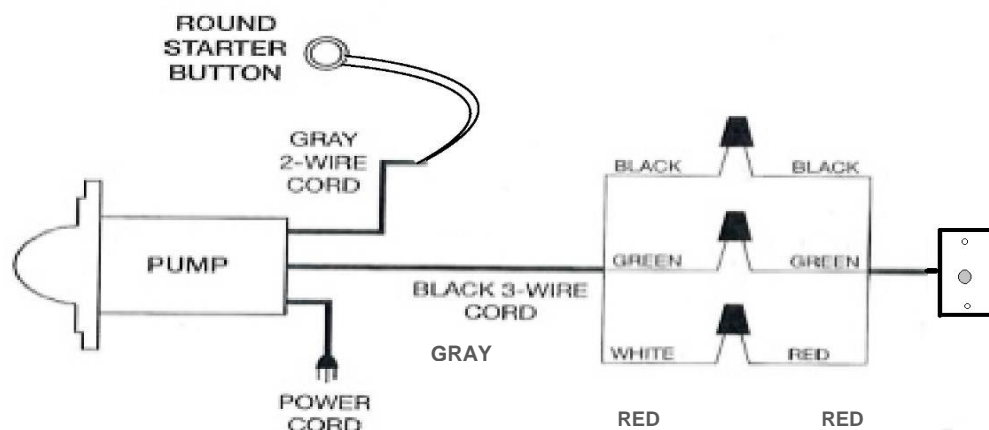


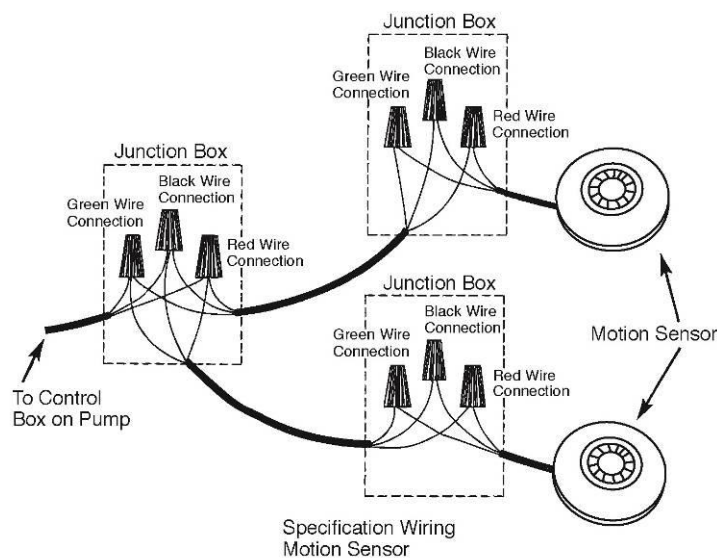


## Connecting D'MAND Kontrols® for 12 Volt\* Motion Sensor (Model HWMSRB-PW – Hardwired)

### Wiring Diagram for Hardwired Motion Sensor Model HWMSRB-PW

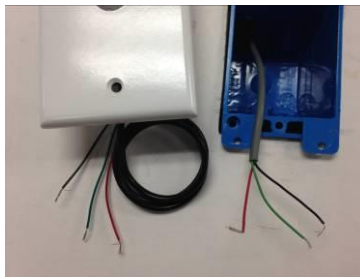


Your ACT D'MAND Kontrols® System is equipped to use infrared motion sensors to interface with the user(s). These sensors may be placed throughout your residence to match your needs/applications. Wiring for these systems is simple and straightforward following the guidelines below.



Materials needed: Installed ACT Inc. D'MAND Kontrols® System, Hardwired Motion Sensor **HWMSRB-PW**, 18-24Ga. Cat5e or thermostat wire with three (3) wires. (Not included)

1. Ensure your ACT Inc. D'MAND Kontrols® System, is **unplugged** from the 110v power source.
2. Hook 3 wires (Red, Black, Green) from the round Hardwired Motion Sensor **HWMSRB-PW** to the D'MAND Kontrols® System. If you need to extend the wiring from the pump to the sensor make sure you keep the color codes the same at each end. The sensor is now ready to be installed in the 1 gang box.



