

Mecotel

(obsolete)

MECOTEL

★ OUT OF BUSINESS

ALL PHONES OBSOLETE

HOTEL
Park, MI 48030

Phone 1-800-443-8993
or Write MECOTEL

INSTALLATION INSTRUCTIONS FOR MODEL HF201 ADA ELEVATOR TELEPHONE

Remove the 2 tamper resistant screws that hold the face plate circuit board to its mounting bracket with an allen wrench.

Hold mounting bracket in desired location in phone cabinet and mark holes.

Drill 4 1/8" diameter holes in phone cabinet and use the 4 screws (supplied) to fasten box to phone cabinet.

Connect the two wires from the phone to the shielded pair telephone traveling cable wires already installed in the telephone cabinet (wires should be shielded all the way to the machine room). Connect 15 ft. harness (supplied) to traveling cable wires as per drawing. Finish the connections to the dialer and telephone jack with dialer, splitter and 7 ft. harness (supplied).

OPERATING INSTRUCTIONS

... simply press center button. The phone will automatically dial the number programmed in the dialer. ... ion to the desired party will be made, (by the automatic dialer) and the telephone will automatically turn off ... ed party hangs up. *After activating telephone, hearing and/or speech impaired persons can press the button ... ft side of the unit to send a pre-recorded message giving location of call origination and procedure to end call. ... inal to hearing impaired may then be initiated by dispatcher by pressing the pound button on their phone. The instructions will advise the dispatcher of same.

CONTROLS

- Volume control for message
- Speed control for message
- Volume control for speaker

TIME	SWITCH 1	
	POS. 1	POS. 2
APPROX. 1 3/4 min.	ON	ON
2 1/2 min.	ON	OFF
5 min.	OFF	OFF

SERVICE REQUIREMENTS

... of malfunction, the device should be disconnected from the telephone and all repairs should be performed It is the responsibility of users requiring service to report the need for service to MECOTEL.

F201 ADA Elevator Telephone must be used with an automatic dialer or ring down system.

ONE COMPANY INFORMATION

Communications Commission regulations require that you notify the telephone company of the FCC-Registration equivalence numbers before connecting this device.

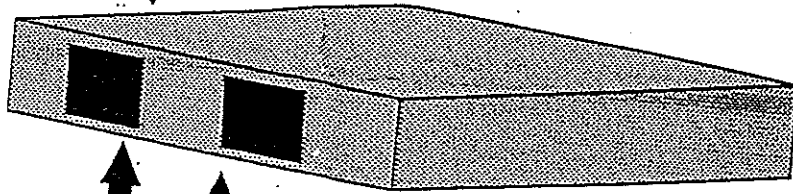
FCC Registration Number: GUFUSA-74455-SP-N
Ringer Equivalence Number: 4.9B
Model: HF201 ADA

... all line the hang up time will be approximately 20 seconds after the dispatcher hangs up their ... er, on some private systems the hang up cannot be detected, then the telephone will not hang up ... nes out. This timer is adjustable (SEE "To set phone disconnect time")



COMPLIANT TELECOMMUNICATIONS DEVICES ELEVATORS - AREA OF RESCUE - DIRECT DIALERS PROGRAMMING INSTRUCTIONS MODEL EX-6 AUTODIALER

- 1.) REMOVE THE EX-6 FROM THE BUBBLE-OUT BAG AND REMOVE COVER (NOTE THE SMALL PLASTIC BAG WITH COVER SCREWS & MOUNTING SCREWS)
- 2.) REMOVE INSULATOR FROM BATTERY HOLDER TO ACTIVATE THE BATTERY PLUG THE UNIT INTO THE PHONE LINE BEFORE PROGRAMMING. CONNECT THE EX-6 TO THE TELEPHONE LINE RJ11 JACK, AND TO TELEPHONE AS SHOWN IN DIAGRAM. TWO HARNESSES ARE SUPPLIED FOR THIS PURPOSE.



TO TELEPHONE

TO TELEPHONE JACK

PROGRAM DESIRED TELEPHONE NUMBER INTO THE EX-6 BY PRESSING THE BUTTONS ON THE CIRCUIT BOARD; IF A PAUSE IS NEEDED, PRESS THE PAUSE BUTTON (FOR EXAMPLE: 9 - PAUSE TO WAIT FOR OUTSIDE LINE - THEN THE DESIRED NUMBER.)

TEST THE EX-6 BY ACTIVATING THE TELEPHONE CONNECTED TO IT, VERIFY THAT IT DIALS THE CORRECT PHONE NUMBER. WHEN PROGRAMMING THE EX-6 AND OR MAKING TEST CALLS TO EMERGENCY NUMBERS:

- A.) REMAIN ON THE LINE AND BRIEFLY EXPLAIN TO THE DISPATCHER THE REASON FOR THE CALL.
- B.) PERFORM SUCH ACTIVITIES IN THE OFF-PEAK HOURS; SUCH AS EARLY MORNING OR LATE EVENINGS.

IF THE CALL DOES NOT GO THROUGH, OR DOES NOT BREAK THE DIAL TONE, ADJUST THE POTENTIOMETER LOCATED IN THE CENTER OF THE BOARD AND TEST THE UNIT AGAIN.

MOUNT THE EX-6 WITH THE TWO SCREWS SUPPLIED.

REPLACE THE COVER AND THE 4 SCREWS, THE UNIT IS NOW OPERATIONAL.

IF YOU WISH TO REPROGRAM THE DIALER, DISCONNECT THE UNIT FROM THE TELEPHONE AND TELEPHONE LINE THEN PROMPTLY RECONNECT BEFORE ENTERING THE NEW NUMBER. THIS WILL ASSURE THAT TELEPHONE IS NOT OFF HOOK.

NOTE: NO ADDITIONAL AUTO DIALING DEVICES CAN BE ON THE SAME LINE AS THE EX-6. (I.E. NETWORK MANAGERS TO PRE SELECT AREA CODES ETC.)

MECOTEL
Hazel Park, MI 48030

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or Write MECOTEL

INSTALLATION INSTRUCTIONS FOR MODEL HF201 ADA ELEVATOR TELEPHONE

- Remove the 2 tamper resistant screws that hold the face plate circuit board to its mounting bracket with an allen wrench.
- Hold mounting bracket in desire location in phone cabinet and mark holes.
- Drill 4 1/8" diameter holes in phone cabinet and use the 4 screws (supplied) to fasten bracket to phone cabinet.
- Connect 2 wires from phone cable already in phone cabinet to the end of the phone cable is connected to the automatic dialer, and to the telephone line. Telephone line from elevator to dialer should be shielded.

OPERATING INSTRUCTIONS

To operate, simply press center button. The phone will automatically dial the number programmed in the dialer. Connection to the desired party will be made, (by the automatic dialer) and the telephone will automatically turn off after called party hangs up. After activating telephone, hearing and/or speech impaired persons can press the button on the left side of the unit to send a pre-recorded message giving location of call origination and procedure to end call. Visual signal to hearing impaired may then be initiated by dispatcher by pressing pound button on their phone.

ADJUSTMENTS

Pot. R8 Volume control for message
Pot. R16 Speed control for message
Pot. R54 Volume control for speaker

TO SET PHONE DISCONNECT TIME	SWITCH 1	
	APPROX	POS.1 POS.2
1 3/4 min.	on	on
2 1/2 min.	on	off
5 min.	off	off

SERVICE REQUIREMENTS

In the event of malfunction, the device should be disconnected from the telephone and all repairs should be performed by MECOTEL. It is the responsibility of users requiring service to report the need for service to MECOTEL.

The Model HF201 ADA Elevator Telephone must be used with an automatic dialer or ring down system.

CC AND PHONE COMPANY INFORMATION

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FCC Registration Number: GUFUSA-74455-SP-N
Ringer Equivalence Number: 4.9B
Model: HF201 ADA

ELEVATOR PHONE DIALER
-NOTE-

LINE ORDERING INSTRUCTIONS

In most cases the building owner will order the emergency telephone line. Ordering from the telephone company may vary from city to city. However, the following procedures generally get results:

-WITH A MODEL 2 DIALER-

You will need a dedicated line (Touchtone) terminated with an RJ11C modular jack next to the elevator controller in the machine room. The same line may be used for multiple phones in one building. An RJ11C jack should be placed in each machine room. NOTE: FCC REGULATIONS CALL FOR NO MORE THAN SIX (6) PHONES ON ONE (1) LINE. PLEASE DO NOT EXCEED.

-MODEL EX4-

You may use an extension line with either pulse or Touchtone. Terminate with an RJ11C modular jack at the elevator controller in the machine room. Remember - in most cases if using an extension line that is in use, YOU WILL NOT CAPTURE THAT LINE WHEN ATTEMPTING TO CALL FROM THE ELEVATOR.

NOTE:

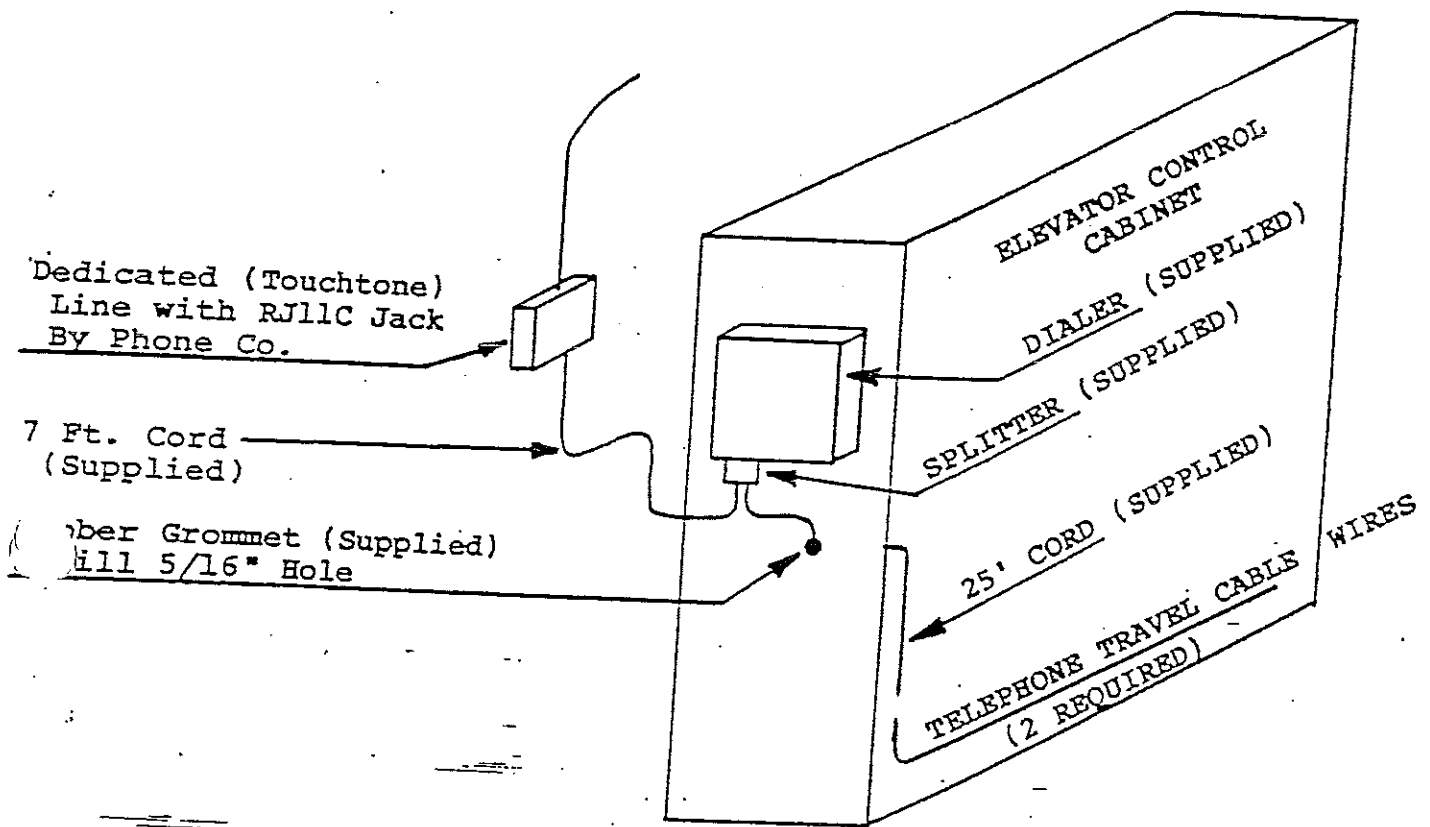
MULTIPLE 101 UNITS: Up to six (6) HF-101's can be connected to one (1) dedicated line*. However, unless you are using an in-house, P.B.X., or similar next available line switching, only the first phone in use will work until it disconnects. At that time, other telephones are available for use. These phones are designed in this manner since only one (1) person at a time can talk on a voice activated telephone. This design eliminates confusion to the dispatcher trying to write down the correct information.

MULTIPLE HANDSETS: Up to six (6) Model 2 Handsets can be connected to one (1) dedicated line. All six (6) elevators may talk on the line at one time. If, however, one (1) handset is left off hook, the other phones will be inoperative until that handset is hung up. To check off-hook situations, simply dial into that assigned phone number and check for busy signal.

NOTE: On multiple car banks with a common machine room, only one (1) dialer is required. Simply parallel wires from each car to the 25 ft. harness. Only one (1) dialer is required per dedicated line in the building.

*FOR OUTGOING PHONE CALLS ONLY

AUTOMATIC DIALER INSTALLATION



TO ORDER

Call or Write: MECOTel, 1658 E. 9 Mile Rd., Hazel Park, MI 48030
(313) 541-6245

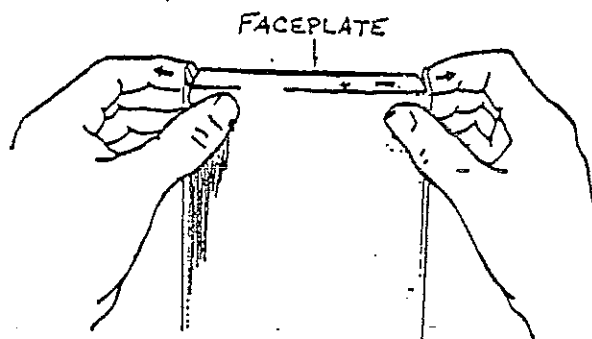
IMPORTANT NOTE: The HOTSHOT uses sophisticated CMOS circuits, which can be damaged by static electricity. To minimize this possibility, program the HOTSHOT in a room that does not have a carpet. Before programming the HOTSHOT, touch a metal pipe, sink, or other grounded metal object to drain off any static electricity you may be carrying.

Program the number that you will want the HOTSHOT to dial into the Program Panel by putting the program pegs into the program columns. Starting with the column that says "Start Number Here", put one (1) peg in each vertical column, without skipping any columns, from left to right until the entire number has been programmed.

TO BEGIN:

REMOVING THE COVER

1. Place the HOTSHOT flat on a table in front of you with the word HOTSHOT on the faceplate facing away from you.
2. Raise the faceplate end of the dialer off the table slightly grasping it on top with your thumbs.



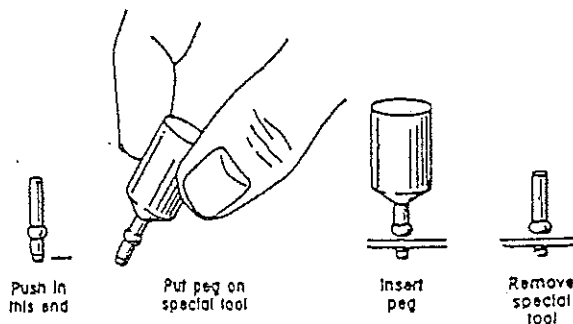
3. Feel how the sides can pull away from the base slightly? Get a good grip on them and pull them hard to the sides allowing the base to fall away from the cover.

TO REPLACE THE COVER

1. Place the base flat on a table, with the word HOTSHOT facing you.
2. Put the cover in place. Be especially careful to see that the front panel is lined up.
3. Snap together. Press the top down with your thumbs, first in the back then in the front.

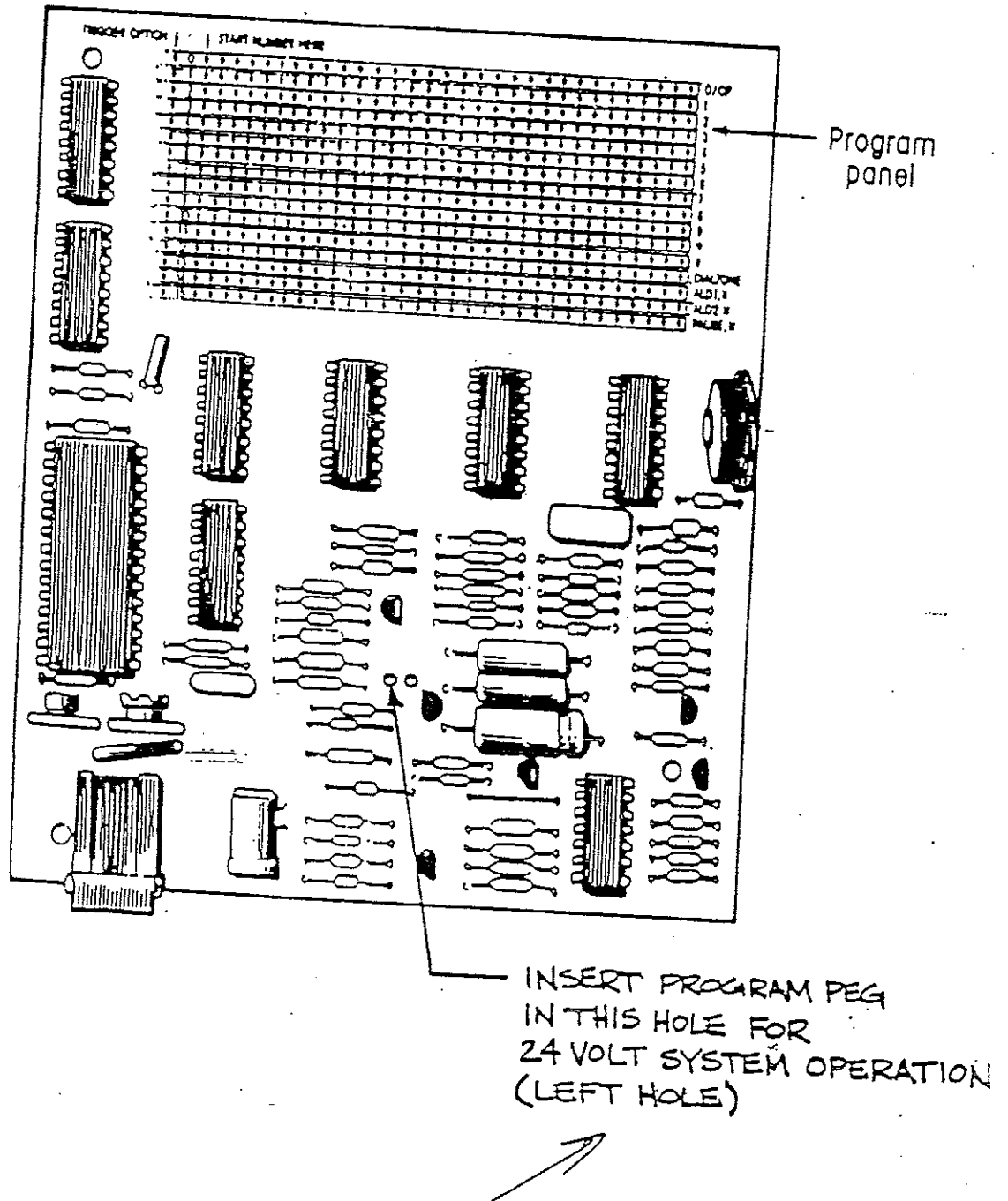
THE PROGRAM PEGS

The HOTSHOT comes with 32 specially designed programming pegs. Each peg tells the HOTSHOT to do something, either dial a number, listen for a computer tone, listen for a dial tone, or pause. The program pegs just push into the program holes in the program panel. Make sure that you push in the short end, the end with the taper. Use the special tool provided with the HOTSHOT to make insertion easier.



