

# Getting Started

# MicroGenius® 150

Genset Battery Charger

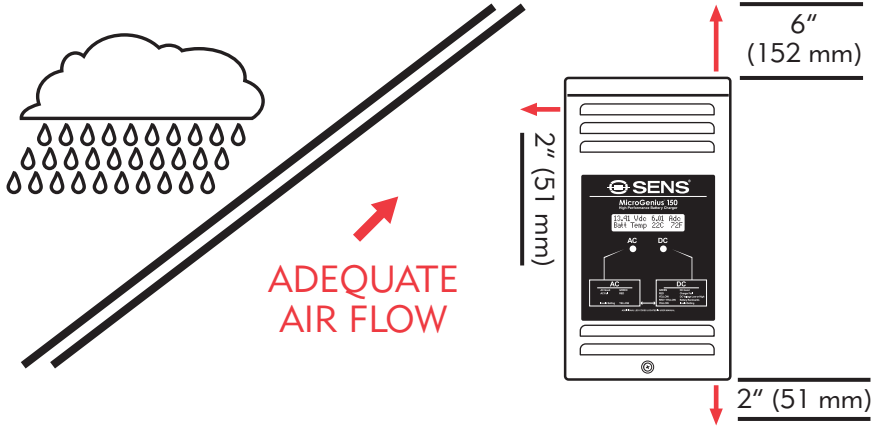
PATENTS PENDING

## 1. Mount The Charger

SEE MOUNTING HOLE TEMPLATES ON REVERSE SIDE

PROTECT **ENCLOSED** CHARGER FROM DRIVING LIQUID, RAIN, SNOW

INSTALL **OPEN-FRAME** CHARGER IN AN ENCLOSURE SUITABLE FOR THE PROTECTION OF PERSONNEL AND WATER INGRESS INTO THE EQUIPMENT



