment and batteries. Read all of the instructions before operating the equipment, and save this manual for future reference.

The following safety symbol is found throughout this manual:



Carefully read all information and abide by the instructions.

The following warning levels are used in conjunction with the symbol:

DANGER: You WILL be KILLED or SERIOUSLY INJURED if instructions are not followed closely.

WARNING: You CAN be KILLED or SERIOUSLY INJURED if instructions are not followed closely.

CAUTION: You CAN be INJURED or equipment can be DAMAGED if instructions are not followed closely.

Battery Safety

Servicing and connection of batteries must be performed by, or under the direct supervision of, trained personnel knowledgeable of batteries and the required safety precautions.



CAUTION: Follow battery manufacturer's safety recommendations when working around battery systems.



CAUTION: Batteries are hazardous to the environment and should be disposed of safely at a recycling facility. Consult the battery manufacturer for recommended local authorized recyclers.



CAUTION: Do Not Dispose of Battery or Batteries in an open 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 – the battery circuit is not isolated from AC, a 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. Observe the following precautions when working on batteries:

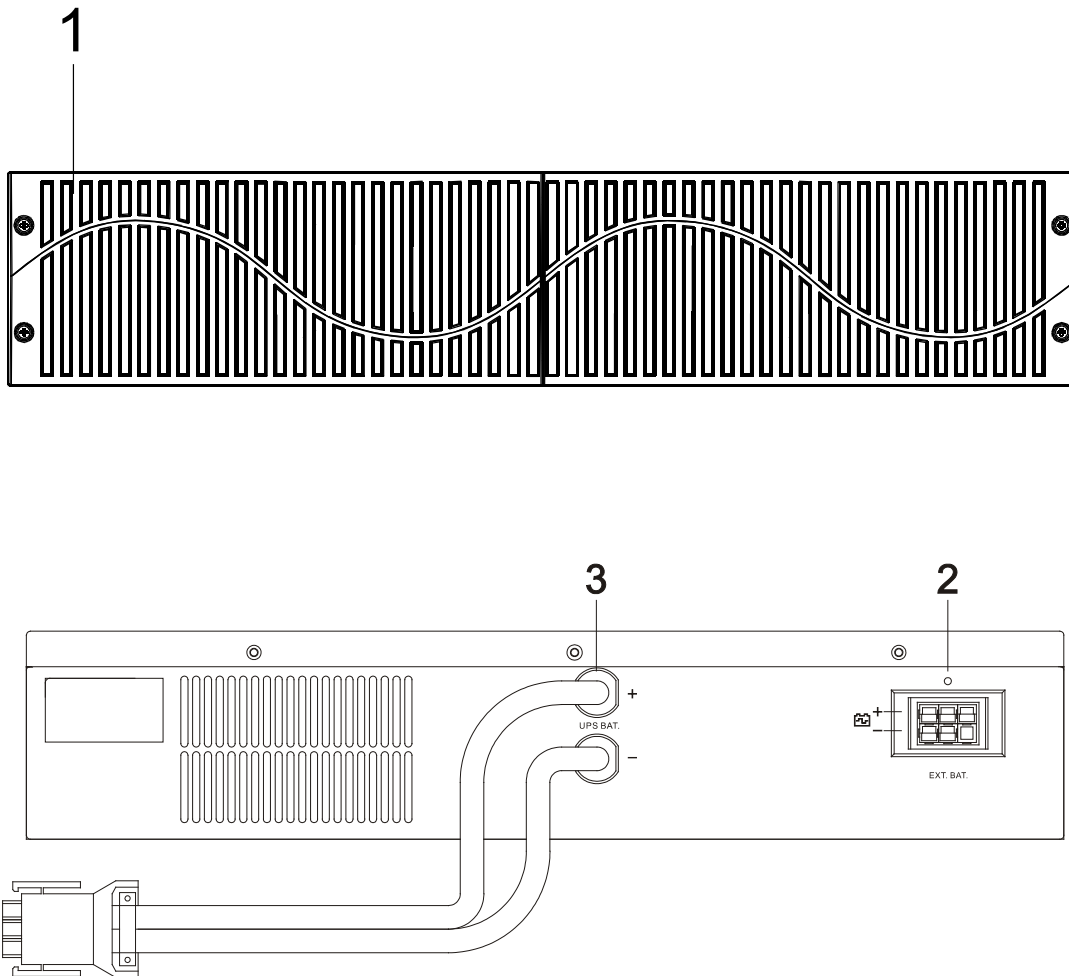
- Remove watches, rings, or other metal objects.
- Use tools with insulated handles.
- Wear rubber gloves and boots.
- Do not lay tools or metal parts on top of batteries.
- Disconnect charging source prior to connecting or disconnecting battery terminals.

