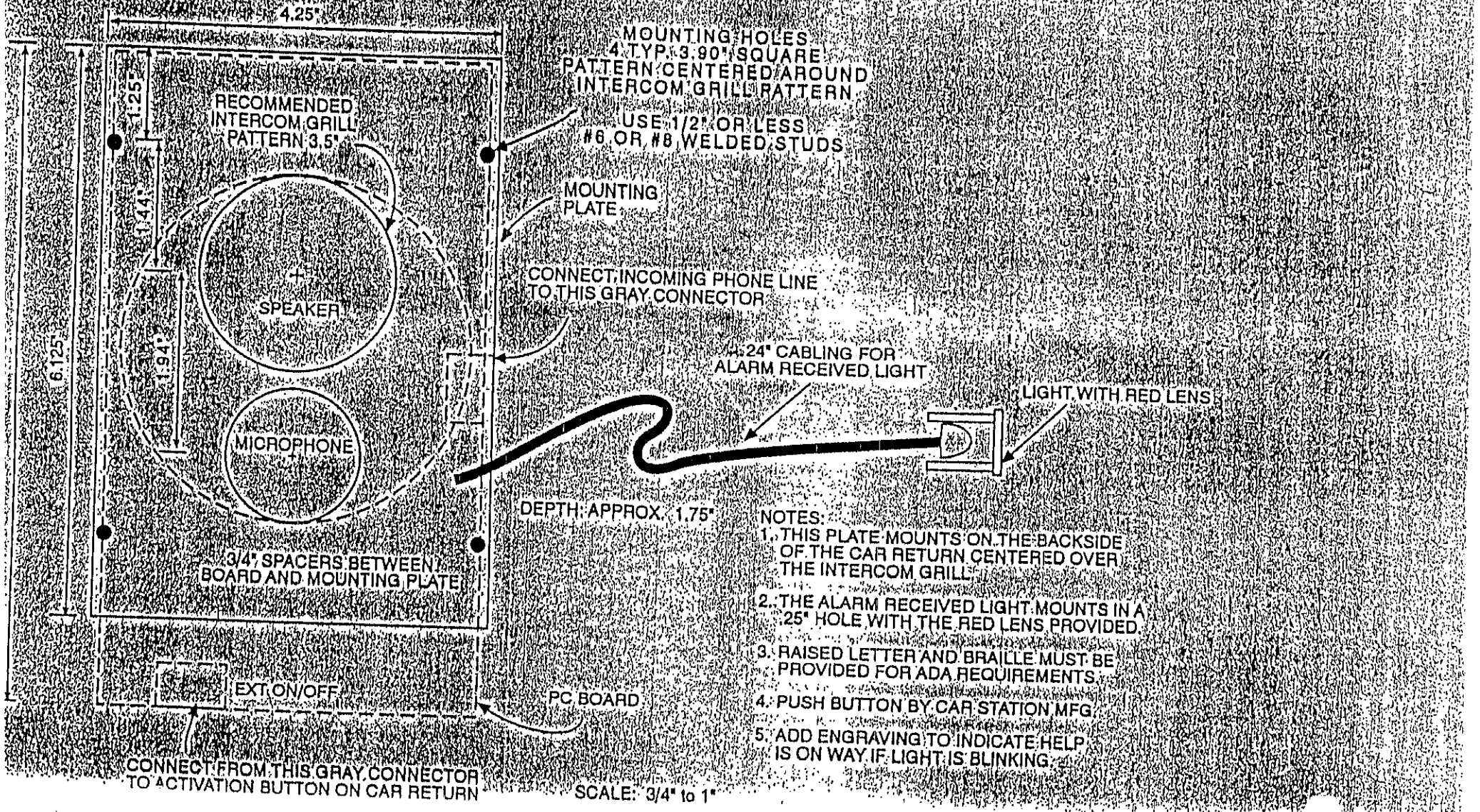
Electronic Micro Systems

ELECTRONIC MICRO SYSTEMS, INC.

INTERCOM PHONE-BUTTONLESS MOUNTING PLATE



SCALE: 3/4" to 1"

NOTES:

1. THIS PLATE MOUNTS ON THE BACKSIDE OF THE CAR RETURN CENTERED OVER THE INTERCOM GRILL.
2. THE ALARM RECEIVED LIGHT MOUNTS IN A .25" HOLE WITH THE RED LENS PROVIDED.
3. RAISED LETTER AND BRAILLE MUST BE PROVIDED FOR ADA REQUIREMENTS.
4. PUSH BUTTON BY CAR STATION MFG.
5. ADD ENGRAVING TO INDICATE HELP IS ON WAY IF LIGHT IS BLINKING.

INSTALLATION, PROGRAMMING AND OPERATING INSTRUCTIONS FOR EMS, INC. ADA INTERCOM STYLE ELEVATOR PHONE

PART NUMBER: PNB-DV-1 PC OR PNB-DV-2PC SPEAKR/MIC PLATE SEPARATE

INSTALLATION INSTRUCTIONS

NOTE: IF THE INTERCOM STYLE PHONE THAT YOU ARE INSTALLING IS A TWO PIECE UNIT WITH SPEAKER AND MICROPHONE ON 24 INCH LEADS MOUNT THE SPEAKER AND MICROPHONE ASSEMBLY BEHIND THE SPEAKER GRILL ON THE CAR RETURN. MOUNT THE ELECTRONICS BOARD OVER THE TOP OF THE SPEAKER MICROPHONE ASSEMBLY OR CLOSE BY ON THE BACK OF THE CAR RETURN.

Step 1. Mount intercom style phone on the backside of the car return panel on the four studs provided by the cab manufacturer. The speaker and microphone face the back of the car panel. Secure mounting plate with appropriate nuts.

Step 2. Remove the black bezel off the Red LED wiring leads. The LED is plugged into the elevator telephone circuit board at the white standup connector labeled "P6". LED is on the end of coiled 24 inch black and red wire.

Step 3. From the car side of the car panel insert the black bezel into the 1/4 inch hole provided for the red LED. Note: There should be wording engraved on the front of the car panel near the LED hole stating to the effect "Blinking indicates call answered Help is on way"

Step 4. Insert the red LED into the backside of the bezel. The legs of the bezel will grip the LED when the LED is properly inserted.

Step 5. Slid the bezel ring over the LED wire onto the back of the bezel and firmly against the back of the car return.

CAUTION: IT IS HIGHLY RECOMMENDED THAT THE WIRING FOR THE INCOMING PHONE LINE INSIDE THE TRAVELING CABLE AND ALL THE WAY TO THE ELEVATOR TELEPHONE ELECTRONICS BE A SHIELDED TWISTED PAIR WITH THE SHIELD GROUNDED ON THE ELEVATOR CONTROLLER END ONLY. ANY TERMINATIONS OR SPLICES BETWEEN THE THE ELEVATOR CONTROLLER AND THE ELEVATOR PHONE SHOULD HAVE THE SHIELD CARRIED THROUGH THE TERMINATION OR SPLICE AND NOT GROUNDED AT THAT POINT.

Step 6. Check the voltage on the incoming phone line by measuring for AC and DC voltage across the two wires. Normally the DC voltage will be 24 volts up to 50 volts. The AC voltage between the two wires and to ground should be around"0".

Step 7. Remove the "TELCO" Block and attach the incoming phone line to the Telco Block's two screw terminals. See Figure 2. NEVER ATTACH THE INCOMING DIALTONE TO THE MODULAR CONNECTOR.

IMPORTANT: Step 8. Tape the shield and the individual wires to prevent shorting to the metalwork or to each other.

Step 9. Plug the "TELCO" Block onto the electronics board. See Figure 2.

Step 10. Using the Gray connector plugged into the two pin header at the bottom of the phone board at the label "EXT ON/OFF" connect a pair of shielded wires to the "Emergency Call" pushbutton. The switch should have dry contacts and be normally open, momentary close.

Step 11. Ground the shield on one end only.

Step 12. If the phone has been preprogrammed test the phone by pressing the "Emergency Call button OR briefly short out the two pins at "EXT ON/OFF"

There are three Methods of SETTING UP prior to Programming the EMS, Inc.. elevator phone. Select the one appropriate to your situation as described below.
PHONE LINE MUST BE TONE LINE

The phones can be programmed at any location and then installed in the elevator cab. They will not lose their programming. You do not need a battery to retain the programmed phone numbers or the voice message.

METHOD A-CALLING UP THE INSTALLED ELEVATOR PHONE

1. From any tone phone call the phone number to which the elevator phone is connected.
2. After five rings (OR if the "CALL" button is pressed) the elevator phone will turn on automatically and you will hear a diddle-diddle-diddle sound.

NOTE-if there is more than one elevator phone on the same phone line you will have to have someone press the "CALL" button on the elevator phone you want to program when the elevator phone rings, OR disconnect all other elevator phones and repeat these steps.

3. GO TO PROGRAMMING INSTRUCTIONS

METHOD B-SET UP FOR PROGRAMMING WITHOUT A PHONE LINE

1. Connect the 9 volt battery to the battery connector. See Figure 2.
2. Plug a tone phone into the modular jack. See Figure 2.
3. Unplug the speaker. See Figure 2.
4. Using a small screwdriver briefly short out the two pins at "M3". See Figure 2.
5. Turn the elevator phone over so you can see the front and PRESS the "CALL" button.
6. Make sure that the red light on the front of the elevator phone turns on. If it does not, go back two steps and start again..
7. Pick up the tone phone handset and listen for the elevator phone to dial.
8. Two seconds after the elevator phone dials you will hear a tone, a two second pause and a pre-recorded voice message will begin cycling with a tone at the end of the message.
9. On the tone phone press "1" immediately after the tone at the end of the message.
10. Listen to the tone phone handset and make sure the message is not cycling.
11. GO TO PROGRAMMING INSTRUCTIONS then return to here.
12. Reconnect the elevator phone speaker.
13. Unplug 9 volt battery.
14. Unplug tone phone.

METHOD C-SETUP SO ELEVATOR PHONE CAN BE REMOTELY PROGRAMMED WITH INSTALLER ON-SITE.

Either the elevator phone installer or the off-site programmer can do the programming.

1. Connect elevator phone by wiring phone line to " TELCO" block. See Figure 2.
2. Connect the 9 volt battery to the battery connector. See Figure 2.
3. Plug the tone phone into the modular jack. See Figure 2.
4. Unplug the speaker. See Figure 2.
5. Turn the elevator phone over so you can see the front of the phone.
6. Using the tone phone dial the phone number of the person doing the programming.
7. When you have the off-site person on the phone line press the "CALL" button.
8. Make sure that the red light turns on. See Figure 1.
   Both the installer and the programmer will hear the phone dial.
9. Two seconds after the elevator phone dials both of you will hear a tone, a two second pause then a cycling pre-recorded voice message.

10. Either the installer or the programmer should press a "1" immediately after the tone at the end of the message.
11. Both should listen to make sure that the message is not cycling.
12. GO TO PROGRAMMING INSTRUCTIONS and return to next step.

NOTE: After programming the installer and the programmer will still be able to talk even though the elevator phone has turned off.

13. After the installer finishes talking to the programmer the installer should unplug the tone phone from the elevator phone.
14. Reconnect the elevator phone speaker. See Figure 2.
15. Unplug 9 volt battery. See Figure 2.
16. Test phone by pushing "CALL" button.

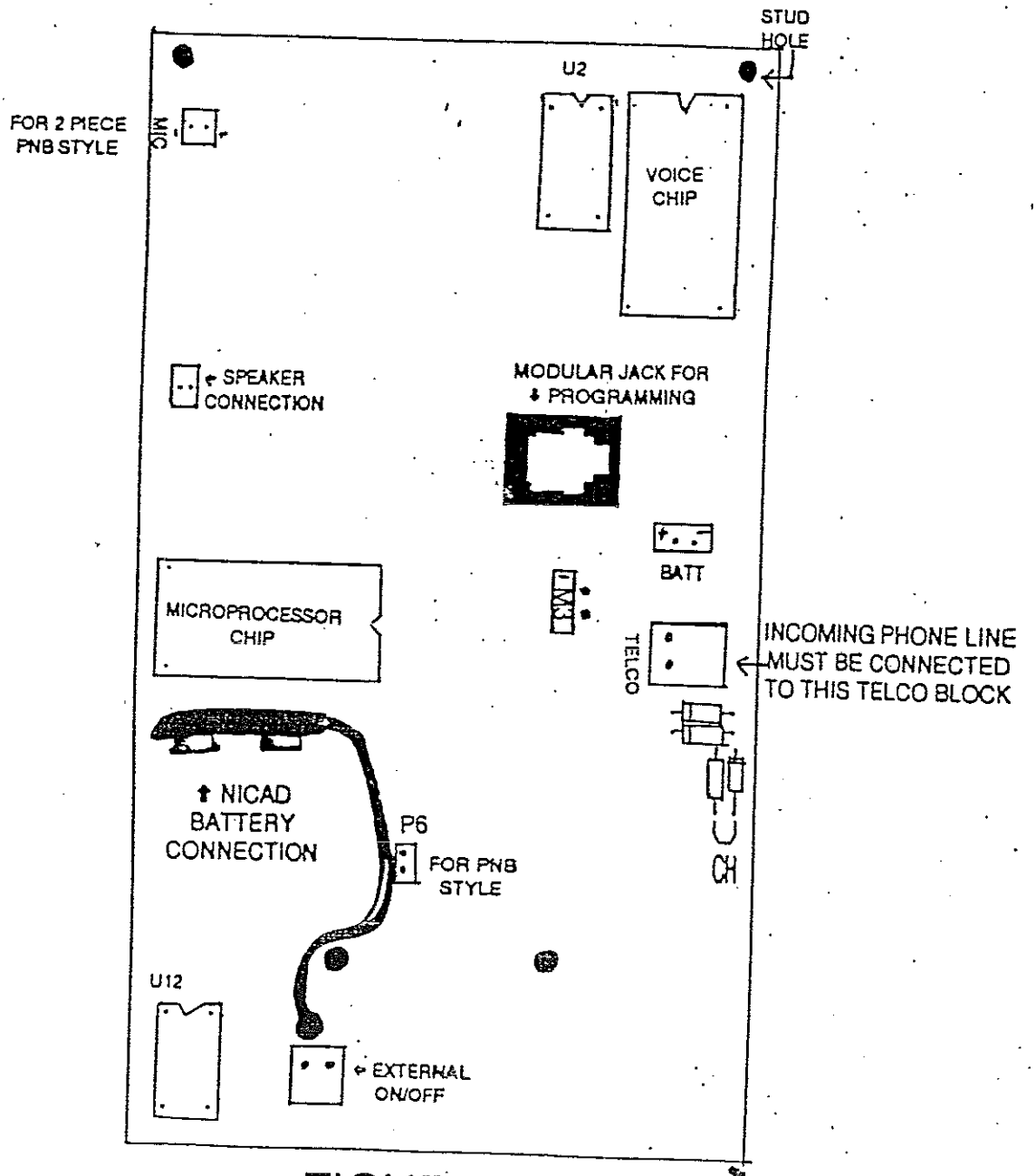


FIGURE 2

Step 1. Using the tone phone keypad press "#94851". Listen for three beeps.

NOTE-Press tone digits slowly and deliberately. Too slow, it ignores tones and too fast, it can't read tones.

