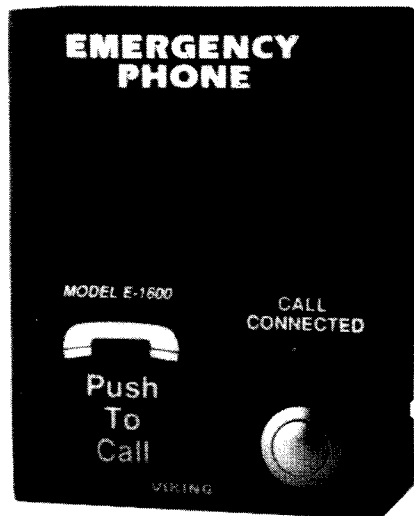


# A.D.A.\* COMPLIANT PHONE with auto dialer



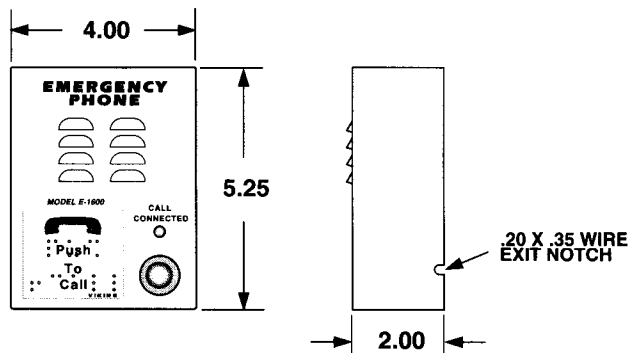
- Fits in elevator phone box, surface mounts, and also mounts on standard junction & single gang electrical boxes
- Vandal-resistant steel chassis with S.S. switch
- Hands-free operation.
- Phone line-powered.
- Non-volatile memory -- no battery required.
- Touch Tone or pulse dialing.
- Dials a second number on busy or no answer.
- Transmits a unique location I.D. code.
- "Call Connected" LED for the hearing impaired.
- Grade 2 braille label for the visually impaired.
- Hangs up on silence, busy, dial tone, time-out.
- Can receive incoming calls, if desired.
- Add loud volume option for noisy areas.
- Program remotely from a Touch Tone phone.

Viking Electronics' **E-1600** Emergency phone is designed to provide quick and reliable access to emergency personnel via two-way hands-free voice communication over the public switched telephone network. Model **E-1600** meets **ADA\*** requirements for elevator telephones.

The **E-1600** can be programmed from any Touch-Tone phone. All parameters, phone and location numbers are stored in non-volatile E<sup>2</sup> prom memory. **No batteries are required for memory retention.**

When the "Push To Call" button is pressed, the **E-1600** seizes the phone line, and the built-in dialer calls the pre-programmed 1 to 20 digit number. The "Call Connected" LED flashes during tone or pulse dialing. In the event that the line is busy or there is no answer, the unit can call a second number. When the call is answered, the distant party dials a Touch Tone '\*'. This causes the **E-1600** to light the "Call Connected" LED steady and send a field-programmed 1 to 20 digit Touch Tone number indicating the location of the emergency phone. The distant party can decode the location number using a Viking Model **DM-4** Digit Monitor. Where required, a Viking Model **EV-1** Emergency Voice Announcer can be installed to provide up to 10 seconds of natural voice announcement.

## DIMENSIONS:



**POWER:** Phone line-powered (Min. Loop Current: 20 mA)

**WEIGHT:** 2 Lbs. (shipping)

**CONNECTION:** Standard RJ-11 jack

**MOUNTING:** Surface mount chassis to wall, post, single gang box or 4" x 4" junction type electrical box (see Installation page 6).

