

HOME E10



Accessory Installation Manual

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The information included in this manual is accurate at the time of publication. However, this manual is subject to change without prior notice. In addition, the illustrations in this manual are meant only to help explain system configuration concepts and installation instructions. Please note the images shown are for illustration purposes only.

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01 General Information

1.1 Introduction

This manual provides the installation instruction for the optional accessories of the Green Solution Inc. (late referred as GS in this document) residential energy storage system E10 (late referred as E10 in this document). Please keep this manual in good condition for later reference.

If you have any questions on the requirement and safety measures in this manual, please contact GS:
Email: support@greensolutions.tech

1.2 Safety precautions

- It is the user's responsibility to follow the instruction of the installation.
- Avoid over-charge or connection errors, or it may cause damage to the E10.
- Before installing the E10, the grid AC inputs and PV DC inputs must be disconnected.
- All wiring and cable connections must be performed by certified technicians.
- Carefully read the labels with the warning and attention signs on the connection panel of the E10.
- Before installing the E10, consult with a licensed contractor, such as a licensed electrician, and use a trained installation expert to ensure compliance with local building and electrical codes and standards, climate conditions, safety standards and all applicable codes and ordinances.

1.3 Emergency actions

The E10 design incorporates safety features and precautions to minimize the risk of failures. However, GS cannot guarantee safety performance of the product is ever exposed to abuse, damage or negligence. When there is an emergency, power off the system. (Refer to section 4.3 for power on/off procedures).

1.3.1. Internal material exposure

If a user happens to be exposed to the internal materials of the battery cell due to damage on the outer casing, the following actions are recommended.

Inhalation: Leave the contaminated area immediately and seek medical attention.

- Contact with eyes: Rinse eyes with running water for 15 minutes and seek medical attention immediately.
- Contact with skin: Wash the affected area with soap and running water and seek immediate medical attention.
- Contact with ingestions: Induce vomiting and seek medical attention immediately.

1.4 Declaration

- This manual contains important information on safety and the proper instructions to install the E10.
- All the images depicted in this manual are meant only to explain the product configuration and installation instructions.
- Read and follow all warnings and instructions before installing and operating the E10. GS will not be responsible for improper installation and operation.
- If the users have installed the product in a location that is not recommended per this manual, please contact GS customer service.
- This manual is specifically for the E10.

02 Expansion Battery Pack Installation (E10 Battery Parallel Connection)

Use case descriptions: To expand the installed battery capacity.

2.1 Prerequisites

2.1.1. Make sure the installation location satisfies the following conditions

- E10 is certified for IP65 and can be installed indoors as well as outdoors. If installed outdoors, do not allow E10 to be exposed to direct sunlight, rain and snow.
- The installation location should have good ventilation.

2.1.2. Qualified installers

The tasks and procedures described herein is intended for use by skilled staff only. A skilled staff is defined as a trained and qualified electrician or installer who has all of the following skills and experience.

- Knowledge of the dangers and risks associated with installing and using electrical devices and acceptable mitigation methods.
- Knowledge of the installation of electrical devices.
- Knowledge of and adherence to this manual and all safety precautions.
- Licensed electrical contractor.
- Or North American Board of Certified Energy Practitioners (NABCEP)-certified solar installer.

Warning

The optimal operating temperature range is 15°C/59°F to 30°C/86°F. If the ambient temperature exceeds the allowed operating range, E10 will be powered off automatically to protect the product from damage. Frequent exposure to extreme temperatures can result in a degradation in the product lifetime.

2.2 Part list

			
1.3m Communication Cable for expansion connection Part 1	Terminal and conduit for expansion connection Part 2	1.05m Power Cable (-) for expansion connection Part 3	1.05m Power Cable (+) for expansion connection Part 4

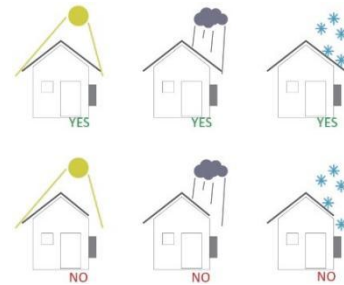
2.3 Installation location and clearance

2.3.1. Installation location

- The E10 can be installed both indoor and outdoor (for outdoor installation, please refer to the following diagram for guidance). Do not expose the E10 to direct sunlight,

rain and snow.

