mini Alarm™ DELUXE

Affordable Security for the Home, Cabin and Business!

CONTROL PRODUCTS

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miniAlarm™ Deluxe Security System

Model MA-D

Installation and Instruction Manual

Table of Contents:

It is recommended that you carefully read this complete manual before you start setting up your alarm.

General Operation

The miniAlarm Deluxe Security System (model MA-D) is a full-featured security system that can be easily expanded. It includes the ability to automatically call up to four different phone numbers if an intruder is detected by one of the motion or door/window sensors. The Control Unit will call all four numbers **once** and play your personally recorded alarm message. This message may be recorded on an answering machine or voice mail when the MA-D calls out. If a sensor remains in an alarm state (either a door or window remains open or a motion sensor continues to be violated), the sensor will resend an alarm message to the control unit and initiate another sequence of calls to the pre-programmed phone numbers.

This system can be expanded by adding up to 17 additional motion or door/window sensors or remote controllers. Sensors may be placed a maximum of 100 feet (30 meters) from the main Control Unit.

This system is easy to use and should provide you with years of comfort and peace of mind.

1. Check Components

1.1 Components included with this System:

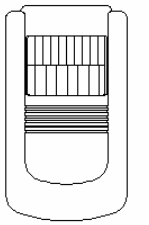
Your MA-D alarm kit is designed to be a complete system for your home, cabin, apartment or business. Note that none of the components are designed for outdoor use.

The kit includes:

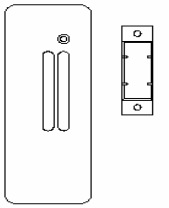
- 1 - Keypad Receiver (Control Unit)
- 1 - PIR Motion Sensor (transmits at 315 MHz)
- 1 - Door or Window Sensor (transmits at 315 MHz)
- 1 - 3 Button Remote Control (transmits at 315 MHz)
- 1 - Siren Horn – 120 decibels at 3 feet (wired)
- 1 - Plug in Transformer
- 1 - Rechargeable 12-volt battery

NOTE: You will need to install new 9-volt alkaline batteries in the PIR and Door/Window sensors, and a **rechargeable 12-volt battery** in the keypad unit. The rechargeable 12 volt battery is included with the MA-D, but it comes uncharged. When you plug in your Control Unit to a power source, the battery will begin charging. It should be fully charged within 12 to 24 hours.

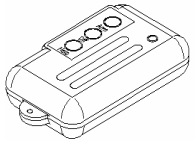
NOTE: <u>You must use a 12-volt rechargeable battery for the keypad unit. This is the backup supply when A/C power is down.</u>



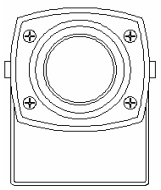
PIR Sensor



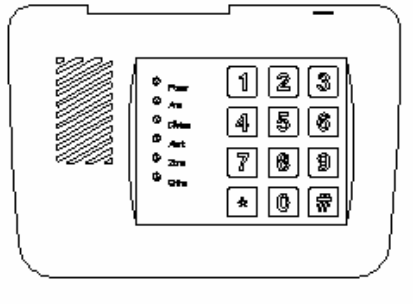
Door/Window



Remote Control

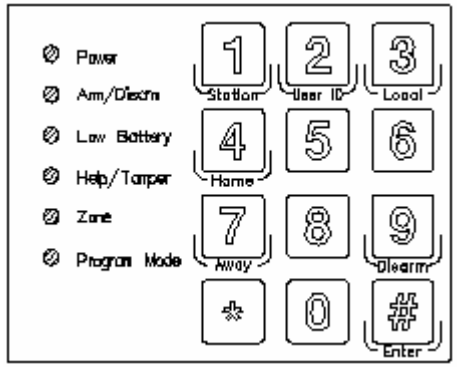


Siren



Control Unit

1.2 Keypad LED Indicators



The display lights on the keypad unit indicate the following:

Power:	On when power from AC adapter is supplied.
Arm/Disarm:	Flashes in the Away mode, solid in the Home mode and off when in the Disarm mode.
Low Battery:	On when a low battery is detected from a sensor.
Help/Tamper:	On when Help button is pressed from the remote control, or when a device has been opened.