**ENVIRONMENTAL:** 0°C to 32°C (32°F to 90°F) with 5% to 95% non-condensing relative humidity.

\* *Americans with Disabilities Act of 1992 contains new federal regulations regarding elevator telephones (Public Law 101-336).*

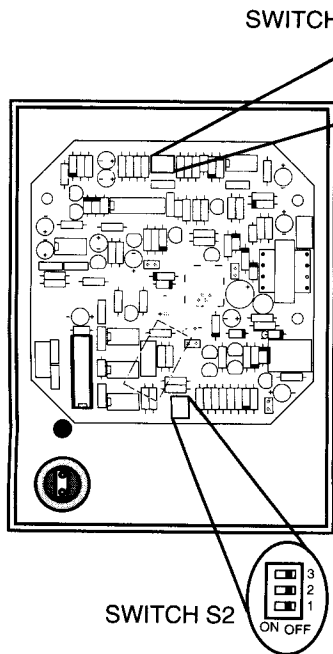
**Made In The U.S.A.**

# I. GENERAL

Model E-1600 is a handsfree emergency phone which meets ADA requirements. When the call button is pressed, it activates the dialer (built into the unit) and dials the pre-programmed speed dial number. The E-1600 can be programmed to dial a second phone number if the first number is busy or unanswered. The E-1600 will alternate between the two pre-programmed numbers until answered. Once communication has been established, an identifier code can be sent by the E-1600 to tell which location is calling. A LED can be lit on the front of the E-1600 to show that communication has been established and help is on the way. A 9V battery (not included) may be added to increase speaker volume for noisy areas.

# II. DIP SWITCH PROGRAMMING

Remove the allen head set screw (with wrench provided) on the bottom of the E-1600 and take off the front cover.



**NOTE:** Speaker/Microphone is controlled by the voice activity of the distant party. Without this voice activity the Speaker/Microphone is in the Microphone mode.

## SWITCH "S1"

### **S1-1 Speaker Sensitivity Adjustment (VOX)**

ON Decrease sensitivity

OFF Normal setting

### **S1-2 Microphone Adjustment (Volume)**

ON Low setting (-6db)

OFF Normal setting

### **S1-3 Front Panel Push Button Switch**

ON Button alternately connects and disconnects calls

OFF Button only connects calls

## SWITCH "S2"

### **S2-1 Operating Mode**

ON Normal operation mode

OFF Learn mode

An incoming call is automatically put into the programming mode (no security code required). Only use this option if you have forgotten your security code.

### **S2-2 Incoming Call Select**

ON Incoming calls are answered

OFF Incoming calls are **not** answered

### **S2-3 Pulse Dialing Rate**

ON Fast pulse dialing, 20 PPS

OFF Slow pulse dialing, 10 PPS

# III. PROGRAMMING OPTIONS FOR THE E-1600

- 1. Security Code (Mem. Pos. "#19")** –A 6 digit number which must be entered prior to programming, while the S2-1 dip switch is in the ON position. The factory-set security code is "VIKING" (845464). **NOTE:** The security code must be 6 digits long using numbers 1-9.
- 2. The First Speed Dial Number (Mem. Pos. "#00")** –The telephone or extension number (up to 20 digits) dialed when the "call" button is pressed.
- 3. The Second Speed Dial Number (Mem. Pos. "#01")** –The telephone or extension number (up to 20 digits) dialed when there is NO ANSWER or a BUSY SIGNAL is detected.

4. **Identification Number (Mem. Pos. "# 20")** - The I.D. number (up to 20 digits) used by security personnel to identify the location of the caller.  
**NOTE:** In order to display the I.D. number, your security office will need a digit monitor such as VIKING's DM-4.
5. **Timing Delays/Dial Second Number Enable (Mem. Pos. "#18")** -The parameters (A-F below) that are user programmable. To program these parameters:

DIAL "A + B + C + D + E + F" + "# 18"



**Setting A– Talk/Listen Delay:** Selects switching time between "Talk" and "Listen" modes (VOX switching time). Programmable in increments of .1 seconds up to a maximum of .9 seconds (Touch Tones 1-9). **NOTE:** Factory default setting is .2 seconds.

