



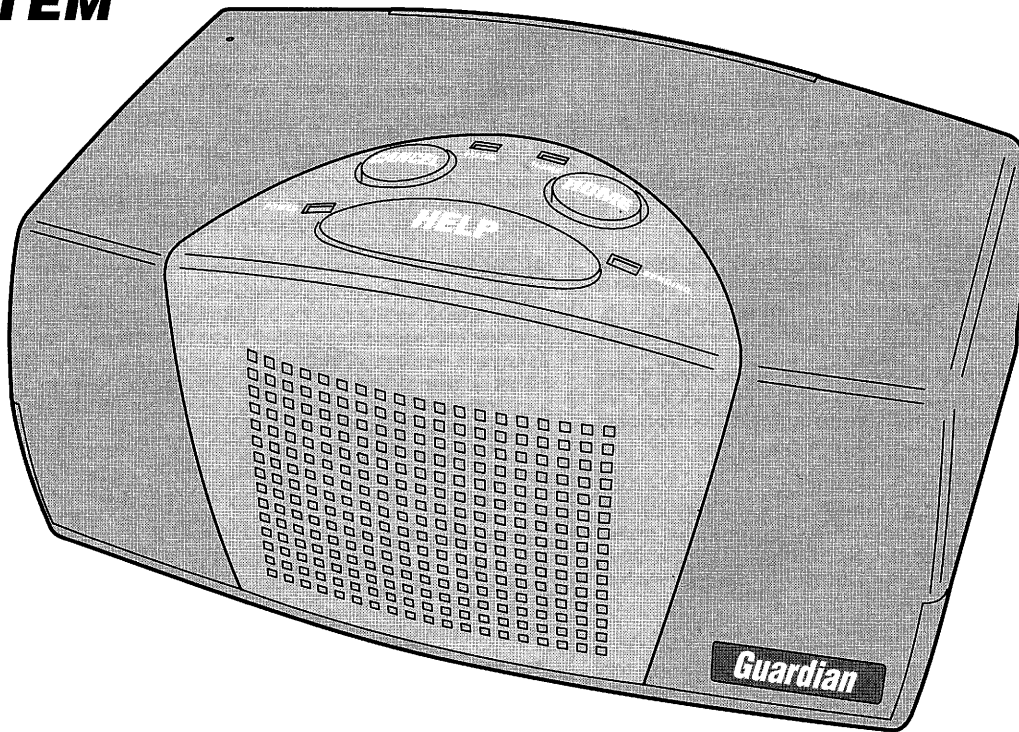
Guardian Medical Monitoring

For questions or emergencies call our 24-hour Medical Monitoring Center at

1-877-435-7225

GM2000B

PERSONAL EMERGENCY REPORTING SYSTEM



INSTALLATION & OPERATION INSTRUCTIONS

**GUARDIAN MEDICAL MONITORING
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PRODUCT DESCRIPTION

The GM2000B Console is a supervised wireless emergency reporting product designed for medical alert applications. The table-top Console provides "pushbutton" emergency assistance to anyone who desires additional security and peace of mind. For the visually impaired, each button on the Console is molded with braille characters to identify the button's function.

The Console can receive signals from up to 16 Linear wireless transmitters. Activating a transmitter causes the Console's digital communicator to send the appropriate alarm report to the central monitoring station via the standard telephone network. In addition to the central station report, audible and visual indications occur and the alarm relay energizes during an emergency activation.

The emergency alarm can be triggered by the large HELP button on the top of the Console or with a wireless transmitter. The fire alarm can be triggered by a wireless smoke alarm.

ACTIVITY TIMER

The optional activity timer can be set for 8, 12 or 24 hour operation or disabled. The emergency alarm will trigger automatically if the time set elapses before an activity transmitter is triggered or the Console's HOME button is pressed.

VOICE PROMPTS

To simplify operation, the Console can "speak" to the subscriber with its built-in digitally synthesized voice. The Console will say "emergency", "fire", "CO alarm", "timer done soon", and other system operation, setup, and supervisory prompts from a 50 word vocabulary. If necessary, the voice option can be disabled.

AUDIO COMMUNICATIONS

The Console can perform 2-way voice activated (duplex), 2-way manual, and 1-way listen-only audio communications through the Console's built-in high-sensitivity microphone and speaker. Communications with central station monitoring personnel starts after an alarm. Communications can also be started without any subscriber action by calling the Console twice from any telephone and keying in a four digit password.

REMINDER MESSAGES

As a special feature, the GM2000B Console can record and play up to approximately eight 15-second audio reminder messages. The reminder messages can be used to help the subscriber remember to take medications, call someone, get ready for an appointment, etc. Each message is controlled by a real time clock and can be programmed via the RA-2400 software to play daily, every other day, weekly, or monthly. Reminder messages are played and repeated in three-minute intervals for either 15 or 30 minutes (programmable) until canceled. Messages can also be programmed for single-play.

BUILT-IN SPEAKERPHONE

The Console can be programmed to act as a remote controlled "speakerphone". With the speakerphone mode enabled, the Console will monitor the telephone line for an incoming call. Activating any emergency transmitter (or the Console's HELP button) while the telephone is ringing will cause the Console to seize the line and begin speakerphone communications. Activating any emergency transmitter (or HELP button) during the call will disconnect the line. The Console will auto-disconnect after 15, 30, or 60 minutes (programmable).

TRANSMITTER SUPERVISION

Supervised transmitters regularly send status reports to the Console and low battery reports when their batteries are low. When the Console receives a low battery report, the STATUS indicator blinks. If the Console fails to receive a status report from a transmitter for a period of 24 hours, the STATUS indicator will light. All supervisory conditions can sound a local annunciation and be reported to the central station (optional through programming).

DIGITAL COMMUNICATOR

The Console's digital communicator can route calls to three telephone numbers: primary, secondary, and supervisory. General reporting codes and individual sensor reporting codes are programmable for the 4x2 format. Alternately, Ademco Contact ID format can be selected. The telephone line is constantly monitored, line failure and restoral will be locally announced by the Console (optional through programming).

POWER SUPPLY

Powered by a low voltage plug-in transformer, the Console has provisions for a rechargeable backup battery for operation during AC power outages. A power switch allows for out-of-service storage of the Console without discharge of the battery. The battery is recharged by the Console, even if the POWER switch is off (as long as the transformer is plugged in). If the backup battery becomes low, the POWER light will flash and the condition can be reported to the central station.

PROGRAMMING

The Console is programmed using the RA-2400 remote access software (available on CD and at Linear's Web site: www.linearcorp.com). Refer to the software's detailed instruction manual and built-in help file for programming details.

OPERATION SUMMARY

A variety of Linear's supervised DXS and non-supervised DX format transmitters can be used with the Console. Transmitters can be assigned to the following four functions:

EMERGENCY

Portable, supervised and non-supervised, pendant, belt-clip, or wristband type transmitters (Models DXT-41, DXT-42, DXT-61A, DXS-21, DXS-23, GM-TX002) and stationary, supervised Model DXS-31 transmitters are used for medical alert applications. When a medical alert transmitter is triggered, the Console announces the emergency alarm and an emergency report is sent to the central station. The emergency alarm can also be triggered by pressing the Console's HELP button.