- This battery pack is intended to be connected to an UPS. There will be a DC voltage at the connector terminals.
- 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 pack, keep all ventilation openings free from obstruction and do not place any foreign objects on top of the battery pack. Keep the battery pack 20 cm (8 in) away from the wall.
- Make sure the battery pack is installed within the proper environment as specified – ambient 0-40°C (32-104°F) and 30-90% non-condensing humidity.
- Do not install the battery pack under direct sunlight. Your warranty will be void if the batteries fail due to overheating.
- This battery pack is designed for indoor use only.
- This battery pack is not designed for use in dusty, corrosive and salty environment.
- The warranty for this battery pack will be void if water or other liquid is spilt or poured directly onto the battery pack. Similarly we do not warrant any damage to the battery pack if foreign objects are deliberately or accidentally inserted into the battery pack enclosure.
- The battery will discharge naturally if the system is unused for a period of time. It should be recharged every two to three 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.
- When replacing batteries, always replace with the same quantity, type and capacity.

2. Introduction to the Front and Rear Panel

2.1. Front and Rear Panel Descriptions

| | | |
|---|--------------|---|
| 1 | Front Cover | To replace batteries, remove the front covers and the screws inside the covers. |
| 2 | EXT.BAT. +/- | To the DC terminal of the 2nd(or next) connected battery pack |
| 3 | UPS BAT. +/- | To the UPS DC terminal or the next battery pack. |



3. Installation and Operation

Note: The packing condition and the external outlook of the unit should be inspected carefully before installation. Retain the packing material for future use.

3.1. Unpacking

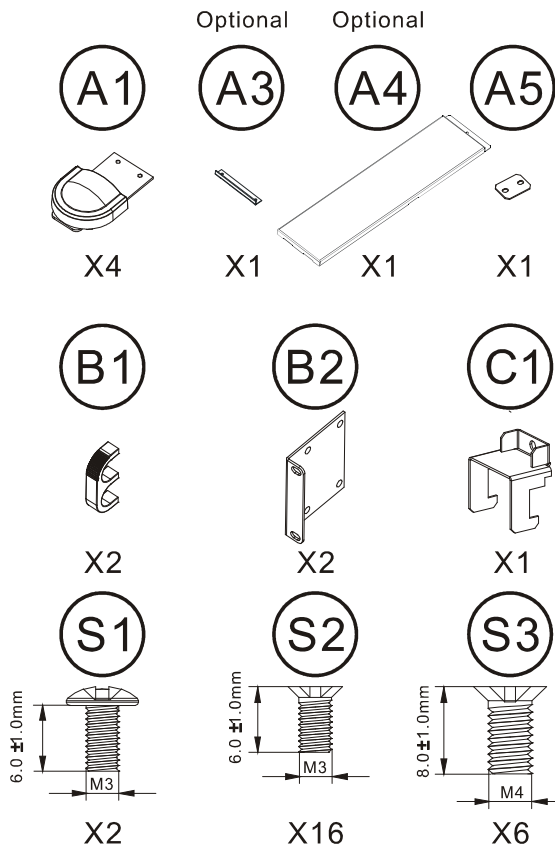
1. Take the battery pack out of the foam.
2. Remove the packing materials.



WARNING: The battery pack module is approximately 32 to 36 kgs (70 to 80 lbs); be cautious when unpacking and lifting the unit to avoid injury.

A standard package includes the following:

- User manual
- Accessories shown below for tower and rack mount

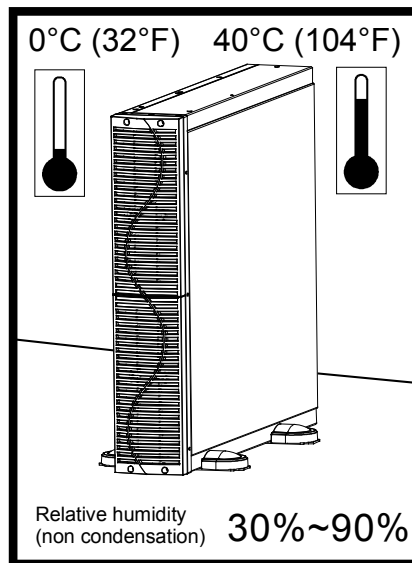
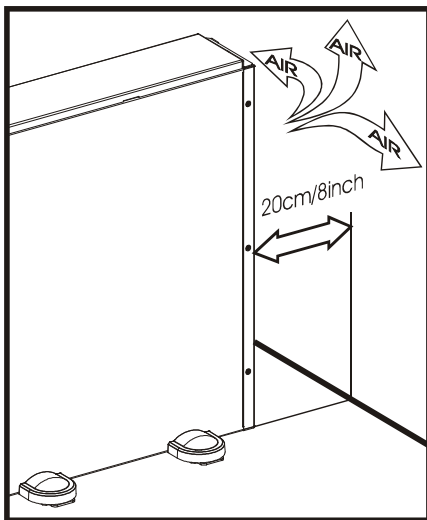


3.2. Selecting Installation Position

The battery cable is provided with an 8 inch cable. Plan to install the battery pack within 3 to 4 inches from the UPS or another battery pack.

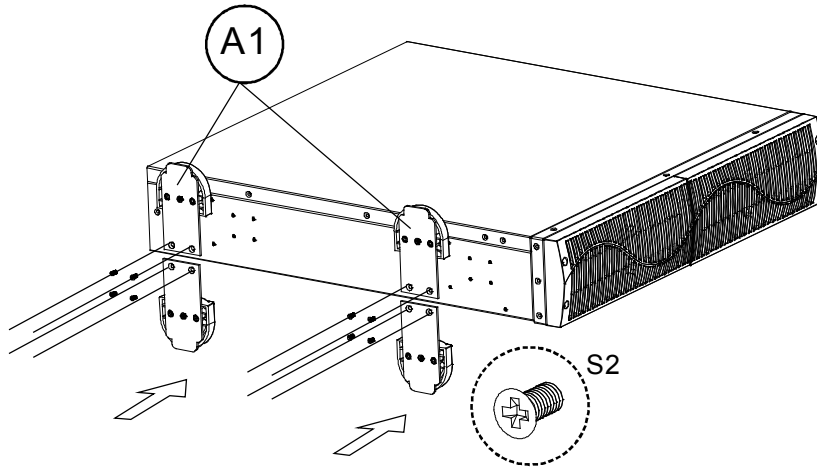
It is necessary to select a proper environment to install the unit, in order to minimize the possibility of damage to the battery pack and extend the life of the batteries. Please follow the instructions below:

1. Keep at least 20cm (8 inches) clearance from the rear panel of the battery pack 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 battery pack working specifications to avoid overheat and excessive moisture.
4. Do not place the battery pack in a dusty or corrosive environment or near any flammable objects.
5. This battery pack is not designed for outdoor use.

