



SOLAR SWITCH

Qualification Guide

Peak Solar Detection Switch for Improved Solar System Management

INSTALLATION GUIDE

- Confirm appropriate timers and solar capacity are in place.
- Install the Solar Switch in the location most accessible after the timer
- Find a suitable mounting location for the solar panel. The solar panel requires full view of the sky throughout the day. Any shade from trees or other obstructions will impede the operation of the switch.

Note: As there are many possible permutations and possibilities, each installation should be evaluated on its own conditions and merits by a suitably qualified individual



PV Sensor



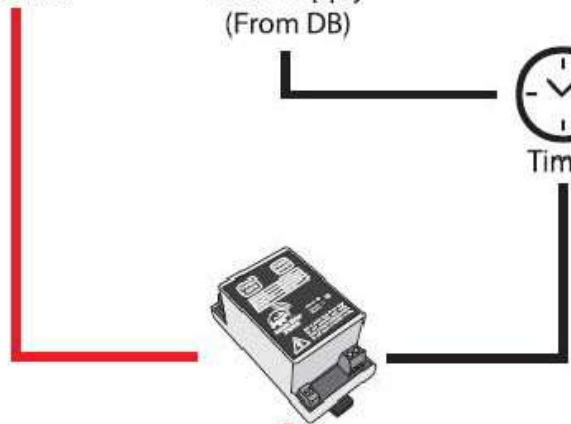
Solar Supply
(From DB)



Timer



Load



IMPORTANT



Prior to installing the switch and connecting the desired load to the solar inverter system, it must be confirmed that there is adequate capacity for the system to properly run the load.



Timers must be used to ensure that the optional loads are only switched on at appropriate times.



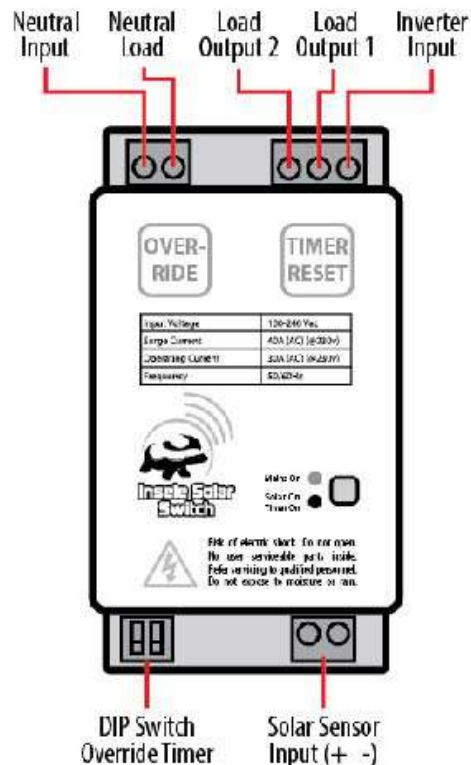
It is advisable to avoid activating the nonessential loads first thing in the morning as this is normally when the batteries consume the largest amount of energy. Timers can be used to activate the load/s after the batteries are typically fully charged.



Electrical wiring and installation protocols should be adhered to at all times

CONNECTIONS

- Connect All Neutral connections to the N bus
- Connect the Live from the DB Board & timer to the INV IN Connector
- Connect to the load Live wire to the Load Out connector 1 or 2
- The solar sensor must be connected to the Sensor connector with correct polarity: Black wire with white stripe = "+"
- Black wire only = "-"







OVERRIDE TIMER SETTING

The override timer is designed to allow the load to run at any time but needs to be configured prior to the installation as in the case of most installations, the selector switches will be concealed behind the face plate of the DB board once installed.

The timer can be set based on the switch positions indicated in the table:

Time override options:

- 24 Minutes
- 30 Minutes
- 60 Minutes
- 120 Minutes

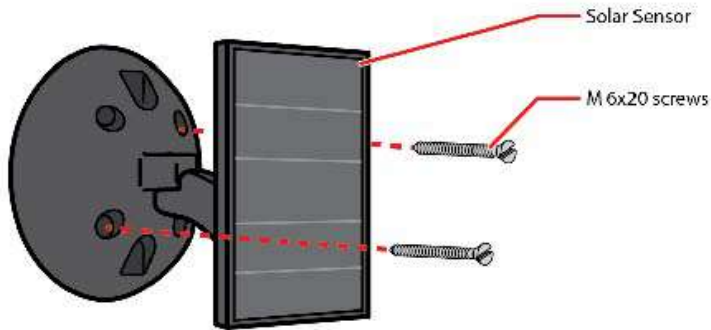
Minutes	SW 1	SW 2	Switch
120	Off	Off	
60	On	Off	
30	Off	On	
24	On	On	

OVERRIDE TIMER OPERATION

- The normal operation of the switch is fully automatic and is driven by the intensity of the solar energy on the sensor.
- Should it be necessary to run the load when there is insufficient solar energy ...
Example: a long period of overcast or rainy weather and the pool needs to be cleaned or the geyser heated:
 - Press the OVERRIDE button on the face of the switch and the switch will activate the load
NOTE: The installed timer must be set to Manual ON or be in the ON period
 - The switch will then activate the load for the preset time as set with the Override Timer Settings
- If the OVERRIDE needs to be cancelled before the end of the elapsed time, the TIMER RESET button can be pressed and the system will return to normal operation.

SOLAR SENSOR

- The Solar sensor must be installed on a fixture/wall/pole/roof that has an uninterrupted view of the sky (close to the solar panels will be helpful.)
- The adjustable mounting can allow the sensor to "see the sky" at the correct angle from many different mounting positions.
- The cable supplied should be adequate for most installations, but if longer lengths are required, this sensor wire can be extended to the required length. Please ensure correct polarity and suitable wire is used and any joints are properly protected and secured.



LED INDICATORS

- There is an LED indicator on the switch that indicates the following:
 - GREEN: Power is applied to the switch
 - If the green LED is off
 - The timer may be in the OFF period- put the timer in "Manual On" if the load is to run
 - There is no power from the Inverter
 - Red: Load is on
 - Enough Sunlight
 - Override Timer active
- If there is no RED indicator
 - Load is Off
 - Insufficient sunlight/shade on the Solar Sensor
 - If the load must be run then activate the OVERRIDE Timer

NOTE: if the RED LED is very bright, there is adequate Solar power PLUS the Override Timer is active. Please cancel the Override Timer



SOLAR SWITCH APPLICATIONS



POOL PUMP



POOL HEATER



HEAT PUMP



JACUZZI PUMP



JACUZZI
HEATER



BOREHOLE
PUMP



IRRIGATION
PUMP



GEYSER



AIR
CONDITIONER