G.A.L.

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PUB-0001N 0197

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G.A.L. HANDS FREE EMERGENCY TELEPHONE MODEL GAL-5400

I. GENERAL

The GAL-5400 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 press the star "*" key on their telephone keypad and the emergency phone will respond with a pre-programmed I.D. number identifying the elevator in trouble and illuminate the "CALL RECEIVED" indication. During the call the unit will act as a standard speaker-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 without changes to the security code or location ID.

A. Connect the phone line to the modular connector supplied on the GAL-5400.

B. From another phone, dial the phone number for the line that the GAL-5400 was attached to. The GAL-5400 will answer immediately.

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-5400 should dial followed by #,0,0. Two beeps should be heard.

E. Hang up. Programming is now complete. Test the GAL-5400 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!

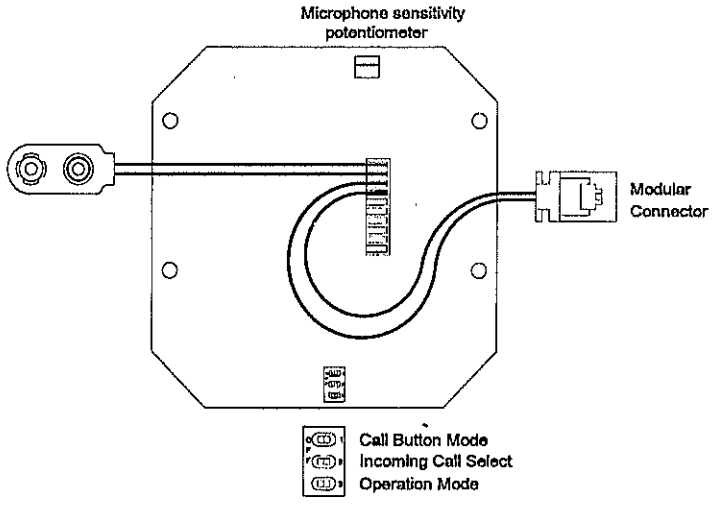

Figure 1

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 potentiometer (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.

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

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

D. Programming consists of entering the emergency telephone number, an identification number and replacing the security code with your own private code (if you wish). After each valid entry, the unit will respond with two beeps.

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 E 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

- 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: "562-1275"
  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 section E if a second number will be used.

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

   Example:

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

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. There are three timing functions and two redial features that are used by the GAL-5400 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-5400 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-5400 does not hang up reliably.

Silent Time - This is the maximum amount of time in increments of 10 seconds that the GAL-5400 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-5400 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).

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, the first five being Talk/Listen Delay, Maximum Call Time, Silent Time, Redial Ring Count and Redial on Busy. The remaining digit is not used at this time and will be entered as 1.

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

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

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 push the "*" key on their touch tone keypad. This will transmit the I.D. of the emergency telephone and light the LED on the station indicating that the call has been received.

If it is determined that the speaker volume is too soft, a 9 volt battery may be added to increase the volume (see Fig. 1).

V. PROBLEMS

Most problems encountered with the GAL-5400 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.

   Use a standard desk phone to check the phone line. If a dial tone is not heard, correct the phone line. If a dial tone is heard, check the connection to the GAL-5400.

2. GAL-5400 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, controllers, etc. Use shielded twisted pair wiring for telephone line. Ground the shielding at one end only.

B. Programming problems

1. GAL-5400 does not accept programming. Two beep response from unit is not heard when programming.

   The GAL-5400 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-5400 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.

C. Dialing problems

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

   Use a standard desk phone (not an office system phone) and dial the same number as programmed in the GAL-5400 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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G.A.L. HANDS FREE EMERGENCY TELEPHONE

MODEL GAL-5400

I. GENERAL

The GAL-5400 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 press the star "*" key on their telephone keypad and the emergency phone will respond with a pre-programmed I.D. number identifying the elevator in trouble and illuminate the "CALL RECEIVED" indication. During the call the unit will act as a standard speaker-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. CONNECTING AND PROGRAMMING THE PHONE UNIT

A. The phone unit (Fig. 1) is located directly behind the speaker grill found on the station. Open the station as necessary to access the unit and plug the phone line into the modular connector found in the middle of the board.

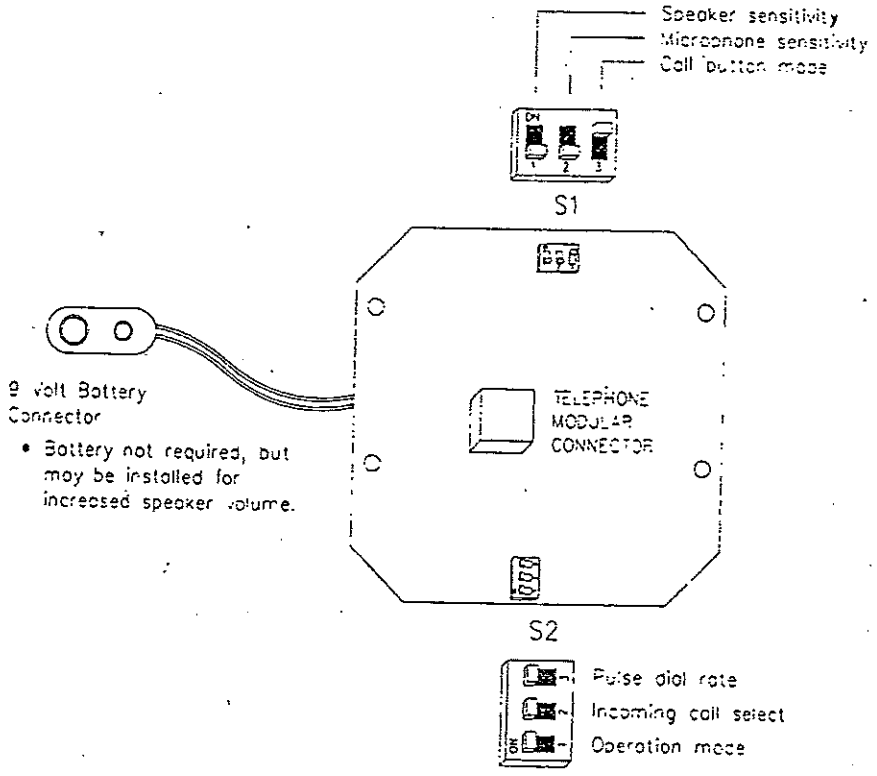


Figure 1

B. DIP switches S1 and S2 (Fig. 1) are set at the factory to meet the needs of typical installations. Please review the function of each switch setting below and modify if necessary for your conditions and preferences.

DIP switch S1:

Position 1 - Speaker sensitivity adjustment

OFF - Normal setting (factory setting)
ON - Decrease sensitivity

If the GAL-5400 is installed on a noisy telephone line causing the speaker to click on and off, set this switch ON. Otherwise, leave this switch OFF.

Position 2 - Microphone sensitivity adjustment

OFF - Normal setting (factory setting)
ON - Decrease sensitivity

This switch should only be set to ON if the phone unit is installed in a noisy location causing the microphone to stay on. If the microphone is on, sound cannot be heard through the speaker.

Position 3 - 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.

DIP switch S2:

Position 1 - Operation mode

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

This switch must be ON (normal operation/program 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. Do not use program only mode (switch OFF) unless you have forgotten your security code.

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 - Pulse dialing rate

OFF - Slow pulse dialing, 10PPS
ON - Fast pulse dialing, 20PPS (factory setting)

This switch only affects the rate at which pulse dialing (not tone dialing) takes place. If you are using pulse dialing and the unit does not dial properly, set this switch to OFF.

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 from another telephone, you may now close and secure the station.

D. Programming consists of entering the emergency telephone number, an identification number and replacing the security code with your own private code. After each valid entry, the unit will respond with two beeps.

PRISON

1. Dial into the unit from any telephone. 609-278-7872

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". 4000

   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" (redial ring count and/or redial on busy will be set in section E of the instructions).

E. There are three timing functions and two redial features that are used by the GAL-5400 for call processing. These functions are listed below.

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-5400 will stay on the line. The factory default is 3 minutes.

Silent Time - This is the maximum amount of time in increments of 10 seconds that the GAL-5400 will stay on the line with no voice activity. The factory default is 40 seconds.

Redial ring counter - This is the number of rings the GAL-5400 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 (number of rings are 2 plus the value set). 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).

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 5 rings (the number entered plus 2). 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, the first five being Talk/ Listen Delay, Maximum Call Time, Silent Time, Redial Ring Count and Redial on Busy. The remaining digit is not used at this time and will be entered as 1.

Examples:

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

  enter: 3,5,7,2,1,1,#,1,8

- Store time functions & set redial feature:
  0.4 seconds Talk/Listen
  6 minutes Maximum Call Time
  50 seconds Silence Time
  6 ring Redial Ring Count
  Redial on Busy

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

III. 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 push the "*" key on their touch tone keypad. This will transmit the I.D. of the emergency telephone and light the LED on the station indicating that the call has been received.

If it is determined that the speaker volume is too soft, a 9 volt battery may be added to increase the volume (see Fig. 1).

IV. PROBLEMS

If problems are encountered with the hands free emergency telephone, please call G.A.L. at (718) 292-9000. - ENRY EXT 42

G.A.L. 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. The "CALL RECEIVED" indicator will also light automatically after playing the recorded message a programmed number of times. 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 up to four additional pre-programmed numbers 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 is attached to. The GAL-6400 will answer immediately.

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 or third number to be dialed if the first is busy or unanswered, READ ON!

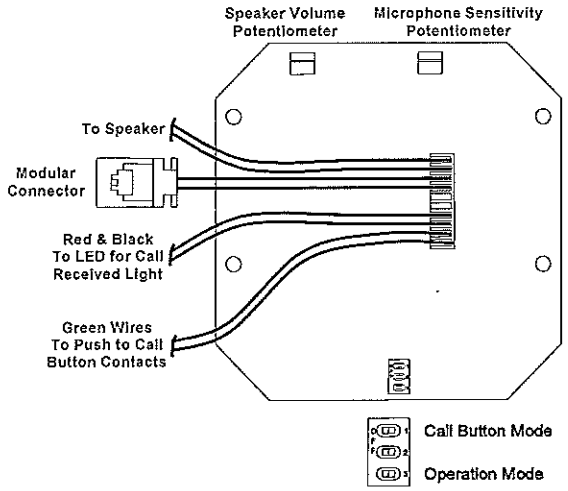


Figure 1

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 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 any additional numbers (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", third in "#,0,2", up to the fifth in "#,0,5".
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

- 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: "562-1275"
  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

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.