FIRE

Supervised Model DXS-73 wireless photoelectric smoke alarm triggers the fire alarm. When the fire alarm is activated, the Console announces the fire alarm and a fire report is sent to the central station.

CARBON MONOXIDE (CO)







Supervised Model DXS-80 wireless carbon monoxide detectors trigger the CO alarm. When a carbon monoxide alarm is activated, the Console sounds a repeated series of four beeps and a carbon monoxide report is sent to the central station.

ACTIVITY

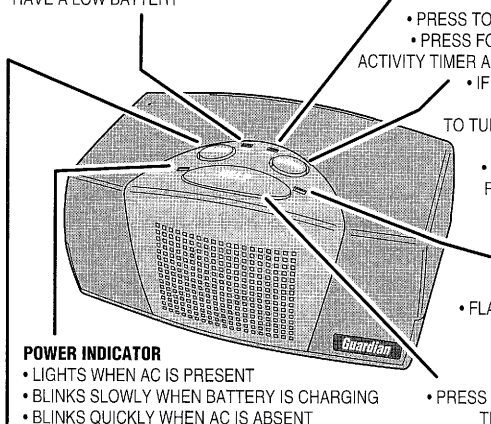
Supervised, switch or motion triggered transmitters (Models DXS-31/DXS-32 and DXS-54) can be used for ensuring human activity. The DXS-54 motion detector will monitor room activity. The DXS-31 and DXS-32 transmitters can be wired to a pushbutton or switch for manual activity monitoring. As long as a signal is received at least once every 8, 12, or 24 hours (programmable) an alarm will **not** be triggered. 15 minutes before the programmed time expires, the HOME indicator will start blinking and the Console will announce every ten seconds that the timer will run out soon. The activity timer can be reset with a signal from one of the activity transmitters or by pressing the HOME button on the Console. Failure to reset the activity timer within the programmed time period will trigger the Console's emergency alarm and send an inactivity report to the central station. The activity timer can be turned on or off at the Console or through programming.

AUTOMATIC FULL SYSTEM TEST

The Console can be programmed to perform a full system test daily, weekly, or monthly. The automatic full system test can also be disabled. As long as all system components are operational, the system test report will be sent at the programmed interval. The full system test report will NOT be sent if any system component (transmitter, Console, phone line) is not fully functional.

EMERGENCY  DXT-41 DXT-42	FIRE  DXS-73	CARBON MONOXIDE  DXS-80
 * DXT-61A * DXS-21 * DXS-23		
 GM-TX002 DXS-31		
↑ NOTE: COMPATABILITY WITH THE GM2000B HAS NOT BEEN VERIFIED BY UL		
* NOTE: NOT A UL LISTED DEVICE		
ACTIVITY  DXS-31/32 DXS-54		
UP TO 16 TRANSMITTERS TOTAL CAN BE USED WITH EACH CONSOLE		

1. CONTROL AREA FEATURES



STATUS INDICATOR

- NORMALLY OFF
- LIGHTS WHEN ANY TRANSMITTERS ARE MISSING (SUPERVISORY)
- BLINKS SLOWLY WHEN ANY TRANSMITTERS HAVE A LOW BATTERY

HOME INDICATOR

- LIGHTS WHEN ACTIVITY TIMER IS ON
- LIGHT IS OFF WHEN ACTIVITY TIMER IS OFF
- BLINKS SLOWLY WHEN LESS THAN 15 MINUTES REMAIN ON THE ACTIVITY TIMER
- BLINKS QUICKLY WHEN THE ACTIVITY TIMER HAS EXPIRED

HOME BUTTON

- PRESS TO RESET ACTIVITY TIMER
- PRESS FOR 5 SECONDS TO TURN ACTIVITY TIMER AND REMINDER RPT. OFF
- IF ACTIVITY TIMER IS OFF, PRESS FOR 5 SECONDS TO TURN ACTIVITY TIMER AND REMINDER REPORT ON
- USED IN TEST MODE TO RECORD AND PLAYBACK REMINDER MESSAGES

SENDING INDICATOR

- NORMALLY OFF
- FLASHES WHEN CONSOLE IS PLACING A CALL

POWER INDICATOR

- LIGHTS WHEN AC IS PRESENT
- BLINKS SLOWLY WHEN BATTERY IS CHARGING
- BLINKS QUICKLY WHEN AC IS ABSENT (CONSOLE ON BATTERY POWER)
- OFF IN TEST AND SETUP MODES

CANCEL BUTTON

- STOPS ALARM
- ADDS CANCEL TO AN ALARM REPORT IN PROGRESS
- PRESS IMMEDIATELY AFTER EMERGENCY TO PREVENT REPORT
- CLEARS INDICATORS
- STOPS TROUBLE BEEPER
- PRESS FOR 5 SECONDS TO ADD A TRANSMITTER
- CLEARS REMINDER MESSAGE

HELP BUTTON

- PRESS AND HOLD TO TRIGGER THE EMERGENCY ALARM
- PRESS DURING RING FOR SPEAKERPHONE MODE
- PRESS DURING SPEAKERPHONE MODE TO DISCONNECT
- PRESS WHILE IN TEST MODE TO CONNECT THE CONSOLE TO A PC FOR LOCAL PROGRAMMING WITH THE RA-2400 SOFTWARE

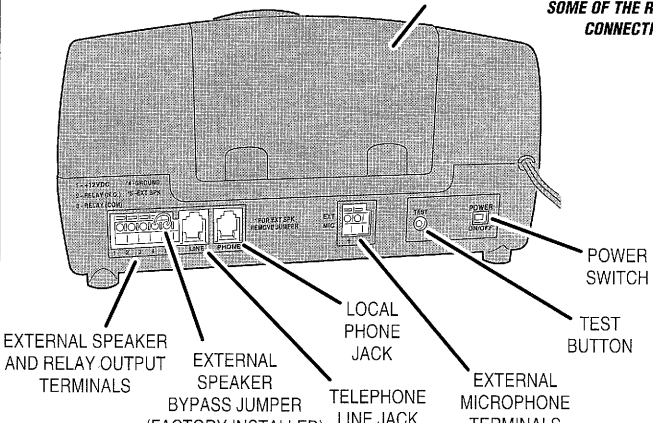
HOME BUTTON COVER

- HIDES THE HOME BUTTON IF THE ACTIVITY TIMER IS NOT USED (REMOVE IF INSTALLED TO RECORD AND PLAYBACK REMINDER MESSAGES)

2. REAR SIDE AND BOTTOM FEATURES

NOTE: THE CONSOLE IS SHIPPED WITH REMOVABLE LABELS COVERING SOME OF THE REAR CONNECTIONS

CONSOLE REAR



EXTERNAL SPEAKER AND RELAY OUTPUT TERMINALS

EXTERNAL SPEAKER BYPASS JUMPER (FACTORY INSTALLED)

