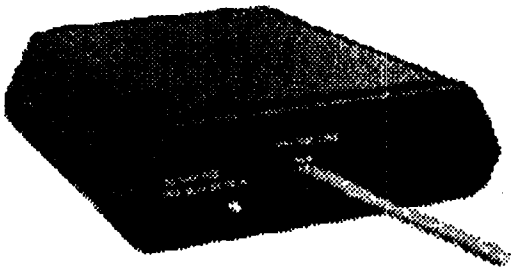
Temperature Guard

Models OMA-VM500-3 & OMA-VM500-3HT

User's Guide



Operating Manual and Installation Instructions

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Description

The Temperature Guard monitors temperature and power wherever it is located, and dials the programmed emergency phone numbers if the temperature goes out of programmed limits or if the power goes out for more than five minutes.

Programming Overview

Programming the Temperature Guard 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, plug in the power pack to an outlet, and connect the power jack. **Use of a phone and power line surge suppressor is strongly recommended.** Turn the unit on by moving the power switch from the position labeled 0 to the position labeled 1.

2 From another phone line dial the number where the Temperature Guard is located. The Temperature Guard will pick up after the first ring.

3 The Temperature Guard prompts for the 4-digit PIN number. **Enter the factory default PIN number, 0000.**

4 You will hear the Main Menu options. You may enter your selection at any time.

The Main Menu options are:

1. Status
2. Set Limits
3. Program
9. Reset High's and Low's (not spoken)
0. Hang Up

5 To access the Program Menu:

From the Main Menu, press 3

The Program Menu options are:

1 Primary Number
2 Secondary Number
3 Third Number
4 Fourth Number
5 Local ID
6 Record a Personal Identification Message
7 Number of Rings
8 Change PIN number
0. Exit (return to Main Menu)

Programming Temperature Limits

Model OMA-VM500-3

1 From the Main Menu, press 2 to Set Limits
2 You will hear the current low limit (i.e. *"Lower limit is 45°")*
3 You will hear *"Press 1 to change"*
4 Press 1 to make a change or any other button to skip to step 8
5 You will hear *"Enter number then press pound"*
6 Enter the temperature (Valid limits are 35° to 125° F), then press #
7 You will hear the value you just entered (i.e. *55°*)
8 You will hear the current upper limit (i.e. *"Upper limit is 85°")*
9 You will hear *"Press 1 to change"*
10 Press 1 to make a change or any other button to return to the Main Menu
11 You will hear *"Enter number then press pound"*
12 Enter the temperature (Valid limits are 35° to 125° F), then press #
13 You will hear the value you just entered (i.e. *55°*)
14 You will be returned to the Main Menu

Model OMA-VM500-3HT

1 From the Main Menu, press 2 to Set Limits
2 You will hear "Press 1 for temperature or 2 for humidity"
3 Press 1 for temperature
4 Proceed to step 2 above

Programming Humidity Limits

Model OMA-VM500-3HT

1 From the Main Menu, press 2 to Set Limits
2 You will hear "Press 1 for temperature or 2 for humidity"
3 Press 2 for humidity
4 You will hear the current low limit (i.e. *"Lower limit is 0%")*
5 You will hear *"Press 1 to change"*
6 Press 1 to make a change or any other button to skip to step 10
7 You will hear *"Enter number then press pound"*
8 Enter the value (Valid limits are 00% to 99% RH), then press #
9 You will hear the value you just entered (i.e. *15%*)
10 You will hear the current upper limit (i.e. *"Upper limit is 85 %")*
11 You will hear *"Press 1 to change"*
12 Press 1 to make a change or press any other button to return to the Main Menu
13 You will hear *"Enter number then press pound"*
14 Enter the value (Valid limits are 00% to 99% RH), then press #

15 You will hear the value you just entered (i.e. 83%)
16 You will be returned to the Main Menu

Programming Telephone Numbers

The monitor will call each programmed phone number until someone enters the PIN number. If the monitor reaches an answering machine, it will leave the personal identification message, and then the alarm condition, but will continue calling.