Zone: On when one of the sensors is activated

Program mode: On when the system is put into the Program mode.

2. Installing Your System:

This manual is not necessarily laid out in the order of installation for first time installations. You should generally install components in the following order:

1. Install 9V Alkaline Batteries into all of your sensors and remote controller. Keep the two door/window sensor components taped together after putting batteries in them or mount them according to instructions detailed in section 2.2. This will prevent false tamper alarms once you power up the main Control Unit.
2. Install and mount the sensor devices.
3. Install and program the main Control Unit. Several sections of this manual detail various instructions related to performing this task.

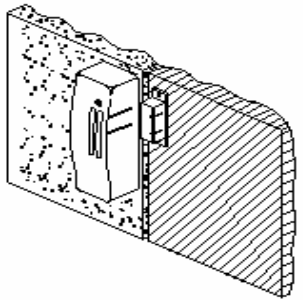
2.1 Control Unit:

Select the location for your control panel. Ideally it should be located close to the main entry/exit door, but not in easy view of the entrance. The height should be chosen based on convenience, above the reach of children. Place the mounting card on the wall and screw or nail the fasteners in the designated positions. Screws are recommended as they tend to be more secure, and pre-drilling might be necessary in some instances. Leave approximately 3/8" of the fastener head protruding from the wall to hang the control unit from. Remove the mounting card, check to make sure the adapter, and other wired connections (optional Siren and Telephone cord) are connected to the control unit, secure all the wires through the wire channel on the back of the unit, then mount the unit over the screw heads. When you are ready to power up the system, connect the 12V adapter to the wall socket.

Note: You must use a 12 volt rechargeable battery for the keypad unit. This is the backup supply when A/C power is lost. This is included with the system.

2.2 Door/Window Sensor:

Install a regular 9V battery (not included) by opening the front cover of the devise. When closing the cover, make sure the LED light is clearly visible through the hole in the front casing. Choose the mounting position on the desired door or window where the door/window edge is flush with the door/window frame. This unit can be mounted anywhere along the edge, but the higher the position the better, as it is less obvious and not likely to be tampered with. Simple hang the transmitter from a screw mount as in Step 1, with the screw centered 5cm or 3/4" back from the door edge. (If screw mounting is difficult, use double sided adhesive tape included with the kit and stick the unit to the door). Do the same with the magnetic sensor piece; be sure to line up the notches on the magnet within the notches on the larger transmitter. The edge of the transmitter should be flush with or slightly back from the door edge, and the gap between the transmitter unit and the smaller magnet sensor piece should not exceed 5mm or 3/4". Your Door/Window transmitters are programmable for *Delay* or *Instant* protection, and optional LED indicator lights (refer to **Setting up Devices** in the operation section.)



2.3 PIR Motion Sensor:

The PIR Motion Sensor should be located in an indoor area. The sensor will not operate properly in temperatures of less than 40°F (5°C).

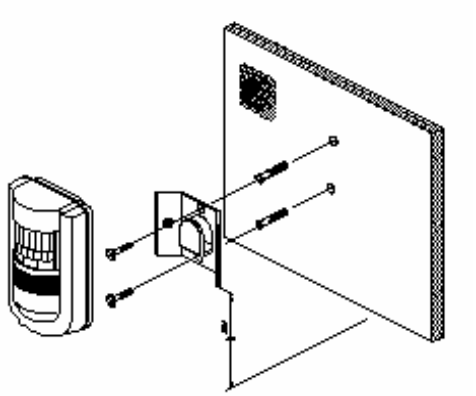
Determine the proper height of the motion sensor by estimating the depth of the space to be monitored. In general, the range of the PIR sensor is about 30 feet (9 meters). If the furthest distance to be protected is around 30 feet, the recommended height for installation is 7' (2.1m). If the size of the space is smaller the height will be correspondingly lower.

