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

NOTE: 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 designed to provide reasonable protection against 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 instructions, may cause harmful interference to radio communications. However, there is no guarantee that 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 the equipment off and on, 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.

IMPORTANT: PLEASE KEEP ALL PACKAGING MATERIAL FOR AT LEAST 90 DAYS IN CASE YOU NEED TO RETURN THIS PRODUCT TO YOUR PLACE OF PURCHASE OR MEMOREX.

E–1

IMPORTANT SAFETY INSTRUCTIONS

When using your telephone equipment, basic safety precautions should always be followed to reduce the risk of fire, electric shock and injury to persons, including the following:

- 1. Read and understand all instructions.
- 2. Follow all warnings and instructions marked on this product.
- Do not use this product near water- for example, near a bath tub, wash bowl, kitchen sink, or laundry tub, in a wet basement, or near a swimming pool.
- 4. Do not place this product on an unstable cart, stand, or table. The product may fall, causing serious injury and serious damage to the product.
- 5. Slots and openings in the cabinet and in the back or bottom are provided for ventilation and to ensure reliable operation of the product and to protect it from overheating. These openings must not be blocked or covered. The openings should never be blocked by placing the product on a bed, sofa, rug, or other similar surface. This product should never be placed near or over a radiator or heat source. This product should not be placed in a built-in installation unless proper ventilation is provided.
- Never push objects of any kind into this product through cabinet slots as they may touch dangerous voltage points or short out parts that could result in a risk of fire or electric shock. Never spill or spray any type of liquid on the product.
- 7. To reduce the risk of electric shock, do not disassemble this product, but take it to a qualified service personnel under the following conditions:
 - A. If liquid has been spilled into the product.
 - B. If the product has been exposed to rain or water.
 - C. If the product does not operate normally by following the operating instructions. Adjust only those controls that are covered by the operating instructions, as an adjustment of other controls may result in damage and will often require extensive work by a qualified technician to restore the product to its normal operation.
 - D. If the product has been dropped or the cabinet has been damaged.
 - E. If the product exhibits a distinct change in performance.
- 8. Avoid using a telephone (other than a cordless type) during an electrical storm. There may be a remote risk of electric shock from lightning.
- 9. Do not use the telephone to report a gas leak in the vicinity of the leak.
- Do not allow anything to rest on the telephone cord. Do not locate this product where the cord will be abused by persons walking on it.
- 11. Never install telephone wire during a lightning storm.
- Never install telephone jacks in wet locations unless the jack is specifically designed for wet locations.
- Never touch uninsulated telephone wires or terminals unless the telephone line has been disconnected at the network interface.
- 14. Use caution when installing or modifying telephone lines.

SAVE THESE INSTRUCTIONS



IMPORTANT SAFETY INSTRUCTIONS

 If your local telephone exchange only accepts Pulse dialing, you may have to switch the Tone/Pulse switch to Tone to access certain services that require Tone signalling (such as home banking). After the initial line is connected to the number you are calling, switch the Tone/Pulse switch to Tone to access Tone signalling. When you have completed your call, please switch the Tone/Pulse switch back to Pulse.

2. Hearing aid compatibility - Your telephone is compatible for use with hearing aids. **FCC and Phone Company Information**

Your telephone company is required by the Federal Communications Commission to allow you to connect FCC registered telephones to their lines. The FCC requires you to provide information, if requested by the local telephone company, about the connection of an FCC registered telephone to their lines. They may ask you for the FCC registration number and the ringer equivalence number (REN); both are at the bottom of the base. They may also ask for the Universal Service Order Code (USOC), which is the RJ-11C.

