# Dialink

| RevNo | Revision note | WWW.BUYELEVATOR.COM | WWW.COMPANYSRL.COM | Date | Signature | Checked |
|---|---|---|---|---|---|---|

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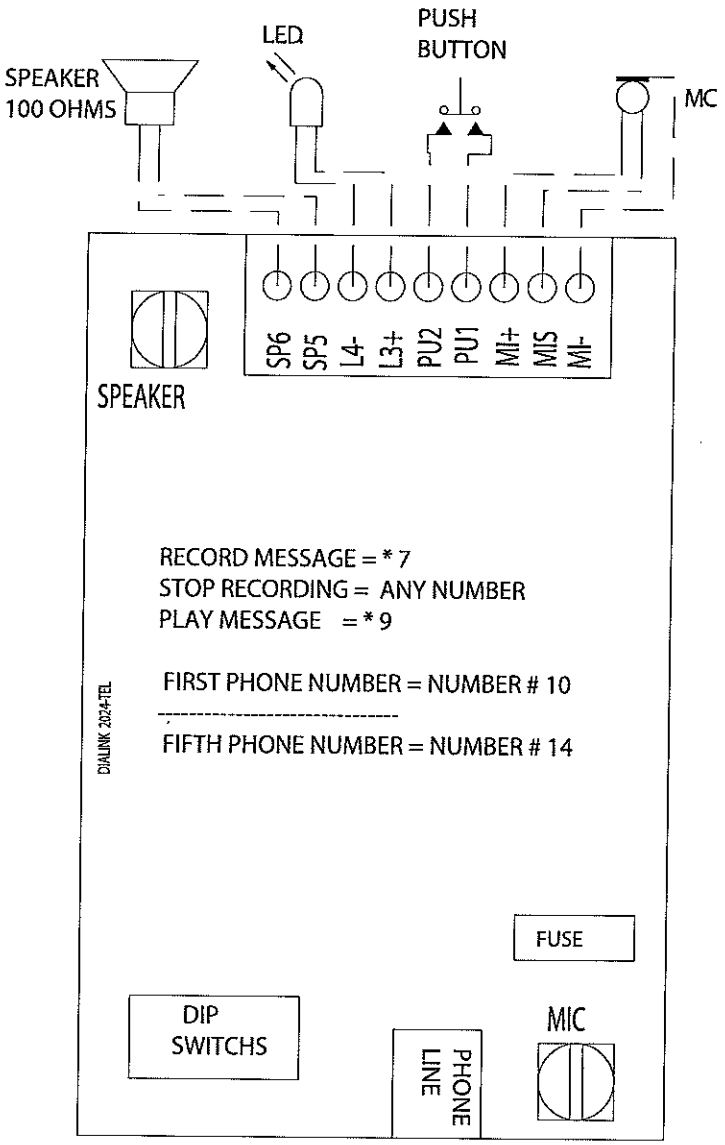
METAL BOX DIMENSION = 8 1/2" X 5" X 2 1/4"




RECORD MESSAGE = * 7
STOP RECORDING = ANY NUMBER
PLAY MESSAGE = * 9

FIRST PHONE NUMBER = NUMBER # 10

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FIFTH PHONE NUMBER = NUMBER # 14

NOTE: 1;2;3;4 =OFF DIP SW.
5 =OFF NO PASSWORD / DEFAULT
6 = ON RECORDING MESSAGE
7 = ON FOR INCOMING CALL
8 = ON PUSH BUTTON

NOTE: AFTER PROGRAMMING DIP SW 5 =ON
AND DIP SW 7=OFF

| Itemref | Quantity | Title/Name, designation, material, dimension etc | | Article No./Reference | |
|---|---|---|---|---|---|
| Designed by STC | | Checked by STC | Approved by - date 03/22/04 | Filename SES | Date 03/22/04 | Scale 1:1 |

COMPANY

DIALINK

2

Edition 0

Sheet

## 1 - Entering the Programming Mode.

The emergency telephone can be programmed from any Tocuh Tone telephone using a Analog PABX or C.O. line

### 1.1 - Without the Security password.

a. The dip switch N.5 has to be in the OFF posistion (no need for password to access programming Mode).
b. The dip switch N.7 has to be in the ON position (incoming calls are accepted). During normal functioning this dip should be at the OFF position.
c. From a tone type telephone, call the line where the Dialink is installed.
d. When the Dialink answer the call, it enters automatically the programming mode. This will be indicated by 2 short beeps.

Important: Once the programming of the Dialink has finish, remember to put the dip switch N.5 to the ON position (so a valid password is needed to enter the programming mode). Also put the dip switch N.7 in the OFF position, so incoming calls are not accepted.

### 1.2 - Using the security Code.

a. Put the dip switch N.5 in the ON position (password needed for programming access).
b. Put the dip switch N.7 in the ON position (incoming calls are accepted). During normal functioning the dip N.7 must be at the OFF position.
c. Once the Dialink answers the call, enter the 6 digit password, if the password entered is incorrect the Dialink will indicated this with 4 short beeps, otherwise it will enter the programming Mode and give 2 short beeps.

## 2 - Short Programming Table.

| | |
|---|---|
| First Emergency telephone number: | 0-20 digits then #10 |
| Second Emergency telephone number: | 0-20 digits then #11 |
| Third Emergency telephone number: | 0-20 digits then #12 |
| Forth Emergency telephone number: | 0-20 digits then #13 |
| Fifth Emergency telephone number: | 0-20 digits then #14 |

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| | |
|---|---|
| First information telephone number: | 0-20 digits then #20 |
| Second information telephone number: | 0-20 digits then #21 |
| Third information telephone number: | 0-20 digits then #22 |

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| | |
|---|---|
| ID number (Default cleared/000000). | 0-20 digits then #30 |
| Security Code (Default set 123456) | 6 digits then #31 |

Voice Announcer options (factory set 000100). 6 digits then #32

Timing/Dialing options (factory set 142314). 6 digits then #33

Speaker options (factory set 111111). 6 digits then #34

Announcer options (factory set 111111). 6 digits then #35

Diagnostic Requierment Code (factory set 111111) 6 digits then #40

Diagnostic options (factory set 000000). 6 digits then #41

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Central Station Receiver Number. 0-20 digitos #50
Central Station Voice Number. 0-20 digitos #51

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Note: 1 short beep indicates valid programming configuration. 4 Short beeps indicated a non valid programming configuration and/or data.

3 - ID number (configuration #30):

The ID number (up to 20 digits) is used by the emergency personnel to be able to identify the location of the Dialink calling. It is sent when the receiving party presses the "*" touch tone button. The emergency office can see this number thru a touch tone monitoring device (Dialink- monitor). To set the desired ID number, enter it in programming mode followed by the #30.

Example: Desired ID Code 234567, enter 2 3 4 5 6 7 # 3 0, you will then hear a 1 beep confirmation beep from the Dialink.

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4 - Security Code (configuration #31):

This password is used to allow the emergency personnel or installer to program the Dialink system. This password is used when the dip switch N.5 is at the ON position, otherwise no password is needed and the system will enter automatically the programming mode. The factory Default password is 123456. The security code must be a 6 digit code, and cannot include # or *.

Exmaple: if the new password is 456789, enter 4 5 6 7 8 9 # 3 1

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5 - Voice announcer Options (configuration #32):

The Dialink has a Voice announcer included as a standard (non-volatile digital voice announcer up to 15 seconds). Which is used to identify the location of the calling Dialink. The messages is recored directly from the remote touch tone telephone (DTMF). The following options are available:

Dial: a + b + c + d + e + f + # + 3 + 2

The first 2 digits have no efect and must be 0 + 0 (a + b).

5.1 - Repeat the digital voice announcer option (C digit).

The value of the digit C, indicates how many times is the message repeated before entering the communication mode. If the value 0 is set, the message will be repeated every 8 seconds until a remote * touch tone is received (default factory setting).

Once the digital voice announcer message is done, the Dialink will automatically send the ID number (up to 20 digits) if set, and after this it will iluminate the connected call LED.

5.2 - Message Delay Option (digits d+e).

The Dialink is factory set to automatically give the message once the call is considered answered (d+e = 0+0). The Dialink can be programmed to give the digital voice announcer message, after a set amount of time. Between 01 and 99 seconds after dialing. If this delay is used instead of the automatic feature, it is important to take in account the time needed for the Dialink to detect Busy or ring-no-answer when using the redial option.

5.3 - Message Volume Option (digit f).

The level of the digital voice announcer message can be from the amplifier (set by the speaker Preset, f = 1..9), or the from the recorded level volume (f = 0, factory default).

5.4 - Recording the message (dip switch N.6 must be ON).

1) To record the message in the Dialink, you must call to the Dialink from a touch tone telephone (DTMF) and enter programming Mode (if dip switch N.5 is at the OFF position no password is needed to access programing mode, otherwise a 6 digit password is needed). See section 1.

2) Once in programming Mode (it will be confirmed by the Dialink with 2 short beeps), to record the message touch * 7, once you here the Dialink confirm this oepration with 1 beep, you can start speaking the message (up yo 15 seconds, otherwise error occurs).

3) To stop the recording, press any touch tone. Inmediatly it will stop repeat and the new recorded message so you can check if it is correct.

4) To hear again the new message press * 9.

5) If no digital voice announcer messages is wanted, press * 8.

Example: "The car number 5, located at the Sawgrass Shopping mall is in a

emergency. Press the * key on your telephone to start or finish the digital voice message."

## 6 - Automating the Connected Call LED.

There are 2 ways of turning on the connected call LED. It will turn on when it receives a * key from the remote touch tone telephone, or after the digital voice announcer messages is given (1..9 times). If the LED is wanted to be turn ON automatically after the communication is connected and no voice messages is needed, program the Dialink as follow:

1) Program 0 0 1 0 0 0 # 3 2
2) Record a 1 second silent message. See section 5.4

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## 7 - Timing/Dialing options (configuration #33):

dial: a + b + c + d + e + f + # + 3 + 3

### 7.1 - Dial next number, on Ring No Answer (a Digit).

If a Ring no answer call is detected, the Dialink will try dialing with the next available number, and thru all numbers until a call is connected. The default factory setting of this option is disabled.

Values 0 and 1, indicate option disabled.

Values between 2 .. 9, indicate how many no answer rings before using the next available number.

### 7.2 - Talk/Listen Delay (b digit).

This value indicates the delay between talk and listen mode switching (Vox). Programmable in increments of 0.1 seconds (100mS). Touch tones 1 thru 9 are valid (0.1 .. 0.9 seconds). The default factory value is 4 (0.4 seconds).

### 7.3 - Dial next Number on Busy (c Digit).

If this option is enabled and a Busy call is detected, the Dialink will dial the next available number, and cycle thru all the available numbers until a emergency call is connected. The default factiry value is disable. Please note that if the Busy signal is interrupted with a promotional message, contact your central office to have it removed, otherwise the Dialink will not be able to detect a Busy call.

| digit | c Option |
|---|---|
| 2 | Enable |
| 1 | Disable |

7.4 - Call Time Out Timer (d Digit).

This option indicates the maximum of time that a call can be connected. Programmable between 1 and 9 minutes (touch tone key 1..9). Programming a value of 0 indicates Call Time Out timer has been turn OFF. In this case the Dialink must rely on a CPC signal to hang-up. The factiry default value is 3 minutes.

7.5 - Pulse Dialing Rate (e digit).

The Dialink can pulse dial with 2 different speeds. Factory default is 10 pps.

| Digit | e Option |
|---|---|
| 1 | 10 pps |
| 2 | 20 pps |

7.6 - Silence Time Out (f Option).

This option indicates how long a Call can be connected with no voice activity. It can be programmed between 10 and 90 seconds (1..9 touch tone keys). If the value 00 is programmed the timer is disabled. The factory default value is 40 seconds.

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8 - Speaker options (configuration #34).

dial: a + b + c + d + e + f + # + 3 + 4

8.1 - Speaker Active during programming (a Option).

The speaker can be activated during programing mode. The factory default value is activated. No yet implemented (to disable).

| Digit | a Option |
|---|---|
| 1 | active |
| 2 | disable |

8.2 - Speaker active during Dialing (b Option).

The Dialink can be set so, that during dialing the speaker is active. This way you can hear the dialing tone, dialing, and call in progress. The factory default value is active. Not yet implemented (to disable).

Digit b Option

```
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1 ..............  active
2 ..............  disable
```

8.3 Speaker active during message Playback (c Option).

The speaker can be active or not, during the playback of the digital voice message. From factory it comes activated.

| Digit | c Option |
|---|---|
| 1 | active |
| 2 | disable |

8.4 Speaker active during recording of the message (d Option).

The speaker can be activated during the recording of the digital voice message. The factory default value is off. No yet implemented (to enable).

| Digit | d Option |
|---|---|
| 1 | active |
| 2 | disable |

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9 - Microphone/ Speaker ajustment and dips switches.

To ajust the level of the speaker use the SPEAKER Preset. If the volume is to high, the audio may have distortion. And/or cause malfunction.

The Dialink has a Preset to ajust the sensibility of the microphone. In noisy locations it may be necesary de reduce the sensibility (MIC preset anticlockwise).