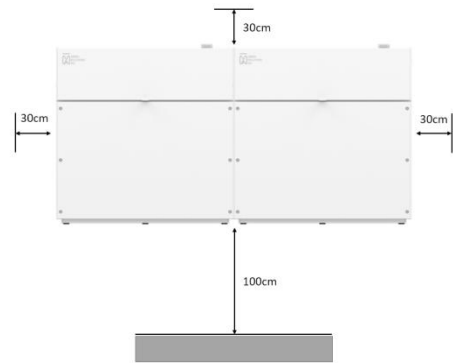
- The E10 can be mounted on a vertical wall or on the ground



2.3.2. Clearance

The clearances shown in the diagram below are required for the E10 batteries installation.

The E10 batteries should be installed <1 meter from the ground to avoid damages in case of dropping. Ensure the E10 is installed in an environment with good ventilation.



2.4 Cable connection

- 1) Place the two E10s side by side at the same height while mounting on the wall (refer to the installation manual section 3.4.1 to 3.4.4 for wall-mounting procedures).

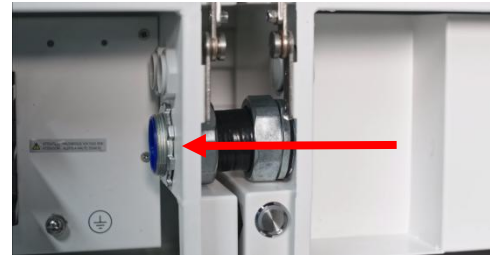


- 2) Remove the waterproof covers on the E10 batteries.

- 3) Remove the conduit cover on the side of the E10 batteries and install the connection conduit.



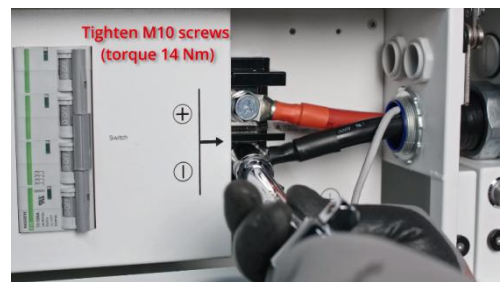
- 4) Slide the E10 (right) towards the E10 (left) and tighten the conduit with conduit locknut.



- 5) Insert the power cables for expansion (+ & -) and communication cable through the conduit.



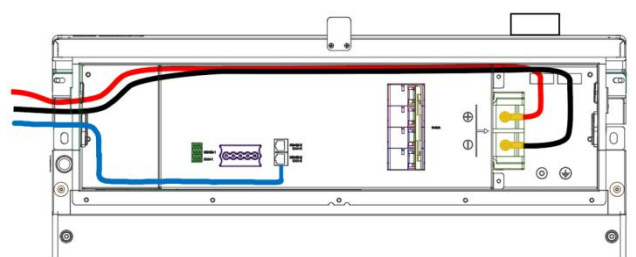
- 6) Tighten the power cables to the terminals and connect the grounding pole to the SC4-6 copper connection base.



- 7) Plug the communication cable to the E10 (left)



- 8) Connect the power cables and communication cable to the E10 on the right.



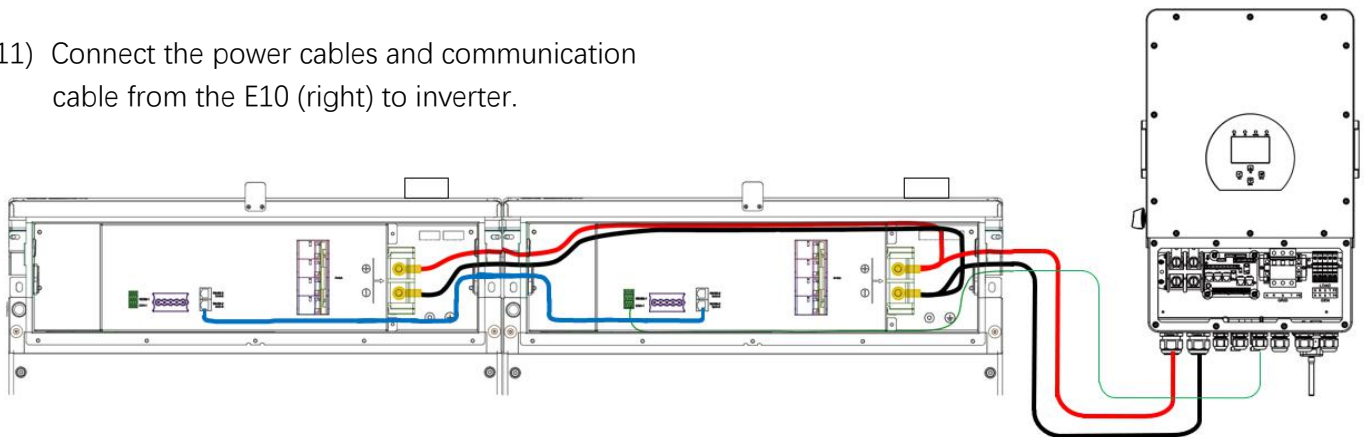
- Stack and screw the two sets of power cables together and tighten to the E10 terminal (right)