TELEPHONE LINE JACK

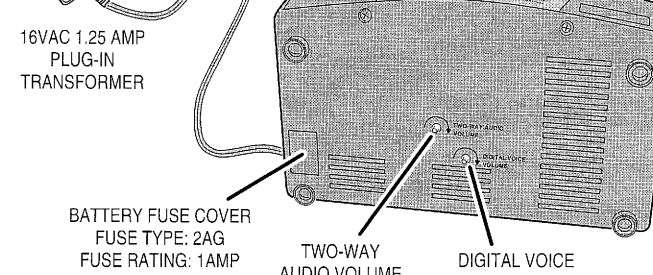
LOCAL PHONE JACK

EXTERNAL MICROPHONE TERMINALS

POWER SWITCH

TEST BUTTON

CONSOLE BOTTOM



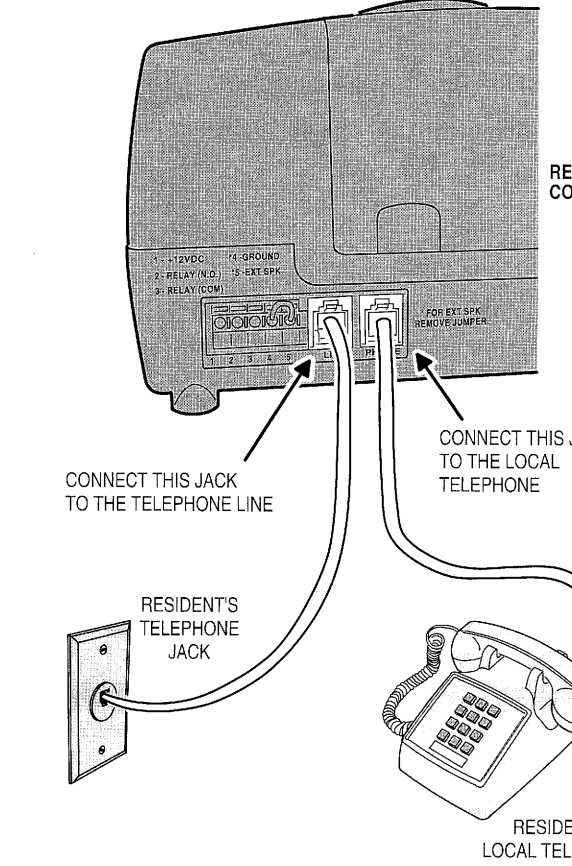
16VAC 1.25 AMP PLUG-IN TRANSFORMER

BATTERY FUSE COVER
FUSE TYPE: 2AG
FUSE RATING: 1AMP

TWO-WAY AUDIO VOLUME

DIGITAL VOICE VOLUME

3. TELEPHONE CONNECTIONS



REAR OF CONSOLE

1. +12VDC 4. GROUND
2. RELAY (NO.) 5. EXT SPK
3. RELAY (COM) 6. EXT SPK

FOR EXT SPK REMOVE JUMPER

CONNECT THIS JACK TO THE TELEPHONE LINE

CONNECT THIS JACK TO THE LOCAL TELEPHONE

RESIDENT'S TELEPHONE JACK

RESIDENT'S LOCAL TELEPHONE (OPTIONAL)

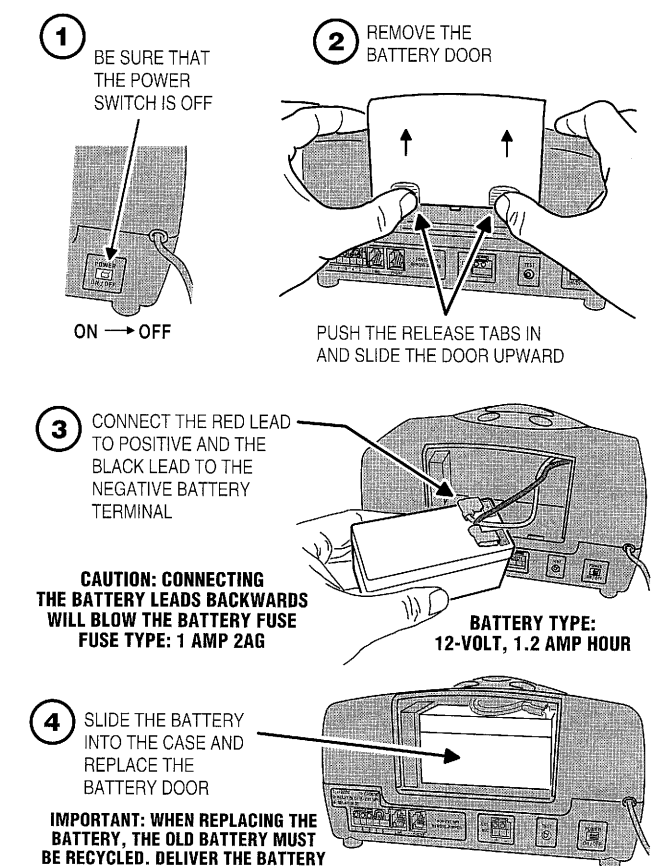
4. BACKUP BATTERY INSTALLATION

- BE SURE THAT THE POWER SWITCH IS OFF
- REMOVE THE BATTERY DOOR
- CONNECT THE RED LEAD TO POSITIVE AND THE BLACK LEAD TO THE NEGATIVE BATTERY TERMINAL
- SLIDE THE BATTERY INTO THE CASE AND REPLACE THE BATTERY DOOR

CAUTION: CONNECTING THE BATTERY LEADS BACKWARDS WILL BLOW THE BATTERY FUSE
FUSE TYPE: 1 AMP 2AG

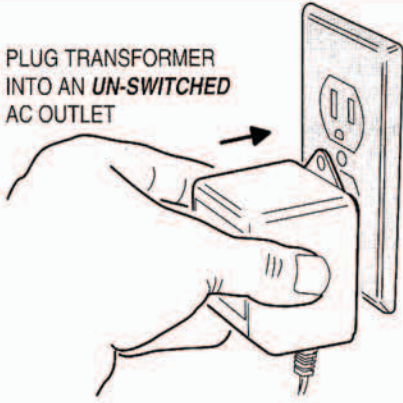
BATTERY TYPE: 12-VOLT, 1.2 AMP HOUR

IMPORTANT: WHEN REPLACING THE BATTERY, THE OLD BATTERY MUST BE RECYCLED. DELIVER THE BATTERY TO AN APPROPRIATE RECYCLING FACILITY

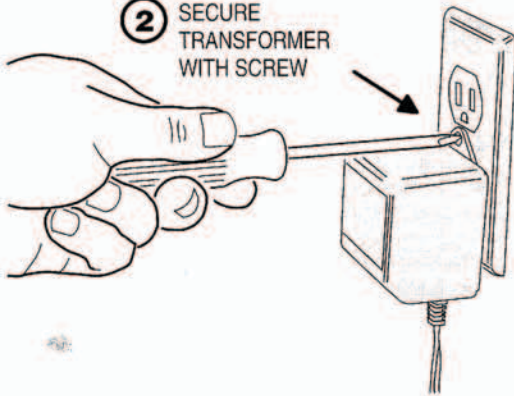


5. TRANSFORMER INSTALLATION

- 1** PLUG TRANSFORMER INTO AN *UN-SWITCHED* AC OUTLET



- 2** SECURE TRANSFORMER WITH SCREW



7. TRANSMITTER INSTALLATION OPTIONS

FOR ALL TWO-BUTTON TRANSMITTERS



WHEN IT IS INSTALLED WITH THE LEFT BUTTON



IT WILL ACTIVATE USING EITHER BUTTON



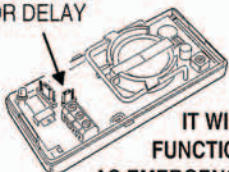
WHEN IT IS INSTALLED WITH THE RIGHT BUTTON



