



English

# Installation, Operation and Maintenance Instructions

## Tank & Bore Level Switch

# Overview

## Tank and Bore Level Controller Installation Instructions

### System Overview

The Tank and Bore Level Controller is a water level control system for control of both bore and float switches simultaneously. The controller is to be used in conjunction with the Mono Solar range.

Note that the Tank and Bore Level Switch is not suitable for use with the Mono Mini MPPT.

The system comprises of:

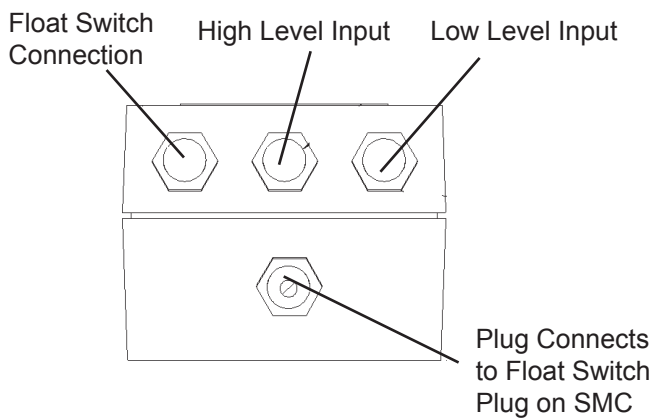
- \* Tank and Bore Level Controller
- \* Two Submersible Float Switches
- \* Two 50m Lengths of 2 core Cable

The submersible float switches are suitable for use in bores.

### Connection of Tank and Bore Level Controller

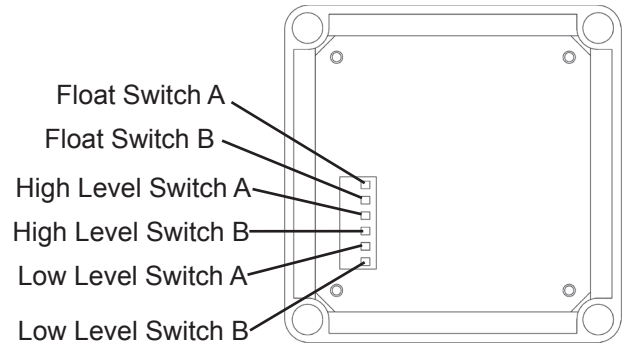
The wiring of the complete system is shown on page 3.

To wire up the system the lid needs to be removed from the Tank and Bore Level Controller.



The float switch connection is used to wire up to a mechanical float switch (normally closed).

If this is not in use, a link wire needs to be put across terminals (Float switch A and Float Switch B) inside the controller (as supplied).

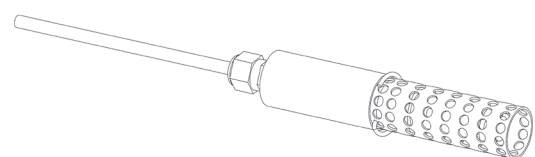


The submersible float switches wire into the terminal block as shown in the picture below. When wired, ensure that the leads go through the correct cable gland.

The submersible float switches will be positioned in the bore such that the pumping system stops when the water level falls below the lowest submersible float switch. The position of the low submersible float switch should be just above the top of the pump. The distance between the high and the low submersible float switches should be sufficient to allow the bore water level to be adequately replenished before pumping re-commences (typically 300 - 1000mm).



Note: In all applications the submersible float switch should be cleaned periodically to ensure smooth operation of the float. In applications where red oxide is present, cleaning of the submersible float switch will need to be performed more regularly.



Submersible Float Switch

# Specifications

## Controller Specifications

### INPUT SUPPLY SPECIFICATION:

Connection 4 pin plug Pins 1 & 2  
 Pin 1 = pos Pin 2 = neg  
 Voltage 14-30 VDC ( current limited )  
 Current 40mA Max.  
 Power 1W Max.

