

# 850H & 850L Alarms **BOSHART**

## OPERATION, MAINTENANCE AND INSTALLATION MANUAL

**INDUSTRIES**

### INTRODUCTION

Before proceeding with the installation or operation of the alarm, read all instructions thoroughly and comply with All Applicable Codes, Regulations and Practices. The alarm must be installed by qualified personnel familiar with all applicable local electrical and mechanical codes. Failure to properly install and test this product can result in personal injury or equipment malfunction.

The alarm is a multipurpose alarm that can be used in a wide variety of applications such as: septic tanks, sumps, holding tanks, pump chambers, water tanks, flow, pressure, condensate, temperature and any others where a "dry" contact can be connected to the alarm. These contacts can be connected to an Auto Dialer, a BAS (building automation system) or SCADA system.



### SAFETY GUIDELINES

1. DO NOT USE WITH FLAMMABLE OR EXPLOSIVE FLUIDS SUCH AS GASOLINE, FUEL OIL, KEROSENE, ETC.  
DO NOT USE IN EXPLOSIVE ATMOSPHERES.
2. ALARM MUST BE MOUNTED INDOORS. FOR OUTDOOR APPLICATIONS CONSULT FACTORY.

### DESCRIPTION OF OPERATION

The alarm is powered by 120 VAC coming from standard wall outlets and is transformed to 9 VDC. Installing a 9 Volt battery provides battery back-up.

When a switch (signaling device) contact "closes" the buzzer and light will turn "on" and the built in auxiliary contacts will be activated. The signaling device could be a control duty float switch, a Water Sensor or a Water Sensor Probe.

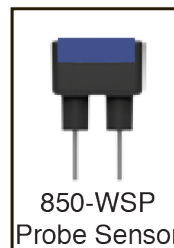
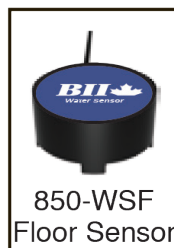
Buzzer is deactivated by placing the slide switch to the "S" position. When the alarm is remedied place the slide switch in the "N" position to reset the alarm.

### TOOLS, SUPPLIES AND REQUIREMENTS FOR INSTALLATION (NOT INCLUDED)

- #1. Phillips screw driver
- #2. (Qty 2) #6 self tapping screws
- #3. Access to 120 VAC power receptacle
- #4. Optional \ plastic anchor if mounting to sheet rock
- #5. Optional 9V battery (used for battery back up if power goes out)
- #6. Optional Wire stripper (used if you need to strip wire to connect to a BAS or SCADA system)
- #7. Optional needle nose pliers if using aux contacts

### INSTALLATION OF THE ALARM

The alarm is packaged with a float switch as shown below. Expand your alarm with the 850-WSF or 850-WSP shown below:



**OTHER PART NUMBERS AND ACCESSORIES ARE AVAILABLE.**

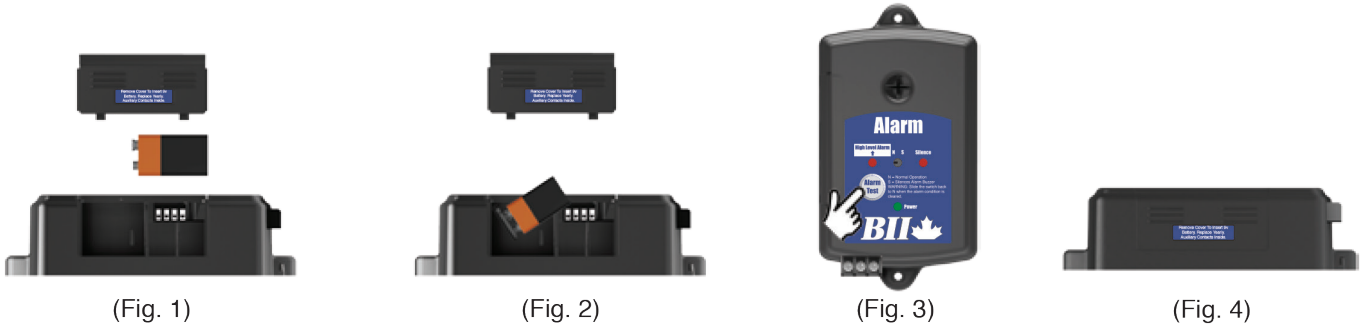
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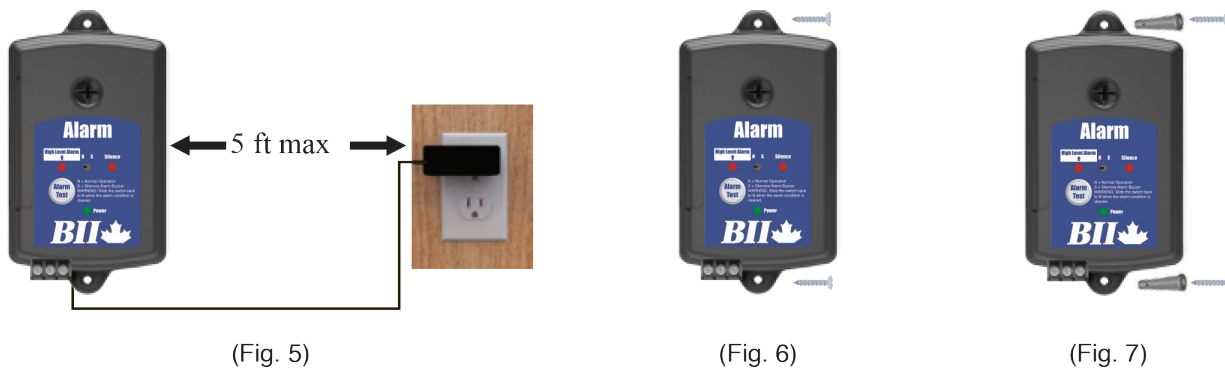
## OPERATION, MAINTENANCE AND INSTALLATION MANUAL

### INSTALLATION OF THE ALARM CONTINUED

1. To install/replace the battery for the backup power feature, remove the access cover (Fig. 1) and install 9 VDC battery (Duracell model MX 1604B2) (Fig. 2). After installing battery, press the test button (Fig. 3) to activate the alarm to make sure the battery works properly. The alarm indicator light should illuminate and the buzzer should announce. If using the auxiliary contacts, leave cover off until step 3 is completed. If you are not using them, replace the access cover (Fig 4)

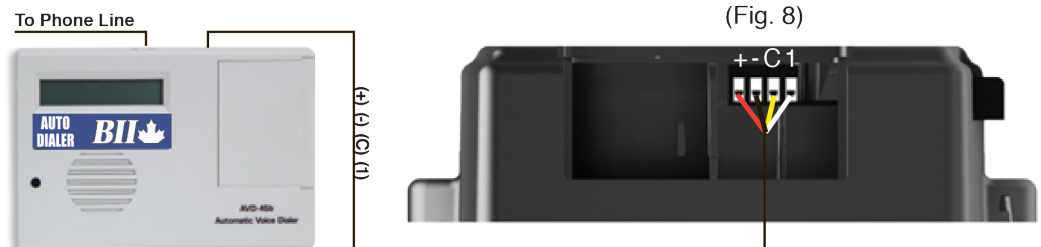


2. Determine mounting location for the ALARM. Make sure power outlet is within 5 feet of the ALARM (Fig. 5). Make sure the outlet is on a separate circuit breaker from any other device and not on a switched receptacle to maintain power integrity. Mount the ALARM using two #6 self tapping screws (not included) (Fig. 6). Use #8 plastic anchor if mounting to sheet rock (not included) (Fig. 7).



3. **IF YOU ARE NOT USING THE AUXILIARY CONTACT GO TO STEP 5.** Wiring to a 4 position Auxiliary Contact. When a sensor such as a float switch in a septic tank, or a BII Water Sensor near a floor drain or in your sump pit is activated, it will close relay contacts on terminals C & 1 and activate the Auto Dialer. If connecting to existing alarm security system or (BAS) system go to (Fig. 9 on page 3) When connected, replace the access cover and pull the wire through the knockouts on the access cover (See Step #4). **CAUTION!** - When installing wires, route all wires away from sharp objects & internal components.

- Terminals 1 & 2**  
Auto Dialer Power Supply  
Red = +  
Black = -
- Terminals 3 & 4**  
Auto Dialer Contacts  
Yellow = C  
White = 1



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### INSTALLATION OF THE ALARM CONTINUED

3. Continued. If connecting to existing alarm security system or (BAS) system leave terminals + & - open and use 18 gauge 2 conductor wire to connect the existing product to terminals C & 1 (Fig. 9). When connected, replace the access cover and pull the wire through the knockouts on the access cover (See Step #4) . Caution! - When installing wires, route all wires away from sharp objects & internal components.

