



# BPE PVDivert

Installation & Operator's  
User Manual V3

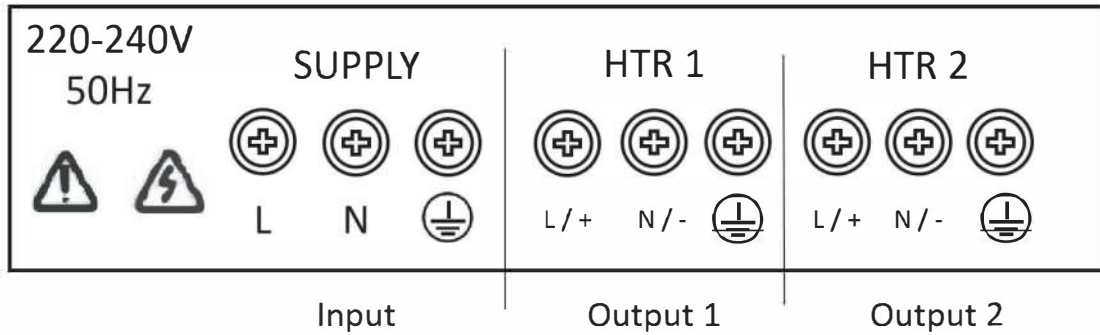






### 3) Wiring the PVDivert

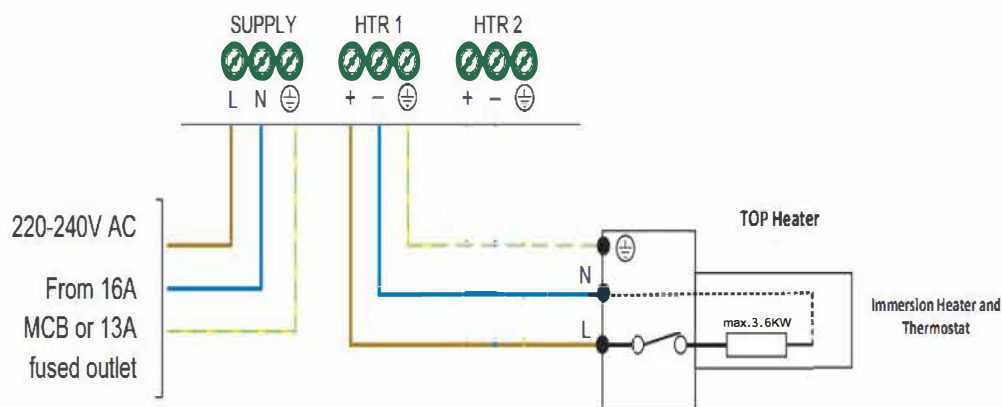
The following wiring operation must be carried out by qualified professionals.  
 16A circuit breaker or 13A fuse should be connected at the higher level of the power input terminal.



Input	L	Live input Connection port
	N	Neutral input Connection port
	⊕	Ground input Connection port
output	L / +	Connect resistance load positive electrode.
	N / -	Connect resistance load negative electrode.
	⊕	Ground output Connection port
PS: This unit is only suitable for connect resistance load		

### Wiring Schematic Diagram

#### (1) Wiring of single water heater



When only one water heater is connected, refer to the above diagram. .



Press button Display and Down for 1 second

Display shows

Pairing Pairing...
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Press button on sender unit 3 secs

Display shows

Pairing Pairing success
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or

Pairing Pairing Failed
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## 5) Manual Operation

The User may press "Enhance" to select different times for heating the water. PVDivert will ensure the opening of the relay and it will not be controlled by the current information collected by the emitter. Each time "Enhance" is activated, the duration will be increased in 15 minute increments until the maximum of 120 minutes at which time the "Manual Enhance Turnoff" will directly shut off the timed water heating.

Important: When timing water heating is selected, PVDivert will output at maximum energy. At this time, it is possible to get electricity from the grid if the power generation energy of the photovoltaic system is not enough to support the energy required by Solar Immersion Controller.

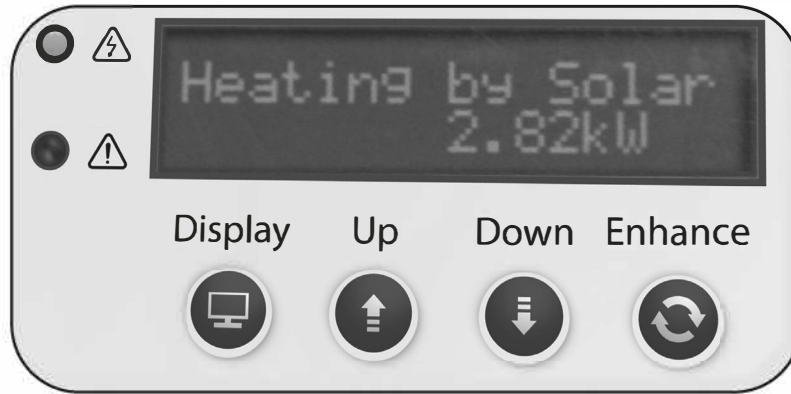
## 6) Warnings and Messages

### Solar Immersion Controller

Sender Battery Low	Batteries are low in the emitter unit. Please replace the batteries
Lost Signal to sender	Possible causes: 1. Batteries may have expired 2. Solar Immersion Controller is positioned too far away from emitter
Over Load	The unit must not exceed 3.6kW max.



