

QUADLINK TM XC-QL4 100X004

Charge Multiple Batteries with a Single Charger



FEATURE AND USE GUIDE

Model XC-QL4 Feature and Use Guide

Table of Contents

Features	Inside front cover
User Guide	1 – 3
Specifications	3
Battery Charger Use	3
FAQs	4
5-Year Limited Warranty	Inside back cover
Xtreme Charge® Products and Accessories	Back cover

Features

Thank you for your purchase of the Xtreme Charge® QuadLink® from PulseTech® Products Corporation.

PulseTech® Products Corporation (www.PulseTech.com) is nationally recognized for its innovative technologies specifically designed to improve 6/12V battery performance, trim replacement costs by extending battery life cycles and contributing to the nation's environmental movement to think and act Green by keeping batteries healthy and out of the waste stream, landfills and smelters.

With the development of the QuadLink, Xtreme Charge® has multiplied this useful application by four times—turning any 6V or 12V dc battery charger (using the standard SAE 2-prong output connector) into a 4-station maintenance charger.

There's no more need to spend time or to remember to switch back and forth between vehicles or batteries in storage. Utilizing a simple, plug and play system, QuadLink automatically splits and distributes 15-minute charge segments to up to four batteries.

Applications include a wide variety of vehicles and equipment, including automobiles, light trucks, SUVs, motorcycles, motor homes, small boats and watercraft, lawn mowers and equipment, ATVs and even golf carts. When mated with a typical maintenance charger (see User Guide) the QuadLink's microprocessor automatically adapts to the number of batteries actually connected.

Included with your QuadLink purchase:

- ✓ 1 QuadLink 4-station charger multiplier
- √ 4 Eyelet lug adaptor cables
- ✓ 4 5' extension leads

 (Additional 5' and 25' lead extensions available separately)

User Guide

Do not operate without first reading these important safety notices and use instructions.

Additionally, do not use this without first reading important safety notices and use instructions that come with your battery charger/maintainer and your battery.

NOTE: As part of good safety routine, this product is designed for use only with automatically controlled charger maintainers and is optimized for use with the Xtreme Charge family of products. It is not suggested for use with automatic chargers with switched on or off or mode selections, or manual maintenance chargers that cannot be used without constant supervision.

- 1. Inspect all cable leads and connections to be sure that they are all in good working condition. Never use cable leads or clips that are worn, damaged or frayed in any way. Replace worn or damaged leads prior to use. Do not alter or otherwise modify cables as this could cause an unsafe condition possibly resulting in personal injury, explosion or fire.
- 2. Connect the output of your battery charger/maintainer to the input of the QuadLink.

Note: The charger must have the same industry standard SAE 2-prong connector to mate properly with the QuadLink.



- 3. Connect the extension leads that come with the QuadLink to either the standard attached battery eyelet connector on each vehicle battery and/or to the charging clip set that comes with your charger. Be sure to first connect the red battery clip to the positive (+) battery terminal. Then connect
 - the black battery clip to the negative (-) battery terminal. Also, be sure to double check that your attached eyelet terminal cable sets are properly polarized. Once you have connected the cable leads to all batteries in use, you can begin the battery maintenance process by plugging in your charger to your ac power source.



- 4. What is happening:
 - **A.** Your battery charger is still in full control of the charging processes. Always refer to the battery charger manufacturer's instructions or the user interface on your charger to determine what state of charge your battery is in.
 - **B.** The QuadLink is almost transparent to the battery. It does not add to the charging capabilities of your charger, just to the number of batteries being maintained. Your charger is still the "brain" in the system.

C. A blinking green LED light will indicate the first battery connected to the QuadLink. Once additional batteries are connected, a solid glowing green LED light will verify connection to all additional connected stations. Once the charger is connected to the QuadLink and plugged into the ac power source, the charging cycle begins. From this point forward, the station or battery that is currently "live" or being charged is indicated by a blinking green LED light.



D. Every 15 minutes, the QuadLink will switch to the next battery in line. If there is no battery connected to any given channel, the channel will be skipped after a short qualification process.

E. Cycle rotation will continue indefinitely, maintaining the charge of all 4 batteries for you automatically. The QuadLink distributes your charger's full power, moving from battery to battery in 15-minute increments.



F. If you would like to remove a battery from the chain, it is always best to unplug the QuadLink from the charger and the charger from the ac power source first. Once the battery is disconnected and the units are plugged back in, the QuadLink will reset and recognize the batteries in the circuit and skip any open channels after a circuit verification test.



G. If you replace or add a battery to an open channel, again it is always best to unplug the QuadLink from the charger and the charger from the AC power source first. Once you have connected the new battery to the circuit and plugged the units back in, the QuadLink will reset and recognize the additional battery in the circuit and begin the process again.

