Battery Sense Wire Kit Field Installation Instructions for 36V and 48V Applications

The following wiring diagrams detail installation of common Alpha® Battery Sense Wire Kits in XM2 and XM3 power supplies. Actual battery placement will vary depending upon enclosure used. Battery No. 1 is connected to the power supply's negative terminal and to the negative battery sense wire; it is your string reference. Batteries are numbered from right to left.



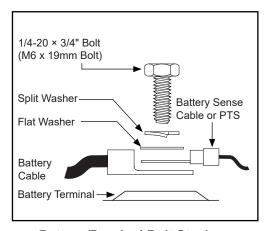
CAUTION!

Incorrect wiring will damage equipment.



NOTICE:

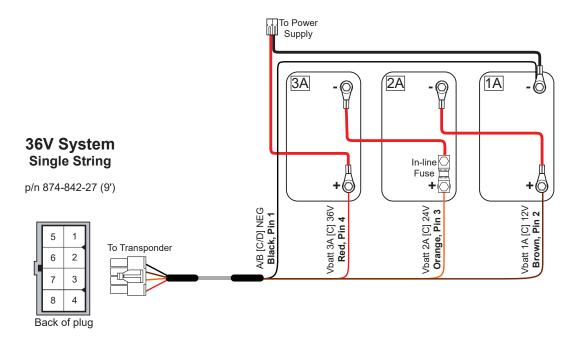
For proper hardware measurements, refer to the Battery Terminal Bolt Stack-up diagram below for AlphaCell® 240XTV, 195XTV or 150XTV batteries. If using AlphaCell® 100XTV or XTV 18V4 batteries, refer to bolt measurements on page 4.

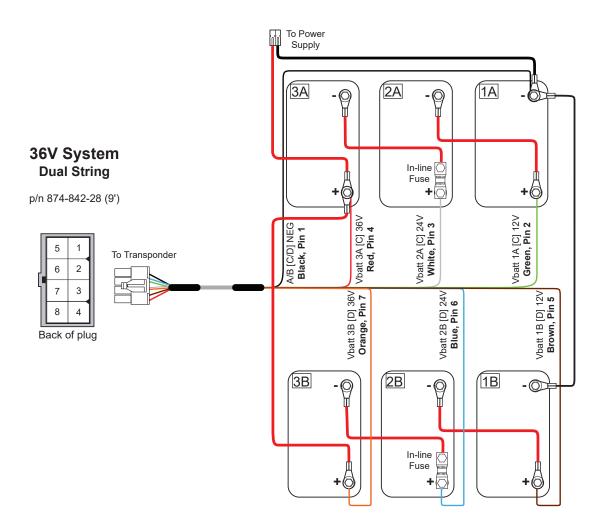


1/4-20 × 1 1/4" Bolt (M6 × 30mm Bolt) 1/4-20 Nut Split Washer Flat Washer Split Washer Flat Washer Battery Cable Fuse Flat Washer 譽 Battery Sense - 1/4-20 × 3/4" Bolt Cable or PTS Spacer **Battery Terminal**

