

Installation Manual 213800G

ALM-Series Indoor Alarms

Features

- NEMA 1 enclosure - Rated for indoor use only
- Automatic alarm and alarm silence reset
- 360° red alarm indicator beacon
- 4 ft (1.2 m) power cord
- 9V Battery back-up with low battery indicator
- Multiple level sensing options available
- Auxiliary dry contacts for triggering external alarm
- Pre-installed connector on level sensor for plug-and-play installation
- Internet connectivity available with NightEye® enabled devices





Models

Standard

- ALM-P1
- ALM-2
- ALM-2-1
- ALM-PK
- SJ10A

NightEye® Wireless Enabled





- ALM-P1-EYE
- ALM-2-EYE
- ALM-2-1-EYE
- ALM-PK-EYE
- SJ10A-EYE

 	<p>NOTICE Installer: Manual must remain with owner/operator.</p>	<p>Prior to installation, record information from pump nameplate for future reference:</p>
<p>7000 Apple Tree Avenue Bergen, NY 14416 ph: 1-800-543-2550 fax: 1-585-494-1839 www.LibertyPumps.com</p>	<p>Keep this manual handy for future reference. For replacement manual, visit LibertyPumps.com, or contact Liberty Pumps at 1-800-543-2550. Retain dated sales receipt for warranty.</p>	<p>Model: _____ Serial: _____ Mfg Date: _____ Install Date: _____</p>

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Safety Guidelines

	This safety alert symbol is used in the manual and on the pump to alert of potential risk for serious injury or death.
	This safety alert symbol identifies risk of electric shock . It is accompanied with an instruction intended to minimize potential risk of electric shock.
	This safety alert symbol identifies risk of fire . It is accompanied with an instruction intended to minimize potential risk of fire.
	This safety alert symbol identifies risk of serious injury or death . It is accompanied with an instruction intended to minimize potential risk of injury or death.
⚠ DANGER	Warns of hazards which if not avoided will result in serious injury or death.
⚠ WARNING	Warns of hazards which if not avoided could result in serious injury or death.
⚠ CAUTION	Warns of hazards which if not avoided could result in minor or moderate injury.
NOTICE	Signals an important instruction related to the pump. Failure to follow these instructions could result in pump failure or property damage.

⚠ WARNING Read every supplied manual before using pump system. Follow all the safety instructions in manual(s) and on the pump. Failure to do so could result in serious injury or death.

Safety Precautions

⚠ WARNING **RISK OF ELECTRIC SHOCK**

- Always disconnect power before installing or servicing this product. Qualified personnel must install and service this product according to applicable electrical and plumbing codes.
- Always wear dielectric rubber boots and other applicable Personal Protective Equipment (PPE) when water is on the floor and an energized pump or alarm system must be serviced as submerged electrical connections can energize the water. Do not enter the water if the water level is higher than the PPE protection or if the PPE is not watertight.
- Do not install this alarm system outdoors. The system is rated for indoor use only.

- All electrical and safety practices shall be in accordance with the National Electrical Code®, the Occupational Safety and Health Administration, or applicable local codes and ordinances.

⚠ WARNING **RISK OF FIRE**

- Do not use this product with or near flammable or explosive fluids such as gasoline, fuel oil, kerosene, etc.
- This product is not to be installed in locations classified as hazardous in accordance with the National Electric Code®, ANSI/NFPA 70.

NOTICE

- ◆ Alarm float adapters cannot be used with puck sensors.
- ◆ Do not cut the connector off a puck sensor and wire it to the float adapter. The sensor uses three wires for communication and the float adapter only has two terminal blocks.

General Information

Before use, please read the following instructions carefully. Each Liberty Pumps alarm system is tested individually in the factory to ensure proper performance and operation. Closely following these instructions will eliminate potential operating problems, providing years of trouble-free service.

This high water level alarm system is designed for applications such as monitoring sump pump basins, sewage pump basins, and water powered back-up pumps. The alarm system comes standard with a 9V battery backup to enable continuous water level monitoring, even when the power is out. A built-in battery monitor alerts the user when the 9V battery needs to be replaced. Replace product immediately if sensor or power cable becomes damaged or severed.

NightEye® enabled devices come equipped with wireless internet connectivity. These devices can connect to your wireless network, by means of an Android® or iOS® device, and send notifications about your system in real time. This system provides peace of mind about the status of your pump system even when you are not home.

All of the alarms come standard with Liberty Pumps 360° red alarm beacon powered by super-bright LEDs. In combination with the 86 dB (at 10 ft/3 m) alarm siren, the alarm is sure to alert occupants of any high-water condition.