Use Comments and Suggestions:

- 1. If you are putting a vehicle/battery away for an extended period, it is always best to give the battery a good charge on its own for a few days and test it prior to putting it away for a season or any extended period. This will assure that proper storage maintenance will occur without a hitch.
- 2. If there is ever a power outage, it is likely that during the outage, the charger may and the QuadLink will consume a small amount of power via LED light indication of the batteries' state of charge and channel indication. This is common and will not cause noticeable discharge of the batteries in the circuit unless the power is out for an extended period of time. Note: If either ac input power to the charger or dc power from the charger to the QuadLink is purposely disconnected for any extended period for any reason, disconnect the QuadLink from the batteries in the circuit until power is restored. This will assure that the batteries are not unintentionally discharged.

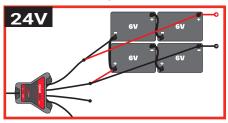
- 3. If for any reason the QuadLink is not unplugged from the dc power source and allowed to reset during removal of a battery, the LED channel indicator will remain illuminated until the next cycle provides a circuit verification test indicating an open circuit. The output previously associated with the removed battery will then in turn be skipped.
- 4. For use more customized to your specific needs, including additional 5'

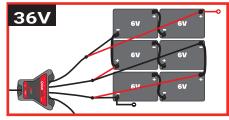
extension leads (part #100X805) and 25' extension leads (part #100X825), please visit www.PulseTech.com.

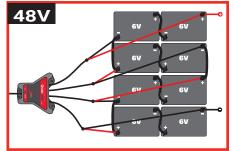
Additional Functionality:

The QuadLink is also uniquely designed to provide a very useful service of maintaining the state of charge of multiple 6V or 12V batteries in 24, 36 and 48V series connected configurations typically used in Golf Carts or similarly designed vehicles or battery packs.

The user would simply connect each output lead using the provided eyelet lug connectors (up to 4) to each of the 6V or 12V segments of the multiple battery configurations and in doing so allow the QuadLink to maintenance charge each of the 6V or 12V segments of the pack in 15-minute intervals. This will ensure that the entire pack is maintained at the state of charge that they were left at when stored or left unused for an extended period.







Specifications

Description: 4-Channel 6/12V DC Charger Multiplier

Input Voltage: 4 V dc to 18 V dc

Input Amperage: 8 A max

Functional Output Cable Length: 5'9" (per channel) Note: Additional 5' and 25' cable extensions available separately

Mounting: Yes, via 4 holes in housing (use housing to mark holes on mounting surface)

Battery Charger Use

IMPORTANT: Please follow the use and safety recommendations that were included with the maintenance charger that will be used with your new QuadLink. This information should provide explicit important safety, operation and maintenance instructions for the user, and, if applicable, with assembly, moving and storage instructions.

Frequently Asked Questions

- Can the QuadLink be used with a Solar Charger? YES, if the Solar Charger uses the same connector, is 6V or 12V DC and does not exceed 8 Amp output.
- 2. Is the QuadLink water resistant? YES, it is water resistant but not waterproof. It cannot be submerged or left in pooled water or driving rain. Safety dictates that one should never use an electrical product in wet conditions.
- 3. Does the "bad battery" function still work when using the QuadLink? The QuadLink is not a charger but a charge conduit. If your charger has a "bad battery" indicator, it will work through the QuadLink connection.
- 4. Will the QuadLink work if batteries are connected to first, second, and fourth outlet, skipping the third position? YES, the QuadLink will sense the open circuit and skip it after a few seconds.
- 5. Will the QuadLink work on multiple battery types and styles simultaneously? For instance, AGM and Gel or Deep Cycle marine and small Motorcycle batteries all connected to each of the 4 stations? YES, your charger is still the "brain" in the system. If your charger has the ability to properly charge all of these battery types automatically, the QuadLink will allow it. If your charger has to be manually switched to alternate settings to enable proper charge output for these different battery types, the answer would be NO. If this is your situation, we suggest using the Xtreme Charge to charge multiple battery types automatically.
- 6. Knowing that the QuadLink is optimized for use with the Xtreme Charge battery charger; does it also work with other brands of chargers? YES, as long as your charger is fully automatic and utilizes the same DC connector.
- 7. When connected to Gel, maintenance free and AGM battery with a charger that requires the use of a battery selection dial for charging different battery types, what happens? We suggest that you do not use the QuadLink with this type of charger. Consider buying an Xtreme Charge to properly charge all these types on the QuadLink automatically.
- 8. If there is no battery connected, is power flowing to the battery clips or eyelet connector? The answer is NO if you are using a fully automatic charger and it is functioning properly. We suggest that a manual charger NOT BE USED with the QuadLink. Remember, the charger is always in control of the charge process, not the QuadLink.
- 9. Can I use this on my vehicle that has 4 batteries connected in parallel (in a 12V system)? YES, as long as you are connecting only one station lead to this 12V pack. Although it will cause no harm, we do not suggest the QuadLink be used in a parallel connected multi battery scenario as there is no additional charging benefit when compared to single station charging to the pack.
- 10. Can I start my vehicle with the QuadLink still attached? YES, as long as your charger allows this capability. The QuadLink does not control the charge going into the battery; it is only a conduit for the power going to each station.
- 11. Can I change the timing so that one battery charges longer before moving to the next battery? NO, the microprocessor is not adjustable.
- 12. Can I connect two sets of leads to one battery so it will charge for an extended period? YES, if you want to allow a certain battery to have more relative charge time within the charge cycle, you can "double connect" a station to any given battery. This will give that battery 15 additional minutes of charge time per cycle.
 - For answers to additional questions, please see your dealer or contact PulseTech Products Corporation at 1-800-580-7554, 8 a.m. to 5 p.m. Monday through Friday CST or go to www.PulseTech.com.

