Thank you for purchasing our Intermediate FreezeAlarm™, model FA-I.

The FreezeAlarm™ Intermediate model will automatically call up to three telephone numbers when the temperature drops in your home, cabin, or business, if the power fails or if the back-up battery needs replacing. You can check the current temperature, power status and battery voltage or change any of the settings from any phone in the world.

Applications

Applications include remote temperature and electrical power monitoring of refrigeration, heating and air conditioning equipment for buildings (homes, cabins and commercial buildings).

FreezeAlarm™
Intermediate Model

CONTROL PRODUCTS, INC. U.S.A.

FreezeAlarm   PHONE

POWER   ALARM

Features

• Adjustable temperature alarm setpoint with call out
• Power loss call out alarm
• Three telephone number call out, up to 16 digits each
• Remote access to programming menu and current condition status
• Low battery call out alarm
• Battery back-up (9 volt-not included)

• Location identification
• Custom voice message recording
• Selectable 15 minute or 2 hour call out interval
• Selectable 10 or 3 ring call out
• Security coded access to programming menu
• Dials out in tone or pulse
• LED status indicators

Specifications

Power requirements: 12 VDC (110 VAC/12 VDC plug-in wall transformer with six foot long cord included)
Sensor: Semi-conductor sensor with 1.75" x .25" nickel plated copper cap and three foot cord
Operating range of sensor: -49° to 199°F (-45° to 93°C)
Phone cord: 7 feet long

Accuracy: $\pm 2°F (\pm 2°C)$
Ambient temperature range: 32° to 140°F (0° to 60°C)
Humidity: 90% non-condensing
Weight: 2.0 pounds (0.91kg)
Dimensions: Width: 5.13" (130mm)
Depth: 5.25" (133mm)
Height: 1.5" (38mm)

Front of the FreezeAlarm

Programming
Phone Jack

Power
Indicator

Alarm
Indicator

Back of the FreezeAlarm

OUT TO
WALLJACK   SENSOR   +9V BATTERY   +12VDC
PWR

Telephone
Input

Option
Selector
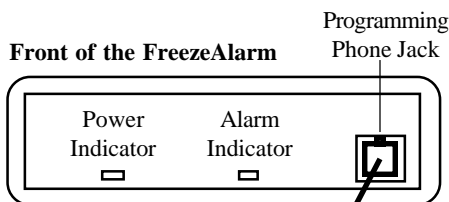
Sensor
Input

Battery
Compartment

Power
Input

Figure 1:
Phone connection when programming at the monitoring location. Unplug phone when finished programming.

Figure 2:
It is highly recommended the power and phone lines are plugged into a surge suppressor/power strip. This is not, however, required for the FreezeAlarm™ to operate. Most electronics stores carry a surge suppressor that handles both the power cord and telephone line.

Telephone
Wall Jack
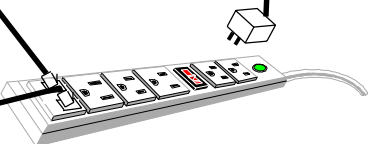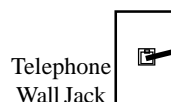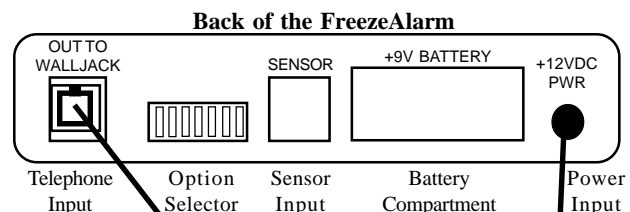
Surge Suppressor for both the power cord and telephone line. This is not included with your FreezeAlarm™

Installation

1. <u>Before starting</u>, please read the **Warranty** on the last page for important information.

CONNECT THE INPUTS IN THE FOLLOWING ORDER AVOID HAVING THE UNIT GO INTO ALARM PREMATURALLY.

2. Connect the temperature sensor to the back of the FreezeAlarm™.
3. Connect the plug-in power supply to the +12VDC port on the back of the unit and plug into a 110 VAC wall outlet. It is highly recommended you plug both the power supply and telephone line into a high quality surge suppressor. These are available at most electronics and department stores. See Figure 2 on page 1.
4. Install 9 volt alkaline battery (not included) in back of unit. If it is not installed within 5 minutes of the plug-in power supply, a low battery alarm will occur.
5. Select and set dip switch options on back of unit – see Dip Switch Table.
6. Plug any standard Touch Tone™ telephone into the PHONE receiver port located on the front panel. Cordless telephones may not work.   See Figure 2 on page 1. Cellular and mobile phones will not work, although you can remotely program with a mobile or cellular phone by calling into your FreezeAlarm™.
7. Follow procedure in **Programming Instructions** section described below.
8. After programming is complete, disconnect the telephone from the front port of the FreezeAlarm™. Then connect one end of the phone cord to the OUT TO WALL JACK port on the back of the unit, and the other end to a standard telephone jack. Optionally, you may wish to plug the phone line into a surge suppressor that can accommodate a phone line. See Figure 2 on page 1 to see how this works. An additional phone cord is required for this and is not included with your FreezeAlarm™. Any standard phone cord will work.

