MASTERVOLT

WARNING! IMPORTANT SAFETY INSTRUCTIONS

MPPT Solar ChargeMaster

IMPORTANT SAFETY INSTRUCTIONS

READ AND SAVE THESE INSTRUCTIONS

WARNING
This chapter describes important safety and operating instructions for use of a MPPT Solar ChargeMaster

GENERAL

1 Before using the MPPT Solar ChargeMaster, read all instructions and cautionary markings on the MPPT Solar ChargeMaster, the batteries, and all appropriate sections of the manual.
2 To reduce the risk of electric shock – Do not expose MPPT Solar ChargeMaster to rain, snow, spray, moisture, excessive pollution and condensing circumstances. To reduce risk of fire hazard, do not cover or obstruct the ventilation openings. Do not install the MPPT Solar ChargeMaster in a non-ventilated room, overheating may result.
3 Use of an attachment or spare part not recommended or sold by Mastervolt may result in a risk of fire, electric shock, or injury to persons.
4 The MPPT Solar ChargeMaster is designed to be permanently connected to a PV array and DC electrical system. Installation of, and work on the MPPT Solar ChargeMaster, may be carried out only by a qualified, authorised and trained technician or electrician, consistent with the locally applicable standards and regulations.
5 Make sure that all wiring is properly installed and in good electrical condition; and that wire sizes are large enough for the ampere ratings of the MPPT Solar ChargeMaster. Check the wiring on a regular base, at least once a year. Do not use the MPPT Solar ChargeMaster when the wiring is undersized or damaged.
6 Do not operate MPPT Solar ChargeMaster if it has received a sharp blow, been dropped, or otherwise damaged in any way; take it to a qualified serviceman.
7 Except for the connection compartment, the MPPT Solar ChargeMaster may not be opened or disassembled. There are no serviceable parts inside the cabinet. Take it to a qualified, authorized and trained serviceman when service or repair is required. Incorrect reassembly may result in a risk of electric shock or fire. Only qualified, electrician installers are authorized to open the connection compartment.
8 Two primary energy sources are present: a PV array and batteries. To reduce risk of electric shock, disconnect the MPPT Solar ChargeMaster from both energy sources before attempting any maintenance or cleaning. Turning off controls will not reduce this risk.
9 This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety.
10 When the PV array is exposed to light, it supplies a DC voltage to the MPPT Solar Chargemaster which can be dangerous to touch. For this reason, use of an external DC-switch is strongly recommended. Alternatively, before attempting any maintenance or cleaning the PV-array should be protected from light exposure, e.g. by covering the PV modules
11 The MPPT Solar ChargeMaster is provided with a grounding terminal. Grounding and all other wiring must comply with local codes and ordinances. Connect the grounding terminal to the central grounding point of the electrical installation. Use one grounding point only. Never ground both the negative pole of the solar array and the negative pole of the battery.
12 Short circuiting or reversing polarity will lead to serious damage to batteries, MPPT Solar ChargeMaster, wiring as well as accessories. Fuses can not prevent damage caused by reversed polarity and the warranty will be void.
13 In case of fire, you must use the fire extinguisher which is appropriate for electrical equipment.
14 If applied in a marine application in the United States, external connections to the MPPT Solar ChargeMaster shall comply with the United States Coast Guard Electrical Regulations (33CFR183, Sub part I).

EXPLOSIVE GASES

1 WARNING – RISK OF EXPLOSIVE GASES. WORKING IN VICINITY OF A LEAD-ACID BATTERY IS DANGEROUS. BATTERIES GENERATE EXPLOSIVE GASES DURING NORMAL BATTERY OPERATION. FOR THIS REASON, IT IS

OF UTMOST IMPORTANCE THAT EACH TIME BEFORE USING THE MPPT SOLAR CHARGEMASTER, YOU READ THIS MANUAL AND FOLLOW THE INSTRUCTIONS EXACTLY.

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 the battery. Review cautionary marking on these products.

3 DANGER: To reduce the risk of explosion – Never use the MPPT Solar ChargeMaster in situations where there is danger of gas or dust explosion or area in which ignition-protected equipment is required.

WARNINGS REGARDING THE USE OF BATTERIES

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

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

3 Wear complete eye protection and clothing protection. Avoid touching eyes while working near battery.

4 If battery acid contacts skin or clothing, wash immediately with soap and water. If acid enters eye, immediately flood eye with running cold water for at least 10 minutes and get medical attention immediately.

5 NEVER smoke or allow a spark or flame in vicinity of battery or engine.

6 Do not short circuit batteries, as this may result in explosion and fire hazard! 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.

7 Remove personal metal items such as rings, bracelets, necklaces, and watches when working with a battery. A battery can produce a short-circuit current high enough to weld a ring or the like to metal, causing a severe burn.

8 Only use MPPT Solar ChargeMaster for charging a LEAD-ACID or Mastervolt MLi batteries and the supply of users attached to these batteries, in permanent systems. Do not use MPPT Solar ChargeMaster for charging dry-cell batteries that are commonly used with home appliances. These batteries may burst and cause injury to persons and damage to property.

9 NEVER charge a frozen battery.

10 Excessive battery discharge and/or high charging voltages can cause serious damage to batteries. Do not exceed the recommended limits of discharge level of your batteries.

11 If it is necessary to remove a battery, always remove grounded terminal from battery first. Make sure all accessories are off, so as not to cause an arc.

12 Be sure that the area around battery is well ventilated while battery is being charged. Refer to the recommendations of the battery manufacturer.

13 Batteries are heavy! It may become a projectile if it is involved in an accident! Ensure adequate and secure mounting and always use suitable handling equipment for transportation.