Step 2. Press "#0-(first phone number to be dialed)-*#". Listen for three beeps.

EXAMPLE: "#05551212*#". If you are on a phone line that requires a "9" or some other digit to dial out of the building normally a pause in dialing is required after the "9" and before dialing the remainder of the phone number. For example, "#09#5551212*#".

Step 3. Press "#1-(second phone number to be dialed)-*#. EXAMPLE: "#18881212*#"

If no second number is to be dialed, press "#1*#". Listen for three beeps.

If you are on a phone line that requires a "9" or some other digit to dial out of the building normally a pause in dialing is required after the the "9" and before dialing the remainder of the phone number. EXAMPLE: "#19#8881212*#".

SPECIAL 3 OR 4 NUMBER DIALERS

Press "#2-(third number to be dialed)*#. Listen for three beeps.

Press "#3-(fourth number to be dialed)*#. Listen for three beeps.

Step 4. Press "#7" and listen for the single beep. At the beep, record the location message by speaking into the tone phone handset. Immediately at the end of recording the voice message press "0". The voice message will play back for you and then you will hear three beeps.

Note-Maximum length of location message is nine seconds. If you need to modify the location message press "#7" and re-record. If you want to listen to the location message without changing it press"#8".

Step 5. Press "##". You will hear a beep and the elevator phone will turn off.

Step 6. After installation test elevator phone by pressing "CALL" button.

TO DISABLE THE VOICE MESSAGE, DO THE FOLLOWING:

.Press #94851, listen for three beeps.

.Press #*1180180*#, listen for three beeps.

.Press ##

TO ENABLE VOICE MESSAGE, PRESS #94851, LISTEN FOR THREE BEEPS

.PRESS #*1180181*# , listen for three beeps. PROGRAM VOICE MESSAGE. (SEE STEP 4 ABOVE)

.PRESS ##.

TO ELIMINATE AUTODIALING, SET UP FOR RINGDOWN

.Press #94851, listen for three beeps.

.Press #0*#, listen for three beeps , Press #1*#, listen for three beeps.

.Press ##

A. TRAPPED PASSENGER CALLING OUT

1. Passenger presses "CALL" button. Red light on elevator phone turns on.
2. Passenger hears dialtone and dialing of first phone number.
3. Passenger hears ringing intermittently.

NOTE-TWO WAY VOICE COMMUNICATION WILL BE ESTABLISHED AFTER THE OPERATOR PRESSES A DIGIT ON THEIR TONE PHONE.

4. Passenger hears a tone two seconds after elevator phone dials and every 7 seconds until the operator responds to the call.
5. If first phone number is not answered within 42 seconds the elevator phone will hang up and dial the second phone number and the same sequence of events will occur.
6. Once the receiving operator responds to the call with a tone digit the passenger and the operator will be able to communicate.
7. After Red light starts blinking the operator can request that the passenger press the "CALL" button again. This action will send an audible signal to the operator to let her know that someone is actually stuck in the elevator and not just a prank call. This action is normally only important for someone who can not speak.

B. RESPONDING OPERATOR

1. Operator hears ringing of incoming call from elevator and answers call.
2. Operator hears a cycling message from the elevator phone stating. "ELEVATOR CALL, AT THE TONE PRESS ONE TO TALK OR TWO FOR LOCATION". The message will keep repeating until the operator presses a "1" or "2" after the tone on their tone phone.
3. The passenger does not hear any voice messages.
4. Normally the operator should press "1" after the tone at the end of the message to quickly establish two way voice communication with the trapped passenger.
5. At any time operator can press "2" to hear the location of the elevator.
6. At the end of the location message another message will be heard by the operator that says, "PRESS ZERO TO ALERT PASSENGER OF RESCUE"
7. When the operator presses "0" on their tone phone they will hear three beeps. The Red light on the EMS, Inc.. elevator phone will begin blinking. At this time the passenger knows that the call has been received because wording engraved on the car panel should state "Blinking Indicates Call Answered Help on Way".
8. The operator can request that the passenger press the "CALL" button again. If the passengers presses the button the operator will hear a diddle-diddle sound. For the operator this means that there is a passenger in the elevator.
9. Prior to the phone timing off(normally 3 minutes) the operator will hear this message, "TO AVOID DISCONNECT PRESS , "THREE" NOW".
10. If the operator presses "3" on their tone phone within ten seconds after this message, the elevator phone will stay on for another three minutes. The message will be repeated every three minutes for the duration of the call so that the operator can keep the passenger on the line until help arrives or as long as needed.

C. 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 and operator will hear diddle-diddle-diddle sound.
3. At this time the operator and passenger can talk. All other operations are the same.

PASSENGER RECEIVING CALL FROM OPERATOR

1. Passenger hears elevator phone ringing. It turns on automatically after five rings, OR,
2. Passenger can push "CALL" button to turn elevator phone on.
3. When elevator phone turns on the passenger

IMPORTANT: USE OF A REGULAR 9 VOLT BATTERY IS FOR PROGRAMMING. IF PHONE LINE VOLTAGE IS LOW AND PHONE NEEDS A BATTERY TO OPERATE PROPERLY, USE A RECHARGEABLE 9 VOLT NICAD BATTERY.

FCC REQUIRED CONSUMER INFORMATION

1. The Federal Communications Commission (FCC) has established Rules which permits this device to be directly connected to the telephone network. Standardized connectors are used for these connections. This equipment should not be used on party lines or coin lines.

2. If this device is malfunctioning, it may also be causing harm to the telephone network; this device should be disconnected until the source of the problem can be determined and until repair has been made. If this is not done, the telephone company may temporarily disconnect service.

3. The telephone company may make changes in its technical operations and procedures; if such changes affect the compatibility or use of this device, the telephone company is required to give adequate notice of the changes.

4. If the telephone company requests information on what equipment is connected to their lines, inform them of:
   (a) The telephone number that this unit is connected to,
   (b) The ringer equivalence number{0.3}
   (c) The USOC jack required{RJ11}(optional, screw terminals provided)
   (d) The FCC Registration Number HCMUSA-74085-SP-N

   Item (b) and (c) are indicated on the label. The ringer equivalence number(REN) is used to determine how many devices can be connected to your telephone line. In most areas, the sum of the REN's of all devices on any one line should not exceed five (5.0). If too many devices are attached, they may not ring properly.

Service Requirements

5. In the event of equipment malfunction, all repairs should be performed by Electronic Micro Systems, Inc. or an authorized distributor. It is the responsibility of users requiring services to report the need for service to us.

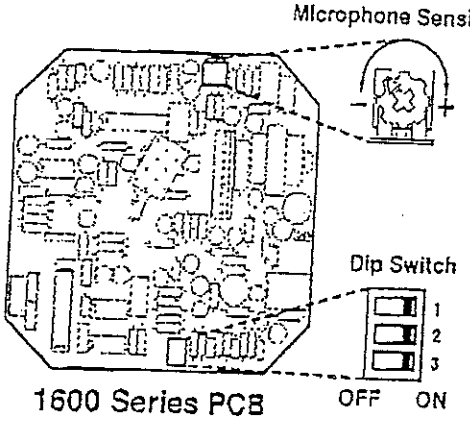
SERVICE AND/OR INFORMATION can be obtained at:

ELECTRONIC MICRO SYSTEMS, INC.
2505-C Viceroy Drive
Winston-Salem, NC 27103
Telephone: 1-800-333-3671

Dip Switch Programming/Microphone Adjustment

A POT is provided to increase or decrease the microphone sensitivity. In certain noisy locations the microphone sensitivity may need to be decreased.

Caution: *Setting the microphone gain too high may cause distorted audio, prevent the distant party from breaking the speaker over, and inhibit second number redialing.*



1600 Series PCB

Note: The speaker/microphone is controlled by the voice activity of the distant party. Without distant voice activity, the speaker/microphone defaults to the microphone mode.

Dip Switch 1: Front Panel Push Button Switch
ON Button alternately connects and disconnects calls
OFF Button only connects calls

Dip Switch 2: Incoming Call Select
ON Incoming calls are answered
OFF Incoming calls are NOT answered

Dip Switch 3: Operating Mode
ON Normal operation mode
OFF Learn mode: An incoming call is automatically entered into the programming mode (no security code required). Use this option if you have forgotten your security code

Operation

en the "Push to Call" button is pressed, the 1600 series emergency phone goes off-hook, and dials a rogrammed telephone number. The "CALL CONNECTED" LED momentarily flashes during tone or pulse dialing. e event that the line is busy or there is a ring-no answer, the unit can be programmed to call a second number. emergency phone can then alternate between the two preprogrammed numbers until answered. When the call is vered, the distant party may dial a Touch Tone *. This causes the emergency phone to light the "CALL INECTED" LED steady and send a field programmable 1 to 20 digit Touch Tone string indicating the location of the y phone. The distant party can decode the location number using the DM-4 digit monitor. Where required, emergency voice announcer can be added to provide up to 10 seconds of natural voice announcement for ion identification. When the call is complete, the distant party may dial a *, wait for the identification code to load, and dial a # to force the 1600 series phone to hang up.

Central Station Software

rtant: You must use the Application Note "Central Station Monitoring" (Fax Back Document 216) in ination with this document to perform any "Central Station" programming.

600 series of emergency phones are compatible with receivers using these specific formats:

1. "Contact ID"
2. "Ademco High Speed"
3. "DTMF 4+1 Express"
4. "DTMF 4+2 Express"

eiving equipment should have the capability of allowing voice communication after the data has been received. ore information, retrieve Fax Back Document 216 or contact Viking Technical Support at (715) 386-8666.

Special Graphics or Colors

1600, K-1600-EHF, or E-1600-02 phones can be supplied with special graphics. In addition to special graphics, 1600 can be supplied blank and/or with special colors. Please contact Viking for minimum quantities, set up s and unit costs. Typical delivery is 4 to 6 weeks.

duct Support Line...(715) 386-8666 *Fax Back Line...(715) 386-4345*

HOWELL HERITAGE PLAZA

ELECTRONIC MICRO SYSTEMS, INC.
854 CHESTER ROAD
WINSTON-SALEM, NC 27104

PHONE 1-800-333-3671
FAX 1-910-765-4851

EMS ADA PHONE-PROGRAMMING AND INSTALLATION INSTRUCTIONS

A. PROGRAM AND PRE-TEST PHONE BEFORE FIELD INSTALLATION YOU WILL NEED: PHONE NUMBER(S) TO BE PROGRAMMED. INFORMATION TO RECORD NO MORE THAN A 9 SECOND VOICE MESSAGE IDENTIFYING THE BUILDING LOCATION. THE PHONE NUMBER AND THE MESSAGE CAN BE CHANGED AT ANY TIME.

1. CONNECT ADA PHONE TO AN EXISTING DEDICATED PHONE LINE, SUCH AS A FAX MACHINE, OR IF PHONE IS INSTALLED GO TO NEXT STEP. TURN OFF FAX.
2. CALL THE PHONE NUMBER THAT THE EMS PHONE IS CONNECTED TO. IT SHOULD TURN ON IN FIVE RINGS OR YOU CAN PRESS THE "ON" BUTTON.
3. USING THE PHONE USED TO CALL UP THE EMS PHONE PERFORM THE FOLLOWING STEPS.
4. PRESS "#94851", (IN SOME CASES THIS MAY BE #9000000) YOU WILL HEAR THREE BEEPS, YOU ARE IN PROGRAMMING MODE.
5. PRESS "#0 AND THE FIRST PHONE NUMBER TO BE DIALED THEN "*#", YOU WILL HEAR THREE BEEPS. IF THE ELEVATOR PHONE DOES NOT NEED TO DIAL ANY PHONE NUMBER BECAUSE YOU HAVE AN EXISTING AUTODIALER OR A RINGDOWN CIRCUIT THEN ERASE THE PHONE NUMBER THAT IS PROGRAMMED INTO THE PHONE BY ENTERING "#0*#".
6. TO PROGRAM A SECOND PHONE NUMBER PRESS "#1 AND THE SECOND PHONE NUMBER THEN "*#", LISTEN FOR THREE BEEPS
7. TO RECORD VOICE MESSAGE PRESS "#7", AT THE BEEP IMMEDIATELY STATE THE LOCATION MESSAGE INTO THE PHONE HANDSET. PRESS "0" AT END OF VOICE MESSAGE. IF YOU WANT TO TEMPORARILY OR PERMANENTLY TURN OFF THE VOICE MESSAGE YOU CAN DO SO BY ENTERING THIS SETUP CODE "#*1180180*#". IF YOU WANT TO TURN THE VOICE MESSAGE BACK ON ENTER "#*1180181*#".
8. MESSAGE AUTOMATICALLY PLAYS BACK OR PRESS "#8" TO REPLAY. PRESS "#7" TO RE-RECORD.
9. PRESS "##" TO END PROGRAMMING. PRESS "ON" BUTTON TO TEST.

NOTE: THE PHONE WILL DIAL THE FIRST NUMBER AND IF THERE IS NO RESPONSE, THE SECOND NUMBER WILL BE DIALED. THE SECOND PHONE NUMBER MUST BE A 24 HOUR ANSWERING SERVICE THAT CAN RESPOND TO THE CALL. IF ONLY ONE NUMBER IS PROGRAMMED THEN IT MUST BE A 24 HOUR ANSWERING SERVICE.

IF THE PHONE IS TO BE CONNECTED TO A PHONE LINE THAT REQUIRES A "9" TO DIAL AN OUTSIDE PHONE NUMBER ENTER A "#" AFTER THE "9" FOR A DIALTONE PAUSE. EXAMPLE "9#19195551212". IF THE PHONE DOES NOT NEED TO DIAL ANY PHONE NUMBER ERASE THE PREPROGRAMMED NUMBERS BY ENTERING "#0*#" AND "#1*#".
IF YOU WANT TO CHANGE THE WAY THE PHONE TURNS ON, OFF, LENGTH OF TIMEOUT, ETC. CALL FOR FURTHER INSTRUCTIONS.

B. INSTALLATION OF PHONE
CAUTION———CAUTION———CAUTION
OBTAIN THE ADVICE OF THE ELEVATOR CONTRACTOR BEFORE PROCEEDING. WHEN DRILLING OR CUTTING USE EXTREME CAUTION SO THAT ELECTRICAL CABLING, ELEVATOR DOORS AND OTHER PARTS ARE NOT DAMAGED.

BOX STYLE PHONE

1. DETERMINE POSITION OF PHONE IN TELEPHONE CABINET. ALLOW SPACE TO ATTACH AND CLOSE LID.

ELEVATOR TELEPHONE OPERATING PROCEDURES

A. TRAPPED PASSENGER CALLING OUT

NOTE: Operation described based on an EMS,Inc. ADA phone connected to a standard phone line.