The Program Panel

You program the HOTSHOT with program pegs that you put into a Program Panel inside the HOTSHOT'S case.



-NOTE-

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In most cases the building owner will order the emergency telephone line. Ordering from the telephone company may vary from city to city. However, the following procedures generally get results:

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NOTE: On multiple car banks with a common machine room, only one (1) dialer is required. Simply parallel wires from each car to the 25 ft. harness. Only one (1) dialer is required per dedicated line in the building.

FOR OUTGOING PHONE CALLS ONLY

PAGE 1

INSTALLATION & PROGRAMMING INSTRUCTIONS FOR THE HF-501 ADA TELEPHONE

for new v3 phones or later.

I. LINE REQUIREMENTS.

Each elevator or desired usage area should have either a dedicated pots line or a dedicated pbx phone system line with modem or fax capabilities. The line is the responsibility of the end user or the telephone interconnect company. The line between the telephone co. jack and the HF501 ADA shall be a shielded twisted pair grounded at the terminal end (opposite of the HF501) these items must be complied with in order to insure that the HF501 will work properly.

II.) REMEMBER TO RECONNECT THE LITHIUM 9 VOLT INSIDE THE HF 501 ADA PHONE

The first time you plug the battery back in, the led will turn on automatically, simply unplug the battery connector and plug it back in after light turns off. This battery must be serviced on a regular basis.

**ALL PHONE NUMBERS AND LOCATIONS SHOULD BE RECORDED
ON PAGE 4 BEFORE PROGRAMMING STARTS**

A.) PROGRAMMING

The HF501 ADA has a built in three number dialer. It must be programmed with all 3 phone numbers, or set to work with a ringdown line to operate properly.

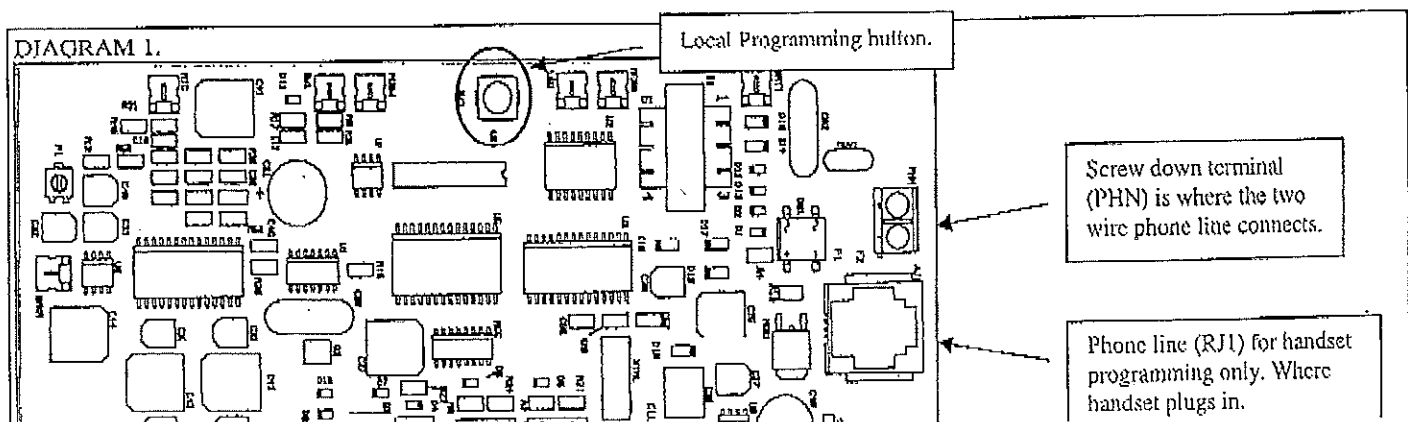
note: if you do not use alternate numbers on (2) or (3) you must program your first number in these slots.

The phone also has 3-20 second programmable voice messages. Programming this phone can be done in one of two ways. As described below.

B.) PROGRAMMING WITH A HANDSET

**NOTE: HANDSET PROGRAMMING SHOULD BE PERFORMED BEFORE
THE HF501 ADA PHONE IS HOOKED TO ANY TELEPHONE LINE**

Connect the HF501 ADA telephone to any standard touch-tone handset via the RJ11C jack on the board. With the handset off-hook, press the button labeled "program" located on the right hand side just below the center on the 501's printed circuit board ("see diagram 1 below), while you are pressing the program button, press the "push to call" button on the front of the HF501 momentarily. Now let both buttons go. You will hear the initial message from the speaker of the handset phone only, the message will repeat itself until you press the pound (#) symbol on the handset, you will then hear a beep. This indicates that you are ready to go into "program mode". Now follow from number 2 on the "desired action" page of the instructions or page #3.



PAGE 5**HF501 ADA NORMAL OPERATION GUIDE**

This sheet will guide you through a normal operation occurrence with the HF501 ADA telephone.

After the phone has been properly installed and programmed, it will wait for activation from one of four sources.

- 1.) The push button on the front of the phone.
- 2.) Optional input port #1 on the circuit board.
- 3.) Optional input port #2 on the circuit board.
- 4.) An outside call coming in to the phone (usually only to adjust programming.)

IMPORTANT!!

Any time the phone is activated the receiving party must follow the voice prompts given by the HF501 ADA or it will continue to dial out until it times out.

When the push button is pushed in the elevator, the red led on the front of the phone will light up. This means that the phone is dialing out or (ringing down) to an outside monitoring service i.e. (elevator co., security/alarm co. or somewhere else in the building.) Inside the elevator the phone will do this operation without making any sounds.

Once the phone has connected the receiving party will automatically here the initial emergency call message (*this is an emergency elevator call, for voice press one, for location press two, to signal that help has been dispatched press 4, to disconnect press five.*)

At this time the person receiving the call decides witch option to choose, if they press #1 on their keypad it will open the speakerphone and they will be able to speak to the cab normally. If they press number two on their keypad they will hear the location message for the elevator. At this time you will also be able to hear the message in the elevator cab. At the end of the message the person receiving the call will be prompted to push numbers five on their keypad (if they are intending on dispatching help to the elevator) this will make the red led blink on the front of the phone. After 10 seconds of blinking the phone will disconnect, and await another input signal.

During a call in process, if there is an excessive delay during response, another message will prompt the receiver to press the number three to avoid disconnection or press four to disconnect and signal that help is dispatched. If no response is given the phone will automatically disconnect.

When the phone receives no active response, it will automatically roll over to the next telephone number in the dialing sequence, and will continue to do this for a total of three dial outs.

NEW FEATURE! times for dialouts have been extended and total dialouts have been reduced to three total, the first, second and third numbers in dialer memory. (by popular request)

(provided that there has been no response i.e. the receiving party pressing a 1, 2, 4 or 5.)

After the phone has been through all dial outs, or has been properly responded to (see above) it will "time out" and turn off, waiting for another activation in or out.

ATTENTION SERVICE PERSONNEL

You must utilize the 2nd and 3rd numbers on the built in dialer. These locations have test numbers in them and must be reprogrammed. If the first number dialed out doesn't answer, it will automatically turn off, turn on and dial the 2nd number, and likewise on to the third number, then the phone will time out and wait for a new activation.

When the phones optional input ports are triggered the phone will go off hook and automatically dial out to the assigned telephone number*, it will automatically play the designated notification message so that the receiving party can dispatch a service person to the job immediately. The message will prompt the receiving party to press numbers two-four on their keypad, when they do this it will end the message and time out in ten seconds. No voice communications with the elevator cab needs to occur, these messages are for the service company only.

ANY OTHER QUESTIONS SHOULD BE DIRECTED TO MECOTel CUSTOMER SERVICE AT 1(800)-443-8993.

PAGE 3

DESIRED ACTION PROGRAMMING INSTRUCTION PAGE

DESIRED ACTION	WHAT YOU DO	WHAT HAPPENS
1.) ENTER INTO PROGRAM MODE	PRESS # SYMBOL AFTER HOOKING THE PHONE TO HANDSET OR DIALING INTO PHONE FROM A REMOTE LOCATION AND HEARING INITIAL MESSAGE LOOP.	YOU WILL HERE A SINGLE BEEP. THIS MEANS YOU ARE NOW IN PROGRAM MODE.
2.) TO GAIN ACCESS TO THE PROGRAMMING FEATURES	PRESS *#12345* ON YOUR KEYPAD	YOU'LL HERE A SINGLE BEEP FROM THE 117501 ADA VIA THE HANDSET, THIS MEANS THAT YOU NOW HAVE ACCESS TO ALL OTHER PROGRAMMING FEATURES.
IF YOU ARE NOT USING ALTERNATE PHONE NUMBERS, THEN PROGRAM "FIRST NUMBER" IN THE 2ND AND 3RD SLOTS FOR DIALER TO OPERATE CORRECTLY, THIS FACILITATES PROPER ROLLOVER DIALING.		
3.) PROGRAMMING THE FIRST OR PRIMARY TELEPHONE NUMBER INTO THE DIALER	PRESS *1 # THEN THE TELEPHONE NUMBER (UP TO 32 DIGITS) THEN *	YOU WILL HERE SINGLE BEEP INDICATING THAT THE NUMBER HAS BEEN SUCCESSFULLY PROGRAMMED INTO THE PHONE
4.) PROGRAMMING THE SECOND OR OPTIONAL TELEPHONE NUMBER INTO THE DIALER	PRESS *2 # THEN THE TELEPHONE NUMBER (UP TO 32 DIGITS) THEN *	SAME AS ABOVE
5.) PROGRAMMING THE THIRD TELEPHONE NUMBER INTO THE DIALER	PRESS *3 # THEN THE TELEPHONE NUMBER (UP TO 32 DIGITS) THEN *	SAME AS ABOVE
6.) TO SET PHONE FOR USE WITH A PABX OR SIMILAR RINGDOWN LINE ONLY.	PRESS(*1 # #*)wait for beep (*2# #*) Wait for beep (*3 # #*) wait for beep	After the last response beep the phone will be set for a ringdown line.
NOTE: USE ONLY SAMPLE WORDING ON ALL VOICE MESSAGES SEE PAGE 4		
7.) TO RECORD ADDRESS LOCATION MESSAGE (MAX. TIME 20 SECONDS)	*5(TALK INTO HANDSET TO RECORD MESSAGE) PRESS # AS SOON AS FINISHED	SINGLE TONE INDICATING THAT THE MESSAGE HAS BEEN PROPERLY RECORDED
8.) TO RECORD FIRST MONITORING PORT MESSAGE (MAX. TIME 20 SECONDS)	*6 (TALK INTO HANDSET TO RECORD MESSAGE) -PRESS # AS SOON AS FINISHED	SAME AS ABOVE
9.) TO RECORD 2ND MONITORING PORT MESSAGE (MAX. TIME 20 SECONDS)	*7 (TALK INTO HANDSET TO RECORD MESSAGE) -PRESS # AS SOON AS FINISHED	SAME AS ABOVE
10.) TO HERE A PLAYBACK OF MESSAGE NUMBER ONE	PUSH *05* (LISTEN FOR MESSAGE)	PHONE WILL PLAYBACK THE MESSAGE YOU HAVE RECORDED
12.) TO HERE A PLAYBACK OF MESSAGE NUMBER TWO	PUSH *06* (LISTEN FOR MESSAGE)	SAME AS ABOVE
13.) TO HERE A PLAYBACK OF MESSAGE NUMBER THREE	PUSH *07* (LISTEN FOR MESSAGE)	SAME AS ABOVE
14.) INITIAL MESSAGE & DISCONNECTION MESSAGE.	08 & 09 ARE PRE SET (DO NOT PROGRAM)	
15.) TO END PROGRAMMING MODE AND SHUTDOWN PHONE	PUSH * 0 #*	THIS WILL DISCONNECT THE PHONE AFTER 10 SECONDS AND END PROGRAMMING MODE

MECOTEL
Hazel Park, MI 48030

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or Write MECOTEL

INSTALLATION INSTRUCTIONS FOR MODEL HF201 ADA ELEVATOR TELEPHONE

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2. Hold mounting bracket in desire location in phone cabinet and mark holes.
3. Drill 4 1/8" diameter holes in phone cabinet and use the 4 screws (supplied) to fasten bracket to phone cabinet.
4. Connect 2 wires from phone cable already in phone cabinet to the end of the phone cable is connected to the automatic dialer, and to the telephone line. Telephone line from elevator to dialer should be shielded.

OPERATING INSTRUCTIONS

To operate, simply press center button. The phone will automatically dial the number programmed in the dialer. Connection to the desired party will be made, (by the automatic dialer) and the telephone will automatically turn off after called party hangs up. After activating telephone, hearing and/or speech impaired persons can press the button on the left side of the unit to send a pre-recorded message giving location of call origination and procedure to end call. Visual signal to hearing impaired may then be initiated by dispatcher by pressing pound button on their phone.

ADJUSTMENTS

Pot. R8	Volume control for message
Pot. R16	Speed control for message
Pot. R54	Volume control for speaker

TIME APPROX	TO SET PHONE DISCONNECT TIME	
	SWITCH 1 POS.1	SWITCH 2 POS.2
1 3/4 min.	on	on
2 1/2 min.	on	off
5 min.	off	off

SERVICE REQUIREMENTS

In the event of malfunction, the device should be disconnected from the telephone and all repairs should be performed by MECOTEL. It is the responsibility of users requiring service to report the need for service to MECOTEL.

The Model HF201 ADA Elevator Telephone must be used with an automatic dialer or ring down system.

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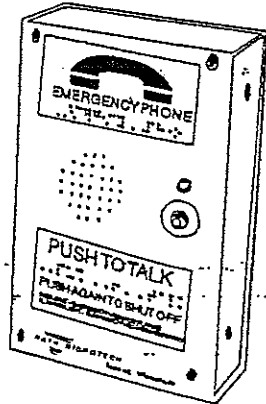
FCC Registration Number: GUFUSA-74455-SP-N
Ringer Equivalence Number: 4.9B
Model: HF201 ADA

Rath Microtech

ADA Compliant Speaker Phone Instructions/Programming Information

(Model 2100-926 Series)
(Model 2100-927 Series)

Rev. 1 937



—Page 1: Programming Steps and Phone Settings

Page 2: Programming Call Tracker and Auto Dialer

Page 3: Standard Features and Operational Specifications

Page 4: Technical Specifications

Page 5: Troubleshooting

RATH MICROTECH

The Telephone Dialer E ADA Compliant Sp Instructions/Program

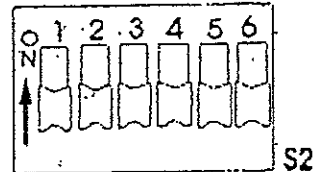
(Model 2100-916 Series)
(Model 2100-917 Series)

Post-it* Fax Note	7671	Date	1/5	# of pages	1
To	Tom	From	Bob Russell		
Co./Dept.	Rath Microtech	Co.	Rath Microtech		
Phone #		Phone #			
Fax #	908-477-1811	Fax #	414-246-4828		

Step 1: Determine phone settings by setting 6 position dip switch on S2

A. Locate 6 position dip switch (S2) on board.
Setting options are as follows:

- Position 1: ON - rotary dial output
OFF - touch tone output
- Position 2: ON - 3 second dialer activation after pushbutton is pressed
OFF - 2 second dialer activation after pushbutton is pressed
- Position 3: ON - 3 minute conversation length
OR
- Position 4: ON - 6 minute conversation length
OR
- Position 3 & 4: OFF - indefinite conversation length
- Position 5: ON - ringer on
OFF - ringer off
- Position 6: ON - auto answer feature on
OFF - auto answer feature off



Step 2: Program/Record the Call Tracker Feature of phone unit

A. Plug phone into working telephone line.

1. Locate slide switches S3, S4 and MIC 1 on board.

B. Slide switch S3 ON.

C. Slide switch S4 ON.

1. Locate 2 position dip switch S1 on board.

D. Set Position 1 on switch S1 ON.

E. Set Position 2 on switch S1 OFF.

F. Press pushbutton on front of phone. LED will light.

G. Slide switch S3 OFF.

H. Slide switch S4 OFF.

I. Record location ID message by speaking into MIC 1.

1. Message can be up to 18 seconds long.

2. Recommended message "Elevator Emergency at ... press star sign to discontinue message."

Immediately after speaking into MIC 1:

J. Slide switch S4 ON.

K. Slide switch S3 ON.

L. Press pushbutton on front of phone to shut off. Red LED goes out.

M. Slide switch S4 OFF.

N. Set Position 1 on switch S1 OFF.

O. Set Position 2 on switch S1 ON.

Step 3: Program the Auto Dialer

A. Plug phone into working telephone line.

1. Locate dip switch S1 on board.

B. Set Position 1 on switch S1 ON.

C. Press pushbutton on front of phone. You should hear dial tone.

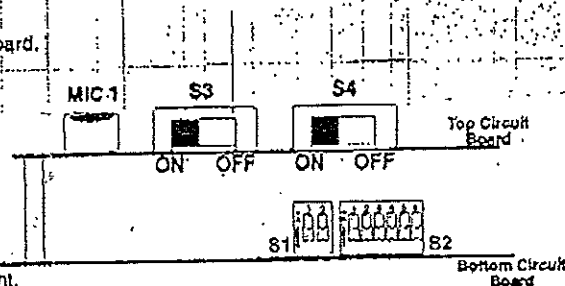
D. Dial program number on keypad provided.

E. Press pushbutton on front. Telephone will disconnect.

F. Set Position 1 on switch S1 OFF.

G. Wait 10 seconds, then push button on front of phone to test for operation.

Note: If you are using your ADA Speaker Phone on a Ring Down line, program a "Pause" on the keypad in Step D. above.