Battery Terminal Bolt Stack-up

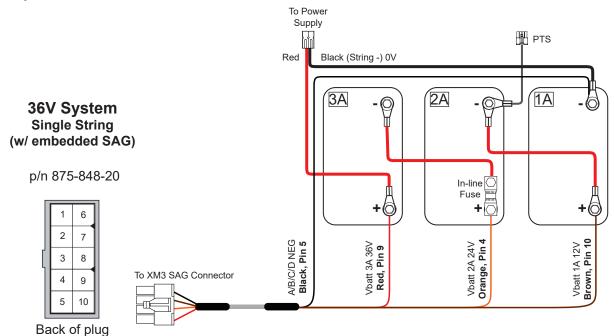
Fuse Bolt Stack-up





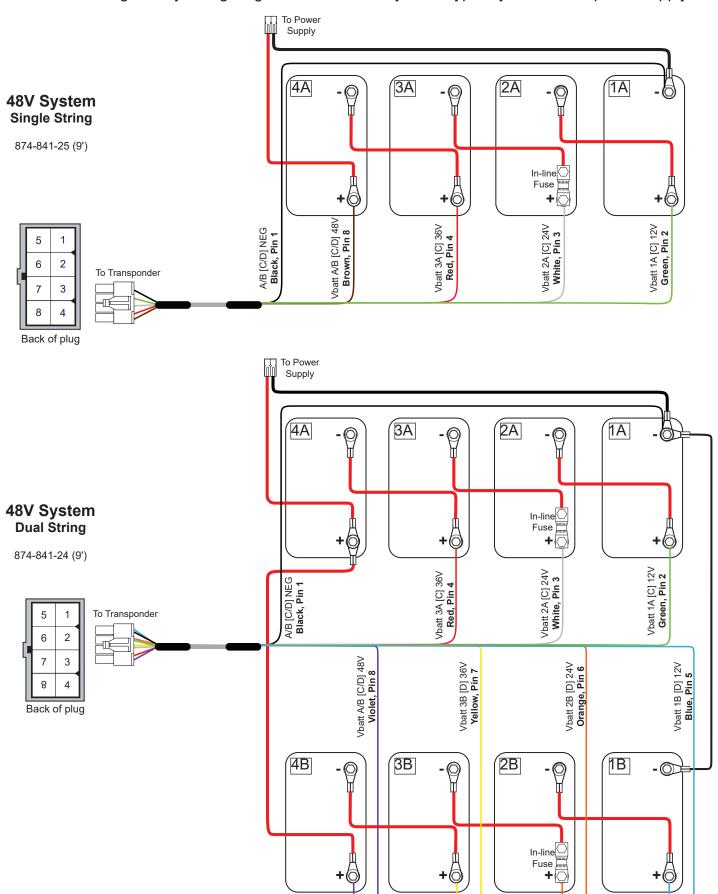
NOTICE:

The following battery wiring diagram features a Smart AlphaGuard™ (SAG) option for 36V systems.



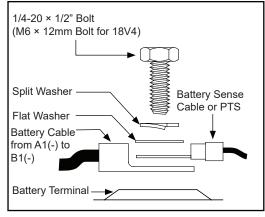


The following battery wiring diagrams are for 48V systems typically for an XM2 power supply.

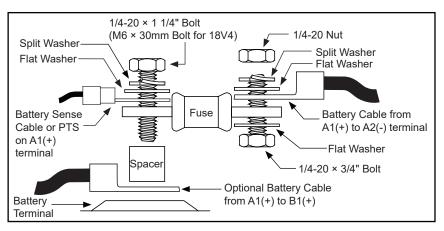




The following battery wiring diagrams are for AlphaCell® XTV 18V4 batteries.



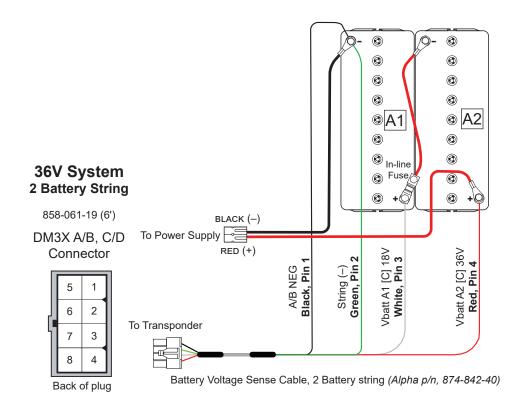
Battery Terminal Bolt Stack-up (for 18V4 batteries)

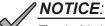


Fuse Bolt Stack-up (for 18V4 batteries)

NOTICE:

The AlphaCell® XTV 18V4 does not support the Smart AlphaGuard™ (SAG) battery charge management function. The SAG functionality will be disabled in XM3 power supplies configured with Platform 14 (1.14.0) firmware code. To avoid possible alarms, the SAG should be disconnected and the sense harness replaced with a standard DSM harness connected to the Battery A/B, C/D connector on the DM3X. If the SAG is still installed, selecting the 18V battery will result in a SAG Compatibility alarm.





Each AlphaCell® XTV 18V4 is shipped with a jumper cable to be used in dual string configurations.