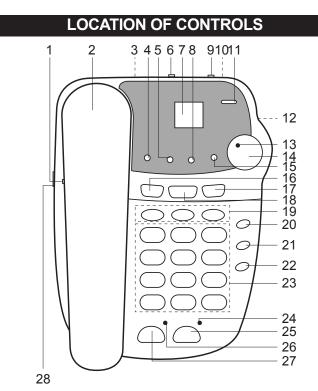
The REN is used to determine the quantity of devices which may be connected to the telephone line. Excessive REN's on the telephone line may result in the devices not ringing in response to an incoming call. In most, but not all areas, the sum of the REN's should not exceed five (5.0). To be certain of the number of devices that may be connected to the line, as determined by the total REN's, contact the telephone company to determine the maximum REN for the calling area.

Should your equipment cause trouble on your line which may harm the telephone network, the telephone company shall, where practical, notify you that temporary discontinuance of service may be required. Where prior notice is not practicable and the circumstances warrant such action, the telephone company may temporarily discontinue service immediately. In case of such temporary discontinuance, the telephone company must: (1) promptly notify you of such temporary discontinuance; (2) afford you the opportunity to correct the situation; (3) inform you of your right to bring a complaint to the Commission pursuant to procedures set forth in of Part 68 of FCC Rules and Regulations.

The telephone company may make changes in its communication facilities, equipment operations or procedures where such action is required in the operation of its business and not consistent with FCC Rules and Regulations. If these changes are expected to affect the use of performance of your telephone equipment, the telephone company must give you adequate notice in writing, to allow you to maintain uninterrupted service.

This equipment cannot be used on telephone company provided coin service. Connection to Party Line Service is subject to state tariffs.

Any changes or modifications not expressly approved by (state party responsible for compliance) can void the user's authority to operate the equipment.

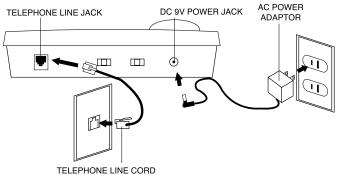


- 1. Handset HI/LO Switch
- 2. Handset
- 3. DC Jack (rear of unit) ⊕⊕⊕
- 4. TIME Button
- 5. MEMO Button
- 6. RINGER (HI/LO/OFF) Switch
- 7. Display
- 8. OGM Button
- 9. TONE/PULSE Switch
- 10. Telephone Line Jack (rear of unit)
- 11. FLASH Button
- 12. Battery Compartment (bottom of unit)
- 13. NEW MESSAGE Indicator

- 14. ANSWER ON/OFF Button
- 15. DELETE Button
- 16. SKIP/DOWN Button
- 17. SKIP/UP Button
- 18. PLAY/STOP Button
- 19. Memory Buttons (M1,M2,M3)
- 20. REDIAL/PAUSE Button
- 21. SPEED DIAL Button
- 22. PROGRAM Button
- 23. Key Buttons (0-9,#,*)
- 24. HOLD Indicator
- 25. HOLD Button
- 26. SPEAKERPHONE Indicator
- 27. SPEAKERPHONE Button
- 28. SPEAKER Volume Control

INSTALLATION

This section has been designed to provide a reference guide to help set up the unit.



- 1. Unpack and make sure all the items have been included: Base Unit, Power Adaptor and small and large Telephone Line Cords.
- 2. Connect one end of the provided telephone line cord into the LINE jack on the rear of the unit and the other end into a modular telephone jack. If using a telephone splitter to connect the unit **AND** an additional phone, plug the telephone splitter into the modular phone jack and connect the provided telephone line cord into one jack of the telephone splitter and the additional telephone's line cord into the other jack.
- 3. Insert the small plug on the end of the AC adaptor into the DC power jack located on the rear of your unit. Use only the Center Negative AC adaptor provided with your unit: INPUT: 120VAC, 60Hz OUTPUT: 10.5V DC
- 4. Plug the AC adaptor into a standard 120V AC wall outlet. Once plugged in, the display will count up from 0 to 5. After a long beep, the unit will display "Lo" to indicate the battery is dead, weak, or not installed. Page 7 describes how to install the batteries.
- 5. This unit uses digital technology, so a microcassette is not used. Follow the instructions on the following pages to operate your unit.
- During AC power failure, four (4) AA batteries provides battery backup so the unit can maintain the memory information. However, the unit cannot answer incoming calls without AC power.