The PIR sensor is easily mounted in corner positions or on flat surfaces. Just place the mounting bracket flush against the wall or corner walls, place the screws in the designated holes and screw tightly against the wall. After the bracket is attached, check to make sure a 9V Alkaline battery (not included) is installed in the motion sensor, and slide the PIR sensor over the mounting bracket.

You can test the vision of your motion sensor by walking through the protected area and looking for the LED indicator light (make sure you have the jumper connection in the PIR placed so the LED light will turn on during transmission.) The sensor can detect motion within a 90 degree angle or 45 degrees on either side of center.

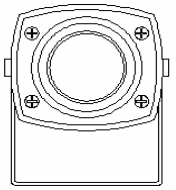
Note: For room protection, corner mounting of the PIR sensor provides the best coverage. You should also avoid facing the PIR sensor directly at windows, as morning sunlight or headlights might cause false alarms.

If you have Pets:
The PIR motion sensors can detect the movement of pets. Pets the size of bird may even set off the sensor. If you intend to leave any pets in your home while you are away, make sure to locate sensors in areas where the pets are not likely to be so as to decrease the chance of a false alarm.



2.4 External Siren:

Your kit includes an external siren that can be connected and placed in a number of important locations. The siren is loud (120dB) and can cause ear damage if you are too close. It can be placed outside your house to alert your neighbors and friends, near private or personal possessions, or next to the control panel. If placed outdoors, it must be placed in a protected area where it will not get wet.



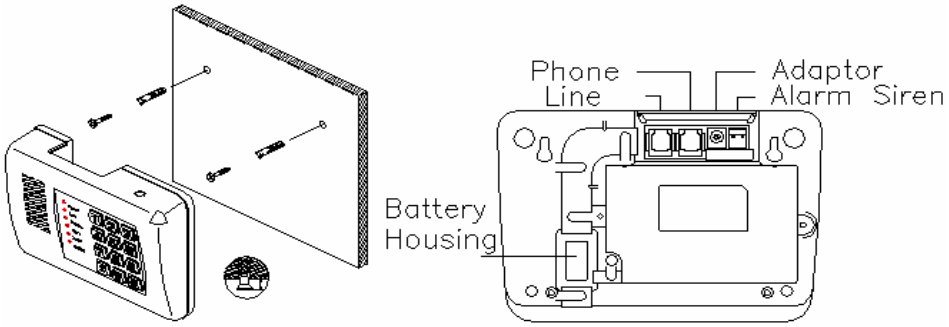
Connect the siren's plug into the control unit’s socket. To mount the siren, first remove the bracket from the siren by unscrewing it from both sides. Then mount the bracket in the desired location by screwing through the holes in the base of the bracket tighten the screws firmly against the base. Place the siren inside the bracket and align the holes of the bracket with the holes on the sides of the siren. Replace the screws and adjust the angle of the siren so the sound is directed in the desired location. Siren wire can be extended up to 1,000’ from the Control Panel using standard two conductor wire.

When there is an alarm condition, the siren will sound for a maximum of five minutes. It will then remain quiet and the Control Unit will reset. If an additional alarm occurs or if a sensor remains in an alarm state, the Control Unit will again sound the siren for a maximum of five minutes.

The siren can be activated and deactivated at the Control Unit. See section 4.3 for details.

2.5 Phone, Power and Siren Connections

Connections for the power cord, phone line and siren are on the back of the Control Unit. See the diagram on the following page.



3. Setting up your Sensor Devices:

3.1 Normal or Exclude Protection Type:

Each sensor can be set to be in a “Normal” or “Exclude” protection type. A “Normal” sensor will delay 30 seconds after initially recognizing a violation before sending a signal to the Control Unit that there is an alarm condition. This gives you 30 seconds to reach the Control Unit and disarm the system or to use your handheld Remote Controller and disarm the system. Your Door/Window sensor(s) all come pre-set as Normal type sensors.

“Exclude” type sensors are only active when the Control Unit is armed in the AWAY mode. When the Control Unit is armed in the HOME mode, these sensors will not send alarm signals to the Control Unit. Your PIR Motion Sensor comes pre-set as an Exclude type sensor.