Each device is specifically designed for use in an indoor residential wastewater application. The system comes with liquid level sensor that conforms to the needs of the intended application. The sensor types are as follows:

- **Snap-on enclosed float for Sump Pump Applications:**
ALM-P1, ALM-P1-EYE, SJ10A, SJ10A-EYE
- **Tethered float for Sewage Pump Applications:**
ALM-2, ALM-2-1, ALM-2-EYE, ALM-2-1-EYE
- **Water puck for Puddle Sensing:**
ALM-PK, ALM-PK-EYE

To install up to three sensors, use Liberty Pumps alarm connector splitter (sold separately, kit #K001633). A maximum of 2 pucks can be used on a single alarm. Acceptable configurations: 3 floats; 2 floats and 1 puck; or 1 float and 2 pucks.

Installation

⚠️ WARNING RISK OF ELECTRIC SHOCK

- Do not install this alarm system outdoors. The system is rated for indoor use only.

Enclosure Installation

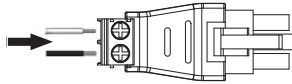
- Select an indoor mounting location for the alarm unit. Liberty Pumps recommends a location between 48 in (1.2 m) and 66 in (1.7 m) above floor level.
- Using the supplied template on the rear cover of this manual, mark screw locations on the mounting surface.
- If the screw locations are *not* directly over a wall stud, or the alarm will be mounted to a masonry wall, the use of the supplied anchors is recommended. A 3/16" (5 mm) hole must be drilled before inserting the anchor into the wall.
- Mount the alarm enclosure to the wall using the supplied anchors and screws as applicable.

Alarm Float Adapter

NOTICE

- Alarm float adapters cannot be used with puck sensors.
- Do not cut the connector off a puck sensor and wire it to the float adapter. The sensor uses three wires for communication and the float adapter only has two terminal blocks.

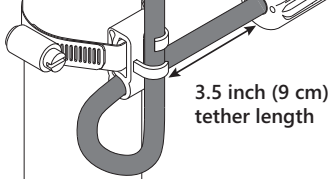
If your system already has an alarm float installed, and you do not want to replace it with the float included with your Liberty Pumps ALM-Series product, you can use the included terminal block adapter.



- Turn both screws in the float adapter counterclockwise, until the conductor receptacles are fully open.
- Insert the float conductors into the float adapter, one conductor per receptacle. Polarity does not matter.
- Tighten the screws in the float adapter until they bottom out.
- Insert the float adapter into the connector on your Liberty Pumps ALM-Series alarm.

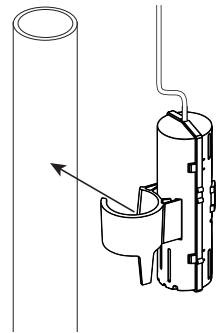
Sensor Installation

Sewage Pump Sensor

- Place the float switch cord into the clamp as shown.
- Locate the clamp at the desired activation level and secure the clamp to the pump discharge pipe.

Note: Do not install cord under hose clamp.
- Tighten the hose clamp using a screwdriver. Over-tightening may result in damage to the plastic clamp. Make sure the float cable is not allowed to touch the excess hose clamp band during operation.
Note: All hose clamp components are made of 18-8 stainless steel. See your Liberty Pumps distributor for replacements.
- Route the sensor cable out of the sewage pit and connect it to the bottom of the alarm enclosure ensuring it does not interfere with the operation of the primary pump's float.

Sump Pump Sensor

- Remove sump pump sensor from packaging.
- Apply a small amount of glue to the inside of the snap feature of the sensor. Note: Over-gluing the sensor will make future removal very difficult.
- Snap sensor over the discharge pipe of your sump pump as shown.
- Route the sensor cable out of the sump pit and connect it to the bottom of the alarm enclosure as shown in Figure 1.



Water Puck Sensor

NOTICE

- Do not cut the connector off a puck sensor and wire it to the float adapter. The sensor uses three wires for communication and the float adapter only has two terminal blocks.
- Remove the puck sensor from its packaging.
 - Place sensor in the location susceptible to water intrusion or buildup (example: under hot water heater, near laundry sink, near problematic foundation wall, etc.).
 - Route water puck cable such that it will not pose a tripping hazard.
 - Plug water puck cable into the ALM sensor connector.
 - Test water puck for operation by setting it in a small puddle or by holding a damp towel on its bottom surface.

Connect Power

- Connect the supplied power adapter to the alarm unit as shown. Plug the power adapter into the wall receptacle and verify that the green "power" indicator illuminates.
- Install the 9V battery as shown. Paying attention to polarity, the battery should gently push into place and latch on the ledge at the bottom of the battery chamber.
Note: A 9V battery must be installed in the device at all times to ensure proper operation.

