

**Orange**  
**PUMPS**

## HD50 Solar Pump



# Installation Instructions

## HD50 Solar Pump



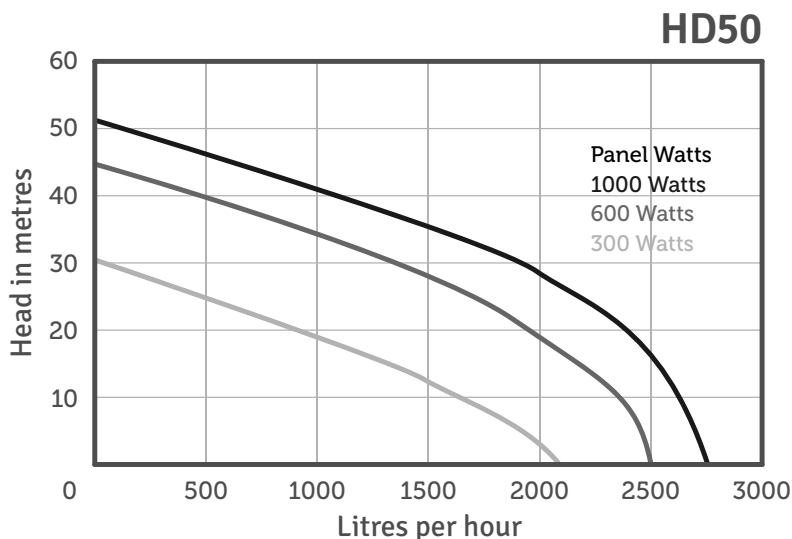
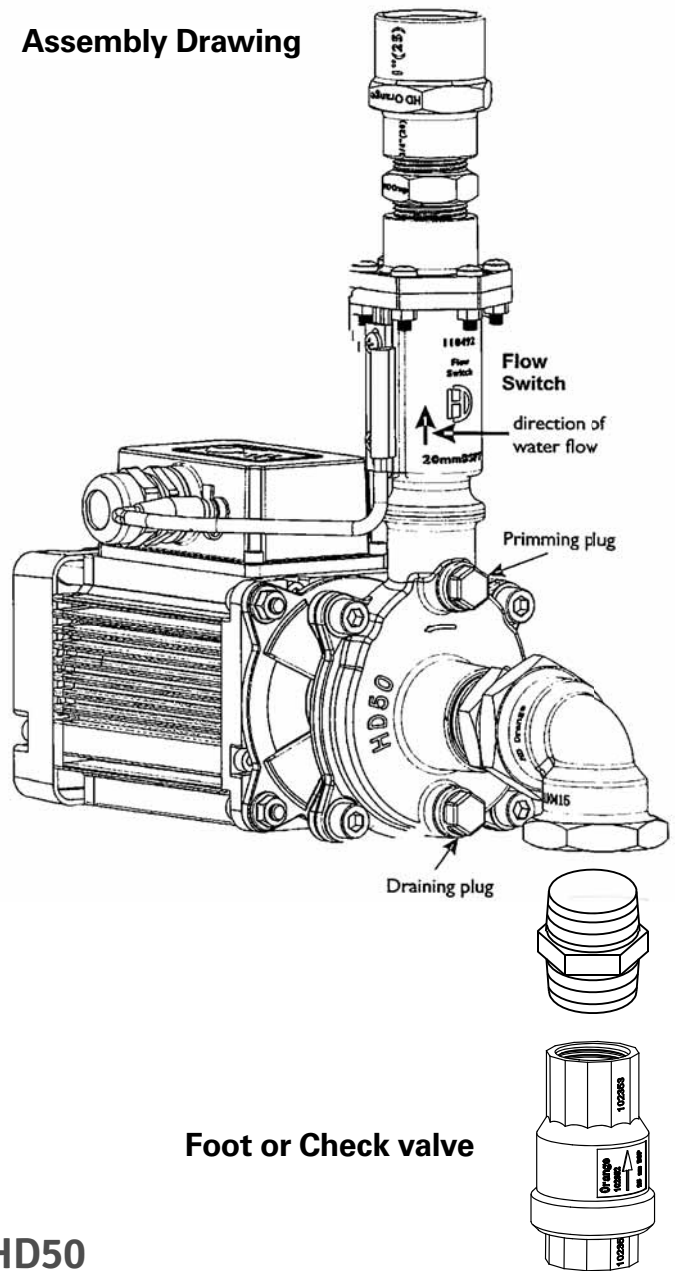
### Pump Commission

1. Ensure voltage from solar panels do not exceed 25–45 Voc (open circuit volts).
2. Place pump in pump cover provided to protect the circuit board from damaging effects of rain and dust.
3. For automatic use install the flow valve correct way up and insert electrical lead into motor socket.
4. Suction lifts require a foot valve at the end of suction line.
5. Flooded suction requires a check valve at the suction port.
6. Prime Pump by pouring water into the discharge port. Open the priming plug to allow air in the casing to escape and water to fill the suction pipe.

### Pump Suction

The pump should be located as close to the water source as possible. The vertical suction height should not exceed 4–5 metres. For long suction lines lay the pipe as evenly as possible so air trapped in pipe is minimised. For suction length up to 100 metres use 1 inch (25mm) suction pipe. For longer distances larger pipe is required to reduce the pipe friction.