INSTALLATION

This unit can be used on a desk, or other level surface or mounted on the wall away from excessive heat or direct sunlight.

Desk or Table Use

- 1. Set the RINGER switch to LO or HI to have the ringer sound when receiving a phone call.
- Set the TONE/PULSE switch to TONE or PULSE to match the service provided on your telephone line. If you are not sure of your service, please contact your telephone company.
- Connect the coiled cord to the handset and base. Connect the straight cord to the base and telephone jack as shown in Figure 1.

Wall Mounting

- 1. Attach the supplied Wall Mount adapter to the rear of the telephone.
- 2. Drill two holes with a vertical distance between the two marked positions of 83mm as shown in Figure 2.
- Drive a screw into each of the holes. Tighten them to the end of the screw lines, only leaving the smooth part of the screw head outside the wall.
- 4. Plug the telephone line cord into the modular wall jack.
- 5. Reverse the position of the Wall Mount Hook on the base as shown in Figures 3 and 4.
- 6. Hang the unit onto the screws, then slide it down firmly to fasten the base securely.
- When using this phone as a wall mount phone, be sure to route the short line cord on the back of

the base unit and plug the other end into the wall mount jack.



Figure 4

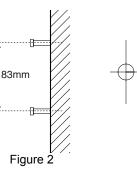


Figure 3



TELEPHONE LINE CORD



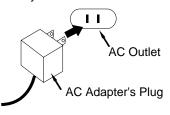


POWER SOURCES

AC Power Adapter

To operate the unit using AC power, connect the AC adapter to the DC jack on the rear of the unit and to a wall outlet having 120V, 60Hz only.

CAUTION: Use only the AC adapter provided with the unit. Using another AC adapter may damage the unit. When not using AC power, disconnect the AC adapter from the wall outlet by pulling the plug (not the cord). Do not touch the AC adapter with wet hands.

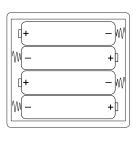


Battery Installation

To protect the memory if there is a power failure, insert 4 "AA" size batteries (not included). To install the batteries, open the battery compartment with a slotted

screwdriver as shown in the figure, insert the batteries following the diagram and replace battery compartment cover.

Replace the batteries when the Battery indicator lights in the display.



BATTERY PRECAUTIONS

- Follow these precautions when using batteries in this device:
- 1. Use only the size and type of batteries specified.
- 2. Be sure to follow the correct polarity when installing the batteries as indicated in the battery compartment. Reversed batteries may cause damage to the device.
- 3. Do not mix different types of batteries together (e.g. Alkaline and Carbon-zinc) or old batteries with fresh ones.
- 4. If the device is not to be used for a long period of time, remove the batteries to prevent damage or injury from possible battery leakage.
- 5. Do not try to recharge batteries not intended to be recharged; they can overheat and rupture.

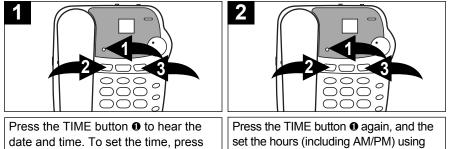
(Follow battery manufacturer's directions.)



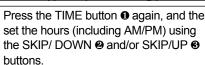
TELEPHONE OPERATION

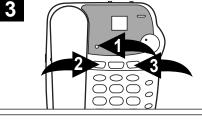
When the unit is first plugged in, the display will count up. If "Er" appears, unplug the unit and plug it back in. If "Lo" appears, insert new batteries.

Setting the Date and Time



and hold the TIME button 10 for 2 seconds; the unit will say the day of the week. Press the SKIP/ DOWN @ and/or SKIP/UP ⁽¹⁾ buttons to set the day of the week, the display will show the corresponding number (0: Sunday, 1: Monday, 6: Saturday).





