



Thank you for purchasing one of our FreezeAlarms. We are confident the FreezeAlarm will meet your expectations of the product.

FA-B is the Basic FreezeAlarm Model.



GENERAL DESCRIPTION

The Basic FreezeAlarm monitors the temperature of an unoccupied home, cabin, or business. If the temperature drops below 45°F (7°C), the FreezeAlarm will automatically dial a user programmed telephone number and sound an alarm tone to the person answering the call. The FreezeAlarm is used to protect homes, cabins, and businesses against winter freeze up and the resulting water damage caused by burst pipes. The most common causes of frozen pipes are furnace failure or a prolonged power failure.

FEATURES

Automatically dials to one telephone number when the temperature drops below 45°F/7°C ($\pm 3^\circ$).
Operates on either rotary/pulse or Touch Tone™ telephone lines.
User entered "call-to" telephone number, up to twelve digits.
FCC Approved
Indicator light

SPECIFICATIONS

Power Requirements: 9-volt battery (not included)
MAKE SURE YOU REPLACE THIS ANNUALLY OR REMOVE WHEN THE UNIT IS NOT IN USE!
Weight: 7.5 oz
Accuracy: $\pm 3^\circ\text{F}$ (2°C)
Sensor: Fixed setpoint thermistor
Operating Ambient Temperature Range: 20° to 140° F (-7° to 60° C)
Humidity: 90% non-condensing
Agency Approvals: FCC part 68, ringer equivalence: 0.0B (ac)
Dimensions: (L) 5.94" (15.1cm) x (W) 3.25" (8.3cm) x (D) 1.75" (4.4cm)

INSTALLATION & PROGRAMMING

IMPORTANT!

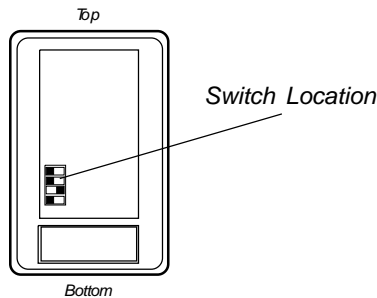
The performance of local and long distance telephone lines vary from location to location and may affect operation of the FreezeAlarm. Therefore, it is important that the FreezeAlarm be fully tested after installation to confirm telephone compatibility. Testing involves plugging the FreezeAlarm into a standard telephone wall outlet, programming the "call-out" telephone number into the FreezeAlarm, and pressing the pound (#) key to initiate the automatic dialing of the FreezeAlarm. It is necessary to have a person available at the "call-to" location to receive and confirm the transmission of the alarm tone. Further details on how to program and test your FreezeAlarm are provided in this manual.

A. What You Will Need:

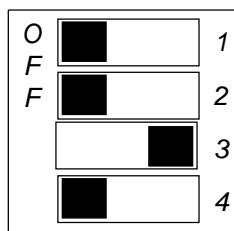
- 9-volt alkaline battery (not included)
- Phillips screwdriver (not included)
- A single line telephone jack. This does not need to be a dedicated phone jack, a phone can share the jack with the FreezeAlarm through the use of a telephone line splitter (not included). These are available at most hardware, electronics, or discount stores.

B. Installation:

1. Remove the four screws from the back cover.
2. Install your 9-volt alkaline battery. **WARNING: Batteries should be replaced annually. Failure to do so will result in the FreezeAlarm malfunctioning.**
3. With the cover still removed, locate the four little “dip” switches on the board.



This is the “OFF” position This is the “ON” position



Each of these switches has a specific function, some of which are for our factory use only. The only switches you need to be concerned with are the following.

#	What it does	OFF position	ON position
1	FACTORY USE ONLY - DO NOT CHANGE!		
2	Pick-Up Ring Count. When you call your monitoring location, should the FreezeAlarm pick-up after 2 rings or 16 rings?	Approx. 16 rings	Approx. 2 rings
3	Call-Out Frequency during an alarm. How often should the FreezeAlarm dial the call-out telephone number.	Every 15 minutes	Every 3 hours
4	FACTORY USE ONLY - DO NOT CHANGE!		

Switch #2 is factory set to answer after approximately 16 rings. You can have your FreezeAlarm answer after 2 rings, but be aware, if there is an alarm condition, another caller, phoning the monitoring location could disable the call-out before you had a chance to hear the alarm.

