1. **Mount The Charger**
   
   **ENCLOSED** CHARGER IS RAINPROOF  
   PROTECT FROM DRIVING WATER  
   
   SEE MOUNTING HOLE TEMPLATES ON REVERSE SIDE  
   
   **INSTALL OPEN-FRAME CHARGER**  
   IN AN ENCLOSURE SUITABLE FOR PROTECTION OF PERSONNEL AND WATER INGRESS INTO EQUIPMENT  
   HEAT SINK CHARGER TO METAL SURFACE  
   
   ![Diagram of mounting options](image)

2. **Verify Battery Settings**

   **IMPORTANT!**  
   SEE INSIDE CHARGER COVER LABEL FOR CUSTOMER REQUESTED SETTIMG CONFIGURED AT THE FACTORY  
   
   LEAVE JUMPERS IN ALL 3 FLOAT POSITIONS AS SHIPPED BY FACTORY TO OPERATE USING THESE SETTINGS (REFER TO FIGURE AT RIGHT)  
   CHARGERS WITH OPTIONAL KEYPAD DO NOT INCLUDE JUMPERS  
   SEE APPLICATION NOTE 26 TO COMMISSION NICD BATTERIES  
   
   **FLOAT VOLTAGE**  
   See inside cover label for factory configuration. Jumper in all 3 FLOAT positions indicates factory configured settings. Do not move jumpers before consulting user manual.  
   BATTERY TYPE AND RANGE  
   Do not place jumper for BATTERY TYPE or RANGE unless battery or output voltage has changed from original factory configuration. Move any one jumper to RANGE to change system voltage (all other settings remain same). To change battery type move one jumper each to BATTERY TYPE, FLOAT and RANGE positions.

3. **Make Electrical Connections**

   **OPTIONAL - J1939 AND MODBUS SETTINGS AND CONNECTIONS**

   ![Diagram of optional settings and connections](image)

   **OPTIONAL ALARMS: REMOVE PLUGGABLE ALARM TERMINAL BLOCK TO INSTALL ALARM WIRES**

   ![Diagram of alarm connections](image)

4. **Power On**  
   Connect battery then energize AC power  
   
   Note - Chargers configured to boost may be in boost for up to 24 hours at start-up if battery voltage is low

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**Need Help?**

REFER TO THE USER MANUAL OR CONTACT SENS CUSTOMER SERVICE: 800-742-2326 / 303-678-7500 / service@sens-usa.com

USE YOUR SMART PHONE QR CODE READER TO ACCESS USER MANUAL
1. **SAVE THESE INSTRUCTIONS** – This guide contains important safety and operating instructions for MicroGenius® 2 battery chargers. Conserve these instructions. This manual contains the instructions important concern la sécurité et le fonctionnement.

2. Do not expose open-frame charger to rain or snow.

3. Use of an attachment not recommended or sold by the battery charger manufacturer may result in a risk of fire, electric shock, or injury to persons.

4. This charger is intended for commercial and industrial use. ONLY TRAINED AND QUALIFIED PERSONNEL MAY INSTALL AND SERVICE THIS UNIT.

5. To reduce risk of damage to electric plug and cord (if optional power cord is included), pull by plug rather than cord when disconnecting charger.

6. Do not operate charger with damaged cord/plug – replace cord/plug immediately.

7. Do not operate charger if it has received a sharp blow, been dropped, or otherwise damaged in any way. Shut off power at branch circuit protectors and have unit serviced or replaced by qualified personnel.

8. To reduce risk of electric shock, disconnect branch circuit feeding charger before attempting any maintenance or cleaning. Turning off controls will not reduce this risk.