Press the TIME button **1** again, and the set the minutes using the SKIP/ DOWN @ and/or SKIP/UP @ buttons. Press the TIME button **①**. The unit will say the date and time, and they will be set.

NOTES:

- Make sure to raise the SPEAKER • VOLUME when setting the clock.
- Press the PLAY/STOP button to quit • the time setting.

TELEPHONE OPERATION

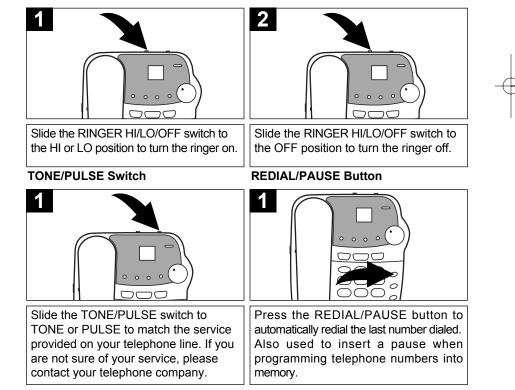
Making a Call Using Dialing Keys (0-9)

 1
 2

 Lift the handset or press the SPEAKER-PHONE button • and listen for a dial tone; the SPEAKERPHONE indicator will light. Adjust the SPEAKER VOLUME control •

RINGER HI/LO/OFF Switch

as desired.





TELEPHONE OPERATION

1

2

FLASH Button



1	
	000

phone with the Call Waiting feature.

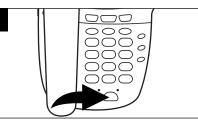
 \bigcirc 0 \bigcirc 0 $\bigcirc \bigcirc \bigcirc$ \sim Press the FLASH button to hang up To increase/decrease the handset's the phone without having to return it to volume, slide the Handset HI/LO the base. This is useful for using the

switch to the HI or LO position.

HOLD Button

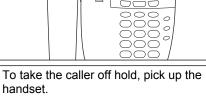
1



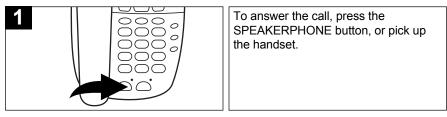


 $\supseteq \bigcirc$ 0 To take the caller off hold, pick up the

Press the HOLD button to put the caller on hold; the Hold indicator will light. You can then hang up the handset if desired.



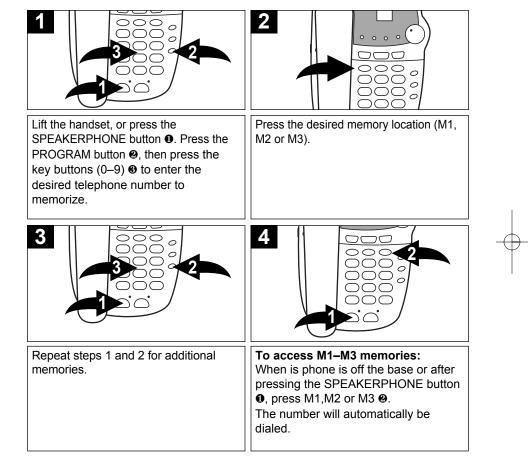
RECEIVING A CALL



TELEPHONE OPERATION

Manually Storing/Accessing Numbers in One-Touch Memories (M1-M3)

This telephone is equipped with 3 memories for programming your most frequently dialed telephone numbers. You can store up to 16 digits in each memory position.



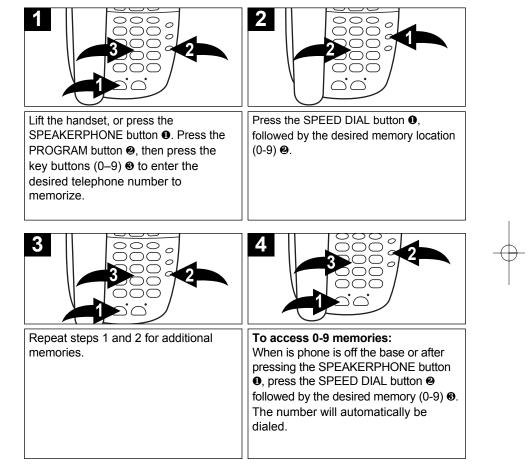
NOTES:

- Although the unit is "off-hook" when setting memories, when the PROGRAM button is pressed, the number will not actually be dialed.
- To insert a pause, simply press the REDIAL/PAUSE button. This will count as a digit.



