

Temperature Guard

Input Guard

Models

VM606 (dialer only)

VM606E (with Ethernet and dialer)

Manual and Installation Instructions



Made in the U.S.A.

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General Description

The Input Guard is a complete multi-input monitor and auto-dialer. The Input Guard monitors up to eight (8) inputs.

The Input Guard allows the user to program individual normal states and a time delay for each input. When an input goes into an alarm condition, the Input Guard will call up to eight programmable voice or pager numbers.

The Input Guard also monitors the power to which it is connected and will call its' programmed numbers if a power outage exists.

The Input Guard will turn on its alarm relay and buzzer when any zone or input is in an alarm condition. The alarm relay and buzzer is turned off by pressing the button on the top of the dialer.

Installing the Input Guard

Select a location with access to power, telephone line, and Ethernet jack if the Input Guard with Ethernet jack was purchased.

Connect the phone line to an active analog phone jack.

Plug in the wall mount transformer into a power socket of which you want monitored. Connect the wall mount transformer power jack to the Input Guard on the top of the unit.

For ease of wiring, remove the terminal blocks. See wiring diagrams on page 4.

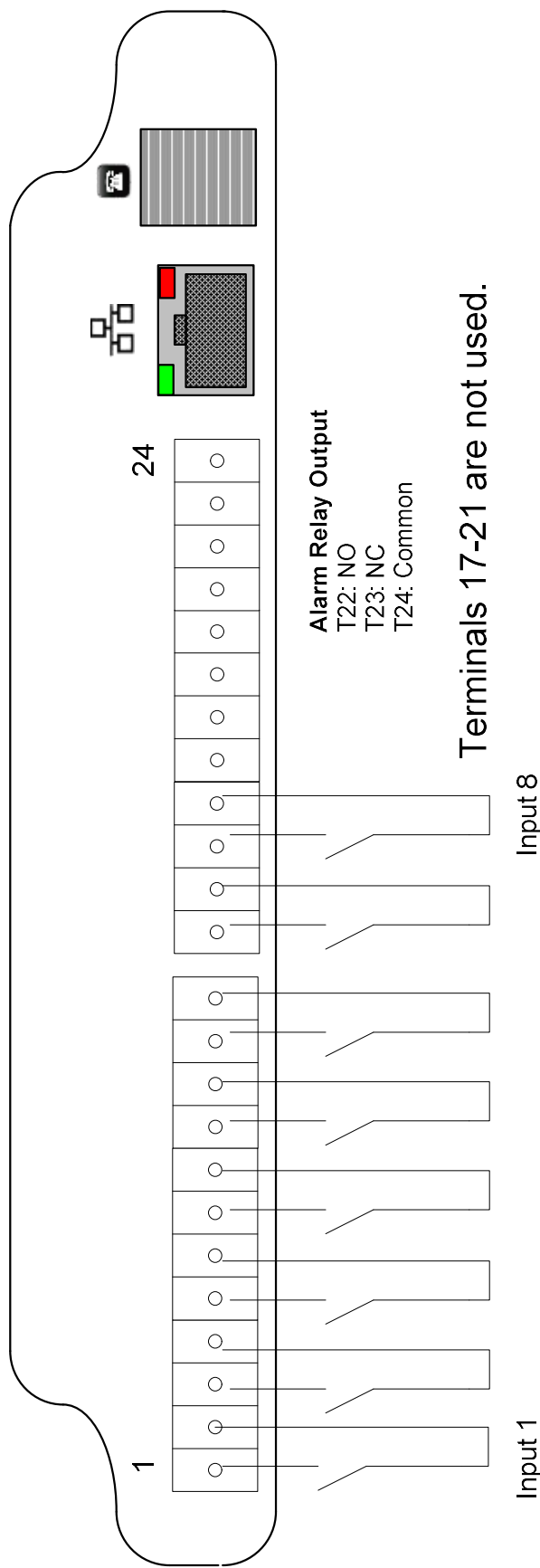
If desired, connect additional signaling devices to the alarm relay contacts at terminals 22, 23 and 24.

Alarm relay is dry contact rated at 1A 24VDC.