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 or more 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).

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
  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 I.D. (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.
   Use a standard desk phone to check the phone line. If a dial tone is not heard, correct 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, controllers, 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.
   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.

G.A.L. Manufacturing Corp.
50 E. 153rd Street
Bronx, NY 10451

PUB-0002N 0505

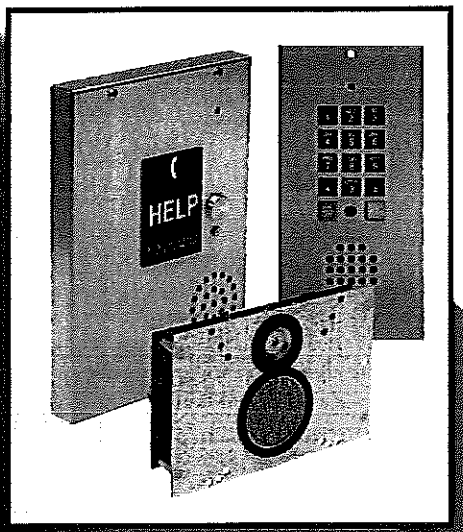
K - Tech

To download program instructions go to www.ktechonline.com

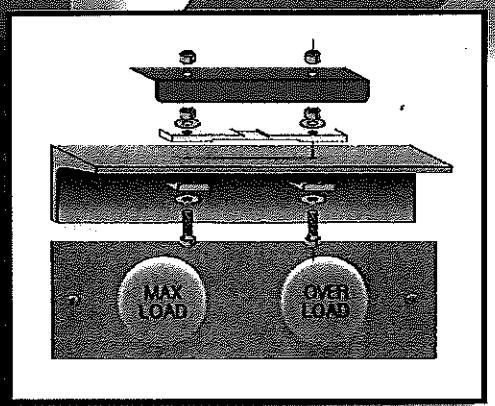
K-Tech International, Inc.

PRODUCT CATALOG

EMERGENCY COMMUNICATIONS



ELEVATOR LOAD WEIGHING



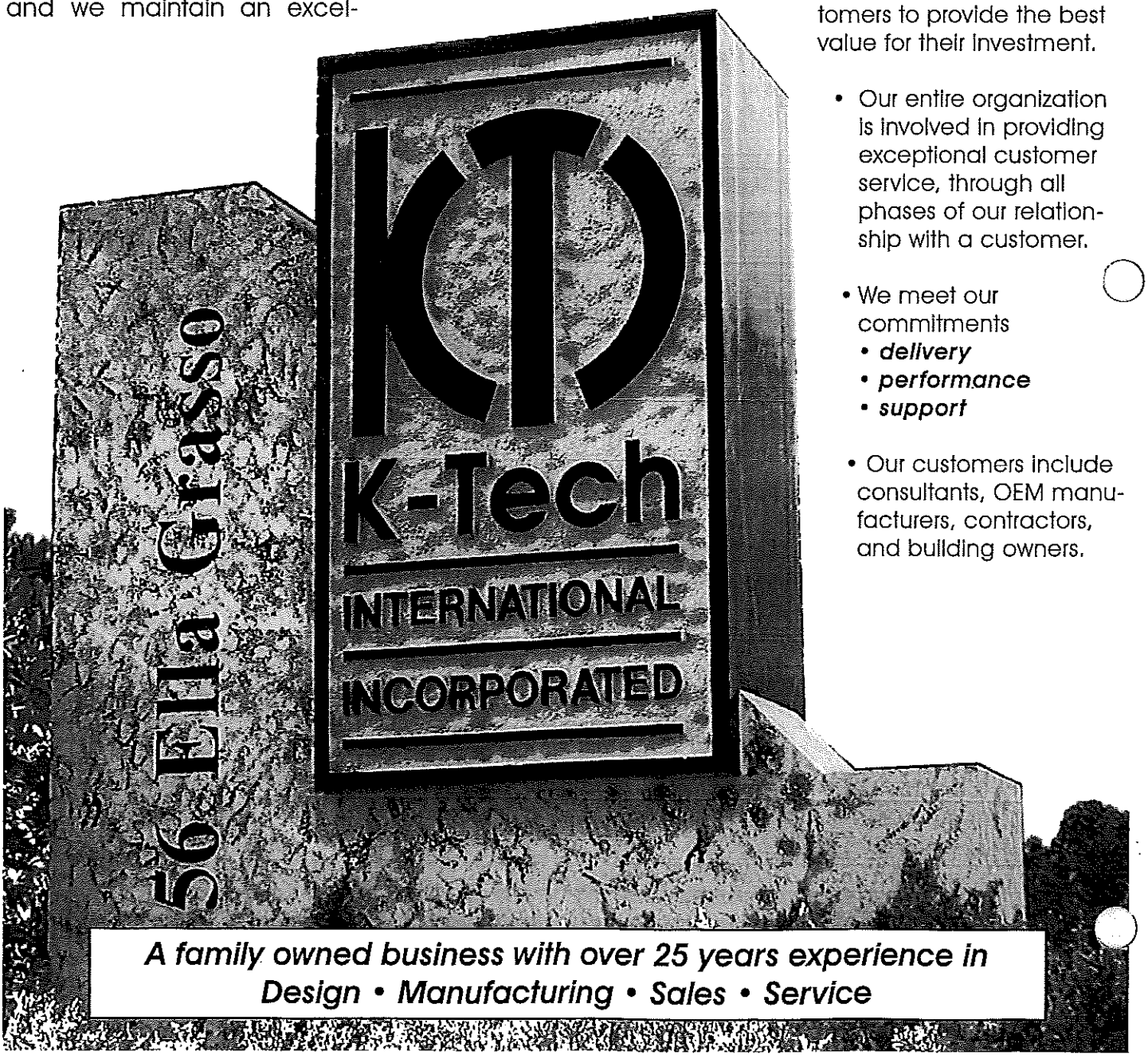
MAINTENANCE BARRICADES

Working Together for Cost Effective Solutions

K-Tech is an industry leader in the design and manufacture of Communication, Elevator Load Weighing and Maintenance Barricade systems. We have unmatched experience and we maintain an excellent reputation for providing high quality products and exceptional service. Our primary objective is to provide our customers with maximum value and total satisfaction.

Recognized as the best in the world in our segments of the industry

- We pride ourselves as the leading solutions provider, working closely with customers to provide the best value for their investment.
- Our entire organization is involved in providing exceptional customer service, through all phases of our relationship with a customer.
- We meet our commitments
  - ***delivery***
  - ***performance***
  - ***support***
- Our customers include consultants, OEM manufacturers, contractors, and building owners.



A family owned business with over 25 years experience in Design • Manufacturing • Sales • Service

K-TECH INTERNATIONAL, INC.
EMERGENCY PHONE TROUBLESHOOTING CHECKLIST

More than 95% of all Tech Support calls, and Repair Analysis, result in the identification of site/installation problems or programming errors; **not equipment failures**. To minimize mechanic site time and eliminate unnecessary repair analysis costs, check/verify all of the following before removing any K-Tech phone from service.

1. PRODUCT IDENTIFICATION and INSTALLATION / PROGRAMMING INSTRUCTIONS					
Confirm that you have the proper installation and programming instructions for the phone model you are working on. K-Tech phones are easily identified by 5 or 6 digit Serial#'s, written on the PCB that begin:					
	"1" ET501 ex: 100555		**"2"** ET201 ex: 200222		**"4"** ET401 ex: 400444
	"5" ET901 ex: 500999		**"7" or "8"** ET701 (dialer) ex: 70077		
*Installation and programming instructions are available, at no charge, via fax (call 860-489-9399 with your fax#) or at www.KTechOnline.com					

2. CHECK TELEPHONE LINE - The telephone line conditions at the emergency phone are:		
	Analog, CO or POTS (Plain Old Telephone System) line	
		On-hook Voltage is between 48V – 52V
		Off-hook voltage is minimum 12V OR Loop Current is 30mA
	Analog, PBX (Private Branch Exchange) line comparable to an Analog CO / POTS line and	
		On-hook Voltage is between 24V – 48V
		Off-hook voltage is minimum 12V OR Loop Current is 30mA

3. CHECK TELEPHONE WIRE	
	Telephone wire is 20 gauge (or larger), shielded, twisted pair

4. CHECK POWER VOLTAGE (if applicable) – refer to installation instructions provided*			
	Battery Voltage is_____ Volts		AC is 12 VAC at the phone

5. CHECK ALL EMERGENCY PHONE CONNECTIONS							
	Phone line (tip & ring)		Battery (if applicable)		Speaker		LED(s)
	AC (if applicable)		Microphone		Activating Button		

6. CHECK PROGRAM SETTINGS – Check all phone program settings, including factory defaults. Refer to the programming / verifying instructions provided with each unit. Also available via fax or at www.KTechOnline.com.

7. CHECK THE CALLED TELEPHONE NUMBER(S) AND ANSWERING / MONITORING RESPONSE	
	Telephone number being dialed is a valid, working number
Tips:	1. Call it from another telephone 2. Remember to include 1, area code or access code (usually "9", and then a pause) if applicable.
	Answering party is able to identify and respond to the emergency call

8. IF, AFTER ALL OF THE ABOVE ARE VERIFIED AND/OR CORRECTED, PROBLEMS PERSIST:			
	Call K-Tech for assistance		RA#_____ issued
	Send a copy of this completed checklist in with any returned equipment.		

