

# Getting Started

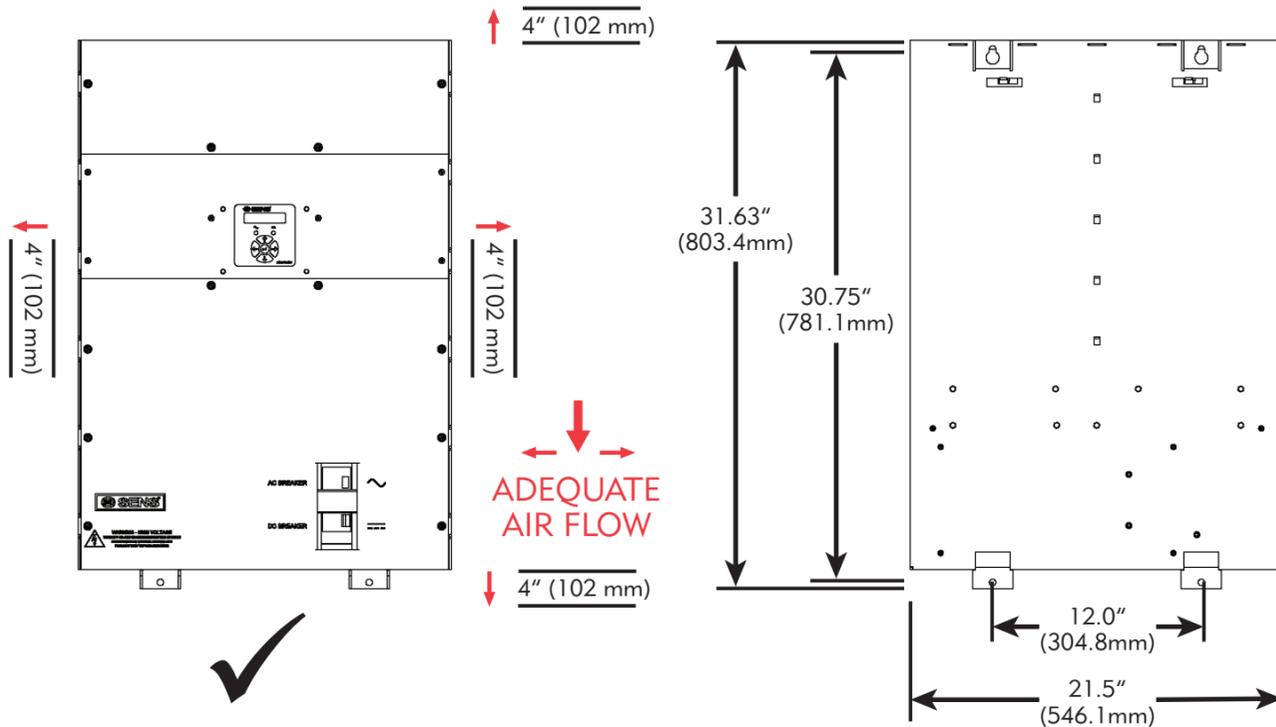
# EnerGenius<sup>®</sup> DC

Automatic Battery Charger/Power Supply

PATENTED US 9,270,140; 9,385,556; 9,413,186; 9,509,164; 9,466,995; 9,948,125; 10,575,433

## Mounting

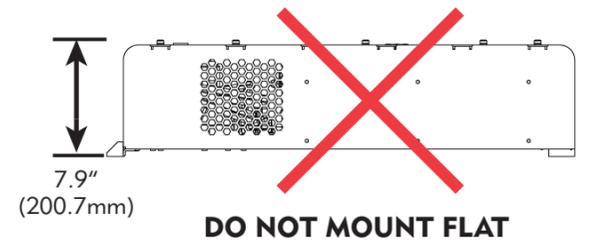
## WALLBOX



MOUNTING HOLES ARE INTENDED FOR 3/8 IN (M10) HARDWARE.