Programming Instructions

IMPORTANT: When the FreezeAlarm™ is first powered up it will not check any of the alarm conditions for 5 minutes. After this initial 5 minute start up period, the alarm conditions will be checked continuously. The battery voltage will be checked every 10 minutes.

When the programming phone is picked up the alarm conditions are checked and any alarms present are reported. If the call out is active and has not been disabled, the menu will give you the option of disabling the alarm call out. The FreezeAlarm™ is programmed by following a series of menu driven voice commands and can be reprogrammed remotely or locally from any Touch Tone™ telephone.

> <u>*"You are now in the main menu:"*</u>
> *"To review or program call out telephone number one, press 1."*
> *"To review or program call out telephone number two, press 2."*
> *"To review or program call out telephone number three, press 3."*
> *"For the current temperature, press 4."*
> *"To review or program the (high / low) temperature alarm setpoint, press 5."*
> *"To review or program the security code, press 6."*
> *"For the battery status, press 7."*
> *"For the power status, press 8."*
> *"To record a message, press 9."*

If the FreezeAlarm™ does not recognize an entry, you will hear "*invalid entry*" and the menu selections will be replayed. Re-enter your menu selection within 15 seconds to continue with the programming sequence.

IMPORTANT: After programming, disconnect your telephone from the PHONE receiver port on the front of the FreezeAlarm™. The phone cannot be used for outgoing phone calls while connected to the FreezeAlarm™.

The menu structure of the FreezeAlarm™ is shown below. These are the sub-menus that will be played when any of the main menu selections are pressed.

If you press "1", "2" or "3"
> *Call out telephone number (1 / 2 / 3) is now xxxxxxx*
> *To change press zero*
> *Otherwise to return to the main menu press one*

If a "4" is pressed:
> *The current temperature is xxx degrees*
> *To return to the main menu press one otherwise hangup*

If a "5" is pressed: (high or low set point is selectable with the DIP switch)

>*(the high / the low) temperature alarm setpoint is now xxxx degrees*
>*To change (the high / the low) temperature alarm set point press zero*
>*Otherwise to return to the main menu press one*

If a "6" is pressed:

>*The security code is xxxx*
>*To change the security code press zero*
>*Otherwise to return to the main menu press one*

If a "7" is pressed:

>*The battery is now ##.## volts*
>*The battery (is in / is not in) an emergency condition*
>*To return to the main menu press one otherwise hangup*

If a "8" is pressed:

>*The power is (off / on) to return to the main menu press one otherwise hangup*

If a "9" is pressed:

>*Greeting message is now [custom message] to change press zero*
>*Otherwise to return to the main menu press one*

The following data must be programmed into the FreezeAlarm™:

A. TEMPERATURE ALARM SETPOINT – temperature at which an alarm call out will be initiated (rise or fall).
B. CALL OUT TELEPHONE NUMBERS – three telephone numbers to be called in succession during an alarm condition.
C. SECURITY/LOCATION CODE – four digit code used to gain access to main menu or disable unit and can also be used to identify location. **You cannot have a security code that starts with a zero.**

MENU DESCRIPTIONS

CALL OUT TELEPHONE NUMBERS: Follow verbal prompts to enter call out telephone numbers. You may enter the same number more than once, or enter the star (*) key to leave an entry blank (no number). Pressing the pound (#) key will place a 5 second pause between digits. Do not place pauses at end of telephone number(s).

CURRENT TEMPERATURE: Reports the current temperature of the sensor.

TEMPERATURE ALARM SETPOINT: The setpoint is the temperature at which the FreezeAlarm™ will initiate an alarm call to your programmed telephone numbers. The setpoint will be used as either a high or a low setpoint depending on the position of the DIP switch #7. The setpoint is factory set to activate below –40°. Follow verbal prompts to change the setpoint. The setpoint should be more than ten degrees above or below the room temperature.

