

MANUAL**Model: PPT 48 - 10**

Solar Converters Inc. - Rev. D

Warning:

This unit operates at potentially dangerous and lethal voltage with energy storage levels sufficient to cause serious shock hazard. To be installed and operated only by skilled and trained personnel only.

QUICK START:

While it is recommended that the manual be read in detail before operating this unit, for the experienced technician, this section describes a quick system setup.

Power Connections: PV - to BLACK #12 AWG Flying Lead
Pump + to WHITE #12 AWG Flying Lead
Pump - to BLUE #12 AWG Flying Lead

Signal Connections: 1) Float Switch:

Connect yellow #24 AWG wire to float switch as well as the dry switch in parallel by using "Y" connections to the yellow wire at the unit. The unit will shut off if anything connects the yellow wire to the Large PV - (Black) together with a contact resistance of less than 100 Ohm. Use float switches and dry switches that make the connection when the unit is required to turn off.

Connect last:

Ensure Pump is clear and safe to operate

Power Connection: PV + to RED #12 AWG Flying Lead

1.0 Specifications**Introduction**

Input Voltage: 0 - 90 DC volts PV Array, approx. 60 V nominal operating

Current: 0 - 10 DC amps nominal

Output Voltage: regulated 58V max, adjustable with internal potentiometer

Current: 10 amps continuous, (provided sufficient solar power)

Connection: Power: max. AWG # 12 Flying Lead

Signal: max. AWG # 24 Flying Lead

Maximum power point tracking to optimize output power

Efficiency: >95% over 20% charging load

Transient protected - input and output

Temperature range: -40 C to +60 C

Start Current: 25 Amps for 10 seconds

Float switch/Dry Switch: On/off functions is accomplished by connecting the yellow signal wire to PV- with a float switch and/or dry switch connection.

2.0 Power Connections

2.1 Ground

It may be beneficial to connect the case of the device to ground reference to optimize its transient protection and minimize any potential interference with other equipment. Note the case is not connected to any of the units connections.

2.2 Pump Connection

Using wire of sufficient amperage for the PUMP load connection #14 AWG or better connect the positive of the PUMP to the WHITE Power lead. Similarly connect the negative of the PUMP to the BLUE.

2.3 Input Power Connection

Using a wire of sufficient amperage for the input power (min. #14 AWG) Connect the negative of the solar panel to the BLACK terminal.

(Do this last only when the pump is clear and safe to operate) - Connect the positive of the solar panel to the RED Power Lead.

3.0 Signal Connections

3.1 Float Switch/Dry Switch Operation

To turn the unit off, connect the yellow lead to a float switch or similar device that connects the yellow lead to the black PV- when it is desired to turn off the unit.

If both dry switch and float switch operation is required, connect in a "y" connection each yellow wire to the respective terminals of the float and dry switch. The float and dry switch connection to be configured such that the switch closes or connects when it is required to turn the pump off. The pump will shut off if anything connects the yellow wires with a contact resistance of less than 100 Ohms.

WARRANTY

The product is warranted to be free from defects in material and workmanship for a period of one (1) year from the date of purchase by a retail customer. The purchase date must be evidenced by a valid and original sales receipt. In lieu of sales receipt, factory will use code date on its label. Removal of the Solar Converters Inc. label or serial number will void the warranty.

Product liability, except where mandated by law, is limited to repair or replacement at the manufacturer's discretion. No specific claim of merchantability or use shall be assumed or implied beyond what is printed on the manufacturers printed literature. No liability shall exist from circumstances arising from the inability to use the product, or its inappropriateness for any specific purpose or actual use, or consequences thereof for any purpose. **It is the user's responsibility to determine the suitability of the product for any particular use.** Solar Converters Inc. shall not be liable for any damages or any kind including without limitation, special, incidental or consequential obligations and liabilities of Solar Converters Inc. and the remedies of Buyer set forth herein shall be Solar Converters Inc. sole and exclusive liability.

Failure to provide a safe and correct installation, safe operation, or care for the product will void the warranty. Personal safety, and compatibility with any other equipment is the ultimate responsibility of the end user. Any returned product that shows significant evidence of abuse may not be covered by this warranty. Installation must be performed by a person with qualification to insure safe and effective operation and the installation thereof certifies that the installer has the technical qualifications to do so.

Solar Converters Inc. cannot guarantee the compatibility of its products with other components used in conjunction with Solar Converters Inc. products, including, but not limited to, solar modules, batteries, and system interconnects, and such loads as inverters, transmitters and other loads which produce "noise" or electromagnetic interference, in excess of the levels to which Solar Converters Inc. products are compatible. Solar Converters Inc. shall not assume responsibility for any damages to any system components used in conjunction with Solar Converters Inc. products nor for claims for personal injury or property damage resulting from the use of Solar Converters Inc. products or the improper operation thereof or consequential damages arising from the products or use of the products.

The warranties set forth herein are Solar Converters Inc. sole and exclusive warranties for or relating to the goods. Seller neither makes nor assumes any warranty or merchantability, any warranty fitness for any particular purpose, or any other warranty of any kind, express, implied or statutory. Solar Converters Inc. neither assumes nor authorizes any person or entity to assume for it any other liability or obligation in connection with the sale or use of the goods, and there are no oral agreements or warranties collateral to or affecting the sale of the goods.

WARRANTY CLAIM PROCEDURE

In the event of product failure, follow this warranty claim procedure.

1. Make sure the problem you are having is actually due to the suspected product and not some other part of the system. You may call technical support for advanced troubleshooting assistance.
2. If you determine that a Solar Converters Inc. product is actually defective, describe on paper, in detail the exact nature of the failure.
3. The product must be accompanied by proof of the date of purchase satisfactory to Solar Converters Inc.
4. Return the product and description to the business office address, along with your address and a daytime phone number. Purchasers must prepay all delivery costs or shipping charges as well as any other charges encountered, in shipping any defective Solar Converters Inc. product under this warranty policy. **No shipment will be accepted Freight Collect.**
5. Any return shipment from Solar Converters Inc. will be via Canada Post. Foreign shipments will ship best way. Special shipping arrangements are available at the customer's expense.