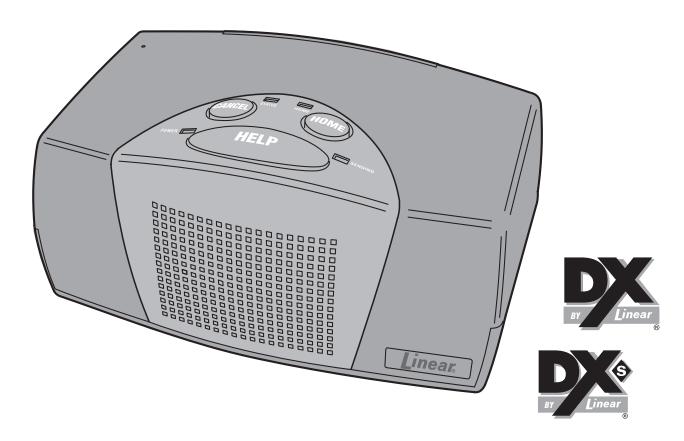
# **PERS-3600**

## Personal Emergency Reporting System



Installation & Operation
Instructions



USA & Canada (800) 421-1587 & (800) 392-0123 Toll Free FAX (800) 468-1340 www.linearcorp.com

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## PRODUCT DESCRIPTION

The PERS-3600 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", "timer done soon", and other system operation, setup, and supervisory prompts from a 49 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 PERS-3600 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 website: 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 three 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, DXS-62, DXS-63) 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**

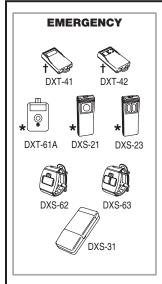
Supervised Model DXS-72 wireless photoelectric smoke alarm triggers the fire alarm. When the fire alarm is activated, the Console announces the fire alarm and a fire report is sent to the central station.

