



PS2-100 Solar Pump System User Guide

Sun. Water. Life.

Congratulations

Look after your pump to ensure it has a long life

Only connect equipment that was provided by the manufacturer or supplier to this pump.

Do not try to power the pump from batteries, generators or a grid connection.

Keep the controller out of water or direct rain, this reduces the chances of short circuit of cable connections.

Do not disconnect the cables when the pump is running. First turn off the pump then disconnect the cables.

Do not let the pump run dry.

Pump clean water that is free from solid objects like sand, sticks or weed.

Position the controller out of direct sunshine. This will reduce the chances of the controller overheating.

Note: the outlet of the pump is 1.0in

Getting started

Setting up your pump

Position the PV modules facing the sun, avoid shading.

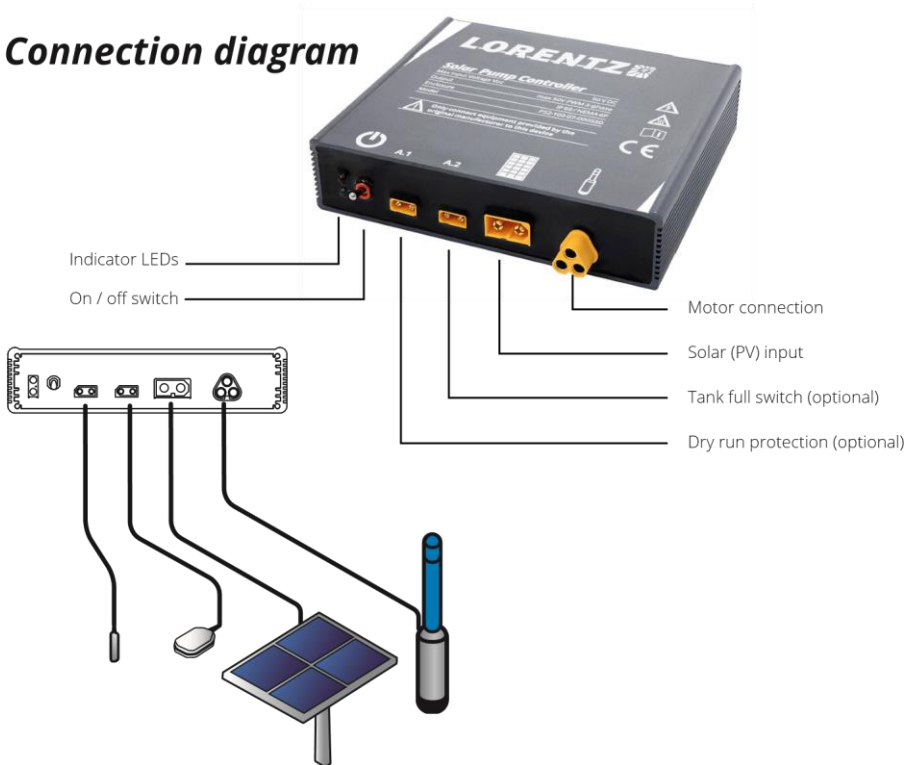
Connect a hose or pipe to the pump outlet

Connect the motor cable to the controller

Connect either accessories or jumpers to A1 and A2.

Connect the solar (PV) cable last.

Connection diagram



Pumping Water

Operation

Ensure the pump is fully submerged in water

Switch on the pump

System will run

LEDs (lights) on the controller tell you:



Pump is running



Use the switch to turn off the pump



Pump is turned off



Use the switch to start the pump



An accessory has stopped the pump



Check the float switch / dry run sensor



An error has occurred



Disconnect and reconnect your pump

 Indicates flashing LED

- low irradiation - "solid red" for 1-2 sec before restart from sufficient irradiation.

- no restart delay for "remote switches". Pressure switch or float switch with differentials is recommended.

Troubleshooting

The following reasons will cause the pump not to start or to stop unexpectedly

- Not enough irradiation (early in the morning or late in the afternoon)
- PV modules: dirty/not facing towards the sun/ are shaded
- Input A1 or A2 is activated, check the LED status
- Wiring problem: plugs not inserted correctly or wet
- The pump is clogged with mud or sand
- Hose or pipe is blocked/ twisted
- The water temperature is too high/ Pump was laying in the sun and heated up
- The controller is too hot and needs to cool down

The pump provides too little water:

- Not enough irradiation
- PV modules: dirty/not facing towards the sun/ are shaded
- Hose or pipe is blocked/ twisted
- Not enough water available/ pump is running dry
- The controller is too hot and needs to cool down
- Wrong pump end is selected : the actual operation pressure is beyond the max. head of the wet end. Make sure you select the correct pump end based on true information of Total Dynamic Head & Flow Rate