



# POWER ZONE JR.<sup>TM</sup>

by CSI Controls

## Simplex Pump Control Panel • Installation Instructions

 <b>WARNING</b>	<b>ELECTRICAL SHOCK HAZARD</b> Disconnect power before installing or servicing this product. A qualified service person must install and service this product according to applicable electrical and plumbing codes.	 <b>WARNING</b>	<b>EXPLOSION OR FIRE HAZARD</b> Do not use this product with flammable liquids. Do not install in hazardous locations as defined by National Electrical Code, ANSI/NFPA 70.
Failure to follow these precautions could result in serious injury or death. Replace product immediately if switch cable becomes damaged or severed. Keep these instructions with warranty after installation. This product must be installed in accordance with National Electric Code, ANSI/NFPA 70 so as to prevent moisture from entering or accumulating within boxes, conduit bodies, fittings, float housing, or cable.			

**NOTE:** These instructions apply to the standard catalog Fusion Series control panels. Additional options or special features may change some or all of the control panel's installation requirements.

### Installation

- Installation of Floats – **Warning: Turn off all power before installing floats in pump chamber.**
  - Determine your normal operating level, as illustrated in **Figure 1** for a standard 2-float setup.
  - If your PowerZone Jr. has the 3-float option, see **Figure 2** instead.
  - Mount float switches at appropriate levels as illustrated in **Figures 3 & 4**. Be sure that floats have free range of motion without touching each other, or other equipment in the basin.
- Choose a control panel mounting location with maximum accessibility and visibility of visual alarm. If distance to the basin exceeds the length of the float switch cables or the pump power cables, splicing will be required. For outdoor or wet installation, we recommend the use of a CSI Controls liquid-tight junction box with liquid-tight connectors to make required connections. **You must use conduit sealant to prevent moisture or gases from entering the panel.**
- Determine conduit entrance locations on control panel. Check local codes and schematic for the number of power circuits required. Drill proper size holes and attach cable and/or conduit connectors to control panel.
- If a cable splice is required, determine a location for and mount the junction box according to local code requirements. Drill proper size holes for and install conduit to junction box using liquid tight connectors. Identify and label each wire before pulling through conduit into control panel and junction box. Make wire splice connections in junction box, and firmly tighten and seal all fittings in junction box, ensuring all cable connectors are liquid-tight and sealed.
- Connect incoming power conductors and pump and float conductors to the proper position on the terminal strip. See schematic inside control panel or wiring diagram beneath terminal blocks for terminal connections.
- Verify correct operation of control panel after installation is complete.

### Operation

PowerZone Jr. simplex control panels are designed to operate as a two-float system. (A three-float option is also available.) When the Pump float is in the open or OFF position, the panel is inactive. As the liquid level changes and closes the Pump float, the pump will start. The pump will remain on until the Pump float opens (returns to the OFF position.) If the liquid level reaches the alarm float, the alarm will be activated.

- Alarm System – When an alarm condition occurs, a flashing red alarm light and buzzer will be activated. If a hand is placed flat against the “touch-to-silence” area on the enclosure door, the buzzer will be silenced until the next alarm occurs. When the alarm condition is cleared, the alarm light and buzzer are reset. The alarm system can be tested by placing your hand flat against the “touch-to-silence” area twice within 1.5 seconds.
- Pump Run Pushbutton – A “Push to Run” pushbutton is provided on the circuit board for manual pump operation. Pressing this button will turn the pump on regardless of the liquid level.
- Pump Run Light – The green pump run light will be ON whenever the pump is called to run.