## 8) User Operation



### DESCRIPTIONS OF BUTTONS

Display	Display the stored electricity quantity information
Down	Revise the timing switch information
Enhance	Manual operation button
LED(green)	Output indicator light
LED(red)	Warning indicator light
Display + Enhance	Press and hold for 5 Secs, the software will be reset. All data will be clear.
Reset	Press for 1 Secs, The hardware will be reset.

### DISPLAY CONTENTS

Heating by solar xx kW	Shows the value of energy being saved to immersion heater
Water tank hot	When the temperature of the water tank of the water heater reaches the setting value, the thermostat within the water heater will be disconnected, and Solar Immersion Controller output will detect no load.
Water heating off	Solar Immersion Controller turns off the output when no residual energy flows into the grid.
Saved Today xx kW	Energy saved today
Saved Yesterday xx kW	Energy saved yesterday
Saved Last 7 days xx kW	Energy saved in the past 7 days
Saved Last 28 days xx kW	Energy saved in the past 28 days
Saved Amount xx kW	Total value of energy saved to the immersion heater since Solar Immersion Controller was installed
Time HH:MM	Current time in 24hr format



## 9) Timing Operation

Solar Immersion Controller can provide users with three manual time periods. Solar Immersion Controller will start the maximum energy. At this time, it is possible to get electricity from the grid if the power generation energy of the photovoltaic system is not enough to support the energy required by Solar Immersion Controller.

Appointment time operation can be set via the buttons of "Up" "Down". Refer to the following table for details. Press "Up" to enter the current settings page which displays the current time period, the display can be adjusted among several time periods. During the setting process, the first displayed is "Enhance time 1", the first number at the first appointment time will flash after pressing "Down". Press "Down" for selection and press "Up" for confirmation, and then move to the next number. Continue in the same manner.

### Solar Immersion Controller

Display shows	Function
Enhance time 1	Set the timed enhance for period 1. Once programmed the Solar Immersion Controller will remember it. Set "00:00 to 00:00" to disable
Enhance time 2	Set the timed enhance for period 2. Once programmed the Solar Immersion Controller will remember it. Set "00:00 to 00:00" to disable
Enhance time 3	Set the timed enhance for period 3. Once programmed the Solar Immersion Controller will remember it. Set "00:00 to 00:00" to disable
Set time HH:MM	Set the clock time in hours and minutes

**Solar Immersion Controller**

<b>Content</b>	<b>Specifications</b>
Operating Voltage	AC 220-240V
Maximum Permissible Loads	16A(Max 3,6KW)
Operating Radio Frequency	433MHz
Operating Ambient Temperature	-10 to 45 °C
Power Dissipation	l-3W
Dimensions	130 x 218 x 63.5
Weight	905g

**Sender**

<b>Content</b>	<b>Specifications</b>
Operating Radio Frequency	433MHz
Battery Type	2*AA 1.5V
Battery Life Cycle	8-12 months
Operating Ambient Temperature	-25 to 50°C
Radio Range	Up to 30m indoors (Outdoors up to 250m)
Current transformer	50A/50mA 0.5
Dimensions	68 x 96 x 30 mm (excluding clamp)
Weight	70g

# 10) Warranty

- BPE provide a 5 year warranty period.
- Warranty period starting: From point of sale
- Warranty Evidence: production of equipment serial number and local approved PVDivert dealer delivery invoice
- Range: During the warranty period the occurrence of any damage will be assessed by the BPE locally approved dealer and BPE to define the scope and responsibilities of each party.
- Warranty Policy: In order to provide better services to all users of PVDivert. All authorised distributors of our company are required to respond to end users' warranty claims.
- During the warranty period replacements will be made by an authorised dealer of products and accessories.

## **BPE reserves the right to invalidate the Warranty under the following circumstances:**

- (1) Permission has not been granted by BPE for Product design changes, modifications or replacement parts
- (2) Evidence of modification, changes, attempted repair, missing or tampered with serial numbers, missing PVDivert company seal.
- (3) Incorrect installation and commissioning.
- (4) Failure to comply with the appropriate safety regulations
- (5) Improper storage or damage incurred while in the possession of the end user.
- (6) Transportation damage including paint surface scratches caused by transit. If damage occurs when unloading, sufficient evidence should be reported to the insurance company as soon as possible.
- (7) Failure to comply with user manuals, installation guides, maintenance procedures.
- (8) Improper use or improper operation of equipment.
- (9) Lack of ventilation equipment associated with usage of this product.
- (10) Maintenance procedures performed to an unacceptable standard.
- (11) Force Majeure (ie lightning strikes, overvoltage, storms, fires).