1. Presses button to dial
2. Hears dialtone and dialing of phone number
3. Hears phone ringing intermittently
4. Hears a beep two seconds after phone number is dialed and every 7 seconds until operator responds to the call
5. If first phone number is not answered within 35 seconds the phone will hang up and dial the second number and the same sequence of events

B. RESPONDING OPERATOR

1. Hears phone ring and answers.
2. Hears message from elevator phone "ELEVATOR CALL, AT THE TONE PRESS ONE TO TALK OR TWO FOR LOCATION"
3. Presses "1" on their tone keypad to establish two way voice communication with the trapped passenger. (Passenger does not hear voice messages)
4. At any time operator can press "2" to hear the location of the elevator.
5. At the end of the location message another message will be heard by the operator that says "PRESS ZERO TO ALERT PASSENGER OF RESCUE"
6. This tone causes the RED light on the front of the elevator phone to start blinking. Wording on the front of the phone says "Blinking Indicates Call Answered Help On Way"
7. Operator will hear the phone respond with three beeps when the light starts blinking. The blinking can be stopped by pressing "0" again. There are no beeps to signal that the light has stopped blinking.
8. Prior to the phone timing off(field programmable up to 4 minutes and 15 seconds, preset at the factory for 3 minutes) the operator will hear "TO AVOID DISCONNECT PRESS THREE NOW, TO AVOID DISCONNECT PRESS THREE NOW"
9. If the operator presses three the phone will stay on for the set time. Phone can be kept on with this method as long as needed.

C. OPERATOR CALLING ELEVATOR PHONE

1. Dials elevator phone number and hears ringing
2. After five rings phone will turn on and operator will hear three diddle's
3. At this time operator can talk and hear the passenger. All other operations are the same

D. PASSENGER RECEIVING CALL

1. Hears elevator phone ringing. Phone turns on after five rings, OR
2. Passenger can push "CALL" button to manually turn phone on.

2. USING PHONE BOTTOM AS TEMPLATE, MARK SCREW HOLE POSITIONS IN CABINET.
3. DRILL THE HOLES FOR THE SCREWS.
4. INSERT PHONE CABLE THROUGH HOLE IN BOTTOM OF PHONE
5. USE SCREWS THAT WILL NOT DAMAGE THE ELEVATOR

SURFACE STYLE PHONE

1. PHONE ELECTRONICS AND DUST COVER REQUIRE AT LEAST TWO INCHES OF CLEARANCE BEHIND ELEVATOR WALL. CHECK TO MAKE SURE THE PHONE WILL NOT INTERFERE WITH ANY MOVING PARTS OR OTHER ELEVATOR EQUIPMENT.
2. DETERMINE POSITION OF PHONE ON ELEVATOR WALL.
3. USING PHONE AS TEMPLATE, MARK HOLES AND CUTOUT AREA.(APPROX 5" X 9".
4. DRILL THE HOLES FOR THE SCREWS AND CUT OUT HOLE. BE SURE TO CUT HOLE ONLY AS LARGE AS NEEDED.
5. PREVENT DAMAGE TO ELEVATOR EQUIPMENT BY USING SCREWS JUST LONG ENOUGH TO ATTACH PHONE TO ELEVATOR WALL.

C.PHONE LINE CONNECTION

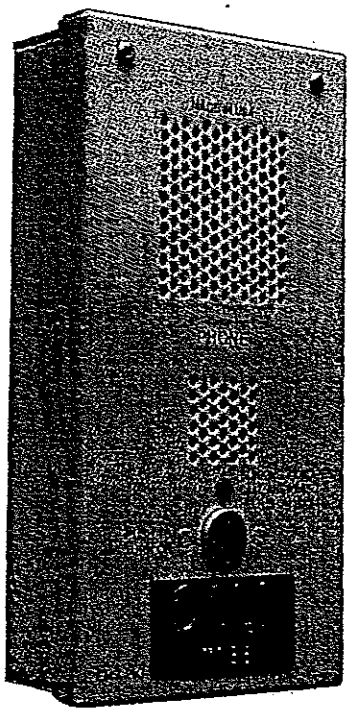
NOTE: WHEN CONNECTING MORE THAN ONE PHONE TO A PHONE LINE CONNECT ONLY ONE PHONE AT A TIME AND MAKE SURE IT IS WORKING BEFORE GOING ON TO THE NEXT ONE. ALL PHONES MUST HAVE PROPER POLARITY-SEE POLARITY SIGNS ON ELECTROICS AT TELCO CONNECTOR-DC VOLTAGE. MEASURE ACROSS THE TWO WIRES- DO NOT ADD THE 9 VOLT NI-CAD BATTERY UNLESS NEEDED.

1. REMOVE TELCO CONNECTOR FROM PHONE ELECTRONICS AND CONNECT PHONE CABLING TO TELCO CONNECTOR.
2. PLUG TELCO CONNECTOR AND CABLING CONNECTION BACK ONTO ELECTRONICS BOARD.
3. WAIT 60 SECONDS TO PRESS "ON" BUTTON.
4. CLOSE PHONE LID AND TEST. AVOID CRIMPING SPEAKER WIRE.
5. IF YOU DO NOT HEAR DIALTONE WHEN YOU PRESS THE "ON" BUTTON GO TO THE TROUBLE SHOOTING TABLE BELOW.

TROUBLE SHOOTING TABLE	TEST TO PERFORM/WITHOUT BATTERY
*PHONE FAILS TO TURN ON	1. WAIT 60 SECONDS-PUSH BUTTON 2. CHECK POLARITY AT TELCO 3. CHECK FOR DIALTONE ON LINE-SHOULD BE APPROX. 50V-DC 4. CHECK FOR SHORTS OR GROUNDING
*NOISE ON LINE	1. GROUND CONTROLLER END OF CABLING SHIELD
*CANNOT HEAR OPERATOR WELL	1. ADJUST "VOL" POT AT THE TOP LEFT OF ELECTRONICS BOARD DO NOT ADJUST POT "ALC"
*PHONE CUTS OFF UNEXPECTEDLY	1. ADD A NI-CAD RECHARGEABLE BATTERY TO ONE OF THE PHONES USING 9 VOLT BATTERY CONNECTOR
*PHONE DIALS-CALL NOT MADE	1. CHECK TO MAKE SURE PHONE LINE IS TONE, NOT ROTARY
*VOICE MESSAGE CONTINUES TO PLAY OR WILL NOT PLAY	1. TONE SIGNAL TO PHONE IS NOT LONG ENOUGH
*PHONE TURNS OFF RIGHT AFTER BEING TURNED ON	1. CHECK FOR AND REMOVE ANY PULSE DIALERS ON THE PHONE LINE
*WHEN PHONE DIALS IT SOUNDS LIKE TWO PHONES DIALING	1. DETERMINE IF TONE DIALER IS CONNECTED TO PHONE LINE. IF SO PROGRAM PHONE TO DIAL NO PHONE NUMBER OR BETTER, REMOVE EXISTING DIALER

EMS

Experts in Emergency Communications



Box Style Installation Instructions

Model No. PBX

EMS
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Phone: (631) 864-4742 • Fax: (631) 864-4770
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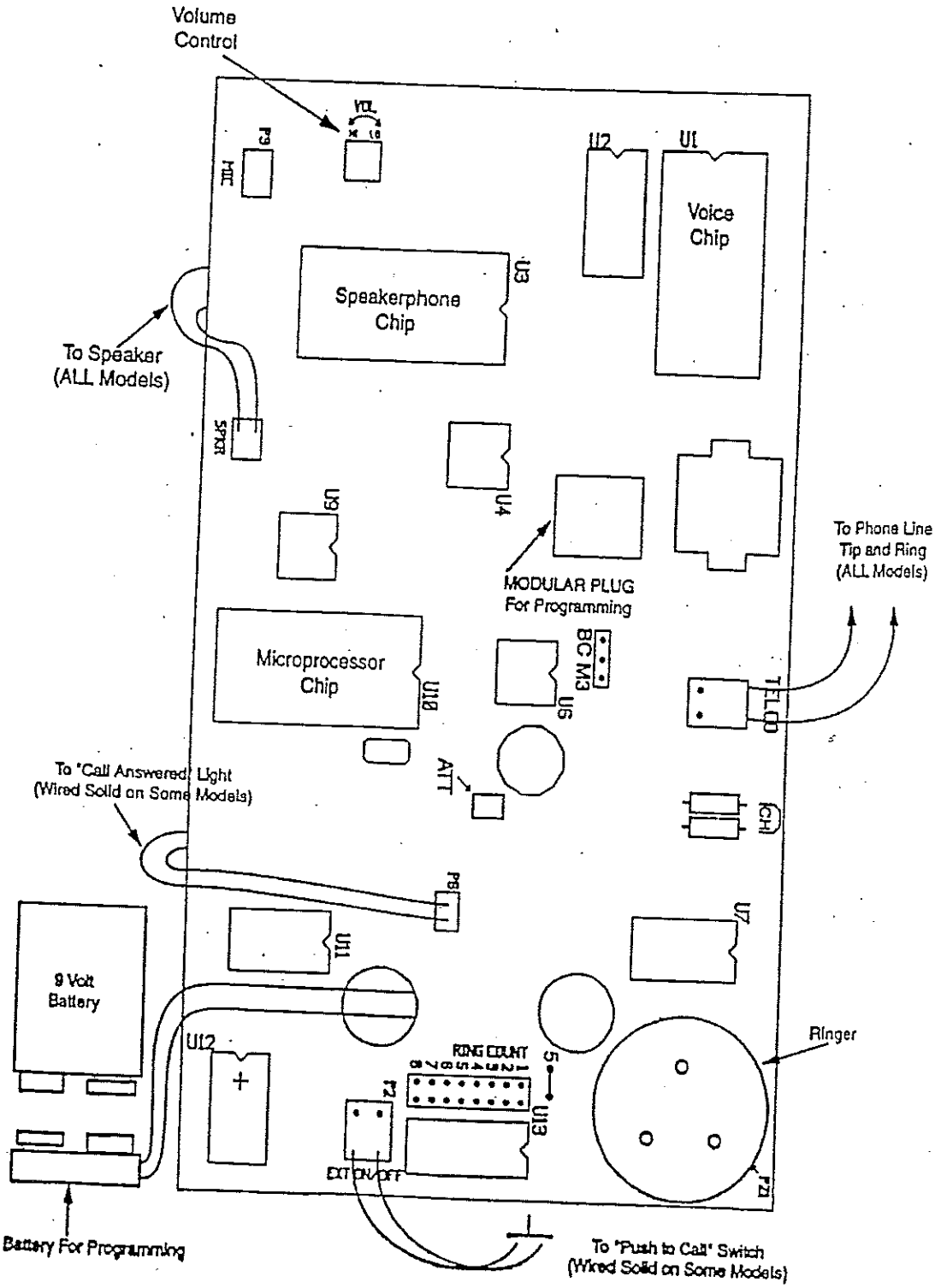
A HALMA GROUP COMPANY


Volume Control
VOL
P4
HDR
U12
U1
Voice Chip
Speakerphone Chip
U3
To Speaker (ALL Models)
SPKR
U9
U4
MODULAR PLUG For Programming
To Phone Line Tip and Ring (ALL Models)
Microprocessor Chip
U10
BC M3
U5
TELCO
To "Call Answered" Light (Wired Solid on Some Models)
ATT
CHI
P8
U11
U7
9 Volt Battery
U12
RING COUNT
P2
U13
EXT ON/OFF
Ringer
P2
Battery For Programming
To "Push to Call" Switch (Wired Solid on Some Models)

ADA COMPLIANT BOX STYLE TELEPHONE INSTALLATION, PROGRAMMING AND OPERATING INSTRUCTIONS FOR MODEL PBX

INSTALLATION INSTRUCTIONS

Step 1. Determine the position for the Hands-free phone in the elevator phone cabinet. Allow enough room at the bottom of the box for opening and removing the cover.
Step 2. Using the box bottom as a template, mark screw hole positions in the back of the phone cabinet.

CAUTION: BEFORE DRILLING, CHECK TO MAKE SURE THERE IS NO CHANCE DRILLING WILL DAMAGE ANY PART OF THE ELEVATOR AND THAT THERE IS SUFFICIENT CLEARANCE FOR THE SCREWS SO NO DAMAGE TO THE ELEVATOR DOOR CAN OCCUR.

Step 3. Drill required holes for elevator phone bottom.
Step 4. Mount elevator phone bottom with selected fastener.
Step 5. Insert the cabling for the incoming phone line through the slots provided in either end of the elevator phone bottom.

IMPORTANT: TO REDUCE OR ELIMINATE ANY POSSIBLE INTERFERENCE, IT IS HIGHLY RECOMMENDED THAT THE WIRING USED INSIDE THE TRAVELING CABLE FOR THE INCOMING PHONE LINE BE A SHIELDED TWISTED PAIR WITH THE SHIELD GROUNDED AT THE ELEVATOR CONTROLLER END ONLY. ANY TERMINATIONS OR SPLICES BETWEEN THE ELEVATOR CONTROLLER AND THE ELEVATOR PHONE SHOULD HAVE THE SHIELD CARRIED THROUGH THE TERMINATION OF SPLICE AND NOT GROUNDED AT THAT POINT.

Step 6. Remove the "TELCO" terminal block and attach the incoming phone line to the Telco Block's two screw terminals. See diagram of phone board. **IMPORTANT:** DO NOT ATTACH THE INCOMING DIALTONE TO THE BLACK MODULAR JACK.
Step 7. **IMPORTANT:** Tape the shield and the individual wires so that they do not short.
Step 8. Plug the "TELCO" terminal block back onto the electronics board.

CAUTION: WHEN CLOSING THE BOX, BE SURE NOT TO CRIMP THE SPEAKER WIRES, BATTERY WIRES, OR TELEPHONE CABLING BETWEEN THE ELEVATOR PHONE, TOP AND BOTTOM.

Step 9. If the phone is being connected to a phone line that needs a "9" or some other digit to call out, go to the SETUP AND PROGRAMMING METHOD section of this guide.

PRE- PROGRAMMING INSTRUCTIONS

SET-UP METHODS

There are three methods of SETTING UP prior to programming the EMS elevator phone. Select the one applicable to your situation as described below. THE TELEPHONE LINE PROVIDED MUST BE A TOUCH-TONE LINE.

The EMS elevator telephone can be programmed at any location and then installed in the elevator cab. The phones have non-volatile memory and will not lose programming. A battery is not necessary to retain the programmed phone numbers or voice message.

METHOD A: CALLING UP THE INSTALLED ELEVATOR PHONE

1. From any tone phone call the phone number to which the elevator phone is connected.
2. After five rings (OR if the "CALL" button is pressed) the elevator phone will turn on automatically and you will hear a diddle-diddle-diddle sound. **NOTE:** If there is more than one elevator phone on the same phone line you will need to have someone press the "CALL" button on each elevator phone to program one at a time.
3. Go to the "PROGRAMMING INSTRUCTIONS" section.
4. After programming the phone, you may remotely test the phone. The test will make sure the phone is functioning correctly and as programmed. See STEP 7 in "PROGRAMMING INSTRUCTIONS".