SECURITY CODE: The security code is factory set at "9999". Follow verbal prompts to change security code. The security code can also be used as a location ID code.

BATTERY STATUS: Low battery alarm will occur at 7 volts. **Important: Battery should be replaced annually, or when power drops to 7 volts or below. Unplug battery when unit is not in service or when storing during the summer.**

POWER STATUS: Unit will report that the *"power is off"* in the event of a power failure. You can turn off the power monitoring feature as well as have the FreezeAlarm™ wait for a power failure of 1 hour before beginning to call out to your programmed telephone numbers.

RECORD A MESSAGE: A custom greeting message may be recorded. The message can be up to 20 seconds long. When the recording is done, press the starkey (*). The greeting message will be used as follows "*Hello, this is [greeting message]*"

Operating Instructions

UPON ALARM

The FreezeAlarm™ will call out with one or more of the following messages:

"There is a temperature alarm emergency at location (your four digit security/location code). *Help is needed immediately!"*

AND/OR

"There is a power alarm emergency at location (your four digit security/location code). *Help is needed immediately!"*

AND/OR

"There is a battery alarm emergency at location (your four digit security/location code). *Help is needed immediately!"*

The alarm message(s) is repeated once, followed by:

"To disable the alarm call out, enter your four digit security code followed by the star key."
You must enter the correct security code within 15 seconds or the FreezeAlarm™ will hang up and call again in the selected interval (15 minutes or 2 hours). If you enter the correct security code within 15 seconds you will hear:

"The alarm call out is now disabled. To return to main menu, press 1, otherwise hang up."
You now have the option of returning to the main menu to review or change the system data.

IMPORTANT: The FreezeAlarm™ will continue to call out with an alarm message until disabled, even if alarm conditions have been corrected.

CALLING THE FREEZEALARM FROM A REMOTE LOCATION

When called from a remote location, the FreezeAlarm™ will answer after five rings and you will hear:

"Enter the security code followed by the star key."
If you enter the correct security code within 15 seconds, and the FreezeAlarm™ is not in alarm, you will enter the main menu and hear:

"You are now in the main menu. To review or program. . ."
If the FreezeAlarm™ is in alarm, you will hear one of the three alarm messages described in **Operating Instructions** above. The alarm message is repeated once, followed by:

"To disable the alarm call out, press 0. Otherwise, to return to the main menu, press 1."
For information on compatiblity with answering machines, see "IMPORTANT INFORMATION" section.

IMPORTANT INFORMATION

Temperature Alarm delay feature: If dip switch #6 is placed in the DOWN position, the FreezeAlarm™ will delay 45 minutes during a temperture alarm only. A temperature alarm condition must be present for 45 minutes before unit will call out.

Power alarm delay feature: The power alarm delay is selectable from either 1 hour or 0 minutes on dip switch #2.

Battery alarm feature: The battery voltage is checked every 10 minutes. A low battery alarm will occur if the voltage drops below 7 volts. **Remove the battery when the unit is not in use.**

Using FreezeAlarm™ on the same phone line as telephone: The FreezeAlarm™ does not require a dedicated phone line and can share the same jack with a telephone by using a dual plug adapter (not included). Caution: The FreezeAlarm™ may not work on a PBX or multi-line systems or a party line.

Surge Protection: It is extremely important that you plug the power cord and the telephone line through a high quality surge suppressor to help avoid damaging spikes in power through the power or phone lines. This may provide some protection from lightning strikes, however, lightning strikes are very powerful and even the best surge protection can be overcome by lightning. Lightning damage is not covered by the warranty.

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Call-Out Ring Selector: Dip Switch #5 determines the number of rings the FreezeAlarm will acknowledge until it moves on to the next phone number in your call-out list.

Phone answering machines at the occupied (call to) location: The FreezeAlarm™ will work with an answering machine at the call-to location. Depending upon the length of your greeting, the answering machine may record a portion of the alarm message.

Phone answering machines at the same location as the FreezeAlarm™:   To gain access to your FreezeAlarm™ when you have an answering machine at the same location as the FreezeAlarm™, set your answering machine to answer after four rings or less. The FreezeAlarm™ will answer after five accumulated rings have been heard by the unit. To gain access, call the location where your FreezeAlarm™ is located and let the phone ring three times and hang up. Then place a second call and let the phone ring until the FreezeAlarm acknowledges five rings. In some cases, a third call may be required. The second call must be made within 3 minutes or the unit will re-set.

