Operational Instructions

NPE, NPXU, NO POLARITY Battery Chargers
For Industrial Use: A float charger designed for gel, and starting batteries

Quick Charge Corp.
800 658-2841
e-mail quickcharge@icnet.net
www.quickcharge.com
Made in the U.S.A
QUICK START INSTRUCTIONS:

The No Polarity chargers do not have positive and negative connections. The two clips may be connected to the battery(s) either way. Move the switch to the OFF position. Before making battery connections, be sure the charger voltage matches that of the battery(s). Once connected, the green battery LED should lite. If not, see the trouble shooting section before proceeding.

Plug the charger into AC power with the same ratings as that of the charger. (See decal). Move the switch to the voltage that matches the battery. The red LED should lite, and the ammeter should deflect to the right or left of 0. As the battery becomes charged, the meter will work its way back to 0. The charger may be left on, and will maintain the battery(s).

While the charger is on, it will adjust the voltage applied to the battery depending on the air temperature. As it increases, the charger will lower the voltage, as the temperature falls, the voltage will rise. This optimizes battery life.

<table>
<thead>
<tr>
<th>Temp. F</th>
<th>VPC</th>
</tr>
</thead>
<tbody>
<tr>
<td>32</td>
<td>2.38</td>
</tr>
<tr>
<td>40</td>
<td>2.36</td>
</tr>
<tr>
<td>50</td>
<td>2.34</td>
</tr>
<tr>
<td>60</td>
<td>2.32</td>
</tr>
<tr>
<td>70</td>
<td>2.3</td>
</tr>
<tr>
<td>80</td>
<td>2.27</td>
</tr>
<tr>
<td>90</td>
<td>2.25</td>
</tr>
</tbody>
</table>

To discontinue charging, move switch to the OFF position.
SAFETY INFORMATION AC WIRING:

Before making AC connections, refer to the requirements on the charger ID label. If your charger is not equipped with an AC plug, for example, a 230 volt charger, have a qualified electrician install one.

To reduce the risk of fire, use this charger only on branch circuits that are protected by a circuit breaker or fuse, and that are adequate to carry the power drawn by the charger. All wiring should be in accordance with the National Electric Code, ANSI/NFPA 70, and all local codes and ordinances.

This battery charger must be grounded to reduce the risk of electric shock. 117 volt chargers are equipped with a grounding type plug, 230 volt chargers are shipped without a plug. Have a qualified electrician install a properly grounded 3 wire plug.

DO NOT USE THIS CHARGER ON A TWO POLE UNGROUNDED OUTLET OR ATTEMPT TO BREAK OFF THE GROUND PRONG FOR USE ON A RECEPTACLE OR EXTENSION CORD NOT HAVING A GROUND.

If an extension cord must be used, make sure it is in good condition. Use a three conductor cord no smaller than the size being used on the charger, and keep it as short as possible. The use of an improper extension cord could result in a risk of a fire or electric shock. Locate all cords so that they will not be stepped on, tripped over, or otherwise subjected to damage or stress.
OTHER SAFETY INFORMATION

Do not use charger if it shows signs of physical stress, or if DC output leads or connector feel hot when used.

Do not disconnect the DC output clamps, or connector from the batteries when the charger is on. The resulting arcing could cause the batteries to explode.

Do not expose charger to rain.

NEVER charge a battery at a higher voltage than what it is rated for.

The charger will become hot during use, provide adequate air flow around it. Do not place charger on cloth or vinyl seats, blankets, or around any other obstructive materials. Do not place charger against walls, allow 12” of space on all sides.

BATTERY SAFETY & CARE INFORMATION

Always wear protective eye shields and clothing when working with batteries. Batteries contain acids which can cause bodily harm. Do not put wrenches or other metal objects across the battery terminal or battery top. Arcing or explosion of the battery can result. Do not wear jewelry when working around batteries. Arcing can cause severe burns.

The tops of the batteries and battery hold downs must be kept clean and dry at all times to prevent excessive self discharge and flow of current between the battery post and frame.

With wet cell batteries, maintain the proper electrolyte level by adding water when necessary. Never allow the electrolyte level to fall below the top of the battery plates. Electrolyte levels fall during discharge and rise during charging. Therefore, to prevent the overflow of electrolyte when charging, add water only after the batteries have been fully charged, or just enough to cover the plates if discharged. Old batteries require more frequent additions of water than do new batteries.
Do not over discharge batteries. Excessive discharge can cause polarity reversal of individual cells resulting in complete battery failure. Re-charge batteries as soon as possible after a deep discharge, but not if they are warm, allow a cooling down period.

Provide adequate ventilation when charging batteries. Chargers can ignite flammable materials and vapors. Do not use near fuels, grain, dust, solvents, or other flammables.

Do not charge batteries in excessively hot temperatures; wait till the cool of the evening.

**PRE CHARGE INFORMATION**

Before connecting the charger to the batteries, make sure the battery pack is of the same voltage rating of the charger. If you are unsure, count the number of cells on the battery pack and multiply by two. This figure should be the same as the DC voltage rating of the charger. (*see ratings label on charger*)

⚠️ Make sure the AC cord, DC output leads, terminals, connectors, or clamps are all in good working condition. Do not use the charger if there are any signs of stress or damage, or if wires are cut or have damaged insulation. Using this charger with any of these symptoms could result in a fire, property damage, or personal injury. Have a qualified service person make the necessary repairs. Repairs should not be made by people who are not qualified.