WARNING

KEYPAD MUST BE PLUGGED INTO SOCKET TO RIGHT OF SWITCH S4



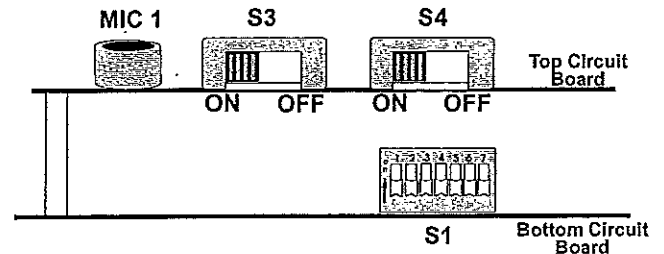
**ADA Emergency Phone
Simplified Programming Instructions**

Programming Call Tracker (Voice Message Chip)

- 1) Plug Phone into standard telephone line.
- 2) Turn slide switch S3 ON and S4 ON.
- 3) Turn dip switch S1 - Position #1 ON, Position #2 OFF.
- 4) Push activation button on front of phone.
- 5) Turn slide switch S3 OFF, turn slide switch S4 OFF.
- 6) Record location ID message:
Recommended wording "Elevator Emergency at . . .
Press star sign to discontinue message."
- 7) Immediately after speaking turn slide switch S4 ON,
slide switch S3 ON.
- 8) Push activation button on front of phone.
- 9) Turn slide switch S4 OFF.
- 10) Turn dip switch S1, position #1 OFF, position #2 ON.

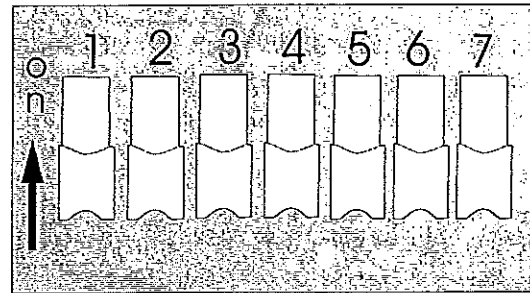
WARNING

KEYPAD MUST BE PLUGGED
INTO SOCKET TO RIGHT OF
SWITCH S4



Programming the Phone Number

- 1) Recommended Dip Switch settings:
Position #3 OFF
Position #4 ON
Position #5 OFF
Position #6 ON
Position #7 ON
- 2) Turn dip switch (S1) Position #1 ON.
- 3) Push activation button on front of phone.
- 4) Dial program number on keypad.
- 5) Push activation button on front of phone.
- 6) Turn dip switch (S1) Position #1 OFF.
- 7) Wait 10 seconds and test for operation.



S1

(for detailed programming see complete programming instructions)

*Recommended installation: 1 phone per line
(maximum 2 phones/line) (Note: 2 phones per line
may only work well under good line conditions)

Note: If you are using your ADA Speaker Phone on a Ring Down line,
program a "Pause" on the keypad in Step 4 above.

ADA Compliant Speaker Phone Instructions/Programming Information

(Model 2100-916 Series)
(Model 2100-917 Series)
Rev.1

Instructions:

- Step 1: Determine Phone settings by setting 7 position dip switch on S1
- Step 2: Record the Call Tracker Feature of phone unit
- Step 3: Program the Auto Dialer

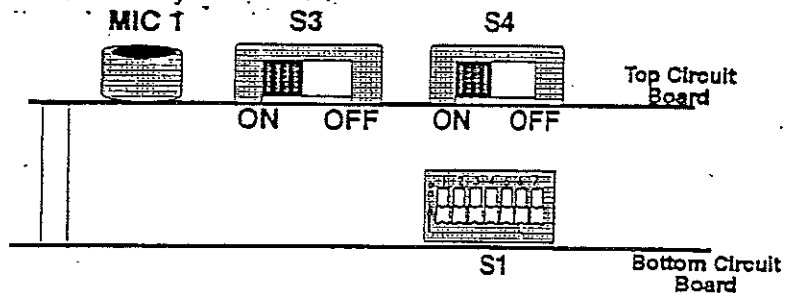
Indicate the switches on this drawing on the circuit boards mounted on base plate (side view from base)

1 = 7 position dip switch (red)

2 = on/off slide switch

3 = on/off slide switch

4 = Microphone for programming Call Tracker

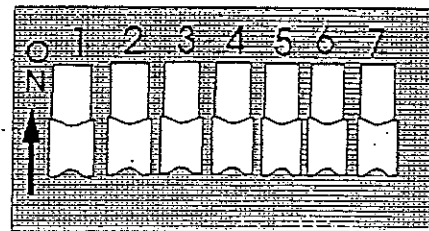


Step 1: Determine phone settings by setting 7 position dip switch on S1

A. Locate 7 position dip switch (S1) on board.

Setting options are as follows:

- Position 1: ON - Program
OFF - Operate
- Position 2: ON - Speaker On
OFF - Speaker Off
- Position 3: ON - Rotary Dial Output
OFF - Touch Tone Output
- Position 4: ON - 3 Minute Conversation Length
OR
- Position 5: ON - 6 Minute Conversation Length
OR
- Position 4 & 5: OFF - Indefinite Conversation Length
- Position 6: ON - Ringer ON
OFF - Ringer OFF
- Position 7: ON - Auto Answer ON
OFF - Auto Answer OFF



S1

ADA Compliant Speaker Phone Instructions/Programming Information

(Model 2100-916 Series)
(Model 2100-917 Series)
Rev. 1.1 1/88

Step 2: Record the Call Tracker Feature of phone unit

A. Plug phone into working telephone line.

1. Locate slide switches S3, S4 and MIC 1 on board.

B. Slide switch S3 ON.

C. Slide switch S4 ON.

1. Locate 7 position dip switch S1 on board.

D. Set Position 1 on switch S1 ON.

E. Set Position 2 on switch S1 OFF.

F. Press pushbutton on front of phone. LED will light.

G. Slide switch S3 OFF.

H. Slide switch S4 OFF.

I. Record location ID message by speaking into MIC 1.

1. Message can be up to 18 seconds long.

2. Recommended message "Elevator Emergency at press star sign to discontinue message, pound sign to disconnect the phone."

Immediately after speaking into MIC 1:

J. Slide switch S4 ON.

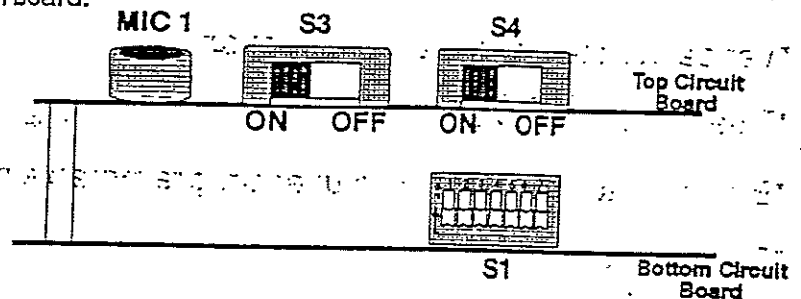
K. Slide switch S3 ON.

L. Press pushbutton on front of phone to shut off. Red LED goes out.

M. Slide switch S4 OFF.

N. Set Position 1 on switch S1 OFF.

O. Set Position 2 on switch S1 ON.



Step 3: Program the Auto Dialer

A. Plug phone into working telephone line.

1. Locate dip switch S1 on board.

B. Set Position 1 on switch S1 ON.

C. Press pushbutton on front of phone. You should hear dial tone.

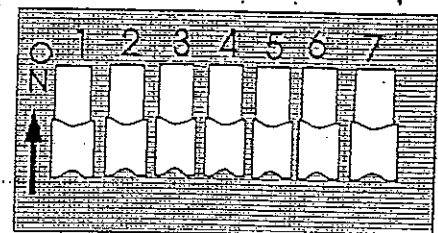
D. Dial program number on keypad provided.

E. Press pushbutton on front. Telephone will disconnect.

F. Set Position 1 on switch S1 OFF.

G. Wait 10 seconds, then push button on front of phone to test for operation.

Note: If you are using your ADA Speaker Phone on a Ring Down line, program a "Pause" on the keypad in Step D. above.



Standard Features:

- *Hands free speaker phone
- *Touch Tone or Rotary selectable
- *Total ADA compliant for both mandatory and non-mandatory requirements
- *Comes complete with full ADA compliant Braille and Raised Letter labeling
- *Exclusive Call Tracker feature (built-in automatic Location Identification System)
- *Vandal resistant all metal construction
- *Telephone line powered
- *Built-in automatic dialer with user programmable memory
- *Built-in ringer
- *Automatic answer feature
- *Called Party shut off feature (press # at anytime from remote phone)
- *Variable conversation length time settings
- *Red LED on front; LED lighted when phone is activated, LED blinking when call is answered

Operational Specifications:

1. User presses push button to activate phone. Red LED lights and automatic dialer dials the programmed number.
 2. In 10 seconds the Call Tracker (Location Identification Message) automatically begins playing. Message plays continuously until the called party (person on receiving end of call) presses the * symbol on their Touch Tone Phone. Called party can press the * symbol at any time to replay and turn off the Call Tracker feature.
 3. When the Call Tracker feature is playing the ADA Speaker Phone MIC is muted.
 4. When the Call Tracker has been shut off, the RED LED on the face of the ADA Speaker Phone begins blinking. This lets the user know the call has been answered and in the case of a Deaf person, that help is on the way.
 5. When the LED begins blinking, two-way conversation between caller and emergency service can begin.
 6. When call is completed the emergency service can shut the ADA speaker phone off remotely by pressing the # on their touch tone phone.
- The calling party can shut off the phone at any time by pressing the push button on the front of the ADA speaker phone. The ADA Speaker Phone will shut off after 1 minute.
8. The ADA Speaker Phone can also be programmed to shut off automatically after 3 minutes or 6 minutes of conversation. (See Step 1 of the programming instructions)

Technical Specifications:

- *Telephone Line Powered
- *Field Programmable
- *28 Digit Memory
- *Tone/Pulse Selectable
- *8 Tones/10 pulse per second dialing speed
 - Pause: 1.20 Seconds Tone Mode
 - 2.50 Seconds Pulse Mode
- *Automatic Answer Feature
- *Built-In Ringer
- *Shut-off time: 3 min, 6 min, and indefinite
- *Reset time is 10 seconds
- *Star(*) and Pound(#) buttons should be depressed at least 1 second on receiving end of call
- *Call Tracker (Location Identification Message) record/playback maximum 18 seconds
- *On hook voltage: 40-110 VDC (Less than 40 VDC requires optional Powerizer accessories)
- *Loop Current: 30 mA (less than 30mA requires optional Powerizer accessories)
- *Off hook voltage: 18 VDC (less than 18VDC requires optional Powerizer accessories)
- *Line Impedance is 600 Ohm AC
- *Ringer Equivalence (REN) is 2.4
- *Recommend 1 ADA phone per line. Maximum of 2 phones per line only when good telephone line conditions exist of 48 VDC at 30 mA
- *Dimensions: 8.15"H x 5.15"W x 3.0"D

Troubleshooting:

When trouble is reported refer to the following tips:

1. Speaker phone is "dead", no dial tone:

Check telephone line to be sure it is operational.

Check the telephone plug; unplug the speaker phone from the telephone line, plug a standard phone set into the same line, if the standard phone is also "dead" the problem is with the phone line. If the standard phone works the problem is with the direct dial phone.

- c. Contact your telephone company if the problem is with the phone line.
- d. Contact Rath Microtech if the problem is with the speaker phone.

2. Phone dials automatically but dial tone doesn't go away:

- a. Phone is dialing in Touch Tone and is installed on a rotary dial telephone line.
- b. Rotary dial telephone line accepts only rotary dial signals.
- c. Touch Tone telephone line accepts rotary dial or Touch Tone signals.
- d. Telephone line can be converted to Touch Tone, contact your telephone company.
- e. If you have a 2100 Series direct dial phone you may reprogram it for rotary dial output.

3. Phone dials but you get an operator intercept or recording instead of being connected to the program number:

- a. Check to make sure the phone is programmed correctly; the direct dial phone must be programmed in the same way as you would dial the call manually. (If you must dial 1, then program for 1; if you must dial the area code then program the area code, etc.) Reprogram the phone.

4. Phone dials but gets a busy signal after dialing only a couple digits:

- a. Direct dial phone has been installed on a switchboard telephone line and is not programmed to dial out from behind the switchboard to get an outside line.
- b. Reprogram direct dial phone to dial the appropriate access code to get an outside line (usually 8 or 9)+ a pause for second dial tone + telephone number.
- c. Jnit has been installed on a switchboard telephone line that does not allow outside calls.
- d. Contact your switchboard vendor.

5. You hear dial tone when you activate the phone but it does not dial automatically:

- a. Make sure you have allowed the phone to reset itself for 10 seconds after each use.
- b. 2100 Series phones: Follow programming instructions to reprogram memory.
(See Step 3 of programming instructions)

6. Call Tracker Message is not clear:

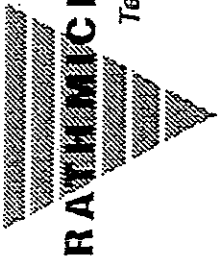
- a. When programming the Call Tracker Message make sure you are speaking clearly into the MIC 1 on the circuit board and you are not speaking into the face of the speaker plate.
(See Step 2 of the programming instructions)

7. Cannot get the Call Tracker Message to record at all:

- a. Make sure you are programming the Call Tracker on a standard telephone line of 48 VDC not on a PBX telephone line.

Note: Any phone returns must be authorized through the Customer Service Dept. at Rath Microtech

Troubleshooting assistance is available by calling
Rath Microtech
Customer Service
1-800-451-1460

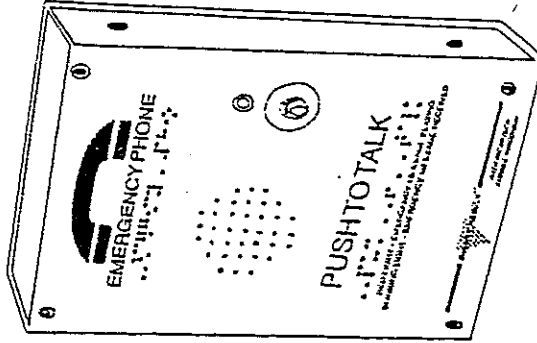


RAYCHEM MICROTECH

Technology of the future, available today!

SMARTPHONESM

MODELS 2100-936, -937, -938, -905.



**INSTANT CONNECT TELEPHONES
TO YOUR
SELECTED NUMBER**



RAYCHEM MICROTECH

Technology of the future, available today!

W227 N6370 SUSSEX ROAD • P.O. BOX 306 • SUSSEX, WI 53089
(414)246-8438 • (800)451-1460 • FAX(414)246-4828

Part No. RP8100091
Rev 4/95

I. GENERAL INFORMATIC

SMARTPHONE MODELS
2100-936, -937, -938, -985

STANDARD FEATURES:

- Hands free speaker phone.
- Automatic dialer has user programmable memory.
- Simplified programming.
- Can be programmed without connection to 110V AC or telephone line.
- Two number capability.
- Detects called party's voice when they answer phone.
- Detects when called party hangs up and shuts off automatically if called party disconnect. "WINK" is available in area. Called party can also use pound (#) button to immediately terminate call.
- Designed for 110V AC power; eliminates concerns about available telephone line voltage and current.
- Will work under worst possible conditions on both PBX and Central Office telephone lines.
- Programming error indicator.
- 110V AC connection indicator.
- Battery back up.
- Shallow profile allows phone to be installed in all existing telephone boxes without removal of programming keypad.
- Automatic answer.
- Built-in ringer.
- Variable conversation time settings.

CALL TRACKER Enhancements

- Detecting voice activates location ID message. Eliminates time concerns during recording. Message cuts off after 18 seconds. Message always plays twice. Called party can replay message by using star (*) button.

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III. Programming Instructions	6-7
IV. Trouble Shooting	8-9
V. Warranty and Repairs	9
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Connection to the Telephone Line

1. If you plan to use the modular line cord provided to connect the SMARTPHONE to the phone line, make sure line cord has been fed through the desired hole in the SMARTPHONE box. Plug the line cord into the jack on the SMARTPHONE and the other end into the appropriate modular telephone jack. (See Figure 1, Page 4)
2. If you plan to use a hard wire connection between the SMARTPHONE and the telephone line follow these steps:
 - a. Clip modular plug off one end of the cord provided.
 - b. Remove about 1" of the outer protective jacket on the cord to expose wires. Remove yellow and black wires. **DO NOT REMOVE INSULATION FROM INDIVIDUAL WIRES.**
 - c. Take the red wire from the telephone line and slide it into the insulation displacement wire connector provided. Take the same color wire from the SMARTPHONE line cord and slide it into the insulation displacement wire connector. Make sure both wires are inserted as far as possible into the displacement wire connector. Hold both wires in place and crimp displacement wire connector with pliers.
 - d. Repeat this procedure with the green wire from the telephone line and the matching wire from the SMARTPHONE cord.

NOTE: When the SMARTPHONE is properly connected to the telephone line and 110V AC, you will hear dial tone when you activate the SMARTPHONE and D9 (GREEN LED) is lit. (See Figure 1, Page 4)

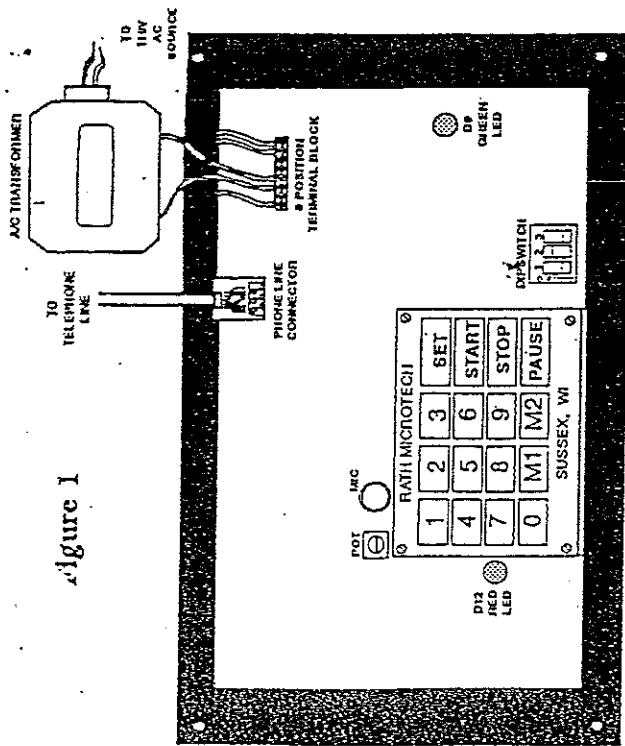


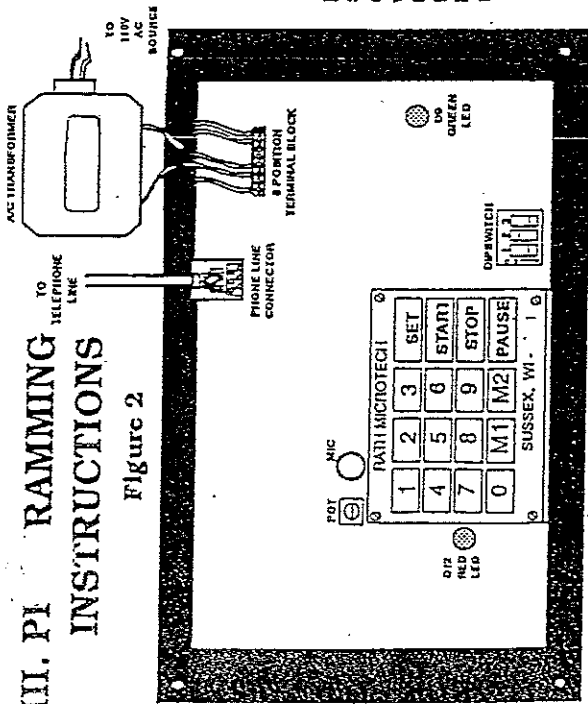
Figure 1

Connection to 110V AC Power

1. The SMARTPHONE requires 110V AC power to operate as well as a telephone line. The SMARTPHONE also has a battery back up which allows full operation of the SMARTPHONE for a minimum of four hours.
The battery lead must be connected to P6 under the board.
NOTE: For proper emergency operation during an AC failure, the SMARTPHONE should be plugged into AC for 48 hours before installation.
2. A UL approved transformer is provided with the SMARTPHONE. The transformer requires 110V AC and provides 10v 5va.
3. The white wire of the transformer should be connected to the neutral side of the 110V AC power (usually the white wire) and the black wire of the transformer to the "hot" side of the 110V AC power (usually the black wire).
4. Four mounting holes are provided to secure transformer at a convenient location.
5. 110V AC power has been properly connected when D9 (GREEN LED) is lit. The GREEN LED is located to the right of the programming keypad on the SMARTPHONE board.