- Plug the inverter communication cable to the E10 on the right.

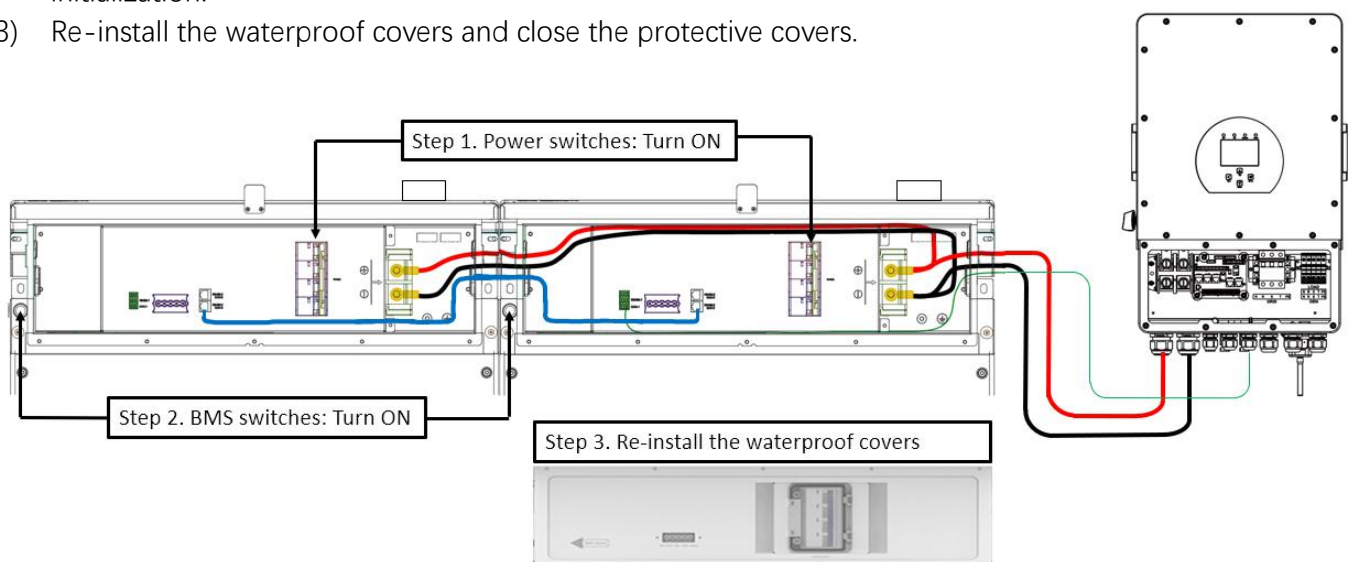


- Connect the power cables and communication cable from the E10 (right) to inverter.



2.5 Commissioning

- Turn on the power switches for both E10 batteries.
- Then turn on the BMS switches for both E10 batteries. Wait 1 minute for the E10 batteries to complete initialization.
- Re-install the waterproof covers and close the protective covers.



03 Thermal Shield Installation

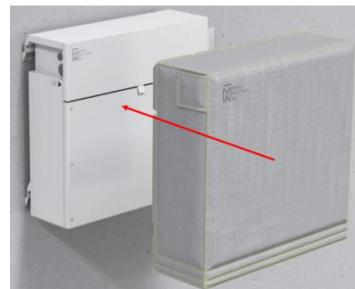
Use case descriptions: To retain performance in extremely cold temperature.

3.1 Part list



3.2 Installation for single E10 battery pack

- Take the thermal shield out from the package.
- Put the thermal shield on to the E10.



- Tighten the shield with the straps and hook-and-loop fastener.



3.4 Installation for multiple E10 battery packs

Same procedures as installing with single E10 battery pack, leave the side hole open to allow connection between 2 E10 battery packs.