METHOD B: SET UP FOR PROGRAMMING WITHOUT A PHONE LINE

1. Connect the 9 volt battery to the battery connector. See diagram of phone board.
2. Plug a tone phone into the black modular jack. See diagram of phone board.
3. Unplug the speaker. See diagram of phone board.
4. Using a small screwdriver briefly short out the two pins at "M3" or briefly short the two leads at "CH". Shorting at "CH" will give you an audible tone. See diagram of phone board.
5. Turn the elevator phone over so you can see the front and PRESS the "CALL" button.
6. Make sure that the red light on the front of the elevator phone turns on. If it does not, go back to step 4 and start again.
7. Pick up the tone phone handset and listen for the elevator phone to dial.
8. Two seconds after the elevator phone dials you will normally hear a tone, a two second pause and a pre-recorded voice message will begin cycling with a tone at the end of the message. IF YOU DO NOT HEAR A VOICE MESSAGE, IT MAY MEAN THAT THE PHONE IS SET UP TO NOT PLAY THE VOICE MESSAGE OR TO DELAY THE VOICE MESSAGE
9. On the tone phone enter 1 immediately after you hear the tone at the end of the message. If there is no message, do not enter 1.
10. Listen to the handset and make sure the message is not cycling.
11. REFER TO THE PROGRAMMING INSTRUCTIONS, after programming, return to step 12.
12. Reconnect the elevator phone speaker.
13. Unplug 9 volt battery.
14. Unplug tone phone and test the phone completely.

METHOD C: SET-UP FOR REMOTE PROGRAMMING WITH INSTALLER ON-SITE

The elevator phone installer or the off-site programmer can do the programming.

1. Connect elevator phone by wiring phone line to "TELCO" block. See diagram of phone board.
2. Connect the 9 volt battery to the battery connector. See diagram of phone board.
3. Plug the tone phone into the black modular jack. See diagram of phone board.
4. Unplug the speaker. See diagram of phone board.
5. Turn the elevator phone over so you can see the front of the phone.
6. Using the tone phone dial the phone number of the person doing the programming.
7. When you have the off-site person on the phone line press the "CALL" button.
8. Make sure that the red light turns on.
   Both the installer and the programmer will hear the phone dial.
9. Two seconds after the elevator phone dials both of you will hear a tone, a two second pause then a cycling pre-recorded voice message. IF YOU DO NOT HEAR A VOICE MESSAGE, IT MAY MEAN THAT THE PHONE IS SET UP TO NOT PLAY THE VOICE MESSAGE OR TO DELAY THE VOICE MESSAGE (Voice Mode 5).
10. Either the installer or the programmer should press a "1" immediately after the tone at the end of the message. If there is no message, do not press "1".
11. The voice message should stop cycling.
12. GO TO PROGRAMMING INSTRUCTIONS and return to next step.
    NOTE: After programming, the installer and programmer will still be able to talk even though the elevator phone has turned off.
13. After the installer finishes talking to the programmer, the installer should unplug the tone phone from the elevator phone.
14. Reconnect the elevator phone speaker. See diagram of phone board.
15. Unplug 9 volt battery. See diagram of phone board.
16. Test the phone completely.

PROGRAMMING INSTRUCTIONS

Step 1. Using the tone phone keypad enter **# 94851**. Listen for three beeps and note that the red LED will be blinking.

NOTE ONE: Enter tone digits slowly and deliberately. Too slow, it ignores tones and too fast, it can't read tones.

NOTE TWO: Once you are in programming mode, you can perform any programming step in any sequence as long as you get three beeps after your programming entry.

Step 2. Enter **# 0** (enter the first phone number to be programmed) followed by * #. Listen for three beeps. EXAMPLE: **# 05551212 * #.**

NOTE: If you are on a phone line that requires a "9" or another digit to call the answering service, enter a # after the 9. This will give the internal phone system time to connect to the outside phone line by inserting a 4 second pause. EXAMPLE: **# 09 # 551212 * #.**

Step 3. Enter **# 1** (enter the second telephone number to be programmed) followed by * #. EXAMPLE: **# 18881212 * #.**

If a second number is not needed, enter **# 1* #.** Listen for three beeps.

Step 4. Enter **# 2** (enter the third telephone number to be programmed) followed by * #. Listen for three beeps. If a third telephone number is not to be programmed, enter **# 2 * #.** Listen for three beeps.

Step 5. Enter **# 3** (enter the fourth telephone number to be programmed) followed by * #. Listen for three beeps. If a fourth telephone number is not to be programmed, enter **# 3 * #.** Listen for three beeps.

Step 6. Enter **# 7** and listen for the single beep. At the beep, record the location message by speaking into the tone phone handset. Immediately at the end of recording the voice message enter **0**. The voice message will play back for you and then you will hear three beeps. The maximum length of location message is nine seconds. If you need to modify the location message enter **# 7** and re-record. If you want to listen to the location message without changing it, enter **# 8.**

Step 7. If you want to test the programming and operation of the phone, you can enter * #. The phone will turn off and then (2) two seconds later, it will turn on automatically. The phone will automatically dial the pre-programmed phone number(s) and play the location message. You may want to alert the person receiving the call that this is a test.

Step 8. Enter # #. You will hear a beep and the elevator phone will turn off. RETURN TO THE SETUP STEP IN PREVIOUS SECTION.

Step 9. After installation, test phone completely.

OPTIONAL PROGRAMMING INSTRUCTIONS

TO DISABLE THE VOICE PROMPT MESSAGE AND DELAY THE VOICE LOCATION MESSAGE:
To disable the voice prompt from giving the following message: "At the tone press one to talk, press two for location", but delay the location message.

Enter # **94851**, listen for three beeps.
Enter # * **1180185** * #, listen for three beeps.
Enter # #

TO DISABLE THE VOICE PROMPT MESSAGE:
To disable the voice prompt from giving the following message: "At the tone press one to talk, press two for location".

Enter # **94851**, listen for three beeps.
Enter # * **1180180** * #, listen for three beeps.
Enter # #

TO ENABLE VOICE PROMPT MESSAGE:
To enable the voice prompt message to say: "At the tone press one to talk, press two for location"

Enter # **94851**, listen for three beeps
Enter # * **1180181** * #, listen for three beeps.
PROGRAM LOCATION MESSAGE (SEE STEP 6 IN PROGRAMMING INSTRUCTIONS)
Enter # #

TO ELIMINATE AUTODIALING:

Enter # **94851**, listen for three beeps.
Enter # **0** * #, listen for three beeps, enter # **1** * #, listen for three beeps.
Enter # **2** * #, listen for three beeps, enter # **3** * #, listen for three beeps.
Enter # #

INSTALLING MULTIPLE EMS TELEPHONES ON THE SAME TELEPHONE LINE

Up to eight (8) EMS telephones can be installed on the same telephone line following the guidelines below.

When multiple EMS telephones are to share the same telephone line, programming of the set-up code and the use of power packs will be necessary. Power packs are needed when three or more EMS phones share the same telephone line. Power packs can be ordered as an option and are easy to install.

The EMS telephone has a set-up code that is programmed when multiple EMS telephones (up to 8) are installed on the same telephone line.
This feature is used to communicate with a specific telephone when multiple EMS telephones are connected to the same telephone line. This feature allows the operator to enter an identification number of the specific telephone the operator needs to communicate with. All other EMS telephones will shut off (hang up).

TO PROGRAM:

1. Using the programming instructions, enter the programming mode on an individual telephone (# 94851).
2. When in programming mode, enter the following setup code: # * 1180181 * #, there will be three short tones.
3. Enter # #, you will hear a single tone.
4. Hang up.

IMPORTANT: The digit 8 (default), shown as bold type in the setup code, is the 6th digit in the sequence and represents the number the telephone will be in reference to other EMS telephones connected to the same telephone line. Each EMS telephone should be programmed with a different number (1 to 8) in relation to each other.

Example:
Elevator 1: # * 1180111 * #
Elevator 2: # * 1180121 * #

OPERATION:
When a call is made and multiple EMS telephones are connected to the same telephone line, all EMS telephones on this line will answer. Press * followed by the number (1to 8) of the phone you wish to communicate with, all other EMS telephones will then turn off (hang up).

OPERATING INSTRUCTIONS

A: TRAPPED PASSENGER CALLING OUT

1. Passenger presses "CALL" button. Red LED on elevator phone turns on.
2. Passenger hears dialtone and dialing of first phone number.
3. Passenger hears ringing intermittently.
   NOTE: TWO WAY VOICE COMMUNICATION WILL BE ESTABLISHED AFTER THE OPERATOR ENTERS A DIGIT ON THEIR TONE PHONE.
4. Passenger hears a tone two seconds after elevator phone dials and every 7 seconds until the operator responds to the call.
5. If first phone number is not answered within approximately 50 seconds, the elevator phone will hang up and dial the second phone number. The same sequence of events will occur.
6. Once the receiving operator responds to the call with a tone digit the passenger and the operator will be able to communicate.
7. After the red LED begins to blink, the operator can request the passenger to press the "CALL" button again. This action will send an audible signal to the operator to let operator know that someone is actually stuck in the elevator and not just a prank call. This action is normally only important for someone who cannot speak.

B: RESPONDING OPERATOR-WITH PROMPT MESSAGE ENABLED

1. Operator hears ringing of incoming call from elevator and answers call.
2. Operator hears a cycling message from the elevator phone stating "ELEVATOR CALL, AT THE TONE PRESS ONE TO TALK, PRESS TWO FOR LOCATION". The message will keep repeating until the operator press a "1" or "2" after the tone on their tone phone.
3. The passenger does not hear any voice messages.
4. Normally the operator should press "1" after the tone at the end of the message to quickly establish two way voice communication with the trapped passenger.
5. At any time the operator can press "2" to hear the location of the elevator.
6. In elevators with a lot of background noise, the operator can press # to mute the microphone. Entry of any other digit will re-enable the microphone.
7. At the end of the location message another message will be heard by the operator that says: "PRESS ZERO TO ALERT PASSENGER OF RESCUE."
8. When the operator presses "0" on their tone phone they will hear three beeps. the Red light on the elevator phone will begin blinking. At this time the passenger knows that the call has been received because wording printed on the phone box states "Blinking Indicates Call Answered Help Is On The Way".
9. The operator can request that the passenger press the "CALL" button again. If the passenger presses the button the operator will hear a diddle-diddle-diddle sound. For the operator, this means that there is a passenger in the elevator.
10. Prior to the phone turning off (normally 3 minutes), the operator will hear this message twice: "TO AVOID DISCONNECT PRESS THREE NOW"

11. If the operator presses "3" on their tone phone within ten seconds after this message, the elevator phone will stay on for another three minutes. The message will be repeated every three minutes for the duration of the call so that the operator can keep the passenger on the line until help arrives or as long as needed.

ALTERNATE B-WITH DELAYED LOCATION MESSAGE -VOICE MODE 5

ALL OPERATING STEPS ARE THE SAME EXCEPT:

1. Operator answers incoming call and begins talking to passenger.
2. Seventeen seconds after the call is dialed, the operator will hear the location message followed by this message: "PRESS ZERO TO ALERT PASSENGER OF RESCUE."
3. Both messages will repeat every 20 seconds until the operator enters "0".

C. OPERATOR CALLING INTO ELEVATOR PHONE

1. Operator dials the phone number of the elevator phone and hears ringing.
2. After five rings the elevator phone turns on automatically and operator will hear diddle-diddle-diddle sound.
3. At this time the operator and passenger can talk. All other operations stay the same.

D. PASSENGER RECEIVING CALL FROM OPERATOR

1. Passenger hears elevator phone ringing. Phone turns on automatically after 5 rings, OR
2. Passenger can push the "CALL" button to turn elevator phone on.
3. When elevator phone turns on the passenger and operator can communicate.

BATTERY INFORMATION

The following information is how to determine when a battery or power pack is needed and the use of different types of batteries. For uninterrupted service, use the following guidelines:

You will need a 9VDC battery or a power pack when:

1. The phone will be programmed on site using a portable phone plugged into the black jack on the back of the phone board.
2. The phone drops off the telephone line without completing the call.
3. There is more than one phone on the same telephone line and there is a need to call back to a specific elevator phone, or if all elevator phones need to be "ON" at the same time.

For testing, any fully charged 9 volt battery can be used.

ALKALINE BATTERY: Can be used on all phone lines. The battery will need to be checked every 6 months. An AC connection is not required and the battery cannot be trickle charged.

LITHIUM BATTERY: Can be used on all phone lines. The battery will need to be checked every 6 months. An AC connection is not required and the battery cannot be trickle charged.

POWER PAK: Can be used on all phone lines. The Ni-Cad battery in the power pack will need to be checked every 6 months.

NI-CAD BATTERY: Can be used only on internal phone systems or when the optional power pack is used. Internal phone system usually require an access digit such as a "9" to obtain a telephone line to allow dialing to a phone number outside the building.
Note: For the Ni-Cad battery to maintain its charge, you must place a shorting jumper over the two pins labeled "BC". The Ni-Cad battery will need to be checked every 6 months. See diagram.

ELECTRONIC MICRO SYSTEMS INC.
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FCC INFORMATION

The HFP2.6 complies with Part 68 of the FCC Rules. The label affixed to this equipment contains, among other information, the FCC Registration Number and Ringer Equivalence Number (REN) for this equipment. You must, upon request, provide this information to your telephone company. The REN is useful to determine the quantity of devices you may connect to your telephone line and still have all of those devices ring when your telephone number is called. In most, but not all areas, the sum of the REN's of all devices connected to one line should not exceed five *(5.0)*. To be certain of the number of devices you may connect to your line, as determined by the REN, you should contact your local telephone company to determine the maximum REN for your calling area.

The following jacks must be ordered from the telephone company in order to interconnect this equipment with the public communication network: RJ11.

An FCC compliant telephone cord and modular plug is provided with this equipment. This equipment is designed to be connected to the telephone network or premises wiring using a compatible modular jack which is part 68 compliant. See Installation Instructions for details.

If this device causes harm to the telephone network, the Telephone Company may discontinue your service temporarily. If possible, they will notify you in advance. But if advance notice is not practical you will be notified as soon as possible. You will be informed of your right to file a complaint with the FCC.

Your telephone company may make changes in its facilities, equipment, operations or procedures that could affect the proper functioning of your equipment. If they do, you will be notified in advance to give you an opportunity to maintain uninterrupted telephone service.

SPECIFICATIONS FOR ALL EMS ELEVATOR PHONES

Input connections:	One shielded twisted pair communication cable (Shield should be grounded in the traveling cable)
Phone line requirements	Standard (analog) loop start voice grade tone telephone line, PBX or key system station analog telephone line.
Power required on-hook	0 ma
Power required off-hook	20 to 30 ma
Phone line voltage on-hook	24 to 56.5VDC (nominally 48V DC)
Phone line voltage off-hook	8 to 20VDC (nominally 14VDC, min. 8 to 14VDC)
Ringing voltage	80 to 120VAC
Operational Loop resistance	600 ohms
FCC Registration	6HVUSA-25668-TE-T
Ringer Equivalency Number	0.2B

NOTE: For some PBX systems the power and/or the off-hook sensing capability of the PBX system is affected by long cable runs. On such systems, if the wiring run is over 300 feet, the pair serving the elevator phone may need to be connected to an OPX card in the PBX.

WARRANTY

Electronic Micro Systems Inc. warrants its products to be free from defects in materials and workmanship under normal use and service for 12 months from date of purchase. Seller's obligation shall be limited to repairing or replacing, at its option, free of charge for materials or labor any product which proves defective in materials or workmanship under normal use and service. Seller shall have no obligation under this Limited Warranty or otherwise if the product is altered or improperly repaired or serviced by anyone other than EMS factory service. For warranty service, contact EMS at 631-864-4742 or 800-333-3671.