Generally, your perimeter sensors on doors and windows should be set as Normal type sensors because whether you are away or home, you want to know when someone enters your premises. For internal sensors (most often the PIR motion sensors), these are often recommended to be set as Exclude type sensors. This means that they are fully armed when the Control Unit is in the AWAY mode, yet they are not active when the Control Unit is in the HOME mode. This allows you to freely move above your home and still have the MA-D protecting your doors and windows.

The door you are going to enter the premises via must be set as a Normal type sensor.

3.2 Setting jumper pins on your Sensor Devices:

You can change the sensor type by setting the jumper pins on the sensor devices. Your PIR motion sensor and Door/Window sensor have programming jumper pins for setting the "type" of sensor (Normal or Exclude).

Sensor Jumper Chart

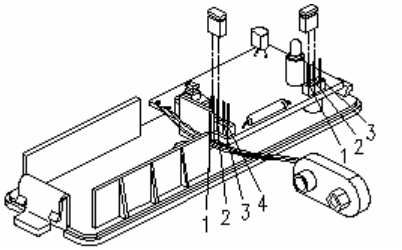
Follow this chart if you wish to change the sensor type using the jumper pins. Note, the words printed on the circuit board of each sensor are incorrect. Follow this chart if you are changing sensor type.

In AWAY mode	
Pins	***Condition***
1 & 2	**Not used**
2 & 3	**Normal**
3 & 4	**Normal**

In HOME mode	
Pins	***Condition***
1 & 2	**Not used**
2 & 3	**Normal**
3 & 4	**Exclude**

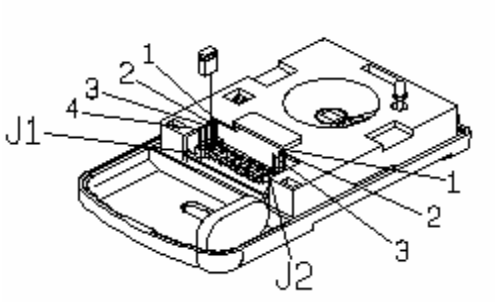
A. Door/Window Sensor:

When you open up the sensor, the jumper pins are located just below the word "MODE" on the circuit board. On the door/wire sensor, there may also be a second set of jumper pins. They are labeled LED ON and LED OFF. This jumper setting allows for the LED to not light up when the sensor is activated or in an alarm state. They come set in the LED ON position. The actual position of the jumper pins may be slightly different from the following diagram.



B. PIR Motion Sensor:

When you open up the sensor, the jumper pins are located just below the word "MODE" on the circuit board. The actual position of the jumper pins may be slightly different from the following diagram.



3.3 Sleep Mode:

The PIR and Door/Window transmitters have a built-in sleep mode. This mode is designed to help conserve battery power on devices located in high traffic areas. If a device is in continuous operation it will cause the device to go into sleep mode. It takes three trips in one minute to cause the device to go into sleep mode. The device is still sensing movement, it is just not reporting to the controller. To exit the sleep mode the device needs to not detect motion for one minute.

3.4 Low Battery Indication:

A fully charged 9 volt alkaline battery will generally last about 1 to 1 ½ years. **It is highly recommended you change out these batteries once a year at a minimum!**

The MA-D Control Unit will indicate a low battery when one of the sensors has a low battery. To locate the device with the low battery, place the system in the disarm mode. Now go to each device and send it into alarm. The device where the LED flashes will be the device with the low battery. The Control Unit *does not* call-out when batteries are low.

3.5 Changing Batteries in Your Sensor Devices:

You must bring the Control Unit into its Battery-Changing mode before changing the batteries in any of the sensors.

NOTE: If you open a sensor device before putting the Control Unit into the Battery-Changing mode, the sensor will register a TAMPER alarm and sound the alarm and begin dialing your phone numbers.

By entering your 4-digit pass code plus the "#" key and the "*" key you will be in the battery-changing mode. You now have a 3-minute time frame to change the batteries. If you do not finish in 3-minutes just set the keypad back into the battery-changing mode.