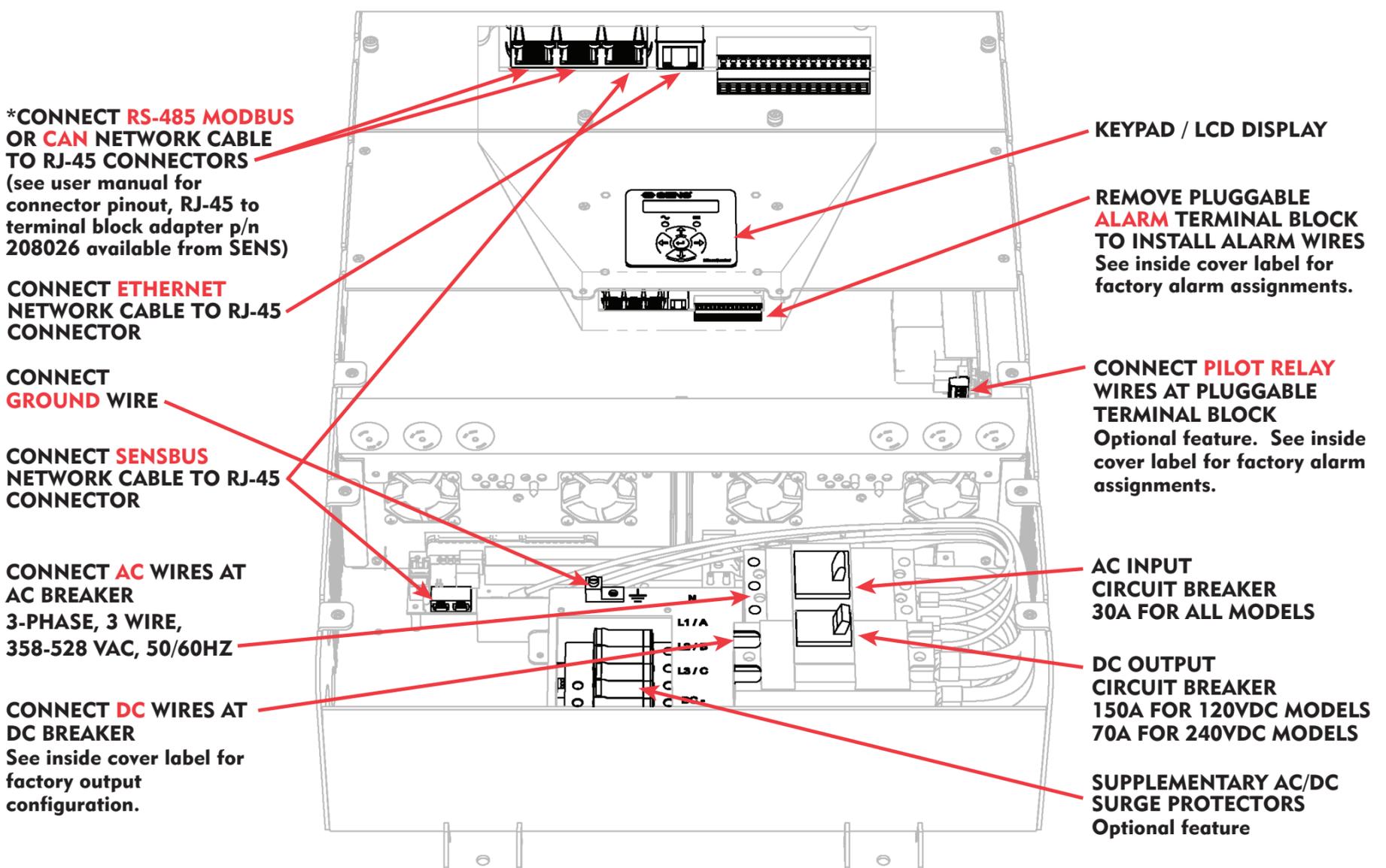
MOUNTING HARDWARE TO BE PROVIDED BY INSTALLER.

SEE INSTALLATION DRAWING IN MANUAL FOR MORE DETAILS.