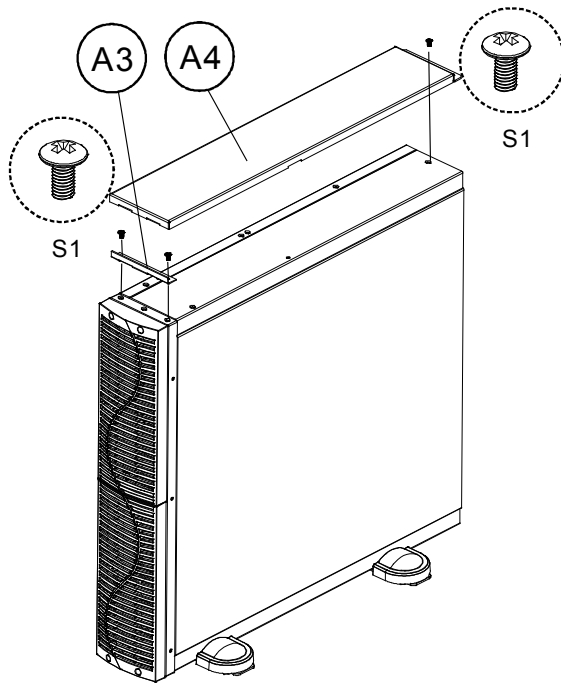


3.2.1. Tower Installation – Standalone Unit

STEP 1

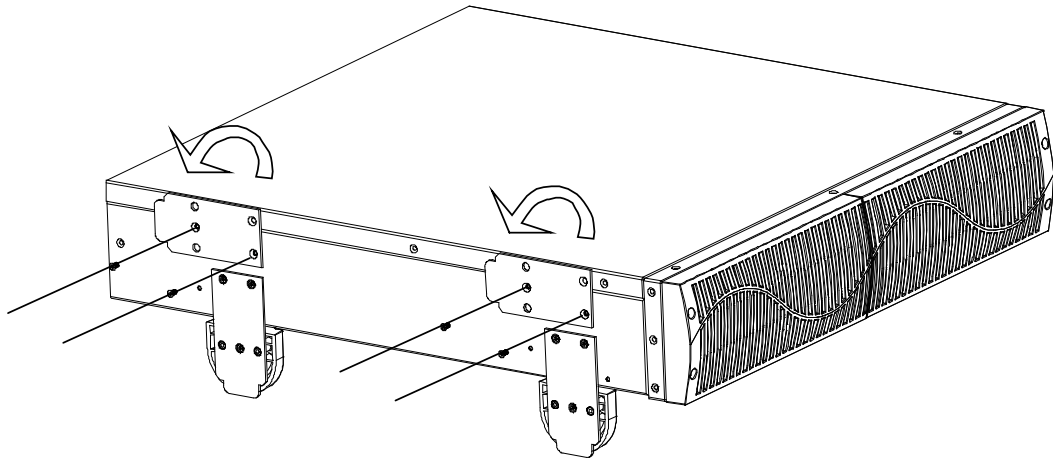


STEP 2

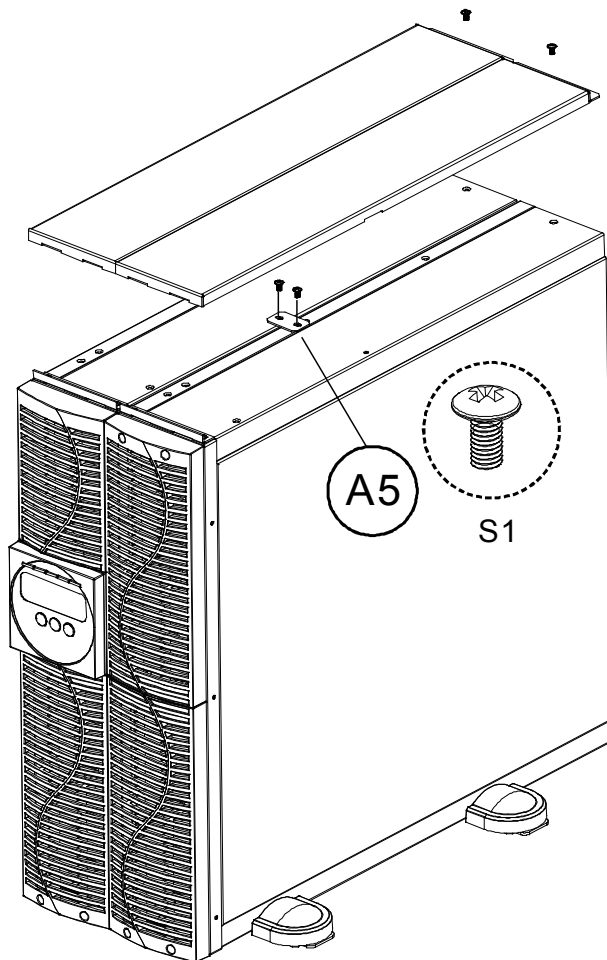


3.2.2. Tower Installation – Combined with UPS

STEP 1