### SHUTDOWN OUTPUT SIGNAL:

Connection 4 pin plug Pin 3 & 4  
 not polarised  
 Switch Normally closed  
 (low water = open)  
 Switch current 50mA Max.  
 Switch Voltage 50V Max.

### SUBMERSIBLE PROBE:

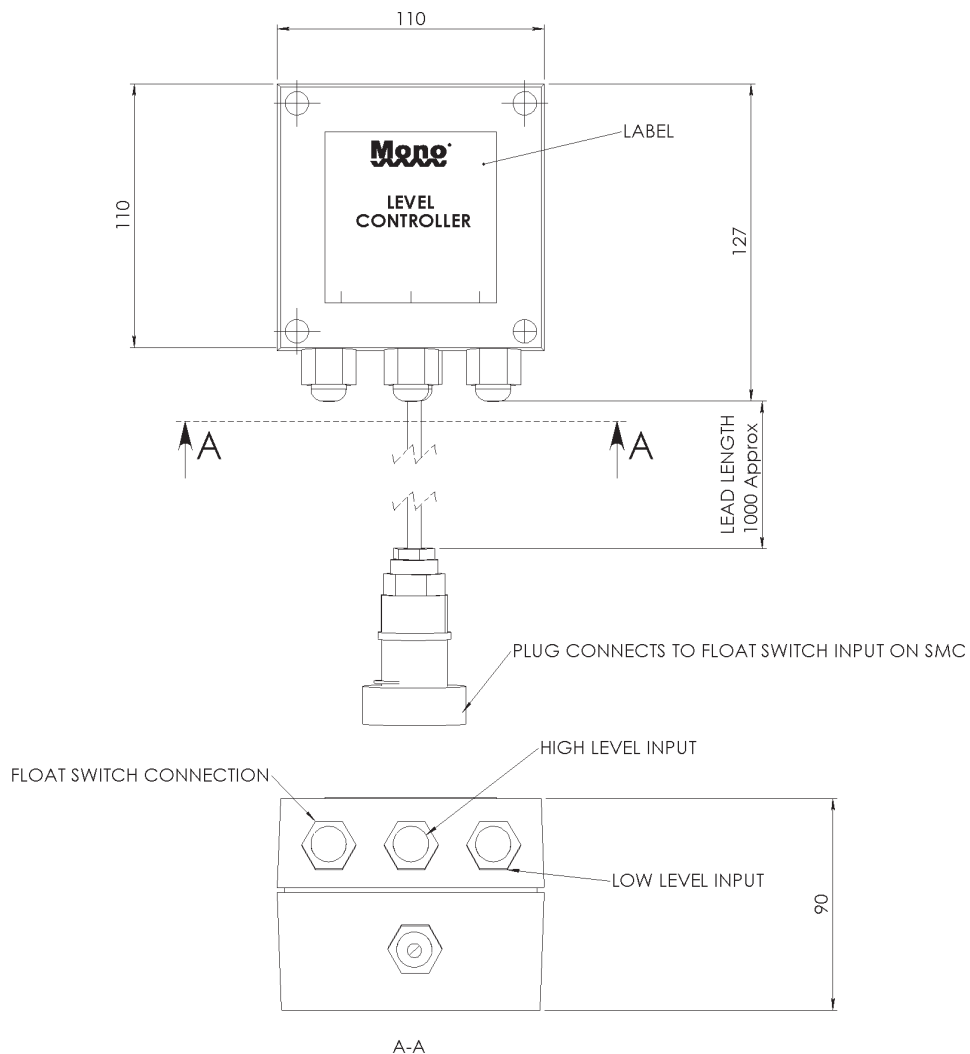
Switch Normally closed ( Float up ).  
 Maximum Switch Current 50mA.  
 Maximum Switch Voltage 50V.

### FLOAT SWITCH INPUT:

Switch Normally closed  
 ( open to shut off pump ).  
 Voltage free contacts  
 Minimum Contact Rating 50V 50mA.