**Setting B– Call Length:** Selects the length of time that calls will be connected. Programmable in increments of 1 minute up to a maximum of 9 minutes (Touch Tones 1-9). **NOTE:** Factory default setting is 3 minutes.

**Setting C– Silence Time-Out:** Selects the length of time that calls will remain connected without voice activity. Programmable in increments of 10 seconds up to a maximum of 90 seconds (Touch Tones 1-9). **NOTE:** Factory default setting is 40 seconds.

**Setting D– Dial A Second Number On Ring No Answer:** Selects the number of unanswered rings that will be allowed before a second emergency number is called. **NOTE:** This feature is disabled in the factory default setting.

<u>SETTING</u>	<u>DIAL A SECOND NUMBER</u>
1	Disabled
2	After 4 rings
3,4,5,6,7,8,9	After 5,6,7,8,9,10,11 rings respectively

**Setting E– Dial A Second Number On Busy:** If enabled, the E-1600 will continue to alternate between the 1st and 2nd emergency numbers, when busy, until one is answered. **NOTE:** This feature is disabled in the factory default setting.

<u>SETTING</u>	<u>FUNCTION</u>
1	Disabled
2	Enabled

**Setting F– Future:** This unused setting should be programmed to 1.

## IV. PROGRAMMING THE E-1600

**TIP:** The E-1600 can be programmed from any Touch Tone phone; however, it may be more convenient to program the unit in your own shop with VIKING's DLE-200A Ringdown Circuit or HD-1 DTMF Dialer (with optional PS-1A installed).

1. Connect the E-1600 to a PABX line or VIKING's DLE-200A using the RJ-11 modular plug located on the back of the unit. Be sure that the S2-2 dip switch is in the ON position. **NOTE:** If the S2-2 dip switch is NOT in the ON position, the unit will NOT answer incoming calls.
2. Dial the PABX line that the E-1600 is connected to from a Touch Tone phone.
  - A. If dip switch S2-1 is in the ON position (normal operation mode), you must enter the 6 digit security code number (factory set code 845464). If you have entered the correct number, you will hear a double beep tone indicating that you are in the programming mode.
  - B. If dip switch S2-1 is in the OFF position (programming mode), you will automatically hear the double beep tone when you dial the unit. This indicates that you are in the programming mode.
3. Begin programming by first entering your speed dial number followed by a function code (see table and example below). **NOTE:** If more than 20 seconds elapse between Touch-Tones while in the programming mode, the E-1600 will disconnect. Upon disconnection, return to Programming, Step 2 above.

### **TO ENTER THE FOLLOWING:**

0,1,2.....9 (Touch-Tone or Pulse dialing)  
\* (Touch Tone only)  
# (Touch Tone only)  
4-second pause  
Switch to pulse dialing

### **PRESS**

0,1,2.....9  
\*\*  
\* #  
\* 7  
\* 6

### **FUNCTION**

Program the first speed dial number in **Touch Tones**  
Program the second speed dial number in **Touch Tones**  
Program speed dial numbers to **pulse dial**  
Program time delays, dialing options  
Program elevator location I.D. code  
Program a new security code

### **ENTER FUNCTION CODE**

1 to 20 digit number + "# 00"  
1 to 20 digit number + "# 01"  
"\* 6"+ 1 to 19 digit number + "#00" or "#01"  
6 digit code + "# 18"  
1 to 20 digit code + "# 20"  
6 digit code + "# 19"

It is recommended that you change the security code from the "845464" factory setting to your own personal 6 digit number.

**EXAMPLE:** To store the number 362-1900 in the speed dial memory position, enter:  
3621900 #00

- A. A double beep tone will be heard after storing a valid memory position. If an invalid command or number sequence is entered, it will be indicated by four beep tones. A valid command will be acknowledged with three beeps.

- B. To clear a number previously stored in a memory position, enter the function code without entering any prior digits.