THERE ARE NO WARRANTIES, EXPRESS OR IMPLIED, OF MERCHANTABILITY, OR FITNESS FOR A PARTICULAR PURPOSE OR OTHERWISE, WHICH EXTEND BEYOND THE DESCRIPTION ON THE FACE HEREOF. IN NO CASE SHALL SELLER BE LIABLE TO ANYONE FOR ANY CONSEQUENTIAL OR INCIDENTAL DAMAGES FOR BREACH OF THIS OR ANY OTHER WARRANTY, EXPRESS OR IMPLIED, OR UPON ANY OTHER BASIS OF LIABILITY WHATSOEVER, EVEN IF THE LOSS IS CAUSED BY THE SELLER'S OWN NEGLIGENCE OR FAULT.

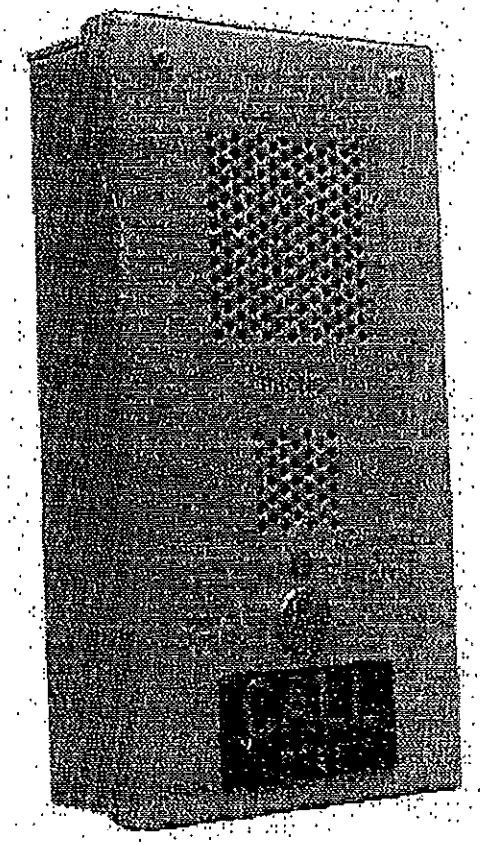
INSTRUCTIONS FOR OPERATION

(Can be hung on cabinet door)

1. PRESS SILVER "CALL" BUTTON ONCE
2. RED LED WILL TURN ON
3. PHONE WILL DIAL AND BEGIN SENDING PROMPT MESSAGE TO ANSWERING SERVICE
4. BE PATIENT-OPERATORS MAY BE BUSY
5. AFTER YOU HEAR A LOUD AND LONG TONE, YOU WILL BE ABLE TO TALK TO THE OPERATOR
6. WAIT FOR OPERATOR TO ADDRESS YOU
7. IF YOU CANNOT TALK, WHEN THE RED LED STARTS TO FLASH, PRESS THE "CALL" BUTTON AGAIN.
8. IF YOU CANNOT HEAR, REFER TO STEP 7 AND THEN BEGIN TALKING

EMS

Experts in Emergency Communications



Box Style Installation Instructions

Model No. PBX

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A HALMA GROUP COMPANY

ADA COMPLIANT BOX STYLE TELEPHONE INSTALLATION, PROGRAMMING AND OPERATING INSTRUCTIONS FOR MODEL PBX

INSTALLATION INSTRUCTIONS

Step 1. Determine the position for the Hands-free phone in the elevator phone cabinet. Allow enough room at the bottom of the box for opening and removing the cover.
Step 2. Using the box bottom as a template, mark screw hole positions in the back of the phone cabinet.

CAUTION: BEFORE DRILLING, CHECK TO MAKE SURE THERE IS NO CHANCE DRILLING WILL DAMAGE ANY PART OF THE ELEVATOR AND THAT THERE IS SUFFICIENT CLEARANCE FOR THE SCREWS SO NO DAMAGE TO THE ELEVATOR DOOR CAN OCCUR.

Step 3. Drill required holes for elevator phone bottom.
Step 4. Mount elevator phone bottom with selected fastener.
Step 5. Insert the cabling for the incoming phone line through the slots provided in either end of the elevator phone bottom.

IMPORTANT: TO REDUCE OR ELIMINATE ANY POSSIBLE INTERFERENCE, IT IS HIGHLY RECOMMENDED THAT THE WIRING USED INSIDE THE TRAVELING CABLE FOR THE INCOMING PHONE LINE BE A SHIELDED TWISTED PAIR WITH THE SHIELD GROUNDED AT THE ELEVATOR CONTROLLER END ONLY. ANY TERMINATIONS OR SPLICES BETWEEN THE ELEVATOR CONTROLLER AND THE ELEVATOR PHONE SHOULD HAVE THE SHIELD CARRIED THROUGH THE TERMINATION OF SPLICE AND NOT GROUNDED AT THAT POINT.

Step 6. Remove the "TELCO" terminal block and attach the incoming phone line to the Telco Block's two screw terminals. See diagram of phone board. **IMPORTANT:** DO NOT ATTACH THE INCOMING DIALTONE TO THE BLACK MODULAR JACK.
Step 7. **IMPORTANT:** Tape the shield and the individual wires so that they do not short.
Step 8. Plug the "TELCO" terminal block back onto the electronics board.

CAUTION: WHEN CLOSING THE BOX, BE SURE NOT TO CRIMP THE SPEAKER WIRES, BATTERY WIRES, OR TELEPHONE CABLING BETWEEN THE ELEVATOR PHONE, TOP AND BOTTOM.

Step 9. If the phone is being connected to a phone line that needs a "9" or some other digit to call out, go to the SETUP AND PROGRAMMING METHOD section of this guide.

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1. From any tone phone call the phone number to which the elevator phone is connected.
2. After five rings (OR if the "CALL" button is pressed) the elevator phone will turn on automatically and you will hear a diddle-diddle-diddle sound. **NOTE:** If there is more than one elevator phone on the same phone line you will need to have someone press the "CALL" button on each elevator phone to program one at a time.
3. Go to the "PROGRAMMING INSTRUCTIONS" section.
4. After programming the phone, you may remotely test the phone. The test will make sure the phone is functioning correctly and as programmed. See STEP 7 in "PROGRAMMING INSTRUCTIONS".

METHOD B: SET UP FOR PROGRAMMING WITHOUT A PHONE LINE

1. Connect the 9 volt battery to the battery connector. See diagram of phone board.
2. Plug a tone phone into the black modular jack. See diagram of phone board.
3. Unplug the speaker. See diagram of phone board.
4. Using a small screwdriver briefly short out the two pins at "M3" or briefly short the two leads at "CH". Shorting at "CH" will give you an audible tone. See diagram of phone board.
5. Turn the elevator phone over so you can see the front and PRESS the "CALL" button.
6. Make sure that the red light on the front of the elevator phone turns on. If it does not, go back to step 4 and start again.
7. Pick up the tone phone handset and listen for the elevator phone to dial.
8. Two seconds after the elevator phone dials you will normally hear a tone, a two second pause and a pre-recorded voice message will begin cycling with a tone at the end of the message. IF YOU DO NOT HEAR A VOICE MESSAGE, IT MAY MEAN THAT THE PHONE IS SET UP TO NOT PLAY THE VOICE MESSAGE OR TO DELAY THE VOICE MESSAGE
9. On the tone phone enter 1 immediately after you hear the tone at the end of the message. If there is no message, do not enter 1.
10. Listen to the handset and make sure the message is not cycling.
11. REFER TO THE PROGRAMMING INSTRUCTIONS, after programming, return to step 12.
12. Reconnect the elevator phone speaker.
13. Unplug 9 volt battery.
14. Unplug tone phone and test the phone completely.

METHOD C: SET-UP FOR REMOTE PROGRAMMING WITH INSTALLER ON-SITE

The elevator phone installer or the off-site programmer can do the programming.

1. Connect elevator phone by wiring phone line to "TELCO" block. See diagram of phone board.
2. Connect the 9 volt battery to the battery connector. See diagram of phone board.
3. Plug the tone phone into the black modular jack. See diagram of phone board.
4. Unplug the speaker. See diagram of phone board.
5. Turn the elevator phone over so you can see the front of the phone.
6. Using the tone phone dial the phone number of the person doing the programming.
7. When you have the off-site person on the phone line press the "CALL" button.
8. Make sure that the red light turns on.
   Both the installer and the programmer will hear the phone dial.
9. Two seconds after the elevator phone dials both of you will hear a tone, a two second pause then a cycling pre-recorded voice message. IF YOU DO NOT HEAR A VOICE MESSAGE, IT MAY MEAN THAT THE PHONE IS SET UP TO NOT PLAY THE VOICE MESSAGE OR TO DELAY THE VOICE MESSAGE (Voice Mode 5).
10. Either the installer or the programmer should press a "1" immediately after the tone at the end of the message. If there is no message, do not press "1".
11. The voice message should stop cycling.
12. GO TO PROGRAMMING INSTRUCTIONS and return to next step.
    NOTE: After programming, the installer and programmer will still be able to talk even though the elevator phone has turned off.
13. After the installer finishes talking to the programmer, the installer should unplug the tone phone from the elevator phone.
14. Reconnect the elevator phone speaker. See diagram of phone board.
15. Unplug 9 volt battery. See diagram of phone board.
16. Test the phone completely.

PROGRAMMING INSTRUCTIONS

Step 1. Using the tone phone keypad enter **# 94851**. Listen for three beeps and note that the red LED will be blinking.
NOTE ONE: Enter tone digits slowly and deliberately. Too slow, it ignores tones and too fast, it can't read tones.
NOTE TWO: Once you are in programming mode, you can perform any programming step in any sequence as long as you get three beeps after your programming entry.

Step 2. Enter **# 0** (enter the first phone number to be programmed) followed by * #. Listen for three beeps. EXAMPLE: **# 05551212** * #.
NOTE: If you are on a phone line that requires a "9" or another digit to call the answering service, enter a # after the 9. This will give the internal phone system time to connect to the outside phone line by inserting a 4 second pause. EXAMPLE: **# 09 # 551212** * #.

Step 3. Enter **# 1** (enter the second telephone number to be programmed) followed by * #.
EXAMPLE: **# 18881212** * #.
If a second number is not needed, enter **# 1*** #. Listen for three beeps.

Step 4. Enter **# 2** (enter the third telephone number to be programmed) followed by * #. Listen for three beeps. If a third telephone number is not to be programmed, enter **# 2** * #. Listen for three beeps.

Step 5. Enter **# 3** (enter the fourth telephone number to be programmed) followed by * #. Listen for three beeps. If a fourth telephone number is not to be programmed, enter **# 3** * #. Listen for three beeps.

Step 6. Enter **# 7** and listen for the single beep. At the beep, record the location message by speaking into the tone phone handset. Immediately at the end of recording the voice message enter 0. The voice message will play back for you and then you will hear three beeps. The maximum length of location message is nine seconds. If you need to modify the location message enter **# 7** and re-record. If you want to listen to the location message without changing it, enter **# 8**.

Step 7. If you want to test the programming and operation of the phone, you can enter * #. The phone will turn off and then (2) two seconds later, it will turn on automatically. The phone will automatically dial the pre-programmed phone number(s) and play the location message. You may want to alert the person receiving the call that this is a test.

Step 8. Enter # #. You will hear a beep and the elevator phone will turn off.
RETURN TO THE SETUP STEP IN PREVIOUS SECTION.

Step 9. After installation, test phone completely.

OPTIONAL PROGRAMMING INSTRUCTIONS

TO DISABLE THE VOICE PROMPT MESSAGE AND DELAY THE VOICE LOCATION MESSAGE:

To disable the voice prompt from giving the following message: "At the tone press one to talk, press two for location", but delay the location message.

Enter # **94851**, listen for three beeps.
Enter # * **1180185** * #, listen for three beeps.
Enter # #

TO DISABLE THE VOICE PROMPT MESSAGE:

To disable the voice prompt from giving the following message: "At the tone press one to talk, press two for location".

Enter # **94851**, listen for three beeps.
Enter # * **1180180** * #, listen for three beeps.
Enter # #

TO ENABLE VOICE PROMPT MESSAGE:

To enable the voice prompt message to say: "At the tone press one to talk, press two for location"

Enter # **94851**, listen for three beeps
Enter # * **1180181** * #, listen for three beeps.
PROGRAM LOCATION MESSAGE (SEE STEP 6 IN PROGRAMMING INSTRUCTIONS)
Enter # #

TO ELIMINATE AUTODIALING:

Enter # **94851**, listen for three beeps.
Enter # **0** * #, listen for three beeps, enter # **1** * #, listen for three beeps.
Enter # **2** * #, listen for three beeps, enter # **3** * #, listen for three beeps.
Enter # #

INSTALLING MULTIPLE EMS TELEPHONES ON THE SAME TELEPHONE LINE

Up to eight (8) EMS telephones can be installed on the same telephone line following the guidelines below.

When multiple EMS telephones are to share the same telephone line, programming of the set-up code and the use of power packs will be necessary. Power packs are needed when three or more EMS phones share the same telephone line. Power packs can be ordered as an option and are easy to install.

The EMS telephone has a set-up code that is programmed when multiple EMS telephones (up to 8) are installed on the same telephone line.
This feature is used to communicate with a specific telephone when multiple EMS telephones are connected to the same telephone line. This feature allows the operator to enter an identification number of the specific telephone the operator needs to communicate with. All other EMS telephones will shut off (hang up).

TO PROGRAM:

1. Using the programming instructions, enter the programming mode on an individual telephone (# 94851).
2. When in programming mode, enter the following setup code: # * 1180181 * #, there will be three short tones.
3. Enter # #, you will hear a single tone.
4. Hang up.

IMPORTANT: The digit **8** (default), shown as bold type in the setup code, is the 6th digit in the sequence and represents the number the telephone will be in reference to other EMS telephones connected to the same telephone line. Each EMS telephone should be programmed with a different number (1 to 8) in relation to each other.

Example:
Elevator 1: # * 1180111 * #
Elevator 2: # * 1180121 * #

OPERATION:
When a call is made and multiple EMS telephones are connected to the same telephone line, all EMS telephones on this line will answer. Press * followed by the number (1to 8) of the phone you wish to communicate with, all other EMS telephones will then turn off (hang up).

OPERATING INSTRUCTIONS

A: TRAPPED PASSENGER CALLING OUT

1. Passenger presses "CALL" button. Red LED on elevator phone turns on.
2. Passenger hears dialtone and dialing of first phone number.
3. Passenger hears ringing intermittently.
   NOTE: TWO WAY VOICE COMMUNICATION WILL BE ESTABLISHED AFTER THE OPERATOR ENTERS A DIGIT ON THEIR TONE PHONE.
4. Passenger hears a tone two seconds after elevator phone dials and every 7 seconds until the operator responds to the call.
5. If first phone number is not answered within approximately 50 seconds, the elevator phone will hang up and dial the second phone number. The same sequence of events will occur.
6. Once the receiving operator responds to the call with a tone digit the passenger and the operator will be able to communicate.
7. After the red LED begins to blink, the operator can request the passenger to press the "CALL" button again. This action will send an audible signal to the operator to let operator know that someone is actually stuck in the elevator and not just a prank call. This action is normally only important for someone who cannot speak.

