

# FloatKiller Well 2.2 Installation Instructions

### **CAUTION:**

FOR INSTALLATION ONLY BY A QUALIFIED ELECTRICIAN IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE (NEC).

Always turn off electrical power at the circuit breaker.

- \* Install per National Electrical Code and local regulations.
- \* Read Installation Instructions completely before installation.
- \* Failure to follow Installation Instructions may void warranties.

The FloatKiller Well 2.2 is a proven system for managing well and booster pumps and can be used for a new installation or integrated into an existing pump panel.

### Your FloatKiller Well 2.2 kit will have:

- FK Well 2 Sensor with 20ft UL Listed Direct Burial Cable Has Fill Start, Fill Stop, Reference and Low Alarm probes
- Display Panel:

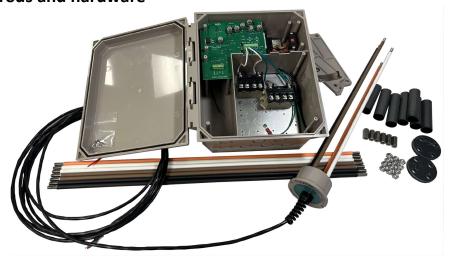
NEMA 4X with Clear cover and stainless steel lockable latch Voltage selector switch set at 230 VAC from the factory

2 Mounting brackets and screws

Terminal block connections for sensor

2 Power relays rated 25A @ 220 VAC Single phase, 3 HP maximum

Extension rods and hardware



### **IMPORTANT SAFETY INSTRUCTIONS**

- 1. Read and follow all instructions.
- 2. Call the factory with any questions: 888-905-1892 or email: info@waterlinecontrols.com
- 3. Disconnect all power before opening the internal cover/s or making any connections to the unit.
- 4. Do not install in locations where sprinklers or other watering devices will allow water to impinge on the unit.
- 5. Sensor wires must be continuous and not spliced. Call factory if there is a need to be spliced.
- 6. Make sure the unit is connected properly to earth ground.
- 7. Only qualified personnel should install this unit or replace the "replaceable" parts.
- 8. Only factory supplied parts should be used whenever a replaceable part is needed.
- 9. The manufacture will not be liable for any injury or damage that may arise from the misuse of this unit or from failure to follow all of these instructions.
- 10. This unit shall not be used in any "safety critical" application or where the failure of any function or component may cause death or personal injury.

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### FloatKiller Well 2.2 V2 Basic Operation & Display Panel Mounting

#### CAUTION:

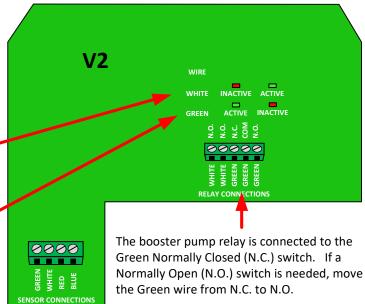
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### LED STATUS LEGEND





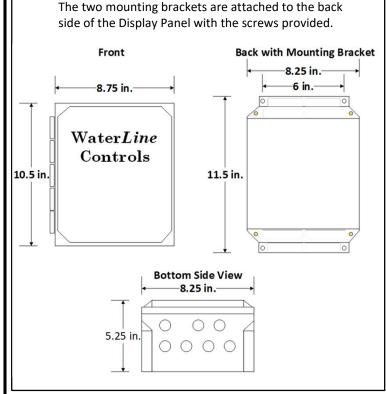
Connect the sensor wires to the SENSOR CONNECTIONS terminal block matching colors.

### Sequence of Operation

When water contacts the Fill Stop rod (Orange), the White wire is Inactive (Red LED) and power is removed from the Well Pump relay.

Whenever water is below the Fill Start rod (White), the White wire is Active (Green LED) and power is applied to the Well Pump relay.

When the water level is below the Low Alarm rod (Brown), the Green wire is Active (Green LED) and power is removed from the Booster Pump relay until the water level contacts the Fill Start rod (White).



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### FloatKiller Well 2.2 Installation Steps – Wiring Power to the Display Panel

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CAUTION: If you connect 220 VAC when the switch is in the 115 VAC position, you will destroy the unit and void any warranty.

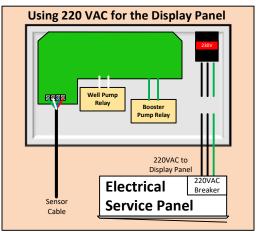
Decide if you will use 220V\* or 110V\*\* from your service panel to power the Display Panel.

The display panel comes from the factory with a voltage selector switch set to 230V.

### If using 220V to power the display panel:

Leave the voltage selector switch set to 230V

Connect 220V power wires (typically Black-Black-Green) from your service panel to the Black-Black-Green wires coming down the high voltage section and also connect the Green ground wires together. (See Fig. 1)



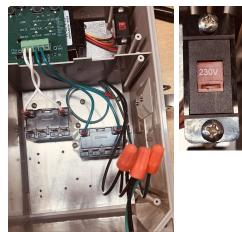


Fig. 1-220V

If using 110V to power the display panel: (See Fig. 2)

Move the voltage selector switch to 115V.

Connect 110V power wires (Black-White-Green) from your service panel to the Black-Black-Green wires coming down the high voltage section. It does not matter which Black wire you use to connect the 110V White or Neutral wire but in the end it should be Black-Black, Black-White, Green-Green.

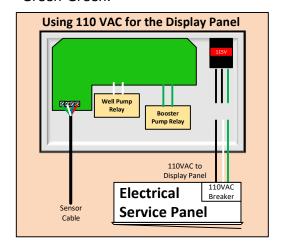






Fig. 2-110V

<sup>\*</sup>The terms 220V, 230V, and 240V all refer to the same system voltage level.

\*\*The terms 110V, 115V, and 120V all refer to the same system voltage level.



## FloatKiller Well 2.2 Installation Steps – Wiring Pump Relays

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The Well and Booster Pump Relays are rated for Single Phase 220V @ 25 amps and 3HP. Exceeding these ratings can destroy the power relay and void any warranty.

Review your Well Pump and Booster Pump installation instructions for details on connecting power and breaker rating needed.

CAUTION: Ensure the circuit breaker is off before installing wiring.

### Wiring Your Well Pump: (See Figure 1)

After removing one of the knock-outs at the bottom of the Display Panel, install the 220V wiring from your service panel to the Well Pump Relay 1/4" spade connections 4 & 6 as depicted below.

Connect the 220V wires from the well pump to the 1/4" spade connections 2 & 8 as depicted below.

CAUTION: Ensure the circuit breaker is off before installing wiring.

### Wiring Your Booster Pump: (See Figure 2)

After removing one of the knock-outs at the bottom of the Display Panel, install the 220V wiring from your service panel to the Booster Pump Relay 1/4" spade connections 4 & 6 as depicted below.

Connect the 220V wires from the Booster pump to the 1/4" spade connections 2 & 8 as depicted below.

After completing the wiring, your connections should look like Figure 3 with the Black wires coming from your service panel and the Blue wires going to the pumps.

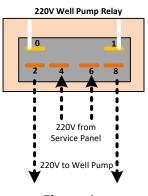


Figure 1

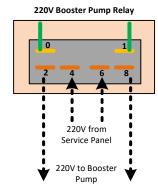


Figure 2

---- Customer provided wiring



Figure 3

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