Illustration of series and parallel battery connections.

**Parallel**

When batteries are connected in Parallel the battery amp hour capacity is additive and the voltage remains the same.

*Example:* two 180 amp hour 12 volt batteries would equal 12 volts and 360 amp hour capacity

**Series**

When batteries are connected in Series the voltage is additive and the battery amp hour capacity remains the same.

*Example:* two 180 amp hour 12 volt batteries would equal 24 volts and 180 amp hour capacity
<table>
<thead>
<tr>
<th>Symptom</th>
<th>Cause</th>
<th>Corrective Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>No green LED when connected to battery. The charger does not see the battery.</td>
<td>Break in DC cord, or connector.</td>
<td>Have a qualified person make repair.</td>
</tr>
<tr>
<td></td>
<td>Battery voltage too low to turn the charger on.</td>
<td>If the battery has too low a voltage you may need to “jump” the dead battery with a charged battery, connecting positive to positive, and negative to negative so the charger has enough voltage to turn on. Once charging, and given time to build the voltage, the jumper battery can be disconnected.</td>
</tr>
</tbody>
</table>
| Both the green and red LED do come on, but the ammeter stays at 0.     | Battery is sulfated, and will not accept a charge.         | Leave the charger connected and ON. Over some hours, the ammeter may begin to rise indicating current flow. The amps will build to the full capacity of the charger, then work back to 0.  
**NOTE**: Batteries in this condition may not be recoverable. |
<p>| When switched on, the red LED does not light, and no amps read on meter | The panel mount fuse is blown.                             | Replace with one having the same rating.                                          |
|                                                                        | There is no AC power present at the plug.                  | Check that there is power at the source. If using an extension cord, check that it is not damaged. |</p>
<table>
<thead>
<tr>
<th>Condition</th>
<th>Cause</th>
<th>Solution</th>
</tr>
</thead>
<tbody>
<tr>
<td>The charger blows its fuse, or branch circuit fuse/circuit breaker as soon as it’s switched on.</td>
<td>Charger is shorted</td>
<td>Contact factory.</td>
</tr>
<tr>
<td>The charger blows the branch circuit fuse/circuit breaker a short while after being switched on.</td>
<td>The branch circuit is too small.</td>
<td>Relocate charger to a branch circuit with a heavier rating, or remove other loads on the circuit.</td>
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<tr>
<td>Batteries use water, get hot, or smell. The ammeter hangs up around a few amps and will not go any lower.</td>
<td>One or more dead cells.</td>
<td>Replace batteries. If charging in a series string, it is best to replace all the batteries rather than mix new with old.</td>
</tr>
<tr>
<td>When I put a volt meter across the output of the charger there is no power coming out when I switch it on.</td>
<td>The charger must be connected to a battery to turn on.</td>
<td></td>
</tr>
<tr>
<td>The batteries don’t receive a full charge. On wet cells, the specific gravity will not rise to a full reading after the charge has completed.</td>
<td>The charger is too small for the battery. The charger is not designed to fully charge deep cycle batteries. It will only charge them to about 80%.</td>
<td>Charger/battery mismatch. Contact us for the proper charger.</td>
</tr>
</tbody>
</table>
QUICK CHARGE NPE Battery Chargers
“LIMITED WARRANTY”

Quick Charge Corporation warrants the NPE line of chargers for three (3) years from the date of purchase. After the warranty period, chargers returned to the factory for repair will be charged a minimum rate of $25.00. Charger will be returned, freight and repair charges, C.O.D. unless other arrangements have been made. This warranty covers all defects in manufacture and performance, provided the unit is operated in compliance with manufacturer’s operating instructions.

For repairs to be made at the Quick Charge factory, a charger and/or component(s) should be sent, freight prepaid to Quick Charge at:

Quick Charge Corp.
1032 S.W. 22nd St.
Oklahoma City, OK. 73109

Quick Charge, will at it’s option, repair or replace the charger or component in question. The repaired item will then be returned, freight prepaid by Quick Charge. This warranty is void if the charger or component have been altered, changed, or repaired by anyone not authorized by Quick Charge, or if the charger or component, have been subjected to misuse, negligence, or harsh environmental conditions. (Except those chargers designed for such conditions)

If returning the charger to the factory is not practical, replacement parts may be shipped to the customer for field repair at no charge. On parts such as circuit boards, the customer will be required to return the board suspected to be defective to Quick Charge, freight prepaid. If such defective parts are not returned, the customer will be invoiced for the repair parts. Field repairs are made at the user's own risk. "Authorization" by Quick Charge to repair refers to maintaining the warranty only. Quick Charge assumes no responsibility or liability for field servicing, and shall not be responsible for incurred travel or labor charges.

Quick Charge corporation shall not in any event be liable for the cost of any special, indirect or consequential damages to anyone, product or thing. This warranty is in lieu of all other warranties expressed or implied. Quick Charge neither assumes nor authorizes any representative or other person to assume for us any liability in connection with the sale of this product.