Important: Also notice that setting the gain too high, may cause distortion in the audio, inhibit next redialing number, and/or prevent the remote party from breaking over. Or Malfunction.

Important: Please note that the metalic case of the microphone must not be connected or touching Ground; or any other matelic part, as this might introduce noise (audio) to the system and/or malfunctioning.

8.1 - Dip switchs

1 ... Diagnostic Mode, (on=Yes, off=NO, only available for Multisel).
2 ... Diagnostic Mode Language (on=Spanish, off=English), only Multisel.
3 ... No effect.
4 ... No effect.
5 ... Programming with/without password (ON/OFF).
6 ... Recording message enable (on=Yes, off=NO)
7 ... Incoming Calls Accepted (ON=Yes, OFF=No). During normal functioning this dip switch should be off.
8 ... Push Button, On only or On/Off (OFF/ON).

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## 10 - Central Station programming.

The Dialink emergency telephone is set by default to communicate using the DTMF 4+2 Express, DTMF 4+1 Express, Ademco Contact ID, or the Ademco High Speed formats. All programming options use the configuration #30, to store the clients account code and alarm specifications.

## 10.1 - Central Station Options.

a. Enter programming mode as described in section 1.

b. Enable/Disable central Station Mode
The Dialink can be configured to Central Station Mode, this is done by programming a telephone number at the configuration #50. To cancel the Central Station mode program #50 only with no telephone number.

c. Ring delay
During Central Station mode it is better to have the ring delay programmed to a minimum of 4 rings. Most receivers send a long tone after answering the line that could be detected as a ring back, therefore if the Dialink is set to a ring delay of 3 or less, the telephone will on-hook (disconnect).

d. Emergency Dial numbers
The Dialink can be set to dial only the Central Station, or first dial up to one of the 5 Emergency dial numbers, and if no answer, then call the Central Sation receiver. During the calling of one of the 5 emergency dial numbers (configuration #10..#14), the Dialink will stay in 2-way communication Mode. When calling the Central Station number (configuration #50), the Dialink will be in a Listen only Mode, so it can understand the hand shake signals of the receiver.

When the Central Sation receiver does not have a Talk over Mode, the second Central Sation Number should be used (configuration #51). The operation is the following, when the configuration #50 has a telephone number, and the configuration #51 is cleared: the Dialink when dial first the central station monitor receiver. After the receiver sends a Kiss-Off, the Dialink lights the Call connected LED and goes into a 2-way talk mode.

If dial numbers are programmed in both configurations (#50 and #51) the operation will be the following one: the Dialink dials first the receiver, and after the Kiss-Off signal, the Dialink will hang-up and dial the telephone number at the configuration #51, for 2-way voice communication.

Important: If only a Central Station mode is to be used, the telephone of the Central Station must be programmed at the configuration #50, and the configurations #10 .. #14 must be cleared. The LED of Call connected will turn on automatically, if a digital voice announcer messages is recorded.

## 11 - Central Station Formats.

The following text shows the different formats that are supported. This data must be set at the configuration #30. Every example begins with a 4 digit account number. This number is assigned by your Central Station for billing and identification purposes. Remember that to set these configurations you must be in programming mode (see section 1).

Note: When a X is shown, use any appropiate number. If a number is shown that specific number must be used.

a. Express Format 4+1

This DTMF format consists of a 4 digit account number, 2 digits for message type, and a single digit event code.

Example: XXXX 17 X #30

XXXX -> Account number
17 -> Message Type
X -> Event Code
#30 -> configuration

b. Express Fornat 4+2

This DTMF format consists of a 4 digit account number, 2 digits for message type, and a 2 digit event code.

Example: XXXX 27 XX #30

XXXX -> Account number
17 -> Message Type
XX -> Event Code
#30 -> configuration

c. Ademco High Speed Format.

This DTMF format consists of a 4 digit account number, 8 zone codes, and 1 alarm type digit. With this format you can identify up to 8 different telephones by using a zone per phone. A 5 in a zone position means no alarm. Example: shows an alarm from the 3rd telephone.

Example: XXXX 55 1 55555 7 #30

XXXX -> Account number
55 -> Idel Zone
1 -> New Event
55555
7 -> Normal Alarm
#30 -> configuration

d. Ademco Contact ID format.

This DTMF format consists of a 4 digit account number, 2 digits for message type, and a 9 digit data field.

Ejemplo: XXXX 18 1 14000 XXX #30

XXXX -> Account number
18 -> Message Type
1 -> New Event
14000-> General Alarm

XXX -> Set to any number to identify telephone
#30 -> configuration

## 12 - Normal Operation.

When the emergency push button is pressed, the Dialink will active the line and place a call to a pre-programmed telephone number. During the dialing (pulse or tone) the connected call LED will flash. If during the dialing process the number is Busy or does not answer the call, the dialink can be set to dialing to a alternative number. The dialink will cycle between the programmed emergency numbers (up to 5) until it connects a call. Once this happens the digital voice announcer messages is given (so the remote party knows the location of the emergency), the ID number is sent (if enabled), and finally the connected call LED is turn on. Now a comunication is enabled between the remote party and the location of the Dialink. After this if the remote party presses again the touch tone key *, the digital voice annoucement will be given again, then the ID. Once the key * has been pressed, pressing the # key, will force the Dialink to hang-up.

## 13 - Central Station Operation.

Once the Dialink has been activated with the emergency press button, it will start to dial. If any voive configuration telephone has been programmed at #10 .. #14, these numbers will be dialed first. After a pre-programmed number of rings and no answer, or detecting a Busy signal, the Dialink will hang-up and dial the Central Station telephone number set at configuration #50. Once the Central Station answers, it will send a handshake tone to the Dialink. Upon detecting the handshake tone, the Dialink will start downloading the information set at configuration #30.

After sending this information (#30), is waits for a Kiss-Off tone from the Central Station receiver. After this, the emergency Dialink telephone turns on the Led of Call Connected and goes into the 2-way talk mode or hangs-up and dials the telephone number set at the configuration #51 (if set).

Important: If your Central Station receiver does not support a talk-over mode, a voice telephone number should be set at the configuration #51.

If the Central Station answers the call and does not send a Kiss-Off, the next number will be dialed (if set). In either single number or multi-number programming, the phone will keep dialing until a call is completed.

## 14 - Telephone numbers.

Each telephone number can have up to 20 digits. The special function digits as pause, dialing mode (tone/pulse), * key, or # key, are considered as 1 digit (even if to enter them, 2 touch tone keys are needed).

13.1 - Emergency numbers.
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The first number that is dialed during a emergency call this the one located at the configuration #10. The next numbers will be dialed if programmed, when a Busy or no answer call is detected. It will cycle between the numbers programmed until a call is answered. To program the number enter the digit plus the configuration desired (#10 .. #14).
To clear a dial number, enter 0 plus the option number (#10 .. #14).

| To Program | Press |
|---|---|
| * | ** |
| # | *# |
| 4 seconds pause | *4 |
| tone/pulse | *5 |
| 0, 1, 2, ..9 | 0, 1, 2 ..9 |

13.2 - Info Numbers.
---

The information numbers set at configurations #20, this the number or extension dial when the information press button is activated (optional). If no answer or busy is detected and the next information number has been set, it will dial it. Cycling thru the available information numbers until a call is answered. To set a information number, enter the desired number plus #20 .. #22. To clear a number simply program #20 .. #22 with no numbers before.

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15 - Specifications:
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| | |
|---|---|
| Requierments: | The Dialink works directly form the telephone line, and needs no external power supply. |
| Programming: | From a touch tone telephone. |
| Dialing Mode: | Tones (DTMF) or Pulses (10 pps or 20pps). |
| Digits Capacity: | Up to 20 digits per dial number. Can included pause (4 seconds for access to central stations PABX, etc), *, #. |
| Conection: | Paralell (tip y ring), with a RJ11 connector. |
| Circuit Protection: | Diecor/Varistor lightning suppressor and full wave polarity guard. |
| Auto Answer: | Automatically activates on incoming ring signal (dip N.7=on). |
| Visual LED: | Called party presses *, or comunication connected. |
| Environment: | -20 C a 60 C (-12 F to 135 F) with 5% to 95% non-condensing humidity. |

Dimensions PCB: 95mm x 155mm (Epoxy).

Aprobacion FCC: 10MUSA-18075-MT-E
IC (Canada): 1643 4093 A

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16 - Code Compliance.

Company SRL has taken great care in ensuring that our telephone system Dialink meets all code requirements. There are, however, additional requirements that have to be met in order for the installation and operation to pass code. We will attempt to list requirements pertaining to the installation of our telephone system. The ultimate responsibility, however, is yours. Consult local codes to be sure your installation complies.

a) Telephone equipment must be mounted at the proper height for people who use wheelchairs.

b) Make sure the called party knows how to make the visual indicator turn on. The signal is for hearing impaired and means that help is on the way.

c) Make sure the called party can determine the origin of the call without interaction from the occupants. This is accomplished by a caller ID (up to 20 digits) and/or by the standard digital voice announcer message. This function is used when the occupant of the elevator is speech and/or hearing impaired.

d) When installing the Dialink inside an elevator phone cabinet you should install a sign with raised and Braille lettering on the outside. A door handle allowing the physically impaired to open the door should also be installed.

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17 - Wiring.

We strongly recommend that the wires used to supply the telephone line to the Dialink emergency speakerphone be 20 AWG shielded, twisted pair. The shield must be continuous from the speakerphone through the traveling cable to the incoming telephone line termination. Make sure the shield is connected to a true EARTH GROUND AT ONE END ONLY!! This will minimize the interference from AC inductance and RF (radio frequency).

18 - Telephone lines.

For best operation, each Dialink emergency speakerphone must be installed on a analog touch tone (or pulse) telephone line. Compatible lines types are standard analog two-wire central office lines (POTS) from the local telephone company or most internal PBX systems.

The Dialink emergency telephone should be installed on a dedicated telephone line. Sharing a telephone line with other devices (e.g. fax machines, alarm systems, another telephone, etc.) could affect code compliance and/or cause the Dialink to malfunction.

The telephone line will be assigned a telephone number which allows the called party to call back to the location of the emergency. Take care to note this number abd supply it to the called party.

## 19 - Telephone line specifications.

Line Type: Standard tw0-wire voice analog.

Line Voltage: 24 VDC minimum on-hook.

Loop Current: 30mA minimum.

## 20 - State Confirmation (beeps).

### 19.1 - 1 Beep.

Is indicated when entering recording of the digital voice message, using the touch tone keys * 7 during programming mode.

### 19.2 - 2 Beeps.

a. When receiving the keys * 8, to erase the digital voice message during programming mode.
b. When the dip switch N.5. is OFF (no password needed), and the Dialink answer the incoming call, indicating that it is in programming Mode.
c. When the Dialink is first turn on, during Factory testing and the serial E2prom is not default programmed. The beeps indicate that the system has made an auto default programming. Then on-hook.
d. Indicates that a valid configuration number and value have been accepted (6 or 20 digits).

### 19.3 - 4 Beeps.

a. During the recording of the digital voice message, if the recording is longer than 15 seconds and no touch tone has been pressed, inidcating an error.
b. When the dip switch N.5 is OFF, and the serial E2prom is not installed or is malfunctioning.
c. When recording a digital voice messages and it is less than 0.8 seconds of duration. This messages will not be accepted.
d. During the programming of a configuration with up to 20 digits, if the 20 digits is exceeded it will be aborted and indicated with 4 beeps.
e. During programming if a non-valid configuration is addressed (#xx), the system will indicate the fault. f. If trying to program configuration #32 (voice announcer options), and the digital voice announcer message is disable by configuration #35.
g. During the programming of the configurations #33 or #31, if less or more than 6 digits are pressed.
h. If during the programming of the configurations #33 or #31, non numeric values are used (* or #), the system will indicate the fault.
i. If during the programing to erase the digital voice messages is used (* 8) and the configuration #35 is set to disable the digital voice announcer.

j. If during programming mode another option which is not *7, *8, or *9, is used it will indicate the fault with 4 beeps.
k. If during programming the options *7, *8, or *9 are used, and the configuration #35 is set to disable the voice announcer.

19.4 - Continuous Beeps.
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If the Dialink has it's dip switch N.5 at ON, and the serial E2prom is not installed/malfunction or dose not have a default programming.

The default factory programming will be done if the serial E2prom is installed and the dip switch N.5 is OFF. When the Dialink is turn on it will do the default programming, and when done it will indicate this with 2 beeps and then put the Dialink on-hook.