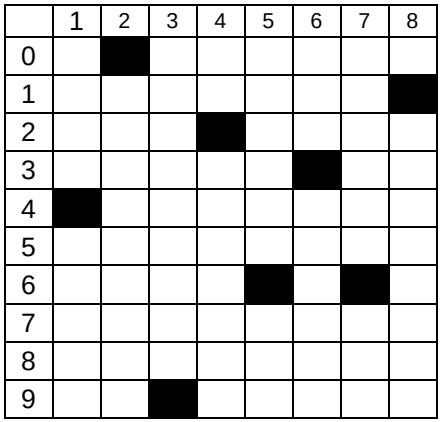
Formula: Pass Code (0000) + # + * + #

3.6 Adding Additional Sensor Devices

To fulfill the need of tighter security control, you may need more sensors than provided in a standard package. In order to integrate the newly bought detector to your existing security system, the control unit must know the transmit code of the new detector. Here is how to tell the Control Unit what the transmit code is:

a. Set the control unit to Setting Transmitter Code Mode by keying in **"Pass Code (0000) + # + 9"**.
b. Key in the 8-digit transmitting code, which is printed on the ID Code Label of the sensor device. Press "#" when you finished entering the 8 number code. See the example on the following page of how to read the ID Code Label.

ID Code Label



The transmitting code for the above ID Code Label is:
4 0 9 2 6 3 6 1

c. If you find you have input wrong code before you press the "#", immediately start entering from the first number of the code input the code again. The unit will accept only the last eight numbers as the input code.
d. The unit checks the input code format automatically and makes an "OK" beeping, if the format of the input code is correct. Otherwise, it will give you a "Bad" beep.
e. Use remote to control the unit, trigger the D/W and PIR detector to send an alarm.

Formula: Pass Code (0000) + # + 9 + 8 digit Transmitter Code + #

To Delete all transmitter codes.

a. Set the control unit to setting transmitter code mode as instructed by keying in **"Pass Code (0000) + # + 9"**.
b. Press the star key "*" 8 times, then "#''. The unit will delete all transmit codes saved in the unit.

Formula: Pass Code (0000) + # + 9 + "*" key eight times

4. Operating Your MA-D Security System:

The MA-D security system has been designed to be simple to understand and easy to use. It should offer years of convenient, hassle free security.

4.1 Program Mode:

In order to change the settings of the MA-D Control Unit you first need to put it into the Program Mode. You do this by entering in your pass code and pressing the # key. This will turn on the program LED. You are now ready to make changes to your system.

Formula: Pass Code (0000) + #

4.2 Changing your "PASS CODE" ID:

To change your "User ID code, (password code), enter the existing password code (it comes factory set with a password code of "0000"), followed by the "#" key. This brings the alarm into Program mode.

Press the User ID "5" key, and enter the new four digit code followed by the "#" key. The new password code is now the code that will control your alarm. You should test the new password code by bringing the system to the Program mode.

Formula: Pass Code (0000) + # + 5 + New Pass Code + #

Note: If the new pass code was unsuccessfully entered, your pass code remains unchanged

Note: If you lose or forget your pass code: The Pass Code can be changed back to 0000 by unplugging the power cord from the wall and removing the 12V rechargeable battery and unplugging the battery cord from the unit. When you plug in power and battery again, the Control Unit's Pass Code will be 0000 again. Your phone numbers and transmitting codes are not lost during this operation.

4.3 Turning Siren On and Off:

The MA-D will allow you to turn the Siren on or off. First enter your pass code (0000) then push the # key then push the 6 key. One beep and the siren is off, two beeps and the siren is on.

Formula: Pass Code + # + 6

4.4 Arming the Alarm:

Your MA-D can operate in two ways to protect your home. When you are leaving the house and no movement will occur inside, use the "**Away**" mode, if you are at home and want to protect only certain areas, use the "**Home**" mode.

Arming the system in the "**Away**" mode will allow the alarm to watch ***all*** the sensor devices in the system layout. This is full protection and all devices are active. Arming the system in the "**Home**" mode will direct the alarm to watch only the *Normal* type sensor devices.

