

Paralleling Xantrex Batteries Application Note

976-0456-01-01
Rev A

⚠️ DANGER

HAZARD OF FIRE, ELECTRIC SHOCK, EXPLOSION, OR ARC FLASH

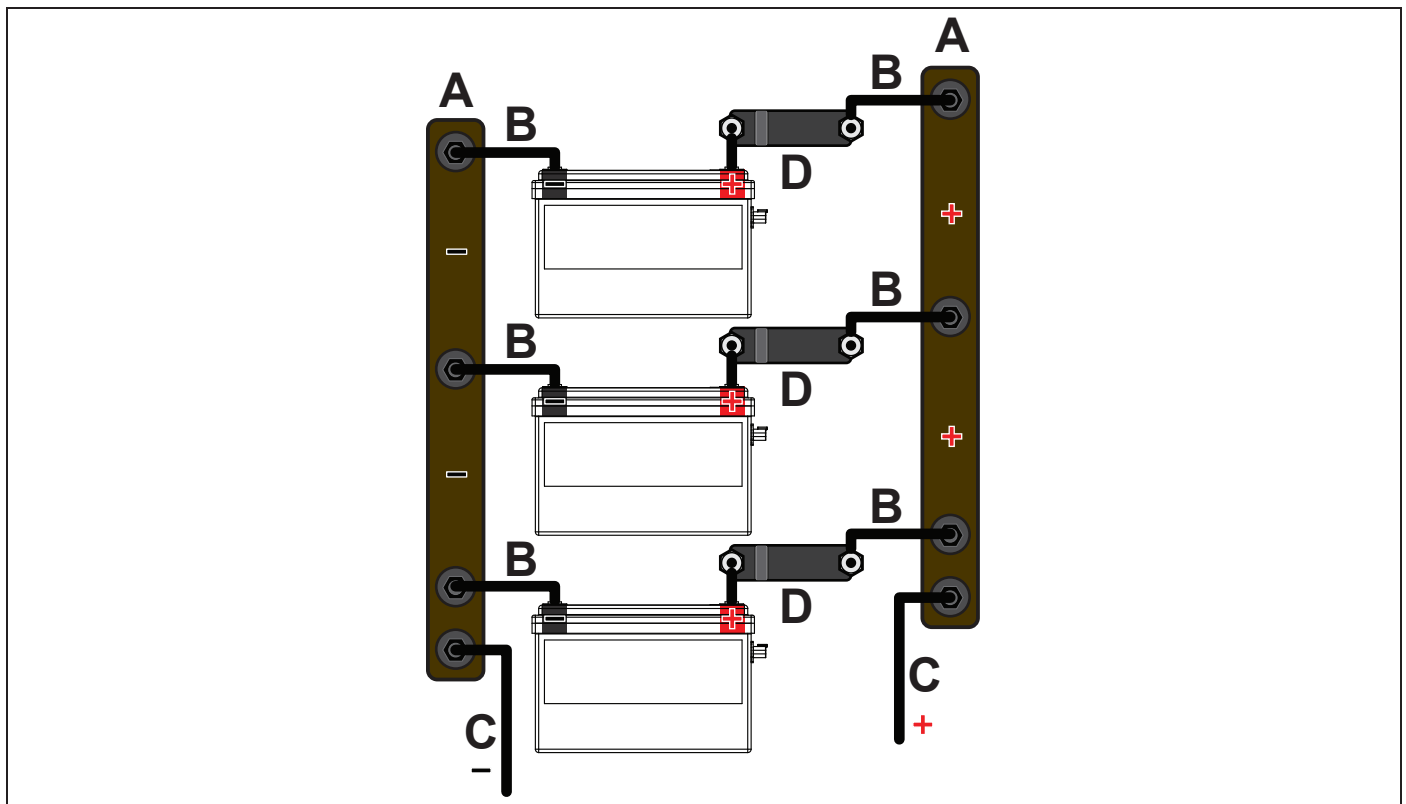
This Paralleling Xantrex Batteries Application Note is in addition to, and incorporates by reference, the relevant product manuals for each product in the power system. After reviewing this guide you must read the relevant product manuals. Unless specified, information on safety, specifications, installation, and operation is as shown in the primary documentation received with the product. Ensure you are familiar with that information before proceeding.

Failure to follow these instructions will result in death or serious injury.

Application

When paralleling more than two Xantrex Batteries (105Ah, 125Ah, or 240Ah), you must install:

- Identical DC bus bars [A] (for NEG- and POS+) which can carry 100% of the maximum current draw of the system.
- The same length of battery cable [B] connecting from the DC bus bar to the battery terminal.
- The same length of battery cable [C] connecting from the DC bus bar to the DC terminal of the next device.
- A suitable DC breaker [D] (alternatively, a fused DC disconnect device) based on the current rating (ampacity) of the DC cables and bus bars.



Additionally, you must ensure that:

- The measured voltage difference between each battery (measured from the terminals) shall not be greater than 100mVDC. This shall be measured during:
 - a maximum recharge scenario,
 - a maximum discharge scenario, and
 - an at rest scenario while the batteries are at the same SOC.
- The voltage from the charge source to the batteries shall have a voltage drop measured at the highest terminal voltage of no more than 100mVDC.

Copyright © 2022 Xantrex LLC. All Rights Reserved.

All trademarks are owned by Xantrex LLC and its affiliates.

Exclusion for Documentation

UNLESS SPECIFICALLY AGREED TO IN WRITING, SELLER

(A) MAKES NO WARRANTY AS TO THE ACCURACY, SUFFICIENCY OR SUITABILITY OF ANY TECHNICAL OR OTHER INFORMATION PROVIDED IN ITS MANUALS OR OTHER DOCUMENTATION;

(B) ASSUMES NO RESPONSIBILITY OR LIABILITY FOR LOSSES, DAMAGES, COSTS OR EXPENSES, WHETHER SPECIAL, DIRECT, INDIRECT, CONSEQUENTIAL OR INCIDENTAL, WHICH MIGHT ARISE OUT OF THE USE OF SUCH INFORMATION. THE USE OF ANY SUCH INFORMATION WILL BE ENTIRELY AT THE USER'S RISK; AND

(C) REMINDS YOU THAT IF THIS MANUAL IS IN ANY LANGUAGE OTHER THAN ENGLISH, ALTHOUGH STEPS HAVE BEEN TAKEN TO MAINTAIN THE ACCURACY OF THE TRANSLATION, THE ACCURACY CANNOT BE GUARANTEED. APPROVED CONTENT IS CONTAINED WITH THE ENGLISH LANGUAGE VERSION WHICH IS POSTED AT <http://www.xantrex.com>.

NOTE: Visit <http://www.xantrex.com>, click Products, select a Product category, select a Product, and search the Product Documents panel for a translation of the English guide, if available.

Contact Information

Telephone: +1-800-670-0707 / +1-408-987-6030

Email: customerservice@xantrex.com,
<http://www.xantrex.com/power-products-support/>

Web: <http://www.xantrex.com>