III. PROGRAMMING INSTRUCTIONS

Figure 2



NOTE: SMARTPHONE can be programmed without connection to 110V AC or the telephone line when backup battery is fully charged.

STEP 1: TO BEGIN PROGRAMMING

- Plug the line cord provided into the modular jack on the SMARTPHONE and into the modular telephone line jack. Connect transformer to 110V AC. See Figure 2 Above.
- Remove SMARTPHONE cover by loosening the four Allen screws located at the corners of the phone. Carefully lift the cover away from the SMARTPHONE box. The automatic dialer circuit board is mounted on the back of the SMARTPHONE cover.

- The automatic dialer inside the phone is equipped with a telephone keypad and a red switch package with three white dip switches.
- Set dip switch 1 ON. Press PUSH TO TALK button on front panel. Front panel activity indicator goes on.
- If an error is made in programming, D12 the RED LED to the left of the programming keypad will flash 3 times and simultaneously the SMARTPHONE will buzz.

STEP 2: TO PROGRAM CALL TRACKER

- Program CALL TRACKER message by pressing START. D12 the RED LED will be on during the recording time. Speak into microphone located above the upper left corner of the keypad. Press STOP at end of message (18 seconds maximum length).
- Turn dip switch 2 ON for CALL TRACKER feature. CALL TRACKER can be disabled with dip switch 2 OFF.

STEP 3: TO PROGRAM NUMBERS

- Program first number by pressing SET followed by the telephone number to be dialed and then M1 to store the number. D12 the RED LED will flash as each number is pressed. If you are programming the SMARTPHONE for use on a switchboard line the programming procedure is slightly different. You must first program the access code for an outside line (usually 8 or 9). Press the PAUSE key once and continue dialing the program number on the telephone keypad.
- Program second number by pressing SET followed by the number to be dialed and then M2 to store the number. D12 the RED LED will flash as each number is pressed. See A. above for programming on switchboard line.
- Turn dip switch 3 ON for two number operation. Disable automatic dialing of the second number by setting dip switch 3 OFF.

D. Note: If you are using the SMARTPHONE on a Ring Down line, program a PAUSE on the keypad in Step A above.

STEP 4: TO PROGRAM TIMER

- Program automatic time-out by pressing SET followed by SET again and then the time (1-999 minutes), then press SET to store the time-out. D12 the RED LED will flash as each number is pressed. The timer has been preset at the factory to 15 minutes.

STEP 5: TO END PROGRAMMING

- Set dip switch 1 to OFF to power phone down.
- Any feature such as CALL TRACKER, telephone numbers one and two, and the timer can be independently reprogrammed at any time.
- Test operation of SMARTPHONE by pressing PUSH TO TALK button on front panel.

STEP 6: TO ADJUST VOLUME

- It is possible to adjust the volume of the SMARTPHONE. The phone is set for optimum volume when it leaves the factory. If you wish to increase or decrease the volume, follow these steps:
- Locate the white potentiometer (POT) on the circuit board. It is located near the 1 on the keypad and is marked VR1. See Figure 2, Page 6.
 - Gently insert a small screwdriver in slot of the potentiometer (POT).
 - Slowly turn the potentiometer clockwise to reduce the SMARTPHONE volume or counter-clockwise to increase the SMARTPHONE volume. Stop turning the potentiometer when you reach the desired volume level.

IV. TROUBLESHOOTING

When trouble is reported refer to the following tips:

1. **SMARTPHONE is "dead", do not even hear dial tone:**
 - Check to see if 110V AC Power is properly connected. D9 (GREEN LED) to right of keypad should be lit.
 - Check telephone line to be sure it is operational. Check the telephone line: unplug the **SMARTPHONE** from the telephone line, plug a standard phone set into the same line. If the standard phone is also "dead" the problem is with the phone line. If the standard phone works, the problem is with the **SMARTPHONE**.
 - Contact your telephone company if the problem is with the phone line.
 - Contact Rath Microtech if the problem is with the **SMARTPHONE**.
2. **SMARTPHONE dials automatically but dial tone doesn't go away:**
 - **SMARTPHONE** is dialing in Touch Tone and is installed on a rotary telephone line.
 - Rotary dial telephone line accepts only rotary dial signals.
 - Touch Tone telephone line accepts rotary dial or Touch Tone signals.
 - Telephone line can be converted to Touch Tone, contact your telephone company.
3. **SMARTPHONE dials but you get an operator intercept or recording instead of being connected to the program number:**
 - Check to make sure the phone is programmed correctly, the **SMARTPHONE** must be programmed in the same way as you would dial the call manually (if you must dial 1, then program for 1; if you must dial the area code, then program the area code, etc.)

- Reprogram the **SMARTPHONE**.

only a couple digits:

- **SMARTPHONE** has been installed on a switchboard, and is not programmed to dial out from behind the switchboard to get an outside line.
- Reprogram the **SMARTPHONE** to dial the appropriate access code to get an outside line (usually 8 or 9) + a pause for second dial tone + telephone number.
- Unit has been installed on a switchboard telephone line that does not allow outside calls. Contact your switchboard vendor.

5. You hear dial tone when you activate the SMARTPHONE but it does not dial automatically:

- Visually inspect **SMARTPHONE** for any damage.
- Follow programming instructions to reprogram memory.
- Troubleshooting assistance is available by calling Rath Microtech Technical Support toll free at 1-800-451-1460 or 1-414-246-8438 in Wisconsin.

V. WARRANTY AND REPAIR

1. Rath Microtech warrants parts and labor on all **SMARTPHONES** for a period of one year from the date of shipment. This warranty is in lieu of all other express warranties. Any act of vandalism to the **SMARTPHONE** will void the warranty.
2. All repairs must be completed at our Sussex, Wisconsin factory. Please use the following procedure to return **SMARTPHONE** repair:
 - Call Rath Microtech Technical Support Toll Free at 1-800-451-1460 or 414-246-8438 to get a Return Authorization Number. No returns will be accepted without a Return Authorization Number.
 - Have model number, serial number and a description of the problem ready to give the Technical Support Representative. The model number and serial number may be found on the label on the mounting box or on the inside cover of the **SMARTPHONE**.

Package the **SMARTPHONE** carefully and return to:

RATH MICROTECH
W227 N6370 Sussex Road
Sussex, WI 53089

TECHNICAL SPECIFICATIONS

Telephone line and 110V AC powered

Field Programmable

31 digit dialer memory

On Hook Voltage - 48V-24V

Off Hook Voltage - 48V-8.07V, 24V-7.45V

Loop Current - 48V-43.3MA, 24V-38.5MA

Back-Up Battery Life = 5 yrs (Replace after 5 yrs)

Touch Tone operation only. Touch Tone is an AT&T registered trademark.

Automatic answer feature

Built-in ringer

Shut-off time: Programmable to 999 minutes

Ringer equivalence: (REN) 1.1

Recommend 1 ADA SMARTPHONE per line

Star (*) and pound (#) button should be depressed at least 1 second

SMARTPHONE should work on all FCC qualified telephone systems

Box Dimensions: 8.15" H x 5.15" W x 2" D

Overall Dimensions: 8-1/8" H x 5-1/8" W x 2-1/16" D

VII. FCC PART 68 INFORMATION

This equipment complies with Part 68 of the FCC rules. On the exterior housing of this equipment is a label that contains, among other information, the FCC registration number and ringer equivalence number (REN) for this equipment. If requested, this information must be provided to the telephone company.

This equipment uses the following jacks: RJ11-2-S

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

If this equipment causes harm to the telephone network, the telephone company will notify you in advance that temporary discontinuance of service may be required. If advance notice isn't practical, the telephone company will notify the customer as soon as possible. Also, you will be advised of your right to file a complaint with the FCC if you believe it is necessary.

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

If trouble is experienced with this equipment, please contact the Technical Support Center at RATH MICROTECH Toll Free at 1-800-451-1460 or 1-414-246-8438 for repair and warranty information. If the trouble is causing harm to the telephone network, the telephone company may request you to remove the equipment from the network until the problem is resolved.

The following repairs can be done by the customer: All repairs should be referred to the Technical Support Center at RATH MICROTECH Toll Free at 1-800-451-1460 or 1-414-246-8438 to determine if phone needs to be returned.

F.I. FCC PART 68 INFORMATION

(Continued)

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

This equipment is hearing-aid compatible.

THIS EQUIPMENT HAS AN AUTOMATIC DIALER. THE FOLLOWING PROCEDURES MUST BE FOLLOWED:

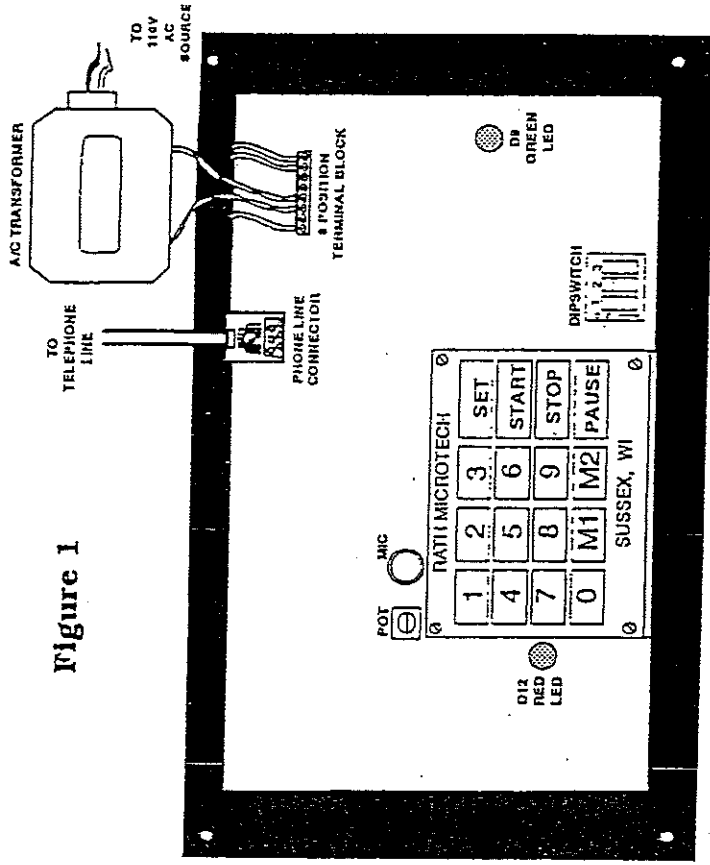
When programming or making test calls to emergency numbers:

Remain on the line and briefly explain to the dispatcher the reason for the call.

Perform such activities in the off-peak hours, such as early morning or late evenings.

This equipment does not provide data operation.

Figure 1



Exploded View of Circuit Board

SMARTPHONE MODELS
2100-936, -937, -938, -985

Call Rath Microtech

for all your

Emergency Phone needs!!

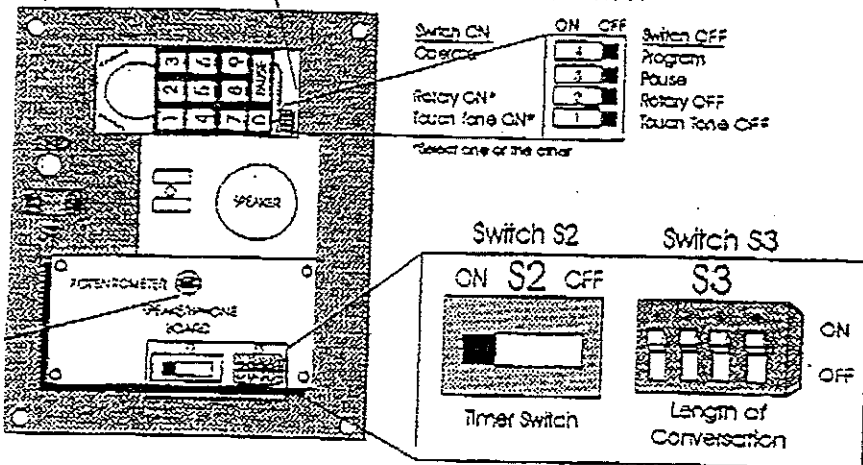
1-800-451-1460

Programming Instructions

for non-Call-Tracker models

TO: FAX NOTE	7671	Date	2/28	# of pages	1
To	Jim	From	Bob Russell		
Co./Dept.		Co.			
Phone #		Phone #	243		

1. Switch S1 at lower right corner of touch pad board



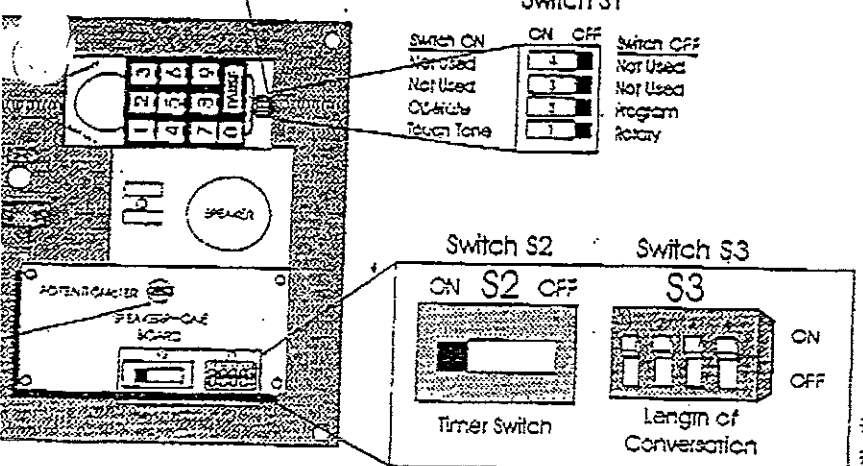
- Programming Instructions:
1. Set S1 for ROTARY (dip #2 ON, dip #1 OFF) or TOUCH TONE (dip #1 ON, dip #2 OFF)
 2. Turn ON timer switch S2.
 3. Set S3 for length of conversation.
 4. Set S1 dip #4 to OFF.
 5. Press CALL button. Switch 3 ON then OFF. Wait 5 seconds then dial number.
 6. After several rings, set S2 to OFF to shut off phone.
 7. Set S2 to ON.
 8. Set S1 dip #4 to ON; wait 10 seconds.
 9. Press CALL button; phone should dial.

Note: Switch 3 ON and OFF can insert a pause between numbers. (Wait 5 seconds before proceeding each time)

Length of Conversation (select only one to ON):

#1 ON = 2 minutes	#3 ON = 4 minutes
#2 ON = 3 minutes	#4 ON = 5 minutes

2. Switch S1 at right center of touch pad board



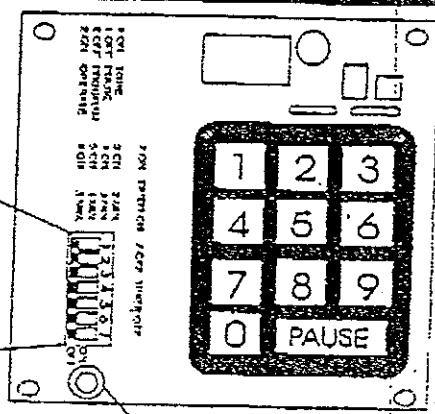
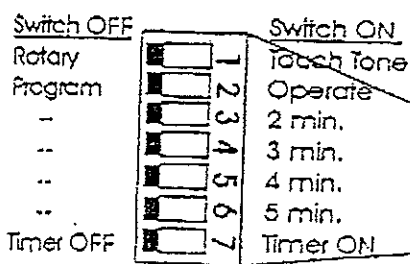
- Programming Instructions:
1. Set S1 dip #1 for ROTARY (OFF) or TOUCH TONE (ON).
 2. Set S1 dip #2 to OFF.
 3. Set S2 timer to ON.
 4. Set S3 for length of conversation.
 5. Press CALL button and dial emergency phone number.
 6. After several rings, set S2 to OFF to shut off phone.
 7. Set S2 to ON.
 8. Set S1 dip #2 to ON; wait 10 seconds.
 9. Press CALL button; phone should dial.

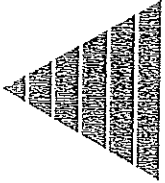
Length of Conversation (select only one to ON):

#1 ON = 2 minutes	#3 ON = 4 minutes
#2 ON = 3 minutes	#4 ON = 5 minutes

3. 7-position switch to left of keypad

- Programming Instructions:
1. Set dip #1 for ROTARY or TOUCH TONE.
 2. Set dip #7 (Timer) to ON.
 3. Set dials #3 thru #6 for length of conversation; see drawing. (Note: Only one of these dials to ON.)
 4. Press program, set dip #2 to OFF.
 5. Press CALL button and dial emergency phone number.
 6. After several rings, set dip #7 to OFF to shut off phone.
 7. Set dip #7 to ON.
 8. Set dip #2 to ON; wait 10 seconds.
 9. Press CALL button; phone should dial.