TELEPHONE OPERATION

Manually Storing/Accessing Numbers in Two-Touch Memories (0-9) This telephone is equipped with 10 additional memories for programming your most frequently dialed telephone numbers. You can store up to 16 digits in each memory position.



NOTES:

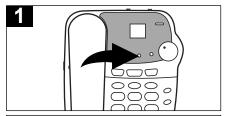
- Although the unit is "off-hook" when setting memories, when the PROGRAM button is pressed, the number will not actually be dialed.
- To insert a pause, simply press the REDIAL/PAUSE button. This will count as a digit.



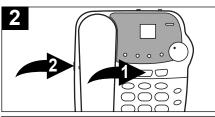
ANSWERING MACHINE OPERATION

RECORDING OGM (OUTGOING MESSAGE)

Recording an OGM allows the caller to hear the OGM and then be able to leave a message. Please note that there is an automatic message on this unit, recording a new OGM will record over this default message.



Press and hold the OGM button for approximately 2 seconds until a short beep is heard ("rA" will appear in the display), and then release the button. Begin recording your outgoing message speaking in a normal tone of voice. Typical Message: "You have reached the Smith residence. We are not able to come to the phone right now. If you'll leave your name, phone number and a brief message after the beep, we will call you back."



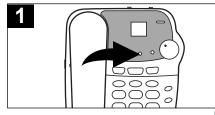
When finished recording, press the PLAY/STOP button **①**. A short beep will sound and the newly recorded outgoing message will then play once; "PA" will appear in the display. Make sure the SPEAKER VOLUME control **②** is at a desirable level.

To record a new outgoing message, please repeat steps 1 and 2.

NOTES:

- The maximum recording time for an OGM is 60 seconds.
- If an invalid OGM is left, the unit will revert back to the default OGM.
- Make sure to raise the SPEAKER VOLUME when setting the OGM.
- If you forget the Access Code, unplug the AC adaptor and disconnect the battery and it will reset to 000.

VERIFYING THE OUTGOING MESSAGE



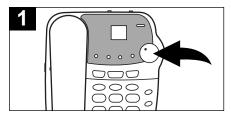
Press and release the OGM button and the selected Outgoing Message will play.

ANSWERING MACHINE OPERATION

SETTING THE UNIT TO ON MODE (Incoming Messages will be recorded)

The Answer/Record mode means when a call is received, the unit will play the OGM and then record a message.

2



Make sure the OGM is recorded. Press the ANSWER ON/OFF button; the NEW MESSAGE indicator will light



The message counter will then appear in the display indicating the unit is in Answer mode.

NOTES:

- If the unit detects a dial tone, silence or a busy signal, the unit will hang up and not register the message.
- The unit will shut off if a parallel phone is picked up.
- When the memory is full, "FU" will appear in the display. In this scenario, when a callers calls the machine, it will pick up and say "not available, please call later" and hang up.
- When the batteries are low, dead or not installed, "Lo" will blink in the display.
- When a call is received, the caller can press the "*" button on the phone to skip the OGM and start recording the ICM.

TOLL-SAVER

The amount of times the phone rings before picking up is automatically set to Toll-Saver. Toll saver will answer the call on the fourth ring if no messages have been recorded and it will answer on the second ring if new messages have been recorded; this feature is useful when phoning in for your messages.

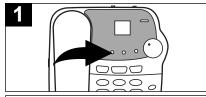
SETTING THE UNIT TO THE ANSWER-OFF MODE

Press the ANSWER ON/OFF button until "--" appears in the display to set the unit to the Answer Off mode.