IT WILL ONLY ACTIVATE USING BOTH BUTTONS

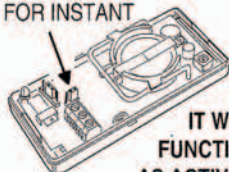
FOR DXS-31 STATIONARY TRANSMITTERS

WHEN IT IS INSTALLED WITH THE JUMPER SET FOR DELAY



IT WILL FUNCTION AS EMERGENCY

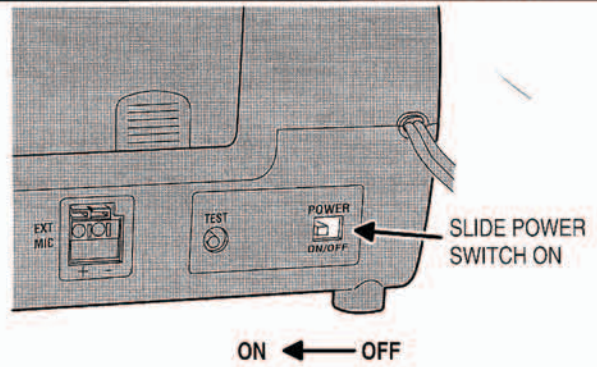
WHEN IT IS INSTALLED WITH THE JUMPER SET FOR INSTANT



IT WILL FUNCTION AS ACTIVITY

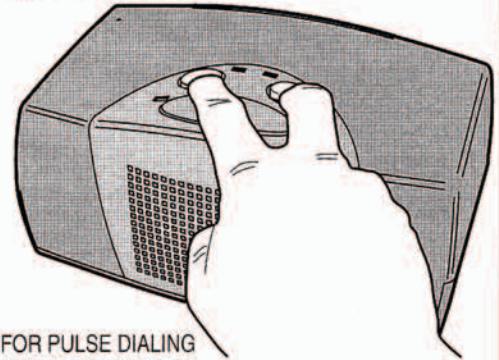
FOR MODEL DXS-32: CUT JUMPER (INSTANT TX) FOR USE AS AN ACTIVITY TX. SEE DXS-32 INSTALLATION INSTRUCTIONS

6. APPLY POWER - SELECT DIALING METHOD



NOTE: THE DEFAULT DIALING METHOD IS TONE DIALING

IF REQUIRED, CHANGE THE DIALING METHOD BY PRESSING AND HOLDING THE HOME & CANCEL BUTTONS FOR 3 SECONDS WHILE SWITCHING THE POWER ON

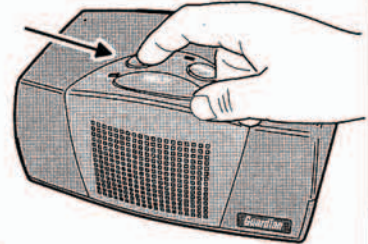


- 7 BEEPS SOUND FOR PULSE DIALING
- 8 BEEPS SOUND FOR TONE DIALING

8. INSTALLING SINGLE TRANSMITTERS

ADDS ONE TRANSMITTER AT A TIME

- 1** PRESS CANCEL BUTTON FOR 5 SECONDS
- CONSOLE ANNOUNCES THAT IT IS READY TO LEARN TRANSMITTERS



- 2** ACTIVATE TRANSMITTER
- CONSOLE ANNOUNCES TRANSMITTER TYPE THEN REVERTS TO STANDBY MODE



NOTE: IF THE CONSOLE'S MEMORY IS FULL, THE CONSOLE WILL ANNOUNCE "ERROR ZONES FULL"

- 3** REPEAT STEPS 1 & 2 FOR ADDITIONAL TRANSMITTERS (UP TO 16 TOTAL)

NOTE: PRESS CANCEL BEFORE TRANSMITTING TO RETURN TO STANDBY MODE WITHOUT ENTERING A TRANSMITTER

- THE CONSOLE WILL ANNOUNCE ITS STATUS

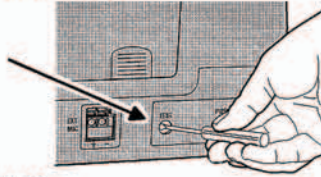
THE CONSOLE WILL RETURN TO STANDBY MODE AUTOMATICALLY WHEN A TRANSMITTER IS LEARNED OR AFTER 30 SECONDS HAS ELAPSED

NOTE: WRITE DOWN EACH TRANSMITTER'S TYPE AND ZONE NUMBER WHEN THE TRANSMITTER IS ADDED. THE CENTRAL STATION WILL NEED TO KNOW THE TYPE AND REPORTING ZONE FOR EACH TRANSMITTER.

9. INSTALLING MULTIPLE TRANSMITTERS

ADDS MULTIPLE TRANSMITTERS

1. PRESS TEST BUTTON
 - CONSOLE ANNOUNCES TEST MODE



2. PRESS TEST BUTTON AGAIN
 - CONSOLE ANNOUNCES ITS READY TO LEARN TRANSMITTERS

NOTE: EACH TIME THE TEST BUTTON IS PRESSED IN THE ADD TRANSMITTER MODE, THE CONSOLE WILL BE READY TO INSTALL A TRANSMITTER IN THE NEXT AVAILABLE SENSOR ZONE LOCATION. THE CONSOLE WILL ANNOUNCE THE SENSOR ZONE LOCATION NUMBER.

3. ACTIVATE TRANSMITTER
 - CONSOLE ANNOUNCES THE TRANSMITTER TYPE

NOTE: IF THE CONSOLE'S MEMORY IS FULL, THE CONSOLE WILL ANNOUNCE "ERROR ZONES FULL"



4. REPEAT STEPS 2 & 3 FOR ADDITIONAL TRANSMITTERS (UP TO 16 TOTAL)

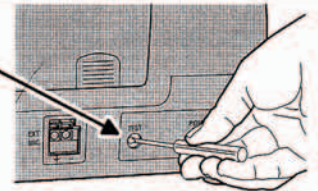
5. PRESS CANCEL TO RETURN TO STANDBY MODE
 - THE CONSOLE WILL ANNOUNCE ITS STATUS

THE CONSOLE WILL RETURN TO STANDBY MODE AUTOMATICALLY AFTER 3 MINUTES

NOTE: WRITE DOWN EACH TRANSMITTER'S TYPE AND ZONE NUMBER WHEN THE TRANSMITTER IS ADDED. THE CENTRAL STATION WILL NEED TO KNOW THE TYPE AND REPORTING ZONE FOR EACH TRANSMITTER