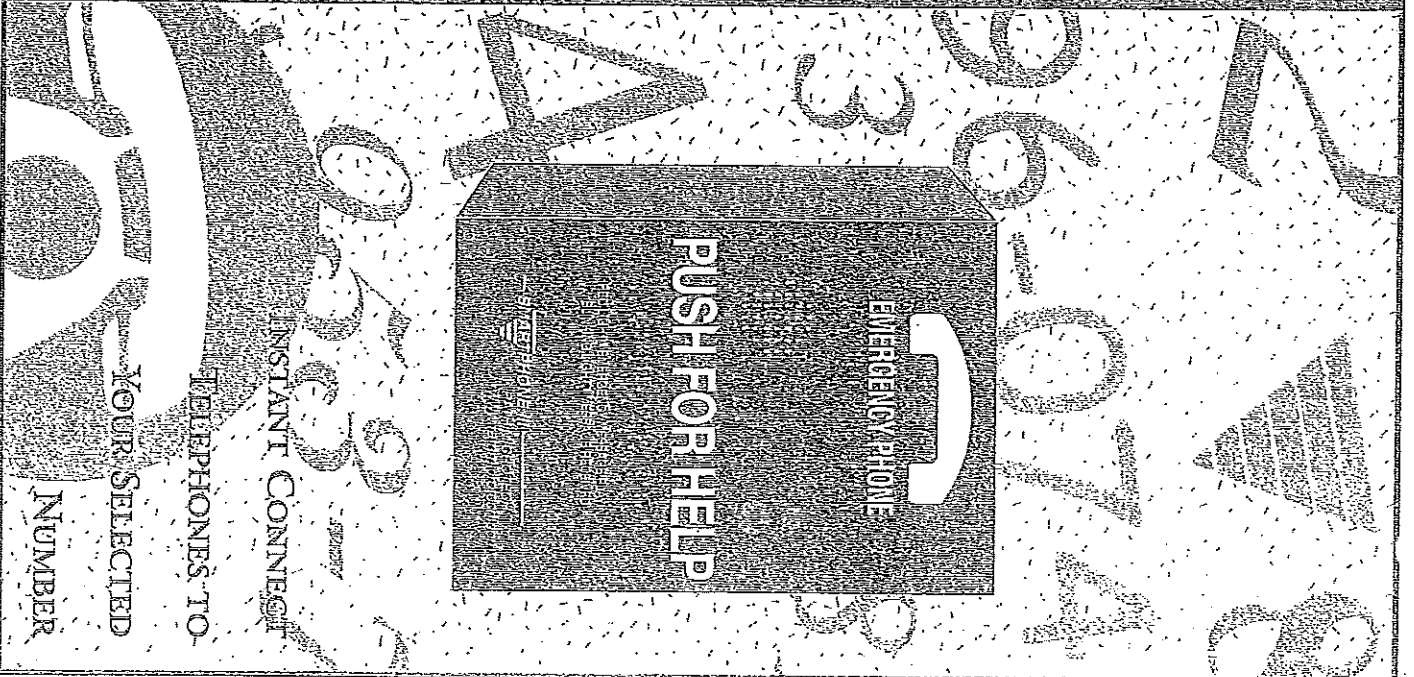
PATH MICROTECH
Technology of the Future, Available Today!

W227 N6370 Sussex Road • P.O. Box 306 • Sussex, WI 53089
1-800-451-1460 • FAX: 262-246-4828
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Part No. RP8100096

Revised 06/01

SMARTPHONE III



SMARTPHONE III

Models 2100-956, 2100-957, 2100-958

Elevator Emergency Phone

Model 2100-984LF

Lift Emergency Phone

Model 2100-847

Tower Emergency Phone

Model 2100-986

Exterior Emergency Phone

Timer

The timer is the variable activation time setting or automatic shut-off. This is the amount of time the phone will function once activated and answered. If the SMARTPHONE III is set for three minutes, the phone will shut off three minutes after the phone is activated and answered or three minutes after SMARTPHONE III has auto answered.

Touch Tone

A trademark owned by AT&T for the tone dialing. The SMARTPHONE III can only work on Touch Tone telephone lines.

WTNKG

Most telephone companies provide a called party disconnect WTNKG. After the called party has hung up, the telephone company momentarily opens up the telephone line to the calling party. This turns the SMARTPHONE III off. If the SMARTPHONE III is installed on a PBX telephone line, the WTNKG only turns down the trunk between PBX and the telephone company.

120 VAC

The SMARTPHONE III requires 120 VAC to the transformer provided. 120 VAC is standard lighting voltage.



TABLE OF CONTENTS

Analog
A method of sending voice, video or data signals that is analogous to the original signal. Standard telephone lines in the home or business are analog.

Auto Answer
When an incoming call is received, the *SMARTPHONE III* will answer the call and two-way conversation is established with the calling party.

CALL TRACKER
This is the location identification message that can be programmed into the *SMARTPHONE III* at the site or remotely.

Central Office Telephone Line
POTS or "Plain Old Telephone Service" is the basic single line access to the public switched network.

Consolidator
This is the ability to access each phone that is wired to a single telephone line. With the *SMARTPHONE III* you will be able to call each *SMARTPHONE III* without a separate piece of equipment. Each phone will have it's own ID. Install up to 5 *SMARTPHONE III*'s on the same telephone line.

Digital
The voice, video, or data signals are encoded into a series of 0's and 1's. These are decoded at the receiving end. The *SMARTPHONE III* requires an analog telephone line.

FCC
Federal Communication Commission. This is the government organization that regulates the telephone industry.

PBX
Private Branch Exchange. A private phone system allowing phone calls within a business and to the outside world. To make a call on the public telephone network you usually have to dial 8 or 9 then the telephone number.

Ring-Down
A Ring-Down telephone line automatically rings a phone when the originating phone goes off hook. The Ring-Down telephone line can be connected to a device which is connected to another phone, or a telephone number can be programmed into a PBX. The local telephone company can also program a telephone number.

Template
This is a sheet of paper provided to mark mounting screw locations.

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General Information	11
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GENERAL INFORMATION

SMARTPHONE III Models 2100-956, -957, -958, -984LF, -847, -986

STANDARD FEATURES

- Hands free speaker phone. Completely automated operation.
- Automatic dialer has user programmable memory.
- Simple programming.
- Can be programmed without connection to 120 VAC or telephone line.
- Two number capability.
- *Call Tracker* location identification message. Recordable message. Up to 18 seconds.
- Detects called party's voice when they answer phone and causes all ADA features to operate automatically.
- Detects when called party hangs up and shuts off automatically if called party disconnect "WINK" is available in area. Called party can also use *# to immediately terminate call.
- Designed for 120 VAC power, eliminates concerns about available telephone line voltage and current.
- Will work on both PBX and Central Office telephone lines.
- Programming error indicator.
- 120 VAC connection indicator.
- Battery back-up.
- Shallow profile allows phone to be installed in all existing telephone boxes without removal of programming keypad.
- Automatic answer.
- Audible ring.
- Variable conversation time settings.
- Remote programming.
- Install multiple phones on the same telephone line. Up to 5 phones per line.
- Built-in consolidator feature. Multiple phones on the same line, reach each phone individually.

OPERATIONAL SPECIFICATIONS

1. User presses push button to activate phone. RED LED lights and automatic dialer dials the following sequence:
 - a. The first programmed number is dialed. If the first programmed number

INDUSTRY CANADA

CERTIFICATION INFORMATION

CP-01, Issue 8, Part I, Section 14.1

Notice: The industry Canada label identifies certified equipment. This certification means that the equipment meets safety requirements as prescribed in the appropriate Terminal Equipment Technical Requirements document(s). The Department does not guarantee the equipment will operate to the user's satisfaction.

Before installing this equipment, users should ensure that it is permissible to be connected to the facilities of the local telecommunications company. The equipment must also be installed using an acceptable method of connection. The customer should be aware that compliance with the above conditions may not prevent degradation of service in some situations.

Repairs to certified equipment should be coordinated by a representative designated by the supplier. Any repairs or alterations made by users to this equipment, or equipment malfunctions, may give the telecommunications company cause to request the user disconnect this equipment.

Users should ensure for their own protection that the electrical ground connections of the power utility, telephone lines and internal metallic water pipe system, if present, are connected together. This precaution may be particularly important in rural areas.

Caution: Users should not attempt to make connections themselves, but should contact the appropriate electrical inspection authority, or electrician, as appropriate."

CP-01, Issue 8, Part I, Section 14.2

Notice: The Ringer Equivalence Number (REN) assigned to each terminal device provides an indication of the maximum number of terminals allowed to be connected to a telephone interface. The termination on an interface may consist of any combination of devices subject only to the requirement that the sum of the Ringer Equivalence Numbers of all the devices does not exceed 5."

GLOSSARY OF TERMS

ADA

Americans with Disabilities Act. The ADA is federal civil rights legislation written and enacted to provide disabled people with access and accommodations equal or similar to those of the general public.

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

If this equipment causes harm to the telephone network, the telephone company will notify you in advance that temporary discontinuance of service may be required. If advance notice isn't practical, the telephone company will notify the customer as soon as possible. Also, you will be advised of your right to file a complaint with the FCC if you believe it is necessary.

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

If trouble is experienced with this equipment, please contact Technical Support Center at RATH MICROTECH Toll Free at 1-800-451-1460, Ext. 3, for repair and warranty information. If the trouble is causing harm to the telephone network, the telephone company may request you to remove the equipment from the network until the problem is resolved. All repairs should be referred to the Technical Support Center at RATH MICROTECH Toll Free at 1-800-451-1460, Ext. 3, to determine if phone needs to be returned.

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

This equipment is hearing-aid compatible.

THIS EQUIPMENT HAS AN AUTOMATIC DIALER. THE FOLLOWING PROCEDURES MUST BE FOLLOWED:

When programming or making test calls to emergency numbers:
Remain on the line and briefly explain to the dispatcher the reason for the call.

Perform such activities in the off-peak hours, such as early morning or late evenings.

This equipment does not provide data operation.

is busy it will immediately dial second programmed number. (See Programming Instructions for Two Number Operation, Step 4, Page 8.)

- b. If the first programmed number is not answered in six rings it will dial the second programmed number. (See Programming Instructions for Two Number Operation, Step 4, Page 8.)

- c. The *SMARTPHONE III* will continue to switch between the first and second programmed numbers until answered or default of 256 times.

2. When the *SMARTPHONE III* is answered it detects the called party's voice then automatically plays the *CALL TRACKER* location identification message twice. The *RED LED* on the face of the *SMARTPHONE III* will begin to flash. This lets the user know the call has been answered and that help is on the way. After the *CALL TRACKER* message has played twice, two-way conversation between caller and emergency service can begin. The *CALL TRACKER* feature can be disabled. (See Programming Instructions, Step 3, Page 8.)

3. The star (**) button pressed twice can be used by the called party to replay the *CALL TRACKER* message.

4. The called party can terminate the call by pressing the star (*) and then the pound (#) button or by simply hanging up. The *SMARTPHONE III* shuts off when the called party hangs up if called party disconnect "WINK" is available in area.

5. The *SMARTPHONE III* can be programmed to shut off automatically. (See Programming Instructions, Step 5, Page 9.)

6. The *SMARTPHONE III* will AUTO ANSWER when called. Two-way conversation is immediately available. The calling party can press ** to play the *CALL TRACKER* and press *# to terminate the call.

INSTALLATION INSTRUCTIONS

SMARTPHONE III can be programmed without connection to 120 VAC or telephone line. Back-up battery is charged when shipped but will discharge over time. Back-up battery will be fully charged 48 hours after *SMARTPHONE III* is installed on 120 VAC. To try programming without connection to 120 VAC connect the battery lead to J2 on the board and go to On Site Programming Instructions, start with Step 1C on Page 7.

An installation kit is enclosed with each *SMARTPHONE III*. These installation instructions and the installation kit will assist you when installing the *SMARTPHONE III* in an existing telephone enclosure. If you wish to flush mount the *SMARTPHONE III* contact Rath Microtech for further instructions.

Installation Kit contents:

- | | |
|--|-------------------------------------|
| 1 each drilling template | 4 each adhesive dots |
| 3 each #8 x 1/2" screws | 1 each Allen wrench |
| 4 each insulation displacement wire connectors | 2 each #4 x 3/8" slotted hex screws |
| #8 or #10 Spanner wrench (when needed) | |

TO MOUNT ON WALL OF TELEPHONE ENCLOSURE

1. Place drilling template against back wall of elevator enclosure. Position properly and secure with enclosed adhesive dots.
2. Drill bit size is 1/8". Drill 3 mounting holes as shown on the drilling template in the elevator telephone box. Remove drilling template.
3. Thread a screw in each mounting hole. Do not tighten completely.
4. Remove the *SMARTPHONE III* cover by loosening the 4 Allen screws located at the corners of the *SMARTPHONE III*. The *SMARTPHONE III* board is mounted on the cover.
5. A 7 foot telephone line cord with a modular plug at each end is provided. The *SMARTPHONE III* phone box has two 1/2" holes, one in the top of the box and one in the bottom of the box. These holes allow the telephone line cord and the transformer leads to be fed through the box to allow connection to the telephone line and to the transformer.
6. Align keyhole cutouts on the *SMARTPHONE III* box with the screws you have mounted in telephone enclosure. Feed telephone line cord and transformer leads through hole in the top or remove knockout in the bottom of the box if this is the preferred location. Leave slack in the cord and in the leads.
7. Slide the *SMARTPHONE III* box in place and tighten screws. The box should be securely mounted in the telephone enclosure.

to the Technical Support Representative. The model number and serial number may be found on the label on the inside cover of the *SMARTPHONE III*.
Package the *SMARTPHONE III* carefully and return to:

RATH MICROTECH • W227 N6370 Sussex Road • Sussex, VT 53089

TECHNICAL SPECIFICATIONS

- Telephone Line and 120 VAC Powered
- Field Programmable
- Remote Programmable
- 31 Digit Dialer Memory
- On Hook Voltage - 48V-24V
- Off Hook Voltage - 48V-9.35V, 24V-7.45V
- Loop Current - 48V-43.2MA, 24V-38.5MA
- LED Specifications: 2VDC, 1/3 Watt
- Back-Up Battery Life = 5 yrs Replace after 5 years
- Back-Up Battery Active Operation 4 Hours
- Touch Tone Operation Only
- *Touch Tone is an AT&T Registered Trademark.*
- Analog Telephone Line Required
- Automatic Answer Feature
- Audible Ring
- Shut-Off Time: Programmable to 999 Minute
- Ringing Equivalence (REN) 1.1B
- Maximum 5 ADA *SMARTPHONE III*'s per Line
- Built-In Consolidator; Reach Individual Phone on the Same Phone Line
- Star (*) and Pound (#) Buttons Should be Depressed at Least 1 Second
- *SMARTPHONE III* Works on All FCC Qualified Telephone Systems
- Box Dimensions: 8.15"H x 5.15"W x 2" D
- Overall Dimensions: 8 1/8"H x 5 1/8"W x 2 1/8"D

FCC PART 68 INFORMATION

This equipment complies with Part 68 of the FCC rules. On the exterior housing of this equipment is a label that contains, among other information, the FCC registration number and Ringing Equivalence Number (REN) for this equipment. If requested, this information must be provided to the telephone company.

This equipment uses the following jack: RJ11

Telephone line can be converted to Touch Tone, contact your telephone company or switchboard vendor.

5. SMARTPHONE III dials but you get an operator intercept or recording instead of being connected to the program number:

- Check to make sure the phone is programmed correctly, the SMARTPHONE III must be programmed in the same way as you would dial the call manually (if you must dial 1, then program for 1; if you must dial the area code, then program the area code, etc.)
- Reprogram the SMARTPHONE III.

6. SMARTPHONE III dials, but gets a busy signal after dialing only a couple digits:

- SMARTPHONE III has been installed on a switchboard line and is not programmed to dial out from behind the switchboard to get an outside line.

- Reprogram the SMARTPHONE III to dial the appropriate access code to get an outside line (usually 8 or 9) + a pause for second dial tone + telephone number.

- Unit has been installed on a switchboard telephone line that does not allow outside calls. Contact your switchboard vendor.

7. You hear dial tone when you activate the SMARTPHONE III but it does not dial automatically:

- Visually inspect SMARTPHONE III for any damage.
- Follow Programming Instructions to reprogram memory.
- Troubleshooting assistance is available by calling Rath Microtech Technical Support toll free at 1-800-451-1460, Ext. 3.

WARRANTY AND REPAIR

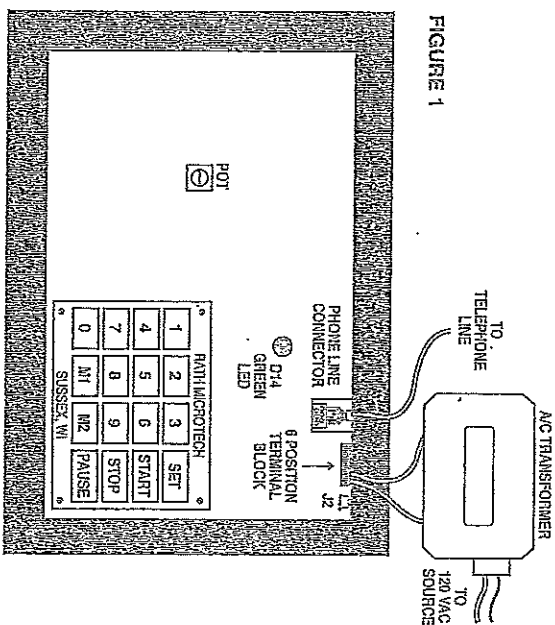
1. Rath Microtech warrants parts and labor on all SMARTPHONE III's for a period of one year from the date of shipment. This warranty is in lieu of all other express warranties. Any act of vandalism to the SMARTPHONE III will void the warranty.

2. All repairs must be completed at our Sussex, Wisconsin factory. Please use the following procedure to return SMARTPHONE III for repair:

Call Rath Microtech Technical Support Toll Free at 1-800-451-1460, Ext. 3, to get a Return Authorization Number. No returns will be accepted without a Return Authorization Number.

Have model number, serial number and a description of the problem ready to give

FIGURE 1



CONNECTION TO 120 VAC POWER

1. The SMARTPHONE III requires 120 VAC power to operate as well as a Touch Tone telephone line. In the event of a power failure, the SMARTPHONE III also has a battery back-up which allows full operation of the SMARTPHONE III for a minimum of four hours. Separate 120 VAC feed not required. The battery lead must be connected to J2 on the board.

NOTE: For proper emergency operation during an AC failure, the SMARTPHONE III should be plugged into AC for 48 hours before installation to recharge back-up battery.

2. A UL approved transformer is provided with the SMARTPHONE III. The transformer requires 120 VAC and provides 10v 5va.
3. The white wire of the transformer should be connected to the neutral side of the 120 VAC power (usually the white wire) and the black wire of the transformer to the "hot" side of the 120 VAC power (usually the black wire).
4. Two mounting holes and 2 each #4 x 3/8" slotted hex screws are provided to secure transformer at a convenient location.
5. 120 VAC power has been properly connected when D14 (GREEN LED) is lit. The GREEN LED is located above the programming keypad on the SMARTPHONE III board. (See Figure 1, above.)

CONNECTION TO THE TELEPHONE LINE

1. If you plan to use the modular line cord provided to connect the

SMARTPHONE III to the phone line, make sure line cord has been fed through the desired hole in the SMARTPHONE III box. Connect telephone line cord to the appropriate modular telephone jack. (See Figure 1, Page 4.)