4. Replace the back cover. Be careful to ensure the cover goes on the correct way as the telephone jack on the FreezeAlarm and the battery may not sit right if replaced incorrectly.
5. Plug one end of the supplied telephone cord into the FreezeAlarm. Plug the other end of the telephone cord into the wall jack for your single line telephone. CAUTION: The FreezeAlarm requires a single line telephone, but does not require this line to be dedicated for FreezeAlarm use only. The FreezeAlarm is not compatible with PBX or other multi-line business telephone systems. Connecting the FreezeAlarm to a commercial telephone system may cause internal damage to both systems.

The FreezeAlarm can share a direct phone line with a telephone. A dual plug adaptor or “splitter” (not included), is required and is available at most hardware or electronics stores. The adapter allows both the FreezeAlarm and the telephone to share the same phone line through connection of a single wall jack.

C. Programming:



1. Press and HOLD the star (*) key on the FreezeAlarm keypad.
2. While CONTINUING TO HOLD the star (*) key, enter the telephone number of the location you want the FreezeAlarm to call should the temperature drop below 45° F (7° C). This is referred to as the “call-out” telephone number. **Remember! Keep holding down the star (*) key until the entire phone number is entered!** Release the star (*) key after entering all the digits of the “call-to” telephone number. The unit is now programmed! If you ever want to program a new “call-to” telephone number, follow this procedure again.

Don’t forget to enter a “1” or your area code if required. Area codes change regularly now, so make sure you remember to change your call-out telephone number if your area code has changed.

E. Testing your FreezeAlarm:

To test if your FreezeAlarm is programmed correctly and is working properly with your phone system, follow the instructions below.

To test your FreezeAlarm to ensure it is compatible with your phone system, do the following:

1. Press the pound (#) key on the FreezeAlarm keypad until the red indicator light comes on then release the pound (#) key. After a moment, the red light will begin pulsing, indicating the FreezeAlarm is dialing the “call-out” telephone number. If the red light does not come on or does not pulse, repeat the programming sequence in section D. The FreezeAlarm will only call out once to the programmed phone number during the test mode.
2. **IMPORTANT!** For proper testing, it is recommended that a person at the call-to location receives and confirms the alarm call. This will assure the FreezeAlarm and your telephone systems are compatible and functioning properly.
3. **NOTE:** If the FreezeAlarm does not function properly, refer to the Troubleshooting section on page 4.

Many people will also want to test if the FreezeAlarm calls out when the temperature drops. They will put the FreezeAlarm in the freezer or outside in the cold weather. This is not recommended, since it reduces battery life and because the temperature sensor inside the unit is very slow to react to temperature changes. This is actually a feature of the FreezeAlarm designed to prevent false alarms due to sudden drafts such as a door opening. In addition, the sudden changes in temperature can cause condensation to build up when the unit is brought back inside. This can reduce the life of your FreezeAlarm.

OPERATION

A. During an Alarm:

If the temperature drops below 45° F (7° C) at the monitoring location, your FreezeAlarm will begin to call out to the “call-out” telephone number you programmed. The FreezeAlarm will continue to call either every 15 minutes or every three hours, depending on your initial set-up. The only way to stop the alarm from calling out is to disable the call-out feature or get the temperature above 45°F (7° C). If the temperature goes above 45°, the FreezeAlarm will re-set and stop calling out to the “call-out” telephone number.

B. Disabling the FreezeAlarm:

1. In the event of a temperature alarm, the FreezeAlarm will repeatedly dial the “call-to” location every 15 minutes or every 3 hours, depending upon the setting of dip switch # 3 (see installation in Step A).
2. After receiving an alarm call, dial the number of the monitoring location where the FreezeAlarm is located and let the phone ring 16 or 17 times.
3. After 16 or 17 rings, the FreezeAlarm will automatically answer and transmit an alarm tone over the phone. The alarm tone confirms the FreezeAlarm call-out has been disabled.
4. **IMPORTANT: If the FreezeAlarm has been in the alarm mode (temperature drops below 45°) and later the temperature rises above 45°, the FreezeAlarm will re-set and return to normal operation. If the temperature falls below 45° again, the FreezeAlarm will automatically go into alarm and dial the “call-out” telephone number again.**

C. Remote Temperature Status Check:

You can remotely check if the temperature is above or below 45°F (7° C) by calling your FreezeAlarm.