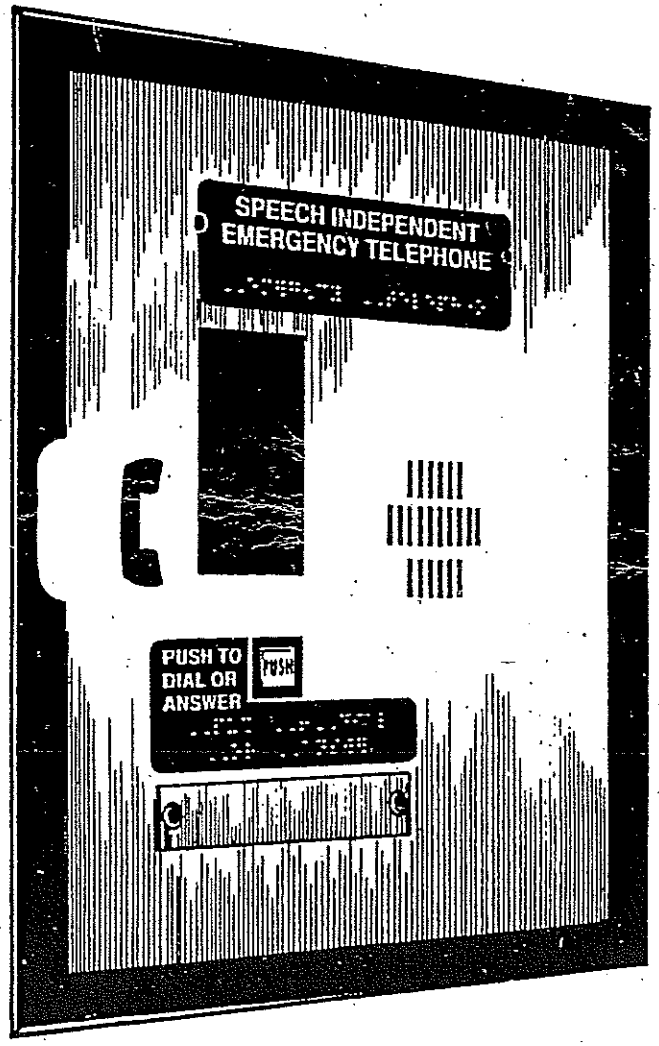
Note: The Dialink will dial to a emergency/info telephone only if the digital voice announcer message has been recorded (*7) or erased (*8). Or if the digital voice announer configuration N.35=00 (disabled)

# Dover - Helplink

DOVER®
ELEVATORS

# Owner's Guide

# HelpLink™




Encoder Assembly (812AA)
Decoder Assembly (812AD)
Programmer (812AC)

P.O. Box 2177, Memphis, Tennessee 38101 Phone (601) 393–2110 Fax (601) 342–4309

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## LIMITED WARRANTY

Dover Elevator Systems, Inc. warrants its products to be free of defects in material and workmanship for a period of 90 days from date of shipment.

We shall not be required to make repairs necessitated by negligence, abuse or misuse of the equipment due to accidents or any other cause beyond our control.

At the option of Dover Elevator Systems, Inc., the exclusive remedy is repair or replacement of a product that Dover Elevator Systems, Inc. determines deficient in material or workmanship.

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Send (transportation prepaid) all items to be repaired under warranty to:

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Dover Elevator Systems Inc.
P. O. Box 300
Walnut, MS 38683
(601) 223–4025

**CANADA**
Dover Corporation
1551 Caterpillar Road
Mississauga, Ontario L4X 2Z6
(416) 949–6700

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Manual No.: 39100-C

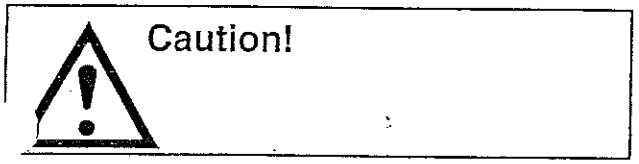
# Contents

# Safety Precautions

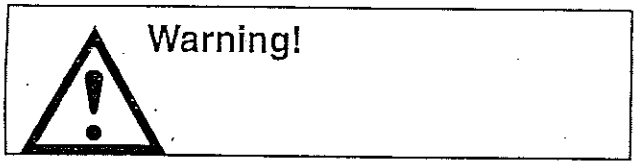
## Important!

**The procedures contained in this manual are intended for the use of qualified personnel. In the interest of your personal safety and the safety of others, do NOT attempt ANY procedure that you are NOT qualified to perform.**

All Procedures in this manual must be done in accordance with the applicable rules of the latest edition of the National Electrical Code, Article 620; the latest edition of ASME A17.1, Safety Code for Elevators and any governing local codes.




**CAUTION** statements identify conditions that could result in damage to the equipment or other property if improper procedures are followed.




**WARNING** statements identify conditions that could result in personal injury if improper procedures are followed.

# Federal Communications Commission (FCC) Regulations

To comply with FCC regulations, the following requirements must be met:

- If requested, the FCC registration number of these devices and ringer equivalence numbers, must be reported to the telephone company. See Table 1.

| Device | FCC Registration Number | Ringer Equivalence |
|---|---|---|
| Encoder | 2R7USA–75563–MT–E | 0.3A/0.9B |
| Decoder | 2R7USA-75975-OT-E | 0.0A/0.0B |

Table 1

- For reliable operation, the sum of ringer equivalence numbers for all devices connected to a single telephone line should not exceed 5.
- These devices must not be installed on coin-operated telephone lines or party lines.
- These devices must comply with part 15 of the FCC rules. Operation is subject to the following two conditions:
  1) This device must not cause harmful interference,
  2) This device must accept any interference received, including interference that may cause undesired operation.
- Repair work on these devices must be done by Dover Elevator Systems, Inc. or an authorized service center.

# DOC Registration

## DOC Registration Notes

The Canadian Department Of Communications label identifies certified equipment. The certificate means that the equipment meets certain telecommunications network protective, operational, and safety requirements. The department does not guarantee that the equipment will operate to a user's satisfaction.

Before installing this equipment, make sure you are permitted to connect it to the facilities of the local telecommunications company. You must also install the equipment using an acceptable method of connection. In some cases you may also extend the company's inside wiring for single line individual service by means of a certified connector assembly (telephone extension cord). You should be aware, however, that compliance with the above conditions may not prevent degradation of service in some situations.

Repairs to certified equipment should be made by an authorized Canadian maintenance facility designed by the supplier. Any repairs or alterations made by a user to this equipment or equipment malfunctions, may give the telephone communications company cause to request the user to disconnect the equipment. For your own protection, make sure that the electrical ground connections of the power utility, telephone lines and internal metallic water pipe system, if present, are connected together. This precaution may be particularly important in rural areas.

**Caution!**

**Do not attempt to make electrical ground connections yourself. Contact the appropriate electric inspection authority or electrician.**

## HelpLink™ Encoder Load Number

The load number (7) assigned to each terminal device denotes the percentage of the total load to be connected to the telephone loop used by the device, to prevent overloading. The termination on a loop may consist of any combination of devices, subject to the requirement that the total of the load numbers of all the devices not exceed 100.

## HelpLink™ Decoder Load Number

The load number (2) assigned to each terminal device denotes the percentage of the total load to be connected to the telephone loop used by the device, to prevent overloading. The termination on a loop may consist of any combination of devices, subject to the requirement that the total of the load numbers of all the devices not exceed 100.

## DOC Compliance Notice

This digital apparatus does not exceed the class A limits for radio noise emissions for digital apparatus as set out in the radio interference regulations of the Canadian Department Of Communications.

## DOC Avis De Conformation

Le Present Appareil Numerique N'emet Pas De Bruits Radioelectriques Depassant Les Limites Applicables Aux Appareils Numeriques De La Class A Prescrites Dans Le Reglement Sur Le Brouiliage Radioelectriques Edicte Par Le Ministere Des Communications Du Canads.

# Arrival of The Equipment

## Receiving

Upon arrival of the Equipment, inspect it for damage and promptly report all *visible* damage to the carrier. All shipping damage claims must be filed with the carrier.

## Storing

During storage in a warehouse or on the elevator job site, precautions should be taken to protect the Equipment from dust, dirt, moisture, and temperature extremes.

# Application

## Overview

HelpLink™ is an elevator emergency phone system which fully complies with the ADA requirements for elevator phones.

HelpLink™ is a "hands free" telephone system designed to operate on standard telephone lines which use tone dialing. The telephone uses standard voice communication from the elevator for emergency use. It also provides a method of identifying the location of that elevator by the party to whom the call is placed. Communication and access for emergency services is also provided to speech or hearing impaired persons through the location identification system and a set of display indicators on the "hands free" telephone. This is done through the passing of telephone tones (DTMF) encoded on the elevator telephone at each elevator and building. This system was designed for and will only work on telephone systems operating in the "DTMF" (tone dialing) mode.

Any time the telephone is in use, with the exception of when tones are being passed, normal verbal communication is possible by standing anywhere in the elevator and talking at a normal voice level. This device cannot be used on coin telephone lines or party lines.

The complete HelpLink™ system consists of (4) major components as follows (See Figure 1):

**Encoder Assembly (Elevator Telephone):** The encoded telephone model 812AA is a special use device designed to work with the HelpLink™ decoder model 812AD located at an answering service. The decoder is designated to receive telephone calls from elevator emergency telephones. The decoder generates a short telephone dial tone data stream to poll a remote encoder to determine the exact location of the elevator car and to control indicator lights at the encoder (elevator telephone) for visual communication to persons inside. The encoder and decoder, as a system, allow people (including the hearing and speech impaired) equal access to 911 emergency services, i.e., fire, police, and medical assistance. In the event of an elevator breakdown, assistance can be obtained through the answering service.

**Decoder Assembly (at answering service):** The 812AD Decoder is a special use device designed for use with the HelpLink™ encoded "hands free" telephone model 812AA that is located in the elevator car. The HelpLink™ decoder model 812AD generates a short data stream to poll a remote encoded telephone to determine the exact location of the elevator car. These two devices together, as a system, allow people (including the hearing and speech impaired) equal access to emergency services. This device cannot be used on coin telephone lines or party lines.

**Printer Assembly:** A standard RS-232 printer is required. The printer can be used to print the decoded job information when a HelpLink™ call is received. The printer must be configured per the printer manufacturers' literature and the *Specifications* section.

**Programmer Assembly:** This device is used to program the telephone number to be dialed, and the building information into the elevator phone (encoder).

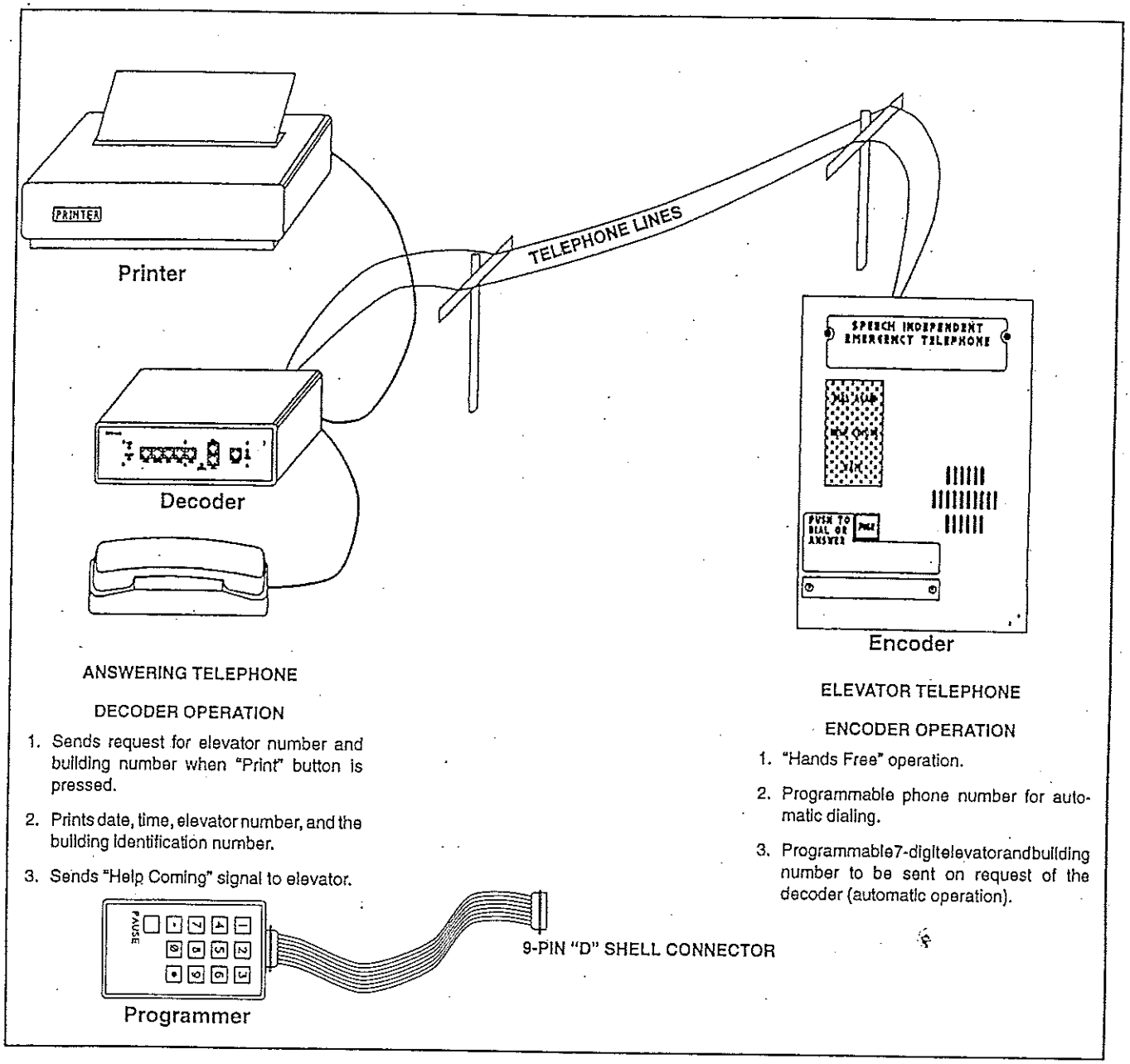

PRINTER
Printer
TELEPHONE LINES
Decoder
SPEECH INDEPENDENT EMERGENCY TELEPHONE
PUSH TO DIAL OR ANSWER
Encoder
ANSWERING TELEPHONE
DECODER OPERATION
1. Sends request for elevator number and building number when "Print" button is pressed.
2. Prints date, time, elevator number, and the building identification number.
3. Sends "Help Coming" signal to elevator.
ELEVATOR TELEPHONE
ENCODER OPERATION
1. "Hands Free" operation.
2. Programmable phone number for automatic dialing.
3. Programmable 7-digit elevator and building number to be sent on request of the decoder (automatic operation).
PAUSE
9-PIN "D" SHELL CONNECTOR
Programmer