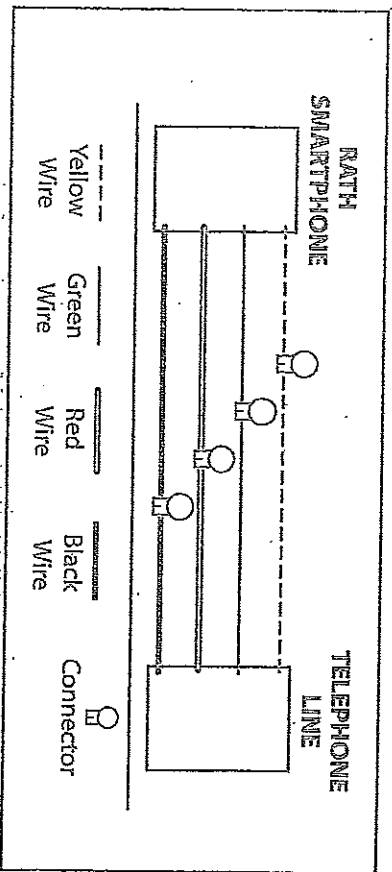
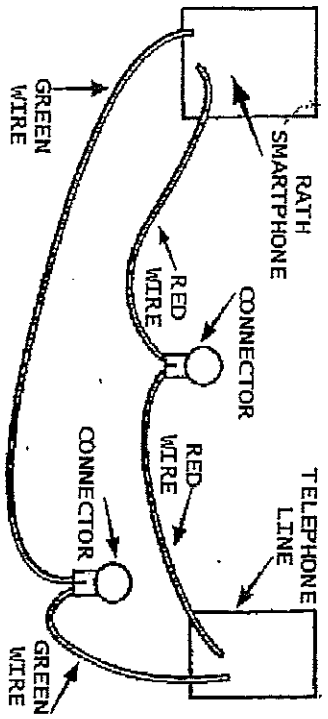


Figure 2A



If your installing the Smartphone III with a SmartRescuePhone, a 4 wire connection is required. (See Figure 2)

In a standard installation a 2 wire connection is required, red, green wires. (See Figure 2A)

Note: When using supplied wire connectors, DO NOT REMOVE INSULATION FROM INDIVIDUAL WIRES.

When SMARTPHONE III is properly connected to the telephone line and to 120 VAC you will hear dial tone when you activate the SMARTPHONE III and D14 (GREEN LED) is lit. (See Figure 1, Page 4)

7. Press 5. Will get beep. Press 0. Will get deedoo-dee tone.
8. Press STOP. Will get deedoo-dee tone.
9. Press and hold STOP until warble sounds.

2. CALL TRACKER message is recorded conversation or something other than the desired emergency message:

- Record new CALL TRACKER message following the instructions on Page 8, STEP 3.
- After recording the message press PAUSE to play back the recorded message. Will get deedoo-dee tone when done.

3. You wish to delete the CALL TRACKER location identification message. Two-way conversation begins as soon as the emergency call is answered.

- The American's with Disabilities Act (ADA) requires that emergency service personnel are able to identify the location of the emergency, even if the caller cannot speak. The CALL TRACKER location identification message meets this ADA requirement.

To delete the message: Press START to enter the program mode. Press START again. Immediately press STOP. Press PAUSE to play back whatever is recorded in the CALL TRACKER message. You will hear a short "blip" tone if there is nothing recorded in the CALL TRACKER message. Press and hold the STOP key until the warble sounds. You have exited the program mode.

- If any message or conversation remains recorded repeat procedure detailed above.

4. SMARTPHONE III is "dead", do not even hear dial tone:

- Check to see if 120 VAC power is properly connected. D14 (GREEN LED) above the keypad should be lit.

• Check telephone line to be sure it is operational. To check the telephone line: Unplug the SMARTPHONE III from the telephone line. Plug a standard phone set into the same line. If the standard phone is also "dead" the problem is with the phone line. If the standard phone works, the problem is with the SMARTPHONE III.

- Contact your telephone company or switchboard vendor if the problem is with the phone line.

• Contact Rath Microtech if the problem is with the SMARTPHONE III. SMARTPHONE III dials automatically but dial tone doesn't go away: SMARTPHONE III is dialing in Touch Tone and is installed on a rotary telephone line.

- Rotary dial telephone line accepts only rotary dial signals.
- Touch Tone telephone line accepts rotary dial or Touch Tone signals.

Telephone ID	Identification number of SMARTPHONE III. Default setting assumes that phone not installed on Party Line. See CONSOLIDATOR OPERATION for details on Party Line set-up.	0
Security Code	4 Digit code. To allow remote programming, must be set to code other than 0000.	1111
Auto Answer	SMARTPHONE III answers itself automatically when called.	ON
Ringer	SMARTPHONE III rings when called.	ON
Dial Delay	Amount of time SMARTPHONE III waits before dialing program number if dial tone not present.	5 seconds
Dial Pause Length	Duration of programmable pause.	1 second
Maximum Rings	Number of rings before SMARTPHONE III hangs up and dials alternate program number or redials program number.	6 rings
Maximum Calls	Number of times SMARTPHONE III will redial program numbers if call rings busy or is not answered on first attempt.	256 times

TROUBLESHOOTING

When trouble is reported, refer to the following tips:

1. *Activate SMARTPHONE III by pressing push button. No dial tone heard. Ringing begins immediately. Called party answers but cannot talk with person in elevator. Called party hangs up.*

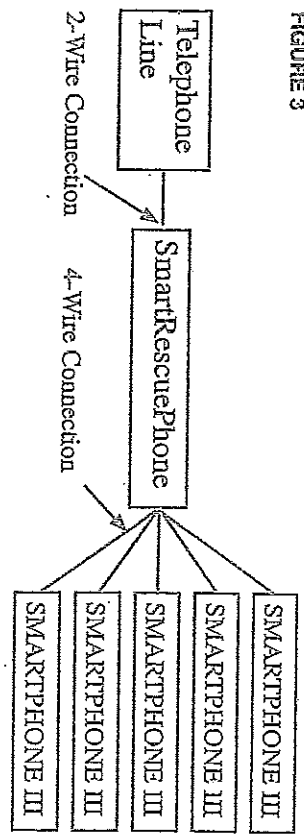
- SMARTPHONE III is installed on a ring-down telephone line from the building switchboard system.

- Use the following steps to reprogram the phone for ring-down telephone line operation.

1. Press START to enter program mode. Will get deedooodee tone.
2. Program M1 by pressing SET followed by PAUSE followed by M1.
3. Program M2 by pressing SET followed by PAUSE followed by M2.
4. Press SET SET SET. Will get deedooodee tone.
5. Press M2. Will get error tone then will get deedooodee tone.
6. Press M1. Will get deedooodee tone.

SMARTRESCUEPHONE INSTALLATION

FIGURE 3

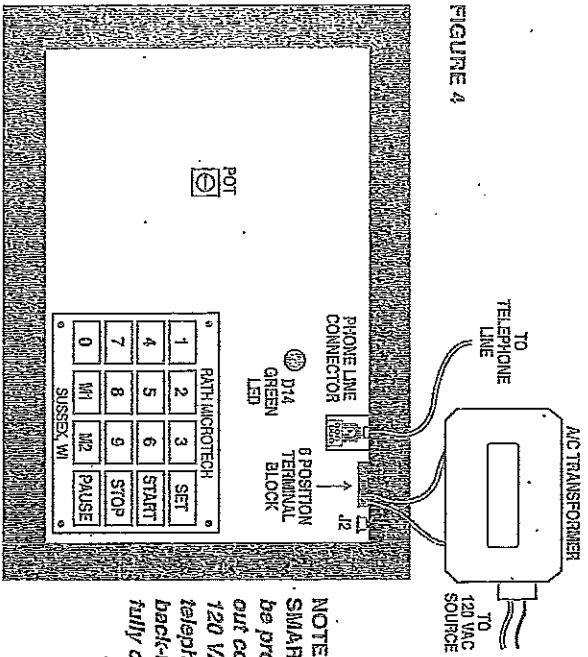


(SmartRescuePhone Model 2500-105)

The SmartRescuePhone is an in-building rescue coordination phone that can be used with the SMARTPHONE III. Use the following instructions to install the SmartRescuePhone. The SmartRescuePhone is connected directly to the telephone line. Each SMARTPHONE III phone is connected to the SmartRescuePhone.

1. Power Requirement: 120 VAC power. Transformer provided.
2. Telephone line requirement: Analog, Touch Tone telephone line. Two-wire connection between Telephone Line and SmartRescuePhone. Four-wire connection between each SMARTPHONE III and the SmartRescuePhone.
3. The SmartRescuePhone should be installed in a central location that allows emergency personnel, in the building, to use it to access the elevator emergency phones and talk with each individual emergency phone.
4. The SmartRescuePhone is a wall mount unit. Use the template to mark the 3 mounting holes. Screws for mounting the SmartRescuePhone are also enclosed.
5. There are 2 key-shaped mounting holes in the back box. Secure the 2 screws, that correspond to these holes, into the wall. Position the mounting holes in the back box of the SmartRescuePhone over the screws, slide down and tighten screws. Secure to the wall by installing and tightening the screw in the mounting hole along the lower edge of the back box.
6. Plug the telephone into the jack marked Telephone Line. Plug each elevator emergency phone into the jack marked 1 - 5. The emergency phone from elevator car 1 should be plugged into the jack marked 1. The emergency phone from elevator car 2 should be plugged in the jack marked 2 and so on, until each emergency phone is connected to the SmartRescuePhone.
7. The SmartRescuePhone will support a maximum of 5 elevator emergency phones.
8. Plug the power transformer into the SmartRescuePhone and into the 120 VAC power supply.
9. The SmartRescuePhone is equipped with a back up battery that will provide 4 hours of full operation, in the event that 120 VAC power is lost.

ON SITE PROGRAMMING INSTRUCTIONS



NOTE:
SMARTPHONE III can be programmed without connection to 120 VAC or the telephone line when back-up battery is fully charged.

STEP 1 TO BEGIN PROGRAMMING

- Connect telephone line cord to the appropriate modular telephone line jack. Connect transformer to 120 VAC. (See Figure 4 above.)
- Remove SMARTPHONE III cover by loosening the four Allen screws located at the corners of the phone. Carefully lift the cover away from the SMARTPHONE III box. The circuit board is mounted on the back of the SMARTPHONE III cover.
- The circuit board inside of the phone is equipped with a telephone keypad.
- During programming, the phone will buzz as each key is depressed.
- If an error is made in programming, the SMARTPHONE III will buzz three times.
- The phone will shut off if no key has been depressed for two minutes. It will shut off with a two tone salute.

1	#	(Enter phone number M1, * for pauses)	#	Deedoodee
1	*	Phone number M1 is played back in beeps		Deedoodee
2	#	(Enter phone number M2, * for pauses)	#	Deedoodee
2	*	Phone number M2 is played back in beeps		Deedoodee
3	#	(Enter timeout minutes)	#	Deedoodee
		<i>Factory set at 15 minutes</i>		
3	*	Timeout minutes played back in beeps		Deedoodee
4	#	Record Message # to stop		Deedoodee
4	*	Message is played back		Deedoodee
9	**#	Will terminate call		

CONSOLIDATOR OPERATION

- Dial the SMARTPHONE III telephone. All phones will automatically answer active.
 - Select Individual Phone

Press * 1	(Phone #1)
Press * 2	(Phone #2)
Press * 3	(Phone #3)
Press * 4	(Phone #4)
Press * 5	(Phone #5)
 - Select All Phones

Press * 0	
-----------	--

2 way conversation with all units
 - Select all Phones (Page Mode)

Press * 9	
-----------	--

Listen Mode only, in elevator

GENERAL OPERATION

- Replay CALL TACKLER message

Press ** *

- Shut Phone Off Manually

Press * #

SMARTPHONE III DEFAULT SETTINGS

Default	Description	Setting
Timeout	Phone shuts off in this amount of time after activated and answered or after auto answer.	15 minutes

the STOP key was not held long enough. Press and hold STOP again until warble sounds.

NOTE: Record telephone ID code and security code on small label found under keypad.

REMOTE PROGRAMMING

STEP 1 REMOTE PROGRAMMING SEQUENCE

A. SMARTPHONE III Standard Remote Programming

1. Call number of phone or phones.
2. After you get the simulated ring, press the # key. Will hear long deededodeo tone.
3. Key in the security code (4 digits). Will hear deededodeo tone. Wrong security code will terminate call.
4. Press 9 * 0. Will hear tone. All phones will be ready to program. See Table A, page 12, for programming menu.
5. Press 9 * * # to end programming.

B. SMARTPHONE III Consolidator Mode Remote Programming

1. Call number of phone or phones.
2. After you get the simulated ring, press the # key. Will hear long deededodeo tone.
3. Key in the security code (4 digits). Will hear deededodeo tone. Wrong security code will terminate call.
4. Changing single phone or all in group.
A.) Single phone
 1. After security code, press 9 * 1. Will hear deededodeo tone. This will make phone with ID 1 ready to program.
 2. See Table A, page 12, for programming menu.
 3. Press 9 * 2. Will hear deededodeo tone. You are now ready to program phone with ID 2. See Table A, page 12.
 4. Continue this until you have programmed all in the group.
 5. Press 9 * * # to end programming.
- B.) Changing all phones in group
 1. After security code, press 9 * 0. This will make all phones ready to program.
 2. See Table A, page 12, for programming menu.
 3. Press 9 * * # to end programming.

STEP 2 TO ENTER PROGRAM MODE

A. To enter program mode press START and release. Will get deededodeo tone.

STEP 3 TO PROGRAM CALL TRACKER

(You must be in the Program mode. See Step 2, above.)

A. Program CALL TRACKER message by pressing START. Speak message. Press STOP at end of message. Will get deededodeo tone. (Message maximum length is 18 seconds)

B. Press the PAUSE key to play back the CALL TRACKER message. Will get deededodeo tone when done.

NOTE: If you want to disable CALL TRACKER, press START then STOP. Will get deededodeo tone. No CALL TRACKER message will play during the phone operation. Press PAUSE to play back whatever is recorded in the CALL TRACKER message. You will hear a short "bip" tone if there is nothing recorded in the CALL TRACKER message.

STEP 4 TO PROGRAM NUMBERS

(You must be in the Program mode. See Step 2, above.)

A. STANDARD TELEPHONE LINE PROGRAMMING

1. Program first number by pressing SET followed by the number to be dialed and then M1 to store the number. Will get deededodeo tone.
2. Program the second number by pressing SET followed by the number to be dialed and then M2 to store the number. Will get deededodeo tone.
3. If you wish to disable automatic dialing of second number, press SET followed by M2.

B. SWITCHBOARD TELEPHONE LINE PROGRAMMING

NOTE: When installing the SMARTPHONE III on a switchboard telephone line be sure that the switchboard has an Uninterruptible Power Supply (UPS). If there is no UPS for the switchboard and a power failure occurs the telephone line will go down. Without a line telephone line the SMARTPHONE III cannot work and no emergency calls can be made until power is returned.

1. If you are programming the SMARTPHONE III for use on a switchboard telephone line the programming procedure is slightly different.
2. Program first number by pressing SET followed by the access code for an outside line (usually 8 or 9) follow by PAUSE key followed by the number to be dialed and then M1 to store the number. Will get deededodeo tone.
3. Program the second number by pressing SET followed by the access code for an outside line (usually 8 or 9) follow by PAUSE key followed by

the number to be dialed and then M2 to store the number. Will get deedoodee tone.

- 4. To disable automatic dialing of second number press SET followed by M2.

C. RING-DOWN TELEPHONE LINE PROGRAMMING

- 1. Program M1 by pressing SET followed by PAUSE followed by M1.
- 2. Program M2 by pressing SET followed by PAUSE followed by M2.
- 3. Press SET SET SET. Will get deedoodee tone.
- 4. Press M2. Will get error tone then will get deedoodee tone.
- 5. Press M1. Will get deedoodee tone.
- 6. Press 5. Will get beep. Press 0. Will get deedoodee tone.
- 7. Press STOP Will get deedoodee tone.

NOTE: To verify numbers programmed do the following. Press M1. The phone will beep each digit entered. For example, if the first three digits entered are 241 you will get beep-beep, beep-beep-beep-beep, etc. If you have programmed a PAUSE you will hear a long beep. After all the entered digits have beeped you will get the deedoodee tone. Press M2 and the phone will beep out the number programmed as explained above.

STEP 5 TO PROGRAM THE TIMER

(You must be in the Program mode. See Step 2, Page 8.)

NOTE: The timer is the variable activation time setting or automatic shut-off. This is the amount of time the phone will function once activated and answered. If the SMARTPHONE III is set for three minutes, the phone will shut off three minutes after the phone is activated and answered or three minutes of the SMARTPHONE III has also answered.

- A. The timer has been preset at the factory to 15 minutes. Program automatic time-out by pressing SET followed by SET again and then the time (1-999 minutes). Then press SET to store the time-out. Will get deedoodee tone.
- B. To verify timer setting, press SET followed by SET and then PAUSE. It will beep the timer setting followed by the deedoodee tone. For example, the factory setting of 15 minutes, after the keys were pressed as explained above, the phone will beep (for the first digit) and beep-beep-beep-beep (for the second digit) followed by the deedoodee tone.

STEP 6 TO END PROGRAMMING

- A. Hold STOP until warble sounds, then release. If you get three low beeps, the STOP key was not held long enough. Press and hold again until warble sounds.
- B. Any feature such as CALL TRACKER, telephone numbers one and two, and the timer can be independently reprogrammed at any time.
- C. Test operation of SMARTPHONE III by pressing PUSH FOR HELP button on front panel.

STEP 7 TO ADJUST SPEAKER VOLUME

It is possible to adjust the speaker volume of the SMARTPHONE III. The phone is set for optimum volume when it leaves the factory. If you wish to increase or decrease the volume, follow these steps:

- A. Locate the white potentiometer (POT) on the circuit board. It is located left of the keypad. (See Figure 4, Page 7).
- B. Gently insert a small screwdriver in slot of the potentiometer (POT).
- C. Slowly turn the potentiometer clockwise to reduce the SMARTPHONE III volume or counter-clockwise to increase the SMARTPHONE III volume. Stop turning the potentiometer when you reach the desired volume level.

OPTIONAL PROGRAMMING

NOTE: For remote programming all phones have to be programmed with a security code. The security code can be any combination of four digits that is not 0000. Security code 0000 does not allow remote programming. The factory security code is set at 1111. We recommend you establish your own unique security code.

NOTE: For consolidator operation all phones have to be programmed with a unique ID number (1-5). The factory ID code is 0. This means all phones are set in a non-consolidator mode.