Software for the VM606E can be found at;

<http://www.temperatureguard.com/datacapture.html>

Wiring Diagram (side view of enclosure)



Terminals 17-21 are not used.

Dry Contact Inputs
Wire each dry contact input to the terminal block as shown.

Setting up the Input Guard

Programming is accomplished over the phone and only has to be done once, unless it is necessary to make a change. Before programming, do the following:

- 1 Connect a phone line and power, and then turn on the Input Guard.
- 2 From another phone line dial the number where the Input Guard is located. The device will pick up after the first ring.
- 3 When prompted, enter the 4-digit PIN number (Factory default PIN number is 0000).
- 4 You will hear the Main Menu options (you may enter your selection at any time):

Main Menu	
Option	Function
1	Status
2	To Set Limits (for inputs)
3	Program (telephone settings)
4	Turn On Relay (if relay option is enabled)
5	Turn Off Relay (if relay option is enabled)
0	Exit and Hang Up

Programming Input Parameters

Each input can be programmed to be either a normally closed or normally open input.

Each input has its own time delay for which the input must have changed state for, before the Input Guard begins making emergency calls. The time delay is programmed in minutes.

Each input has a unique Input ID message that can be recorded to give further detail during emergency calls.

1. From the Main Menu, press 2 to setup inputs
2. You will hear *"Enter Input Number"*
3. Enter the number of the input which you wish setup (i.e. 1)
4. You will hear *"Input X is normally open, press 1 to change."*
5. Enter your selection
6. Press 1 to change , or any other key to skip. If you press 1 you will hear "Enter 1 for normally closed, 2 for normally open." Make your selection. Unit will state your selection.
7. You will hear the programmed time delay for the input (i.e. 0 minutes)
8. You will hear *"Input X callout time delay is X minutes, Press 1 to change"*
9. Press 1 to change the delay or press any other button to not change the delay. (If you do not press one, go to step 12)
10. You will hear *"Enter number followed by the # key"*
11. Enter the time delay in minutes (Valid times are 0 to 999 minutes), then press #.
12. You will hear the value you just entered (i.e. 5 minutes)
13. You will hear the programmed identification message for the selected input. You will hear "Input X message is Empty" on a new unit.
14. You will hear "Press 1 to change"
15. Press 1 to make a change or press any other button to not change the message (If you do not press one go to step 19)
16. You will hear a tone
17. Begin speaking after the tone. The Input Guard will record for about 4 seconds
18. After 4 seconds you will hear the tone again, marking the end of your message
19. You will hear the message you recorded
20. You will be returned to the Input Setup Menu. Repeat the above steps for each input used. Press 0 to get back to the main menu.

Program Menu Items

To access the Program Menu:

1. From the Main Menu, press 3
2. You will hear the Program Menu options (you may enter your selection at any time): 6 through # are unspoken.

Program Menu	
Option	Function
1	Program Telephone Numbers
2	Set Local ID (for pagers only)
3	Record a Unit Message
4	Set Number of Incoming Rings
5	Change the Pin Number
6	Alarm Reminder (unspoken)
7	Warning Repetition (unspoken)
8	Enable or Disable Relay Option (unspoken)
9	Power Outage Time Delay (unspoken)
*	Unit Callout Time Delay (unspoken)
#	Change Acknowledge Only Pin Number (unspoken)
0	Exit (Return to Main Menu)

Programming Telephone/Pager Numbers

The Input Guard stores up to eight (8) emergency telephone or pager numbers. The Input Guard will call each phone number until the PIN number is entered. If Input Guard reaches an answering machine, it will leave your personal identification message, and then the alarm condition, but will continue calling.

First Time Number Programming:

- 1 From the Program Menu, Select **1** to set telephone numbers.
- 2 You will hear *"Select contact." Select #1-8.*
- 3 You will hear *"Contact X is empty. Press 1 to change." After you enter 1 you will hear "Enter number followed by the # key."*

- 3a For voice phone numbers enter the full phone number
(1 + area code if necessary) followed by the **#** key.
- 3b For pager numbers enter * then enter the full pager number
(1 + area code if necessary) followed by the **#** key.
- 4 You will hear the telephone number you just entered.
- 5 Repeat for all the contact numbers you wish to program. Press 0 to return to previous menu.

