



Wall-Mount Rack (1 Battery) Installation Instructions

NOTICE:

Install the system in a sheltered, weather-protected location inaccessible to the general public.



CAUTION!

The installer must verify the wall is capable of supporting the loaded rack. Direct mounting to a wall stud or equivalent is required.

Tools and Materials:

- Two user-supplied 5/16" x 3" (or metric equivalent) lag bolts
- User-supplied grounding wire (of sufficient length for application)
- Drill with 1/4" (or metric equivalent) drill bit
- Ratchet with 1/2" and 5/16" (or metric equivalent) sockets
- Level
- 1" Torque Wrench
- Stud finder (optional)
- Tape measure (optional)

Installation Procedure:

- 1. See Fig. 1 for the dimensions of the shelf. Select a location that allows sufficient clearance on the top, bottom and sides for cabling and ventilation required for the installation.
- 2. Locate one stud and drill pilot hole. Install first user-supplied 5/16" lag bolt and hang the shelf using keyslot. Mark and drill second hole in a stud and install second lag bolt. Secure both lag bolts once shelf is positioned.
- 3. To install an SPI, use either of the two SPI mounting holes on the top of the rack. Place the SPI so that the seizure screw is facing up. Tighten the SPI to 130 in-lbs (14.5 Nm) of torque.

IMPORTANT:

For proper operation of the Power Supply and Communications Module, external grounding of the rack is required.

- Verify the power supply is connected to the rack grounding connection. The power supply connects to a ground stud <u>∧</u> in Fig. 1. Follow the proper stack-up as shown in Fig. 2 to attach the supplied #10-32 nut, lock washer, flat washer, and supplied ground wire.
- 5. Verify the rack is connected to ground via either of the #10-32 ground studs △ in Fig. 1, and a user-supplied ground wire. Follow the proper stack-up as shown in Fig. 2 to attach the supplied #10-32 nut, lock washer, flat washer, and customer supplied ground wire. Refer to applicable codes to determine additional grounding requirements.





Fig. 1, Mounting hole layout





For installation and connection, refer to the power supply's technical manual at www.alpha.com or www.alpha-outback-energy.com





Wall-Mount Rack (2 Battery) Installation Instructions

NOTICE:

Install the system in a sheltered, weather-protected location inaccessible to the general public.



CAUTION!

The installer must verify the wall is capable of supporting the loaded rack. Direct mounting to a wall stud or equivalent is required.

Tools and Materials:

- Three user-supplied 5/16" x 3" (or metric equivalent) lag bolts
- User-supplied grounding wire (of sufficient length for application)
- Drill with 1/4" (or metric equivalent) drill bit
- Ratchet with 1/2" and 5/16" (or metric equivalent) sockets
- Level
- 1" Torque Wrench
- Stud finder (optional)
- Tape measure (optional)

Installation Procedure:

- 1. See Fig. 3 for the dimensions of the shelf. Select a location that allows sufficient clearance on the top, bottom and sides for cabling and ventilation required for the installation.
- 2. Locate one stud and drill a pilot hole. Install the first user-supplied 5/16" lag bolt and hang the rack using the keyslot. Mark and drill the second and third center-line holes in the stud and install the second and third lag bolts. Tighten all lag bolts once the rack is positioned.
- 3. To install an SPI, use either of the two SPI mounting holes on the top of the rack. Place the SPI so that the seizure screw is facing up. Tighten the SPI to 130 in-lbs (14.5Nm) of torque.

IMPORTANT:

For proper operation of the Power Supply and Communications Module, external grounding of the rack is required.

- 4. Verify the power supply is connected to the rack grounding connection. The power supply connects to the left ground stud \wedge in Fig. 3. Follow the proper stack-up as shown in Fig. 4 to attach the supplied #10-32 nut, lock washer, flat washer, and supplied ground wire.
- 5. Verify the rack is connected to ground via either of the #10-32 ground studs \triangle in Fig. 3, and a user-supplied ground wire. Follow the proper stack-up as shown in Fig. 4 to attach the supplied #10-32 nut, lock washer, flat washer, and customer supplied ground wire. Refer to applicable codes to determine additional grounding requirements.



Fig. 3, Mounting hole layout









Wall-Mount Shelf (Small) Installation Instructions

NOTICE:

Install the system in a sheltered, weather-protected location inaccessible to the general public.



CAUTION!

The installer must verify the wall is capable of supporting the loaded rack. Direct mounting to a wall stud or equivalent is required.