Job Location/Name:	
Person Checked by:	Date:

K-TECH INTERNATIONAL, INC
56 Ella Grasso Avenue •Torrington, CT 06790
860-489-9399 / 800-993-9399
www.KTechOnline.com

Rev 05/12/05

CONFIDENTIAL PRICE LIST

08/01/2007

EMERGENCY PHONES

CATALOG PAGE #	PART#		DESCRIPTION	SUGGESTED LIST	CONTRACTOR RESELLER
	FORTRESS - FLUSH MOUNT				
5	ET1401A		K-Phone 401 Fortress Flush Mount Stainless	$526	$329
Not Listed	ET1401A-K		K-Phone 401 Fortress Flush Mount Stainless - Kastle Security System Compatible	$608	$380
5	ET1401AB		K-Phone 401 Fortress Flush Mount Bronze/Muntz	Call	Call
5	ET1401A-S	NEW	K-Phone 401 Fortress Flush Mount Stainless, Small	$510	$319
5	ET1401A-WP		K-Phone 401 Fortress Flush Mount Stainless, Weather Protected	$654	$409
5	ET1401A-S-WP	NEW	K-Phone 401 Fortress Flush Mount Stainless, Small, Weather Protected	$638	$399
5	ET1901A		SUREphone 901 Fortress Flush Mount Stainless	$574	$359
5	ET1901AB		SUREphone 901 Fortress Flush Mount Bronze/Muntz	Call	Call
5	ET1901A-S	NEW	SUREphone 901 Fortress Flush Mount Stainless, Small	$558	$349
5	ET1901A-WP		SUREphone 901 Fortress Flush Mount Stainless, Weather Protected	$702	$439
5	ET1901A-S-WP	NEW	SUREphone 901 Fortress Flush Mount Stainless, Small, Weather Protected	$686	$429
	SENTRY - CABINET MOUNT				
5	ET401A		K-Phone 401 Sentry Cabinet Mount	$382	$239
Not Listed	ET401A-K		K-Phone 401 Sentry Cabinet Mount - Kastle Security System Compatible	$464	$290
5	ET401A-R		K-Phone 401 Sentry Cabinet Mount - RED	$397	$248
5	ET401A-WP		K-Phone 401 Sentry Cabinet Mount, Weather Protected	$510	$319
5	ET901A		SUREPhone 901 Sentry Cabinet Mount	$430	$269
5	ET901A-R		SUREphone 901 Sentry Cabinet Mount - RED	$445	$278
5	ET901A-WP		SUREphone 901 Sentry Cabinet Mount, Weather Protected	$558	$349
	LIBERATOR - SURFACE MOUNT, LOW PROFILE				
5	ET401A-LPSS		K-Phone 401 Liberator 1"D Surface Mount	$446	$279
6	ET401A-LPSS-S	NEW	K-Phone 401 Liberator 1"D Surface Mount, Small	$432	$270
5	ET401A-LPSS-WP		K-Phone 401 Liberator 1"D Surface Mount, Weather Protected	$574	$359
5	ET901A-LPSS		SUREphone Liberator 1"D Surface Mount,	$494	$309
5	ET901A-LPSS-S	NEW	SUREphone Liberator 1"D Surface Mount, Small	$478	$299
5	ET901A-LPSS-WP		SUREphone Liberator 1"D Surface Mount, Weather Protected	$622	$389
	COMMANDER / UNIVERSAL COMMANDER - COP FIXTURE MOUNT				
6	ET401A-OEM		K-Phone 401 Commander COP/Grille Mount	$366	$22
6	ET401A-OEM-CM		K-Phone 401 Commander COP/Grille Mount - Center Mic	$366	$229
6	ET401A-OEMCS		K-Phone 401 Commander COP/Grille Mount - Center Speaker	$390	$244
Not Listed	ET401A-OEM-K		K-Phone 401 Commander COP/Grille Mount - Kastle Security System Compatible	$448	$280
6	ET401A-OEMU		K-Phone 401 Universal Commander COP/Grille Mount	$366	$229
Not Listed	ET401A-OEMU-K		K-Phone 401 Universal Commander COP/Grille Mount - Kastle Security System Compatible	$448	$280
6	ET901A-OEM		SUREphone 901Commander COP/Grille Mount	$414	$259
6	ET901A-OEM-CM		SUREphone 901 Commander COP/Grille Mount - Center Mic	$414	$259
6	ET901A-OEMCS		SUREPhone 901 Commander COP/Grille Mount - Center Speaker	$438	$274
Not Listed	ET901A-OEM-OS		SUREPhone 901 Commander COP/Grille Mount - Offset Speaker	$438	$274
Not Listed	ET901A-OEM-A	NEW	SUREphone 901 Commander COP/Grille Mount - 12 Volt LED output	$438	$274
6	ET901A-OEMU		SUREPhone 901 Universal Commander COP/Grille Mount	$414	$259
Not Listed	ET901A-OEMU-A	NEW	SUREPhone 901Universal Commander COP/Grille Mount -12 Volt LED output	$438	$274
Not Listed	ET901A-OEMU-B	NEW	SUREphone 901 Universal Commander COP/Grille Mount - -2 LED (Red & Green)	$438	$274
Not Listed	ET901A-OEMU-D	NEW	SUREphone 901 Universal Commander COP/Grille Mount - SoundNet & SRM Compatible	$456	$285
	SUREcom INTERCOM				
6	ET92		SUREcom Intercom w/Handset Station	$478	$299
6	ET105		SUREcom Handset Station	$64	$40
7	ET1301	NEW	SUREcom Keypad Station	$270	$169
	KEYPAD SPEAKERPHONE 301 SERIES				
7	ET1301		Keypad Phone, Fortress Flush Mount, Stainless #4	$270	$169
	ET1301B		Keypad Phone, Fortress Flush Mount, Bronze/Muntz	Call	Call
7	ET301-OEM		Kepyad Phone, Commander, COP/Grille Mount	$222	$139
Not Listed	ET301-OEM-A		Keypad Phone, Commander, COP/Grille Mount w/adhesive pads & spacers	$238	$149
Not Listed	ET301-OEM-B		Keypad Phone, Commander, COP/Grille Mount w/raised keys	$238	$149
	WEATHER PROOF ENCLOSURE w/ PHONE				
7	ET401A-WE		K-Phone 401 in Weatherproof Enclosure	$574	$359
7	ET401A-WE-S	NEW	K-Phone 401 in Small Weatherproof Enclosure	$560	$350
7	ET901A-WE		SUREphone 901 in Weatherproof Enclosure	$622	$389
7	ET901A-WE-S	NEW	SUREphone 901 in Small Weatherproof Enclosure	$608	$380

Gray enclosure is standard. Call for details on RED, YELLOW or your custom color.

Continued on next page.

CATALOG PAGE #	PART#		DESCRIPTION	SUGGESTED LIST	CONTRACTOR RESELLER
	PHONE ACCESSORIES / PARTS				
8	ET-TESTPHONE		Mechanic Test Phone	$286	$179
9	ET81		Phone Line Manager	$478	$299
9	ET-INST		Set of Phone Manuals (301, 401 & 901)	$40	$25
9	ET701		Auto Dialer, NewWave Single Number	$136	$85
9	ET-SP		Surge Protector, Phone Line	$32	$20
9	ET-501TRN NEW (Toroidal)		Transformer assembly, SUREphone 901	$32	$20
9	LBL170		Label, ADA NEW - "HELP" w/Braille	$16	$10
9	ET-509SPK		Speaker assembly, 45 ohm Phone - All	$16	$10
Not Listed	ET-508SPK (mylar)		Speaker assembly, 45 ohm Phone - All - Mylar	$24	$15
9	ET-505MIC		Microphone assembly, Phone - All	$16	$10
9	ET-502LED		LED assembly, phone, 18" wire - Red	$13	$8
9	ET-BTY002		Battery assembly, K-Phone 401	$16	$10
9	ET-503BTY9V		Battery assembly, Phone 501 - Nicad 8.4V	$32	$20
9	ET-BTY005		Battery assembly, SUREphone 901 - universal	$32	$20
Not Listed	503BTYWIR		Battery strap, use with ET-503BTY9V & ET-BTY002	$8	$5

LOAD WEIGHING SYSTEMS

CATALOG PAGE #	PART#		DESCRIPTION	SUGGESTED LIST	CONTRACTOR RESELLER
	Analog / Variable Voltage Output				
10	LW4201	1 - 8.5 VDC standard	K-Weigh, Analog System, single sensor, single amp, hanging weight signal	$1,184	$740
Not Listed	LW4201LV	0.5 - 3.25 VDC standard	K-Weigh, Analog System, single sensor, single amp, hanging weight signal	$1,208	$755
10	LW4201AC	0 - 4.95 VDC standard	K-Weigh, Analog System, single sensor, single amp w/ auto-comp, in-car load signal	$1,454	$909
10	LW4202	1 - 8.5 VDC standard	K-Weigh, Analog System, dual sensor, dual amp, hanging weight signal	$1,712	$1,070
10	LW4202AC	0 - 4.95 VDC standard	K-Weigh, Analog System, dual sensor, dual amp w/ auto-comp, in-car load signal	$1,982	$1,239
Not Listed	LW4202B	1 - 8.5 VDC standard	K-Weigh, Analog System, dual sensor, dual amp w/buffer, hanging weight signal	Call	Call
Not Listed	LW4202LV	0 - 3.25 VDC standard	K-Weigh, Analog System, dual sensor, dual amp, hanging weight signal	$1,736	$1,085
Not Listed	LW4202LV-D	0 - 3.25 VDC standard	K-Weigh, Analog System, dual sensor, dual amp w/Can Bus, hanging weight signal	Call	Call
	Set-Point N/O, N/C Dry Contact Output				
10	LW4201S2		K-Weigh, Set-Point System, single sensor, single amp, 2 channel, hanging weight signal	$1,184	$740
10	LW4201S4		K-Weigh, Set-Point System, single sensor, single amp, 4 channel, hanging weight signal	$1,232	$770
10	LW4201S6		K-Weigh, Set-Point System, single sensor, single amp, 6 channel, hanging weight signal	$1,280	$800
10	LW4201ACS2		K-Weigh, Set-Point System, single sensor, single amp, 2 channel w/auto-comp, in-car load signal	$1,454	$909
10	LW4201ACS4		K-Weigh, Set-Point System, single sensor, single amp, 4 channel w/auto-comp, in-car load signal	$1,502	$939
10	LW4202S2		K-Weigh, Set-Point System, dual sensor, dual amp, 2 channel, hanging weight signal	$1,712	$1,070
10	LW4202ACS2		K-Weigh, Set-Point System, dual sensor, dual amp, 2 channel w/auto-comp, in-car load signal	$1,982	$1,239
	Freight Car Overload Protection Package, Set-Point N/O, N/C Dry Contact Output				
11	LW4201S4-F	NEW	K-Weigh, Set-Point System, Single Sensor, single amp, 4 channel, w/ Lock-Out Relay & Alarm Bell	$1,360	$850

Call for other configurations of single or dual sensor, hanging weight or in-car load signal systems. Several to choose from. Custom available.