Figure 1

# Specifications

## Encoder

This unit is installed in the elevator cab and features the following:

- Raised Braille characters
- Illuminated Flashing Messages for caller:
  1) **Wait** comes on as soon as the telephone is taken off-hook and remains on until a good interrogation is made by the answering service or until the phone goes back on-hook.
  2) **Help Coming** comes on when the answering service completes its interrogation. *Help Coming* indicates that the answering service knows the location of the elevator and is responding based on information for this job. This turns off a short period after the phone is hung-up.
  3) **Dial Again** comes on to indicate that the call did not go through or that a good interrogation was not completed before the phone was hung up. The call should be placed again so that the location of the elevator can be identified.
  4) **Wait and Dial Again (together)** indicates the phone line is already in use and that the call should be placed again when the line clears.
- LED Indicator lights for Troubleshooting:
  1) **Power** indicates that the power switch is turned on and that power is being supplied from either the battery or the 115 VAC outlet.
  2) **Battery Status:** Indicates the 3 conditions of the battery charger:
     Light **OFF** means the power cube is unplugged or the battery pack has failed.
     Light **ON** means the battery is charging.
     Light **Flashing** means the battery is fully charged and the charger is idle.
- On/Off Computer power switch
- Speaker and Microphone to enable 2-way "hands free" communications
- Automatic illuminated call button
- Back-up power source keeps the system operable for about 4 hours with loss of 115 VAC power. Batteries will reach a full charge in about 5 hours. Whenever the power cube is first plugged into its outlet, the battery charger will turn on for about 30 minutes to top off the battery.
- Programming outlet for setting phone number (up to 18 digits).
- Programming outlet for setting building data. There are 2 options available:
  1) 7-Digit: (2-digit elevator number and 5-digit building number)
  2) 11-Digit: (2-digit elevator number, 3-digit branch number, 1-digit service contract type, and 5-digit service contract number)
- Low REN (0.3A/0.9B) allows use of several hands-free phones on the same telephone line
  Type A Ringing (20 or 30 hz) up to 16 phones
  Type B Ringing (up to 66 hz) up to 6 phones
- The encoder can be called (and will ring) from any outside telephone. The telephone can be answered by pressing the Push to Dial or Answer button. A 1 minute conversation will be allowed before the phone is automatically disconnected. The call can be extended 1 minute by pressing the # button on the answering service telephone. The encoder telephone can be automatically hung-up by pressing the # and then * buttons on the telephone.
- DTMF Tones Received:
  1) **Interrogation** (# then 4)—request for encoder to send building and elevator data
  2) **Call Accepted** (# then 9)—building information accepted. This causes the Help Coming light to come on in encoder.
  3) **Hang-Up** (# then *)—request to automatically hang up the encoder phone.
- Power cube 115VAC/12VDC

## Decoder

The decoder unit must be installed at the location where the calls are received and features the following:

- Programming buttons (year, month, day, hour, minute) for setting date and time (24 hour clock)
- INC and DEC buttons to use for programming the time and date.
- LED Indicators for Troubleshooting:
  1) **Power** indicates that power is being supplied from the 115 VAC outlet.
  2) **On-Line** indicates the phone is on-hook and the printer is on-line.
  3) **Accept** indicates that a proper interrogation from an encoder has been received.

4) **Reject** indicates that an error occurred and a proper interrogation was not received.

- Standard phone jack connection
- 115 VAC/9VDC power supply
- Print button to send decoded message to printer
- Standard RS-232 serial printer connection.
- Lithium battery maintains clock setting with power off.
- Clock automatically adjusts for daylight savings time and leap years.

## Programmer

This device is used to program the telephone number to be dialed, and the building identification number into the elevator phone (encoder). It has the following features:

- 9 pin D-Shell connector with cable
- Keypad for programming

## Printer

Standard RS-232 printer or terminal required. The printer must be configured using printer manufacturer's literature, for the following:

- 9600 baud
- 8 data bits, 1 start bit, 1 stop bit, no parity
- full duplex operation
- skip perforation

**NOTE:** Carriage returns and line feeds are provided by the encoder.

# Installation

## Encoder

### Pre-Installation Requirements

1. Check to ensure that jumpers JP1 and JP3 are installed from the factory. (These are located on the back of the encoder close to the battery, at the bottom of the board.)

2. Remove fiber insulator between battery and clip.

3. The power cube requires 110 VAC to operate. The connection point where the power cube plugs into the encoder is located at the top on the innermost board (almost hidden).

### Mounting

1. Install and wire the 110 VAC outlet for the encoder, if required.

2. Determine the type of Encoder and install per the following guidelines:

**Warning!**

**This unit, as with all equipment located in an elevator, must be grounded per the Electrical Code.**

*Impulse phone box with exposed button (hinge on RIGHT facing front of phone door)*

1. Remove phone door, hinge, and magnets from the black frame.

2. Insert the encoder faceplate through the frame from the front.

NOTE: There are nuts provided in the installation kit to attach the faceplate to the frame. Use the flat washers provided on the side where the faceplate studs stick through the rectangular holes where the magnets were mounted (right hand side when viewing from inside the car station/swing return.)

3. Close car station/swing return to ensure clearance between the encoder and the phone box. If encoder will not clear the phone box, you must remove the phone box.

4. Route the phone line and power cube cable for clearance when accessing car station/swing return.

*Impulse phone box with exposed button (hinge on LEFT facing front of phone door)*

1. Remove phone door, hinge, and magnets from the black frame.

2. Remove the frame and rotate it 180 degrees.

**Caution!**

**Extreme care must be taken to accomplish removal of the clips holding the frame in place. The frame may be damaged.**

NOTE: Kit No. 200AF1, including new frame and clips, is available.

3. Insert the encoder faceplate through the frame from the front. There are nuts provided in the installation kit to attach the faceplate to the frame. Use the flat washers provided on the side where the faceplate studs stick through the rectangular holes where the magnets were mounted (right hand side when viewing from inside the car station/swing return.)

4. Close the car station/swing return to ensure clearance between the encoder and the phone box. If the encoder will not clear the box, you must remove the box.

5. Route phone line and power cube cable for clearance when accessing the car station/swing return.

*Impulse phone box with concealed button ("push-to-dial" button located behind phone door)*

1. Install mounting brackets on the encoder assembly.
2. Using the clips provided, attach the encoder assembly to existing impulse frame. (There is no need to remove existing clips holding the frame in place.)
3. Close car station/swing return to ensure clearance between the encoder and the phone box. If the encoder will not clear the box, you must remove the box.
4. Route the phone line and power cube cable for clearance when accessing the car/station swing return.

*Cutout mounted phone (separate unit - used in car stations without incline housing)*

1. Make a 7.625" × 10.375" cutout for the encoder.
2. Install the encoder in the cutout.
3. Close the car station/swing return to ensure clearance between the encoder and the phone box. If the encoder will not clear the box, remove the box.
4. Route phone line and power cube cable for clearance when accessing the car station/swing return.

## Wiring

See Figure 2 for Encoder wiring detail, and wire accordingly.

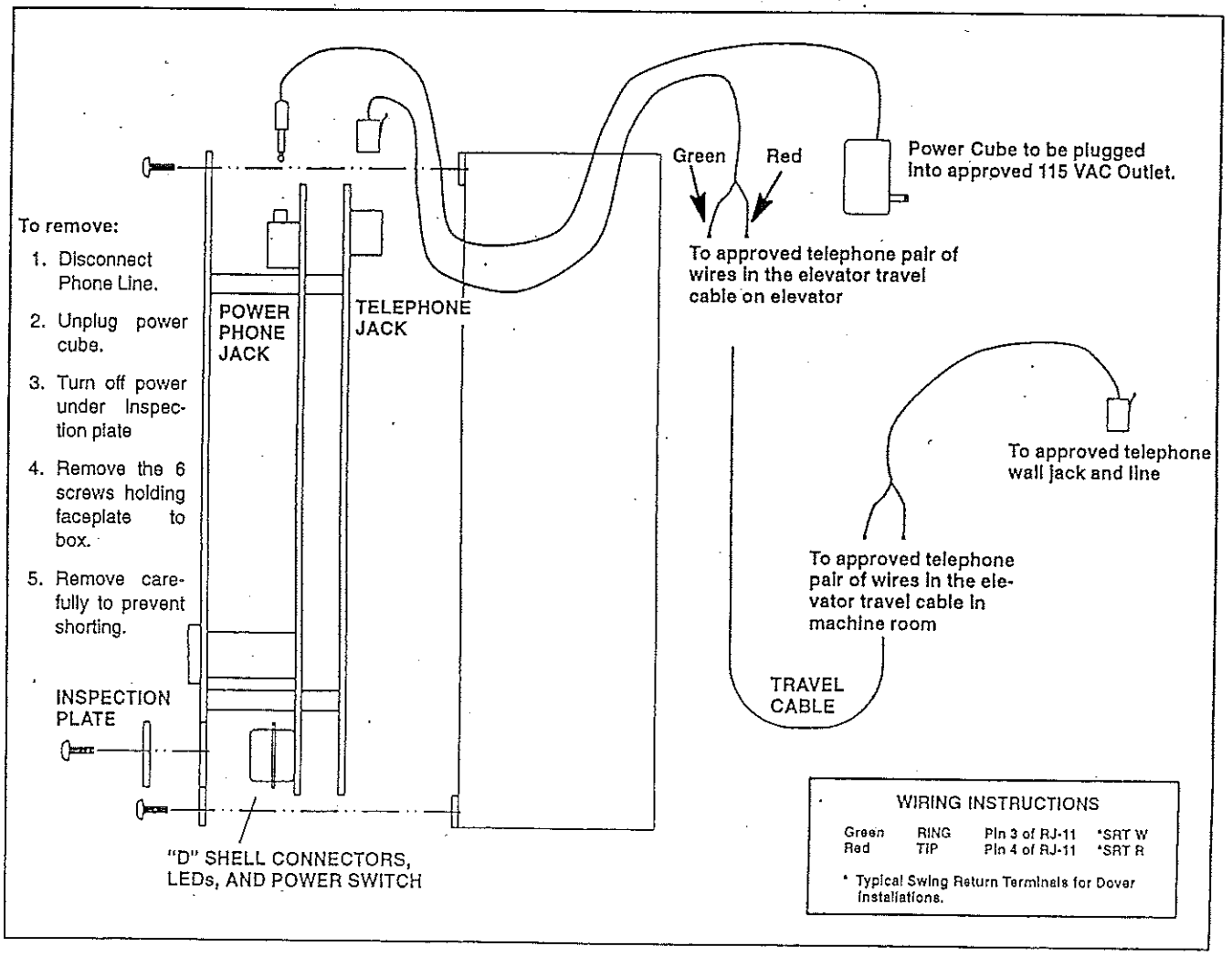



Figure 2

## Power-Up

1. Remove the inspection cover on the front of the phone so that the indicator lights can be observed.

2. Connect DC side of power cube to the encoder.

3. Insert the plug of the encoder power cube into a ground fault protected 115 VAC electrical outlet (typically wired to L10–L20 on Dover installations). When this is done the battery status indicator, observed through the inspection hole in the phone faceplate, should light.

4. Through the inspection hole turn on the computer power switch. The power indicator should light.

5. Press the **Push To Dial Or Answer** push button on the front of the phone. If the computer is running properly the **Dial Again** and **Wait** lights on the front panel should light for about 20 seconds.

## Programming

NOTES:

- All programming is done with the hand-held programming tool and MUST be done with the phone "on-hook".
- Once programmed, the numbers will be held in battery-backed memory.
- Any telephone number up to 18 digits (including pauses) can be programmed into the telephone.
- If a mistake is made when programming, the Push To Dial Or Answer button must be pressed one time before a new number can be programmed. To prevent dialing the bad number, disconnect the telephone line before pushing the button.
- Only one pause is allowed in the programming of each phone (a pause lasts about 4 seconds)
- When programming building identification number the encoder will automatically recognize the 7- or 11-digit identification number based on the number of digits programmed.