10. TESTING TRANSMITTERS

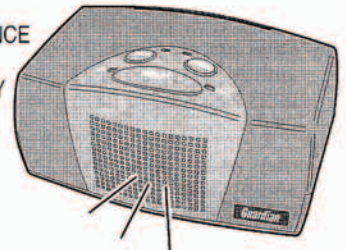
1. PRESS TEST BUTTON
 - CONSOLE ANNOUNCES TEST MODE



2. ACTIVATE EACH OF THE CONSOLE'S TRANSMITTERS, ONE AT A TIME



3. THE CONSOLE WILL ANNOUNCE THE TRANSMITTER'S TYPE AND ZONE NUMBER AND ANY SUPERVISORY CONDITIONS FOR THE TRANSMITTER



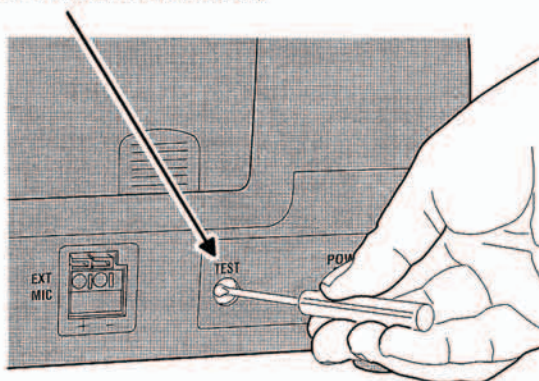
4. PRESS CANCEL TO RETURN TO STANDBY MODE
 - THE CONSOLE WILL ANNOUNCE ITS STATUS

THE CONSOLE WILL RETURN TO STANDBY MODE AUTOMATICALLY AFTER 3 MINUTES

11. ERASING TRANSMITTERS

CAUTION: ALL TRANSMITTERS WILL BE ERASED!

1. PRESS AND HOLD THE TEST BUTTON FOR 5 SECONDS
 - CONSOLE ANNOUNCES "ZONE RESET" (ALL TRANSMITTERS ERASED)



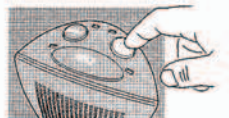
2. PRESS CANCEL TO RETURN TO STANDBY MODE
 - THE CONSOLE WILL ANNOUNCE ITS STATUS

THE CONSOLE WILL RETURN TO STANDBY MODE AUTOMATICALLY AFTER 3 MINUTES

12. RECORDING REMINDER MESSAGES

RECORDING REMINDER MESSAGES

1. PRESS AND RELEASE THE TEST BUTTON TO ENTER TEST MODE
2. PRESS AND HOLD THE HOME BUTTON FOR 5 SECONDS (BE READY TO RECORD)
3. RECORD UP TO A 15 SECOND MESSAGE (SPEAK AT NORMAL VOLUME, TWO FEET FROM CONSOLE)
4. PRESS THE HOME BUTTON TO STOP RECORDING
5. PRESS THE HOME BUTTON AGAIN TO PLAY THE MESSAGE JUST RECORDED, PRESS THE HOME BUTTON TWICE AND HOLD IT AFTER THE 2ND PRESS TO RECORD ANOTHER MESSAGE IN THE NEXT AVAILABLE MESSAGE NUMBER
6. REPEAT STEPS 2-5 FOR ADDITIONAL MESSAGES (UP TO 8 MESSAGES ALLOWED)
7. PRESS AND RELEASE THE CANCEL BUTTON TO EXIT TEST MODE



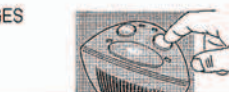
TEST PLAYING REMINDER MESSAGES

1. PRESS AND RELEASE THE TEST BUTTON TO ENTER TEST MODE
2. PRESS AND RELEASE THE HOME BUTTON
3. THE CONSOLE WILL ANNOUNCE EACH MESSAGE NUMBER, THEN PLAY THE RECORDED MESSAGE
4. PRESS THE HOME BUTTON TO ADVANCE TO THE NEXT MESSAGE TO BE PLAYED
5. PRESS AND RELEASE THE CANCEL BUTTON TO EXIT TEST MODE

NOTE: TIME SCHEDULING FOR PLAYING REMINDER MESSAGES IS SET WITH THE RA-2400 SOFTWARE

ERASING ALL REMINDER MESSAGES

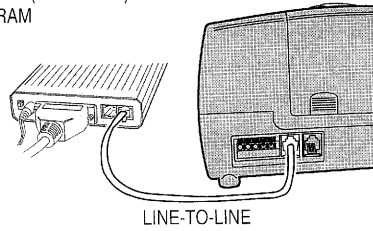
1. PRESS AND RELEASE THE TEST BUTTON TO ENTER TEST MODE
2. PRESS AND HOLD THE HOME BUTTON FOR MORE THAN 10 SECONDS
3. THE CONSOLE WILL ERASE ALL REMINDER MESSAGES AND PLAYBACK SCHEDULES
4. PRESS AND RELEASE THE CANCEL BUTTON TO EXIT TEST MODE



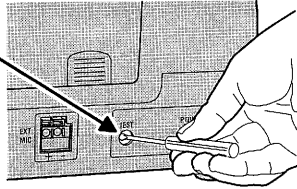
13. LOCAL PROGRAMMING WITH RA-2400

- 1 PERFORM THE STEPS DETAILED IN THE RA-2400/PERS REFERENCE GUIDE (P/N 224756) TO SET UP THE RA-2400 PROGRAM

- 2 TO LOCALLY PROGRAM THE CONSOLE, CONNECT THE MODEM'S LINE JACK TO THE CONSOLE'S LINE JACK

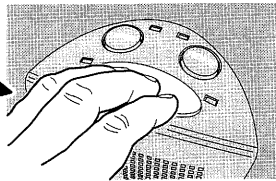


- 3 PRESS THE TEST BUTTON MOMENTARILY
 - CONSOLE ANNOUNCES TEST MODE
 - START A LOCAL CONNECTION WITH THE RA-2400 SOFTWARE



NOTE: CONSOLE WILL EXIT TEST MODE AUTOMATICALLY AFTER 3 MINUTES OR BY PRESSING THE CANCEL BUTTON

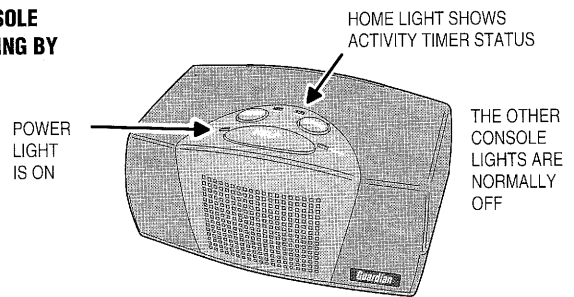
- 4 WHEN RA-2400 CONNECTION TIMER STARTS COUNTING DOWN, PRESS THE HELP BUTTON
 - THE CONSOLE ANNOUNCES "PHONE ON" WHEN THE CONSOLE HAS CONNECTED



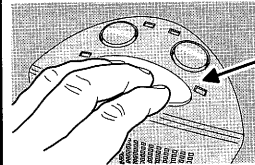
- 5 PERFORM PROGRAMMING IN THE RA-2400 SOFTWARE, SEND AND SAVE THE ACCOUNT PROFILE, THEN DISCONNECT FROM THE CONSOLE