Sensors set up as *Exclude* type sensors **will not** be recognized by the system when the alarm is activated in the "**Home**" mode. (refer to the **Setting up Devices** section for setting options).

You can arm and disarm the alarm using the keypad on the keypad receiver or with the remote control (see section 4.8). To arm the system using the keypad receiver, use the key sequences below for either the **"Away"** or **"Home"** mode. Depending upon which mode you have armed the system in, the *Arm/Disarm* LED light will either flash or be solid. For the **"Away"** mode, the light will flash. For the **"Home"** mode, it should be solid. After you have armed the alarm you will have 30 seconds to exit the house through an exit/entry door.

Away Mode – Flashing LED

Formula: Pass Code (0000) + # + 7

Home Mode – Solid LED

Formula: Pass Code (0000) + # + 7 + (0000) + # + 7

After the first "7" is entered, the system will begin it's 30 second countdown. Keep on entering the rest of the sequence though until the LED light remains solid.

4.5 Disarming the Alarm:

When you return home you will have 30 seconds to Disarm the alarm. Bring the keypad to the Program mode by entering your four digit password code and following it with the "#" key. Now you can Disarm the alarm by pressing the "8" key. The Arm/Disarm LED will go off and the alarm is Disarmed.

Formula: Pass Code (0000) + # + 8 + #

Note: You must set the sensor on the door you will be entering and exiting the house through as a Normal Type sensor (refer to section 3 for setting sensor options).

When you disarm the MA-D and you hear a long series of beeps. It means the system was violated or tampered with.

4.6 Recording Voice Message:

When using the Voice feature of the MA-D, you will need to record the address of where the alarm is coming from. To do this enter your pass code (0000) then the "#" key then the "*" key, the program LED will flash during recording. Now speak into the right side of the keypad. You will want to say the owner's name and the address of the alarm. The system will record 24 seconds of your message.

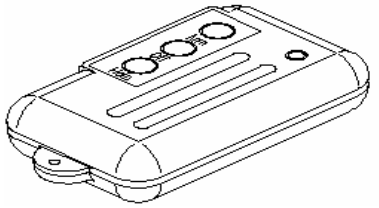
Formula: Pass Code (0000) + # + * Then speak into the unit.

4.7 Playback of the Voice Message:

Once you have recorded your message you can listen to it by entering your pass code (0000) then "#" key then "0" key. You will hear the message you recorded.

Formula: Pass Code (0000) + # + 0

4.8 Remote Controller:



The remote control has three buttons that allows you to switch the control unit from stand by to AWAY or HOME modes and it allows you to Disarm the Control Unit and initiate a HELP alarm and initiate the Control Unit to call out to your programmed numbers. We have added a delay to the buttons of the remote. So you will need to hold the buttons down for them to activate the controller. We have also added the ability to switch from away to home and back to away. By pressing the arm button once will put the system into the armed mode and you will hear two beeps. Pressing the arm button again will put the system into the home mode and you will hear three beeps. Pressing the Help button will cause the controller to send an audible panic alarm telling the Control Unit to call your programmed phone number list and play the alarm message.

A. Arming with Remote:

Press once and hear Two Beeps = Away Mode
Press again and hear Three Beeps = Home Mode

B. Disarming with Remote:

Press and hold the "Off" button to disarm the MA-D Control Unit.

Multiple Beeps when disarming = System Violation
Either something is wrong with the system or there has been a violation of system and may have been tripped by an intruder or some other means.

Note: If you notice the range of the transmitter is shorter, or the LED light isn't as bright, the battery should be replaced. Unscrew the backside of the cover to replace the 12V, A23 size battery (included).

5. Programming Phone Numbers:

Your MA-D alarm has the ability to hold up to four different phone numbers. Each phone number could report in a different mode, either to a voice phone (home, office, mobile, neighbor, relative or friend), or a numeric pager. Each phone number can be up to 24 digits in length.

NOTE: Most municipalities have ordinances against having security systems dial the police, fire, or other emergency numbers. It is highly recommended you do not program 911 or any other emergency number into your MA-D Security System.

