

GENERAL INSTALLATION INSTRUCTIONS DuraVolt Marine Series Solar Panels

Introduction

Thank you for choosing DuraVolt Solar Panels. With proper operation and maintenance, your DuraVolt Solar Panels will provide you with clean renewable solar electricity for many years. These instructions contain “basic” installation and safety information of which you should be familiar with. Please contact us if you have any questions info@itcsolar.com or 1-858-337-7950 9AM – 6PM Pacific Time 7 Days / Week.

NOTE: All DuraVolt Solar Panels are **SELF-REGULATING** and typically require no additional controller or voltage regulator.

Different DuraVolt Models and Sizes

These instructions contain installation and safety information for several products ranging from 1 watt to 160 watts. The drawings and pictures may not look the same as the model you have purchased. The model you have purchased may not include all the connection adapters pictured.

Disclaimer of Liability

These Instructions do not constitute a warranty, expressed or implied. DuraVolt does not assume responsibility and expressly disclaims liability for loss, damage, or expense arising out of or in any way connected with installation, operation, use or maintenance of DuraVolt solar panels. DuraVolt reserves the right to make changes to the product, specifications or installation instructions without prior notice.

Mounting - DuraVolt Marine Version:

Using the (4) Rubber Mounting Holes (1 in each corner)
The most common method is to use the (4) mounting holes secured to some form of bracket or solid horizontal surface



Mounting - Super Magnetic Version:

The mounting process is simple. The most common application is to mount the panel horizontally on the roof of a vehicle or other metal surface. **Do not** mount the panel vertically. Please contact us if you have any questions about mounting the panels.



Optional - Rail Mounting (NOT Included)

Available at West Marine. Model # 5142070 | Mfg # 81062



Connecting the DuraVolt (Self Regulating) Panels to 12V & 24V Battery Banks.

To ensure proper system operation, be careful to observe the correct cable connection polarity when connecting the panels to a battery. Positive output cable is White or Red wire, Black wire of output cable is always negative. Minimum recommended cable size is 16 AWG gauge.

Easy Plug & Play options to connect the DuraVolt Solar Panels Using The 3 Included Adapters.



**Fused SAE Output Plug
(Factory Installed)**



**1. Ring Terminals
Adapter**



**2. Battery Clip
Adapter**



**3. Lighter Plug (Fused)
Adapter**

Quick Connect Options using the factory installed SAE panel output plug & adapters:

NOTE: A safe installation can be performed by anyone. No prior solar or DC electricity experience should be required.

Option 1: Connect directly to your battery using the ring terminals adapter (recommended).



- a) Connect the SAE output plug to the ring terminals adapter.
- b) Connect the Positive Red (+) to the battery terminal (+)
- c) Connect the Negative Black (-) to the battery terminal marked (-)
- d) Always Observe Battery Polarity, double check it, triple check it.

Option 2: Connect to your battery using the battery clip adapter.



- a) Connect the SAE output plug to the battery clip adapter.
- b) Connect the Positive Red (+) clip to the battery terminal (+)
- c) Connect the Negative Black (-) clip to the battery terminal marked (-)
- d) Always Observe Battery Polarity, double check it, triple check it.

Option 3: Connect directly to a “live” cigarette lighter receptacle.



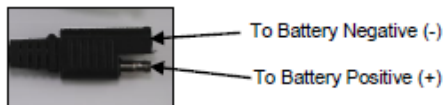
- a) Connect the SAE output plug to the lighter plug adapter.
- b) Firmly insert the lighter plug into an available “live” receptacle.
- c) Try to use a “live” receptacle that is not switched on/off by vehicle ignition.
- d) If Receptacle is switched (on/off by ignition key) the panel will only charge when key is turned on.

Option 4: Connect to other SAE devices or SAE extension cables (not included).



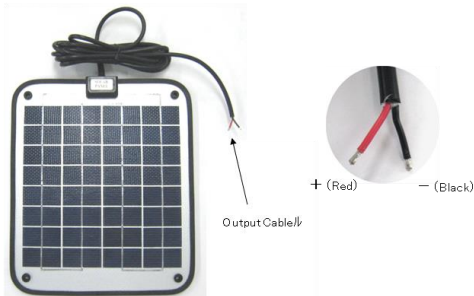
- a) Connect the SAE output plug to your SAE devices or SAE extension cables.
- b) Confirm polarities with a DVM. double check it, triple check it.

CAUTION: Check that all Polarities are matched.



Advanced Wiring Instructions: Directly to battery or existing system wiring.

DANGER: There are many correct and incorrect ways to connect the DuraVolt Panels directly to your battery or system. The options are too many to cover in this SHORT GENERAL INSTALLATION INSTRUCTIONS SHEET. **If you are not sure we encourage you to contact us to determine what is best for your installation.**



If you know about DC electricity and want to configure the panel without assistance, simply cut the cable before the factory installed fused SAE adapter. This will reveal the Red (+) and Black (-) raw output plug. This will not void the warranty.

NOTE: Replacing DuraVolt Fuses

Fuse (1) Part# BP/ATM-5 5 Amp Mini-Fuse

Fuse (2) Part# AGC 5A 250V (1.18" Long)

1

2



For Technical, Warranty, & Return Information Contact:



MARINE GRADE PRODUCTS

5666 LA JOLLA BLVD #122
LA JOLLA CA 92037
Phone:
FAX:



www.itcsolar.com
info@itcsolar.com
1-858-337-7950
1-858-270-7155