Monitoring multiple Freeze Alarms™ using the Security Code/Location ID's: Upon alarm, the FreezeAlarm™ calls its programmed telephone numbers and announces the location of the alarm, using the custom greeting message and the SECURITY CODE as a location number or identification number. This enables you to identify an infinite number of FreezeAlarm™ locations.

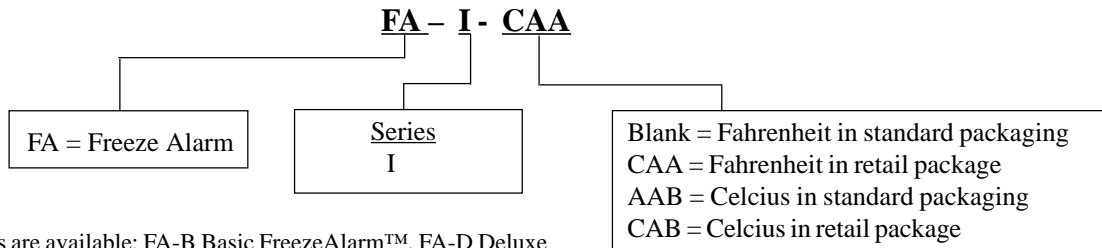Dip switch table: Factory settings are indicated in the DOWN position

Switch #	Function	Settings	
1	Pulse / Tone dial out	UP = pulse	DOWN = tone
2	1 hour power alarm delay call out	UP = immediate	DOWN = on
3	Power alarm monitoring	UP = off	DOWN = on
4	Select 15 minute or 2 hour call out frequency	UP = 2 hrs	DOWN = 15min
5	Select between 10 or 3 ring call out	UP = 3	DOWN = 10
6	45 minute temperature alarm delay call out	UP = immediate	DOWN = on
7	Select for alarm on temperature fall or rise	UP = rise	DOWN = fall

Troubleshooting

Problem	Solution
1. Unit does not function	Check power supply and phone line service.
2. Phone does not ring at "call-to" location	Review telephone number and re-program. Place Switch #5 in the "DOWN" position.
3. Cannot access FreezeAlarm™ at monitoring location	Make sure Touch Tone™ telephone is plugged into front face plate. Try another phone.
4. Cannot access FreezeAlarm™ at call-to location	Make sure Touch Tone™ telephone is being used. Check FreezeAlarm™ power and telephone connections. Try another phone. Verify security code. Cordless telephones may not work.
5. Receiving false alarms	Do not place temperature sensor near heat vents, drafts, or other areas that do not represent the internal temperature being monitored. Raise or lower thermostat accordingly. Check rise and fall switch on back of unit to verify correct position.
6. Temperature reading –49°	Check sensor connection on the back. Make sure sensor has not been damaged.

Ordering Information

Please use the following example when ordering:

FA – I - CAA

FA = Freeze Alarm	Series I	Blank = Fahrenheit in standard packaging CAA = Fahrenheit in retail package AAB = Celcius in standard packaging CAB = Celcius in retail package

Other models are available: FA-B Basic FreezeAlarm™, FA-D Deluxe FreezeAlarm™ and FA-DX Deluxe Plus FreezeAlarm™.

Custom Design & Modifications

In addition to standard models, Control Products specializes in complete custom design of electronic controls. Modifications of our standard controls are also available. Please consult our headquarters for more information.

Contacting Us

To order a FreezeAlarm™ or for technical support, contact a Customer Service Representative at:

Control Products, Inc.
1724 Lake Drive West
Chanhassen, MN 55317
952-448-2217
Fax: 952-448-1606
www.automationhomeproducts.com
email: sales@controlproductsinc.com

Model Number Information:

The model number of your unit is:
FA–I   Fahrenheit Intermediate FreezeAlarm™
FA–I-AAB   Celcius Intermediate FreezeAlarm™
Some models may have additional letters after the FA-I model number. These are style numbers that reference different packaging designs only.

When calling or writing for customer support or service, it is a good idea to have the **DATE CODE/MO#** from the back of you FreezeAlarm™.

Write it down now for reference: _____

IMPORTANT

Limited Warranty

Warrantor: Dealer, Distributor, Retailer, Manufacturer

Warranty and Remedy:
We believe this is a very fine product. Although we take extreme pride in producing and testing a product that will function properly, we cannot guarantee that there will never be a defective unit or that a unit will function on all the thousands of phone lines and communication equipment in existence. For this reason, it must be clear that the Warrantors are not insuring your premises or guaranteeing that there will not be damage to your person or property if you use this Product. If you are not comfortable with our Limited Warranty, or completely satisfied with the Product, we encourage you to return the unused Product for a full refund within 30 days of purchase. Thank you for your understanding.