STEP 1 TO PROGRAM TELEPHONE ID NUMBER

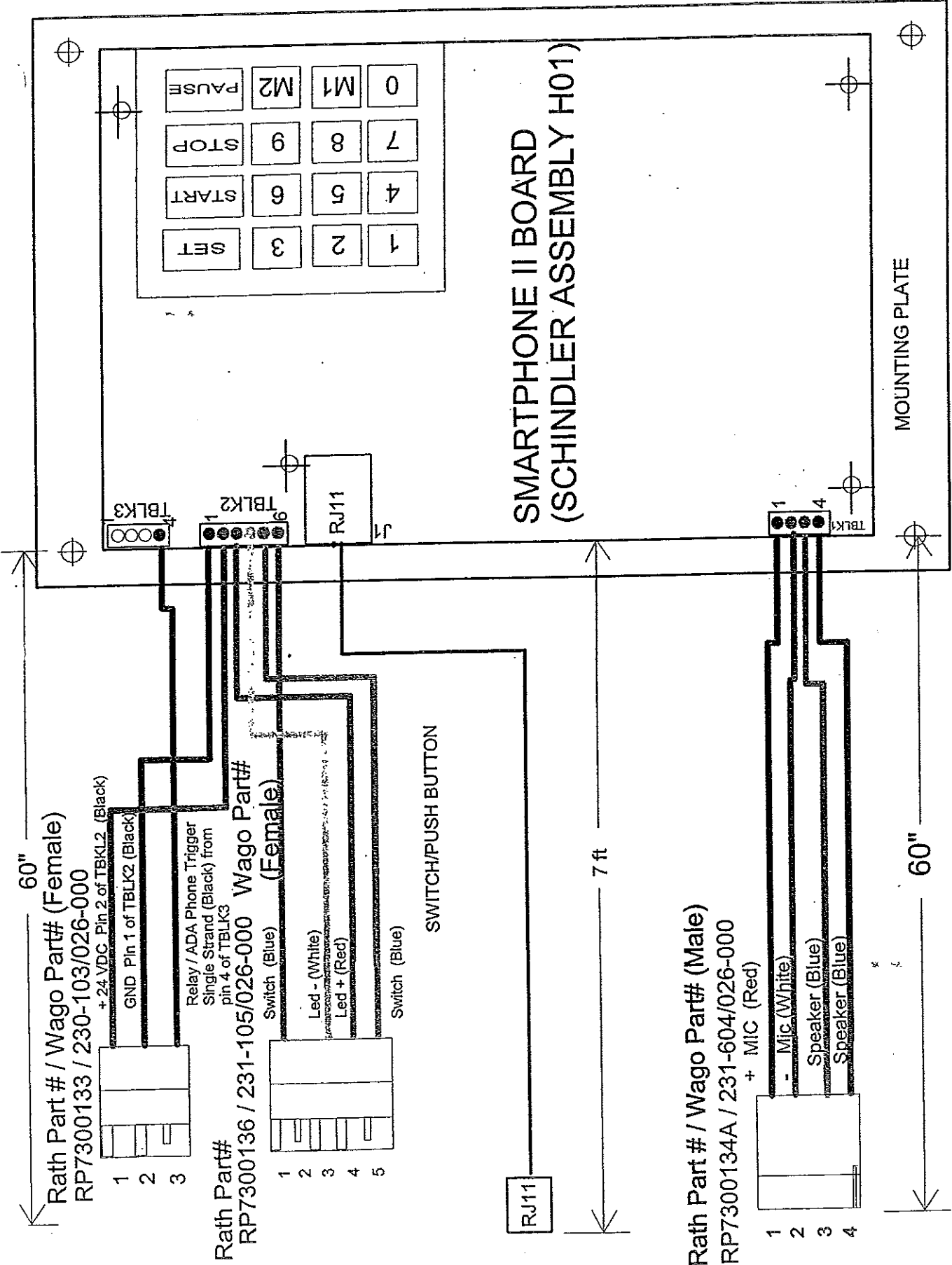
- A. Press START. Will get deedoodee tone (you are now in Program mode).
- B. Press SET, SET, SET. Will get deedoodee tone.
- C. To establish ID number, press 1. Will hear beep. Press ID number desired, any digit 1-5. Will get deedoodee tone. WARNING: For consolidator operation one of the ID numbers must be 1.
- D. To find out which ID code is programmed do the following: Press 1. Wait for the beep. Press PAUSE. If the ID programmed is 2 you will hear beep-beep followed by deedoodee tone.

STEP 2 TO PROGRAM TELEPHONE SECURITY CODE

- A. To change the factory security code of 1111, press 2. Will hear beep. Press 4 digit code desired. WARNING: If you wish to use remote programming, the code must not be 0000. We recommend you keep the same security code for all units in all of your installations. Will get deedoodee tone.
- B. To find out which security code is programmed do the following: Press 2. Wait for the beep, then press PAUSE. It will beep out each digit of the security code followed by deedoodee tone.

STEP 3 TO EXIT OPTIONAL PROGRAMMING MODE

- A. To exit optional program mode, press STOP until deedoodee tone sounds. Then press and hold STOP until the warble sounds. If you get three low beeps



**SMARTPHONE II BOARD
(SCHINDLER ASSEMBLY H01)**

MOUNTING PLATE

BASIC WIRING DIAGRAM
 RATH MICROTECH EMERGENCY TELEPHONE
 MODEL: 2100-949SH
 RP8100091SH2
 10-07-98

SCHINDLER ASSEMBLY H01

Advanced Programming Instructions for Standard Operations

Phone has been preset to Standard SmartPhone V Operation

On-Board Programming

1. Program Telephone Numbers

- A. Press **Enter** to get into program mode
Press **1 Enter** (Phone Number) **Stop**
Note: For Phone Numbers 2-5 repeat Step A
- B. Press **Stop** for 3 Seconds to exit programming

2. Programming Ring Down (No Dial Tone)

- A. Press **Enter** to get into program mode
- B. Press **1 Enter Pause Stop**
- C. Press **9 Enter 0**
- D. Press **Stop** for 3 Seconds to exit programming

3. Program Message (Call Tracker)

Default message "test", plays twice

- A. Press **Enter** to get into program mode
- B. Press **6 Record** (Speak Your Message) **Stop**
(To replay message Press 6, Play)
- C. Press **Stop** for 3 Seconds to exit programming

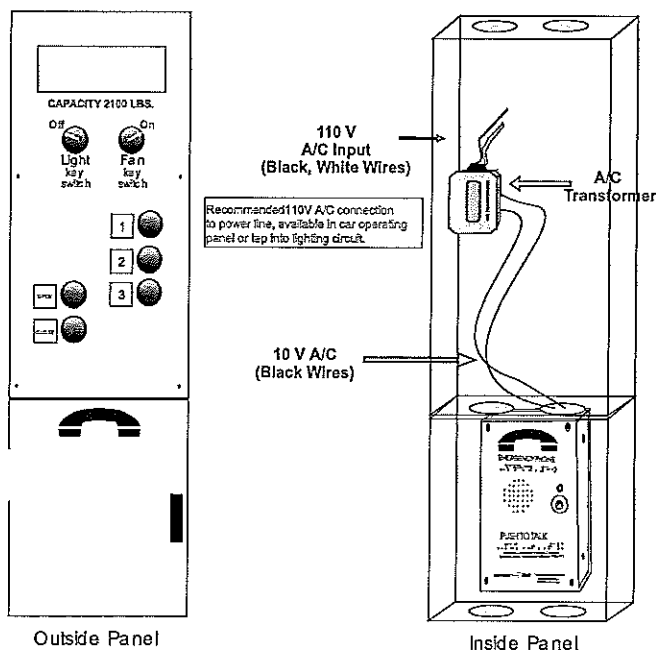
4. Program Frequency of Message (Call Tracker)

Default message "test", plays twice

- A. Press **Enter** to get into program mode
Press **1 3 Enter**
Press **0** = No Message
Press **1** = Plays Message 1 Time
Press **2** = Plays Message 2 Times (Default)
Press **3** = Plays Message until receiving party
Presses * on their phone
- B. Press **Stop** for 3 Seconds to exit programming

5. Change Telephone Security Code (Default 1111)

- A. Press **Enter** to get into program mode
- B. Press **2 2 Enter**, enter in desired 4 digit code
(Cannot be 0000)
- C. Press **Stop** for 3 Seconds to exit programming



SmartPhone V Consolidator Feature

1. Program ID Numbers for Phones 1-5

- A. Press **Enter** to get into program mode
- B. Press **7 Enter**
- C. Press * and 1-5 for corresponding elevator (1-5)
- D. Press **Stop** for 3 Seconds to exit programming

2. Program ID Numbers for Phones 6-10

- A. Press **Enter** to get into program mode
- B. Press **7 Enter**
- C. Press # and 1-5 for corresponding elevator (6-10)
- D. Press **Stop** for 3 Seconds to exit programming

3. Consolidator Operation

Dial the SmartPhone all phones will automatically answer active.

- A. To Select Individual Phone

Press *1 (Phone #1)	Press #1 (Phone #6)
Press *2 (Phone #2)	Press #2 (Phone #7)
Press *3 (Phone #3)	Press #3 (Phone #8)
Press *4 (Phone #4)	Press #4 (Phone #9)
Press *5 (Phone #5)	Press #5 (Phone #10)
- B. To select All phones
Press * then **0** - establishes 2 way conversation with all units.

Remote Programming

Call into phone After 1st simulated Ring Press # #
Key in Security Code **1111** (default)
You are now in program mode

1. Program Telephone Numbers

1 * (phone number) * #

Note: 5 Automatic dialing program numbers can be entered. Use 2 thru 5 for additional telephone numbers.

2. Programming Ring Down (No Dial Tone)

1 * # * * #

9 * 0

3. Program Message (Call Tracker)

Default message "test", plays twice

6 * (record message) * #

Verify Message **6 #**

4. Program Frequency of Message (Call Tracker)

Default message "test", plays twice

1 3 *

- 0** = No Message
- 1** = Plays Message 1 Time
- 2** = Plays Message 2 Times (Default)
- 3** = Plays Message until receiving party
Presses * on their phone

Exit Programming

- * # 0** (you will hear beep beep)
- * #** turns off phone

Talk-a-Phone

Quality Elevator

Being Up To Code on Emergency Elevator Phone Requirements Could Make All the Difference.

ALL TALK-A-PHONES
ARE PROGRAMMED THE
SAME WAY!

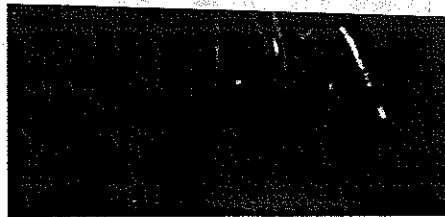
AS/QUALITY ELEVATOR

A fire is accelerating quickly. A man in a wheelchair is trapped in an elevator, but which one? A life could depend on a reliable phone system being in place.

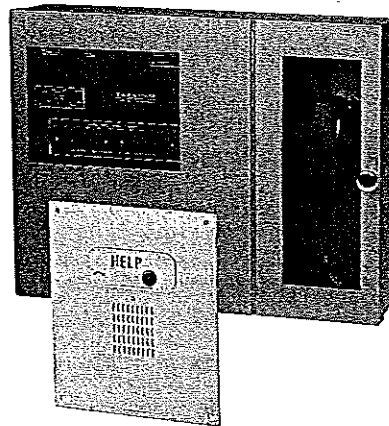
Talk-A-Phone can help.

Emergency communication requirements for elevators are changing. Our completely integrated ADA and A17 compliant *Elevator Rescue Communication System* offers two-way communication between each elevator and the lobby, as well as the machine room.

Our standard Elevator Rescue Communication System includes a



**Especially to someone
you don't know.**



Rescue Command Unit, which can audibly and visually identify the origination of the distress call, a Machine Room Phone Unit and compact Emergency Phones designed specifically for use in elevators. If the Rescue Command Unit does not answer, the call can automatically be routed by phone line to off-site authorized emergency personnel.

Our experienced, technical support staff is readily available to assist you. For more information, please call us at **773-539-1100** or visit our web site at www.talkaphone.com.

Available through:

**QUALITY
ELEVATOR** PRODUCTS, INC.

T A L K - A - P H O N E C O .

Creating Communication Solutions

5013 N. Kedzie Ave. • Chicago, IL 60625 • 773-539-1100 • Fax: 773-539-1241 • e-mail: info@talkaphone.com • www.talkaphone.com
Talk-A-Phone is a registered trademark of Talk-A-Phone Co.

QUICK PROGRAMMING GUIDE

Call emergency phone from any other phone. After you hear a series of tones enter the following:

*4** (Default guard code)

*13*XXXXXX* (1st number to call) ~~##~~

*23*XXXXXX* (2nd number to call)

IF ON A PBX ADD THESE CODES:

*14*3*

*18*5*

55

*13*5* (In lieu of phone number for "ringdown" line)

IF YOU HAVE VOICE OPTION ("V")

58 (record your message)

(After 1st beep, unit will begin recording; 2nd beep indicates recording ended).

59 (Plays back the message)

5 (Turns on audio to check communication; also takes unit out of program mode).

Any questions? Check manual for more information or call TALK-A-PHONE Tech Support at 312-539-1100.

ATLANTIC COAST REHAB . EXT 259

INSTALLATION/OPERATION MANUAL

TALK-A-PHONE MODELS ETP-100M AND ETP-100E HANDS-FREE EMERGENCY PHONES

CODE FOR PROGRAMMING * 4 **

FIRST * * 13 * " 1-800-621-0145" *
SECOND * * 23 * "
TO HEAR TONES * 19 *
DIALING

ELEVATOR TELEPHONE OPERATING PROCEDURES

A. TRAPPED PASSENGER CALLING OUT

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

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

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.

TALK-A-PHONE MODELS ETP-100M AND ETP-100E
HANDS-FREE EMERGENCY PHONES
INSTALLATION & OPERATION INSTRUCTIONS

INSTALLATION

STEP 1. Placement and Connection. Mount the Hands-Free Emergency Phone to the desired wall using the mounting holes provided. Model ETP-100E flush mounts to the wall and is secured with a mounting hole in each corner. Model ETP-100M surface mounts on the wall and is secured with a mounting hole in each corner of the bracket attached to the back of the unit. You should also drill a hole for the telephone cable to pass through on Model ETP-100M. See ETP-100M template included with these instructions.

Plug the RJ11 male connector on the cable coming out of the Hands-Free Emergency Phone into an RJ11 female phone connector. Wait 15 seconds for the unit to perform its internal self tests. The unit is now installed. NOTE: If you remove the RJ11 connector to hard wire the system, the red wire is "ring" and the green wire is "tip".

STEP 2.- Programming the Emergency Phone

It is essential to program the one or two telephone numbers that the Emergency Phone is to call. In addition, you can program or change from factory settings various other features.

NOTE: When reference is made to codes such as "*4*XXXXXXXXX", each "X" represents a number you can insert if you wish to do so. As shipped from the factory these "X" are empty slots, so the above code would be entered as *4** until such time as numbers are inserted in the empty slots.

1. Programming can be done from any touch-tone telephone.
2. To do Programming, call the Emergency Phone. Enter either the factory set Guard Code (*4**) or factory set Master Code (*10*12345678*). You are now able to program the functions shown below.

a) *12*XXXXXXX* Programs the ID number of up to 6 digits.

b) *13*XXXXXXXXXXXXXXXXXXXX* (0 to 18 digits)

Programs the first telephone number the elevator will call when activated. NOTE: Many phone numbers today are answered by automatic answering devices that request that you enter the extension of the party you wish to reach. If programming to call such devices, enter the phone number, e.g., 555-1234; then enter #; then enter the extension number. This can be done for both the first and second phone numbers being programmed.

c) *23*XXXXXXXXXXXXXXXXXXXX* (0 to 18 digits)

Programs the second telephone number the elevator will call when activated.

d) *17*XXXX* (0 to 4 digits)

The unit automatically disconnects from the line if the guard presses # for one second, or after about 15 seconds if he hangs up the phone. In addition, the unit can be set to automatically disconnect from the line after a certain number of minutes. As shipped the unit is set for a maximum of a 12 minute conversation. That number can be changed by this function to be a maximum of 4320 minutes, or 72 hours. For example, to set for one hour (60 minutes), enter *17*60*.

e) *18*XX* (3-20 digits)

The unit as shipped is programmed to call the second phone number only if the first phone number rings 12 times or is busy. The number of ringbacks can be altered, to as few as three or as many as twenty. To allow for phone company induced "phantom rings" and time for the guard to respond, it is suggested that the number be changed only under unusual circumstances.

f) *19*

As shipped the Emergency Phone is programmed so that no dial tones, ringing, busy signals are heard in the elevator. If you wish to hear these tones in the elevator, enter code *19*. To return unit to silent dialing mode, enter *20*.

OPERATION

A. General Information. When the push button on the Hands-Free Emergency Phone is depressed, the phone number programmed into it will automatically be dialed. If a second phone number is also programmed into the unit, it will automatically be dialed if the first phone number is busy or does not answer after 12 rings. Should the second phone number also be busy or does not answer after 12 rings, the Emergency Phone will continue trying the first number and then the second phone number until the call is completed.

When the telephone at the attendant's end is answered, persons at the Hands-Free Emergency Phone talk and listen hands-free without operating any controls.

The Hands-Free Emergency Phone also provides a number of other features, including the ability for a guard position to remotely call the Emergency Phone and activate it, to monitor locations as situations require. Please be certain to obey all local, state and federal laws when using this feature.

B. Calling the elevator from the guard position

1. On a regular touch-tone telephone, enter the telephone number of the elevator you wish to call. After a short pause the elevator will send a short series of audible coded tones.

2. Enter the Guard Code *4*XXXXXXXX* (0-8 digits). (Shortest Guard code would be simply *4**, which is the default Guard Code as unit is shipped.)

3. If you wish to be able to program, but want to turn audio "on" so you can hear the elevator unit, enter *0*. Your outgoing volume to the elevator will be at reduced volume level. To turn audio "off" enter *1*.

4. If you wish to communicate with the elevator at full operating volume enter *5*. Note: You cannot program when in full volume mode. You can program again by holding down the star button on your telephone for at least one second. You will hear a single "beep" to indicate that you are able to program.

C. Answering when the elevator calls. The telephone will ring. When the guard answers and speaks into his telephone (or in 5 seconds if he answers but does not speak) the Emergency Phone will

send a short series of audible coded tones. At the end of the tones he will be listening to the elevator, and also able to speak to the elevator. No codes are required to activate this function.

D. Security levels - The Master Code and the Guard Code. The Emergency Phone accommodates two separate levels of security. Different passwords can be used for each level of security access. The purpose of the Master Code is to change either the Master Code itself or the Guard Code. The Guard Code can be changed, for example, to prevent former employees being able to access units.

Programming the security codes requires knowledge of the 1 to 8 digit Master Code. As shipped, the default Master Code is 12345678.

To program a new Master Code, first call the Emergency Phone. Then, enter your Master Code. If the Master Code has never been changed, enter *3*12345678*. The unit will respond with one beep, indicating acceptance of the Master Code. Program your new Master Code by entering *10*XXXXXXXX* (1 to 8 digits). Be sure to write down your new Master Code and store it in a safe place.

To program a new Guard Code, first call the Emergency Phone. Then, enter your Master Code. The unit will respond with one beep, indicating acceptance of the Master Code. Program your new Guard Code by entering *11*XXXXXXXX* (1 to 8 digits). Note: If programming the Guard Code immediately after the Master Code, it not necessary to re-call the unit.

E. Special notes

a) If you enter a command correctly, the phone will respond with one "beep". The phone will respond with two beeps to indicate a command incorrectly entered and therefore rejected.

c) You can force the emergency phone to hang-up by depressing the pound button (#) for at least one second. In any event, hanging up the guard telephone will result in the phone hanging up and disconnecting in about 15 seconds.

d) As a precaution against tampering, entering an incorrect Guard Code or Master Code will cause the phone to hang-up.

e) Whenever the Emergency Phone "hangs-up", it requires 10 seconds before it is ready for use again.