9. Do not operate charger with damaged cord/plug – replace cord/plug immediately.

10. **WARNING – RISK OF EXPLOSIVE GASES**

10.1 **WORKING IN THE VICINITY OF A LEAD-ACID OR NICKEL-Cadmium BATTERY IS DANGEROUS. STORAGE BATTERIES GENERATE EXPLOSIVE GASES DURING NORMAL BATTERY OPERATION. FOR THIS REASON, IT IS OF UTMOST IMPORTANCE THAT YOU READ THIS DOCUMENT AND FOLLOW THE INSTRUCTIONS EACH TIME YOU USE THE CHARGER.**

10.2 To reduce risk of battery explosion, follow these instructions and those published by battery manufacturer and manufacturer of any equipment you intend to use in vicinity of a battery. Review cautionary markings on these products and on the engine.

Pour réduire le risque d’explosion, lire ces instructions et celles qui figurent sur la batterie.

11. Someone should be within range of your voice or close enough to come to your aid when you work near a storage battery.

12. Have plenty of fresh water and soap nearby in case battery electrolyte contacts skin, clothing, or eyes.

13. Wear complete eye protection and clothing protection. Avoid touching eyes while working near a storage battery.

14. If battery electrolyte contacts skin or clothing, wash immediately with soap and water. If electrolyte enters eye, immediately flush the eye with running cold water for at least 10 minutes and get medical attention immediately.

15. **NEVER** blink or allow a spark or flame in vicinity of battery or engine.

16. Be extra cautious to reduce risk of dropping a metal tool onto battery. It might spark or short circuit battery or other electrical part that may cause explosion. Using insulated tools reduces this risk, but will not eliminate it.

17. Never use metallic objects, such as rings, bracelets, necklaces, and watches when working with a storage battery. A storage battery can produce a short circuit current high enough to weld a ring or the like to metal, causing a severe burn.

18. When charging batteries, charge 6 and 12 cell LEAD-ACID or 10 and 20 cell LIQUID ELECTROLYTE NICKEL-CADMIUM batteries only with rated capacity of 30 to 300 Ampere-hours. Certified for the pump and emergency generator applications at 200 Ampere-hours. Do not use this battery charger to supply power to an extra-low voltage electrical system or to charge any type of non rechargeable, dry cell, alkaline, lithium, nickel-metal-hydride, or sealed nickel-cadmium batteries that are commonly used with home appliances. These batteries may burst and cause injuries to persons and damage to property.

19. **NEVER** charge a float battery.

20. Charger contains a DC output fuse for internal fault protection, but this will not protect DC wiring from fault currents available from battery. Consult national and local ordinances to determine if additional battery fault protection is necessary in your installation.

21. Be sure area around battery is well ventilated while battery is being charged.

22. Ensure battery terminals are clean and properly tightened. Be careful to keep corrosion from coming in contact with eyes.

23. Add distilled water in each cell until battery acid reaches level specified by battery manufacturer. Do not overfill. For a battery without removable cell caps, such as valve regulated lead acid batteries, carefully follow manufacturer’s recharging instructions.

24. Study all battery manufacturer specific precautions such as removing or not removing cell caps while charging and recommended rate of charge.

Pendre connaissance des mesures de précaution spécifiées par le fabricant de la batterie, c., vérifier s’il faut enlever les bouchons des cellules lors du chargement de la batterie, et les lois de chargement recommandées.

25. Locate charger as far away from battery as DC cables permit.

26. Never place charger directly above or below battery being charged. Gas from battery will corrode and damage charger.

Ne jamais placer le chargeur directement sous la batterie à charger au-dessus ou au-dessous de celle-ci. Les gaz ou les fluides qui s’échappent de la batterie peuvent entraîner la corrosion du chargeur ou l’endommager.

27. Never allow battery acid to drip on charger while reading electrolytic specific gravity or filling battery.

28. Do not operate charger in a closed-in area or restrict ventilation in any way.

Ne pas faire fonctionner le chargeur dans un espace clos et/ou ne pas gêner la ventilation.

29. Do not set anything on top of the charger.

Ne pas poser d’objet sur le chargeur.