First Time Number Programming:

1 From the Program Menu, Select **1** for the primary number, **2** for the secondary number, **3** for the third number, or **4** for the fourth number.
2 You will hear "*Enter number then press pound.*
3 Enter the full phone number **(1 + area code if necessary)** followed by the **#** key.
4 You will hear the number you just entered.
5 You will be automatically returned to the Program Menu.

To Change a Phone Number:

1 Select the appropriate number from the Program Menu
2 You will hear the telephone number for the selected recipient
3 You will hear "*Press one to change*"
4 Press **1** to make a change or any other button to return to the Program Menu
5 You will hear "*Enter number then press pound*
6 Enter the full phone 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 appropriate number from the Program 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 then press pound*"
6. Enter the # key
7. You will be automatically returned to the Program Menu

Adding a delay to access outside phone line

If an extra time delay between digits of a phone number is required, enter * to provide a two second delay.
For example: If a 9 were required to connect with an outside line, and a delay is needed after the 9 and before the number is dialed, program the phone number as follows:

9 * 5 5 5 1 2 3 4 #

The monitor will dial 9, wait 2 seconds and then dial the rest of the phone number.

Programming Pager Numbers

The Temperature Guard can call voice or pager numbers. Pager numbers are programmed by programming a * as the first digit of a telephone number.

1 From the Program Menu, Select **1** for the primary number, **2** for the secondary number, **3** for the third number, or **4** for the fourth number.
2 You will hear "*Enter number then press pound*"
3 Enter * then enter the full pager number **(1 + area code if necessary)** followed by the **#** key.
4 You will hear "*star*" and then the telephone number you just entered.
5. You will be automatically returned to the Program Menu

Programming a Local Identification Number For Pagers

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

1 From the Program Menu, press **5** for the local ID
2 If this is the first time setup, go to step 6
3 You will hear the programmed number
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 "*Enter number, then press pound*"
7 Enter the number, followed by a **#**
8 You will hear the number you just entered.
9 You will be automatically returned to the Program Menu

Programming the Number of Rings

The monitor answers the telephone line after the programmed number of rings. Valid numbers of rings are 1 – 25.

1 From the Program Menu, press **7** 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 then press pound*"
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

Recording a Personal Identification Message

When the monitor calls out, it will first play the recorded personal identification message. The message can be up to 10 seconds in length.

1 From the Program Menu, press **6**
2 If this is the first time recording a message, you will not hear anything. Go to step 4
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 If you press **1** you will hear a tone
7 Begin speaking after the tone. The Temperature Guard will record for up to 10 seconds.
8 After you are done recording, press any key to mark the end of your message.
9 You will hear the message you recorded.
10 You will be automatically returned to the Program Menu

Programming Your PIN Number

The monitor has a programmable 4-digit PIN number (0000-9999) to access the program menu, and to stop the monitor from making emergency phone calls. The PIN number must be 4 digits and must not include a # sign.

My PIN Number is _____

1 From the Program Menu, press **8** to change the PIN number
2 You will hear the PIN number (factory default is 0000)
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*"
6 Enter a four digit number (do not put a **#** anywhere in your pin number)
7 You will hear the PIN number you just entered
8 You will be automatically returned to the Program Menu

Using the Temperature Guard

Where to Locate the Monitor

The monitor measures temperature and power wherever it is located.

If the monitor is being used to protect against freezing temperatures, locate it in an area where the temperature will drop the fastest, if the heating system fails, such as a room with a northern exposure or numerous windows.

If the monitor is being used to protect equipment against overheating in case air conditioning fails, locate the monitor close to the equipment and close to the ceiling where heat will build up quickest.

What happens when the Monitor calls?

1 The monitor will play the personal identification message, followed by the cause of the alarm.
2 The monitor will ask for the PIN number
3 Once the PIN number has been entered, the monitor will not call again because the current alarm condition has been acknowledged.
4 If the PIN is not entered, the Monitor will repeat the sequence one time.

What happens if I call the Monitor while an alarm condition exists?

1 You will hear either "Warning, the temperature is XX" or "Warning, the power is out"
2 You will hear "Enter your PIN number"
3 If the PIN number is entered, the monitor will stop making emergency phone calls.
4 If the PIN number is not entered, the monitor continues dialing the emergency phone numbers.

What happens when the Temperature Guard calls a pager?