	Load Weighing Accessories				
13	LW-LI1A	NEW	Load Limit Indicator "OVERLOAD"	$280	$175
13	LW-LI4A	NEW	Load Limit Indicator Incremental: 50%, 80%, 100%, OVERLOAD	$478	$299
13	LW-LI2		Load Limit Indicator "MAX LOAD", OVERLOAD	$176	$110
13	LW-AB		Alarm Bell 6"	$80	$50
	Load Weighing Parts				
13	LW42SENKIT		Sensor Kit, Includes: sensor, mounting hardware, dual purpose drill template/sensor guard	$536	$335
13	LW-SENGDKIT		Sensor Hardware Kit, Includes: mounting hardware, dual purpose drill template/sensor guard	$56	$35
13	LW-SPMODKIT		Set-Point Module Kit, Includes:module, snap-track, wire harness (2 N/O, N/C dry contact outputs)	$144	$90
13	LW-SITK		Sensor Installation Tool Kit - see catalog page 13 for tools list	$318	$199

MAINTENANCE BARRICADES

CATALOG PAGE #	PART#		DESCRIPTION	SUGGESTED LIST	CONTRACTOR RESELLER
14	BI42		Barricade, Single Panel 42" H x 36" W	$48	$30
14	BI42-B	NEW	Barricade, Blank Single Panel 42" H x 36" W	$64	$40
14	BI42-3K		Barricade, 3 Panel Set w/2 Anchors & 2 Locks	$222	$139
14	BI42-4K		Barricade, 4 Panel Set w/2 Anchors & 3 Locks	$286	$179
14	BI1097L		Barricade Lock	$16	$10
14	BI325AK		Barricade Anchoring Kit	$48	$30
14	BI1234W	NEW	Barricade Weight Set (1 lb per set of 4)	$24	$15
15	BI72		Barricade, Single Panel 72" H x 36" W	$78	$49
15	BF42	NEW	Barricade, Folding Aisle Blocker 42" H x 72" W	$62	$39

What's Inside

Emergency Communications

Elevator Load Weighing

Maintenance Barricades

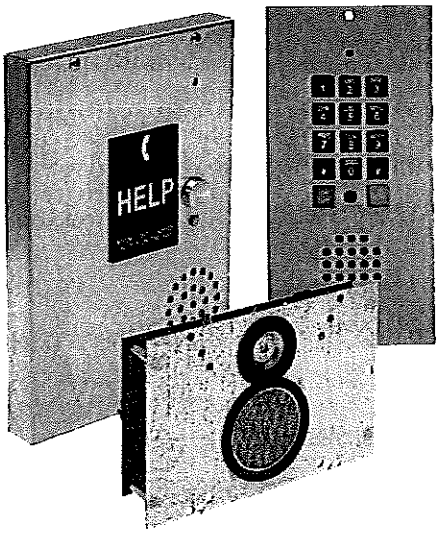
K-Phone ET401

Single Phone / Single Line
Phone line powered

SUREphone ET901

Multiple Phones / Single Line
AC powered

- **Elevators**
- **Wheelchair Lifts**
- **Areas of Rescue**
- **Parking Garages**
- **Hallway**
- **Poolside**
- **Entry**
- **Security**
- **Campus**
- **Gated Areas**



K-Tech phones meet all current ADA and A17.1/B44 Elevator Safety standards by providing the built-in features necessary to promptly connect, identify, and respond to emergency calls for assistance.

The momentary press of the phone activating button puts it all into motion...

An automatic dialer is provided to dial out to an emergency location. In buildings that are not manned 24/7, multiple phone numbers (up to 5) can be programmed that will sequentially cycle through if there is no answer or a busy signal is detected. The two recordable voice messages are used to identify location and provide any dispatch and/or other information specific to the site. Selectable, automatic or programmable shut-off methods ensure units are always ready for the next call.

The well thought-out design provides for programming via either the built-in keypad or remotely from any touch-tone phone. Voice prompted programming steps, which immediately repeat for verification, make programming the phone a breeze.

The SUREcom intercom module rounds out the product line for those installations requiring Machine Room to Elevator communications. *(See Page 6)*

Specifications

Phone Line:
ET401: 24-48 VDC 30 mA
ET901: 11-48 VDC 15 mA

Power Requirements:
ET401: phone line
ET901: 120 VAC 50 mA
(NiCad backup battery included)

Wiring:
20 AWG shielded twisted pair

Registrations & Approvals:
FCC, IC & CSA, UL approved (ETL)
ADA and ASME A17/ B44 compliance

To Order Call 1-800-993-9399

Features

- Five number automatic dialer
- Two voice announcement messages
- Built-in keypad & remote programming
- Voice prompted programming
- Automatic & programmable shut-off
- Non-volatile memory
- Metal push button
- Braille label & Visual indicator

Mounting styles...

Fortress

Flush Mount...use it to upgrade cabinet mount units or to simply replace old/damaged phone cabinets. Also, the Fortress is ideal for adding a phone where there is no phone cabinet. *(A17.1-2004 requires that the activating button and visual indicator be "visible" and marked as "HELP")*

Available in #4 brushed stainless steel or Muntz.

Plate sizes: 12.5" H x 10" W x .125" Th.
10.5" H x 6.5" W x .125" Th. ***NEW!***

Cutout: 10" H x 5" W x 2" D.

Custom sizes available.

ET1401A	One Phone / Line	**Add –S**	10.5"H x 6.5"W Brushed S. S.
ET1901A	Multiple Phones / Line	**Add –B**	Bronze / Muntz
		Add –WP	Weather Protected

Sentry

Box Mount...fits right into most existing telephone cabinets.
Available in Brushed Aluminum or Red.
Size: 9.5" H x 4.75" W x 2" D.

ET401A	One Phone / Line	**Add –R**	Red Faceplate
ET901A	Multiple Phones / Line	**Add –WP**	Weather Protected
		Add –WE	Weather Enclosure

Liberator

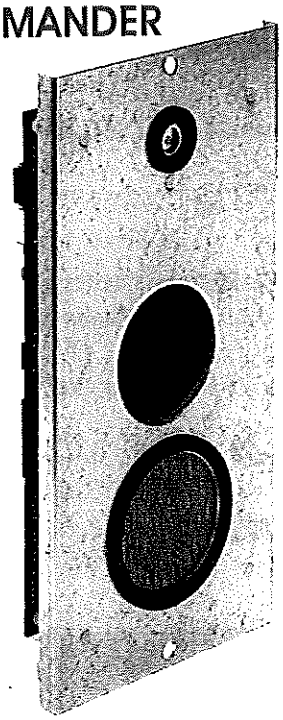
Low Profile Surface mount...Ideal for installations where space is limited and/or cutting a hole is not possible or economical.
Available in #4 brushed stainless steel.
Sizes: 9.5" H x 6.875" W x 1" D
6.75" H x 5.625" W x 1" D ***NEW***

ET401A-LPSS	One Phone / Line	**Add –S**	6.75" H x 5.625" W x 1" D
ET901A-LPSS	Multiple Phones / Line	**Add –WP**	Weather Protected

Visit www.KTechOnLine.com

OEM Plate Mount Phones

COMMANDER



Size: 9.5" x 4.75" x 1.5" D

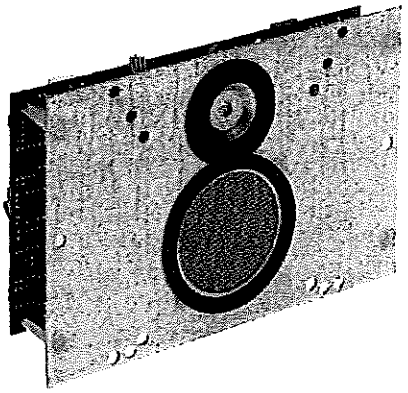
The Universal Commander is the perfect field replacement. It has all the same features and functions found in our other K-Tech phone models (see pages 4 & 5) and it fits most fixture grille and mounting patterns. Available for single or multiple phones on one line. A seamless solution to replacing or upgrading your fixture mount phones.

As an added convenience, the AC powered phones have an integrated transformer mounted to the faceplate.

Also available in new fixtures... specify the K-Tech Universal Commander on all of your new elevator fixture orders. No additional fixture prep time.

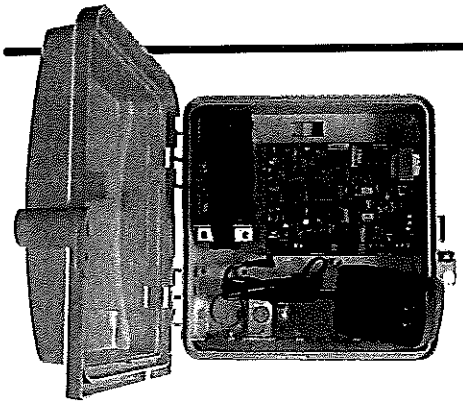
ET401A-OEM	One Phone / Line	Add —CS Center Speaker
ET901A-OEM	Multiple Phones / Line	Add —CM Center Microphone

UNIVERSAL COMMANDER



Size: 4.75" x 7" x 1.5" D

ET401A-OEMU	One Phone/Line
ET901A-OEMU	Multiple Phones/Line

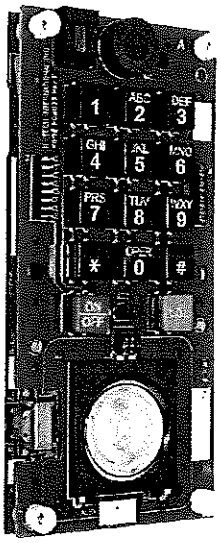


SUREcom

The **SUREcom** is a low cost solution for providing communications from the Machine Room and/or Lobby to elevators and for meeting the "call-in-progress override" required in the latest A17.1. The system supports 1 to 4 remote stations and up to 10 K-Tech elevator phones. It allows you to contact one or all elevators on the system from each remote station. Sharing elevator emergency phones and wiring make the SUREcom an even more economical choice for adding these features to your elevators.