3. The wiring for your ACT Inc. D'MAND Kontrols® System activation devices are wired in parallel or "home run" back to the pump. (See diagrams above) You can wire up to twelve hardwired **HWMSRB-PW** Motion Sensors to each D'MAND Kontrols® System.
4. Once the Hardwired Motion Sensors are correctly wired to the D'MAND Kontrols® System we can then plug the pump into the 110v power supply. The sensor will now lock out and will reset in 3-5 minutes.



**HWMSRB-PW**

### **Using your Motion Sensors**

In normal operation the green light on the Motion Sensors will only activate for approximately 2 seconds, and then lock out for 3-5 minutes. The Sensors only send signals back to the ACT D'MAND Kontrols® System. **Note:** *If there is >103°F water in water line, the pump may not start.*

The Motion Sensor is now ready to be installed. When installing the sensor(s), be sure a clear portion of the lens is pointing in the direction you wish to detect motion. See Below for specifications and placement.

## **1. INTRODUCTION**

The **HWMSRB-PW** is a 360 ceiling/wall mounted passive infrared detector, which provides a nearly conical pattern of 36 feet in diameter when installed on a 12 foot ceiling. The sensor is equipped with a low-noise pyro electric detector which prevents children and small pets less than 40lbs from triggering the Motion Sensors.

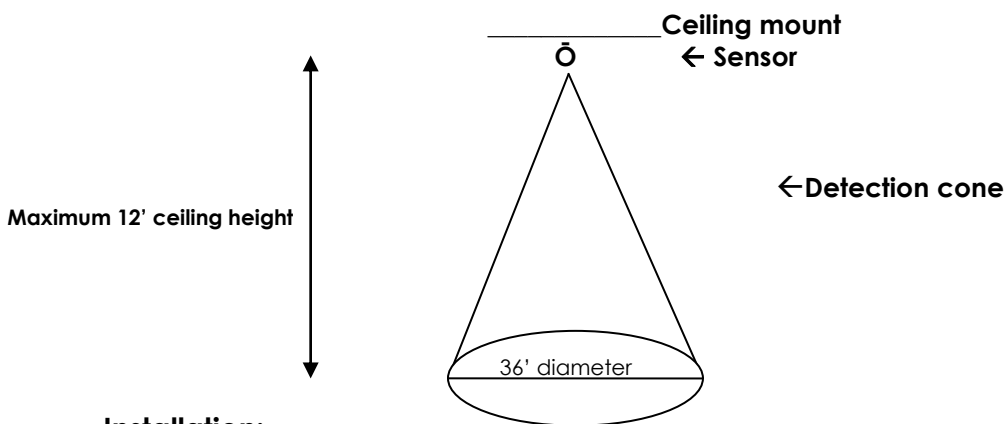
### **Mounting**

- **Ceiling Mounting:** Maximum mounting height 12 feet

### **Environmental**

- **Operating Temperature:** 14°F to 120°F
- **Storage Temperature:** -4°F to 120°F
- **Compliance with Standards:** EN 50131-1 Grade 2, Class II

**Detection pattern:** A virtual conical pattern of maximum 36 feet diameter when installed on a 12 foot ceiling



### Installation:

#### Mounting

- The **HWMSRB-PW** will need to be mounted either on a ceiling or wall so that it is perpendicular to the detection area. (I.e. wall or ceiling)
- Be sure to install the detector on a stable surface to avoid vibrations.

**Note:** *Passive infrared detectors are sensitive to changes in infrared energy caused by an object moving across the unit's field of view.*

#### Troubleshooting:

*"My motion sensors do not light up?"*

*Issue, check wiring, if ANY sensor in the line is mis-wired, none of the motion sensors will light up, or start the pump.*

*"I did not see the sensor light after I walked in the room, but the pump turned on."*

*Ans. The Green LED light will only blink briefly for 1-2 seconds. Unless you are looking directly at the sensor when you walk in the room typically you will not see the sensor activate.*

*"I activated the sensor and it will not light up again despite me standing in front of it."*

*Ans. Our motion sensors have a built in lock out that will not trigger until the lockout time has expired. Typically this is 4 min. on current models. After which the sensor will unlock and light up, and then return to lock out again. This applies to each sensor individually.*

If you have any questions on these instructions or any information not covered please do not hesitate to call ACT Inc. D'MAND Kontrols® Systems at (800) 200-1956 or email: [info@gothotwater.com](mailto:info@gothotwater.com)

**Please refer to our website at [www.gothotwater.com](http://www.gothotwater.com) for warranty and indemnification information.**

Open Monday – Friday 7:30am-4pm PST