



Eclipse Home Series Lithium Battery Cheat Sheet

- Eclipse Home Series lithium batteries should NOT be operated below 32F and should never go below 0 degrees F.
- When paralleling Eclipse Home Series batteries, no more than three batteries should be paralleled with battery cables “battery to battery”. Beyond three batteries, a busbar must be used. Proper wiring practices should be followed and battery to battery cables need to be exactly the same length and gauge.
- Eclipse Home Series batteries cannot be wired in series.
- Do not use temperature sensors with Eclipse Home Series Batteries. Turn off temperature compensation on Victron charge controllers.
- Never Equalize or overcharge an Eclipse Home Series Battery.
- Using a “State of Charge” meter like a Bogart Trimetric, Midnite Whiz Bang or Victron BMV is highly recommended.
- Do not discharge Eclipse Home Series Batteries below 20% state of charge. If you do, make sure you charge the battery back to a minimum of 40% SOC within 3 days.
- Do not operate the battery so it shuts down from low battery voltage. Leaving the battery in a low voltage state can damage the battery. Low voltage shutdown is not covered by warranty. To restart a battery that has shut down due to low voltage, a constant voltage charge must be applied to the battery. The battery will “see” this charge and will then turn on and start charging. It is best to fully charge the battery after a low voltage event.
- Eclipse Home Series Batteries receive the majority of their charging via the “Bulk” stage. Absorb time at “high” voltage should be 20 minutes or less for most charge controls. Over charging a battery may cause it to shut down due to high voltage disconnect. Damage could occur to equipment if the battery shuts down. There is no harm to the battery if it does not get completely charged. It is better to slightly undercharge than to overcharge an Eclipse Home Series battery.
- If charge control “Absorb” time cannot be limited to 20 minutes or less (C40 charge controller or other limited programmable control), then Absorb voltage should be under the max charge voltage set point.
- **Voltage set points for 48V 100Ah Eclipse Home Series Battery:** Absolute max charge voltage is 57.0V. For a fully programmable charge control set the Absorb at 56.0V for 5-10 minutes and Float at 54.0V. For a C40 set the Absorb voltage at 56.0V and Float at 54.0V.
- During low solar, high generator run times of year, take advantage of the Eclipse Home Series’ ability to be used without being fully charged. By running your generator a minimal amount (up to 40%-70% SOC) you can greatly reduce your generator usage compared to a lead battery that needs to be fully charged frequently.
- Low voltage disconnect settings can vary with different inverters and even different systems. A general LVD for Eclipse Home Series 48V batteries is 51.0V.
- Auto Generator Start settings will greatly vary with different inverters and different size systems. A general starting voltage for a 48V system is 52.0V.
- Upon startup, if possible, it is best to start up the solar charge control first, before turning on the inverter breaker. Inverters can have a large surge on the initial start that can shut down the battery BMS.