14. SYSTEM OPERATION

CONSOLE STANDING BY



- IN CASE OF EMERGENCY -



PRESS AND MOMENTARILY HOLD THE HELP BUTTON

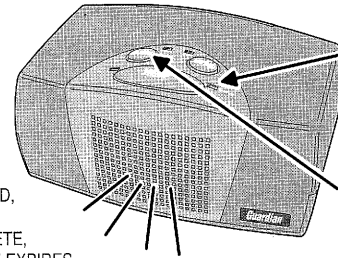


- OR -
ACTIVATE AN EMERGENCY TRANSMITTER

PRESS TRANSMITTER BUTTON FOR AT LEAST 2 SECONDS

CONSOLE IN ALARM

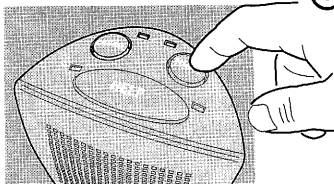
THE CONSOLE ANNOUNCES EMERGENCY UNTIL THE CANCEL BUTTON IS PRESSED, CENTRAL STATION REPORT IS COMPLETE, OR THE SIREN TIME EXPIRES



SENDING LIGHT FLASHES DURING COMMUNICATION

PRESS CANCEL TO STOP THE ALARM (ADDS CANCEL TO ALARM REPORT IN PROGRESS)

15. ACTIVITY TIMER OPERATION

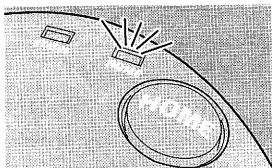


- 1 **ENABLING THE ACTIVITY TIMER**
PRESS THE HOME BUTTON FOR 5 SECONDS TO TURN THE ACTIVITY TIMER ON

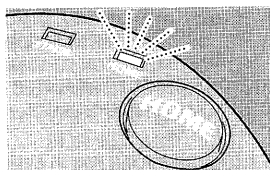
NOTE: THE ACTIVITY TIMER CAN BE ENABLED FOR 8, 12, OR 24 HOURS, OR DISABLED BY PROGRAMMING

NOTE: TO TURN THE ACTIVITY TIMER OFF, PRESS THE HOME BUTTON FOR FIVE SECONDS, THIS WILL ALSO TURN ON/OFF REMINDER REPORTING IF REMINDER SCHEDULE TIME OUT REPORT IS ENABLED IN THE RA-2400 SOFTWARE (ACTIVITY TIMER CAN BE DISABLED SEPARATELY IN RA-2400 ALARMS PROGRAMMING)

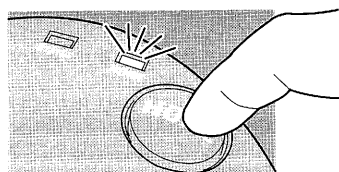
- 2 **ACTIVITY TIMER RUNNING**
THE HOME INDICATOR WILL LIGHT, SHOWING THAT THE ACTIVITY TIMER IS ENABLED



- 3 **TIME RUNNING OUT**
THE HOME INDICATOR WILL BLINK & THE CONSOLE ANNOUNCES EVERY 10 SECONDS WHEN LESS THAN 15 MINUTES OF TIME REMAIN



- 4 **RESETTING ACTIVITY TIMER**
THE SUBSCRIBER NEEDS TO PRESS THE HOME BUTTON OR TRIGGER AN ACTIVITY TRANSMITTER BEFORE THE TIMER EXPIRES TO PREVENT AN INACTIVITY REPORT



PRESSING THE HOME BUTTON RESTARTS THE TIMER

16. AUDIO OPERATION

- 1 PROGRAM THE CONSOLE FOR THE DESIRED AUDIO MODE:
 - 1) LISTEN-ONLY
 - 2) 2-WAY MANUAL
 - 3) 2-WAY VOICE ACTIVATED (DUPLEX)
- 2 AFTER THE CENTRAL STATION OPERATOR ACKNOWLEDGES THE COMMUNICATOR'S REPORT, THE CONSOLE WILL STOP ITS LOCAL ALARM AND SWITCH TO THE SELECTED AUDIO MODE FOR 90 SECONDS

AUDIO OPERATION CAN ALSO BE ESTABLISHED BY CALLING THE CONSOLE TWICE AND KEYING IN THE FOUR DIGIT REMOTE AUDIO PASSWORD FOLLOWED BY THE # KEY (SEE SECTION #22)

- 3 **CENTRAL STATION OPERATOR OR AUDIO CALLER:**
USE THESE KEYS ON A TELEPHONE SET TO CONTROL THE CONSOLE'S AUDIO MODE (IN CENTRAL STATION, CONNECT A TELEPHONE TO THE SAME TELEPHONE LINE AS THE CENTRAL STATION RECEIVER)

ALL AUDIO MODES { **9** PRESS "9" TO DISCONNECT THE CALL

2-WAY MANUAL AUDIO MODE { **3** PRESS "3" TO LISTEN

{ **1** PRESS "1" TO TALK

THE "1" AND "3" KEYS ARE NOT USED IN LISTEN-ONLY AUDIO MODE

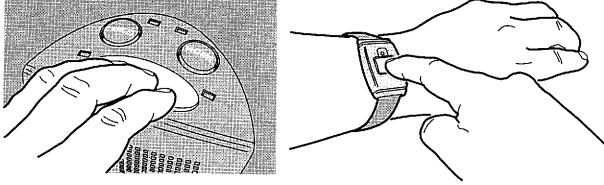
THE "1" AND "3" KEYS CAN BE USED IN 2-WAY VOICE ACTIVATED MODE. USING THEM WILL CAUSE THE SYSTEM TO SWITCH TO 2-WAY MANUAL MODE. PRESSING "8" RESTORES 2-WAY VOICE ACTIVATED MODE.

PRESSING ANY KEY OTHER THAN "9" WILL EXTEND THE AUDIO TIME 90 MORE SECONDS

17. SPEAKERPHONE OPERATION

- PROGRAM THE CONSOLE TO ENABLE SPEAKERPHONE MODE
NOTE: SPEAKERPHONE MODE CAN ONLY BE USED ON INCOMING CALLS AND WILL NOT FUNCTION WHEN THE CONSOLE IS OPERATING FROM BACKUP BATTERY POWER. ATTEMPTING TO ANSWER WHILE THE CONSOLE IS ON BACKUP POWER WILL CAUSE AN EMERGENCY ALARM.

- WHILE THE TELEPHONE IS RINGING, ACTIVATING AN EMERGENCY TRANSMITTER OR PRESSING THE HELP BUTTON WILL SEIZE THE TELEPHONE LINE



- THE SYSTEM WILL BEGIN 2-WAY VOICE ACTIVATED MODE FOR AUDIO COMMUNICATIONS

WARNING: THE CONSOLE WILL NOT BE ABLE TO REPORT AN EMERGENCY WHILE THE SPEAKERPHONE MODE IS ACTIVE

NOTE: TO REPORT AN EMERGENCY WHEN THE SPEAKERPHONE IS IN USE, PRESS EITHER THE HELP BUTTON OR THE BUTTON ON AN EMERGENCY TRANSMITTER TO END THE PHONE CALL AND THEN PRESS ONE OF THESE BUTTONS AGAIN TO REPORT THE EMERGENCY.