**Terminals + & -**  
DO NOT USE

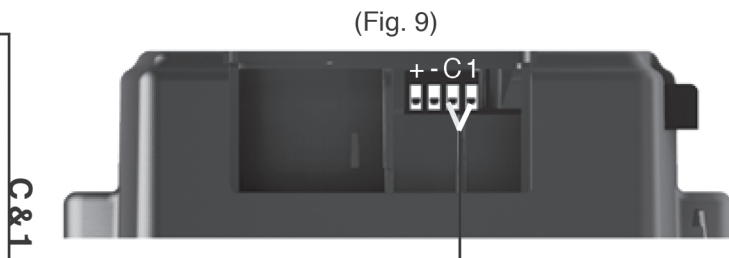
#### Terminals C & 1

Class 2, 24 VDC/VAC (50/60 HZ)  
500 Milliamps **MAXIMUM**

Terminal C = Normally Open

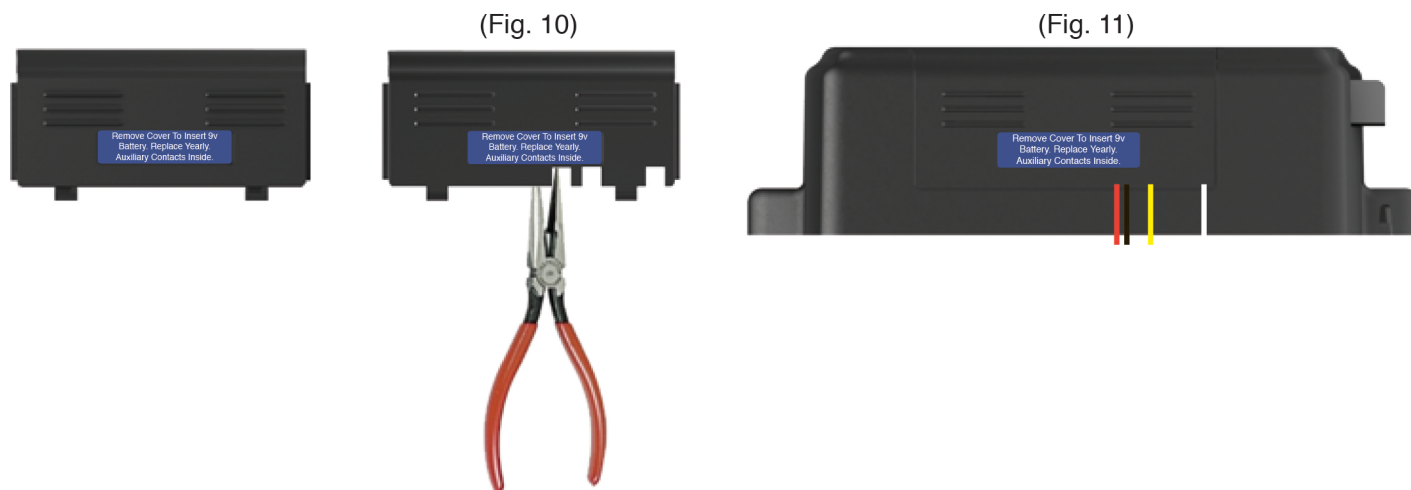
Terminal 1 = Normally Open

BAS (Building Automation System)  
or  
another high water alarm  
or  
any monitoring system



**NOTE: The Auxiliary Contacts on terminals C & 1 of the ALARM UNIT are normally open only.**

4. Use a needlenose pliers to remove the desired "break away tabs" from the access cover (Fig. 10). Lightly pull and twist off tab (s). Replace access cover and run wires through the "break aways" (Fig. 11)



5. Make note of the alarm condition (s) you are monitoring and keep near alarm.

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### INSTALLATION OF THE ALARM CONTINUED

6. Connect any combination of switches (rated 9 VDC, 200 ma MINIMUM) such as a float switch, Water Sensor, Water Sensor Probe, pressure switch, etc. to terminals C & 1 on the terminal block of the ALARM. See (Fig. 12) for wiring instructions. **TERMINAL 2 IS NEVER USED.** The alarm is activated by a closed switch. Caution! - When installing the "signaling switch" refer to it's installation instructions for proper installation.

