

# **INSTALLATION MANUAL**

# **Controller: ALC 1275**

#### Please read all instructions carefully before installation.

#### **Check List Before Installation:**

- ✓ ALC 1275 sensor is designed for DC voltage only, DO NOT use with AC voltage.
- ✓ The sensor may not work in all water qualities. Although it is rare, pure water will not conduct the very low voltage used for sensing.

### Tools Needed:

Phillips Screwdriver

### Specs:

Minimum Volts DC	11.5
Maximum Volts DC	75
MAX Amp Load	<u>5</u>
Sensor Wire Max Length	1500 FT

## Installing Your Controller-

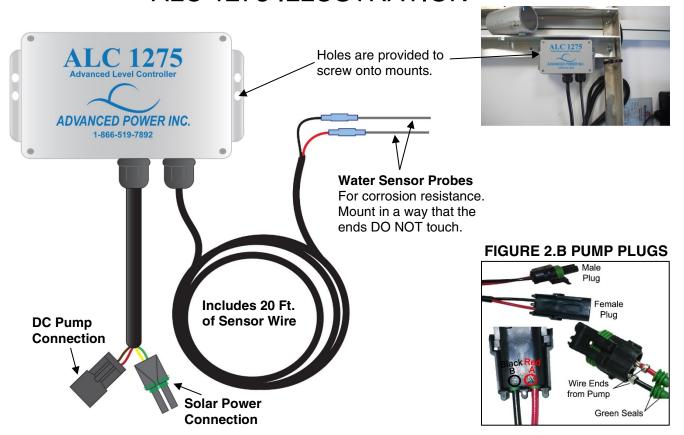
- Install the ALC 1275 water sensor under the array to better protect the sensor from the weather. When the unit is used with Advanced Power Inc. Kits, the ALC 1275 simply plugs in to the existing wire harness using weather-pack connectors. Mount ALC 1275 on lower bottom corner of the panel.
- 2. Holes are provided on the mounts to secure the sensor, using two panhead screws provided.
- 3. Simply route the black water sensor wire to the tank and hang the sensor probes over top tank edge to the desired water height. (For protection & if possible, it's better to route the sensor wires inside plastic conduit to the storage tank.)
- 4. When extending the sensor wire use only direct burial, sunlight resistant 18-2 or smaller (18-24) gauge wire. There is 20 feet of water sensor wire included but sensor wire may be extended up to 1500 FT max. *ALC 1275* sensor has an automatic start and stop feature, when tank water level rises and reaches the sensor ends for approximately 8 seconds consistently, the sensor will shut off power to the pump.
- 5. The sensor will allow the pump to start again, when both sensor ends are not touching water for 8 seconds and water level recedes below them. Sensor ends may become corroded over time, simply clean or replace them.
  - a. These connector ends are installed for 2 reasons:
    - 1. When "moss" develops in the storage tank the ends will protect against wicking of the water, giving a false water level.
    - 2. If desired, weather resistant ON and OFF switches may be installed in either power wire (These are available from API).
- The ALC 1275 will disconnect the load from the power supply (solar, batteries, etc.) when the power drops below 11.5 VDC. It automatically reconnects when the power reaches 12 volts.





7. The maximum voltage for this unit is 75 VDC, voltage in excess of 75VDC will cause damages. Five (5)AMP Inline fuses are recommended (but not required) in the power side, either positive or negative will work. There are no switches or settings inside the *ALC 1275* to adjust, it is a preset/automatic device.

## **ALC 1275 ILLUSTRATION**



# TROUBLE SHOOTING

If you experience issues while installing your product or trouble shooting, please contact our technicians so we can assist you.

- 1. If the unit will not turn on or off correctly, check the connections. Lid can be removed and terminal connections checked. Check for corrosion at the end of the sensor wire. These connectors must be reasonably clean and free of corrosion.
- 2. Check for damaged wires or connections.

#### <u>Important Steps When Installing:</u>

 See pump plugs in FIGURE 2.B for connector illustrations. Be certain of plug connector alignment, do not force as damage may occur.

View our <u>website</u> for video installs, quick tips and more!

also available online at solarpumps.com/resources/tech-docs