#### **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.

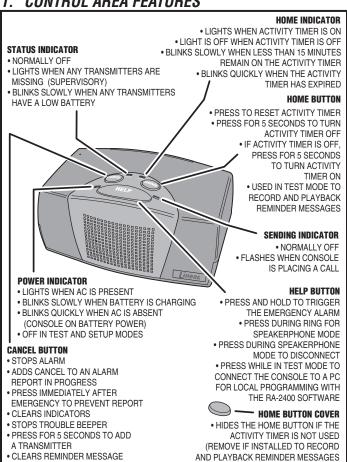




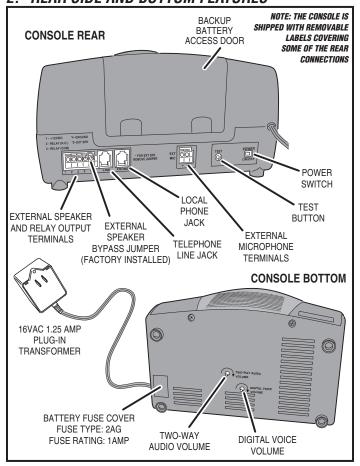
\* NOTE: NOT A UL LISTED DEVICE

† NOTE: COMPATIBILITY WITH THE PERS-3600 HAS NOT BEEN VERIFIED BY UL

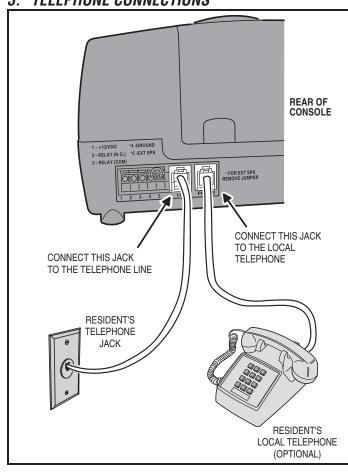
#### 1. CONTROL AREA FEATURES



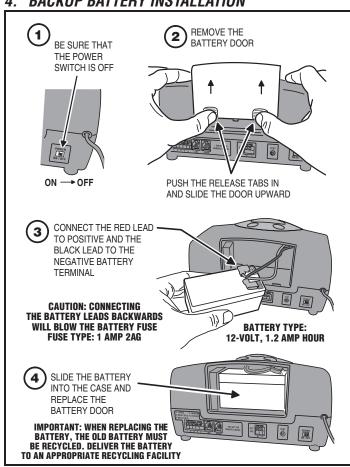
## 2. REAR SIDE AND BOTTOM FEATURES



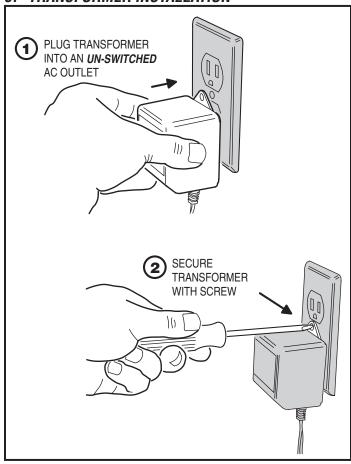
## 3. TELEPHONE CONNECTIONS



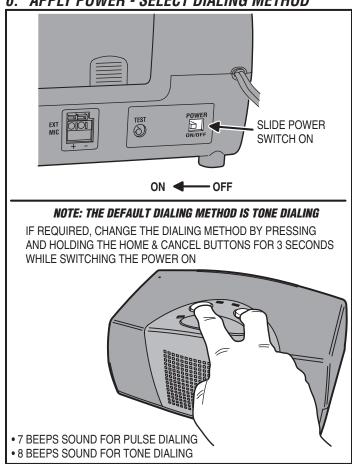
## 4. BACKUP BATTERY INSTALLATION



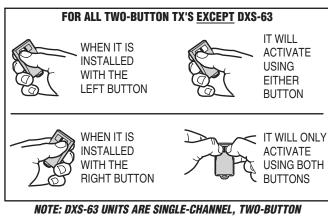
## 5. TRANSFORMER INSTALLATION



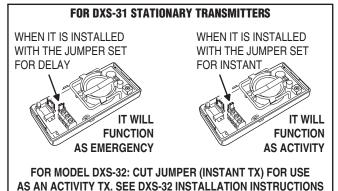
## 6. APPLY POWER - SELECT DIALING METHOD



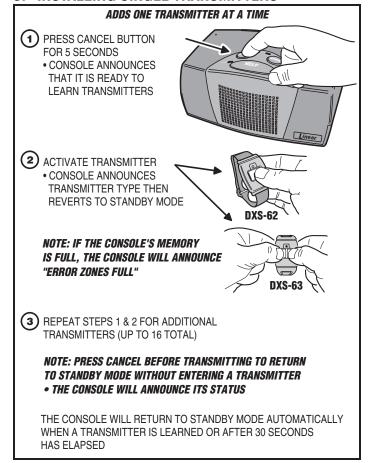
## TRANSMITTER INSTALLATION OPTIONS



TRANSMITTERS. BOTH BUTTONS MUST ALWAYS BE PRESSED TO ACTIVATE A DXS-63 TRANSMITTER.