Note: If an extra delay between digits is required, entering * will provide a two second delay. Do not enter * for the first digit unless programming a pager number.

To Change a Phone Number:

- 1 Select the phone number to change from the Contact Menu
- 2 You will hear the selected telephone number
- 3 You will hear *"Press one to change"*
- 4 Press **1** to change
- 5 You will hear *"Enter number followed by the # key."*
- 6a For voice phone numbers enter the full phone number
(1 + area code if necessary) followed by the **#** key.
- 6b For pager numbers enter * then enter the full pager number
(1 + area code if necessary) followed by the **#** key.
- 7 You will hear the telephone number you just entered.
- 8 You will be automatically returned to the Program Menu

To Delete a Phone Number:

- 1 Select the phone number to change from the Contact Menu
- 2 You will hear the telephone number you selected
- 3 You will hear *"Press one to change"*
- 4 Press **1** to make a change
- 5 You will hear *"Enter number followed by the # key."*
- 6 Enter the **#** key. This will erase the phone number
- 7 You will be automatically returned to the Contact Menu

Programming a Local Identification Number For Pagers

The local identification number is printed on the display of a pager when the Input Guard calls a pager number. The local identification number can be up to 20 digits long.

- 1 From the Program Menu, press **2** for the local ID
- 2 You will hear the programmed number or you will hear *"Empty, press one to change"*

- 3 Press **1** if you wish to make a change or press any other button to return to the Program Menu
- 4 You will hear *"Enter number, followed by the # key."*
- 5 Enter the number, followed by a **#**
- 6 You will hear the number you just entered.
- 7 You will be automatically returned to the Program Menu

Recording a Personal Identification Message

When the Input Guard calls, it first plays this 8 second personal identification message. If no message has been recorded this message is skipped.

- 1 From the Program Menu, press **3** to record a message
- 2 If this is the first time setup you will hear "Empty, press 1 to change." go to step 5
- 3 You will hear the recorded message
- 4 You will hear *"Press one to change."*
- 5 Press **1** if you wish to make a change or press any other button to return to the Program Menu
- 6 You will hear a tone
- 7 Begin speaking after the tone. The Input Guard will record for 8 seconds
- 8 After 8 seconds you will hear the tone again, marking the end of your message
- 9 You will hear the message you recorded
- 10 You will be automatically returned to the Program Menu

Programming the Number of Rings

The Input Guard answers the telephone line after the programmed number of rings. Valid numbers of rings are 1 – 12.

- 1 From the Program Menu, press **4** to set the number of rings
- 2 You will hear the programmed number of rings
- 3 You will hear *"Press one to change."*
- 4 Press **1** if you wish to make a change or press any other button to return to the Program Menu
- 5 You will hear *"Enter number followed by the # key."*
- 6 Enter the number of rings, then press **#**
- 7 You will hear the number of rings you entered
- 8 You will be automatically returned to the Program Menu

Programming the PIN Number

The Input Guard uses a 4-digit PIN number (0000-9999) to identify you when calling the device or during callout procedures. After programming the PIN number write it down here.

_____ Pin Number

The PIN number must be 4 digits and must not include a # sign.

- 1 From the Program Menu, press **5** to change the PIN number
- 2 You will hear "PIN number is 0000, *Press one to change.*"
- 3 Press **1** if you wish to make a change or press any other button to return to the Program Menu
- 4 You will hear "*Enter your PIN number*"
- 5 Enter a four digit number (do not put a # anywhere in your pin number)
- 6 You will hear the PIN number you just entered
- 7 You will be automatically returned to the Program Menu

Programming the Alarm Reminder Call

The Input Guard can make reminder calls after a programmable amount of time if inputs are still active after the PIN number has been entered.