**EXAMPLE:** To clear the phone number from the redial function, enter: #01.

**IMPORTANT:** After programming, be sure that the S2-1 dip switch is in the ON position (normal operation mode).

## V. PROGRAMMING EXAMPLES

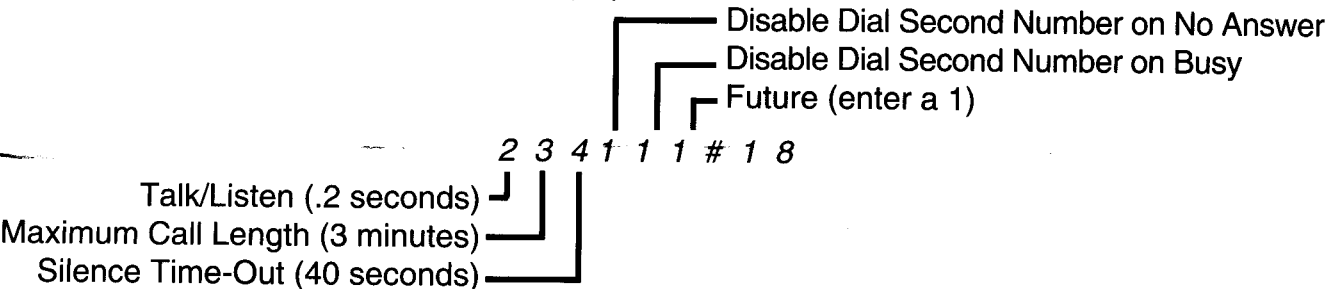
1. To store the phone number 362-1900 into the first SPEED DIAL memory position, enter:  
3621900 #00

If the E-1600 is installed behind a PBX which requires 9 plus a pause for outside line, you would enter:

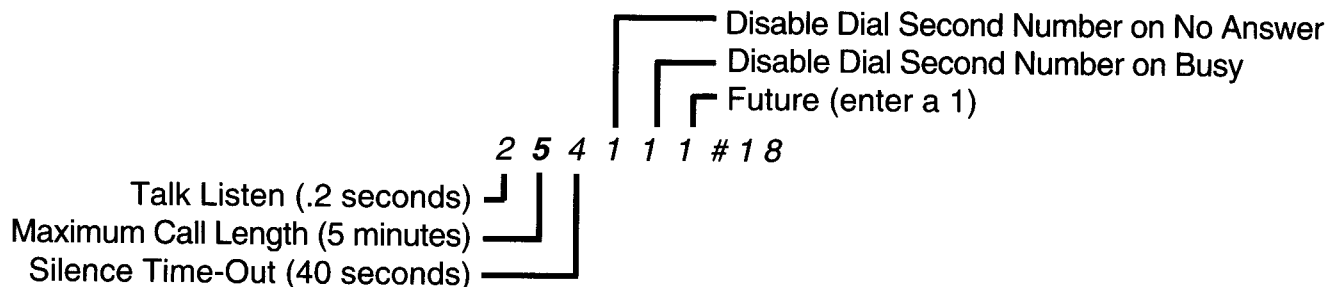
9 \* 7 3621900 #00  
└─ \*7=4 Second Pause

2. To store "9999999999" into the I.D. memory position, enter:  
9999999999 #20

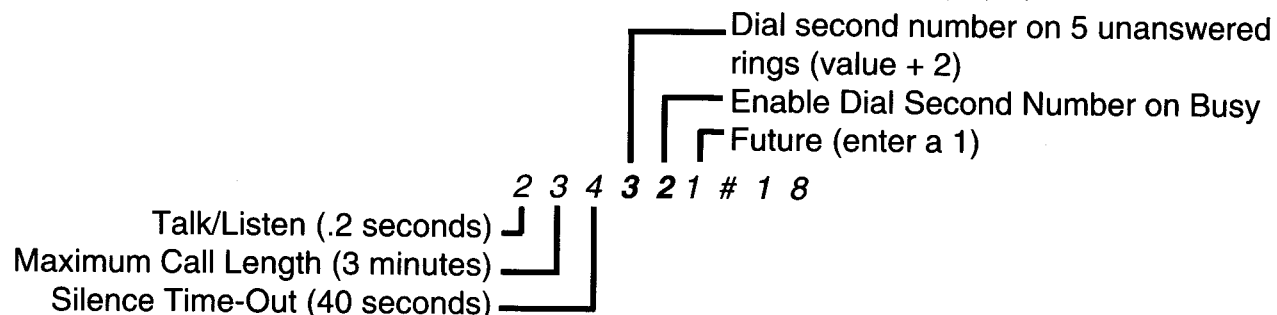
3. Factory Time Delays/Redial (18)