SUMMARY CHART OF CONTROL AND PROGRAMMING CODES

OPERATING CODES	
0	AUDIO ON
1	AUDIO OFF
*3*XXXXXXXX*	ENTER CURRENT MASTER CODE (1-8 DIGITS)
*4*XXXXXXXX*	ENTER CURRENT ACCESS CODE (0-8 DIGITS)
5	GO TO CALLING MODE; HIGHER SPEAKER VOLUME
9	OUTPUT REPORT
PROGRAMMING CODES	
*10*XXXXXXXX*	PROGRAM NEW MASTER CODE (1-8 DIGITS)
*11*XXXXXXXX*	PROGRAM NEW ACCESS CODE (0-8 DIGITS)
*12*XXXXXXXX*	PROGRAM UNIT'S ID NUMBER (0-6 DIGITS)
*13*XXXXXXXXXXXXXXXXXXXX*	PROGRAM TELEPHONE NUMBER 1 (0-18 DIGITS)
*17*XXXX*	SET SHUTDOWN TIMER (1-4320 MINUTES) (DEFAULT VALUE AS SHIPPED = 12 MINUTES)
*18*XX*	SET MAXIMUM RINGBACKS (3-20) (DEFAULT VALUE AS SHIPPED = 12 RINGS. ONLY CHANGE IN UNUSUAL CIRCUMSTANCES)
19	TO HEAR DIAL TONES, RINGING, ETC. AT UNIT
20	TO SILENCE ALL TONES, RINGING AT UNIT
*23*XXXXXXXXXXXXXXXXXXXX*	PROGRAM BACKUP TELEPHONE NUMBER
ADDITIONAL CODES	
# (FOR 1 SECOND)	HANG UP
* (FOR 1 SECOND)	SWITCH TO CONTROL MODE (LOWER SPEAKER VOLUME)
COMMAND COMPLETED SUCCESSFULLY	PROGRAMMER WILL HEAR ONE BEEP
ERROR DETECTED IN COMMAND	PROGRAMMER WILL HEAR TWO BEEPS
DEFAULT MASTER CODE IN PHONE AS SHIPPED FROM FACTORY. VALID UNTIL REPLACED WITH A NEW MASTER CODE (SEE CODE *10*)	12345678

NOTE: When reference is made to codes such as ***4*XXXXXXXX***, each "X" represents a number you can insert if you wish to do so. As shipped from the factory these "X" are empty slots, so the above code would be entered as ***4**** until such time as numbers are inserted in the empty slots.

This device has been granted a registration number by the Federal Communications Commission, under part 68 rules and regulations for direct connection to the telephone lines. In order to comply with these FCC rules, the following instructions must be carefully read and applicable portions followed completely. These instructions must be provided to the consumer.

1. This equipment complies with part 68 of the FCC rules. A label located on an outside surface of this equipment contains, among other information, the FCC registration number and ringer equivalence number (REN). If requested, this information must be provided to the Telephone Company.

2. As indicated below the suitable jack (USOC connecting arrangement) for this equipment is shown. If applicable, the facility interface codes (FIC) and service order codes (SOC) are shown.

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

4. If this equipment, (indicated with trade name and model) causes harm to the Telephone Network, the Telephone Company will notify you in advance. But if advance notice is not practical, the Telephone Company will notify the customer as soon as possible. Also, you will be advised of your right to file a complaint with the FCC if you believe it is necessary.

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

6. If trouble is experienced with this equipment, (indicated below with trade name and model together with a service center in the

U.S.A. address and telephone number), contact manufacturer for repair and/or warranty information. If the trouble is causing harm to the Telephone Network, the Telephone Company may request you remove the equipment from the Network until the problem is resolved. User repairs must not be made. Doing so voids warranty.

7. This equipment must not be used on Telephone Company provided public coin service. Connection to party lines is subject to State Tariffs, (contact your State Public Utility Commission for information). If so required, this equipment is hearing aid compatible (HAC).

NOTE: The user is cautioned that any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

U.S.A. SERVICE CENTER:

QUALITY ELEVATOR PRODUCTS, INC.

5210 N. OTTO
CHICAGO, IL 60655
1-800-222-3598

Push button

4 Pole - OTTO P3-30105

21649

~~9233~~



TELEPHONE LINE SPECIFICATIONS

The following criteria must be met by a phone line in order to insure proper functionality of the FCC approved equipment.

(ALL VOLTAGES USE TIP AS GROUND WHEN MEASURING)

On Hook Voltage must be less than or equal to -36 V (-50 V standard).

Off Hook should be recognized in a maximum time of 300 ms.

At off hook voltage of -15 V, a minimum of 20 ma must be supplied with a maximum of 120 ma as upper limit.

Dial tone must consist of 350 Hz & 440 Hz tones at -17db +/-0.5%

It must generate ring-back consisting of 440 Hz & 480 Hz tones at -17db +/- 0.5% with a duty cycle 1.6 seconds on 4.8 seconds off +/-10% interrupted at 20 Hz.

It must generate busy signal consisting of 480 Hz & 620 Hz tones at -17db +/-0.5% with a duty cycle 500 ms on. 500 ms off.

It must be able to recognize or send the following frequencies in order to decode or transmit DTMF:

+685 - 709 Hz	Row 1
+757 - 784 Hz	Row 2
+837 - 867 Hz	Row 3
+925 - 957 Hz	Row 4
+1189 - 1229 Hz	Column 1 (1, 4, 7, *)
+1314 - 1538 Hz	Column 2 (2, 5, 8, 0)
+1453 - 1501 Hz	Column 3 (3, 6, 9, #)
+1607 - 1659 Hz	Column 4 (A, B, C, D)

When dialing it should require a minimum tone pulse time on of 40 ms as well as a between tone gap of 40 ms minimum.

The telephone line should support and match with a 600 ohm AC impedance as well as a DC resistance of 100-200 ohms.

It should also support audio communication between 300 and 3300 Hz.

GAL 6400



G.A.L. MANUFACTURING CORP.
50 EAST 153RD STREET. BRONX, N.Y. 10451

VACATION NOTICE

NO SHIPPING OR RECEIVING

OUR FACTORY AND OFFICE WILL BE CLOSED FOR ANNUAL VACATION

JULY 19, 2002-4:30 P.M. TO AUGUST 5, 2002-8:00 A.M.

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REDUCED STAFF AVAILABLE FOR
EMERGENCY ORDERS (718) 292-9000
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- C. Dial the factory set security code 1,2,3,4,5,6 on the telephone keypad. Two beeps should be heard.
- D. Using the telephone keypad, enter the emergency number the GAL-6400 should dial followed by #,0,0. Two beeps should be heard.
- E. To record a 10 second voice location message, dial "*" 4" and speak after the tone. To stop the recording, press any telephone keypad key, or wait 10 seconds for the recording to stop. We recommend adding the statement, "hit star key to end message" at the end of your recording.
- F. Hang up. Programming is now complete. Test the GAL-6400 for proper operation.

If programming was not successful, or additional features need to be programmed or modified, such as a second number to be dialed if the first is busy or unanswered, READ ON!

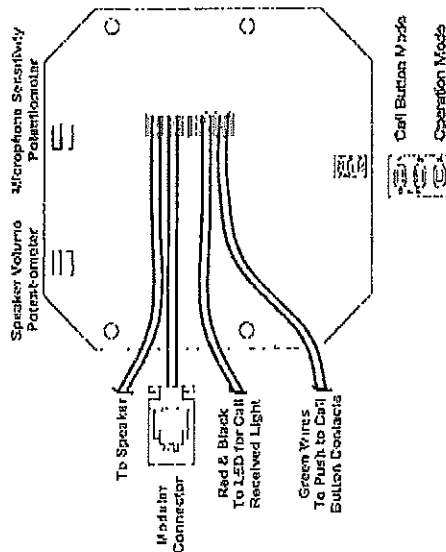


Figure 1



**GAL HANDS FREE EMERGENCY TELEPHONE
MODEL GAL-6400**

I. GENERAL

The GAL-6400 Hands Free Emergency Telephone permits a pre-programmed number to be dialed when the "push to call" button is depressed on the station. The emergency personnel upon receiving the call can hear a 10 second recorded message. By pressing the star "*" key on their telephone keypad, the emergency phone will respond by stopping the recorded message and/or issuing a pre-programmed tone location I.D. number and illuminate the "CALL RECEIVED" indication. During the call the unit will act as a standard speaker-phone. At any time after the star key is pressed, the pound "#" key can be used to hang up the emergency phone.

The unit also has the capability of dialing a second pre-programmed number if the first number called is unanswered and/or busy.

II. QUICK PROGRAMMING INSTRUCTIONS

To program a single emergency number to be dialed and voice location announcement to be recorded without changes to the security code or tone location ID.

- A. Connect the phone line to the modular connector supplied on the GAL-6400.
- B. From another phone, dial the phone number for the line that the GAL-6400 was attached to. The GAL-6400 will answer immediately.

III. CONNECTING AND PROGRAMMING THE PHONE UNIT

A. Plug the phone line into the modular connector wired to the board (Fig. 1).

B. DIP switches S1 and the microphone sensitivity and speaker volume potentiometers (Fig. 1) are set at the factory to meet the needs of typical installations. Please review the function of each setting below and modify if necessary for your conditions and preferences.

DIP switch S1:

Position 1 - Push to call button switch mode

OFF - Push button CANNOT cancel call
ON - Push button CAN cancel call (factory setting)

This switch determines whether or not the push button can cancel (hang up) a call after it has been initiated. It is recommended that the call CAN be cancelled (switch ON). This allows for "resetting" the phone line should the line become "stuck". If you wish to change, do so after programming.

Position 2 - Incoming call select

OFF - Incoming calls are NOT answered
ON - Incoming calls are answered (factory setting)

Since programming requires remotely dialing into the phone unit, this switch MUST be set to ON when programming. After programming, this switch may be set to your preference.

Position 3 - Operation mode

OFF - Program only mode
ON - Normal operation mode (factory setting)

This switch must be ON (normal operation mode) for the unit to operate. To program the unit with the switch in this position, a six character security code must be entered after calling the unit from a remote telephone. This is how initial programming will be done.

In program only mode, a security code is not required to program the unit. An incoming call automatically puts the unit into programming operation. Use program only mode (switch OFF) to program a new security code if the current one is forgotten.

Microphone sensitivity adjustment (Potentiometer)

The microphone sensitivity (volume that the distant party hears) can be adjusted with this potentiometer.

Caution: Setting the gain (volume) too high may cause distorted audio, and also prevent the distant party from being heard.

Speaker volume adjustment (Potentiometer)

The speaker volume can be adjusted with this potentiometer. Set for distortion free sound.

C. Initially test the unit by pushing the "PUSH TO CALL" button. A dial tone followed by touch tones should be heard. Push the button a second time to cancel the call. If a dial tone was not heard, check the connection of the phone line to the unit.

Since all programming will be done by dialing this unit

- Store the dialing sequence: "9,(pause),563-2141"
enter: 9,*7,5,6,3,2,1,4,1,#,0,0

Note: This example would be used on telephone systems that require pressing "9" to get an outside line. The *,7" provides a four second pause to allow for the outside line dial tone.

- Store the pulse dialed emergency number:
"563-1275"

enter: *6,5,6,2,1,2,7,5,#,0,0

Note: This example would be used on telephone systems that require pulse dialing (tone dialing does not work).

- Store the second emergency number: "263-9384"
enter: 2,6,3,9,3,8,4,#,0,1

IMPORTANT: Refer to Redial Ring Counter and Redial on Busy in section F if a second number will be used.

4. Enter a tone I.D. number (up to twenty digits) for the unit followed by "#,2,0".

Note: If using the voice message for location I.D., you may wish to clear the tone I.D.

Examples:

- Store the I.D. number: "1234"
enter: 1,2,3,4,#,2,0

- Clear the I.D. number(when using the voice location I.D.)
enter: #,2,0

From another telephone, you may now mount the phone unit, and/or close and secure the station.

D. Programming consists of entering a primary and secondary (if the second number redial feature is to be used) emergency telephone number. You may also change the factory set tone identification number and security code to your own private codes if you wish. After each valid entry, the unit will respond with two beeps. Programming of a voice message will be covered in section E.

1. Dial into the unit from any telephone.

2. Enter the factory set security code 1,2,3,4,5,6 on the telephone keypad.

3. Enter the emergency telephone number (up to twenty digits) on the touch tone keypad followed by "#,0,0".

If the redial feature will be used (second number will be dialed if first number does not answer), enter the second emergency telephone number on the touch tone keypad followed by "#,0,1". **IMPORTANT:** Redial ring count and/or redial on busy will be set in section F of the instructions if you are using these features.

The following functions can be programmed as part of the emergency telephone number:

Keypad entry Function

*6 Pulse/touch tone toggle
*7 4 second pause

Examples:

- Store the emergency number: "423-5263"
enter: 4,2,3,5,2,6,3,#,0,0

5. Enter your private six digit security code followed by "#,1,9" to replace the factory code. Make sure to remember your private security code so that you may remotely program this unit in the future.

Example:

- Store the new security code: "168263"
enter: 1,6,8,2,6,3,#1,9

E. The GAL-6400 has a built in digital recorder/announcer that can be used to give location identification. Both the emergency personnel and the elevator car occupants will hear the message, however the car occupants will hear it at a reduced volume. It provides 10 seconds of record time and has two options for operation.

Forced Play Time

By factory default, the 10 seconds message is played automatically when the unit detects that the call has been answered (forced play time value set to "00"). Alternatively, it may be programmed to play after a programmed amount of time from 1 to 99 seconds after dialing (forced play time value set from "01" to "99").

Repeat Announcement

By factory default, the message will repeat continuously every 8 seconds until the emergency personnel presses the "*" key on their key pad. This will stop the message and turn on the call received LED (repeat announcement value set to "0"). Alternatively, the announcement may be programmed to play from 1 to 9 times and then automatically turn ON the call received LED (repeat announcement value set from "1" to "9").

The two options are set by entering a string of six digits followed by #17. The first two digits of the string set the Forced Play Time option, the next (third) digit sets the Repeat Announcement option, followed by "000" for a total of six digits.

Example:

- Set message announcement options:
Forced Play Time set to play announcement automatically when call is answered.
Repeat announcement until star "*" is pressed.
enter: 00,0,000 #17
- Set message announcement options:
Forced Play Time set to play announcement 10 seconds after dialing.
Repeat announcement 3 times.
enter: 10,3,000 #17

To record your message:

1. While in programming mode, enter *4. Wait for the tone and begin recording. Ten seconds of record time is available. Hit any key to stop recording, or at 10 seconds, the recording will stop.
2. At the end of recording, play back of the message is automatic. To repeat play back for your review enter #5. To re-record, enter #4.
3. To erase and disable the voice message feature, enter #3.

Example announcement:

- "Emergency call from elevator 3 at 125 Broadway.
Press the star key to stop this announcement."

Note: If using the factory default for the repeat announcement option (repeating message until a "*" is pressed), we recommend including the instruction to press the star "*" key at the end of your recorded message as in the sample above.

Pulse dialing rate - This is the rate at which the phone will dial in pulse mode. A value of 1 sets phone to 10 pulses per second (PPS), a value of 2 sets it to 20 PPS. The factory default is 1.

The factory defaults for the talk/listen delay, maximum call time and the silent time are set to provide good operation and performance in most cases. The redial features should be set to your preference. If you wish to change any of these values or enable the redial feature, do so as follows.

The numbers 1 through 9 on the telephone keypad are used to enter the incremental values of each of the time functions. As an example, the number 3 represents 0.3 seconds for the talk/listen delay, and the number 6 represents 6 minutes for the maximum call time, etc.

The keypad numbers are also used to enable and set the number of rings for the redial features. As an example, the number 3 represents a redial ring count of 3 rings. For redial on busy, the number 2 represents enabling the second emergency number to be dialed when the first is busy.

The new values are entered as a string of digits followed by "*,1,8". The string is made up of six digits, in the following order Talk/Listen Delay, Maximum Call Time, Silent Time, Redial Ring Count, Redial on Busy, and Pulse Dialing Rate.

Examples:

- Store time functions & set redial feature: 0.3 seconds Talk/Listen
- 5 minutes Max. Call Time
- 70 seconds Silence Time
- 4 ring Redial Ring Count
- Do not Redial on Busy

F. There are three timing functions and two redial features that are used by the GAL-6400 for call processing. These functions are listed below. **IMPORTANT:** If a second number is to be dialed if the first is busy or unanswered, the Redial Ring Counter and/or the Redial on Busy **MUST** be set.

Talk/Listen Delay - This delay is the switching time between talk and listen in increments of 0.1 seconds. The factory default is 0.2 seconds.

Maximum Call Time - This is the maximum time in minutes that the GAL-6400 will stay on the line. The factory default is 3 minutes. A value of 0 disables the maximum call time. **CAUTION:** Some phone systems do not issue hang up signals. Do not disable the maximum call time if the GAL-6400 does not hang up reliably.

Silent Time - This is the maximum amount of time in increments of 10 seconds that the GAL-6400 will stay on the line with no voice activity. The factory default is 40 seconds. A value of 0 disables the silent time.

Redial ring counter - This is the number of rings the GAL-6400 will look for before the second programmed emergency number is dialed. If the second number is unanswered after the same number of rings, the first number will be attempted again. This will continue until the line is answered or the unit is hung up. To allow redialing, values of 2 - 9 can be used (the value set equals the number of rings). A value of 1 disables the feature (second number will not be dialed). The factory default is 1 (feature disabled).

Redial on busy - This will enable or disable the feature to dial the second emergency number on a busy signal. A value of 1 disables this feature, a value of 2 enables it. The factory default is 1 (feature disabled).

Use a standard desk phone to check the phone line. If a dial tone is not heard, connect the phone line. If a dial tone is heard, check the connection to the GAL-6400.

2. GAL-6400 hangs up within seconds of button being pressed.

This is usually a noisy phone line. Use a standard desk phone to determine if noise is heard on the line. Make sure to route all telephone line wiring away from possible sources of electrical noise such as motors, controlifiers, etc. Use shielded twisted pair wiring for telephone line. Ground the shielding at one end only.

B. Programming problems

1. GAL-6400 does not accept programming. Two beep response from unit is not heard when programming.

The GAL-6400 is looking for standard touch tones for programming. If you are not successful with the phone you are using, try calling from outside the building such as from your office or home phone.

2. Cannot program multiple phones sharing a single phone line.

Since only one GAL-6400 phone can pick up at a time, you must program each of the units one at a time. Disconnect the phone line from all the other units on the same line not being programmed, or set the incoming call select switch to off on all the units except for the one being programmed.

C. Dialing problems

1. Phone dials properly but call does not go through.

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10 PPS pulse dialing rate
enter: 3,5,7,4,1,1,=,1,8

- Store time functions

& set redial feature: 0,4 seconds Talk/Listen
6 minutes Max. Call Time
50 seconds Silence Time
6 ring Redial Ring Count
Redial on Busy
10 pps pulse dialing rate

enter: 4,6,5,6,2,1,*,1,8

IV. TESTING THE PHONE UNIT

Test the unit in the elevator by depressing the "push to call" button on the cover of the station. A dial tone should be heard followed by the dialing of the emergency number.

When the call is answered, the answering party should listen for the voice announcement (if one exists) and push the "*" key on their touch tone keypad. This will transmit the tone LD. (if one exists) of the emergency telephone and light the LED on the station indicating that the call has been received.

V. PROBLEMS

Most problems encountered with the GAL-6400 hands free emergency telephone fall into one of the three categories listed below.

A. Phone line problems

1. Dial tone not heard when the "PUSH TO CALL" button is pressed.

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Use a standard desk phone (not an office system phone) and dial the same number as programmed in the GAL-6400 to determine if the problem is the number, the phone system, or the unit. Keep in mind some phone systems require a "9" to be dialed to get an outside line.

The phone line may be a pulse line. Try entering a *6 before the phone number when programming to dial in pulse mode.

If other problems are encountered with the hands free emergency telephone, please call G.A.L. at (718) 292-9000.



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