1. Dial the FreezeAlarm telephone number.
2. If the telephone rings more than 16 times, the FreezeAlarm is not in an alarm condition and the temperature is above 45°.
3. If after 16 rings, you hear the alarm tone, the temperature has dropped below 45° and you have just effectively disabled the call-out feature on your FreezeAlarm. Note: In the event the temperature rises above 45°, the FreezeAlarm will automatically reset and stop calling the “call-to” telephone number. The FreezeAlarm will dial the “call-to” number again if the temperature drops below 45° a second time.
4. If the FreezeAlarm answers after eight rings and you hear the alarm tone, the call-out feature has been disabled by a previous call, yet the alarm tone signals there is still a temperature alarm condition at the monitoring location.

D. Answering Machines/Voice Mail at Monitoring Location:

Do not use an answering machine at the location you are monitoring with the FreezeAlarm. Answering machines will generally answer the phone before the FreezeAlarm can, preventing the FreezeAlarm from being tested or having the call-out feature disabled.

E. Answering Machines/Voice Mail at “Call-To” Location:

To best assist you in protecting your property from freeze-up, the FreezeAlarm has been designed to communicate with you personally. If you have an answering machine or voice mail at the “call-to” location, the FreezeAlarm will continue to operate normally, however, it will not leave the alarm tone message on an answering machine or voice mail.

TROUBLESHOOTING

PROBLEM

1. The FreezeAlarm does not function.

SOLUTION

Check battery, phone line service, and cord connections. Verify that switches are properly set (see Installation Step C).

Make sure the FreezeAlarm is connected to a direct phone line and not through a PBX, digital, or multi-line business phone system. This can be verified by plugging a standard telephone into the wall jack. If a standard telephone functions (you hear a dial tone and can make a phone call), then the phone line is a direct phone line.

2. Cannot disable alarm call-out.

Verify the phone number at the monitoring location.

Check to verify if the temperature at the modified location is not fluctuating around 45°F. This would cause the FreezeAlarm to automatically reset every time the temperature went back above 45°F, thus not giving you the alarm tone when you called back to disable the call-out. If the temperature drops below 45° again, the FreezeAlarm will begin the call-out again.

3. Receiving false alarms.

The unit may be placed too close to a window, or other cold temperature source, causing it to dial out. Do not place the FreezeAlarm near windows or drafty areas.

Furnace thermostat may be set too low, causing areas of your building to drop near 45°F ($\pm 3^\circ\text{F}$). Raise the temperature setting on your thermostat. We recommend thermostats be set no lower than 55°F.

Commonly Asked Questions

1. In order to test my FreezeAlarm, I put it into the freezer for a few minutes to cool it down, and force it into alarm mode. It did not go into alarm and dial out. Why?
2. The FreezeAlarm is not calling the correct “call-to” location. Why?

Answers

The sensor reacts slowly, therefore, you need to keep it in the freezer for a minimum of one half hour. Caution: repeated testing in this manner may lead to condensation damage to the electronics.

This may be due to entering an incorrect “call-out” telephone number or a dead battery. Check or replace the battery and double check the call-out telephone number. Did you enter a “1” before a long distance phone number? Check to see if your area code has changed and re-program the call-out number with the correct area code.

3. *If I unplug the FreezeAlarm or take out the battery, will I have to re-enter the "call-to" telephone number?*

Once your FreezeAlarm is programmed, the "call-to" telephone number will be retained in memory indefinitely whether the FreezeAlarm is plugged in or not or if the battery goes dead or is taken out. You can always program a new "call-to" telephone number though at any time.

4. *Do I need a dedicated telephone line for my FreezeAlarm?*

No. The FreezeAlarm can share a telephone line with a telephone, modem or fax machine, provided you purchase a dual plug adapter or a line splitter.

5. *Will the FreezeAlarm work on a multi-line business phone systems, PBX systems or digital telephone systems?*

No. The FreezeAlarm is designed to work only with a single telephone line, found in most residential homes. Sharing a phone line with a telephone, fax machine or computer modem is acceptable as long as they are sharing a single telephone line.