Tools and Materials:

- Four user-supplied 5/16" x 3" (or metric equivalent) lag bolts
- User-supplied 1/2" thick sheet of plywood
- User-supplied grounding wire (of sufficient length for application)
- Drill with 1/4" (or metric equivalent) drill bit
- Ratchet with 1/2" and 5/16" (or metric equivalent) sockets
- Level
- 1" Torque Wrench
- Stud finder (optional)
- Tape measure (optional)

Installation Procedure:

- 1. See Fig. 5 for the dimensions of the shelf. Select a location that allows sufficient clearance on the top, bottom and sides for cabling required for the installation.
- 2. Using the back of the shelf as a template, cut a piece of 1/2" plywood and mark and drill pilot holes for the keyslot.
- 3. Locate one stud and a drill pilot hole. Install the first user-supplied 5/16" lag bolt and hang the shelf and plywood behind it using the keyslot. Drill the second hole through the plywood and into the stud and install the second lag bolt. Drill the top left and right holes in the plywood though the shelf and install the 3rd and 4th lag bolts. Tighten all lag bolts once the shelf is positioned.

IMPORTANT:

For proper operation of the Power Supply and Communications Module, external grounding of the shelf is required.

- 4. Install the SPI to the SPI bracket and torque to 130 in-lbs (14.5 Nm). Follow the proper stack-up as shown in Fig. 6 and mount the SPI bracket onto either of the #10-32 studs 🖄 in Fig. 5, and tighten the supplied #10-32 nut, lock washer, and flat washer.
- Verify the power supply is connected to the shelf grounding connection. The power supply connects to the ground stud <u>1</u> in Fig. 5. Follow the proper stack-up as shown in Fig. 7 to attach the supplied lock washer, #10-32 nut and supplied ground wire.
- Verify the shelf is grounded via the unused #10-32 ground stud <u>h</u> in Fig. 5, and a user-supplied ground wire. Follow the proper stack up as shown in Fig. 7 to attach the supplied lock washer, #10-32 nut and customer supplied ground wire. Refer to applicable codes to determine additional grounding requirements.







 $\cancel{1}$ #10-32 ground stud $\cancel{2}$ #10-32 SPI mounting bracket / ground stud $\cancel{3}$ SPI





Fig. 6, SPI Hardware stack up

Fig. 7, Ground wire stack up

For installation and connection, refer to the power supply's technical manual at www.alpha.com or www.alpha-outback-energy.com





Wall-Mount Shelf (Large) Installation Instructions

Install the system in a sheltered, weather-protected location inaccessible to the general public.



CAUTION!

The installer must verify the wall is capable of supporting the loaded rack. Direct mounting to a wall stud or equivalent is required.

Tools and Materials:

- Four user-supplied 5/16" x 3" (or metric equivalent) lag bolts
- User-supplied 1/2" thick sheet of plywood
- User-supplied grounding wire (of sufficient length for application)
- Drill with 1/4" (or metric equivalent) drill bit
- Ratchet with 1/2" and 5/16" (or metric equivalent) sockets
- Level
- 1" Torque Wrench
- Stud finder (optional)
- Tape measure (optional)

Installation Procedure:

- 1. Refer to Fig 8 for the shelf dimensions. Select a location that allows sufficient clearance on the top, bottom and sides of the shelf for cabling required for the installation.
- 2. Using the back of the shelf as a template, cut a piece of 1/2" plywood and mark and drill pilot holes for the keyslot.
- 3. Locate one stud and a drill pilot hole. Install the first user-supplied 5/16" lag bolt and hang the shelf and plywood behind it using the keyslot. Drill the second hole through the plywood and into the stud and install the second lag bolt. Drill the top left and right holes in the plywood though the shelf and install the 3rd and 4th lag bolts. Tighten all lag bolts once the shelf is positioned.

IMPORTANT:

For proper operation of the Power Supply and Communications Module, external grounding of the shelf is required.

- 4. Install the SPI to the SPI bracket and torque to 130 in-lbs (14.5 Nm). Follow the proper stack-up as shown in Fig. 9 and mount the SPI bracket onto either of the #10-32 studs and tighten the supplied #10-32 nut, lock washer, and flat washer.
- Verify the power supply is connected to the shelf grounding connection. The power supply connects to the ground stud <u>A</u> in Fig. 8. Follow the proper stack-up as shown in Fig. 10 to attach the supplied lock washer, #10-32 nut and supplied ground wire.
- Verify the shelf is grounded via the unused #10-32 ground stud <u>h</u> in Fig. 8, and a user-supplied ground wire. Follow the proper stack up as shown in Fig. 10 to attach the supplied lock washer, #10-32 nut and customer supplied ground wire. Refer to applicable codes to determine additional grounding requirements.





 $\binom{1}{1}$ #10-32 ground stud

2 #10-32 SPI mounting bracket / ground stud

∕₃ SPI





Fig. 9, SPI Hardware stack up

Fig. 10, Ground wire stack up

Worldwide Corporate Offices				
Africa africa@alpha-outback-energy.com				

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