

OPERATING INSTRUCTIONS

OBE, OBEXU, Battery Charger

For Industrial Use: A float charger designed for gel, and starting batteries



Quick Charge Corp. 800 658-2841 e-mail <u>info@quickcharge.com</u> <u>www.quickcharge.com</u> Made in the U.S.A

QUICK START INSTRUCTIONS:

These chargers work very simply. Once connected and plugged into AC power, the LED will come on steady green, when the float voltage is reached, the LED will flicker, and battery will be maintained indefinitely.

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.

Temp. F	VPC
32	2.38
40	2.36
50	2.34
60	2.32
70	2.3
80	2.27
90	2.25



To discontinue charging, unplug AC power.

Please read complete instructions before proceeding.

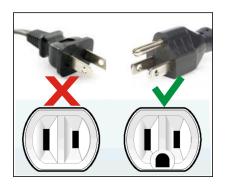


SAFETY INFORMATION AC WIRING:

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.

If your charger bears the ϵ mark, it conforms with the essential requirements of the applicable EC directives for products placed on the market in the European Economic Area.

LOTHER 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.

Failure to unplug AC power before moving or driving equipment will result in damage to cords, plugs and receptacles.



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 sever 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:

Mount the charger in the desired location. Allow space for the charger to dissipate heat, it will get hot while in use. Do not seal the charger in an air tight compartment. Do not cover the charger with any material. **NOTE:** The OBE models are *NOT* water proof, they are water resistant. This means they cannot withstand immersion, or continuous exposure from pressure washers, or heavy rain.

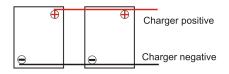
Connect the red charge lead to battery positive, black to negative. But before, make sure the battery pack is of the same voltage rating of the charger. If you are unsure, count the number of cells on the battery pack and multiply by two. This figure should be the same as the DC voltage rating of the charger. (see ratings label on charger) Charging a battery with a lower voltage rating than the charger will cause damage to batteries, charger, and can create an explosive atmosphere.

DRIVE LOCKOUT OPTION:

If your charger has an extra pair of small wires with a connector, spade terminals, or just bare wires, it has this option. These wires connect to your equipment if it has this feature. The purpose is to disable the drive mechanism of the equipment when the charger is plugged in so it cannot be moved and cause damage to the AC cord and receptacle. These wires do not have to be connected for the charger to work.

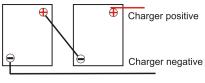
Make sure the AC cord, DC output leads, terminals, connectors, or clamps are all in good working condition. Do not use the charger if there are any signs of stress or damage, or if wires are cut or have damaged insulation. Using this charger with any of these symptoms could result in a fire, property 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

TROUBLESHOOTING

Symptom	Cause	Corrective Action		
LED does not come on When plugged into AC power.	Connected reverse to battery, or not connected to battery.	Correct polarity, or connect to battery.		
	Break in DC cord, or connector.	Have a qualified person make repair.		
	Battery too dead to charge.	While charger is connected to battery, connect a charged "jumper" battery across the dead battery, The charger will then see voltage, and if high enough, will turn on. Remove the jumper battery when enough voltage has transferred into the dead battery to keep the charger on.		
	No AC power.	Check circuit.		
		Check extension cord for breaks or damage.		
When I put a volt meter across the output of the charger there is no power coming out when I plug it in.	The charger must be connected to a battery to turn on.			

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.	The charger is too small for the battery. You are attempting to charge a deep cycle battery, and this charger does not have a cycle to fully charge it. It will only charge to about 80%	Check that the charger's output is about 10% of the amp hour rating of the battery. Use a charger with the capability to fully charge a deep cycle battery.	
	The battery is defective.	Replace	
The charger blows the branch circuit fuse/circuit breaker as soon as AC power is applied.	The charger is shorted	Contact factory.	
The charger blows the branch circuit fuse/circuit breaker a short while after being switched on.	The branch circuit is too small.	Relocate charger to a branch circuit with a heavier rating, or remove other loads on the circuit.	
Batteries use water, get hot, or smell.	One or more dead cells.	Replace batteries. If charging in a series string, it is best to replace all the batteries rather than mix new with old.	
After a full charge, the batteries die quickly	The batteries are sulfated.	Sometimes batteries can be recovered. Leave the charger on for some hours, if the voltage falls and the current begins to rise, it is a good sign they can recover under normal charging.	

QUICK CHARGE OBE Battery Chargers "LIMITED WARRANTY"

Quick Charge Corporation warrants the OBE 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 manufacture'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