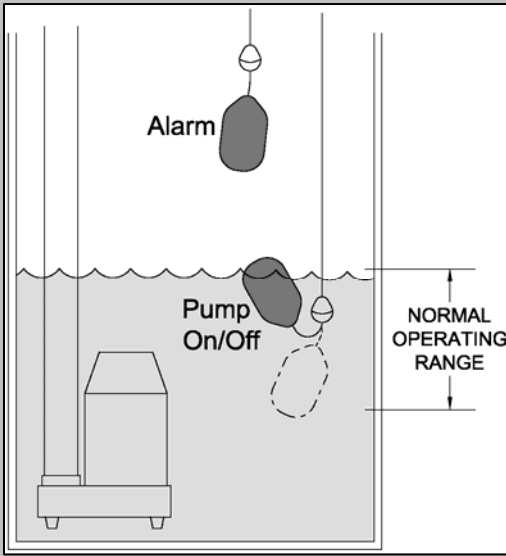


Figure 1

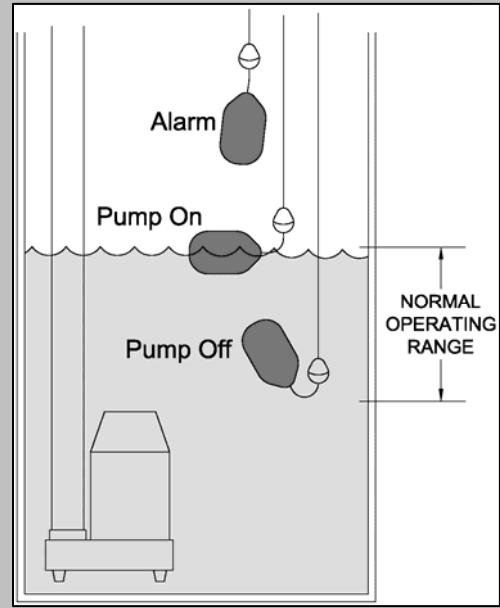


Figure 2

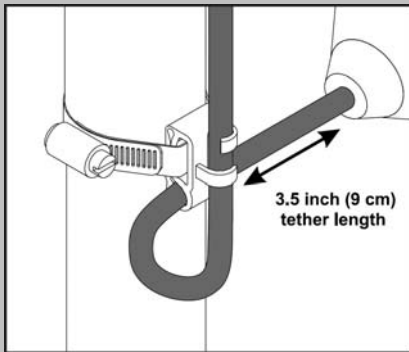


Figure 3

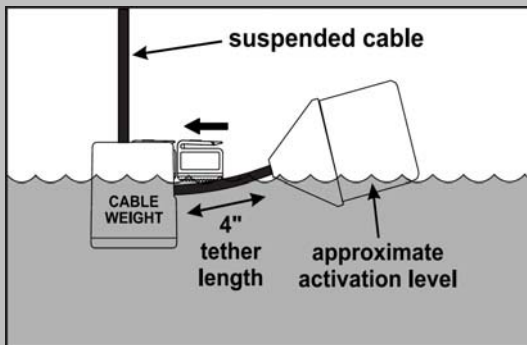
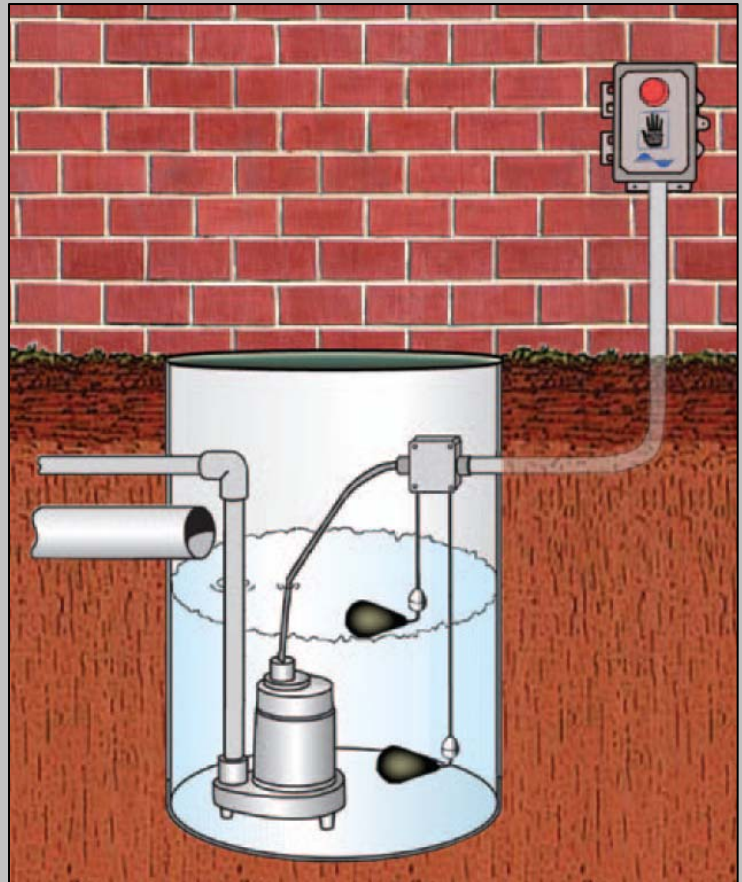


Figure 4



Typical Installation Example