### Assembly Drawing



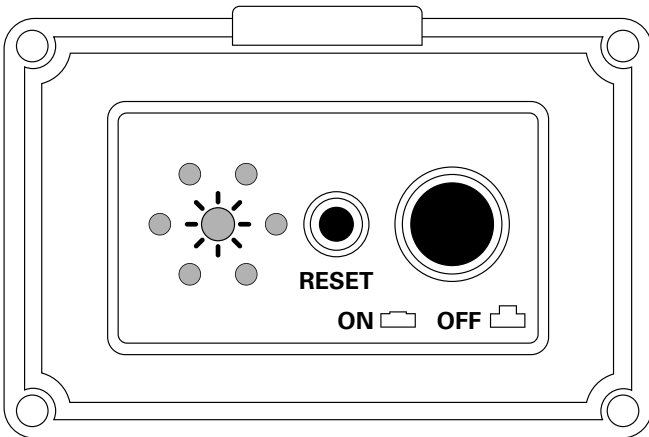
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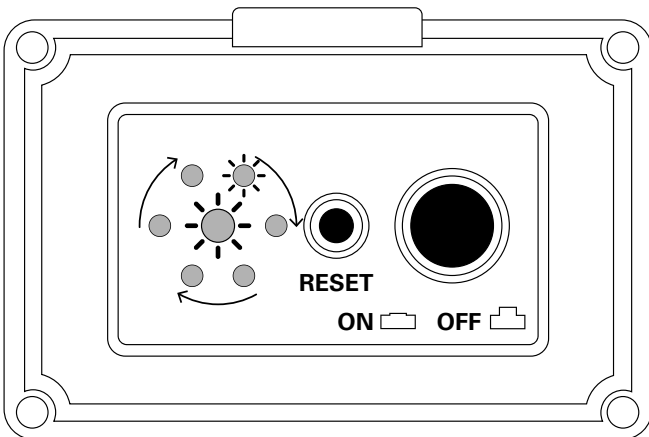
### Operation Guide

Automatic Mode: Flow valve is connected.  
Manual Mode: Flow valve not connected.  
Press on/ off button to operate.



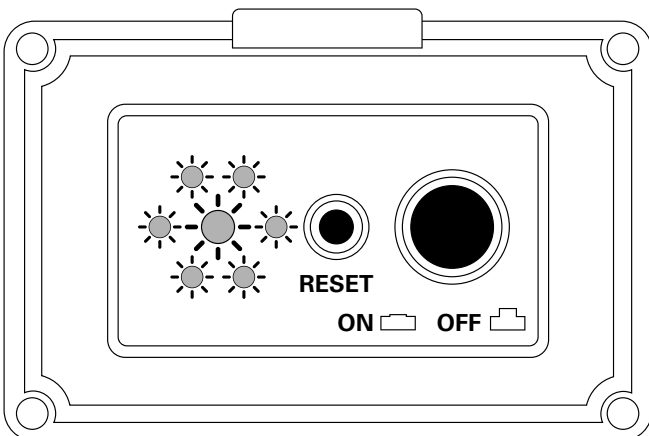
### Standby Mode

Red light illuminated.  
Automatic mode: Pump is in standby and will turn on at the end of time sequence in 30 minutes.  
Manual mode: Pump is off.



### Pump operating

Green lights rotate.  
Automatic mode: Pump is operating.  
Manual mode: Pump is operating.



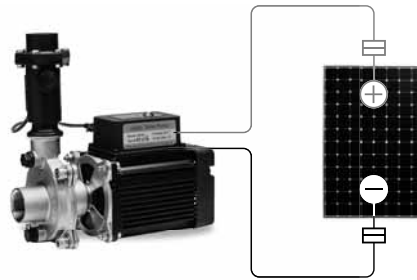
### Pump not operating

Green lights flash together.  
Automatic mode:  
1. Pump has lost prime.  
2. Flow stopped as tank or troughs are full.  
Automatic & Manual mode:  
1. Low volts, low light.

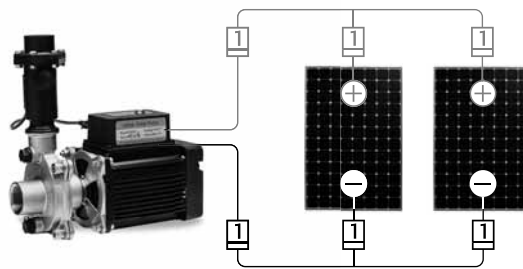


# HD50 Electrical lead kits wiring diagram

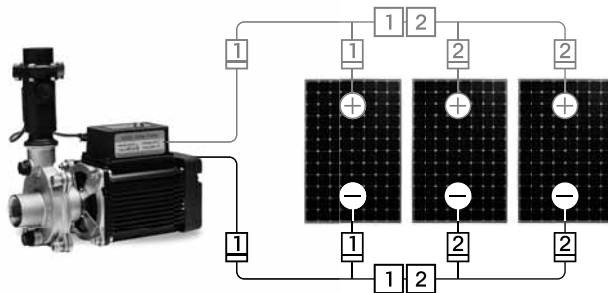
## One Panel System



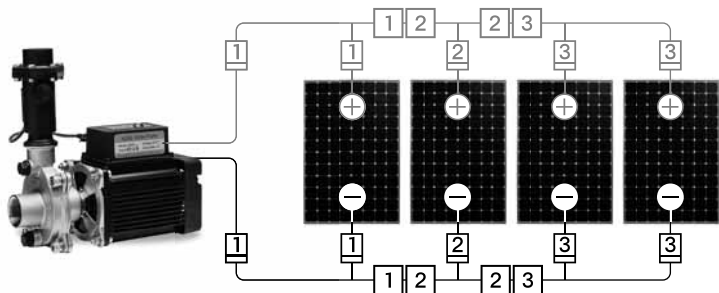
## Two Panel System Electrical Lead Kit – Parallel x 1



## Three Panel System Electrical Lead Kit – Parallel x 2



## Four Panel System Electrical Lead Kit – Parallel x 3



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