1. Program the telephone number:
   a. Remove the inspection hole cover.
   b. Connect the programmer D-Shell connector to the right hand connector. See Figure 3.

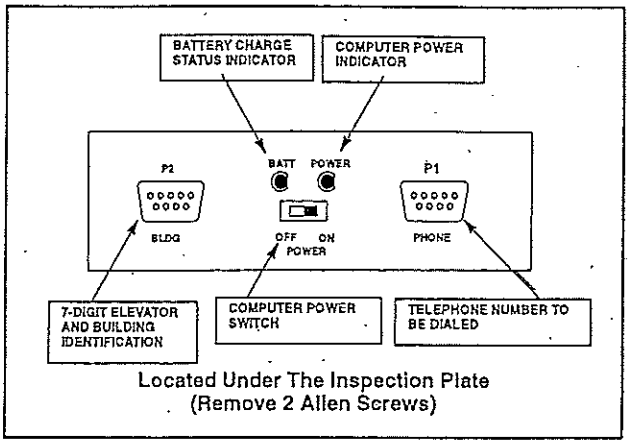



Figure 3

   c. On the programmer, enter the outside line access number, a pause, then the answering service telephone number.

**Example:** To enter the number 9–1–206–828–3110, press programmer keys: 9 Pause 1 2 0 6 8 2 8 3 1 1 0.

   d. Unplug the programmer.

2. Before programming the elevator and building identification code, determine if a 7- or 11-digit code is to be used.

**NOTE:** To assist programming, fill out the appropriate table. See Table 2 and Table 3.

3. Program the elevator and building Identification:
   1) 7-digit
      a. In the inspection hole, connect the programmer D-Shell connector to the left-hand connector (BLDG).
      b. Determine the elevator number (2 digits) and building identification number (5 digits). See Table 2.

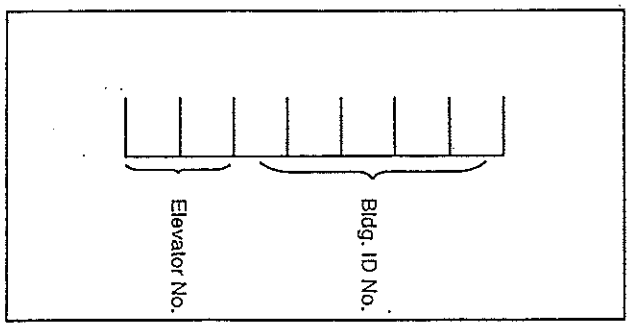



Table 2

      c. On the programmer, enter the numbers. The first 2 digits are the elevator number and the last 5 digits are the building number. Include any leading zeros.

**Example:** To enter elevator number 3 in building number 37, press programmer keys 0 3 0 0 0 3 7.

      d. Unplug the programmer.

   2) 11-Digit Identification
      a. In the inspection hole, connect the programmer D-Shell connector to the left-hand connector (BLDG).
      b. Determine the elevator number (2 digits), the branch number (3 digits), the type of service contract (1 digit, see Table 4), and the service contract number (5 digits). See Table 3.

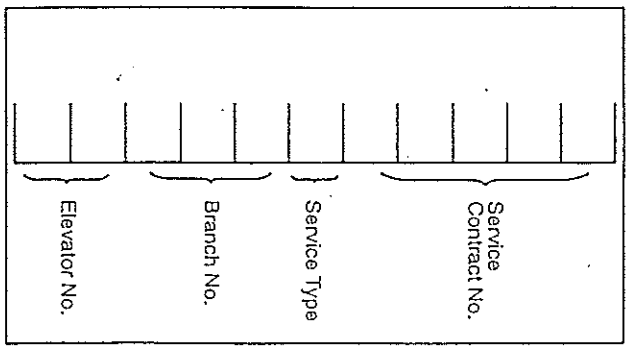



Table 3

**NOTE:** The branch number is the number of the Dover office in the city where the emergency call originates.

      c. On the programmer, enter numbers in the order of: elevator; branch; service contract; and contract. Include any leading zeros.

**Example:** To enter elevator number 2; Branch number 119; no service contract; and contract number 4937, press programmer keys: 0 2 1 1 9 0 0 4 9 3 7.

      d. Unplug the programmer.

**NOTE:** When a printout is received from this encoder, it will display the time, date and the following:
Elevator 2 Branch 119 Service NA Contract 4937

| Digit | Printer Message | Type of Service Contract |
|---|---|---|
| 0 | Service IM | Monitoring Only |
| 2 | Service IS | Full Maintenance |
| 4 | Service IL | Examination, Lubrication, and Monitoring |
| 6 | Service IN | Parts, Examination, Lubrication, and Monitoring |
| 9 | Service ?? | Not an acceptable number |

Table 4

## Testing

1. Connect the telephone set plug to the telephone wires on the elevator.
2. Press the **Push To Dial Or Answer** push button. (this places an emergency call).
3. Have the answering service do an interrogation on the system to see that the system is programmed and functioning correctly.

**NOTE:** This test requires a fully functional decoder at the answering service.

# Decoder

## Printer Set-Up

NOTE: The decoder uses a standard RS-232 serial printer which plugs into the rear of the decoder. The plug-in connection is a 25-pin 'D-shell' connector. Your printer should be equipped with a cable that fits this connector.

1. Plug the power cord from the printer into the wall outlet and see that power indicators are on.

2. Using the printer manufacturers literature, configure the printer as follows:
   - Baud rate to 9600
   - 8 Data Bits, 1 Start Bit, 1 Stop Bit, No Parity
   - Full Duplex Operation
   - Skip Perforation

NOTE: Carriage returns and line feeds are provided by the decoder.

## Decoder Set-Up

1. Install the printer cable between your printer and the decoder unit.

2. Insert the plug of the decoder power cube into the decoder.

3. Install the telephone set plug into the "phone" socket at the rear of the decoder.

4. Connect the telephone wall outlet to the "line" socket at the rear of the decoder and check that the phone still works correctly.

5. Plug the power cube for the decoder into a wall outlet. The following should occur:
   - the printer will print a turn-on message with the time and date
   - the red **Power** indicator light on the decoder will turn ON.
   - the green printer **On Line** indicator light on the decoder will turn ON.

6. With the phone on hook, press the **print** button on the decoder. The printer should print the current time and date.

7. Lift the phone receiver and press the **print** button on the decoder. The following should occur:
   - a series of tones will sound in the telephone receiver
   - the **wait** indicator will light for two seconds
   - the **rej** (reject) indicator will light for five seconds.

## Decoder Programming

NOTES:
- The clock in the decoder has an internal lithium cell which maintains the time and date with automatic corrections for daylight savings and leap year.
- The clock is formatted based on a 24-hour day instead of a 12-hour am/pm day. This ensures that morning and evening hours are not confused when reading the printout.

  **Example:** 0700 = 7:00 AM
  1900 = 7:00 PM

- The year is set based on the last 2 digits
- The seconds in the timer are reset to zero when the "min" setting is changed.

1. Check that the decoder telephone is on-hook and the printer's **on line** light is lit.

2. Set the date and time by holding the appropriate button (year, month, day, hour, or min) and pressing **inc** (increase) or **dec** (decrease) buttons on the decoder. The date or time will increase or decrease by the number of times that the **inc** or **dec** button is pressed.

**Example:** To set the year as 1993 (with the year defaulted at 00); hold the **year** button and press the **dec** button 7 times.

3. Verify the correct time and date setting by pressing the **print** button on the decoder and reviewing the printout.

# HelpLink™ Flow Details

The following list shows how a typical Emergency call from an elevator encoder phone flows through the HelpLink™ system. The step numbers match the numbers in Figure 4.

1) If you wish to place an emergency call or answer the ringing telephone, press the **Push To Dial Or Answer** push button.
2) The **Wait** light in the elevator turns on to signal that a call is being made to the answering service.
3) If the elevator phone line is busy then it cannot send an emergency call.
4) The **Wait** and **Dial Again** lights will turn on for about 20 seconds to indicate that the call must be placed again.
5) If the line is not busy, the answering service phone will ring.
6) The answering service answers the phone.
7) If the answering service does not answer within 30 seconds of call placement, the **Dial Again** light in the elevator will turn ON.
8) When the answering service answers the call, they will hear periodic beeps indicating that the call is from a HelpLink™ phone.
9) The answering service presses the print button on the decoder.
10) If the **Rej** light on the decoder lights, the decoded message from the elevator did not come through and the print button must be pressed again.
11) If the printer is on-line, it should print the appropriate message identifying the distributor, the building and the elevator number as well as the time and date that the call came in (message is 7- or 11-digit based on how the encoder is programmed).
12) The decoder sends a message which lights the **Help Coming** message in the elevator to inform the person in the elevator that their call has been acknowledged.
13) When the interrogation is complete, the off-hook time is extended for another 2 minutes so further attempts can be made for verbal communication.
14) If verbal communication is established, the answering service determines the nature of the call to determine the proper response.
15) Each call is set for 2 minutes of communication time. Seven seconds before the call is automatically terminated, a sequence of beeps sounds on the answering service phone.
16) If more time is needed, the answering service presses the # button, then the 1 button to extend the call another 2 minutes. The call can be extended as many times as required to conclude the call.
17) The answering service evaluates the call based on the conditions and the job specific instructions and initiates the appropriate action (dispatch a service person; contact building personnel; etc.)
18) The answering service hangs up the phone when the call is complete (this automatically hangs up the emergency phone after a time–out) or the answering service presses the # button, then the * button (to cause the emergency phone to immediately hang–up).

# HelpLink Phone Call Flow

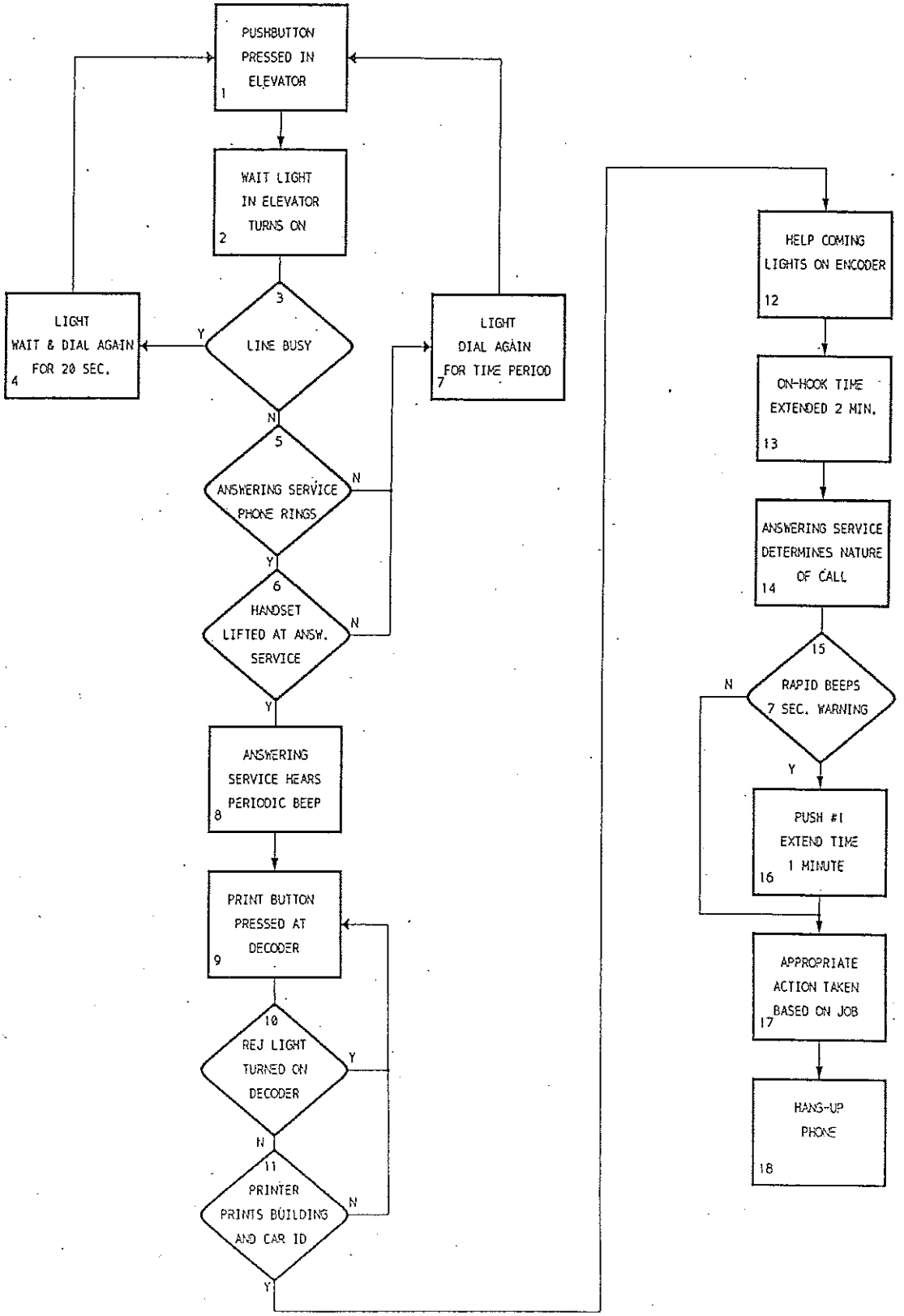



Figure 4

# Maintenance

## Card Cleaning

1. Periodically inspect the cards for excessive dust.
2. If necessary, turn off CPU switch, disconnect power cube and clean cards with a non-nylon brush.