ET92	SUREcom w / 1 Handset Station
ET105	Handset Station
ET1301	Flush Mount Keypad Speakerphone

KEYPAD SPEAKERPHONE



Size: 6.5" H x 3" W x 0.70" D

ET301-OEM Mount Behind COP Custom Plate

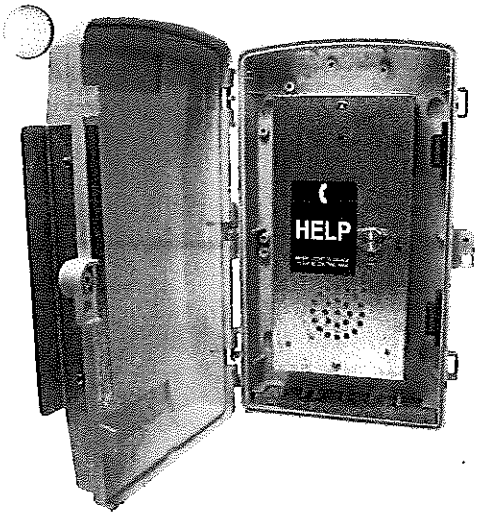
The Keypad Speakerphone is the premium emergency communication solution for the home elevator. The unique flush mount design can be made to perfectly match the elevator décor. It eliminates the need for a hinged door cabinet and there is no unsightly, dangling handset to contend with. Robust, yet distinctive... something to compliment your fine cabs and finishes.

Ask your fixture manufacturer to integrate the OEM model in your next home elevator fixture order... it's small enough for even the most compact fixture.

Plate Size: 8" H x 4" W
Cut-out: 7" H x 3.5" W x 1" D

ET1301 Brushed Stainless Flush Mount

WEATHER PROOF ENCLOSURES



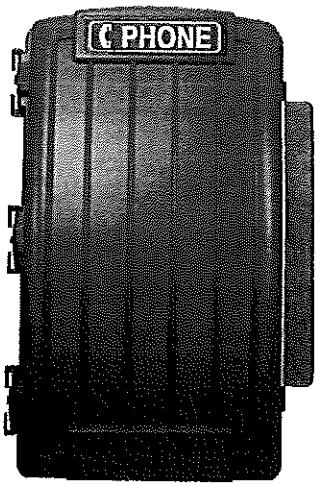
ET401 or ET901
Series phone included
(see pages 4 & 5 for details).

Enclosures are 14" H x 9" W x 4" D
or
8.75" H x 7.75" W x 2.50" D

ET401A-WE Add-S 8.75" H x 7.75" W x 2.50" D
ET901A-WE

Weather Proof hinged phone enclosure. Gray is standard (not shown). Call for red, yellow or your custom color choice.

- **Parking Garages**
- **Campus**
- **Poolside**
- **Entry**
- **Security**
- **Gated Areas**
- **Outdoor Access Lifts**



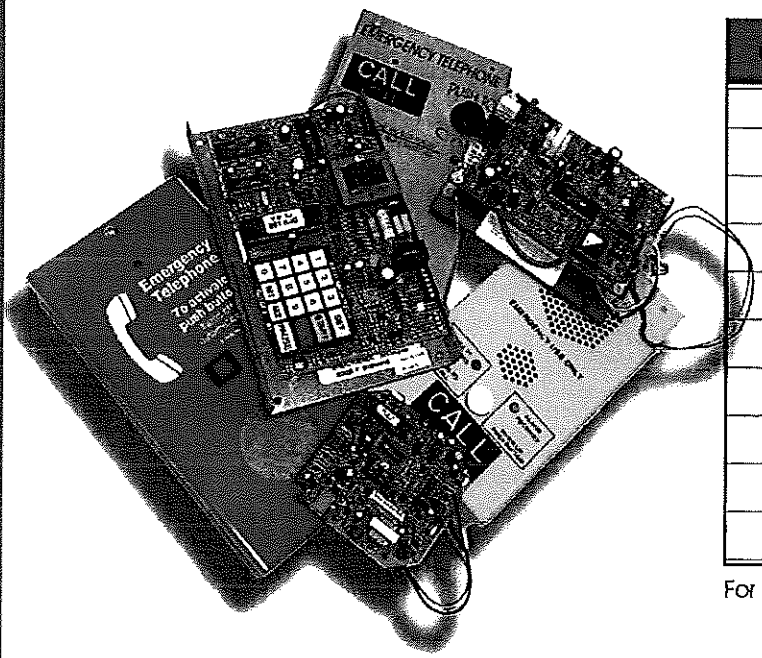
UL listed thermoplastic alloy with magnetic latch.

Visit www.KTechOnLine.com

ELEVATOR PHONE REPLACEMENTS

With more than 20 elevator phone manufacturers and 100+ phone models manufactured over a 25 year period, finding the right replacement ADA elevator phone can be a costly and time-consuming task. Let K-Tech simplify the process and greatly reduce your costs of replacing emergency phones.

K-Tech's new **PhoneFinder** database cross-references manufacturers and model numbers to comparable K-Tech phone models. Most phones fit right in, without any mechanical field mounting or wire connection modifications.



COMPANY	MODEL#	K-TECH MODEL#
EMS	PBX	ET401A
	PNB	ET401A-OEMU
	PSS	ET1401A-S
RATH	2100-956SS	ET901A
	2100-957RA	ET901A-OEM-OS
TRE	as3bb	ET401A
	as3mini	ET1401A-S
	as3sm-1	ET401A-OEMU
WURTEC	11-580	ET401A
	11-903	ET901A-OEMU

For a complete list, call K-Tech.

TEST PHONE

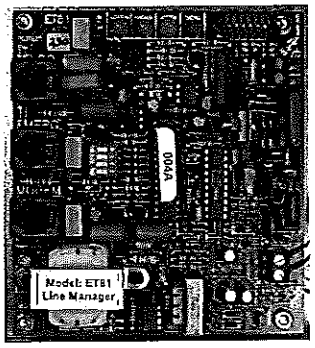
The Test Phone will save you money by allowing the mechanic to work more efficiently. Most problems can be traced back to phone line issues. With the Lil' Buttie Test phone you can check on-hook voltage, line current and dial tone quickly and easily. Quickly check for restricted phone lines, active phone numbers and access codes. Gives you specific data when dealing with customers and the phone company.

ET-TESTPHONE

NOW WITH PROTECTIVE BOOT!

To Order Call 1-800-993-9399

PHONE ACCESSORIES

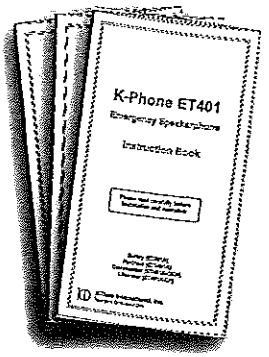


ET81

Phone Line Manager

Bidirectional Telephone Line Manager sets-up a means to share one telephone line between emergency elevator telephones and remote monitoring system modems. Includes enclosure and power supply.

OEM models available.



Manuals

Complete set of all phone manuals.

ET-INST

Auto Dialer

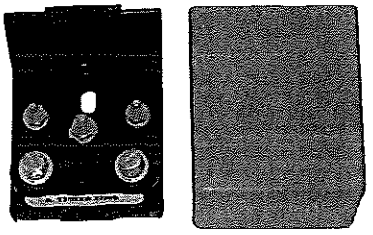
The ET701 Dialer will automatically dial a preprogrammed number, of up to 32 digits, whenever an associated telephone goes off hook.

- Non volatile EPROM memory (no batteries)
- Telephone line powered
- Built-in keypad for programming

Size: 8.75" H x 7.75" W x 2.5" D

ET701

Surge Protector



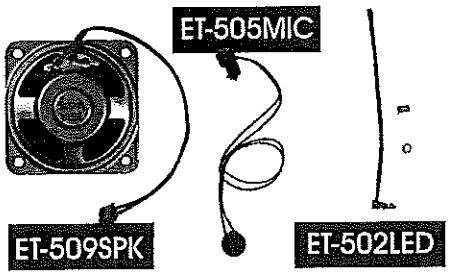
Hooks up to the phone line in the machine room and diverts high voltage surges safely to ground. The gas fuses protect against multiple surges and are easily replaceable.

Size:
3.5" H x 3" W x 2" D

ET-SP

PHONE PARTS

Speaker / Microphone / LED



ET-505MIC

ET-509SPK

ET-502LED

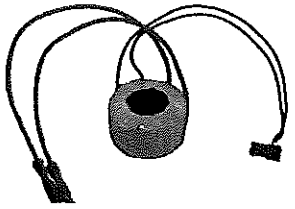
Braille Label

Raised Symbol/Letters and Braille
Adhesive-backed polycarbonate

Size:
3.125" H x 2.25" W x .125" Thick

LBL170

Transformer



AC Transformer for ET901 Series SUREphone. Mounts to phone faceplate.

