

# Installation Instructions

## 1 Sensor BilgAlarm™ System

Model No. BA1R-4W12V

The following parts are enclosed:



\*The most common installation screws are included. Since each installation is different and may require different types and lengths of wood screws, machine screws, washers, lock washers, and nuts, please purchase the screws that are applicable for your installation at your local marine store. Stainless steel screws are recommended.

## STEP 1

### Mount Control Panel, Sensors, and Siren

#### Control Panel

Carefully cut a rectangular hole (width) 3.0 inches X (height) 2.5 inches to mount the BilgAlarm™ Control Panel. Inspect carefully behind where you intend to cut to avoid damage to other equipment and provide adequate room for installation of the BilgAlarm™ Control Panel and wiring. Do not cut the hole larger than 3.0 inches X 2.5 inches. The thickness of the mounting surface must not be more than ¾ inch. Secure the BilgAlarm™ Control Panel with 4 screws after electrical connections have been made.

#### Sensor

The BilgAlarm™ Sensor is placed vertically (cable end up) where water collects, which is usually where the bilge pumps are located. Place the BilgAlarm™ Sensor 2 to 3 inches above the bilge water level at which the bilge pump normally turns on. Should the pump not turn on or is unable to handle the volume of water coming in, the BilgAlarm™ system will sound an early warning alarm. After installation of the BilgAlarm™ Sensor, run sensor cable back to the BilgAlarm™ Control Panel. A special mounting bracket and mounting screws are provided to attach the sensor. A set screw is provided to secure the sensor to the mounting bracket and to adjust sensor height, if desired. Screw the set screw through any side of the sensor bracket until the sensor is secure.

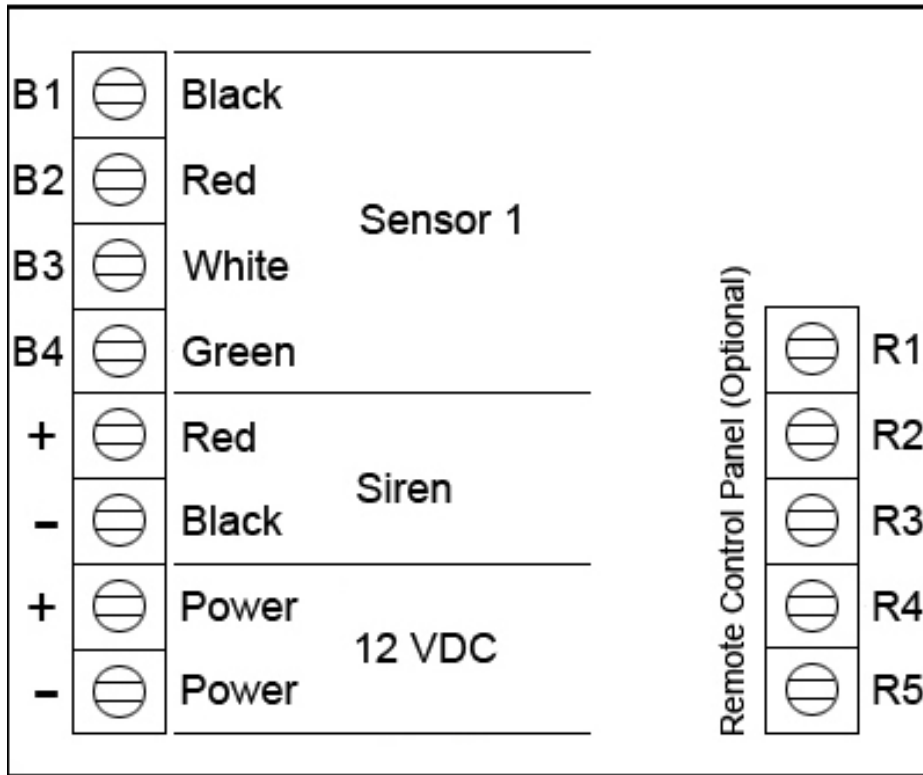
#### Siren

Mount the warning siren near the control panel in an unobstructed location. Run the leads back to the BilgAlarm™ Control Panel.

## STEP 2

### Wire Sensor, Siren to the Control Panel

Model BAIR-4W12V



#### Sensor

Attach the four leads of the sensor to the sensor terminal strip. The terminals are marked for the sensor. See wiring diagram to the left. Be sure to put the proper color wire in the proper terminal strip hole. Tighten securely, but do not over tighten.

#### Siren

Attach the two leads of the siren to the control panel paying attention to polarity. See wiring diagram above. Be sure to connect the red and black wires correctly. Tighten securely, but do not over tighten.

Note: Additional sirens and an optional strobe light can also be added as long as the total load does not exceed the BilgAlarm™ two ampere (2 AMP) rated output.

#### Strobe Light (Optional)

Attach the two leads of the strobe light to the control panel paying attention to polarity. Connect the negative lead (black) to R5 and the positive lead (red) to R3 on the Remote Control Panel terminal strip.

Note: The strobe light will continue to flash even when the system is muted as long as there is an alarm condition present in the bilge. If you would prefer the strobe light to stop flashing when the system is muted connect the strobe light to the siren output instead.

#### Remote Control Panel (Optional)

Your system comes pre-wired for an optional BilgAlarm™ Remote Control Panel. This full featured remote control panel is typically installed in the master stateroom or captain's quarters and has its own audible device, usually a beeper or second siren.

## STEP 3

### Connecting Power to the Control Panel & Testing the System

#### Attach power leads (12VDC)

Attach the power leads to the control panel paying attention to polarity. See wiring diagram above.

#### Test your system

Test your system now by pressing and holding the test button and then pressing the mute button. To reset the mute condition, just release the test button and the alarm is reset. You can also test your system by putting a cup of water under the sensor or just placing a wet rag across the sensor electrodes.

#### To test silently

Press and hold the **Mute** button before depressing the **Test** button. The only sound will be a brief “chirp.”

**This completes the installation of your new BilgAlarm™ Early Warning System.**

### To the Installer:

Below is some additional information you may find useful:

#### Sensor

The sensor comes with a 40 foot cable. You may shorten it. If you would prefer a longer length, please contact our office. For reliability and longevity of the system, please don't make splices in the sensor cable, especially within the bilge area.

#### Sensor Installation

Sometimes it's easier to add a pull line through a span that's hard to run cables/wires. A pull line is a line that's twice as long as the span, so you can pull wires in either direction without losing the ends of the line. Secure the ends of the line so they can't be pulled through accidentally. When the task is accomplished, leave the line for the next cable pull. (Nylon clothesline works well)

#### Splicing Wire

We offer continuous sensor cables to 1000 feet. If splicing of any wires is needed, it's best to take the time and solder the splices and then heat shrink wrap the connections or use specialized water-proof type connectors, or heat shrink crimp connectors.

**BilgAlarm™ is not liable for any sensor cable that has been spliced, altered, or changed.**

#### Remote Panel System – Optional

You must first install this “1 Sensor BilgAlarm™ System” before installing a remote panel system. Use these instructions to install the “1 Sensor BilgAlarm™ System” and use the instructions included with the remote panel system to add it to this system.