B: RESPONDING OPERATOR-WITH PROMPT MESSAGE ENABLED

1. Operator hears ringing of incoming call from elevator and answers call.
2. Operator hears a cycling message from the elevator phone stating "ELEVATOR CALL, AT THE TONE PRESS ONE TO TALK, PRESS TWO FOR LOCATION". The message will keep repeating until the operator press a "1" or "2" after the tone on their tone phone.
3. The passenger does not hear any voice messages.
4. Normally the operator should press "1" after the tone at the end of the message to quickly establish two way voice communication with the trapped passenger.
5. At any time the operator can press "2" to hear the location of the elevator.
6. In elevators with a lot of background noise, the operator can press # to mute the microphone. Entry of any other digit will re-enable the microphone.
7. At the end of the location message another message will be heard by the operator that says: "PRESS ZERO TO ALERT PASSENGER OF RESCUE."
8. When the operator presses "0" on their tone phone they will hear three beeps. the Red light on the elevator phone will begin blinking. At this time the passenger knows that the call has been received because wording printed on the phone box states "Blinking Indicates Call Answered Help Is On The Way".
9. The operator can request that the passenger press the "CALL" button again. If the passenger presses the button the operator will hear a diddle-diddle-diddle sound. For the operator, this means that there is a passenger in the elevator.
10. Prior to the phone turning off (normally 3 minutes), the operator will hear this message twice: "TO AVOID DISCONNECT PRESS THREE NOW".

11. If the operator presses "3" on their tone phone within ten seconds after this message, the elevator phone will stay on for another three minutes. The message will be repeated every three minutes for the duration of the call so that the operator can keep the passenger on the line until help arrives or as long as needed.
12. Operator presses *0 to hang up the elevator phone.

ALTERNATE B-WITH DELAYED LOCATION MESSAGE -VOICE MODE 5

ALL OPERATING STEPS ARE THE SAME EXCEPT:

1. Operator answers incoming call and begins talking to passenger.
2. Seventeen seconds after the call is dialed, the operator will hear the location message followed by this message: "PRESS ZERO TO ALERT PASSENGER OF RESCUE."
3. Both messages will repeat every 20 seconds until the operator enters "0".

C. OPERATOR CALLING INTO ELEVATOR PHONE

1. Operator dials the phone number of the elevator phone and hears ringing.
2. After five rings the elevator phone turns on automatically and operator will hear diddle-diddle-diddle sound.
3. At this time the operator and passenger can talk. All other operations stay the same.
4. Operator presses *0 to hang up the elevator phone.

D. PASSENGER RECEIVING CALL FROM OPERATOR

1. Passenger hears elevator phone ringing. Phone turns on automatically after 5 rings, OR
2. Passenger can push the **"CALL"** button to turn elevator phone on.
3. When elevator phone turns on the passenger and operator can communicate.

BATTERY INFORMATION

The following information is how to determine when a battery or power pack is needed and the use of different types of batteries. For uninterrupted service, use the following guidelines:

You will need a 9VDC battery or a power pack when:
1. The phone will be programmed on site using a portable phone plugged into the black jack on the back of the phone board.
2. The phone drops off the telephone line without completing the call.
3. There is more than one phone on the same telephone line and there is a need to call back to a specific elevator phone, or if all elevator phones need to be "ON" at the same time.

For testing, any fully charged 9 volt battery can be used.

ALKALINE BATTERY: Can be used on all phone lines. The battery will need to be checked every 6 months. An AC connection is not required and the battery cannot be trickle charged.

LITHIUM BATTERY: Can be used on all phone lines. The battery will need to be checked every 6 months. An AC connection is not required and the battery cannot be trickle charged.

POWER PAK: Can be used on all phone lines. The Ni-Cad battery in the power pack will need to be checked every 6 months.

NI-CAD BATTERY: Can be used only on internal phone systems or when the optional power pack is used. Internal phone system usually require an access digit such as a "9" to obtain a telephone line to allow dialing to a phone number outside the building.
Note: For the Ni-Cad battery to maintain its charge, you must place a shorting jumper over the two pins labeled "BC". The Ni-Cad battery will need to be checked every 6 months. See diagram.

ELECTRONIC MICRO SYSTEMS INC.
125 Ricefield Lane
Hauppauge, NY 11788
631-864-4742, 800-333-3671 Fax: 631-864-4770, 888-333-3671

FCC INFORMATION

The HFP2.6 complies with Part 68 of the FCC Rules. The label affixed to this equipment contains, among other information, the FCC Registration Number and Ringer Equivalence Number (REN) for this equipment. You must, upon request, provide this information to your telephone company. The REN is useful to determine the quantity of devices you may connect to your telephone line and still have all of those devices ring when your telephone number is called. In most, but not all areas, the sum of the REN's of all devices connected to one line should not exceed five *(5.0)*. To be certain of the number of devices you may connect to your line, as determined by the REN, you should contact your local telephone company to determine the maximum REN for your calling area.

The following jacks must be ordered from the telephone company in order to interconnect this equipment with the public communication network: RJ11.

An FCC compliant telephone cord and modular plug is provided with this equipment. This equipment is designed to be connected to the telephone network or premises wiring using a compatible modular jack which is part 68 compliant. See Installation Instructions for details.

If this device causes harm to the telephone network, the Telephone Company may discontinue your service temporarily. If possible, they will notify you in advance. But if advance notice is not practical you will be notified as soon as possible. You will be informed of your right to file a complaint with the FCC.

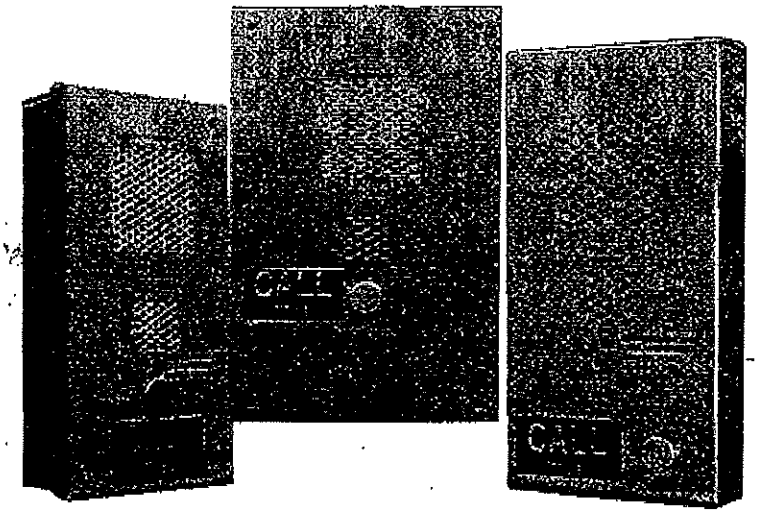
Your telephone company may make changes in its facilities, equipment, operations or procedures that could affect the proper functioning of your equipment. If they do, you will be notified in advance to give you an opportunity to maintain uninterrupted telephone service.

SPECIFICATIONS FOR ALL EMS ELEVATOR PHONES

Input connections:	One shielded twisted pair communication cable (Shield should be grounded in the traveling cable)
Phone line requirements	Standard (analog) loop start voice grade tone telephone line, PBX or key system station analog telephone line.
Power required on-hook	0 ma
Power required off-hook	20 to 30 ma
Phone line voltage on-hook	24 to 56.5VDC (nominally 48V DC)
Phone line voltage off-hook	8 to 20VDC (nominally 14VDC, min. 8 to 14VDC)
Ringing voltage	80 to 120VAC
Operational Loop resistance	600 ohms
FCC Registration	6HVUSA-25668-TE-T
Ringer Equivalency Number	0.2B

NOTE: For some PBX systems the power and/or the off-hook sensing capability of the PBX system is affected by long cable runs. On such systems, if the wiring run is over 300 feet, the pair serving the elevator phone may need to be connected to an OPX card in the PBX.

EMS Electronic Micro Systems



Experts in Emergency Communications

Electronic Micro Systems is a leader in providing communications solutions since 1987. We strive to provide the highest quality products and customer service in the industry. Our sales staff, together with our highly skilled technicians and engineers, are here for you before and after the sale.

Our telephones come in a variety of mounting styles to fit most applications and provide hands-free operation. We also welcome "non-standard" and "special" applications.

EMERGENCY ADA TELEPHONES

All of Our ADA Telephones Contain the Following Key Features

- Simple installation
- Suitable for new and existing elevators
- Programmable push button operation
- Can operate without an external power source for a single application telephone (phone line powered)
- Hands-free operation
- Can be programmed with or without a telephone line connected
- Capable of dialing up to four pre-programmed numbers
- Programmable off-hook time-out
- Recordable voice message or DTMF code to indicate location
- Easily programmed on site or remotely
- ADA Compliant
- Voice prompts to answering operator ensures proper operation eliminating the need to post instructions
- Positive acknowledgement of call answered, not fooled by answering machines
- Multiple telephones can be used on the same telephone line*
- Microphone muting for high noise conditions
- Complete off-site testing of phone operation
- Programmable pass-code for programming protection
- Non volatile memory
- Raised "CALL" letters with Braille
- LED for visual indication of received call
- Ability to drive an external relay

* Optional power pack may be required

Post-it® Fax Note 7671	Date 1-3003	# of pages ▶ 7
To RAY PICHLER	From GLORIA	
Co./Dept. JERSEY ELEVATOR	Co. EMS	
Phone #	Phone #	
Fax # 732-290-9824	Fax #	

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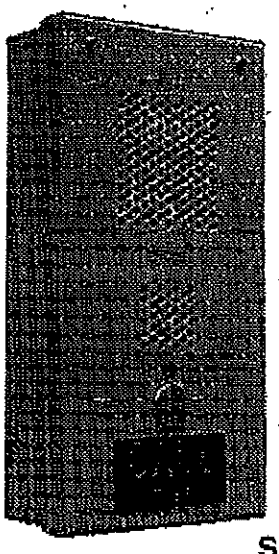
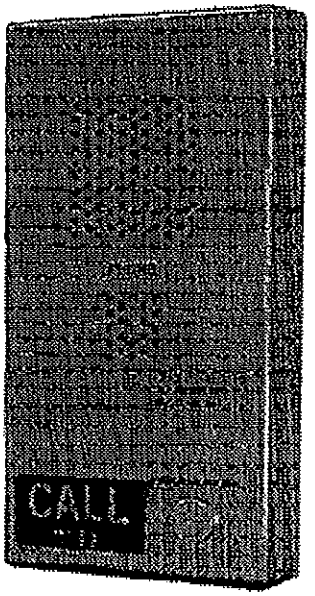
ADA EMERGENCY TELEPHONES



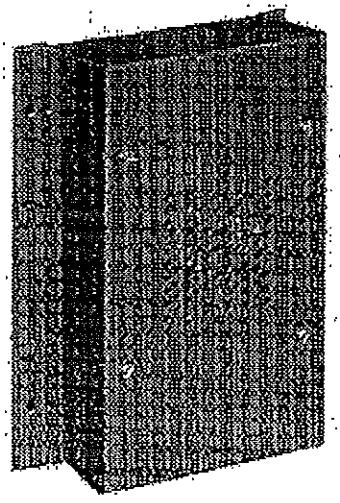
BOX STYLE PHONE
Part Number: PBX

- For mounting in elevator telephone cabinet
- Simple installation
- Tamper & vandal resistant
  8 13/16 in.H X 4 5/8 in.W X 2 1/16 in.D



SURFACE MOUNT
Part Number: PSM

- Stainless Steel with welded corners
- Hidden tamper-proof screws
- Does not require a cutout
  9 1/2 in.H X 5 1/16 in.W X 1 3/8 in.D



CEILING MOUNT TELEPHONE
Part Number: PCM

- Designed to mount on ceiling inside elevator cab
- Uses remote push button
  7 3/4 in.L X 4 13/16 in.W X 2 1/4 in.D
  (5 7/8 in.W with mounting flange)

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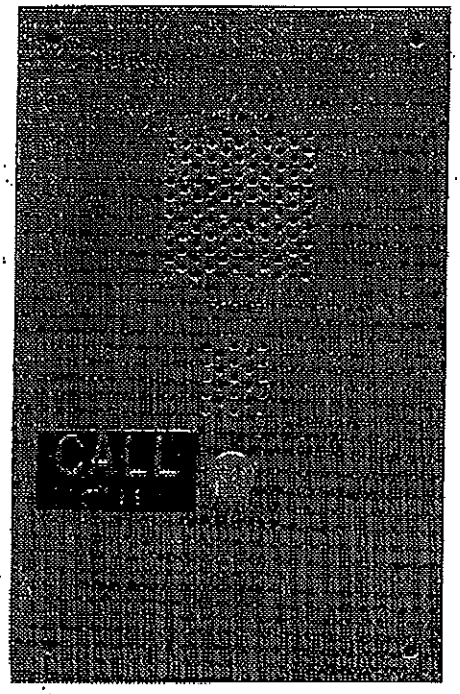
ADA EMERGENCY TELEPHONES

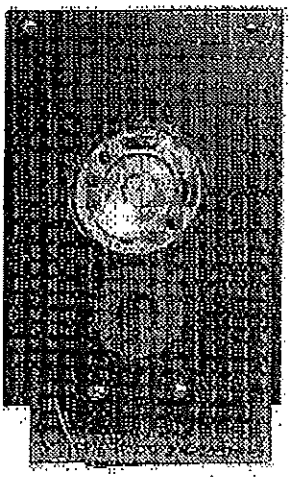


FLUSH MOUNT
Part Number: PSS (for small) or PSL (for large)

- Flat Stainless Steel Plate
- No. 4 Brushed Stainless Steel
- Available in custom sizes and metal
- Available in two standard sizes:
  PSS: 10½ in.H X 6½ in.W
  PSL: 13¼ in.H X 10 in.W
  Minimum cutout requirement for both:
  9 in.H X 5 in.W X 2 in.D

O.E.M. STYLE PHONE
Part Number: PNB

- Mounts behind car/cab operating panel
- Requires minimum 3½ in. diameter speaker pattern
- Activated by external button or dry contact
- Custom mounting plates are available to match existing mounting configuration
- Single piece construction shown
  (PNB faceplate: 6⅛ in.L X 4½ in.W)
- Also available:
  2 piece construction for applications where space is limited
  (Part No. PNB-2PC faceplate: 4½ in.L X 4½ in.W)



EMS *Experts in Emergency Communications*

Description of Operation:

EMS telephones can autodial up to four pre-programmed phone numbers when activated by simply pressing a button. If the telephone line is busy or the call is not answered, EMS telephones will automatically dial the next pre-programmed number.

When a call is answered, voice instructions can be offered to the answering party to assist in a proper response. The location of the person needing assistance can be identified either by a digitized voice recording or a DTMF code.

If the call is answered by an answering machine, the system will disconnect and dial a second pre-programmed number. EMS telephones can be programmed to answer calls either manually or automatically.