ET-501TRN

Batteries

ET- BTY002

Alkaline

ET401

ET-503BTY9V

8.4V NiCad

ET501

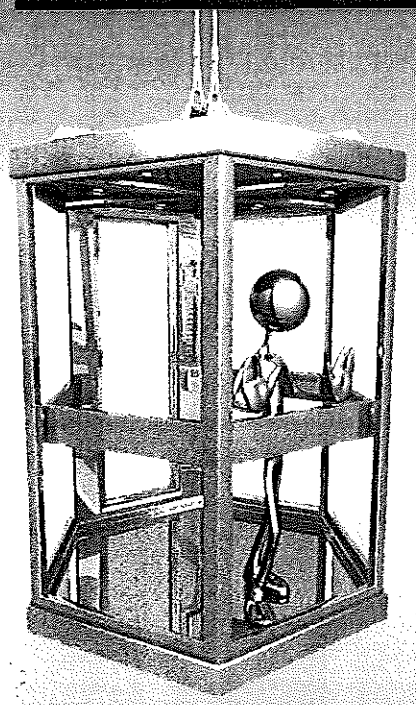
ET-BTY005

7.2V NiCad

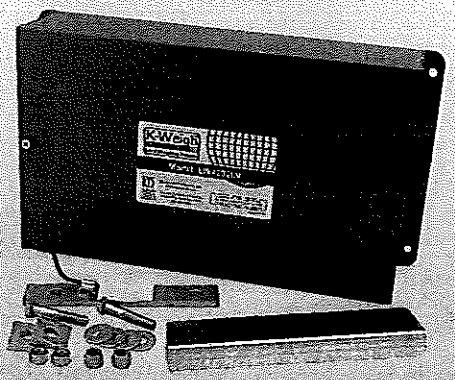
ET901

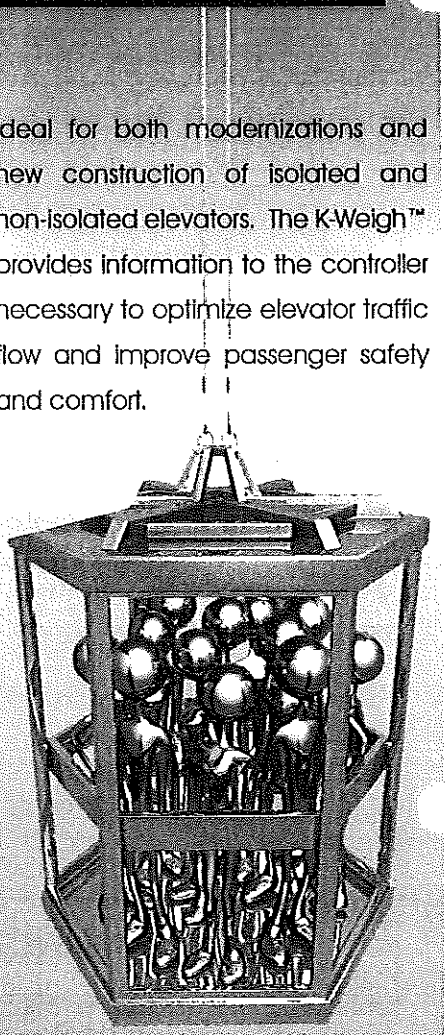
Visit www.KTechOnLine.com

LOAD WEIGHING



Through the years, those looking to accurately weigh anything, large or small, have relied on strain gauge technology for accuracy and long-term reliability. Using this superior, time-tested method of weighing, the K-Tech K-Weigh™ provides a universal and cost saving answer to even the most complex elevator load weighing environments. It is ideal for both modernizations and new construction of isolated and non-isolated elevators. The K-Weigh™ provides information to the controller necessary to optimize elevator traffic flow and improve passenger safety and comfort.





WHAT CAN A K-WEIGH™ DO FOR YOUR ELEVATOR?

Optimize Traffic Flow
- Hall Call Bypass
- Anti-Nuisance
- Light/Heavy Load Dispatch

Provide a Smooth, Comfortable Ride
- Motor Preforque

Ensure Passenger Safety and Equipment Protection
- Child Safety
- Overload protection

Reduce Maintenance and Conserve Power
- Fewer starts and stops
- Smooth take-off and stops

NOTE: Some features are controller dependent.

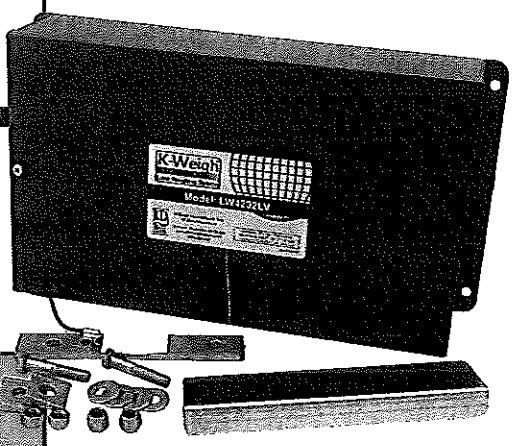
Configuration Examples		Output / Interface Signal (s)			Typical Accuracy / Repeatability	
K-Weigh™ Model#	Output Type	Hanging Weight	In-Car Load	No. of Sensors	+/- 5%	+/- 2%
LW4201	A	X		1	X	
LW4202	A	X		2		X
LW4201AC	A		X	1	X	
LW4202AC	A		X	2		X
LW4201S2	B	X		1	X	
LW4202S2	B	X		2		X
LW4201ACS2	B		X	1	X	
LW4202ACS2	B		X	2		X

Output Types: A = Variable Voltage B = Set-Point 2, 4, or 6 (specify)

Custom output and configurations available—OEM and Contractor models.

To Order Call 1-800-993-9399

COMPETITIVE ADVANTAGE



- ***Complete*** • ***Accurate*** • ***Reliable***
- ***Cost Effective*** • ***Peace-of-Mind***

What's the difference?
LOAD WEIGHING SYSTEM CHECKLIST

Feature	K-Tech K-Weigh™	Other *
Mounts to top-of-car cross-head - easy access	Yes	
Works on isolated elevator cars	Yes	
Works on non-isolated elevator cars	Yes	
Single or dual sensor systems	Yes	
Analog signal (variable voltage) models	Yes	
Set-Point signals (N/O, N/C dry contact) models	Yes	
In-car load only signals available (auto-comp)	Yes	
Hanging weight signals available	Yes	
Auto-Zero reset automatically maintains system settings	Yes	
Comes complete with all parts needed for installation	Yes	
Works independently of moving elevator parts that can affect accuracy and wear over-time (i.e., isolation pads, ropes – premature replacement)	Yes	
Selected by several manufacturers as part of their controller package	Yes	
Backed by 25+ years of in-house experience in engineering, production and support	Yes	
Opportunity to work with product designer and manufacturer	Yes	
CSA & UL Approvals (ETL)	Yes	

*"Other" systems features may vary and can include proximity sensor, rope tension sensor, load cells, etc. Check with the manufacturer.

What's the best value?

All materials + All labor = Total Long-Term Cost of a load weighing system.

Materials and labor include not only the initial purchase of a load weighing system, but also any parts needed to complete the installation of that system. In addition, there are other elevator components that must be present, and in excellent condition for the overall accuracy and performance of some load weighing systems. Long-term maintenance and adjustments, where needed*, also add to the long-term costs.

***K-Weigh™** auto-zero reset automatically maintains system settings.

FREIGHT CAR OVERLOAD PROTECTION

K-Weigh™ Freight Car Load Weighing Package

Model: LW4201S4-F

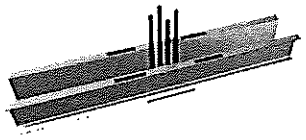
Includes: (4) N/O, N/C set-point system, Lock-Out Relay and Alarm Bell

See Accessories (Page 13) for optional Load Limit Indicator Lights—not included.

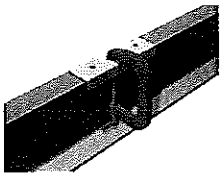
Load weighing systems protect freight elevators from costly equipment damage caused by overloading and helps provide worker safety from slipping or falling elevators. K-Tech's K-Weigh™ provides constant monitoring of the elevator load. Should an overload condition occur, it can sound an alarm, provide a visual load indicator and/or keep the elevator from moving until the weight is reduced to a predetermined "safe load".

Visit www.KTechOnLine.com

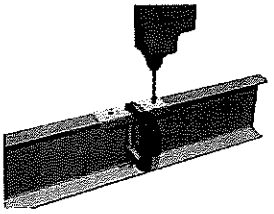
LOAD WEIGHING—EASY INSTALLATION STEPS



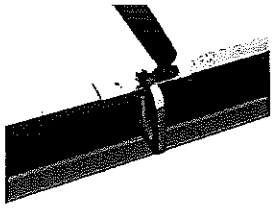
(1) Identify the proper mounting location for one or two sensors



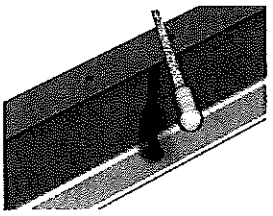
(2) Clamp drill guide on C channel



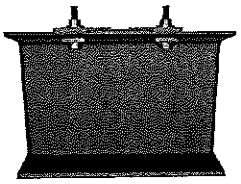
(3) Drill two 3/8" dia. holes



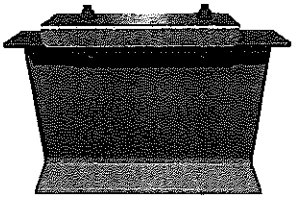
(4) Clean up all debris



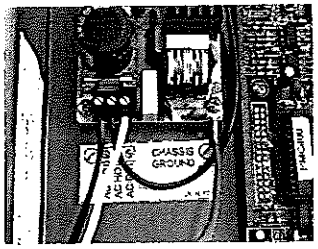
(5) File edges off drilled holes



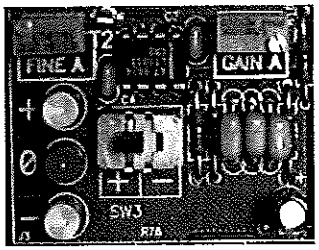
(6) Install sensor using the hardware provided



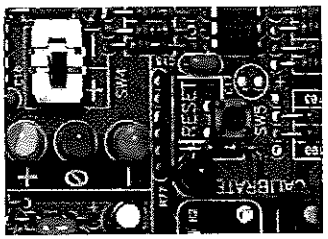
(7) Install sensor cover (drill guide) with bolts



(8) Mount enclosure
(9) Connect AC



(10) Adjust amplifier Zero and Gain



Periodically reset amplifier Zero—automatic or manual

SPECIFICATIONS

Enclosure:	Steel NEMA Type 1 (standard) 8.25" H x 14" W x 3" D (21 cm x 36 cm x 7.6 cm); 15.5" W (39 cm) with flange
Sensors:	1" H x 7" W x 1/4" D (26 mm x 178 mm x 6.4 mm) bar; 8 foot (2.4 m) cable
Power Input:	100 to 240 VAC, 47—63 Hz; 0.6 A @ 115 VAC; 0.45 A @ 240 VAC
Output:	1 to 8.5 VDC (Standard Analog system) 0 to 4.95 VDC (Auto-Comp Analog system) NO/NC dry contacts (Set-Point system) Please call for other output options
Resolution:	< 50 lbs (<23 kg) or 2%
Repeatability:	+/- 2% (2 sensors), +/- 5% (1 sensor)
Temperature:	32 to 158°F (0 to 70° C)
Humidity:	20 to 85% non-condensing
Drift/°F:	0.3% of FS (typical, without Auto Reset)
Zero Reset:	< 1%
Correction:	+/- 40% offset (~ 4 VDC)
Input:	120 VAC ground (pull-down)

Automatic Cable Compensation ***(In car load)***

Input:	NC to ground signal with elevator door closed (NO with door open)

Set-Point Module

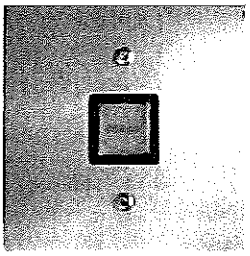
Adjustments:	0 to100% of maximum load
Output:	Two independent DPDT NO/NC contacts rated 10 A—28 VDC; 1/4 HP—120 VAC
Approvals:	ETL (UL & CSA) Safety Conforms to ASME Std. A17.5 Certified to CAN/CSA std. B44.1