4. To change the Maximum Call Length parameter to 5 minutes: (18)



5. To enable second number dialing on no answer and busy: (18)



6. To store "345-9999" as the SECOND NUMBER to dial, enter:  
*3459999 #01*  
(must enter if either dial second number feature is enabled—see Time Delays/Dial Second Number)

7. To store "123456" as the SECURITY CODE, enter:  
*123456 #19*

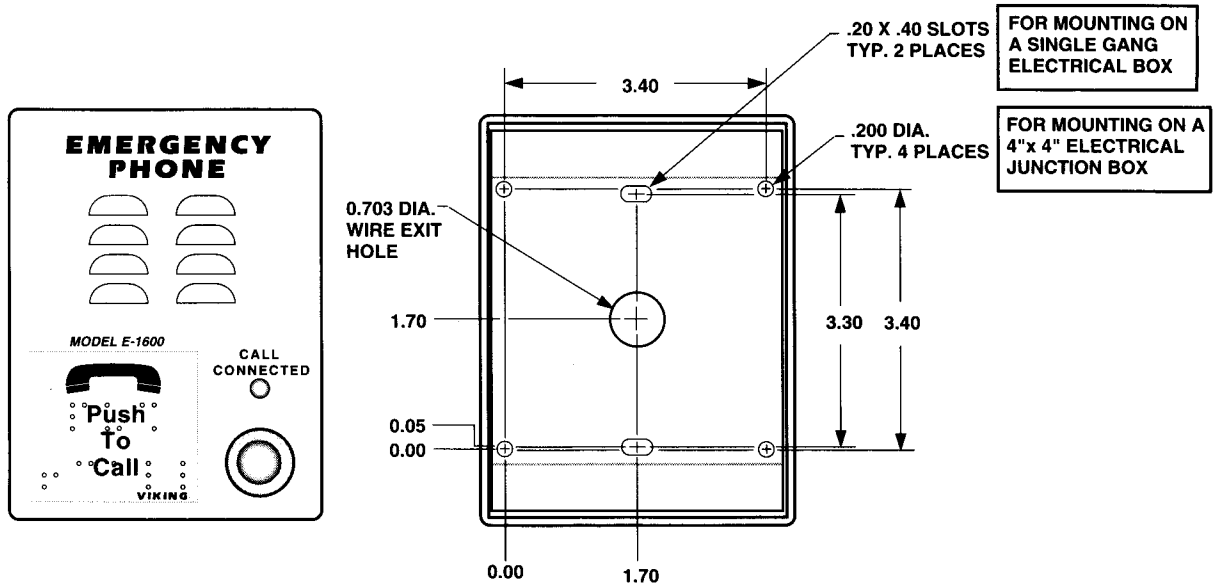
**NOTE:** The security code must be 6 digits in length.

8. To store a Touch Tone "9, a 4-second pause, then pulse dial, 333-4444" into the SPEED DIAL memory position, enter:  
*9 \* 7 \* 6 3334444 #00*

9. To clear the number stored in the I.D. memory position, enter:  
*#20*

## VI. INSTALLATION

Plug your Central Office or PABX line into the modular jack located on the back of the E-1600. Surface mount the back panel to a wall, post, elevator phone box, etc. The back panel has screw hole spacing for mounting to a standard single gang electrical box or a 4" x 4" junction box (screws not provided).



**Tech Support Hot-Line....715-386-8666**

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