Specifications

Meets or Exceeds the Requirements of:

- Complies with Americans with Disabilities Act (ADA)
- Complies to ASME A17.1
- FCC Part 68
- FCC Part 15, Class A Device
- CE (Europe)

Connections:

- One pair shielded twisted pair communication cable

Phone Line Requirements:

- Standard (analog) loop start voice grade tone telephone line

Electrical:

- Required on-hook current: 0mA
- Required off-hook current: min. 20mA max. 125mA
- On-hook voltage range: 24 - 52VDC (Nominally 48VDC)
- Off-hook voltage: min 8VDC

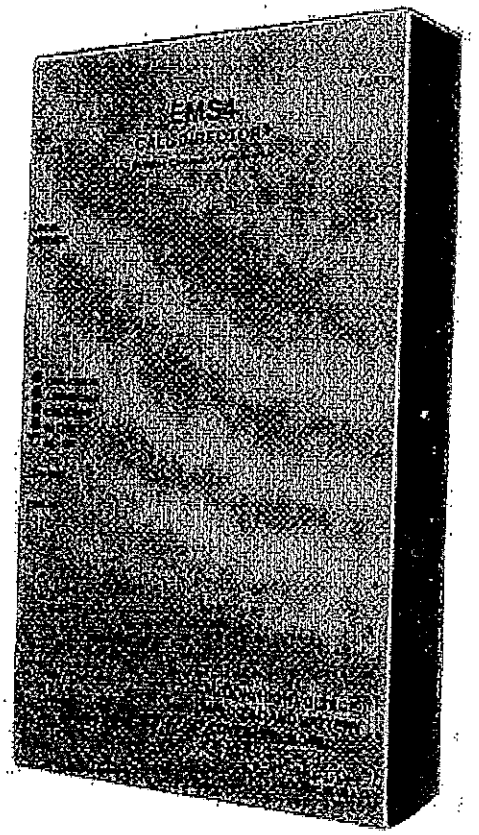
EMS
Electronic Micro Systems Inc.
125 Ricefield Lane • Hauppauge, New York 11788 • USA
Phone: (631) 864-4742 • Fax: (631) 864-4770
Phone: (800) 333-3671 • Fax: (888) 333-3671
Web Site: www.emscomm.com • E-Mail: sales@emscomm.com

EMS Experts in Emergency Communications

ELEVATOR TELEPHONE SYSTEM

The EMS4 CallDirector™ system allows multiple telephone devices to communicate within a building without the need for a dedicated telephone line. If a telephone line is connected to the system, the EMS4 CallDirector™ allows communication outside the building. The EMS4 CallDirector™ incorporates "FORCE THRU CALLING™" to ensure emergency calls can not be ignored.
Multiple EMS4 CallDirectors™ can be combined to support a total of up to 64 telephone devices. Telephone devices can be elevator phones, machine room phones, standard telephones and a lobby/master station telephone.
The EMS4 CallDirector™ is available in two models, the EMS4-4 for up to 4 telephone devices, and the EMS4-8 for up to 8 telephone devices.

EMS4 CallDirector™
Part Number: EMS4



- Can function as a stand alone intercom system
- Up to three voice messages may be programmed, messages can play when a call is answered or when the EMS4 answers an incoming call
- Can autodial up to 3 programmed telephone numbers
- Allows telephone devices to dial separate phone numbers other than EMS4 programmed numbers
- Can be used as a ring down device
- Compatible with all EMS ADA telephones
- Uses standard modular connections
- Brushed stainless steel finish

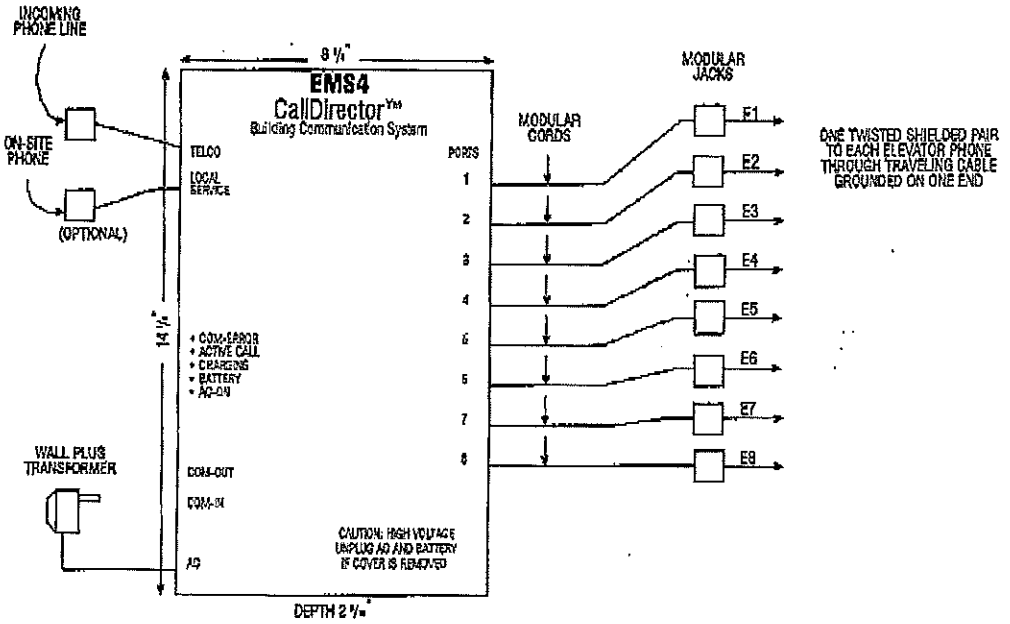
Master Station (optional)
Part Number: SHW

- Two digit display to indicate location calling
- Wall mounted, desk or flush mount optional
- Brushed stainless steel finish (muntz finish available)
- Custom enclosures available
- Two 22 gauge twisted shielded pair wiring required

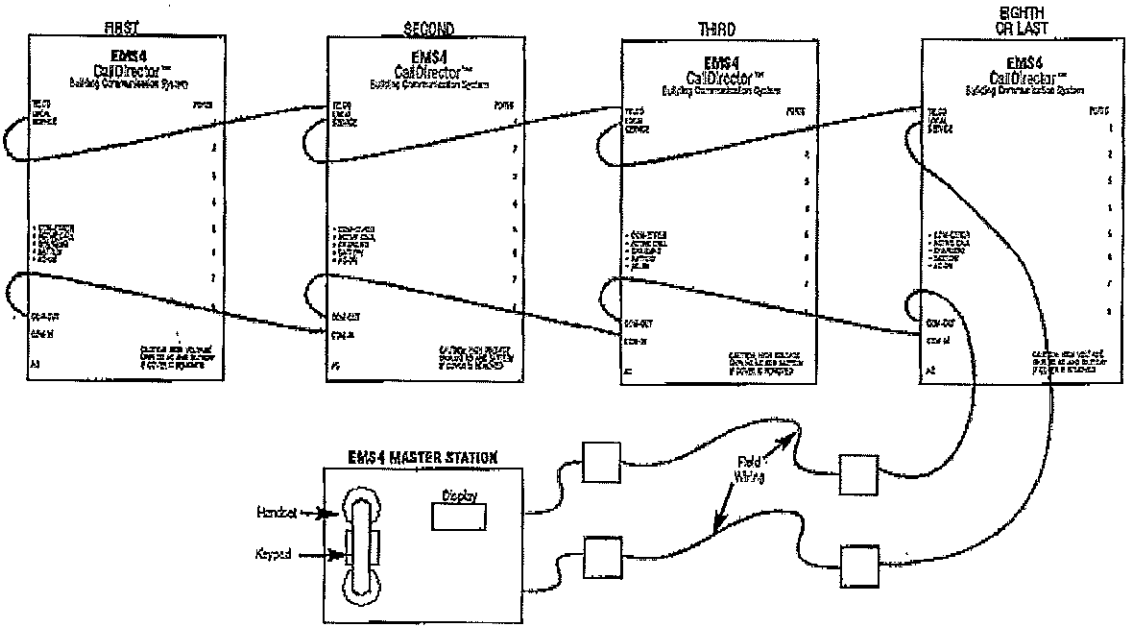
Specifications
FCC approved • One 22 gauge twisted shielded pair wiring per phone • Phones can be up to 1000 feet away Requires AC power (plug-in transformer provided) • Four hour battery back-up • 8⅜in.W X 14¼in.H X 2⅝in.D

A HALMA GROUP COMPANY

EMS4 CallDirector™ Installation Diagram



Interconnections of EMS4 CallDirectors™ and Master Stations



EMS
Electronic Micro Systems Inc.
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Phone: (631) 864-4742 • Fax: (631) 864-4770
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Web Site: www.emscomm.com • E-Mail: sales@emscomm.com

Increase Your Sales
While Reducing Your Customers Expenses

EMS4 IntraBuilding Communication System
For Multiple Car, Machine Room, and Lobby Communications

Eliminates expensive multiple telephone line charges, providing additional savings for your customer.

Provides compliance with ASME 2000 machine room to cab communication bringing your customers up to the most recent codes.

On or off site monitoring capacity. Creates flexibility for daytime security staff and evening offsite monitoring without changing programming.

Reduces time delay of emergency contact onsite, when Master Stations are used, allowing faster response time in the event of a trapped passenger.

Easily installed by your elevator mechanics or telecommunications personnel.

Lobby Master Stations and Machine Room Stations allow property management, fire department and elevator technicians onsite communication with all other Master Stations or elevator cabs.

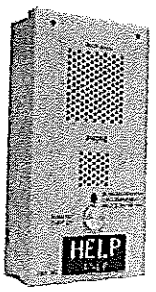
For the average customer, the equipment and installation pays for itself within 12-14 months with the elimination of multiple phone lines.

For more information or quotes contact EMS 1-800-333-3671

Janus Elevator Products Inc.

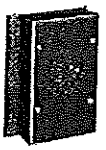
"Sound Innovation, On Call."

LINE POWERED ADA TELEPHONE USER'S MANUAL



PBX

PNB



PCM

PSM

PSS/PSL

AVAILABLE IN THE U.S. THROUGH

JANUS ELEVATOR PRODUCTS, INC.

125 Ricefield Lane, Hauppauge, New York 11788
Phone: 631 864 3599 Toll Free: 800 527 9155
Fax: 631 864 2631 Email: sales@januselevator.com

www.electronicmicrosystems.com www.januselevator.com

A HALMA GROUP COMPANY

TABLE OF CONTENTS

Installation

Box-Less Style

1. Mount phone on the car station.
2. Attach red lens cap and bezel to ¼" hole on car station.
3. ert LED into lens cap and plug wire into P6.
4. ED versions – Red LED goes to "Call in Progress" (P6)
   Green LED goes to "Alarm Received" (D29)
5. Attach emergency button leads to terminal block at P2 (EXT ON/OFF).
6. Attach phone line to terminal block at P1 (TELCO).

Box Style

1. Mount back box into phone cabinet on car station.
2. Allow enough room at bottom for opening and removing phone cover.
3. Attach phone line to terminal block at P1 (TELCO).
4. Attach phone cover with screws provided.

Flush Mount Style

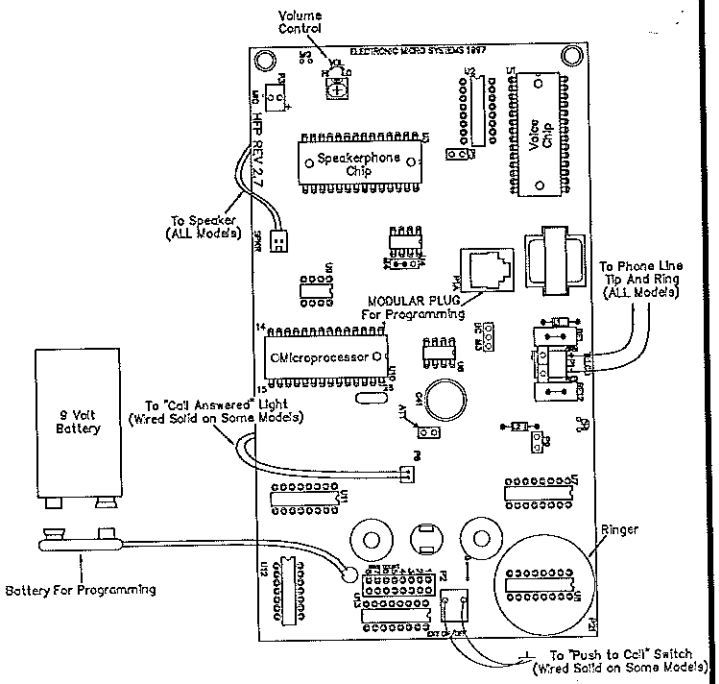
1. Cut 5 x 9 inch hole for the phone.
2. Using the plate as a template mark & drill holes for the mounting screws.
3. Attach phone line to terminal block at P1 (TELCO).
4. Mount phone (screws not provided).

Surface Mount Style

1. Use mounting plate as a template.
2. Attach mounting plate to wall.
3. Attach phone line to terminal block at P1 (TELCO).
4. Attach phone cover with screws provided.

CAUTION: To reduce or eliminate any possible interference, it is highly recommended that the wiring used inside the traveling cable for the incoming phone line be a 20-22 AWG twisted shielded pair with the shield grounded at the elevator controller end only. Any terminations or splices between the elevator controller and the elevator phone should have the shield carried through the termination of splice and not grounded at that point.

PC Board Diagram



Note: On all HFP Rev. 2.7 or above revision boards, the jumper on P9 position should be installed whenever the phone is used wit' cellular backup unit. When used on a regular phone line, th jumper should be removed.

Programming Set-Up Methods

There are two appropriate methods of SETTING UP the Hands-Free elevator phone for programming. Select the one applicable to your situation as described below.

N : THE TELEPHONE LINE PROVIDED MUST BE A TOUCH-TONE LINE.

The Hands-Free telephone can be programmed at any location and then installed in the elevator cab. The phone will retain its programming without the need for a battery.

Method A: Calling Into the Installed Elevator Phone

1. From any touch tone phone call the phone number to which the elevator phone is connected.
2. After five rings (OR if the "HELP" button is pressed) the elevator phone will turn on automatically and you will hear a diddle-diddle-diddle sound.
   NOTE: If there is more than one elevator phone on the same phone line you will need to have someone press the "HELP" button on each elevator phone, or disconnect the others, in order to program each ADA phone.
3. Go to the "PROGRAMMING INSTRUCTIONS" section to continue.
4. After programming the ADA phone, you should test it by pressing the "HELP" button. The test will assure the phone is functioning correctly and as programmed.

Method B: Set Up for Programming without a Phone Line

1. Disconnect the phone line from the P1 (TELCO) connector.
2. Connect the 9-volt battery to the battery connector on the board. (See diagram of phone board)
3. Plug a touch-tone phone into the black modular jack. (See diagram of phone board)
4. Unplug the speaker. (See diagram of phone board)
5. Wait 60 seconds and then PRESS the "HELP" button on the elevator car panel.
6. Make sure that the red light of the phone turns on. If it does not, go back to step 4 and start again.
7. Pick up the touch-tone phone handset and listen for the elevator phone to dial.
8. Two seconds after the elevator phone dials you will normally hear a tone, a two second pause and a pre-recorded voice message will begin repeating with a touch-tone at the end of the message. IF YOU

DO NOT HEAR A VOICE MESSAGE, IT MAY MEAN THAT THE PHONE IS SET UP TO NOT PLAY THE VOICE MESSAGE.