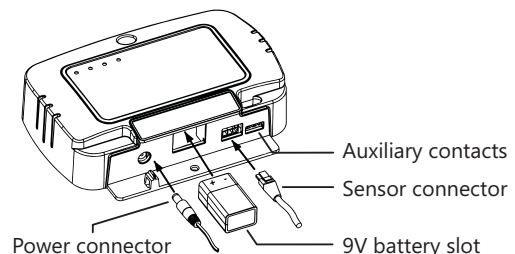
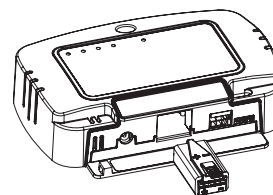


Figure 1. Connection Locations on Bottom of Alarm Unit



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Figure 2. 9V Battery Installation with Tray

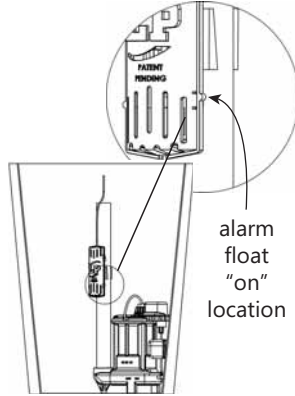
NightEye Configuration

If your device is NightEye enabled, download the NightEye application from the Apple App store or the Google Play store. Follow the directions provided in the NightEye app to configure the device.

Alarm Testing

Sump Pump Sensor

This switch is a self-contained unit. The internal float may not be visible from the outside of the switch housing. The switch should be placed such that the activation point (the bump on the right) is slightly higher than the pump activation point.



1. In order to test the proper operation of the float switch, we recommend raising the water level in your sump pit above its normal operating level. When the water level reaches the lowest mark on the side of the float housing, the alarm will activate.
Alternately, a cup of water can be used to confirm float operation. Raise the cup of water up to the float, and submerge the float past the bump on the right. This will trigger the alarm.
2. Once alarm begins to sound, it will continue to sound until the water level is lowered. The audible alarm can be silenced using the **Silence** button on the front of the device. The alarm will stay silenced for 6 hours after the **Silence** button is pressed.
3. Once testing is complete, lower the water level in the pit back to its normal range.

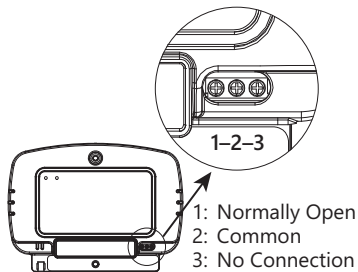
Sewage Pump Sensor

1. Manually tip the float up.
2. Once alarm begins to sound, it will continue to sound until the float is tipped down. The audible alarm can be silenced using the **Silence** button on the front of the device. The alarm will stay silenced for 6 hours after the **Silence** button is pressed.
3. Lower the float back to its resting position to reset the alarm.

Auxiliary Contacts

This device comes equipped with auxiliary contacts. These contacts can be used to integrate the output of this alarm with an existing home monitoring system.

Contact Rating: Class 2,
24 VDC/VAC (50/60 HZ)
500 mA maximum.



Operation and Maintenance

Now that your alarm unit has been configured and tested, it is ready for operation.

The following is a list of regular maintenance tasks:

- Test the alarm system every 6 months. Follow the procedure outlined in **Alarm Testing**.

In the event the 9V battery is low, the alarm will emit a short chirp about twice per minute. The 9V battery should be replaced any time the yellow "low battery" indicator on the alarm unit is lit or every 12 months.

In the event that an alarm condition is detected by the system, the audible and visual alarms will activate. The automatic reset feature of the alarm will turn the audible and visual alarms off once the condition has been corrected.

Warranty

Liberty Pumps Wholesale Products Limited Warranty

Liberty Pumps, Inc. warrants that Liberty Pumps wholesale products are free from all factory defects in material and workmanship for a period of three (3) years from the date of purchase (excluding* batteries and "Commercial Series" models). The date of purchase shall be determined by a dated sales receipt noting the model and serial number of the pump. The dated sales receipt must accompany the returned pump if the date of return is more than three years from the date of manufacture noted on the pump nameplate.

The manufacturer's sole obligation under this Warranty shall be limited to the repair or replacement of any parts found by the manufacturer to be defective, provided the part or assembly is returned freight prepaid to the manufacturer or its authorized service center, and provided that none of the following warranty-voiding characteristics are evident:

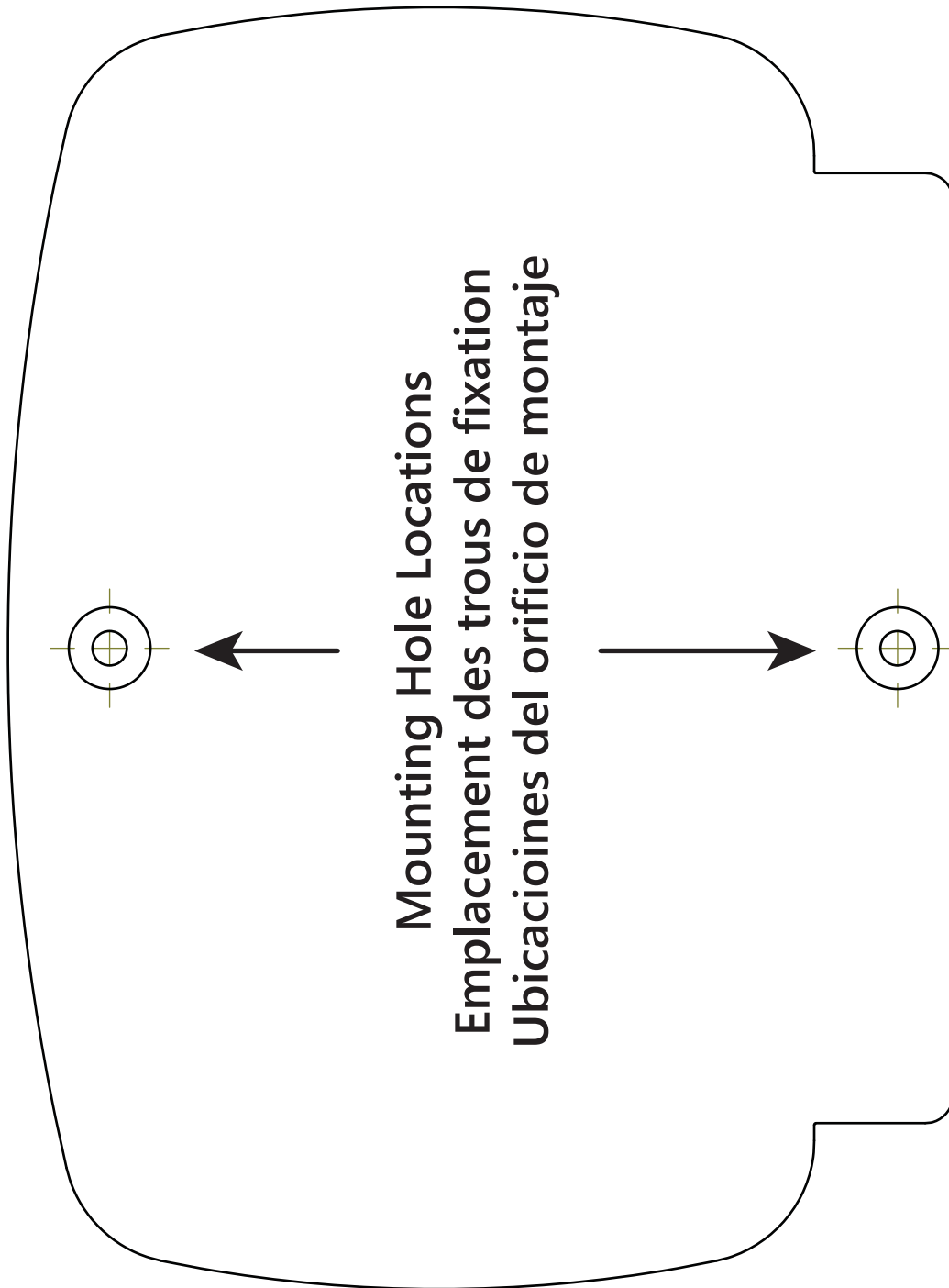
The manufacturer shall not be liable under this Warranty if the product has not been properly installed, operated, or maintained per manufacturer instructions; if it has been disassembled, modified, abused, or tampered with; if the electrical cord has been cut, damaged, or spliced; if the pump discharge has been reduced in size; if the pump has been used in water temperatures above the advertised rating; if the pump has been used in water containing sand, lime, cement, gravel, or other abrasives; if the product has been used to pump chemicals, grease, or hydrocarbons; if a non-submersible motor has been subjected to moisture; or if the label bearing the model and serial number has been removed.

Liberty Pumps, Inc. shall not be liable for any loss, damage, or expenses resulting from installation or use of its products, or for indirect, incidental, and consequential damages, including costs of removal, reinstallation or transportation.

There is no other express warranty. All implied warranties, including those of merchantability and fitness for a particular purpose, are limited to three years from the date of purchase. This Warranty contains the exclusive remedy of the purchaser, and, where permitted, liability for consequential or incidental damages under any and all warranties are excluded.

*Liberty Pumps, Inc. warrants StormCell batteries for 1 year from date of purchase, and warrants that pumps of its Commercial Series are free from all factory defects in material and workmanship for a period of 18 months from the date of installation or 24 months from the date of manufacture, whichever occurs first, and provided that such products are used in compliance with their intended applications as set forth in the technical specifications and manuals.

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Mounting Hole Locations
Emplacement des trous de fixation
Ubicaciones del orificio de montaje