- THE CONSOLE WILL END AUDIO COMMUNICATIONS WHEN EITHER:

- THE HELP BUTTON IS PRESSED
- ANY EMERGENCY TRANSMITTER IS ACTIVATED
- THE AUTO-DISCONNECT TIMER RUNS OUT (PROGRAMMABLE FOR 15, 30, OR 60 MINUTES)

18. SUPERVISORY CONDITIONS

TRANSMITTER LOW BATTERY

WHEN A TRANSMITTER SENDS A LOW BATTERY SIGNAL THE CONSOLE'S STATUS INDICATOR WILL BLINK SLOWLY

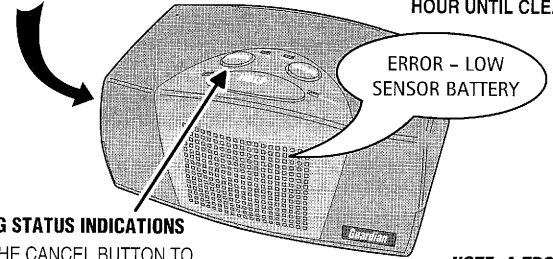
TRANSMITTER SUPERVISORY

IF A TRANSMITTER PROGRAMMED AS SUPERVISED FAILS TO REPORT STATUS IN A 24 HOUR PERIOD, THE CONSOLE'S STATUS INDICATOR WILL LIGHT

LOW CONSOLE BACKUP BATTERY

THE CONSOLE WILL TEST ITS BACKUP BATTERY EVERY 8 HOURS. IF THE BATTERY TESTS LOW, THE POWER INDICATOR WILL BLINK SLOWLY WHILE THE CONSOLE CHARGES THE BATTERY.

WHEN TROUBLE EXISTS, THE CONSOLE WILL ANNOUNCE THE CONDITION EVERY HOUR UNTIL CLEARED



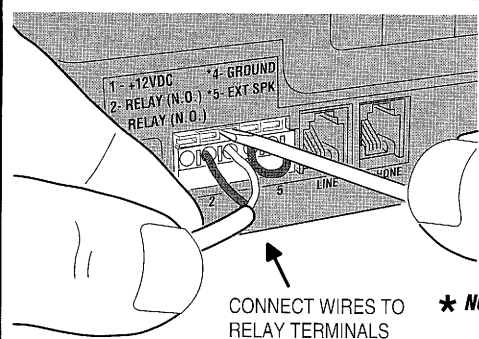
CLEARING STATUS INDICATIONS

PRESS THE CANCEL BUTTON TO CLEAR THE STATUS INDICATOR AND STOP THE ANNUNCIATION

NOTE: A TROUBLE CONDITION WILL LIKELY OCCUR AGAIN UNTIL THE PROBLEM IS FIXED

THE CONSOLE WILL REPORT THESE SUPERVISORY CONDITIONS TO THE CENTRAL STATION IF ENABLED IN THE COMMUNICATOR PROGRAMMING (AUTOMATIC FULL-SYSTEM CONSOLE SUPERVISORY REPORTS CAN ALSO BE SENT AT 1, 7, OR 30 DAY INTERVALS)

19. OPTIONAL OUTPUT CONNECTIONS

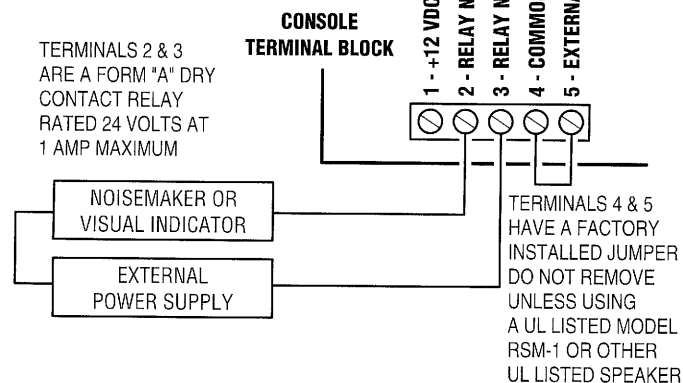


USE A SMALL SCREWDRIVER TO PUSH ON THE TERMINAL LOCKS TO ALLOW THE WIRE TO SLIDE INTO THE TERMINAL HOLE

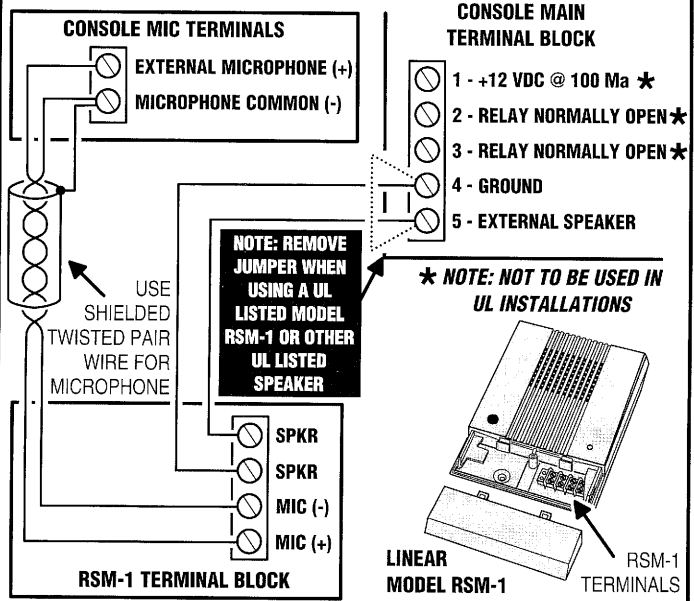
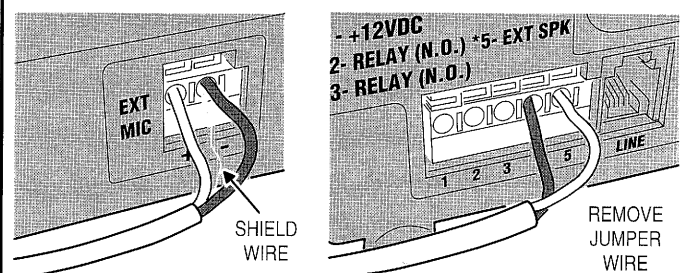
CONNECT WIRES TO RELAY TERMINALS

*** NOTE: NOT TO BE USED IN UL INSTALLATIONS**

NOTE: THE CONSOLE IS SHIPPED WITH REMOVABLE LABELS COVERING SOME OF THE REAR CONNECTIONS



20. OPTIONAL REMOTE SPEAKER/MIC CONNECTIONS



21. NON-VOICE PROMPT BEEP LEGEND

WHEN VOICE PROMPTS ARE DISABLED, THE CONSOLE WILL SOUND BEEPS TO INDICATE VARIOUS CONDITIONS

- 1 BEEP..... TRANSMITTER ADDED TO A SENSOR ZONE
- 1 LONG BEEP..... SENSOR ZONES FULL
- 2 BEEPS..... CONSOLE IN STANDBY MODE, ACTIVITY TIMER ON
- 3 BEEPS..... CONSOLE IN STANDBY MODE, ACTIVITY TIMER OFF
- 4 BEEPS..... CONSOLE IN TEST MODE
- 5 BEEPS..... CONSOLE IN LEARN TRANSMITTER MODE
- 6 BEEPS..... CONSOLE HAS ERASED ALL TRANSMITTERS
- 7 BEEPS..... PULSE DIALING HAS BEEN SELECTED FOR THE CONSOLE
- 8 BEEPS..... TONE DIALING HAS BEEN SELECTED FOR THE CONSOLE