**Caution!**

**Failure to follow proper anti-static procedures when handling electronic assemblies could result in damage to electronic components.**

## Encoder Battery

The batteries used are ni-cad rechargeable type. The unit should be tested periodically with power off to verify the unit will function.

## Periodic Testing

Periodic testing should be done by building personnel in order to be certain that the encoder and phone lines remain functional.

# Troubleshooting

## Encoder

The following is a list of common problems and their possible causes:

*Red **Power** LED is not ON*

- Power cube not properly inserted into 115 VAC power supply
- Power cube jack not properly inserted into Printed circuit card.

*The **Wait** and **Dial Again** lights continually. Turns on when the **Push to Dial or Answer** button is pressed:*

- Telephone line is NOT in service
- Phone connections NOT properly made to the telephone jack and the printed circuit board.

*The voice breaks-up when talking as a hands-free phone.*

- External noise within the elevator causes the encoder to transmit which causes any incoming voice signals to be cancelled (a simplex phone system, it cannot receive and transmit at the same time).

## Decoder

The following is a list of common problems and their possible causes:

*Red **Power** LED is not ON*

- Power cube NOT properly inserted into 115 VAC power supply
- Power cube jack NOT firmly inserted into the decoder.

*Green **On Line** LED is not ON*

- No power to the printer
- Printer on-line switch/button is NOT in proper position
- Improper wiring or connections between the printer and decoder
- Improper printer type or set-up (See printer specifications)
- Printer problems, Paper out, Jam or any other problem which takes the printer Off-Line.

# Replacement Parts

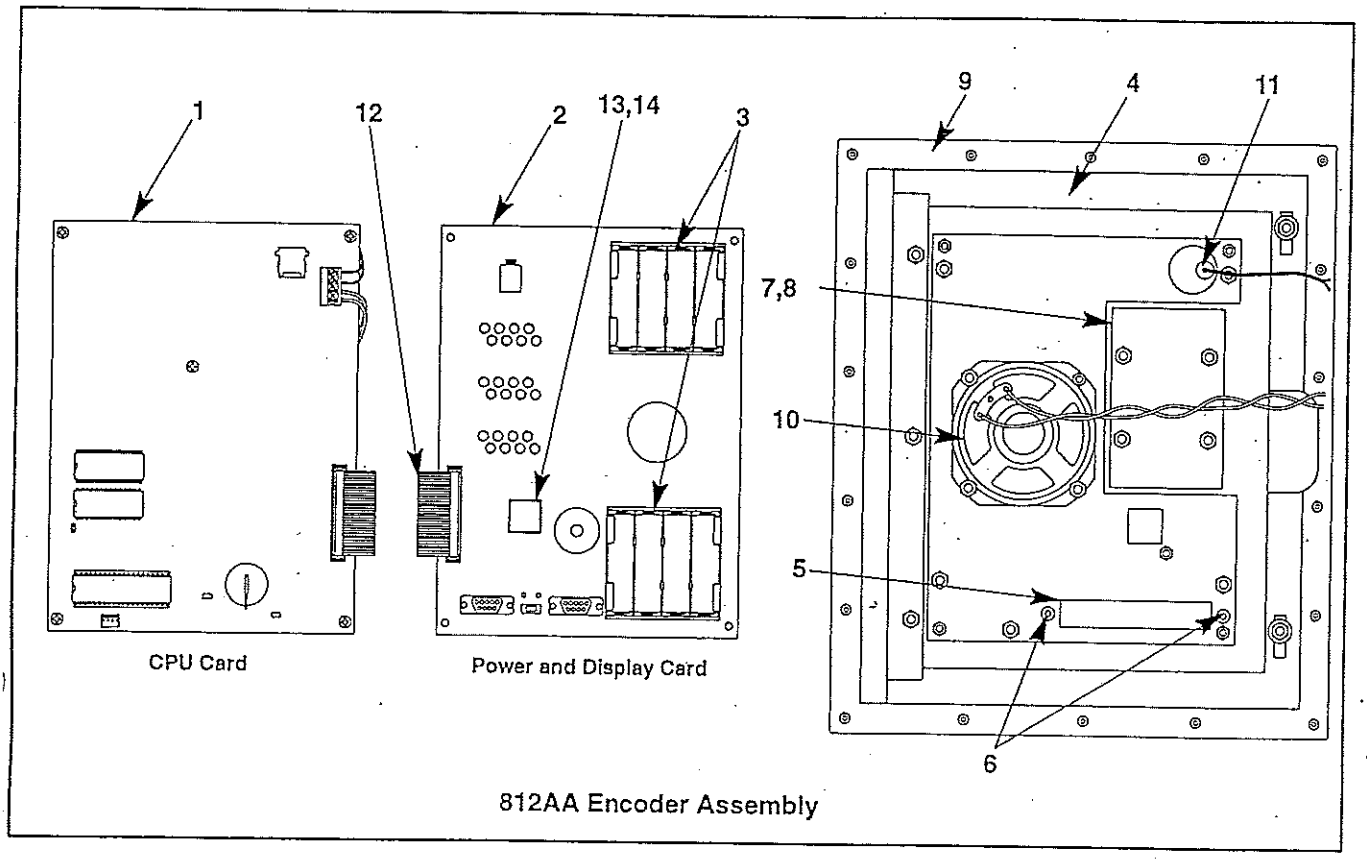



Figure 5

| ITEM | PRINT NO. | DESCRIPTION |
|---|---|---|
| 1 | 6300EX1 | Card, CPU |
| 2 | 6300EY1 | Card, Power and Display |
| 3 | 116AE1 | Battery, Ni-Cad chargeable |
| 4 | | Faceplates (specify finish ) |
| 5 | | Access Plate (specify finish) |
| 6 | 160623 | Access Plate screws |
| 7 | 160627 | Lense, plexi-glass gray |
| 8 | 160628 | Film, display |
| 9 | 168AA2 | Frame, Telephone Door |
| 10 | 170090 | Speaker |
| 11 | 170089 | Microphone |

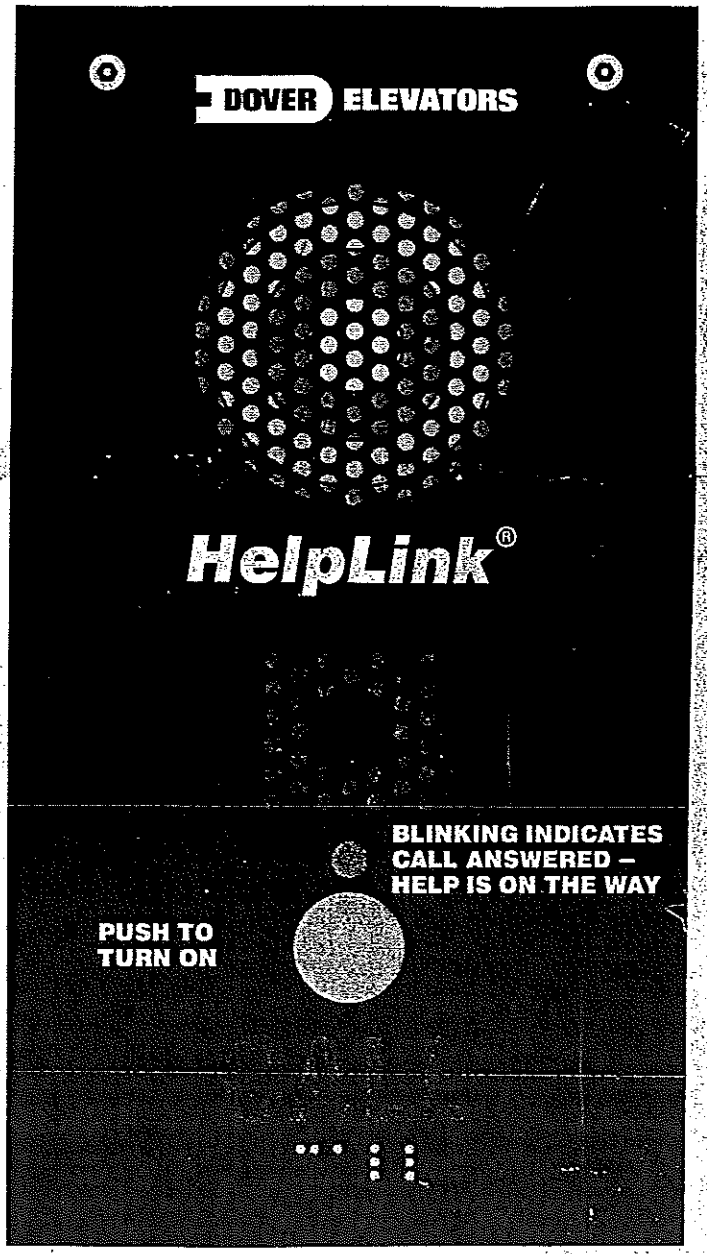
| ITEM | PRINT NO. | DESCRIPTION |
|---|---|---|
| 12 | 170087 | Cable, ribbon |
| 13 | AB6Q-BK1-Y | Button Cap (IDEC) |
| 14 | LAPD-1-W | LED (IDEC) |

Items Not Shown

| | | |
|---|---|---|
| 15 | 170092 | Power Cube, Encoder |
| 16 | 812AC | Programmer |
| 17 | 812AD | Decoder |
| 18 | 687AY2 | Receptacle Outlet |
| 19 | 129BH1 | Bracket, Outlet |

DOVER®
ELEVATORS

# HelpLink®

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ELECTRONIC MICRO SYSTEMS, INC
2505C VICEROY DRIVE WINSTON-SALEM, NC 27103
800-333-3671 FAX: 888-333-3671

# IMPORTANT INFORMATION ABOUT USE OF BATTERIES ON NEXT SHEET.

**Operational functions apply to all phones styles**

- **Helplink Phone-New Features Ver.2.6**
- Dials up to four phone numbers. See Item 1 below.
- Programmable 17 second delayed voice location message-message plays every 20 seconds. See Item 2 below.
- Highly immune to induced voltage surges
- Operator controlled muting of microphone for noisy conditions. See Item 3 below.
- Inexpensive power pack when connecting three to eight phones to the one dedicated phone line
- Elevator is selected with two digit code. See Item 3 and 4 below.
- Off site activation of phone allowing each function/feature of the phone to be remotely tested for proper operation. See Item 5 below.

**For those needing additional assistance, phones still have modular jack**

- Modular jack permits programming, testing of phone line, and calling vendor for assistance with troubleshooting phone

**PROGRAMMING INFORMATION FOR NEW FEATURES**

1. Program the third and fourth phone numbers by using "#2------*#" and "#3-------*#". Erase programmed phone numbers by entering "#2*#' and "#3*#".
2. To delay the voice location message change go into programming mode and enter new setup code "#*1180185*#".
3. Change the setup code for each phone so that the sixth digit of the setup code matches the elevator number (1-8).
4. After calling phone number of elevator phones press "*-followed by the number of the elevator you wish to talk to.
4. Pressing "#" will mute the speaker. Any digit after that will enable the microphone.
5. To remotely test the phone go into programming mode, program the phone as needed and then end programming with "*#".

**If you have any questions about the use of these features please call us at 1-800-333-3671 from any phone or from a phone plugged into the black jack on the back of the HelpLink phone.**

# USE OF BATTERY

The EMS, Inc. elevator phone has been redesigned and the following information is about the use of a battery. For uninterrupted service follow the following guidelines.

You need a 9 volt battery or a power pak when:

1. The phone is being programmed and you have a phone plugged into the black jack on the back of the phone board.
2. The phone drops off the phone line without completing the call.
3. You have more than one phone on the same line and you want to be able to call back to a particular elevator phone OR you want to be sure that all the elevator phones can be "ON" at the same time for instance during a power failure.

For testing purposes any charged 9 volt battery can be used.

ALKALINE BATTERY- can be used on all phone lines. The battery will need to be replaced in three years and it should be checked every 6 months. No AC connection is required. Cannot be trickle charged.

LITHIUM BATTERY- can be used on all phone lines. The battery will need to be replaced in eight years and checked every 6 months. No AC connection is required. Cannot be trickle charged.

POWER PAK- can be used on all phone lines. The Ni-Cad battery in the power pak will need to be replaced in eight years and checked every 6 months.