One Year Limited Warranty – Control Products, Inc. warrants its products to be free from defects in material and workmanship under normal use for one year, and is not responsible for consequential damages or installation costs of any nature. In the event that the Product does not conform to this Warranty at any time during the period of one year from original purchase date, Warrantor will repair the defect and return it to you at no charge. IMPORTANT: The Warranty is limited to replacement of the Product ONLY. Secondly, because every phone line differs, we strongly encourage you to fully test this Product in its actual application. This should include a full test, involving the Product actually dialing to its designated locations and someone verifying the proper response.

This Warranty shall terminate and be of no further effect at the time the Product is 1) damaged by extraneous causes such as fire, water, lightening, etc., or not maintained as reasonable and necessary; 2) modified; 3) improperly installed; 4) repaired by someone other than the Warrantor; 5) used in a manner or purpose for which the Product was not intended.

WARRANTORS' OBLIGATION UNDER THIS WARRANTY IS LIMITED TO REPAIR OR REPLACEMENT OF THE PRODUCT ONLY. THIS WARRANTY DOES NOT COVER PAYMENT OR PROVIDE FOR THE REIMBURSEMENT OF PAYMENT FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES.

It must be clear that the Warrantors are not insuring your premises or guaranteeing that there will not be damage to your person or property if you use this Product. The Warrantors shall not be liable under any circumstances for damage to your person or property or some other person or that person's property by reason of the sale or use of this Product, or its failure to operate in the manner in which it is designed. The Warrantors' liability, if any, shall be limited to the original cost of the Product only. Use of this product is at your own risk.

Procedures for Obtaining Performance for Warranty:

In the event that the Product does not conform to this Warranty, the Product should be shipped or delivered freight prepaid to Warrantor with evidence of original purchase. If in any way your are not comfortable with this product or its Limited Warranty, we encourage you to return it unused within 30 days of original purchase date with evidence of the purchase date.

To return a product to Control Products, Inc.:
All products being returned to Control Products must have a valid Returned Goods Authorization Number (RGA #) from Control Products, Inc., regardless of why the product is being returned. Warranty returns will be honored only with an RGA #. Ship warranty returned products prepaid to Control Products, Inc. 1724 Lake Drive West, Chanhassen, MN 55317. Control Products, Inc. will, at its option, either repair or replace the product free of charge and return the repaired unit or replacement unit at the lowest cost shipping prepaid. Products returned for credit are subject to a 15% restocking charge. Returns resulting from errors by the seller are not subject to this charge. All returns must include evidence of original purchase, showing purchase date. The RGA # should be *clearly* marked on the outside of the package containing the product.

To request an RGA #, call Control Products, Inc. at 952-448-2217 and ask for Customer Service. Failure to have an RGA # may result in lost product or significant delays in handling your return. Products without an RGA # clearly marked on the outside of the package are not the responsibility of Control Products, Inc.

FCC Regulations

This equipment complies with Part 68 of the FCC Rules. On the bottom of this equipment is a label that contains among other information the FCC Registration Number and Ringer Equivalence Number (REN) for this equipment. If requested this information must be given to the telephone company.

The REN is useful to determine the quantity of devices you may connect to your telephone line and still have all of those devices ring when your number is called. In most but not all areas the sum of the REN's of all devices connected to one line should not exceed five (5.0). To be certain of the number of devices you may connect to your line as determined by the REN, you should contact you local telephone company to determine the maximum REN for your calling area.

If your telephone equipment causes harm to the telephone network the telephone company may discontinue your service temporarily. If possible they will notify you in advance. If advance notice is not practical, you will be notified as soon as possible. You will be informed of your right to file a complaint with the FCC.

Your telephone company may make changes in its facilities, equipment, operations or procedures that could affect the proper functioning of your equipment. If they do you will be notified in advance to give you an opportunity to maintain uninterrupted telephone service.

If you experience trouble with this telephone equipment, please contact Control Products, Inc. at 952-448-2217 for information on obtaining service or repairs. The telephone company may ask that you disconnect this equipment from the network until the problem has been corrected or until you are sure that the equipment is not malfunctioning.

This equipment may not be used on coin service provided by the telephone company. Connection to party lines is subject to state tariffs. Contact your statepublic utility commission or corporation commission for information.

WHEN PROGRAMMING EMERGENCY NUMBERS AND (OR) MAKING TEST CALLS TO EMERGENCY NUMBERS:
1) Remain on the line and briefly explain to the dispatcher the reason for the call.
2) Perform such activities in the off-peak hours, such as early morning or late evening.