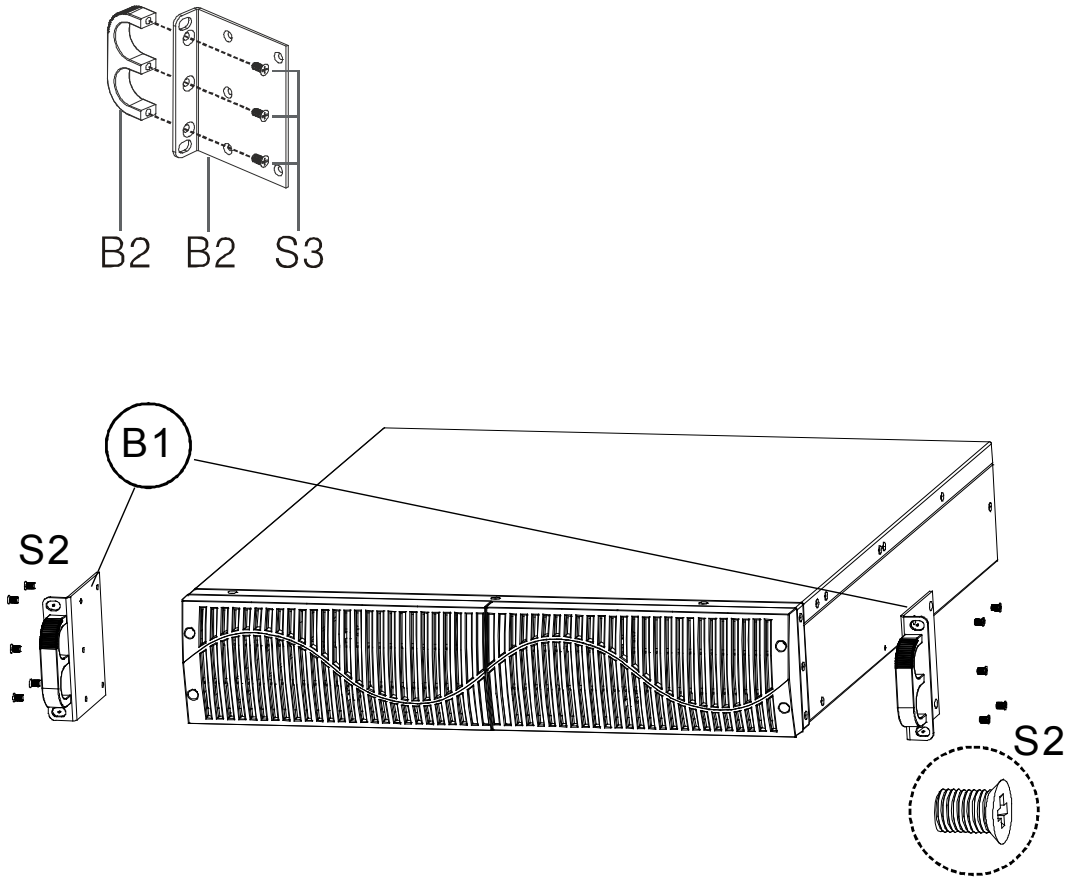


STEP 2

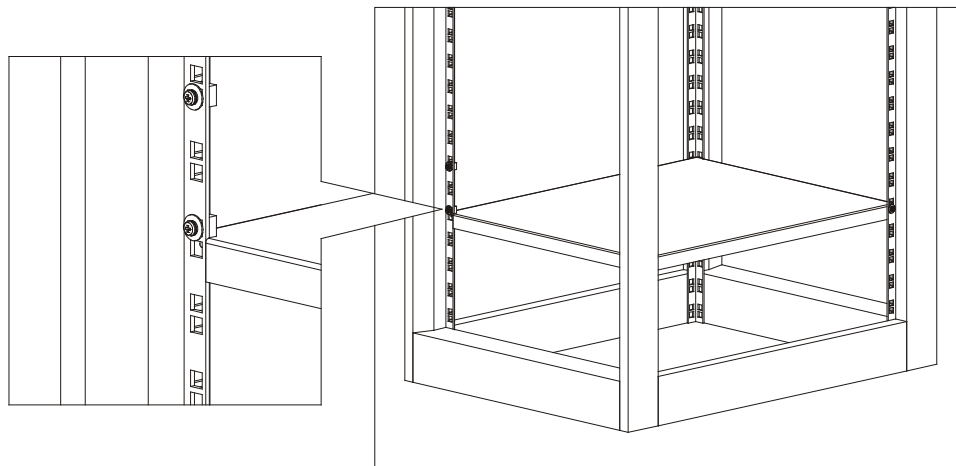


3.2.3. Rack Mount installation

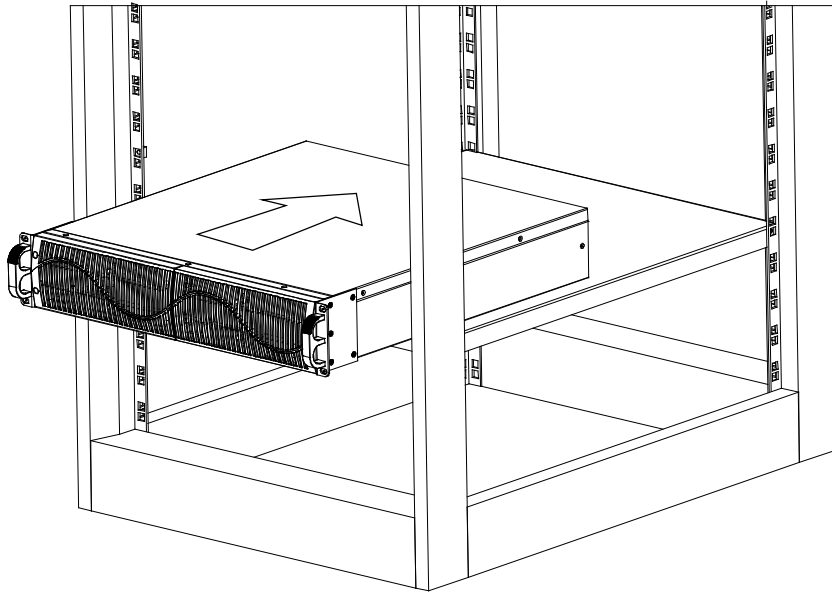
STEP 1



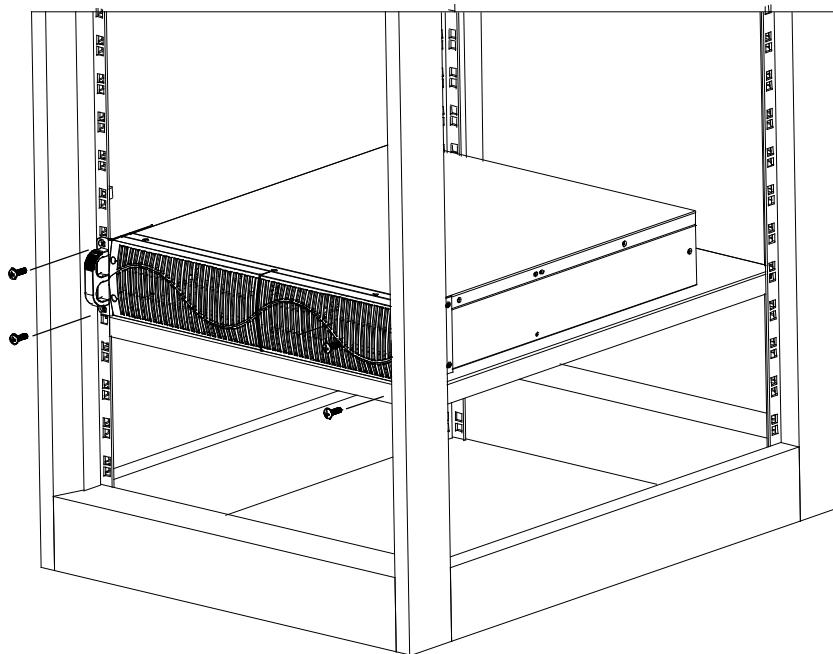
STEP 2