NI-CAD BATTERY- can be used only on internal phone systems. You know you are on an internal phone system when you have to dial "9", etc. to be able to dial outside the building. For the battery to maintain its charge you must place the red shorting jumper over the two pins Labeled "BC". The Ni-Cad battery will need to be replaced in eight years and checked every 6 months. See diagram

# Contents

# Federal Communications Commission (FCC) Regulations

To comply with FCC regulations, the following requirements must be met:

- If requested, the FCC registration number of the device and ringer equivalence numbers, must be reported to the telephone company. See Table 1.

| FCC Registration Number | Ringer Equivalence |
|---|---|
| HCMUSA–32041–TE–T | 1.6B |

**Table 1**

- For reliable operation, the sum of ringer equivalence numbers for all devices connected to a single telephone line should not exceed 5.
- The device must not be installed on coin-operated telephone lines or party lines.
- These devices must comply with part 15 of the FCC rules. Operation is subject to the following two conditions:
  1) This device must not cause harmful interference,
  2) This device must accept any interference received, including interference that may cause undesired operation.
- Repair work on these devices must be done by Dover Elevator Systems, Inc. or an authorized service center.

# Arrival of The Equipment

## Receiving

Upon arrival of the Equipment, inspect it for damage and promptly report all *visible* damage to the carrier. All shipping damage claims must be filed with the carrier.

## Storing

During storage in a warehouse or on the elevator job site, precautions should be taken to protect the Equipment from dust, dirt, moisture, and temperature extremes.

# Application

## Overview

HelpLink® is an elevator emergency phone system which fully complies with the ADA requirements for elevator phones.

HelpLink® is a "hands free" telephone system designed to operate on standard telephone lines which use tone dialing. The telephone uses standard voice communication from the elevator for emergency use. It also provides a method of identifying the location of that elevator by the party to whom the call is placed. Communication and access for emergency services is also provided to speech or hearing impaired persons through the location identification system and a display indicator on the "hands free" telephone. This is done through the passing of telephone tones (DTMF) encoded on the elevator telephone at each elevator and building. This system was designed for and will only work on telephone systems operating in the "DTMF" (tone dialing) mode.

Any time the telephone is in use, with the exception of when tones are being passed, normal verbal commu-

# Installation

## Pre-Mounting Requirements

1. Remove the U1 chip if it is present. See Figure 5 for location.

**NOTE:** Step 1 applies only to elevator phones used with an automated answering service such as SoundNet. Do not remove U1 chip if phone will be voice programmed. Also see *Appendix, Optional Voice Chip Programming.*

2. Check DC and AC voltage on the phone line that will be connected to the elevator phone.
   - DC voltage should be between 24 and 50 VDC.
   - AC voltage should be near 0 VAC (less than 2 VAC) .

**Warning!**

**Do NOT touch bare phone wires. AC voltage can rise to 90 to 120 VAC when phone rings for an incoming call.**

## Mounting

When HelpLink® is purchased with a job, it may already have been mounted by the Factory. There are two cases in which no mounting is necessary by the Field. If either of the following applies, continue with *Wiring.*

**Case 1:** An Impulse® Style CALL button and Indicator light are mounted in an inclined housing with the microphone and speaker mounted behind the swing return or Car Operating Panel.

**Case 2:** The elevator phone is mounted inside the Swing Return Phone Box.

There are two options with which mounting is necessary.

**Option 1:** Elevator phone goes behind phone door. Phone is in a box with a faceplate which attaches to back of phone box.

1. Remove the HelpLink® Phone Box cover by lifting it at the top, sliding it down to free it, then lifting it out.

**NOTE:** Inside the box is a plastic bag which contains two tamper-proof screws and a special allen wrench for securing the cover to the box.

2. Mount HelpLink® phone box per Figure 1.

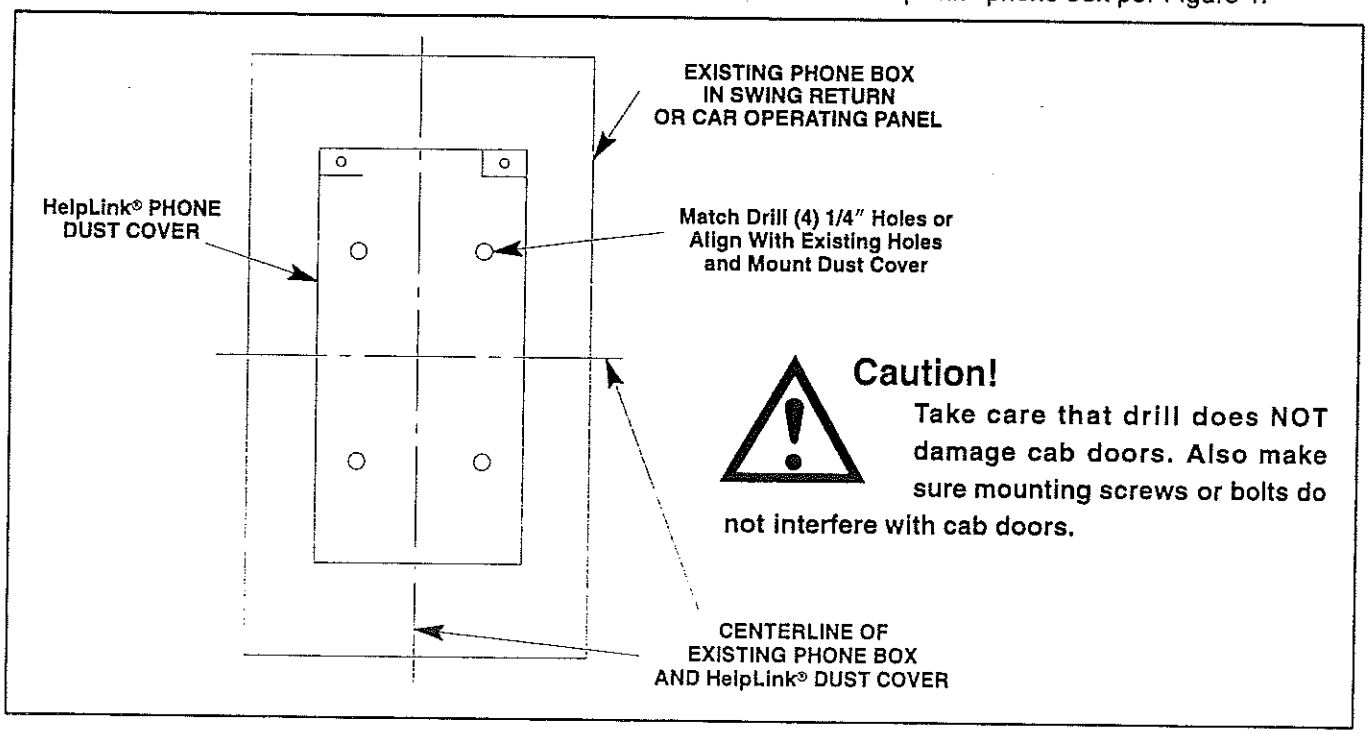



Figure 1

## Wiring

The Factory recommends that the wiring for the incoming phone line from the controller to the elevator phone board be a twisted-shielded pair with the shield grounded at the controller end only. Any terminations or splices between the controller and the elevator phone should have the shield carried through the termination or splice and not grounded at that point.

1. Remove the TELCO wiring terminal block and attach the incoming phone line to the two terminals—polarity is not important. See Figure 5.

**Caution!**

**Never wire the incoming phone line to the modular plug on the elevator phone board. Damage to phone board will occur if phone board is submitted to the high voltage of a "ring" signal.**

2. Tape up any bare wire or shields to prevent shorting.
3. Plug the TELCO wiring block onto the phone board. See Figure 5 for location.

# Connecting And Programming

**NOTE:** If programming with a voice chip, skip *Preparation* and continue with *Connecting*.

## Preparation

1. Determine the emergency number for the elevator phone to call. Use the local office's unique 1–800 number to SoundNet.

**NOTE:** The number can be obtained from either the local office or SoundNet (1–800–881–4337).

2. Determine if any preceding numbers, such as 9 or 8, are needed to obtain an outside line.

**NOTE:** Wherever a pause is needed, press the # key on the touch-tone phone.

3. Write the complete emergency number in Figure 3.

**Example:** The local emergency number to SoundNet is 1–800–123–4567. Dialing 9 is necessary to obtain an outside line. The keys pressed would be:

9 # 1 8 0 0 1 2 3 4 5 6 7

**NOTE:** The elevator phone can be programmed with two (2) emergency numbers. The Factory recommends that the second number be programmed and that it is also the local emergency number to SoundNet.

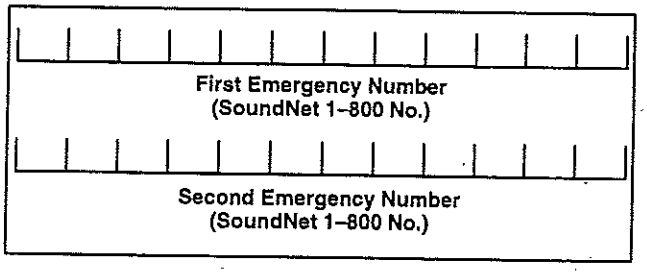



**Figure 3**

4. Determine the 11-digit Building and Elevator Identification number. This number identifies to SoundNet the location of the building and the elevator. Write the number in Figure 4, including any leading zeros to fill all spaces.
   a. Write the elevator number (2 digits).
   b. Write the branch number (3 digits) The branch number is the number of the Dover office in the city where the emergency call originates.
   c. Write the type of service contract (1 digit, see Table 2)
   d. Write the service contract number (5 digits).

**Example:** To enter elevator number 2; Branch number 119; no service contract; and contract number 937, press keys: 0 2 1 1 9 0 0 0 9 3 7.

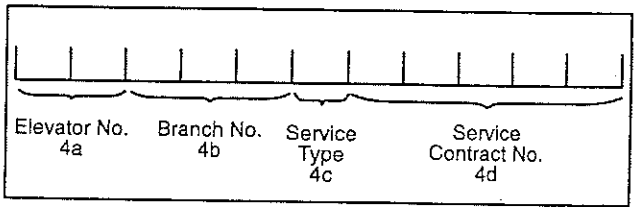



Figure 4

# HelpLink® Flow Details

The following shows how a typical Emergency call from a HelpLink® phone flows through the SoundNet system.

## Trapped Passenger Calling Out

1. Passenger presses CALL button. Red light on elevator phone turns on.
2. Passenger hears dial tone and dialing of first phone number.
3. Passenger hears ringing.
4. If the first phone number is not answered within 42 seconds, the elevator phone will hang up and dial the second phone number and steps 2 through 4 will repeat until an operator responds.
5. The SoundNet computer answers the phone, decodes programmed information from the elevator phone, and passes the call to an operator.
6. An operator receives the call and responds by pressing a button on his/her phone. The passenger and the operator can communicate verbally.
7. The red light on the elevator phone will start blinking and the operator can request that the passenger press the CALL button again to determine that someone (possibly speech-impaired) is actually trapped in the elevator.

## Operator Calling Elevator Phone

1. Operator dials the phone number of the elevator phone and hears it ringing.
2. After five rings the elevator phone turns on automatically or the passenger can push the CALL button to answer. The operator will hear a diddle-diddle-diddle sound.
3. When elevator phone turns on, the passenger will hear a diddle-diddle sound.
4. At this time the operator and passenger can communicate verbally.

# Maintenance

## Card Cleaning

1. Periodically inspect the cards for excessive dust.
2. Disconnect the TELCO plug from the board and clean the card with a non-nylon brush.

**Caution!**

**Failure to follow proper anti-static procedures when handling electronic assemblies could result in damage to electronic components.**

## Periodic Testing

Periodic testing should be done by building personnel to ensure that the elevator phone and phone lines are functional.

6) Not inserting a # between the leading digit and the outside phone number.
7) Phone is not connected to the phone line but it is being powered by a 9-volt battery.

**Solution(s):**

1) Plug your tone phone into the back of the elevator phone and dial the programmed phone number.
2) Reprogram the phone number(s).
3) Listen to elevator phone dial tone. If dial tone continues to be heard after the number is dialed, then the phone line is a pulse line.
4) Plug the touch-tone phone into the modular plug and dial the number programmed into the elevator phone. If you get the same message, try dialing 9, etc., before the programmed phone number.
5) Plug the touch-tone phone into the back of the elevator phone and try to dial out. If the same message is received, try calling 0 or some other inside phone number. If the inside phone number works and the outside number does not, then the phone line is restricted. Ask the owner to have the dial restriction removed.
6) Place a # in the programmed number everywhere a pause is needed.
7) When the elevator phone is turned on, there should be a dial tone unless it is a ringdown circuit. Plug a touch-tone phone into the back of the elevator phone and listen for a dial tone. If there is no dial tone, wait to see if SoundNet answers. If so, the phone line may be a ringdown line.

**PROBLEM:** Passenger cannot hear SoundNet well.

**Possible Cause(s):**

1) Low speaker volume.
2) Induced voltage on phone line.

**Solution(s):**

1) Adjust VOL pot on elevator phone board counterclockwise for higher volume. See Figure 5.
2) Make sure phone line from elevator phone to controller is twisted-shielded pair and that the shield is grounded at the controller end only.