**IMPORTANT!**  
INSTALL MOUNTING HARDWARE BEFORE CONNECTING WIRING  
INSTALL VERTICALLY IN WELL-VENTILATED AREA

## 2. Configure Battery Settings

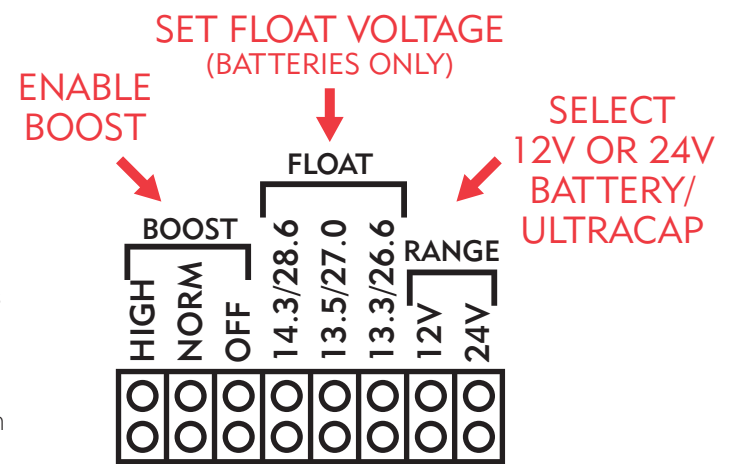
**IMPORTANT!**  
CONFIGURE CHARGER USING JUMPERS BEFORE CONNECTING WIRING

**NOTE!**  
FOR CHARGER TO PROVIDE OUTPUT A JUMPER MUST BE PLACED FOR EACH SETTING

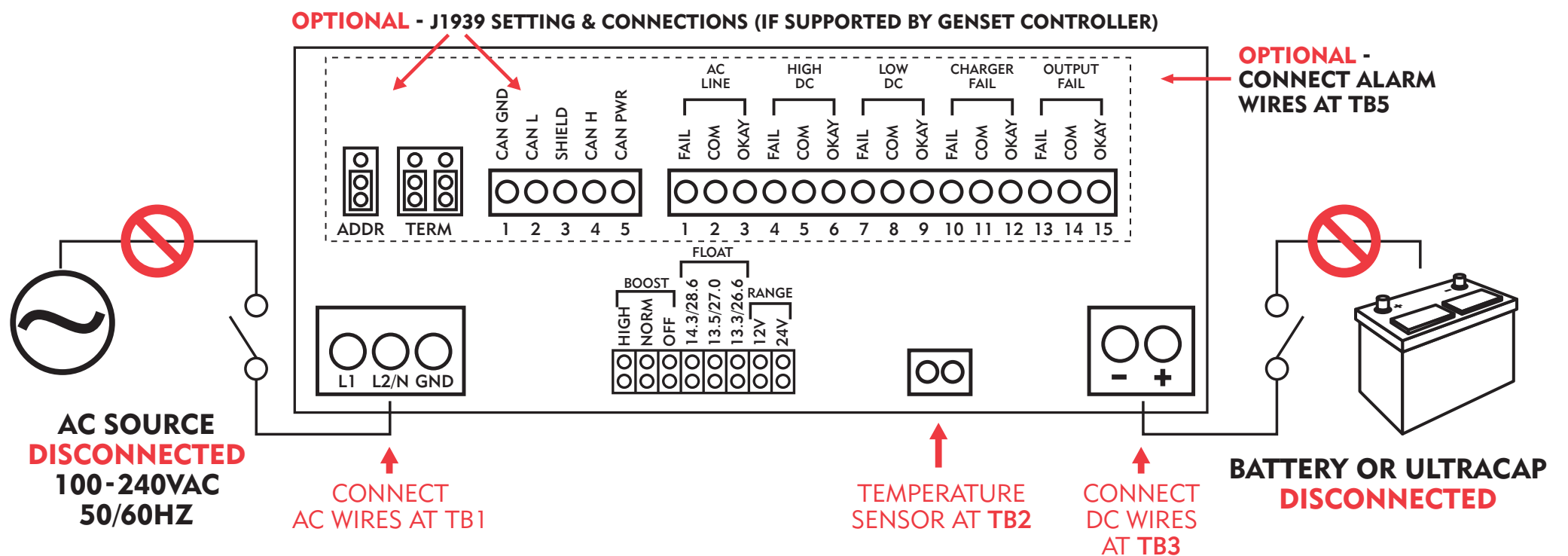
**ENABLE BOOST**  
Use NORM setting for most flooded batteries and OFF for VRLA batteries

**ENABLE BOOST and SET FLOAT VOLTAGE**  
Check battery manufacturer specifications to determine best settings

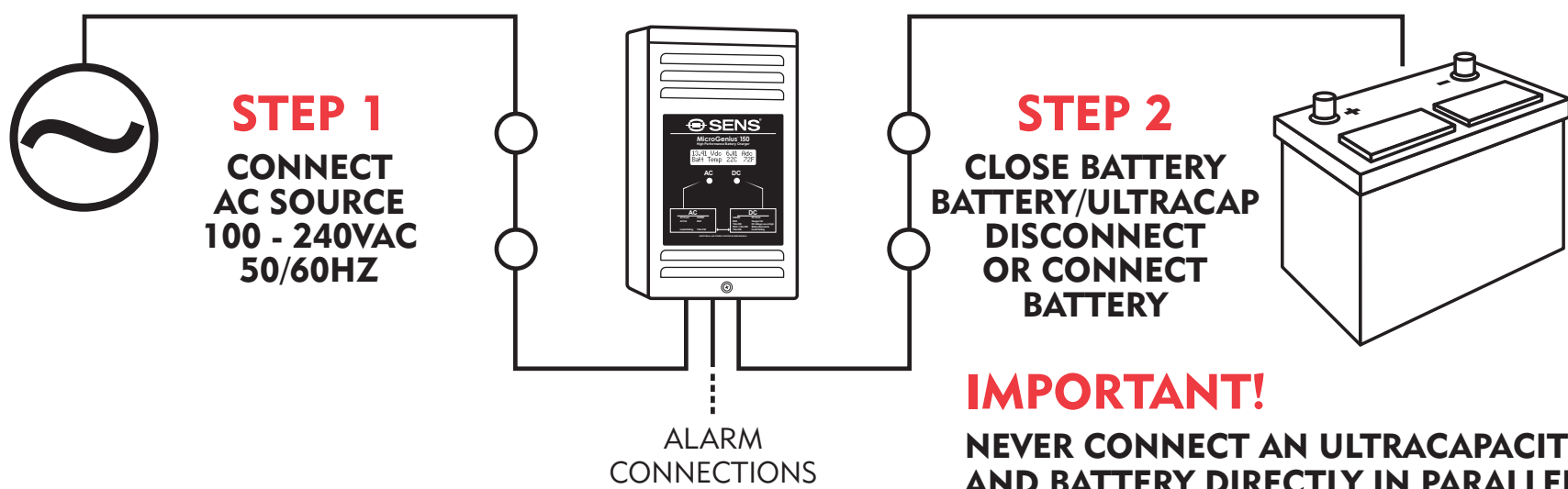
**ENABLE ULTRACAPACITOR**  
Place jumpers in both the BOOST NORM and BOOST HIGH positions and remove FLOAT setting jumper to enable operation with ultracapacitors