- 1 From the Program Menu, press 6
- 2 You will hear "Alarm Reminder is Off,, *press One to change*"
- 3 Press **1** to enable Reminder Calls
- 4 You will hear "Alarm Reminder is On, *Time Delay is 60- minutes, press One to Change*"
- 5 Press **1** to set a custom time delay for the reminder call, or 2 to return to the program menu.
- 6 You will hear "*Enter number followed by the # key.*"
- 7 Enter the delay in minutes (Valid times are 15 to 999 minutes), then press **#**.
- 8 You will hear the time you just entered.
- 9 You will be automatically returned to the Program Menu

Programming Warning Message Repetitions

During callouts the Input Guard will repeat the recorded ID message and warning conditions a programmable number of times. (Default is 1, Valid numbers are 0,1,2)

1. From the program menu press 7.
2. You will hear "Warning reminder is 1, press 1 to change." Press 1, and you will hear "Enter number, followed by the pound (#) key."
3. Press 1 to change or 2 to return to the program menu.
4. Enter the number of times (0,1,2) that you would like the message repeated.
5. You will hear the value you entered and automatically be returned to the program menu.

Programming the Relay Option

The external relay can be used for controlling another device rather than an alarm signal. By default the relay changes state, with alarms. You can manually control it over the phone, with the cancel alarm button (holding it for 10 seconds), or with the software by enabling this option.

1. From the program menu press 8.
2. You will hear "Relay control is off, press 1 to change." Press 1, and you will hear "Relay control is on"
3. You will be automatically returned to the programming menu.

Programming the Power Outage Alarm Time Delay

The power must be out for this programmable amount of time before the Input Guard will call out due to the power input.

1. From the Program Menu, press 9.
2. You will hear "Power has been out for callout time-delay is.. "
3. You will hear the programmed time delay (5 minutes)
4. You will hear *"Press 1 to change"*
5. Press **1** to change the delay or press any other button to not change the delay. (If you do not press one, go to step 9)
6. You will hear *"Enter number followed by the # key."*
7. Enter the time delay in minutes (Valid times are 0 to 999 minutes), then press **#**.
8. You will hear the value you just entered (i.e. *5 minutes*)

Programming the Unit Callout Time Delay

The unit will wait this delay (default is 2 minutes) before making alarm callouts.

1. From the Program Menu, press *
2. You will hear "Callout time-delay is 2 minutes, press one to change. "
3. Press 1 to change this setting, press 2 to return to the Program Menu.
4. If you press 1 you will hear, "Enter number followed by the pound key".
5. Enter the time in minutes (i.e. 60 for 1 hour). Then press **#**.
6. You will hear the value you just entered and be automatically returned to the Program Menu.

Acknowledge Only Pin Number

There is a built in acknowledge only pin number. It is 1234. This allows checking of status and turning on/off the relay. It also acknowledges the alarm condition and stops phone calls. Changes cannot be made with the Acknowledge Only pin number except the turning on/off the relay.

- 1 From the Program Menu, press **#** to change the PIN number
- 2 You will hear "PIN number is 1234, *Press one to change.*"
- 3 Press **1** if you wish to make a change or press any other button to return to the Program Menu
- 4 You will hear *"Enter your PIN number"*
- 5 Enter a four digit number (do not put a # anywhere in your pin number)
- 6 You will hear the PIN number you just entered

You will be automatically returned to the Program Menu

Using the Input Guard

How does an input go into an alarm condition?

An input is in an alarm condition when its current state (on or off) is the opposite of its programmed state for longer than the programmed time delay.

For example: Input 1 is programmed as normally off with a time delay of 1 minute. Input 1 will be active when it is on for at least 1 minute.

What happens when an input goes into an alarm condition?

The Input Guard will close the alarm relay (unless the relay option is enabled)

The alarm buzzer will begin to sound.

The Input Guard will begin making emergency phone calls.

Pushing the Cancel Alarm button on the top of the Input Guard will cause the alarm buzzer to turn off and the alarm relay to de-energize. After the Cancel Alarm button has been pressed the Input Guard will stop making emergency phone calls until a new emergency is present, unless the Reminder Calls function is enabled.

How do I activate and deactivate the relay? (assuming you enabled it, page 13)

- 1 Call the Input Guard
- 2 Enter you PIN number
- 3 From the main menu press **4** to activate the relay or **5** to deactivate the relay

or

Use the software to control it.

What happens during a call to voice number?

