

AlphaGuard™ AG/CMT Installation Instructions

Features:

- Patented technology extends battery life and improves capacity
- Each battery receives the precise voltage required to maintain optimum charge
- Replace single batteries as they fail, not the entire string
- Spreads charge voltage equally across batteries – batteries no longer need to be matched
- Maintains battery voltage as they age
- Passes individual battery voltages to status monitoring equipment



Charge Management Technology (CMT)

The AlphaGuard installs directly on top of one of the batteries in the string. A wire harness connects the AlphaGuard to each of the batteries in the string. Both 36V (3 battery) and 48V (4 battery) versions are available. One AlphaGuard is required per battery string. The AlphaGuard performs electrical compensation for differences in individual batteries in the string. The unit can be configured to pass measurements from the battery string to a status monitoring device (EDSM card, DOCSIS transponder, etc.) via an interface cable.

<u>Model</u>	<u>Description</u>
AG-CMT-3SC	AlphaGuard manages 3 batteries*
AG-CMT-4SC	AlphaGuard manages 4 batteries*

* Includes 6' battery cables

IMPORTANT SAFETY INSTRUCTIONS

SAVE THESE INSTRUCTIONS: This document contains important instructions for the AlphaGuard that should be followed during the installation.



WARNING!

- Before making connection to batteries, refer to the battery manufacturer's installation manual and maintenance instructions.
- Before making connection to a power supply, refer to the power supply manufacturer's installation instructions.



CAUTION!

The AlphaGuard requires ventilation for proper operation and optimum life. Do not place in a location that blocks the vents, or in a position that allows it to fall between batteries.



CAUTION!

Standby power is not available while the batteries are disconnected.

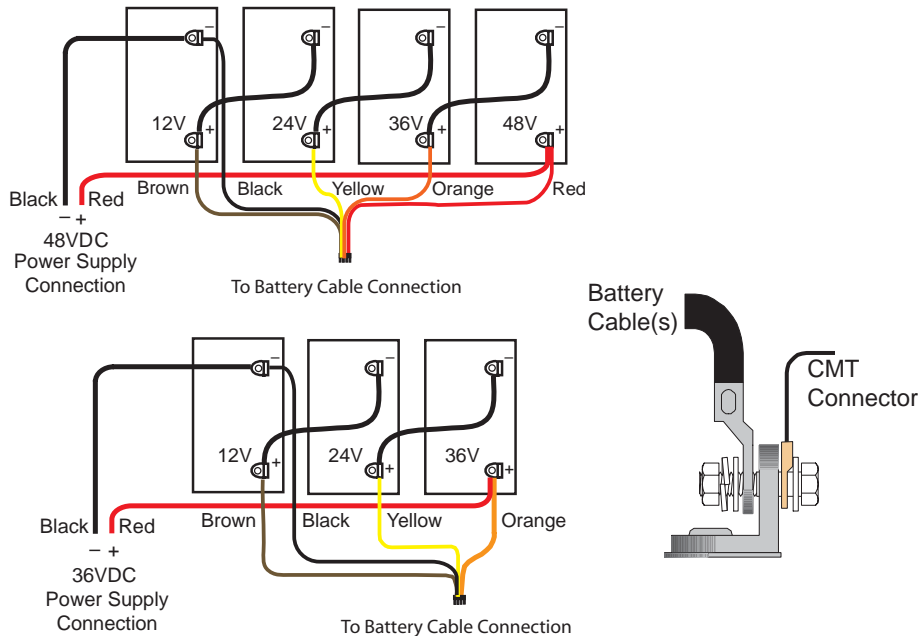
AlphaGuard Wire Harness Installation

1. Set the BATTERY BREAKER to the OFF position.
2. Unplug the battery pack from the power supply.
3. From the diagram below, select the battery pack voltage that matches your installation.
4. Connect the AlphaGuard wire harness to the battery pack (see chart below). Torque to battery manufacturer's recommendations.
5. Reconnect battery pack to the power supply, and set the BATTERY BREAKER to the ON position.
6. Connect the wire harness to the front of the AlphaGuard box. Verify Status Indicator LED is lit.



NOTE:

LED illuminates at 38.6V for 36V strings and 51.4V for 48V strings.



CAUTION!

When using the **Battery Monitoring Cable** with *XM Power Supply* and *external Alpha DOCSIS Transponder*, clip the black wire from the cable kit at both ends.

Battery Monitoring Cable Installation

1. Insert one end of the battery monitoring cable into the Voltage Sense connector on the front of the AlphaGuard.
2. Connect the other end of the monitoring cable into the AUX connector on the front of the EDSM, or to the BATT connector on a external DOCSIS transponder.
3. Verify battery wire kit is properly connected.
4. Press and hold the STAT button on the EDSM until the RDY LED lights; when you release, all LEDs will blink.
5. Verify Status Indicator LED on the AlphaGuard is on steady.



Battery Cable Connection Status Indicator LED Voltage Sense Connection

Battery Monitoring Cables

Single String, 9', 36/48V:	Alpha P/N 875-510-20
Dual String, 9', 36/48V:	Alpha P/N 875-510-21
Single String, 35', 36/48V:	Alpha P/N 875-510-23
Dual String, 35', 36/48V:	Alpha P/N 875-510-22

For general product information and customer service (7 AM to 5 PM, Pacific Time), call

1-800-863-3930,

For complete technical support, call

1-800-863-3364

7 AM to 5 PM, Pacific Time or 24/7 emergency support

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