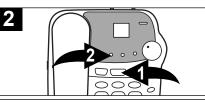


ANSWERING MACHINE OPERATION

RECORDING A PERSONAL MEMO



To record a personal memo which will be played the next time somebody retrieves the messages, press and hold the MEMO button for approximately 2 seconds; a beep will sound and "rE" will appear in the display.

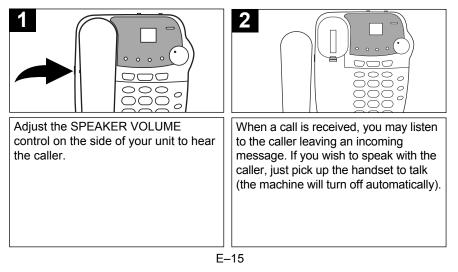


After the message is recorded, press the PLAY/STOP button **①** to stop the recording. To hear the memo(s), press the MEMO button **②**.

TO REPEAT OR SKIP MEMOS:

To repeat a memo while you are listening to it, simply press the SKIP/DOWN button. Repeatedly press this button to skip back to previous memos. To skip a memo while you are listening to it, press the SKIP/UP button and the next recorded memo will play.

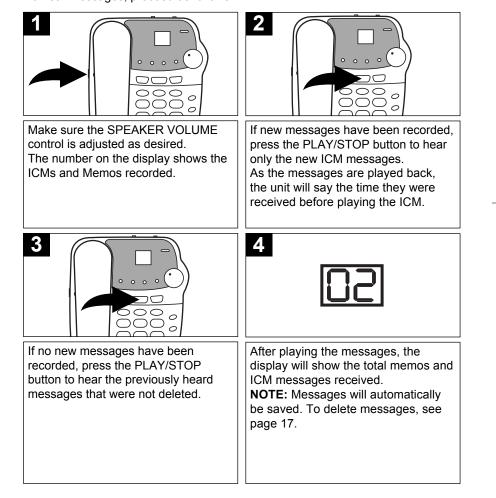
SCREENING YOUR CALLS



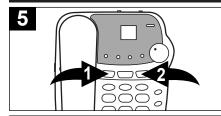
ANSWERING MACHINE OPERATION

PLAYING BACK INCOMING MESSAGES (ICMs)

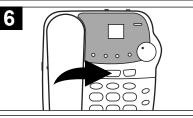
The NEW MESSAGE indicator will blink when the unit has recorded new messages, and the display will show the amount of messages. If the NEW MESSAGE indicator is not blinking, then the display will show the number of messages that have been recorded previously, but not deleted. To hear messages, proceed as follows:



ANSWERING MACHINE OPERATION



To repeat a message while you are listening to it, simply press the SKIP/DOWN button **①**. Repeatedly press this button to skip back to previous messages. To skip a message while you are listening to it, press the SKIP/UP button **②** and the next recorded message will play.



To stop playback, press the PLAY/STOP button and the unit will save the previous messages.

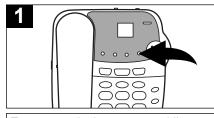
NOTES:

- After playing the ICMs, the unit will automatically reset to take new messages.
- The maximum recording time for an ICM (Incoming Message) is 60 seconds.

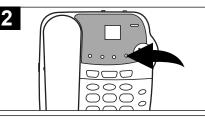
IF MEMORY IS FULL

If the memory is full, the unit will not allow any new messages, and "FU" will appear in the display. In this scenario, when a callers calls the machine, it will pick up and say "not available, please call later" and hang up.

DELETING INCOMING MESSAGES AND MEMOS



To erase a single message while playing it back, press the DELETE button and the unit will delete the current message and play the next message.