22. REMOTE AUDIO COMMUNICATIONS

TO ESTABLISH REMOTE AUDIO COMMUNICATIONS WITH THE CONSOLE:

1. DIAL THE NUMBER OF THE PHONE LINE THAT THE CONSOLE IS CONNECTED TO, ALLOW IT TO RING THREE TIMES, THEN HANG UP
2. WAIT ABOUT 10 SECONDS, THEN CALL THE CONSOLE A SECOND TIME
3. WHEN THE CONSOLE ANSWERS, A TONE WILL SOUND FOR ABOUT 8 SECONDS
4. WHEN THE TONE ENDS, ENTER THE REMOTE AUDIO PASSWORD (DEFAULT 1234) FOLLOWED BY THE # KEY

THE CONSOLE WILL BEGIN AUDIO COMMUNICATIONS (2-WAY DUPLEX, 2-WAY MANUAL, OR LISTEN-ONLY) DEPENDING ON THE CONSOLE'S PROGRAMMING

SEE SECTION 16 FOR AUDIO COMMUNICATION OPERATION DETAILS

NOTE: IF THE CONSOLE AUDIO IS SET TO "NONE" REMOTE AUDIO COMMUNICATIONS WILL NOT FUNCTION

SPECIFICATIONS

CODING FORMATS

DX CODE 24-BIT A1D PPM	1,048,567 CODES
DXS CODE 24-BIT A1D PPM	1,048,567 CODES

POWER REQUIREMENTS

PRIMARY SUPPLY	16 VAC 1.25 AMP PLUG-IN TRANSFORMER
BACKUP SUPPLY	12 VOLT 1.2 AMP/HOUR BATTERY
NORMAL OPERATING CURRENT	120 mA
ALARM OPERATING CURRENT	190 mA
BACKUP OPERATION DURATION	30 HOURS MINIMUM
BATTERY LIFE EXPECTED	3 YEARS
BACKUP SUPPLY OPERATING CURRENT	40 mA
BATTERY FUSE	1 AMP, TYPE 2AG

RF CHARACTERISTICS

RECEIVER TYPE	DUAL-DIVERSITY SUPERHETERODYNE
RF SENSITIVITY	-100 dBm TYPICAL
RADIO FREQUENCY	315 Mhz
MAXIMUM RANGE	400 FEET LINE-OF-SIGHT, OPEN RANGE UL LISTED FOR 150 FEET

COMMUNICATOR

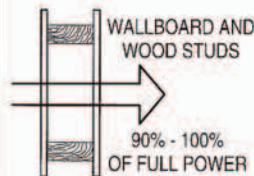
COMMUNICATOR FORMATS	4 BY 2 (GENERAL OR POINT-TO-POINT), ADEMCO CONTACT ID UL TESTED WITH SURGARD SGMLRG-DG CENTRAL STATION RECEIVER
DIALING	TONE OR PULSE
DIALING DELAY	0 OR 15 SECONDS
REMOTE PROGRAMMING PASSWORD	6 DIGITS
REMOTE COMMUNICATIONS PASSWORD	4 DIGITS
ACCOUNT NUMBER LENGTH	4 DIGITS
PRIMARY TELEPHONE NUMBER	20 DIGITS
SECONDARY TELEPHONE NUMBER	20 DIGITS
SUPERVISORY TELEPHONE NUMBER	20 DIGITS
CONSOLE STATUS REPORT	OPTIONAL 1, 7 OR 30 DAY REPORT

NOTE: THE INSTALLER MUST VERIFY COMPATIBILITY BETWEEN THE GM2000B AND THE UL LISTED DIGITAL ALARM COMMUNICATOR RECEIVER

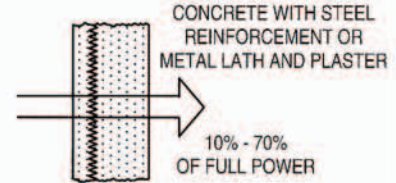
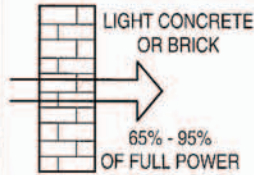
CONSOLE

OPERATING TEMPERATURE	32°-120° F (0-49° C)
HELP ALARM DURATION	1-30 MINUTES
ACTIVITY TIMER PERIOD	8, 12, OR 24 HOURS
AUDIO	LISTEN-ONLY, 2-WAY MANUAL, 2-WAY VOICE ACTIVATED (DUPLEX) SPEAKERPHONE
RELAY OUTPUT	N.O. @ 24 VOLT AC/DC 1 AMP MAXIMUM, NEC CLASS II CIRCUITRY

23. WIRELESS INSTALLATION TIPS



CONSTRUCTION MATERIALS WILL AFFECT RADIO RANGE



CENTRALLY LOCATE CONSOLE



CONSOLE LOCATION WILL AFFECT RADIO RANGE

TRANSMITTERS AT THE OTHER END OF THE HOUSE MIGHT BE TOO FAR AWAY



LINEAR LIMITED WARRANTY

This Linear product is warranted against defects in material and workmanship for twelve (12) months. This warranty extends only to wholesale customers who buy direct from Linear or through Linear's normal distribution channels. Linear does not warrant this product to consumers. Consumers should inquire from their selling dealer as to the nature of the dealer's warranty, if any. **There are no obligations or liabilities on the part of Linear LLC for consequential damages arising out of or in connection with use or performance of this product or other indirect damages with respect to loss of property, revenue, or profit, or cost of removal, installation, or reinstallation.** All implied warranties, including implied warranties for merchantability and implied warranties for fitness, are valid only until the warranty expires. **This Linear LLC Warranty is in lieu of all other warranties express or implied.**

All products returned for warranty service require a Return Product Authorization Number (RPA#). Contact Linear Technical Services at 1-800-421-1587 for an RPA# and other important details.

IMPORTANT WIRELESS INFORMATION

Linear radio controls provide a reliable communications link and fill an important need in portable wireless signaling. However, there are some limitations which must be observed.

- For U.S. installations only: The radios are required to comply with FCC Rules and Regulations as Part 15 devices. As such, they have limited transmitter power and therefore limited range.
- A receiver cannot respond to more than one transmitted signal at a time and may be blocked by radio signals that occur on or near their operating frequencies, regardless of code settings.
- Changes or modifications to the device may void FCC compliance.
- Infrequently used radio links should be tested regularly to protect against undetected interference or fault.
- A general knowledge of radio and its vagaries should be gained prior to acting as a wholesale distributor or dealer, and these facts should be communicated to the ultimate users.

This device complies with FCC Rules Part 15 Operation is subject to the following two conditions:

- (1) This device may not cause harmful interference and
- (2) This device must accept any interference that may be received, including interference that may cause undesired operation.

NOTE: The manufacturer is not responsible for any radio or TV interference caused by unauthorized modifications to this equipment. Such modifications could void the user's authority to operate the equipment.