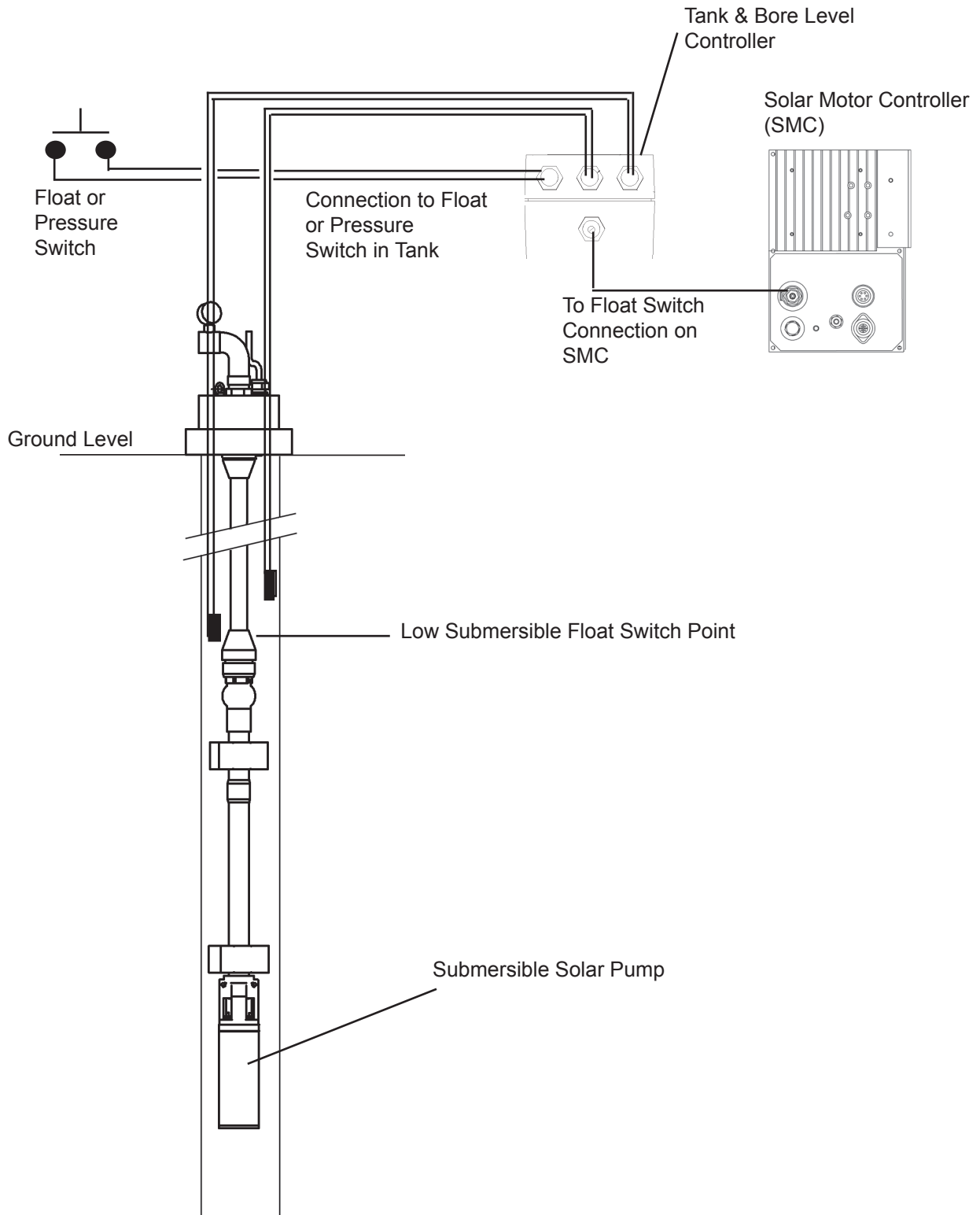
### ENVIRONMENTAL:

Temperature -10 TO 60 °C  
 Packaging IP66



# System Layout

## System Layout



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