(Fig. 12)

### Terminals C & 1

#### Control Float Switch

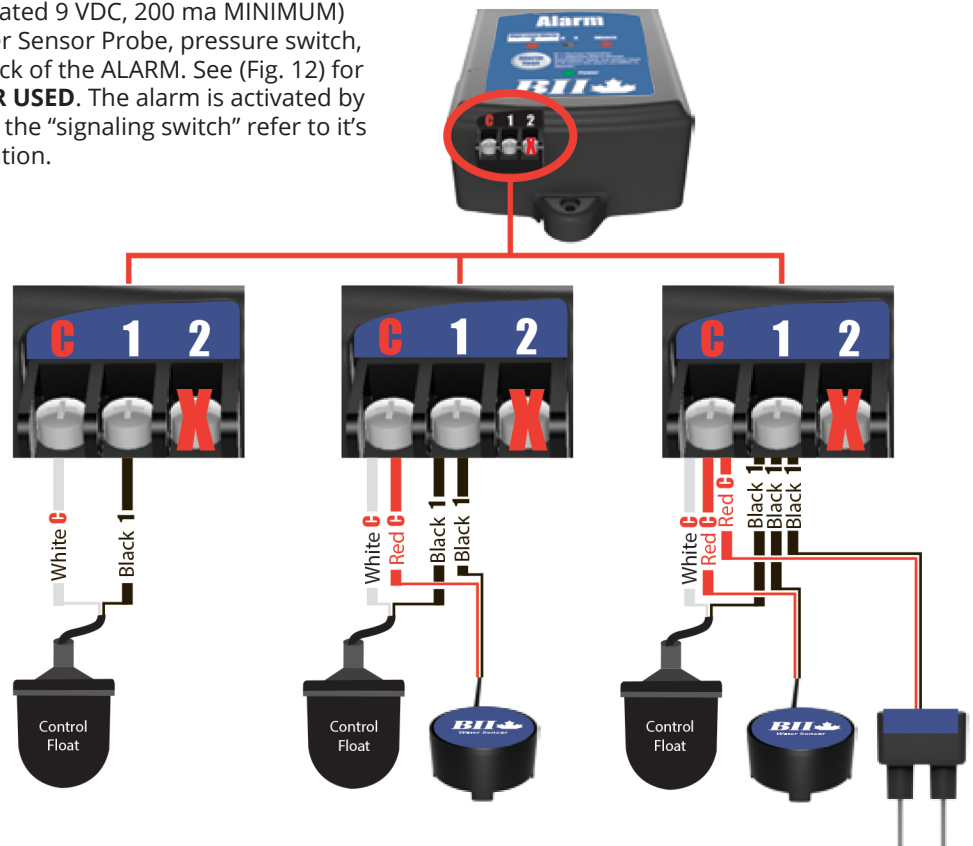
Black = 1  
White = C

#### Water Sensors & Probes

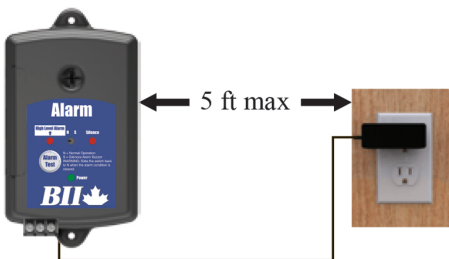
Black = 1  
Red = C

#### Combination of Sensors

Blacks = 1  
Reds/Whites = C



7. Plug the power supply into a 120VAC, 50/60 HZ standard wall outlet. The green "Power" light should come on.



8. Test the system by pressing the "Test" switch or by activating the "signaling device" i.e. The float switch or Water Sensor. (Fig.16). The buzzer and the red warning light will be "on". Slide the "Silence" switch to "S" to silence the buzzer (Fig. 17). The alarm light will remain "on". Deactivate the "signalling device." The alarm light will turn "off". Since the ALARM is equipped with "Manual Reset", YOU MUST PLACE THE SELECTOR SWITCH BACK TO N TO RESET THE ALARM (Fig. 18). Test product weekly to ensure system integrity.

(Fig. 16)



(Fig. 17)



(Fig. 18)