LOAD WEIGHING ACCESSORIES

Load Limit Indicator

"OVERLOAD"

Plate: 5" H x 5" W
Box: 4.25" H x 4" W x 3.5" D
Power: 120 VAC

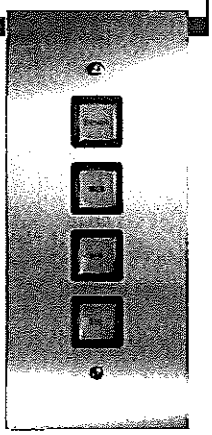


LW-LI1A w/buzzer

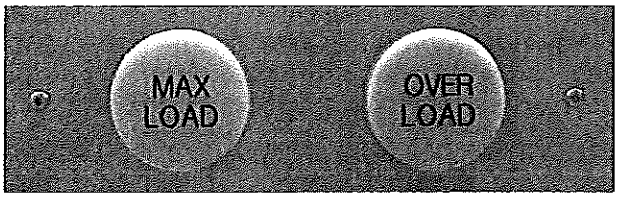
Load Limit Indicator

Incremental Indicators: 50%, 80%, 100%, Overload

Plate: 11.25" H x 5" W
Box: 9.25" H x 4" W X 3.5" D
Power: 120 VAC



LW-LI4A w/buzzer

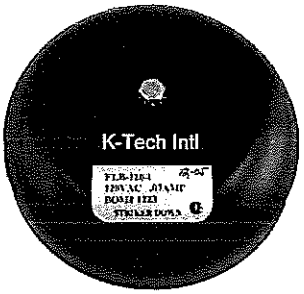


Load Limit Indicator

"MAX LOAD", "OVERLOAD"

Plate: 13" W x 3.5" H
Box: 11" W x 3.875" H x 3.5" D
Power: 120 VAC

LW-LI2

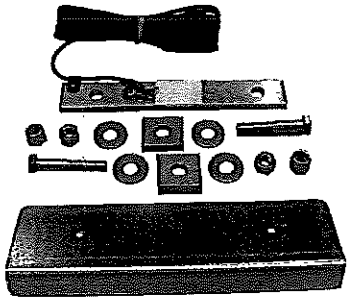


Alarm Bell 6"

Sound: 92db @ 10 ft
Size: 6" dia x 3" H
Power: 120 VAC

LW-AB

LOAD WEIGHING PARTS

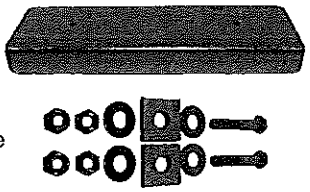


Sensor Kit

Includes: Sensor, Mounting Hardware and dual purpose Drill Template / Sensor Guard

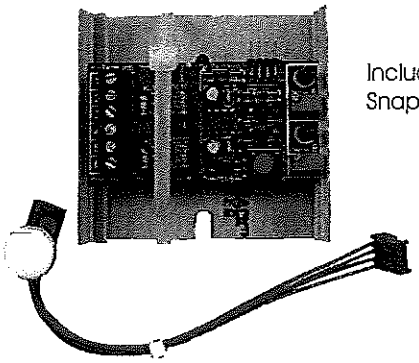
LW42SENKIT

Sensor Hardware Kit



Includes: Mounting Hardware and dual purpose Drill Template / Sensor Guard

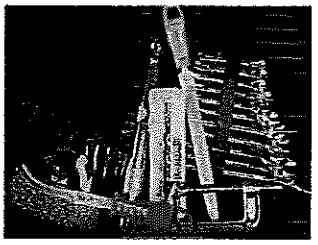
LW-SENGDKIT



Set-Point Module (2 outputs)

Includes: Set-Point Module, Snap-Track and Wire Harness

LW-SPMODKIT



Sensor Installation Tool Kit

Kit Includes: Torque Wrench, Deep Socket Set, Wrench Set, C-Clamp, File, Drill Bit, Tape Measure, Wire Brush, Tool Box and Sensor Install Instructions

LW-SITK

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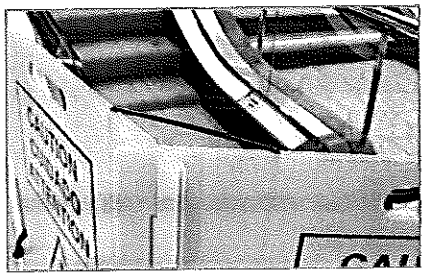
MAINTENANCE BARRICADES

Interlocking 42 Inch High

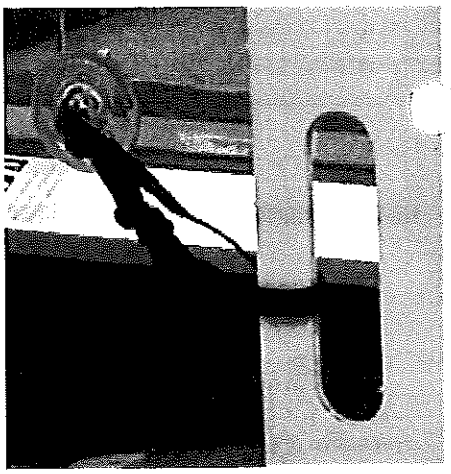
Bear-i-cade™ light weight (3.5 Lbs.) panels protect pedestrians from hazardous areas. They are made of rugged, 7/16" thick corrugated polypropylene. The ANSI approved bright yellow color and black graphics are easily seen and "CAUTION" is repeated in Spanish and French. The flat bottom edge keeps tools and hardware from straying out of the work area. The 36 in. wide panels can be interlocked to form any width or shape. The 42 in. height, locks and anchors are required by the 2005 Field Employees Safety Handbook.



BI1097L Barricade Lock

Bear-i-cade™ Locks keep the barricade panels rigid. The U-shaped lock slides easily into the barricade panel corrugations where the special vinyl coating provides a snug, non-slip fit. When not in use, the locks are stored in the top of the barricade panels. Bear-i-cade™ Anchor Kit securely attaches the safety barricade to escalator balustrades, handrails, elevator entrance frames or any other smooth surface. Bear-i-cade™ Weight Sets easily slip into one panel or can be spread out across multiple panels.. Each set contains four, 1/4 lb weights. *Custom printing is available, call for details.*

BI42-4 4 Panel Set w/2 Anchors & 3 Locks



BI325AK Barricade Anchoring Kit

BI42	Single Panel 42" H x 36" W x 7/16" T
BI42-B	Blank Single Panel 42" H x 36" W x 7/16" T
BI42-3K	3 Panel Set w/2 Anchors & 2 Locks
BI42-4K	4 Panel Set w/2 Anchors & 3 Locks
BI1097L	Barricade Lock
BI325AK	Barricade Anchoring Kit
BI1234W	Barricade Weight Set (1 lb per set)

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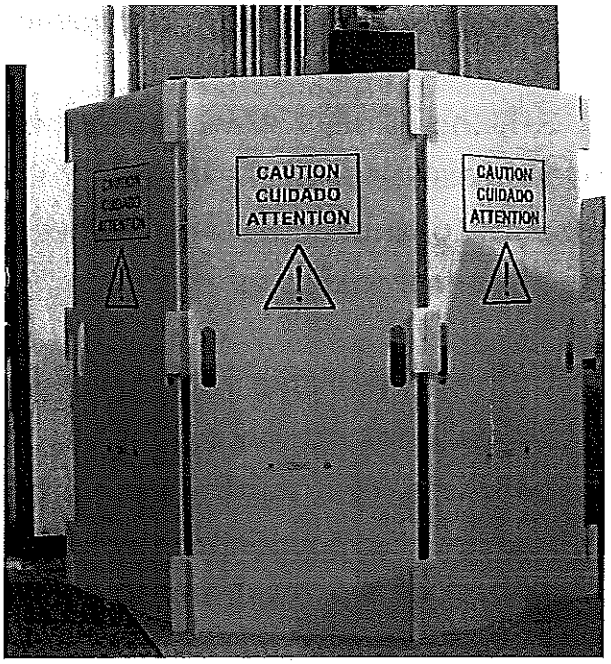
MAINTENANCE BARRICADES

72 Inch High



BI72 Single Panel 72" H x 36" W x 7/16" T

Light Weight Folding

BF42 Dual Panel, Folding 42" H x 72" W x 3/16" T

Helpful Information
Helpful information is at your fingertips twenty-four hours a day. K-Tech's web site contains everything you need from sales literature to technical support. New products and updates are displayed here first.

Sales Sheets
All K-Tech products have sales sheets downloadable in PDF form from the web site. No prices are shown so you can feel comfortable e-mailing a link to your customer. Or print out information in color for that last minute sales presentation.

E-mail Requests
Send in a catalog request, spec out a K-Weigh Intelligent Load Weighing System right from your desk, or just ask a question; you can do it all through KTechOnline.com. Send your request anytime day or night and receive an answer the next morning.

Programming and Install Instructions
Now you or your mechanics can download programming instructions for all K-Tech products 24/7. Along with the instructions get technical tips and specifications to ensure the job is done right the first time.

Technical Support
If your questions cannot be answered using the comprehensive and constantly updated user manuals, you can go to our web site that is open 24/7. Also available to our customers is toll free telephone support during normal business hours: 8 AM to 4:30 PM Eastern time, Mon. - Fri.

Warranty
K-Tech International, Inc. warrants equipment of its own manufacture to be free from defects in material and workmanship for a period of one year from date of shipment from factory or appointed distributor to original user. For more information see our Terms and Conditions page at www.KTechOnline.com

Repair
K-Tech maintains a quick turn-around repair department. Please call for a Return Authorization number when repairs are required.

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K-Tech provides replacement parts where applicable for all its products. Remember that Nickel-Cadmium batteries and other similar products should be properly disposed of.

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K-Tech offers complete design engineering services—from development of an initial concept to the finalization of the complete manufactured product.

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Our most valuable quality is the knowledge and dedication of our skilled staff. Our goal on every project is to deliver a product that meets your expectations for performance, quality and value.

Contact us with your project... we'll get right on it!