To program the phone numbers you need to enter your pass code (0000) and then push the # key and then the position for the phone number (1 through 4). See chart below. Then you select the type of phone number this is – either a voice phone number or a pager. Follow this with the actual phone number to dial. If dialing long distance, make sure you add the "1" if necessary and the area code. It should be entered exactly as if you were dialing with a regular phone. Then press the # key when done. Repeat for phone numbers 2 through 4.

When the MA-D dials out during an alarm, it will attempt to call all four numbers in the sequence of their position number. The MA-D will call the number in position 1 first and follow the sequence through position 4.

N = Phone Number Position Chart
1 = Phone Number 1
2 = Phone Number 2
3 = Phone Number 3
4 = Phone Number 4

M = Phone Number Type
1 = Don't Use
2 = Voice Phone (home, cell, office, neighbor or relative)
3 = Pager
Formula for entering a phone number:
Pass Code (0000) + # + N + M + Phone Number + #

Formula for deleting a phone number:
Pass Code (0000) + # + N + M + #

NOTE:

1. For phone systems where you need a delay before you enter a set of numbers, you can add a 3 second delay by pressing the "*" key. Each "*" entered is considered one of your 24 digits allowed per phone number.
2. When programming the pager phone number, you may need to enter several 3 second delays using the "*" key and then follow it up with additional digits you wish to appear on the numeric pager display number.
3. When the unit is in alarm and dialing out to your programmed phone numbers, it will attempt to dial all four numbers, regardless if there are numbers programmed in other positions or not. This means the Control Unit may make some clicks and noises during call-out, even though you only have one or two numbers programmed in the Control Unit.

6. Contacting Us & Technical Support:

Control Products prides itself on making quality products. If you have comments or suggestions on making our products better, feel free to contact us:

Control Products, Inc.
1724 Lake Drive West
Chanhassen, MN 55317
952-448-2217
Fax: 952-448-1606
Consumer Products Web Site: www.protectingyourhome.com
Corporate Web Site: www.controlproductsinc.com

For Technical Support:
If you need technical support:
Call toll-free: 1-800-947-9098
Email: technicalsupport@controlproductsinc.com
On the web: www.protectyourhome.com

Model Number Information:
The model number and description of your unit is:
MA-D **Deluxe MiniAlarm**

When calling or writing for customer support or service, it is a good idea to have the **DATE CODE/MO#** from the back of your unit:

Write it down here for easy reference: _____

7. Warranty:

Warrantor: Dealer, Distributor, Retailer, Manufacturer

Warranty and Remedy:
We believe this is a very fine product. Although we take extreme pride in offering 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 loss or damage to your person or property if you use this Product. The Warrantors shall not be liable under any circumstances for damage or losses 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 you 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 your miniAlarm™ Deluxe 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.

8. FCC Statement:

This equipment complies with Part 68 of the FCC rules. The FCC Part 68 Label is located on the rear of the enclosure. This label contains the FCC Registration Number for this equipment. If requested, this information must be provided to your telephone company.

The REN is useful to determine the quantity of devices you can connect to your telephone line and still have the devices ring when your telephone number is called. In most, but not all areas, the sum of the RENs 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 your local telephone company to determine the maximum REN for your calling area.

Using standard modular telephone jacks, type RJ11C, should make connection to the telephone network. The RJ11C plug and/or jacks used must comply with FCC Part 68 rules. If trouble is experienced with this unit, please contact customer service at the address and phone listed below. DO NOT DISASSEMBLE THIS EQUIPMENT. It does not contain any user serviceable components. If the equipment is causing harm to the network, the Telephone Company may request that you disconnect this equipment from the telephone network until the problem is resolved.

These devices comply with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) these devices may not cause harmful interference, and (2) these devices must accept any interference received, including interference that may cause undesired operations.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designated to provide reasonable protection harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that the interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning on and off the equipment, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Caution: Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

FCC ID: I55HSS202RUS FCC Reg: 6ACTAI-24559-AL-E
FCC ID: I55RCU202R USOC Jack: RJ11C
AC REN: .07b
MA-D is made in Taiwan; Manual printed in USA