Twin Core Cable in Red and Black

3M Velco

M4*14mm Flat-Heat cross-Screw (For the Installation of Controller)

1000mm/2*2.5mm² Twin Core Cable in Red and Black with MC4
User’s guide

After receiving the solar panel kit, please check if all accessories are included in the package and prepare to test your kit:

1. Locate a sunlit area clear from hanging branches or obstacles.
2. Unclip the two latches (2, Table 1) on the side of the unit and fold two panels outward. Extend the two support legs (4, Table 1) to desired length and lock the stands in position. Set solar panel kit in the position facing the sun.

Tip: To obtain the maximum output power of solar modules, it is recommended to adjust the solar modules based on solar trajectory.

How to test the solar panel

Method 1: Use a multimeter

Set your multi-meter to measure DC voltage and put the red probe on the red positive MC4 cable (14a, Table 1) and the black probe on the black MC4 cable (14b, Table 1) and make sure the connections are secure. The open-circuit voltage should be displayed on your multi-meter and it should be around 17.6V-23V. This is your solar panel’s voltage without going through the charge controller.

If you’re not getting something within that range or close to those numbers, you should check and make sure the solar panel is in direct sunlight and that the connections between the MC4 cables and the multi-meter is secure.

Specifications

100w solar panel

<table>
<thead>
<tr>
<th>Type</th>
<th>Module Size</th>
<th>N.W</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Module</td>
<td>mm</td>
<td>Kg</td>
<td>W</td>
</tr>
<tr>
<td>2*50w</td>
<td>650<em>505</em>30</td>
<td>15</td>
<td>2*50</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Type</th>
<th>Module Size</th>
<th>N.W</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Module</td>
<td>mm</td>
<td>Kg</td>
<td>W</td>
</tr>
<tr>
<td>2*50w</td>
<td>650<em>505</em>30</td>
<td>15</td>
<td>2*50</td>
</tr>
</tbody>
</table>

Power Your Green Life!
Method 2: Use your solar generator

To test if the solar panel is working with a solar generator with a built-in charge controller, connect the MC4 adapters that came with your solar generator and plug it in to the MC4 cables of the solar panel directly (14a and 14b, Table 1). Turn your solar generator on and it should start charging from the solar panel.

How to test if the charge controller is working

When testing the charge controller, please make sure a battery in working condition is used. The charge controller will not power on with a bad battery. A good thing to do is to test with your 12 V car battery.

Step 1: Clamp the red positive battery clip (9a, Table 1) to the positive terminal of 12V battery, black negative battery clip (9b, Table 1) to the negative terminal and make sure the connection is secure.

Step 2: When all the connections are complete, the Battery status indicator (10, Figure 1) should light up if the battery is connected to the charge controller. If the solar panel is under direct sunlight, the charging status indicator (10, Figure 1) will be on as well. (Detailed information under Specifications section)

Tip: The charge controller will not respond unless it is connected to a battery! Always connect the battery first, then load (if applicable).

For lights explanation, please check the Specifications section.
What are you going to use it for

1. **Charge solar generators**
   1.1. Charge 12V Solar Generator with built-in Charge Controller

   ![Solar Generators]

   Step 1: understand your solar generator and prepare the MC4 adapter for your solar generator

   ![MC4 Adapters]

   Step 2: Disconnect MC4 Connectors and let it to be a solar panel with MC4 connectors

   Step 3: Use your MC4 Adapter to charge your solar generator

2. **Charge your 12 Volt battery**

   ![Batteries]

   The solar panel kit is designed to charge a large range of batteries including Sealed, Flooded, GEL, AGM, Lithium, lead-acid battery and other deep cycle battery. The batteries are used as car battery, RV battery, boat battery and emergency back-up battery.

   Step 1: understand your battery: battery type, capacity and voltage

   Step 2: check the charge controller’s set up. We have defaulted the setting of the charge controller is for SEALED. (AGM is also included in SEALED type.) If your battery’s type is different, please set your battery type with the charge controller following the instructions below.

3. **Connect in parallel with another solar panel to charge a 12V battery faster**

   When you combine two solar panels in parallel, the current from the two solar panels are added together and this will enable the battery to charge faster. For more information about adapters needed, please contact us.

   **Warning**: Make sure the combined current is lower than the rated current of the charge controller which is 10 amps for this model.
Warranty

Limited Product Warranty-One Years Repair, Replacement and refund Remedy, but fuse excluded

The solar panel itself comes with an 18-months workmanship warranty and a 25-year 85% output warranty. Within 30 days of purchase: Items can be returned for a full refund or replacement, we will cover return shipping due to quality issues, buyer pays return shipping and replacement shipping due to non-quality issues. Within 30 days to 6 months: Items can be replaced new or refurbished due to quality issues, we will cover return shipping. Items can be replaced with a restocking fee due to non-quality issues, buyer pays for all shipping. Within 6 months to 18 months: Items can be replaced refurbished due to quality issues, buyer pays for all shipping.

Accessories:
Within 30 days of purchase: Items can be returned for a full refund or replacement, we will cover return shipping due to quality issues, buyer pays return shipping and replacement shipping due to non-quality issues. Within 30 days to 6 months: Items can be replaced new or refurbished due to quality issues, we will cover return shipping. Items can be replaced with a restocking fee due to non-quality issues, buyer pays for all shipping. Within 6 months to 18 months: Items can be replaced refurbished due to quality issues, buyer pays for all shipping.

Charge Controller:
The controller itself comes with a 1-year warranty. Within 30 days of purchase: Items can be returned for a full refund or replacement, we will cover return shipping due to quality issues, buyer pays return shipping and replacement shipping due to non-quality issues. Within 30 days to 6 months: Items can be replaced new or refurbished due to quality issues, we will cover return shipping. Items can be replaced with a restocking fee due to non-quality issues, buyer pays for all shipping. Within 6 months to 1 year: Items can be replaced refurbished due to quality issues, buyer pays for all shipping.

Seller shall not be responsible or liable in any way to the customer or any third-party arising from any non-performance or delay in performance of any terms and conditions of sale, including this “Limited Warranty for PV Modules”, due to acts of God, war, riots, strikes, warlike conditions, plague or other epidemics, fire, flood, or any other similar cause or circumstance beyond reasonable control. such cases, this Limited Warranty shall be suspended without liability for the period of delay reasonably attributable to such causes.

Register your warranty with ACOPower, please visit:   https://www.acopower.com   select “Warranty Registration”.

Thank you for your business and support!
ACOPower Team
technical support: support@acopower.com
www.acopower.com