- 1 If you have recorded a Personal Identification Message, it will be played.
- 2 The Input Guard will report any alarm condition. For example "Alarm has been caused by Input 1, (*Your prerecorded input ID message*)"
- 3 The Input Guard will ask for the PIN number
- 4 Once a valid PIN number** has been entered, the Input Guard will not call again because the current alarm condition has been acknowledged***. For units without the relay option enabled, the alarm buzzer will turn off and alarm relay will de-energize. If Alarm Reminder has been programmed, the Input Guard will begin making calls again after the programmed amount of time.

** If no pin number is entered, the Input Guard will wait 20 minutes and then begin calling all programmed numbers.

*** It will call again if reminder calls are enabled and it stays in alarm.

What happens during a call to a pager?

The Input Guard will print your Local Identification number on the pager screen.

For example, 5551212, 5551212 is the Local ID.

The Input Guard will continue to make calls until either:

- The alarm condition goes away OR
- The Input Guard is called and the PIN number is entered

Calling the Input Guard to check the state of the inputs and power status

1. Call the Input Guard.
2. The Input Guard will report the following:
 - Any alarmed inputs
 - If the power is out

To check the state of an input and power

1. Call the Input Guard
2. Enter you PIN number
3. From the main menu press **1**
4. You will hear "*Enter Input Number*"
5. Enter the number of the input you wish to hear (i.e. 1)

To check to status of the relay (Input Guard-R only)

1. From the main menu press **1**
2. You will hear “*Enter Input Number*”
3. Enter **#**
4. You will hear the status of the relay

To check status with a web browser

1. Enter into the address bar `http://xxx.xxx.xxx.xxx` where the x's are the IP address. Hit enter. A Java based status page will appear.

Connecting the Input Guard to a Phone Line which has a fax or answering machine connected to it

Program the Input Guard to answer after one more ring than the other device. This allows the other device to always answer first.

To call and access the Input Guard

1. Dial the phone number
2. Hang up one ring before the other device answers.
3. Wait no longer than 30 seconds, then dial the phone number again.
4. The Input Guard will answer.

Example:

A fax machine on the same line as the Input Guard is set to answer after 4 rings.

The Input Guard is programmed to answer after 5 rings.

To access the Input Guard, dial the number, let it ring three times, then hang up. Wait 20 seconds and call again. After two rings, the Input Guard will answer.

Do not set the Fax/Answering Machine to 2 rings and the Input Guard to 3 rings. This will force both to answer at the same time.

Troubleshooting

Verifying that the Input Guard works with your phone line

To verify that the Input Guard works with your phone line, perform the following test.

1. Using another phone line, call the Input Guard and verify that it answers the phone
2. From the Main Menu, press **2** to setup inputs
3. Press **1** to setup input 1
4. Press **1** to make this input normally closed
5. Program a time delay of 0 minutes (See **Input Setup**)

6. Skip the input ID message recording for now.
7. Program the phone number you are calling from into the first phone number location. (See **Programming Telephone Numbers**)
8. Press '0' twice to exit the Program Menu and hang up the Input Guard
9. Remove the terminal blocks to ensure input 1 will be open
10. The Input Guard will close the alarm relay, sound the buzzer, and call out because input 1 is programmed to be normally closed and is currently open

If the Input Guard does not answer the phone

Verify that the phone line is working. Connect a standard phone to the line intended for the Input Guard. Verify that there is a dial tone.

Check that the phone line is plugged in securely.

Verify that the Input Guard is powered up and the status light is blinking.

If the Input Guard does not call out

Verify that the phone line is good. Connect a phone to the line intended for the Input Guard. Verify that there is a dial tone.

Check that the phone line is plugged in securely

Verify that the Input Guard is powered up and the display is on.

Verify that the Input Guard is programmed correctly. Call up the Input Guard and verify the programmed phone numbers and inputs setup.

Call the input Guard. When it says "Enter your pin number" enter #999 and hang up right away. The Input Guard will call all programmed phone numbers.