1 The Temperature Guard will print the Local Identification number
2 The Temperature Guard will print the temperature. The Temperature Guard will then print the power status. 1 for power on and 0 for power off.

Example, if you saw 12340751 on the pager's display, 1234 is the user ID, 075 indicates a temperature of 75 degrees, and the last 1 indicates power is on.
The Temperature Guard will continue to call the pager and any other programmed phone numbers until either:

- The alarm condition goes away OR
- The Temperature Guard is called and the PIN number is entered
- The Temperature Guard calls a voice number and contacts a person who enters the PIN number.

Calling the Monitor to hear the status

1 Call the monitor
2 From the Main Menu press 1
3 The monitor will report the following:
The temperature
The humidity (-3HT)
The status of the power
The highest temperature since power up (-3 and -3HT)
The lowest temperature since power up (-3 and -3HT)
The highest humidity since power up (-3 and -3HT)
The lowest humidity since power up (-3 and -3HT)

To clear the high and low temperature data, enter 9 at the main menu

Reading the temperature from the blinking light

1 Wait for the light located next to the phone line to be on for approximately 2 seconds.
2 Count the number of blinks until the light is off for 1 second. This number of blinks is the 10's digit of the temperature.
3 Now count the number of blinks until the light is again off for 1 second. This is the 1's digit of the temperature.
4 The temperature is calculated by: (multiply the number of blinks counted in step 2 by ten and then add the number of blinks counted in step 3. For example, if the number of blinks counted in step 2 is seven and the number of blinks counted in step 3 is two, then the temperature is (7 x 10) + 2 = 72 degrees.

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

Program the monitor to answer after one more ring than the other device on the line. This allows the other device to always answer first.

To call and access the monitor

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 number again.
4 The monitor will answer.

Example: An answering or fax machine on the same line as the monitor and is set to answer after 4 rings.

Program the monitor to answer after 5 rings.

To access the monitor, dial the number, let it ring three times, then hang up. Wait 30 seconds and call again. After two rings, the monitor will answer.

Verifying that the Monitor works with your phone line

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

1 Using another phone line, call the monitor and verify that it answers the phone
2 Enter #999 as the PIN number.
3 Hang up after the unit plays "Goodbye"
4 The unit will call all of the programmed telephone numbers. Do not enter the PIN during this process of the unit will stop calling out.

If the Monitor does not answer the phone

Verify that the phone line is working. Connect a phone to the line intended for the monitor. Verify that there is a dial tone. Check that the phone line is plugged in securely. Verify that the monitor is powered up and the status light is blinking.

If the Monitor does not call out

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

Check that the phone line is plugged in securely

Verify that the monitor is powered up and the status light is blinking

Verify that the monitor is programmed correctly. Call up the monitor and verify the programmed phone numbers and temperature

limits.

Emergency Phone Call Sequence

Emergency	Calls After
Power Outage	5 minutes
Temperature	Immediately

All phone numbers are called. If the PIN number is not entered, the monitor will wait 15 minutes and then begin calling all phone number again.

Optional 20 / 30 Hour Extended Batteries

If your unit has been ordered with an extended battery, it is installed at the factory. These batteries are trickle charged and can take up to a week to reach full capacity. The battery is charging whenever the monitor is powered on.

Local Audible Alarm Option

The local audible alarm option consists of an 85 dB buzzer and a pushbutton. The buzzer is turned on when the temperature is outside of the programmed limits. The push-button is used to turn off the alarm and stop the monitor from making emergency phone calls. Press and hold the push-button until the buzzer is turned off.

Some Helpful TIPS

- Do not place the Temperature Guard in direct sunlight as this will effect the temperature and humidity readings.
- Do not place the Temperature Guard near heating or cooling sources if you wish to monitor the average temperature of a room.
- Locate the Temperature Guard in the sensitive area you wish to monitor.
- Placing the Temperature Guard on the floor will cause the Temperature Guard to sense a temperature that is lower then the actual ambient temperature.
- Include all necessary digits for phone numbers. Long distance numbers must include 1 and the area code.
- To monitor the power status of specific devices; connect the Temperature Guard's power plug into the same power source as

the device you wish to monitor. It is possible for an isolated power outlet to lose power.