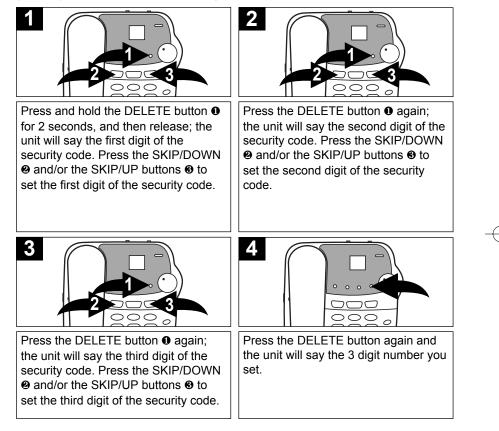


To delete all the messages, press and hold the DELETE button while in the Play mode until "dE" appears in the display. Press the DELETE button to confirm and the message counter will revert back to "00".

REMOTE OPERATION

SECURITY CODE

This unit can be operated from almost any touch-tone phone. The Security Code is preset to 000. You can operate the unit remotely with this code, but we suggest you set your own new code. To change this code, follow the instructions below.

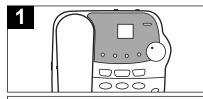


NOTES:

- · If a power failure occurs and there is a dead or no battery, the Access Code resets to 000.
- If you forget the Access Code, unplug the AC adaptor and disconnect the battery and it will reset to 000.
- Be sure to write down your new Access Code and store it in a safe place.

REMOTE OPERATION

TURNING THE ANSWERING MACHINE ON AND OFF



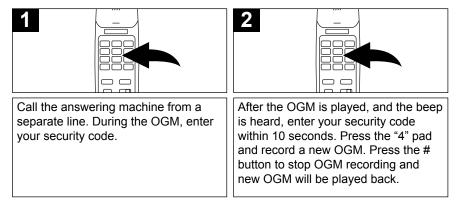
Call the answering machine from a separate line.

If the unit is off, it will answer after 10 rings, the unit will emit a 3 second beep.

REMOTELY RECORDING A NEW OGM



After the 3 beeps are heard, enter your security code within 10 seconds. Press the "8" pad to turn the unit off, or the "9" pad to turn the unit on.



REMOTELY PLAYING INCOMING MESSAGES (ICM'S)

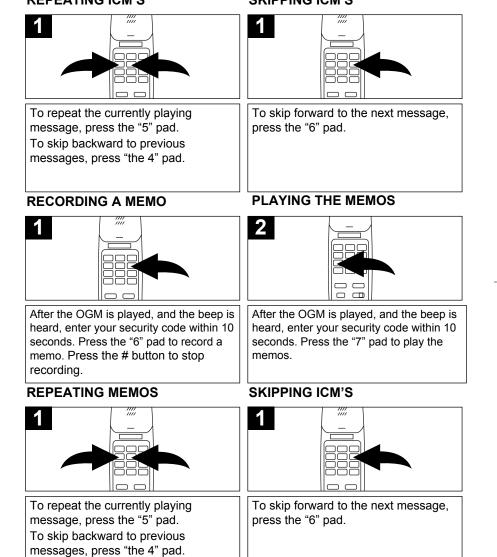
Call the answering machine from a separate line. During the OGM, enter your security code.	After the OGM is played, and the beep is heard, enter your security code within 10 seconds. Press the "2" pad to play all messages or the "1" pad to play only new messages.

E–19

REMOTE OPERATION

REPEATING ICM'S

SKIPPING ICM'S

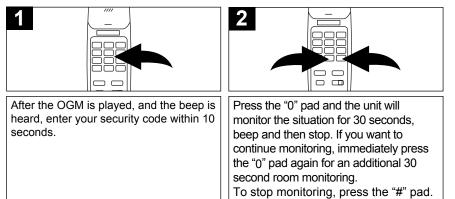


E–20

REMOTE OPERATION

REMOTE ROOM MONITORING

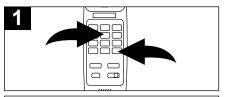
This feature will allow you to call in and monitor the room in which the answering machine is located.





REMOTE OPERATION

HELP MENU



After the OGM is played, and the beep is heard, enter your security code within 10 seconds. Press the "5" pad for the help menu. Press the "#" pad to stop help menu.