5-Year Limited Warranty

PULSETECH PRODUCTS CORPORATION

What Does This Warranty Cover? This warranty covers any defects in workmanship or materials in the product under normal use and service.

How Long Does The Coverage Last? This warranty runs for five (5) years from the date of purchase.

What Will PulseTech Do? PulseTech will, at its option, repair the unit or replace the unit with a remanufactured unit at no charge.

What Does This Warranty Not Cover? This warranty applies only to the product and does not cover any other equipment, static damage, water damage, overvoltage, dropping of the unit or damage resulting from extraneous causes. The warranty is void if the owner attempts to disassemble the unit or modify the cable assembly. In addition, PulseTech will not be responsible under this warranty if PulseTech determines that (1) upon examination that the unit's failure was (A) caused by misuse, neglect, accident, alteration, or abnormal condition of operating or handling (including the failure to install the product in accordance with PulseTech's instructions and observe the warnings on the product and the instruction manual), or other conditions beyond the control of PulseTech or (B) damaged in transit to PulseTech, or (2) the owner is not the original purchaser that purchased the product from PulseTech directly or through an authorized PulseTech dealer or distributor. IN NO EVENT SHALL PULSETECH BE LIABLE FOR ANY DIRECT, SPECIAL, INDIRECT, CONSEQUENTIAL, INCIDENTAL, PUNITIVE OR EXEMPLARY DAMAGES. EXPENSES. LOST SAVINGS OR LOST PROFITS. OR ANY OTHER DAMAGES OF ANY KIND FROM ANY BREACH OF THIS WARRANTY OR OTHERWISE. Some states, provinces or countries do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation may not apply to you.

How To Get Service? Send the product postage prepaid with proof of purchase (sales receipt) within the warranty period to the authorized reseller where the product was purchased or contact PulseTech directly by calling 1-800-580-7554.

How Does State, Province or Country Law Apply? This warranty gives you specific legal rights, and you may also have other rights which vary from state to state, province to province or country to country.

THIS WARRANTY IS THE SOLE AND EXCLUSIVE REMEDY AND IS IN LIEU OF ALL OTHER WARRANTIES EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

Model: XC-QL4 Part #: 100X004



Southlake, TX 76092 Patent Number 9287725

PRODUCTS & ACCESSORIES



Battery Lead with Clips

This 7.5-amp fuse-protected cable is supplied with a quick-disconnect terminal. Lead is 2 feet long.

Part #: 100X827 Model: XC-CLIPS

12V 4 Amp Xtreme Charger w/Pulse Maintenance

Ideally suited for AGM and Maintenance-Free batteries. Increases the duty and life cycle of all 12V batteries up to three times longer.

Part #: 200X010 Model: XC400



"Leave-On" Battery Lead with Lugs

Xtreme Charge® 7.5-amp fuse-protected cable comes with a quick-disconnect terminal.
Lead is 2 feet long.

Part #: 100X830 Model: XC-LUGS

5' and 25' Extension Lead

Extend a standard lead by 5 or 25 feet with these extensions. They feature quick-disconnect terminals on both ends. Lead is 5 feetor 25 feet long.

Part #: 100X805 Model: XC-EXT-5 Part #: 100X825 Model: XC-EXT-25



QuadLink™ 4-Channel Battery Charger Multiplier

Turns any 6/12V battery charger (using the standard SAE 2-prong output connector) into a 4-station maintenance charger.

Part # 100X004 Model: XC-QL4

Quick Battery Tester

Assess your 12V battery's state of charge quickly with this pocket-sized tester. It will be the most used tester in shops, garages and any areas where battery checks are performed.

Part #: 100X822 Model: XC-822-TEST