DO NOT MOUNT FLAT

## Overview and Connections



\*See user manual for details regarding CAN and Modbus configuration



### Need Help?

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

USE YOUR SMART PHONE QR CODE READER TO ACCESS USER MANUAL

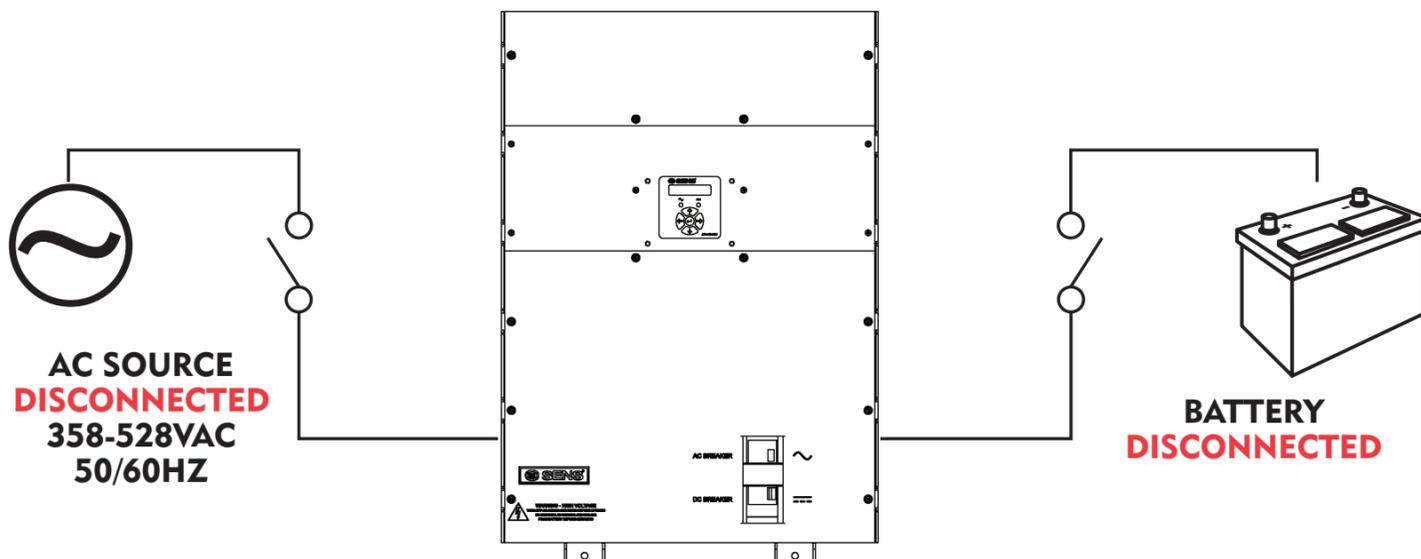


## Wires, Torques and Tools

TYPE	WIRE RANGE	TORQUE	TOOL
<b>GROUND TERMINAL BLOCK</b>	14-4 AWG	50 IN LB (5.65 Nm)	1/4 IN FLAT SCREWDRIVER
<b>AC BREAKER</b>	14-1/0 AWG	62 IN-LB (7.0 Nm)	M4 HEX
<b>120V DC BREAKER</b>	1 AWG - 300 KCMIL	135 IN-LB (15.25 Nm)	M8 HEX
<b>240V DC BREAKER</b>	10 AWG 8 AWG 6-2 AWG	20 IN-LB (2.3 Nm) 35 IN-LB (4 Nm) 75 IN-LB (8.5 Nm)	M6 HEX
<b>STANDARD ALARMS</b>	28-16 AWG	2.0 IN-LB (0.22 Nm)	1/8 IN FLAT SCREWDRIVER
<b>AC POWER RELAYS (optional)</b>	26-12 AWG	5.5 IN-LB (0.62 Nm)	1/8 IN FLAT SCREWDRIVER

## Power On - Connect battery then energize AC power

SEE APPLICATION NOTE 26 TO COMMISSION NICD BATTERIES



Note - Chargers configured to boost may be in boost for up to 24 hours at start-up if battery voltage is low

### IMPORTANT SAFETY INSTRUCTIONS

- SAVE THESE INSTRUCTIONS** –This guide contains important safety and operating instructions for EnerGenius<sup>®</sup>DC battery chargers.
- Do not expose charger to rain or snow.
- 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.
- This charger is intended for commercial and industrial use. ONLY TRAINED AND QUALIFIED PERSONNEL MAY INSTALL AND SERVICE THIS UNIT.
- 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.
- 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.
- Use appropriate lockout / tagout procedures to ensure safety of all personnel installing and servicing this equipment. The input and output breakers are equipped with provision to lock breakers in the OFF position.
- WARNING – RISK OF EXPLOSIVE GASES**
  - WORKING IN 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.**
  - To reduce the 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 engine.
- PERSONAL PRECAUTIONS**
  - Someone should be within range of your voice or close enough to come to your aid when you work near a storage battery.
  - Have plenty of fresh water and soap nearby in case battery electrolyte contacts skin, clothing, or eyes.
  - Wear complete eye protection and clothing protection. Avoid touching eyes while working near a storage battery.
- 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.
- NEVER** smoke or allow a spark or flame in vicinity of battery or engine.
- 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.
- Remove personal metal items 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.
- When charging batteries, charge LEAD-ACID or LIQUID ELECTROLYTE NICKEL-CADMIUM batteries only. Consult SENS before using with any other type of battery - other batteries may burst and cause injuries to persons and damage to property.
- NEVER** charge a frozen battery.
- Consult national and local ordinances to determine if additional battery fault protection is necessary in your installation.
- PREPARING BATTERY FOR CHARGE**
  - Be sure area around battery is well ventilated while battery is being charged.
  - Ensure battery terminals are clean and properly tightened. Be careful to keep corrosion from coming in contact with eyes.
  - 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.
  - Study all battery manufacturer specific precautions such as removing or not removing cell caps while charging and recommended rate of charge.
- CHARGER LOCATION**
  - Locate the charger as far away from the battery as DC cables permit.
  - Never place charger directly above or below battery being charged; gases from battery will corrode and damage charger.
  - Never allow battery acid to drip on charger when reading electrolyte specific gravity or filling battery.
  - Do not operate charger in a closed-in area or restrict ventilation in any way.
  - Do not set anything on top of the charger.