**PROBLEM:** SoundNet operator cannot hear trapped passenger well.

**Possible Cause(s):**

1) Induced voltage on phone line.

**Solution(s):**

1) Make sure phone line from elevator phone to controller is twisted-shielded pair and that the shield is grounded at the controller end only.

**PROBLEM:** Static, noise or hum on the phone line during the conversation.

**Possible Cause(s):**

1) Induced voltage on phone line.

**Solution(s):**

1) Make sure the phone line from elevator phone to controller is twisted-shielded pair and that the shield is grounded at the controller end only.

# APPENDIX
# OPTIONAL VOICE CHIP PROGRAMMING

## Voice Chip

If an answering service other than SoundNet is used, voice communications may be required. This would necessitate the elevator phone having a voice chip which would enable the phone to "talk" to the answering service operator.

If the phone does not have a voice chip in socket U1, one may be ordered through the Parts Department. See Figure A1 and *Replacement Parts.*

## Installing the Voice Chip

1. Orient the chip correctly (pin 1 to pin 1). See Figure A1.
2. Make sure all legs of the chip are started into corresponding sockets on the program board.
3. Slowly but firmly press the chip into place.

## Programming the Voice Chip

In the following steps, press the phone keys slowly and deliberately. If keys are pressed too fast, the elevator phone cannot read the tones. However, if keys are pressed too slowly, the elevator phone will ignore the tones.

1. Have on hand the following information:
   - elevator number
   - building name
   - building location
2. Determine the connection method from the options under *Connecting and Programming, Connecting.*
3. On the touch-tone phone keypad, press # 7.
4. After the beep, speak clearly into the touch-tone phone stating the information from step 1. Maximum length of message is nine (9) seconds.
5. When the message is finished, press 0. The message will play back.
6. If the message is unsatisfactory, press # 7 and repeat steps 3, 4 and 5.

**NOTE:** To play back the message at any time press # 8 on the touch-tone phone.

7. Press # # to save the message, and turn the elevator phone off.

## Testing

**NOTE:** If there is no phone line connected, the elevator phone cannot be tested other than stated under *Programming the Voice Chip.*

Which of the following steps apply depends upon the connection method used.

1. Unplug the 9-Volt battery.
2. Unplug the touch-tone phone that was used for programming.
3. Re-attach the speaker plug.
4. Press the CALL button.

The elevator phone should dial the programmed number and an operator should answer shortly.

## Deactivating Voice Message

At some later time, it may be desired that the elevator phone call SoundNet. In that event, the voice message must be deactivated.

1. Determine the connection method from the options under *Connecting and Programming, Connecting.*
2. Press # 9 4 8 5 1. (3 beeps)
3. Press # * 1 1 8 0 1 8 0 * #. (3 beeps)
4. Press # # to save the information and turn the elevator phone off.
5. Reprogram the phone to call SoundNet per instructions under *Connecting and Programming, Programming.*

# HelpLink® Flow Details

The following shows how a typical Emergency call from a HelpLink® phone uses the voice chip.

## Trapped Passenger Calling Out

1. Passenger presses CALL button. Red light on elevator phone turns on.

2. Passenger hears dial tone and dialing of the phone number.

3. Passenger hears a beep two (2) seconds after number is dialed, then every seven (7) seconds until an operator responds.

4. If the first phone number is not answered within 35 seconds, the elevator phone will hang up and dial the second phone number and steps 2 and 3 will repeat until an operator responds.

## Operator Responding to Call

1. The operator answers the phone and hears the first message from the elevator phone, "ELEVATOR CALL, AT THE TONE PRESS ONE TO TALK, PRESS TWO FOR LOCATION." The passenger does not hear this message.

2. The operator presses one (1) to establish two-way communication with the passenger.

3. The operator presses two (2) at any time to hear the location of the elevator.

4. At the end of the location message, the operator hears "PRESS ZERO TO ALERT PASSENGER OF RESCUE."

5. When the operator presses zero (0), the red light on the elevator phone will start blinking. The elevator phone confirms this with 3 beeps.

6. The operator can now request that the passenger press the CALL button again to determine that someone (possibly speech-impaired) is actually trapped in the elevator.

7. If communications nears three (3) minutes duration, the operator hears, "TO AVOID DISCONNECT PRESS THREE NOW, TO AVOID DISCONNECT PRESS THREE NOW." Communications may be kept open indefinitely if the operator presses three (3) each time he/she hears this message.

## Operator Calling Elevator Phone

1. Operator dials the phone number of the elevator phone and hears it ringing.

2. After five rings the elevator phone turns on automatically or the passenger can push the CALL button to answer. The operator will hear a diddle-diddle-diddle sound.

3. At this time the operator and passenger can communicate verbally.

## NOTES:

732 606 6766

## FCC Information:

This equipment complies with 47 CFR, Part 68 of the rules. Located on this equipment is a label that contains the certification number and ringer equivalence number (REN)(as part of the certification number) for this equipment. If requested, this information must be provided to the telephone company

This equipment is designated to be connected to the telephone network or premises wiring using a hardwired method, which is Part 68 compliant.

If the terminal equipment 26800ALD 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 is not practical, the telephone company will notify the customer as soon as possible. Also, you will be advised of your right to file a complaint with the FCC if you believe it is necessary.

The telephone company may make changes in its facilities, equipment, operations or procedures that could affect the operation of the equipment. If this happens, the telephone company will provide advance notice in order for you to make necessary modifications to maintain uninterrupted service.

If trouble is experienced with this equipment 26800ALD for repairs or warranty information, please contact the Otis Service Center 1-860-242-3632. If the equipment is causing harm to the telephone network, the telephone company may request that you disconnect the equipment until the problem is resolved.

There are no repairs that can be performed by the customer (user).

This equipment cannot be used on public coin phone service provided by the telephone company. Connection to party line service is subject to state tariffs. (Contact the state public utility commission, public service commission or corporation commission for information.)

USOC: Hardwired
FIC: 02LS2
SOC:9.0Y

## Industry Canada Information

This equipment meets the applicable Industry Canada Terminal Equipment Technical Specifications. This is confirmed by the registration number. The abbreviation, IC, before the registration number signifies that registration was performed based on a Declaration of Conformity indicating that Industry Canada technical specifications were met. It does not imply that Industry Canada approved the equipment.
The RINGER EQUIVALENCE NUMBER (REN) for this terminal equipment is 0.3B . The REN assigned to each terminal equipment provides an indication of the maximum number of terminals allowed to be connected to a telephone interface. The termination on an interface may consist of any combination of devices subject only to the requirement that the sum of the Ringer Equivalence Numbers of all the devices does not exceed five (5.0).

OTIS 211 (NEW)

# Quick Guide to Emergency Elevator Telephone Installation and Programming

## Installation

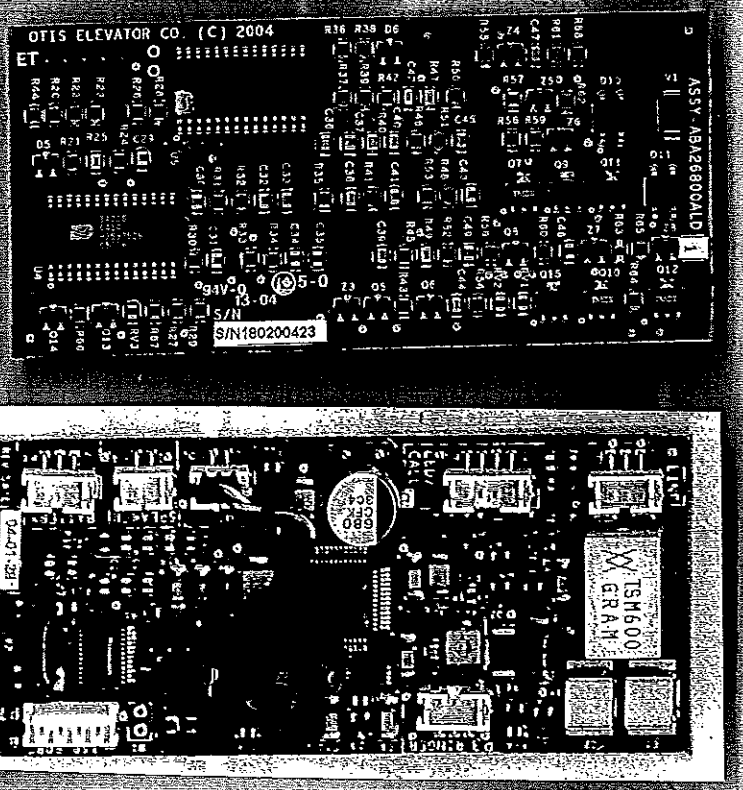
The telephone will come preinstalled in the COP. Field installation will be to connect the Telephone wires from the traveling cable to the designated terminals in the COP or back panel.

For Programming Assistance call OtisLine at 1-800-458-6847
For Other installation Assistance call OtisRole at 1-877-287-6847

**This COP Contains the Otis ADA Telephone 26800ALD.**

**If you experience start-up issues please call OtisLine 1-800-458-6847 or OtisRole 1-877-287-6847**

**Do Not Call "EMS" for support**




This is the EM Phone from Berkley BOE
Bayville Elementary School

OTIS

MIKE P

OTIS 211 PHONE

OTIS PHONE CARD
ASSY- ABA26800ALD 11
REV DATE 04-01-28
S/N: 180200423
ASSY IN MEXICO

LOW VOLUME

211 NEW
IS OBSOLETE -
REPLACEMENT PART #
ASSY # AAA25300W1

OBSOLETE

ASSY # AAA25300W1 $234.64

OTIS 211

# Quick Guide to Emergency Elevator Telephone Installation and Programming

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For Other Assistance Call OtisRole
1-877-287-6847

This COP Contains the Otis ADA Telephone 26800ALD.

If you experience start-up issues please call the numbers listed above

Do Not Call "EMS" for support!

NEW BOARD: ASSY # AAA25800W1

## Programming by Otis Line

1. Connect phone to line
2. Press HELP button
3. Phone is programmed to call Otis Line
4. Otis Line operator will program the phone
5. The microphone will be muted in programming mode
6. If communication with the car is required during programming, dial #9 to exit programming mode and then reenter programming mode (#94851) when communication with the car is completed

## Programming from external line

1. Dial into the phone from any touch tone phone
2. The phone will pick up after 5 rings and respond with a diddle tone
3. Enter programming Mode by entering #94851
4. Three beeps will confirm phone is in programming mode
5. The microphone will be muted in programming mode
6. Program the phone using the Programming Guide
7. If communication with the car is required during programming, dial #9 to exit programming mode and then reenter programming mode (#94851) when communication with the car is completed

## Programming Guide

Commands can be entered in any order. A three beep confirmation will follow any valid command

| | |
|---|---|
| #0 phone number *# | Program Phone number 1 |
| #1 phone number *# | Program Phone number 2 |
| #2 phone number *# | Program Phone number 3 |
| #3 phone number *# | Program Phone number 4 |
| #7(beep) location Message | Record location message |
| #8 | Check location message |
| #9 | Exit Program Mode |
| *# | Hang up and Dial out |
| ## | Hang Up |
| #* | See Mode Settings Table |

Notes : 1) Inserting a # in the phone number will add a 4 second pause. This is used when a "9" or other digit is needed to get an outside line.
Example #0 9# 123-5678 *#.
2) To remove a number from the dial sequence dial the command with no phone number. Example: #0*#

Remove all numbers for ringdown line Example: #0*#, #1*#, etc

Mode Settings Table

| Command | Code | Description | Range | Default |
|---|---|---|---|---|
| #*00*# | | Reset All to Defaults | | |
| Composite Command<br><br>#*1AAA1BC*# | AAA<br><br><br>B<br><br><br>C | Disconnect Timeout in seconds<br><br>Phone code for multiphone per line differentiation<br><br>Voice Prompt Message Options<br>0 = Disable<br>1= Enable<br>3= Interruptible<br>5 = Delayed | 060 - 255<br><br>1 to 8 | 180<br><br>8<br><br>3 |
| #*20N*# | N | Ring LED Enable<br>0 = OFF 1 = ON | | 1 |
| #*21M*# | M | Ring Count | 1-9 | 5 |
| #*30C*# | C | Voice Prompt<br>0 = Disable<br>1= Enable<br>3= Interruptible<br>5 = Delayed | | 3 |
| #*31X*# | X | Call Progress<br>0= OFF 1 = ON | | 0 |
| #*40B*# | B | Multiphone Select | 1-8 | 8 |
| #*41AAA*# | AAA | Disconnect Timeout in seconds | 060-255 | 180 |
| #*42X*# | X | CPC Disconnect Mode<br>0 = Disabled<br>1 = Low Line<br>2 = Normal<br>3= Short Pulse | | 2 |

Request 26800ALD_OIM for complete details

## Non - Programming Mode Commands

0 Toggles the Call Lock/ Call in progress Notification (blinks LED)
1 Play Initial Message once
2 Play Location Message
3 Reset disconnect timeout timer
# mutes microphone after 3 seconds delay with no other keypress
Unmutes on any subsequent keypress
#X Plays phone # programmed into autodialler (X=0-3)
*0 Hang up phone