END CALL:

Press the "#" pad to stop remote operation and end the call.

Care and Maintenance

- 1. Clean your phone with a damp (never wet) cloth. Solvent or detergent should never be used.
- 2. Avoid operating your unit under direct sunlight or in hot, humid or dusty places.
- 3. Keep your unit away from heating appliances.



CONVENIENT REMOTE ACCESS CARD

For your convenience, cut out this card and keep it in your wallet as a reference guide when remotely calling your answering machine.

IDLE MODE (No Messages Playing)		
Button	Function	
1	Playback new message(s)	
2	Playback all messages	
3	Erases all ICM messages only	
4	Record OGM (Outgoing Message)	
5	Voice/Help menu	
6	Record memo	
7	Playback memo	
8	Set answer mode off	
9	Set answer on	
0	Starts room monitoring	
#	Stop current operation	
PLAY MODE (Messages Playing)		
Button	Function	
3	Erase single memo / ICM message	
4	Skip backward to the previous messages	
5	Repeat current messages	
6	Skip forward to next messages	
#	Stop current operation.	



TROUBLESHOOTING GUIDE

SYMPTOM	POSSIBLE	POSSIBLE
	CAUSE	SOLUTION
Telephone not	Phone Locked Up.	Unplug the unit, wait
working.		one minute and then
		plug it back in.
No Dial Tone	Line cord not connected	Connect line cord,
	correctly.	correctly.
Phone does not	RINGER switch set to	Slide RINGER switch to
ring.	OFF position.	the HI or LO position.
	Line cord not connected	Connect line cord,
	correctly.	correctly.
	Wall Jack not working.	Try phone in another
		wall jack.
Voice level too low.	Handset switch set to	Set Handset switch to
	LO position.	HI position.
Unit will not	Memory locations not	Reprogram memory
memory dial.	set properly.	location numbers as
		per this manual.
	Loss of power/memory.	Check batteries or AC
		Adapter. Reprogram
		memories.
Unit will not dial	PULSE/TONE switch	Set PULSE/TONE
out.	not set properly.	switch properly.

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TROUBLESHOOTING GUIDE

SYMPTOM	POSSIBLE CAUSE	POSSIBLE SOLUTION
No Power.	AC adaptor not connected.	Connect AC adaptor to DC jack on unit and AC outlet.
	AC outlet not working.	Move to another outlet.
No OGM.	Volume is too low.	Increase volume.
	Message recorded too low.	Record message again.
Unit not answer- ing the phone.	Line cord(s) are not connected properly.	Connect line cord(s) securely.
	Unit is not on.	Turn unit on.
	Phone line problems.	Call local phone company for service.
No ICM recorded.	Unit is not on.	Turn unit on.
	Memory is full.	Delete old ICMs.
	The SPEAKER Volume	Raise the SPEAKER Volume
	Control set too low.	control.
ICM is incomplete.	Memory is full.	Delete old ICMs.
	ICM was more than 60 seconds.	Make sure ICMs are less than 60 seconds.
	The caller recorded silence, busy signal or dial tone.	Calls that fit these categories will be cut off.
ICM is low.	Volume is too low.	Increase volume.
No sound.	Volume is too low.	Increase volume.
"Lo" blinks on the display.	The battery is weak or not installed.	Install new battery.
No response to Access Code.	The phone is not a touch- tone phone.	Use a touch-tone phone.
	Incorrect Security Code.	Enter the correct Security Code
	Using incorrect touch-tone phone.	Make sure phone is capable of transmitting 2 second tones.
Can't leave messages (ICMs).	Memory is full.	You cannot leave an ICM when the memory is full.

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13 MEMORY DESKTOP TELEPHONE WITH DIGITAL ANSWERING MACHINE

MODEL: MPH4489

BEFORE OPERATING THIS PRODUCT, PLEASE READ THESE INSTRUCTIONS COMPLETELY.



OPERATING INSTRUCTIONS