- Never set an upper limit below a lower limit or a lower limit above an upper limit.

If the Temperature Guard is having trouble receiving your programming entries, try holding the button for a longer amount of time.

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 device 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 it's 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.

WARRANTY/DISCLAIMER

OMEGA ENGINEERING, INC. warrants this unit to be free of defects in materials and workmanship for a period of **13 months** from date of purchase. OMEGA's Warranty adds an additional one (1) month grace period to the normal **one (1) year product warranty** to cover handling and shipping time. This ensures that OMEGA's customers receive maximum coverage on each product.

If the unit malfunctions, it must be returned to the factory for evaluation. OMEGA's Customer Service Department will issue an Authorized Return (AR) number immediately upon phone or written request. Upon examination by OMEGA, if the unit is found to be defective, it will be repaired or replaced at no charge. OMEGA's WARRANTY does not apply to defects resulting from any action of the purchaser, including but not limited to mishandling, improper interfacing, operation outside of design limits, improper repair, or unauthorized modification. This WARRANTY is VOID if the unit shows evidence of having been tampered with or shows evidence of having been damaged as a result of excessive corrosion; or current, heat, moisture or vibration; improper specification; misapplication; misuse or other operating conditions outside of OMEGA's control. Components which wear are not warranted, including but not limited to contact points, fuses, and triacs.

OMEGA is pleased to offer suggestions on the use of its various products. However, OMEGA neither assumes responsibility for any omissions or errors nor assumes liability for any damages that result from the use of its products in accordance with information provided by OMEGA, either verbal or written. OMEGA warrants only that the parts manufactured by it will be as specified and free of defects. OMEGA MAKES NO OTHER WARRANTIES OR REPRESENTATIONS OF ANY KIND WHATSOEVER, EXPRESS OR IMPLIED, EXCEPT THAT OF TITLE, AND ALL IMPLIED WARRANTIES INCLUDING ANY WARRANTY OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE HEREBY DISCLAIMED. LIMITATION OF LIABILITY: The remedies of purchaser set forth herein are exclusive, and the total liability of OMEGA with respect to this order, whether based on contract, warranty, negligence, indemnification, strict liability or otherwise, shall not exceed the purchase price of the component upon which liability is based. In no event shall OMEGA be liable for consequential, incidental or special damages.

CONDITIONS: Equipment sold by OMEGA is not intended to be used, nor shall it be used: (1) as a "Basic Component" under 10 CFR 21 (NRC), used in or with any nuclear installation or activity; or (2) in medical applications or used on humans. Should any Product(s) be used in or with any nuclear installation or activity, medical application, used on humans, or misused in any way, OMEGA assumes no responsibility as set forth in our basic WARRANTY/DISCLAIMER language, and, additionally, purchaser will indemnify OMEGA and hold OMEGA harmless from any liability or damage whatsoever arising out of the use of the Product(s) in such a manner.

RETURN REQUESTS/INQUIRIES

Direct all warranty and repair requests/inquiries to the OMEGA Customer Service Department. BEFORE RETURNING ANY PRODUCT(S) TO OMEGA, PURCHASER MUST OBTAIN AN AUTHORIZED RETURN (AR) NUMBER FROM OMEGA'S CUSTOMER SERVICE DEPARTMENT (IN ORDER TO AVOID PROCESSING DELAYS). The assigned AR number should then be marked on the outside of the return package and on any correspondence.

The purchaser is responsible for shipping charges, freight, insurance and proper packaging to prevent breakage in transit.

FOR **WARRANTY** RETURNS, please have the following information available BEFORE contacting OMEGA:

1. Purchase Order number under which the product was PURCHASED,
2. Model and serial number of the product under warranty, and
3. Repair instructions and/or specific problems relative to the product.

FOR **NON-WARRANTY** REPAIRS, consult OMEGA for current repair charges. Have the following information available BEFORE contacting OMEGA:

1. Purchase Order number to cover the COST of the repair,
2. Model and serial number of the product, and
3. Repair instructions and/or specific problems relative to the product.

OMEGA's policy is to make running changes, not model changes, whenever an improvement is possible. This affords our customers the latest in technology and engineering.

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