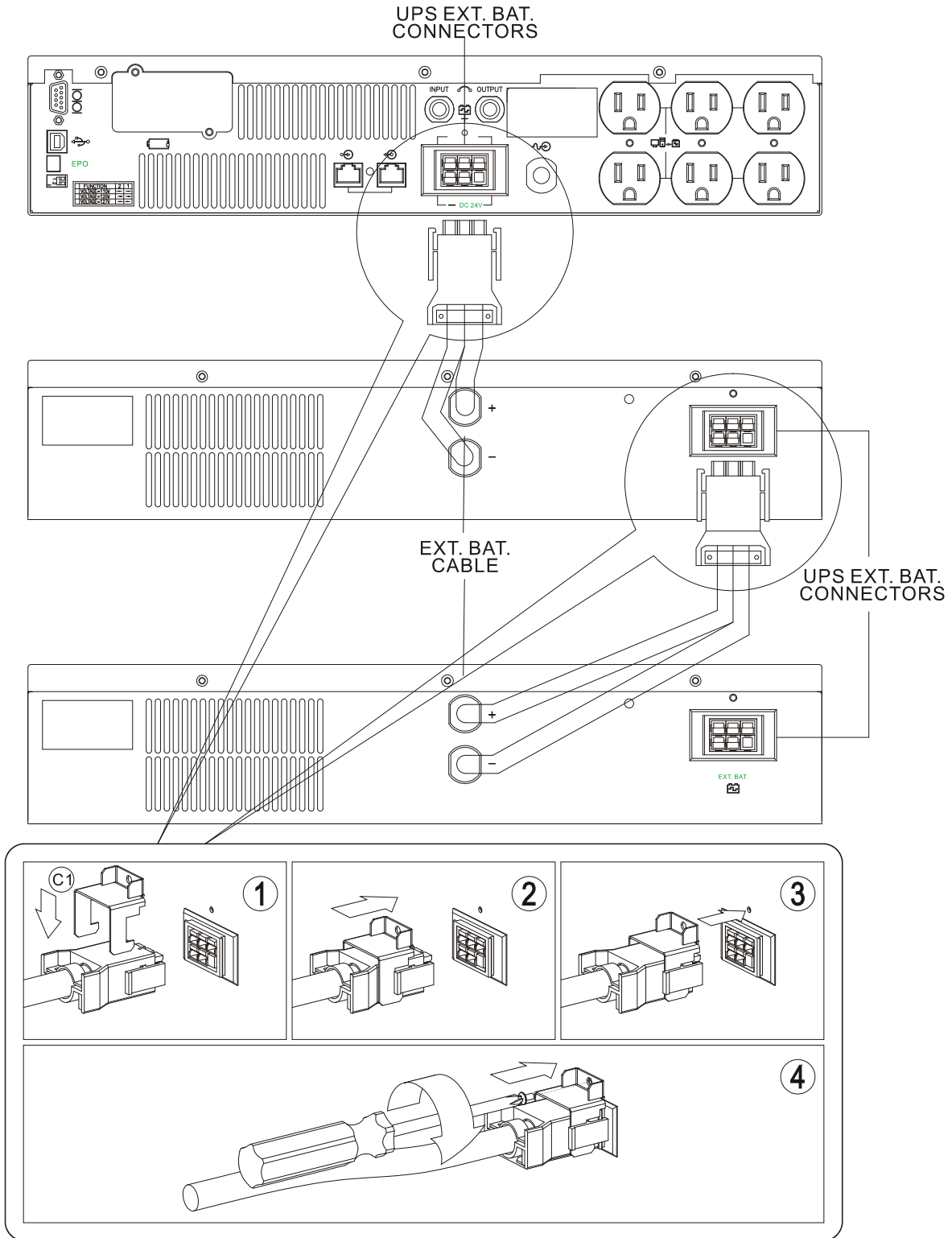
STEP 3



STEP 4



3.2.4. Connect DC Cable

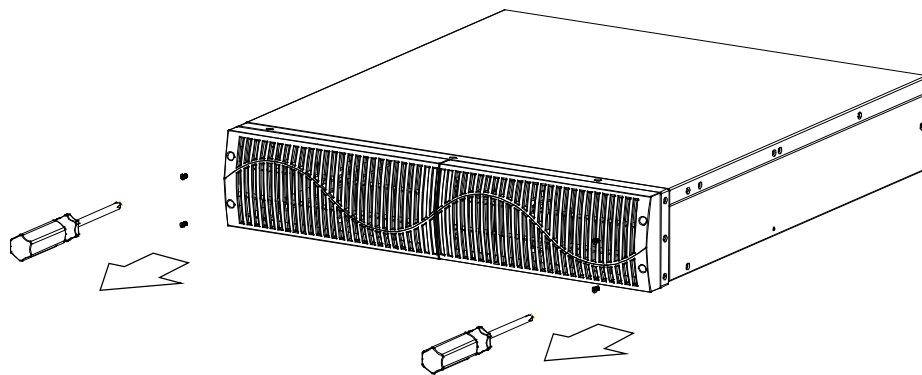


3.2.5. Storage Instruction

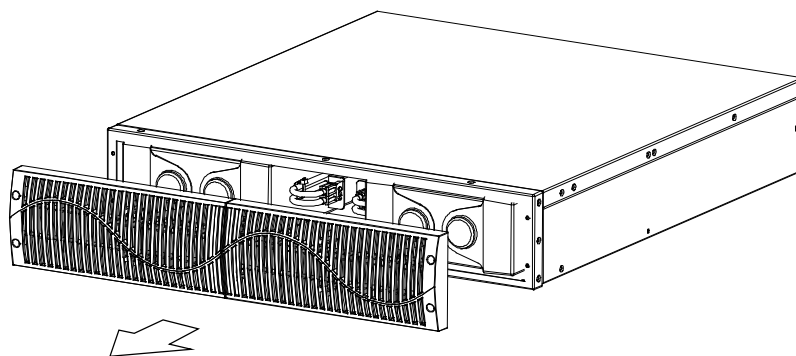
For extended storage in a moderate climate (-5 to +30 °C / 23 to +86 °F), the batteries should be charged for 12 hours every 6 months by plugging in to a UPS. Repeat this every 3 months at higher temperatures (+30 to +45 °C / +86 to +113 °F). Do not store batteries under conditions that are outside of this range.