9. On the touch tone phone enter "**1**" immediately after you hear the tone at the end of the message. If there is no message, do not enter "**1**".
10. Listen to the handset and make sure the message is not repeating.
11. REFER TO THE PROGRAMMING INSTRUCTIONS, after programming, return to step 11 below.
12. Reconnect the elevator phone speaker to the phone circuit board.
13. Unplug 9-volt battery.
14. Unplug touch-tone phone and test the phone completely when the ADA phone is hooked up to a phone line.

Programming Instructions

1. Choose programming setup method A or B.
2. Enter **# 94851 or # 9000000** to get into programming mode. Listen for three beeps.
   NOTE ONE: Enter touch tone digits slowly and deliberately.
   NOTE TWO: Once you are in programming mode, you can perform any programming step in any sequence as long as you get three beeps after your programming entry.
3. Enter **# 0** (enter the first phone number to be programmed) *** #**. Listen for three beeps. EXAMPLE: **# 0 5551212 * #**.
   NOTE: If you are on a phone line that requires a "9" or another digit to call the answering service, enter a # after the 9. This will insert a 4 second pause. EXAMPLE: **# 09 # 5551212 * #**.
4. Enter **# 1** (enter the second telephone number to be programmed) *** #**. (Optional)
5. Enter **# 2** (enter the third telephone number to be programmed) *** #**. (Optional)
6. Enter **# 3** (enter the fourth telephone number to be programmed) *** #**. (Optional)
7. Enter **# 7** and listen for the single beep. At the beep, record the **location message** by speaking into the touch-tone phone handset. Enter **0** to end. If you want to listen to the location message without changing it, enter **# 8**.
8. Enter **# * 1180183 * #** and listen for three beeps. (Enables Voice prompt messages)
9. Enter **# #** to hang up the phone.

Optional Programming Instructions

***PURPOSE*: To Eliminate Autodialing:**
To disable the dialer from dialing a phone number. **(Used on a Ring Down telephone line)**

Enter **# 94851 or #9000000** and listen for three beeps.
Enter **# 0 * #**, listen for three beeps, enter **# 1 * #**, listen for three beeps.
Enter **# 2 * #**, listen for three beeps, enter **# 3 * #**, listen for three beeps.
Enter **# * 1180180 * #**, listen for three beeps. (Optional)
Enter **# #** and hang up.

***PURPOSE*: To Disable the Voice Prompt Message:**
To disable the voice prompt from saying: "Elevator call at the tone press one to talk, press two for Location".

Enter **# 94851 or #9000000** and listen for three beeps.
Enter **# * 1180180 * #**, listen for three beeps.
Enter **# #** and hang up.
CAUTION: This option cannot be used with two or more number dialing.

***PURPOSE*: To Disable Voice Prompt Message and Delay Voice Location Message:**
To disable the voice prompt and have the location message play automatically every 19 seconds.

Enter: **# 94851 or #9000000** and listen for three beeps.
Enter: **# * 1180185 * #** and listen for three beeps.
Enter: **# #** and hang up.

***PURPOSE*: To Enable Voice Prompt Message: (DEFAULT)**
To enable the voice prompt message to say: "Elevator call at the tone press one to talk, press two for Location".

Enter **# 94851 or #9000000** and listen for three beeps
Enter **# * 1180183 * #** and listen for three beeps.
PROGRAM LOCATION MESSAGE (SEE STEP 7 IN PROGRAMMING INSTRUCTIONS)
Enter **# #** and hang up.

Operating Instructions

A: Trapped Passenger Calling Out

1. Passenger presses "HELP" button. Red LED turns "ON".
2. Passenger hears dial tone and dialing of first phone number.
3. Passenger hears intermittent ringing.
4. Passenger hears a tone two seconds after elevator phone dials and every 7 seconds until the operator responds to the call.
5. If first phone number is not answered within approximately 50 seconds, the elevator phone will hang up and dial the second phone number. The same sequence of events will occur for any additional phone numbers the phone is programmed to call.
6. Once the receiving operator responds to the call with a touch-tone digit the passenger and the operator will be able to communicate.
7. When the Red LED flashes or the Green light turns 'ON', the operator can request the passenger to press the "HELP" button again. This action will send an audible signal to let operator know that someone is actually stuck in the elevator and not just a prank call. This action is normally only important for someone who cannot speak.

B: Responding Operator - with Prompt Message Enabled

1. Operator hears ringing of incoming call from elevator and answers call.
2. Operator hears a repeating message from the elevator phone stating "ELEVATOR CALL, AT THE TONE PRESS ONE TO TALK, PRESS TWO FOR LOCATION". The message will keep repeating until the operator presses a "1" or "2" after the tone on their touch-tone phone.
3. The passenger does not hear any voice messages.
4. Normally the operator should press "1" after the touch-tone at the end of the message to quickly establish two way voice communication with the trapped passenger.
5. At any time the operator can press "2" to hear the location of the elevator.
6. In elevators with a lot of background noise, the operator can press # to mute the microphone. Entry of any other digit will re-enable the microphone.
7. At the end of the location message another message will be heard by the operator that Says: "PRESS ZERO TO ALERT PASSEN OF RESCUE."
8. When the operator presses "0" on their touch-tone phone they will hear three beeps. The Red light flashes or the Green light turns 'ON'. At this point the operator has acknowledged the call. The passenger knows that the call has been received because wording printed on the panel or the phone states "ALARM RECEIVED" or "BLINKING INDICATES CALL IS ANSWERED"

9. The operator can request that the passenger press the "HELP" button again. If the passenger presses the button, the operator will hear a diddle-diddle-diddle sound. For the operator, this means that there is a passenger in the elevator.
10. Prior to the phone turning off (normally 3 minutes), the operator will hear this message twice, "TO AVOID DISCONNECT PRESS THREE NOW"
    If the operator presses "3" on their touch tone phone within ten seconds after this message, the elevator phone will stay on for another three minutes. The message will be repeated every three minutes for the duration of the call so that the operator can keep the passenger on the line until help arrives or as long as needed.
12. Operator presses *0 to hang up the elevator phone.

Alternate B - with Delayed Location Message - Voice Mode 5

ALL OPERATING STEPS ARE THE SAME EXCEPT

1. Operator answers incoming call and begins talking to passenger.
2. Within 17 seconds after the call is dialed, the operator will hear the location message followed by this message: "PRESS ZERO TO ALERT PASSENGER OF RESCUE."
3. Both messages will repeat every 20 seconds until the operator enters "0".

Operator Calling Into Elevator Phone

1. Operator dials the phone number of the elevator phone and hears ringing.
2. After five rings the elevator phone turns on automatically and operator will hear diddle-diddle-diddle sound.
3. At this time the operator and passenger can talk. All other operations stay the same.

Passenger Receiving Call from Operator

1. Passenger hears elevator phone ringing. Phone turns on automatically after 5 rings, or Passenger can push the "HELP" button to turn elevator phone on.
2. When elevator phone turns on the passenger and operator can communicate.

Battery Information

The following information explains how to determine when a battery or a power pack is needed or when to use a specific type of battery:

You will need a 9VDC battery or a power pack when:

1. The phone drops off the telephone line without completing the c
2. There is more than one phone on the same telephone line and there is a need to call back to a specific elevator phone, or if all elevator phones need to be "ON" at the same time.

Note: For programming and testing, any fully charged 9-volt battery could be used.

ALKALINE BATTERY: Can be used on all phone lines. The battery will need to be checked every 6 months. An AC connection is not required and the battery cannot be trickle charged.

LITHIUM BATTERY: Can be used on all phone lines. The battery will need to be checked every 12 months. An AC connection is not required and the battery cannot be trickle charged.

POWER PAK: Can be used on all phone lines. The Ni-Cad battery in the power pack will need to e checked every 12 months. An AC connection is required and the battery will be charged by the power pack.

CAUTION: **DO NOT** leave an alkaline or lithium battery in the **2.53 Revision** and lower EMS hands-free phones.

Troubleshooting Guide

Always visually check the phone for loose or shorted wires, physically damaged or missing components. The phone will not work on a Digital phone line. It will **only** work on **an Analog** phone line or an Analog port f· ı digital phone system.

Problem: Phone would not turn 'ON'
Possible Cause:

- Check phone line connection
- Check phone line voltage (Normal C.O. line 48-52VDC or 20-35VDC – Internal systems)
- Try connecting a fully charged 9-Volt battery.
- Make sure phone line is connected to the screw terminal connector at TELCO. (See P.C. Board Diagram)
- Check if unit is pulling down line voltage (You should read the same as the phone line voltage)
- Check voltage at controller
- Check button connection
- On an OEM style phone Remove button connector and try shorting button connection at P2 EXT- ON/OFF pins.

Problem: Phone Dials Incorrect number
Possible Cause:

- Check number programmed into phone
- Plug a phone in the jack and call the same number you are trying to program to see if you can call out.
- Check to see if the phone is on a ring down line
- Check to see if another auto dialer is on the line and remove it
- Reprogram unit

Problem: No sound thru speaker
Possible Cause:

- Check speaker connection (See P.C. Board Diagram)
- Try calling into unit and speaking to person in the car
- Make sure that the Volume and ALC pots are adjusted at center.
- Make sure a jumper/short is placed on the bottom 2 pins of M4 (HFP-Rev 2.7 only)

Problem: Noise on the line
Possible Cause:

- Check if twisted shielded pair was used
- Check to see if shield was connected to ground at the controller end only
- Measure AC voltage on line, should be zero
- Check button connection

- Try a spare pair of wires thru traveling cable
- Check if wire is running thru hoist way by itself

Problem: Phone dials out but has broken communication
Possible Cause:

- Check if voice prompt message is being stopped
- Check if there is loud background noise in cab
- Check location of microphone
- Check mounting of unit
- Hold unit in hand and test
- Make sure that the Volume and ALC pots are adjusted at center.
- Check to see if person-answering call is using a handset. Headsets could cause problems.

Problem: Phone cannot be programmed
Possible Cause:

- Try holding down keys slowly and deliberately
- Try disconnecting the speaker. (See P.C. Board Diagram)
- Make sure you are using a touchtone phone
- If you are using a cell phone do not stand in the car
- Check if phone is hearing tones (see if Red LED flickers when a DTMF tone is received)
- Check if twisted shielded pair was used
- Check to see if shield was connected to ground at the controller end only
- Measure AC voltage on line, should be zero voltage
- The phone will only work on an Analog phone system and not digital.

Problem: Phone rings busy
Possible Cause:

- Check if other devices are on the line
- Check where phone line is connected to unit
- Make sure phone line is connected to the screw terminal connector at TELCO. (See P.C. Board Diagram)
- Check voltage on phone line
- Check to see if voice chip is in backwards (See P.C. Board Diagram)
- Check polarity on phone line
- Make sure unit is off
- Remove our unit from the line to see if line is still busy
- Make sure phone line is connected to the screw terminal connector at TELCO. (See P.C. Board Diagram)

Problem: Phone does not ring
Possible Cause:

- Check phone line connection
- Check ring voltage (min. 65VRMS)
- Check phone line ringing with a touch-tone phone. (Use the black jack on P.C. board)

Problem: Phone Turns 'ON' by itself.
Possible Cause:

- Check phone line on-hook DC voltage. The voltage should be steady 48-52VDC
- Check phone line on-hook AC voltage. The voltage should be less then 1VAC.
- Check push-button. The button should be a normally open dry contact.

If you have questions or problems, please call Janus Elevator Products technical support for assistance at 1-800-527-9156.

Notes:

Specifications

Input connections:	One shielded twisted pair communication cable (Shield should be grounded at the controller only)
Phone line requirements:	Standard (analog) loop start voice grade touch tone telephone line, PBX or key system station analog telephone line.
Optional AC adapter:	9VDC @ 200mA
Power required:	on-hook 0 ma
Power required:	off-hook 20 to 30 ma
Phone line voltage:	on-hook 24 to 56.5VDC (nominally 48VDC)
Phone line voltage:	off-hook 8 to 20VDC (nominally 14VDC, min. 8 to 14VDC)
Ringing voltage:	80 to 120VAC
Dialing:	DTMF (Dual Tone Multi Frequency)
Frequency Response:	550Hz - 3400Hz, +/- 3db.
Operational Loop resistance:	600 ohms
FCC Registration:	6HVUSA-25668-TE-T
Ringer Equivalency Number:	0.2B

Warranty Policy

Janus Elevator Products Inc. warrants its products to be free from defect in materials and workmanship under normal use and service for 24 months from date of purchase. Seller's obligation shall be limited to repair or replacing, at its option, free of charge for materials or labor any product which proves defective in materials or workmanship under normal use and service. Janus shall not be responsible for any damage to the unit incurred during installation. Seller shall have no obligation under this Limited Warranty or otherwise if the product is altered or improperly repaired or serviced by anyone other than Janus factory service. For warranty service, contact Janus at 631-864-3699 or 800-527-9156.

THERE ARE NO WARRANTIES, EXPRESS OR IMPLIED, OF MERCHANTABILITY, OR FITNESS FOR A PARTICULAR PURPOSE OR OTHERWISE, WHICH EXTEND BEYOND THE DESCRIPTION ON THE FACE HEREOF. IN NO CASE SHALL SELLER BE LIABLE TO ANYONE FOR ANY CONSEQUENTIAL OR INCIDENTAL DAMAGES FOR BREACH OF THIS OR ANY OTHER WARRANTY, EXPRESS OR IMPLIED, OR UPON ANY OTHER BASIS OF LIABILITY WHATSOEVER, EVEN IF THE LOSS IS CAUSED BY THE SELLER'S OWN NEGLIGENCE OR FAULT.

Return Policy

During installation, if a product does not appear to function properly the installer must call the **Janus Elevator Products** Technical Support Unit at (800) 527-9156, Monday through Friday. If the technician determines that the product is not functioning, an **RA** (Return Authorization) number will be issued, allowing the installer to return the product directly to **Janus Elevator Products** for repair, replacement or credit. Returns with no fault found, will result in a bench charge plus shipping costs. Returns without an **RA** number will result in a restocking charge of 25% or more plus shipping costs.

FCC Notice

The EMS phone complies with Part 68 of the FCC Rules. The label affixed to this equipment contains, among other information, the FCC Registration Number and Ringer Equivalence Number (REN) for this equipment. You must, upon request, provide this information to your telephone company. The REN is useful to determine the quantity of devices you may connect to your telephone line and still have all devices ring when your telephone number is called. In most, but not all areas, the sum of the REN's of all devices connected to one line should not exceed five *(5.0)*.

To be certain of the number of devices you may connect to your line, as determined by the REN, you should contact your local telephone company to determine the maximum REN for your calling area.

The following jacks must be ordered from the telephone company in order to interconnect this Equipment with the public communication network: RJ11.

An FCC compliant telephone cord and modular plug is provided with this equipment. This Equipment is designed to be connected to the telephone network or premises wiring, using a Compatible modular jack that is Part 68 compliant. See Installation Instructions for details.

If this device causes harm to the telephone network, the Telephone Company may discontinue your service temporarily. If possible, they will notify you in advance. But if advance notice is not Practical you will be notified as soon as possible. You will be informed of your right to file a complaint with the FCC.

Your telephone company may make changes in its facilities, equipment, operations or procedures that could affect the proper functioning of your equipment. If they do, you will be notified in advance to give you an opportunity to maintain uninterrupted telephone service.