## 3. Make Electrical Connections



## 4. Powering On - Double-check wiring before powering charger!



## IMPORTANT SAFETY INSTRUCTIONS

1. **SAVE THESE INSTRUCTIONS** –This guide contains important safety and operating instructions for MicroGenius®150 battery chargers.
2. Do not expose 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. Do not operate charger if it has received a sharp blow, been dropped, or otherwise damaged in any way; shut off power at the branch circuit protectors and have the unit serviced or replaced by qualified personnel.
6. To reduce risk of electric shock, disconnect the branch circuit feeding the charger before attempting any maintenance or cleaning. Turning off controls will not reduce this risk.
7. This equipment is compliant with Class A of CISPR 16. In a residential environment, this equipment may cause radio interference.
8. **WARNING – RISK OF EXPLOSIVE GASES**
  - 8.1 **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 MANUAL AND FOLLOW THE INSTRUCTIONS EACH TIME YOU USE THE CHARGER.**
  - 8.2 To reduce the risk battery explosion, follow these instructions and those published by the battery manufacturer and the manufacturer of any equipment you intend to use in the vicinity of a battery. Review cautionary markings on these products and on the engine.
9. **WARNING – RISK OF SHOCK**
  - 9.1 **ULTRACAPACITORS ACCEPT AND DISCHARGE CURRENT RAPIDLY. NEVER ATTEMPT TO JUMP OR CONNECT A BATTERY TO AN ULTRACAPACITOR.**
10. **PERSONAL PRECAUTIONS**
  - 10.1 Someone should be within range of your voice or close enough to come to your aid when you work near a storage battery or ultracapacitor.
  - 10.2 Have plenty of fresh water and soap nearby in case battery electrolyte contacts skin, clothing, or eyes.
  - 10.3 Wear complete eye protection and clothing protection. Avoid touching eyes while working near a storage battery.
  - 10.4 If battery electrolyte contacts skin or clothing, wash immediately with soap and water. If electrolyte enters eye, immediately flood the eye with running cold water for at least 10 minutes and get medical attention immediately.
  - 10.5 **NEVER** smoke or allow a spark or flame in vicinity of battery, ultracap or engine.
  - 10.6 Be extra cautious to reduce risk of dropping a metal tool onto battery/ultracap. It might spark or short circuit battery/ultracap or other electrical part that may cause explosion. Using insulated tools reduces this risk, but will not eliminate it.
  - 10.7 Remove personal metal items such as rings, bracelets, necklaces, and watches when working with a storage battery/ultracap. A storage battery/ultracap can produce a short circuit current high enough to weld a ring or the like to metal, causing a severe burn.
  - 10.8 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 120 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.
  - 10.9 **NEVER** charge a frozen battery.
  - 10.10 The charger contains a DC output fuse for internal fault protection, but this will not protect the DC wiring from fault currents available from the battery/ultracap. Consult national and local ordinances to determine if additional battery fault protection is necessary in your installation.
  - 10.11 Study all battery/ultracap manufacturer specific precautions such as removing or not removing cell caps while charging and recommended rate of charge.
  - 10.12 Do not operate charger in a closed-in area or restrict ventilation in any way.
  - 10.13 Never place the charger directly above or below the battery being charged; gases from the battery will corrode and damage charger. Locate the charger as far away from the battery as DC cables permit.