3.2.6. Replacing the Battery

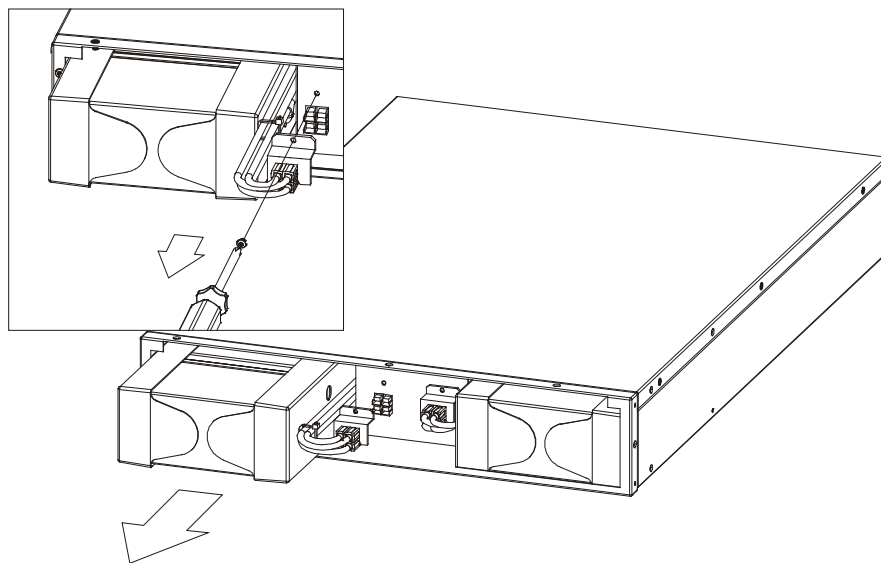
STEP 1



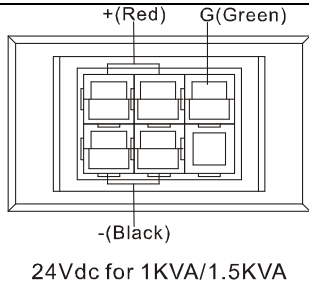
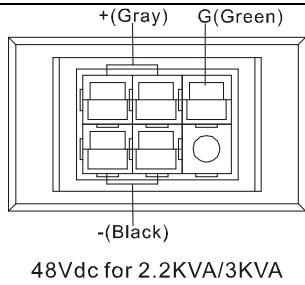
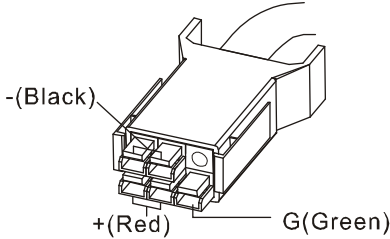
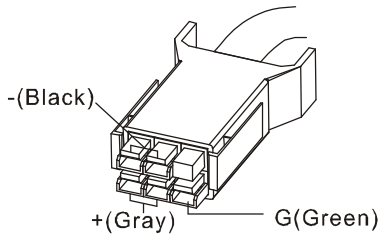
STEP 2



STEP 3



3.3. Specification

| UPS | 1000VA | 1500VA | 2200VA | 3000VA |
|--------------------------|--|-------------------|---|-------------------|
| Battery Pack Model | BP Sentra XL 1000 | BP Sentra XL 1500 | BP Sentra XL 2200 | BP Sentra XL 3000 |
| Part Number | 0320000-001 | 0320001-001 | 0320002-001 | 0320003-001 |
| Nominal System Voltage | 24VDC | 24VDC | 48VDC | 48VDC |
| Battery Quantity | 8 | 8 | 8 | 8 |
| Battery Type | 7Ah | 9Ah | 7Ah | 9Ah |
| Max. Charge Current | 8.4A | 10.8A | 4.2A | 5.4A |
| Connector color | Red (+) , Black (-) | | Gray (+) , Black (-) | |
| DC Sockets Diagram |  <p>24Vdc for 1KVA/1.5KVA</p> | |  <p>48Vdc for 2.2KVA/3KVA</p> | |
| DC Plug Diagram |  | |  | |
| Dimensions W x D x H, mm | | | | |
| Unit | 440 x 482 x 88 | | | |
| Shipping | 560 x 675 x 228 | | | |
| Weight, kg | | | | |
| Unit | 29 | 33.4 | 29 | 33.4 |
| Shipping | 32 | 36.4 | 32 | 36.4 |

3.4. Recycling the Used Battery



Contact your local recycling or hazardous waste center for information on proper disposal of the used battery

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