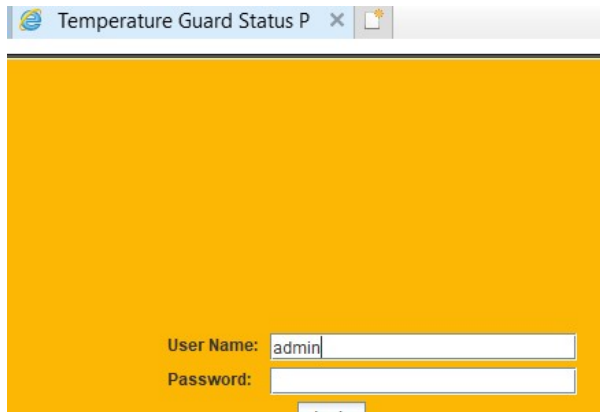
Your Settings

Input	Normally closed or open	Time delay	Notes
Input 1			
Input 2			
Input 3			
Input 4			
Input 5			
Input 6			
Input 7			
Input 8			
Contact #	Phone number	Person	Notes
1			
2			
3			
4			
5			
6			
7			
8			

# of rings	
Full pin #	
Alarm reminder	
Warning repetition	
Power outage time delay	
Unit callout time delay	
Acknowledge only pin #	

Resetting the Java browser password

Default login and password for browser programming is admin and



blank. If you forget your password, it can be reset.

Turn the unit off with the power switch.

Place a short from pin 17 to 21. A piece of wire or a paper clip will work. Hold the cancel alarm button down while turning the unit back on. The LCD screen will display

"Release Pushbutton" with a 5

second countdown. Release the button before 5 seconds. Screen will then display "Reset UN/PW No" with a 5 second countdown. Press and release the pushbutton again to change the No to Yes. Let it boot up normally and the password is reset. Remove the short from 17 to 21.

Resetting VM606E back to DHCP

Turn the unit off with the power switch. Hold the Cancel Alarm button down while turning the unit back on. LCD screen will display "Release Pushbutton" with a 5 second countdown. Release the button before 5 seconds. Screen will then display "Reset to DHCP, No?" with a 5 second countdown. Press and release the pushbutton again to change the No to Yes. Let the unit boot up normally and the network adapter will be reset to DHCP mode and will likely have a new IP address. If you see the LCD screen below, it was successful.

Monitor Mode..5

Rec Bytes..23

Success!

FCC PART 68 INFORMATION

This equipment complies with Part 68 of the FCC Rules. The FCC Part 68 Label is located on the bottom of the unit. This label contains the FCC Registration Number and Ringer Equivalence Number (REN) 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 may connect to your telephone line and still have all of those 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.

Connection to the telephone network should be made by using standard modular telephone jacks, type RJ11. The plug and/or jacks used must comply with FCC Part 68 rules. If this telephone equipment causes harm to the telephone network, the telephone company will notify you in advance that temporary discontinuance of service may be required. But if advance notice isn't practical, the telephone company will notify the customer as soon as possible. Also, you will be advised of your right to file a complaint with the FCC if you believe it is necessary.

The 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 in order for you to make necessary modifications to maintain uninterrupted service.

This equipment may not be used on coin service provided by the telephone company. Connection to party lines is subject to tariffs.

If trouble is experienced with this unit, for repair or warranty information, please contact customer service at the address and phone listed below. If the equipment is causing harm to the network, the telephone company may request that you disconnect the equipment until the problem is resolved.

DO NOT DISASSEMBLE THIS EQUIPMENT. It does not contain any user serviceable components.

Limited Warranty:

1. Warrantor: Dealer, Distributor, Retailer, and Manufacturer

2. Warranty and Remedy

We believe that this is a high quality product. Although we test all products for proper functionality, we cannot guaranty that there will never be a defective unit, or that a unit will function on every phone line and all 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 this warranty is unacceptable please return the unused Product for a full refund.

One Year Limited Warranty - Microtechnologies, 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 damage or installation costs of any nature. In 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 test this Product in its actual application. This should include a full test, involving the Product actually dialing to its designated location 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, lightning, 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 Warrantor's liability, if any, shall be limited to the original cost of the Product only. Use of this Product is at your own risk.

3. 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 a Warrantor with evidence of original purchase. If in any way you are not comfortable with the product or its Limited Warranty, we encourage you to return it unused for a full refund.

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Rev 60602