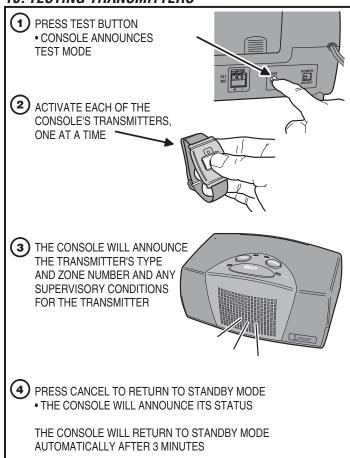
## 8. INSTALLING SINGLE TRANSMITTERS



## 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 DXS-62 **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

## 10. TESTING TRANSMITTERS



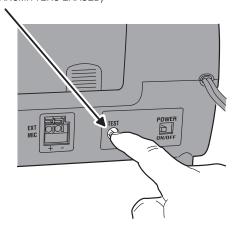
## 11. ERASING TRANSMITTERS

**AUTOMATICALLY AFTER 3 MINUTES** 

## **CAUTION: ALL TRANSMITTERS WILL BE ERASED!**

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

THE CONSOLE WILL RETURN TO STANDBY MODE



(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





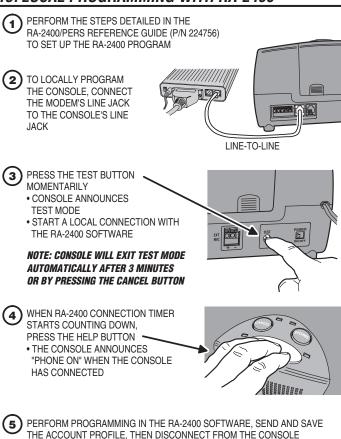








## 13. LOCAL PROGRAMMING WITH RA-2400



## 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

## 2 ACTIVITY TIMER RUNNING

THE HOME INDICATOR WILL LIGHT, SHOWING THAT THE ACTIVITY TIMER IS ENABLED



#### (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

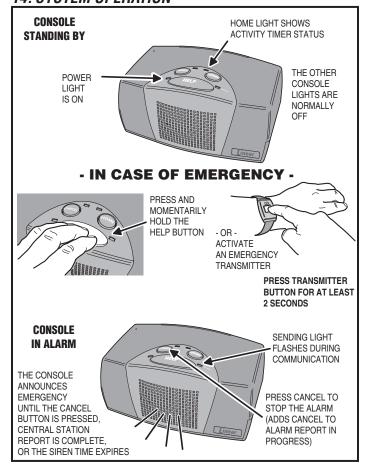
## 3 TIME RUNNING OUT

THE HOME INDICATOR WILL BLINK & THE CONSOLE ANNOUNCES EVERY 10 SECONDS WHEN LESS THAN 15 MINUTES OF TIME REMAIN





## 14. SYSTEM OPERATION



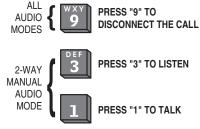
## 16. AUDIO OPERATION

- 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)

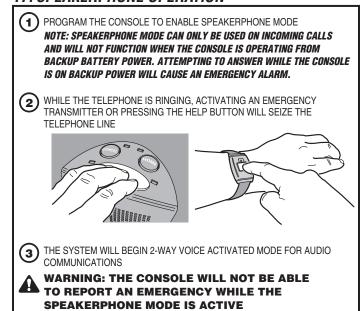


THE "1" AND "3" KEYS ARE NOT USED IN LISTEN-ONLY AUDIO MODE

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



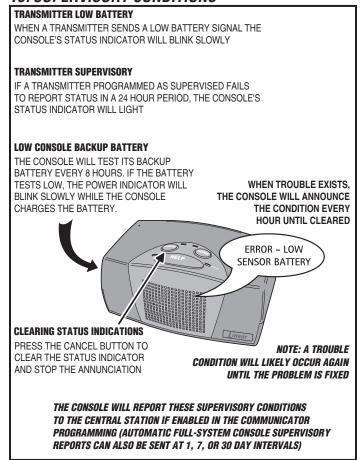
PRESS EITHER THE HELP BUTTON OR THE BUTTON ON AN EMERGENCY TRANSMITTER TO END THE PHONE CALL AND THEN PRESS ONE OF THESE BUTTONS AGAIN TO REPORT THE EMERGENCY.

NOTE: TO REPORT AN EMERGENCY WHEN THE SPEAKERPHONE IS IN USE.

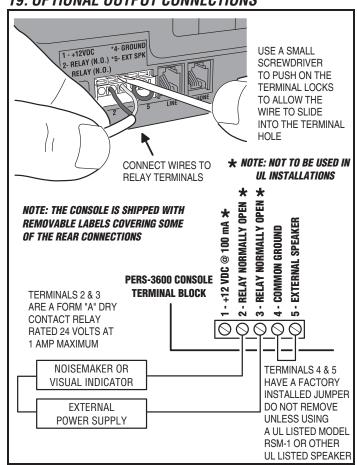
- THE HELP BUTTON IS PRESSED
- ANY EMERGENCY TRANSMITTER IS ACTIVATED.
- THE AUTO-DISCONNECT TIMER RUNS OUT (PROGRAMMABLE FOR 15, 30, OR 60 MINUTES)

(4) THE CONSOLE WILL END AUDIO COMMUNICATIONS WHEN EITHER:

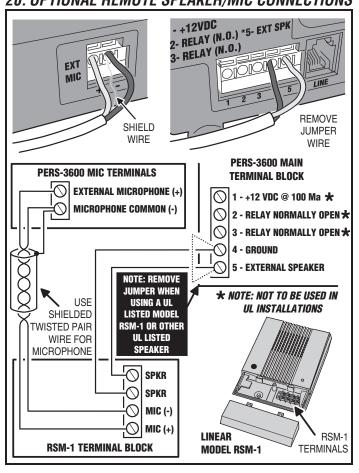
## 18. SUPERVISORY CONDITIONS



## 19. OPTIONAL OUTPUT CONNECTIONS



## 20. OPTIONAL REMOTE SPEAKER/MIC CONNECTIONS



#### 21. NON-VOICE PROMPT BEEP LEGEND

| WHEN VOICE PROMPTS ARE DISABLED, THE CONSOLE WILL SOUND BEE<br>TO INDICATE VARIOUS CONDITIONS | EPS . |
|---|-------|
| 1 BEEPTRANSMITTER ADDED TO A SENSOR ZONE  |       |
| 1 LONG BEEP SENSOR ZONES FULL   |       |
| 2 BEEPSCONSOLE IN STANDBY MODE, ACTIVITY TIMER ON   |       |
| 3 BEEPSCONSOLE IN STANDBY MODE, ACTIVITY TIMER OFF  |       |
| 4 BEEPSCONSOLE IN TEST MODE   |       |
| 5 BEEPSCONSOLE IN LEARN TRANSMITTER MODE  |       |
| 6 BEEPSCONSOLE HAS ERASED ALL TRANSMITTERS  |       |
| 7 BEEPSPULSE DIALING HAS BEEN SELECTED FOR THE CONSO  | LE    |
| 8 BEEPSTONE DIALING HAS BEEN SELECTED FOR THE CONSOL  | .E    |

## 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 30 HOURS MINIMUM BACKUP OPERATION DURATION BATTERY LIFE EXPECTED 3 YEARS 40 mA

BACKUP SUPPLY OPERATING CURRENT

BATTERY FUSE 1 AMP. TYPE 2AG

#### RF CHARACTERISTICS

RECEIVER TYPE DUAL-DIVERSITY SUPERHETERODYNE RF SENSITIVITY -100 dBm TYPICAL BADIO FREQUENCY

315 Mhz

MAXIMUM RANGE

400 FEET LINE-OF-SIGHT OPEN BANGE UL LISTED FOR 150 FEET

#### COMMUNICATOR

COMMUNICATOR FORMATS 4 BY 2 (GENERAL OR POINT-TO-POINT), ADEMCO CONTACT ID

LIL TESTED WITH SURGARD SGMLRG-DG CENTRAL STATION RECEIVER -

TONE OR PULSE DIALING DIALING DELAY 0 OR 15 SECONDS

REMOTE PROGRAMMING PASSWORD REMOTE COMMUNICATIONS PASSWORD ACCOUNT NUMBER LENGTH PRIMARY TELEPHONE NUMBER SECONDARY TELEPHONE NUMBER SUPERVISORY TELEPHONE NUMBER CONSOLE STATUS REPORT

6 DIGITS 4 DIGITS 4 DIGITS 20 DIGITS 20 DIGITS 20 DIGITS OPTIONAL 1, 7 OR 30 DAY REPORT

NOTE: THE INSTALLER MUST **VERIFY COMPATIBILITY** RETWEEN THE PERS-3600 AND THE UL LISTED DIGITAL ALARM COMMUNICATOR RECEIVER

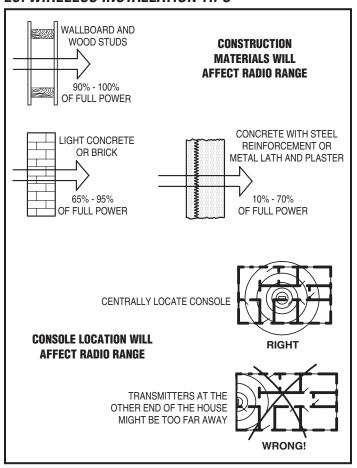
#### CONSOLE

OPERATING TEMPERATURE 32°-120° F (0-49° C) HELP ALARM DURATION 1-30 MINUTES ACTIVITY TIMER PERIOD

8. 12. OR 24 HOURS 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



## LINEAR LIMITED WARRANTY

This Linear product is warranted against defects in material and workmanship for twelve (12) months. The Warranty Expiration Date is labeled on the product. 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 Warranty Expiration Date as labeled on the product. 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
- 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 HISARS

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