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NAEC

56 Ella Grasso Avenue
Torrington, CT 06790

Your Distributor:

K-Tech International

Fax Cover Page

To:	Ray / Jersey Elevator
Fax number:	+1 (732) 290-2924
From:	Chris Zarzycki
Fax number:	(860) 489-4399
Business phone:	800-993-9399 x 132
Date & Time:	03/20/2003 9:49:40 AM
Pages sent:	6
Re:	Programming instructions for all phones

56 Ella Grasso Ave. Torrington CT 06790

K-Tech Emergency Elevator Phones -Quick Troubleshooting Guide

Information to be recorded for use by K-Tech Tech Support:

1. Job Site name or Address _____
2. Model of Phone(s) _____
3. Serial Numbers of Phone (s) 1._____|2._____|3._____|4._____|

A. Phone Will not Activate - Phone line Testing: (Central Office line)

1. Set your voltmeter for DC volts and measure across tip and ring with phone hooked up. Voltage _____
2. If under 48 volts is this a PBX system? If so GOTO I ,
3. If under 48 volts, disconnect phone line from phone, test line only. If voltage stays the same keep checking phone line back to phone company connection. If phone line is under 48 volts at this point, then there is either another phone or device on the line or there is a problem with the line
4. ET501 Phones check condition of 9 Volt Battery
5. ET901 – Check for 11 volt AC output from transformer

B. No Dial tone:

1. Activate phone – do you hear Dialing tones after you hear dial tone? Yes, Go To D
2. Is phone line a ring down line? A ring down line might not have dial tone. A handset phone hooked up to this line will connect without dialing

C. Phone Gets Dial Tone but does not dial:

1. ET201 Series phones before S/N 207200 and ET701 dialers before S/N 78000 have a 3 volt lithium battery. If this battery is bad the phone will activate and stay at dial tone.
2. ET 401 and ET901. Press *3 and then 1 to check phone number in location 1 (see programming instructions). If no number stored, reenter phone number.

D. Phone Dials wrong number:

1. Confirm number with cell phone or other phone.
2. Check to see if you have to dial 9, 1 or area code
3. Confirm number stored in phone is correct (see programming instructions)
4. Eliminate the possibility of second autodialer

E. Phone dials and rapidly hangs up:

1. Check programming on ET401 and ET901 Phones. Make sure a phone number is stored in location #1
2. Measure voltage across tip and ring when phone is activated. If over 25 volts call for assistance.

F. Operator cannot hear elevator

1. Check microphone – make sure plugged in to proper plug and hole for mike is not blocked
2. Test microphone on ET401 and 901 try to record a location message – (see instructions)
3. Confirm Message erased if not using location message (ET401 and ET901 only – see instructions)
4. Confirm volume control is not turned to full volume- set about 80% full volume.

G: Elevator can not hear operator

1. Make sure speaker plugged into proper plug
2. If you can hear dial tone, speaker is working, if not ohm test speaker at connector. Should be 8, 25 or 45 ohm.
3. Increase volume control, do not set more than 90% of full volume.
4. AC Inductance will lower volume.

H. LED does not light up

1. Wrong LED installed
2. Do not use incandescent bulbs
3. Polarity reversed.

I. PBX System

1. A PBX system will usually have a voltage of 24 , 33 or 48 volts.
2. There is usually no CPC signal so the phone will only shut off by the timer function.
3. The phone number dialing out will usually begin with a "9" "*".
4. If phone will dial but not maintain connection, check line voltage with phone off and with phone activated. Call K-Tech for assistance.
5. ET901 series needs 2 numbers in dialing sequence. When calling operator (0) program "0", "0".

J. Ringdown line

1. This line does not require a dialer. When the phone is activated the phone is immediately connected to the other party.
2. There may or may not be a dial tone
3. There may or may not be a ring signal
4. There may not be a CPC signal so timer shutoff may be necessary.
5. Most advanced phone features are not available on a ringdown line.

Quick Programming Guide - Main Phone Numbers

1. ET201 S/N 20001 – 24606
2. ET201 S/N 24700-207188
3. ET201 S/N 207200 – Current
4. ET401 S/N 401000 - Current
5. ET501 Not programmable – see ET701 dialer
6. ET901 S/N 501000 - Current
7. ET701 Follow instructions inside housing

Phone number programming:

Most local calls just dial 7 digit number
Example 876-8987

Long distance may require 1 before the number:
Example 718-646-4523 or 1-718-646-4523

Most PBX systems require you to dial "9" before hte number and you may need a pause:
Example 9 * 1-718-646-4523

For internal PBX extensions you just need to program the extension number
Example 438

Note – ET901 and ET401 must be programmed with 2 digits, for operator enter 0, 0.

Centrex numbers are usually 4 or 5 digit and do not need a 9 or 1

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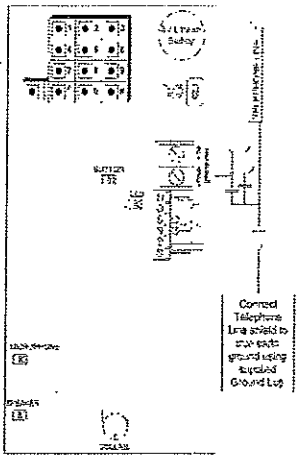
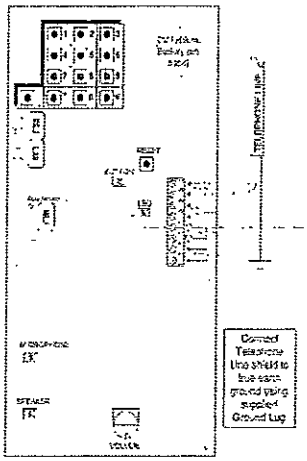
S/N 20001 – 24606 (Remember to check 3 V battery)



Phone HAS to be hooked up to line to be programmed

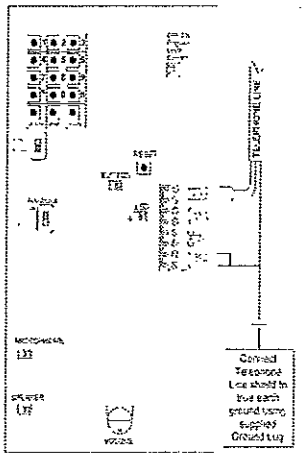
Set switch to pulse or tone as required by phone service (usually tone)
Phone hooked up to phone line
Press Activation Button – get dial tone
Hit first number of phone number – wait 5 seconds – enter rest of number
Will call during program – have party hang up and test.

S/N 24700-27188 (Remember to check 3 V battery)



Phone does NOT have to be hooked up to line
Memory Backup switch to "ON"
Program/Online switch to "PROGRAM"
Enter phone number using keypad
Place Program/Online switch back to "ONLINE"
Hook up to line and test

S/N 207200 – Current



Phone HAS to be hooked up to line to be programmed

Program/Online switch to "PROGRAM"
Push activating button (get dial tone)
Press STORE, then MEMORY, then 0
Enter phone number
Press STORE
Press RESET
Place Program/Online switch back to "ONLINE"
Test

Note: If dial tone drops during programming, start over and HOLD activation button.

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ET401 (Serial numbers beginning with 4)

Phone can be programmed through keypad or remotely
If using Keypad, battery must be hooked up.
(disconnect when transporting or storing –
you will not loose memory)

Feature List

1 - Voice Message #1
2 - Voice Message #2
3 – Phone Directory - Locations 1,2,3,4,5
4 – Timer minutes
5 – Outgoing number of rings
6 – Not used
7 – Enter programming
8 – ID number
9 – Security code

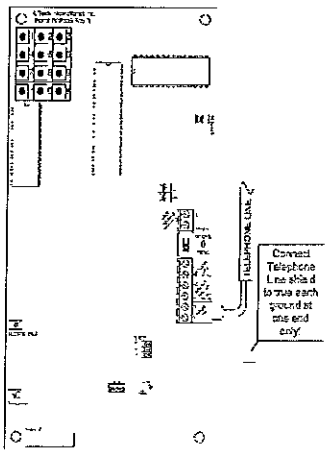
TO ENTER AND EXIT PROGRAMMING MODE:

Option 1: Keypad:

Move Program/Online Switch to PROGRAM
Wait 15 seconds or till program says "Program Complete"
Press *7
Enter security code [factory 1234]
Enter *, then press feature number (see list)
Follow the instructions for that feature
When done – press * then # to exit programming mode.

Option 2: Remote:

Call into phone – wait 10 seconds after pickup or when you can hear elevator.
Press *7
Enter security code [factory 1234]
Enter *, then press feature number (see list)
Follow the instructions for that feature
When done – press * then # to exit programming mode.



A. To change phone number:

ENTER PROGRAMMING MODE (SEE ABOVE)
Press *, then (Feature) 3, then press location number (start with 1)
Enter phone number, then press # (Listen for confirmation – repeat if necessary)
Press * then # to exit programming mode
Press *, then 3, then 1 to test

B. To change voice message

ENTER PROGRAMMING MODE (SEE ABOVE)
Press *, then (Feature) 1
Press # to start recording (you have 10 seconds)
Press * then # to exit programming mode
Press *, then 1 to test

C. To delete voice message

ENTER PROGRAMMING MODE (SEE ABOVE)
Press *, then (Feature) 1
DO NOTHING – Wait for timer to time out (12 seconds)
Press * then # to exit programming mode
Press *, then 1 to test

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ET901 (Serial numbers beginning with 5)

Feature List

1 - Voice Message #1
2 - Voice Message #2
3 – Phone numbers 1,2,3,4,5
4 – Timer minutes
5 – Outgoing number of rings
6 – Incoming number of rings
7 – Enter programming
8 – ID number
9 – Security code

Phone can be programmed through keypad or remotely
If using Keypad, battery must be hooked up.
(disconnect when transporting or storing –
you will not loose memory)

To enter programming mode:

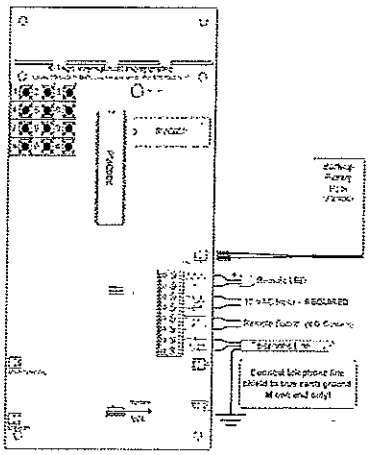
Option 1: Keypad:

Press *7
Enter security code [factory 1234]
Enter *, then press feature number (see list)
Follow the instructions for that feature

Option 2: Remote:

Call into phone
Press *7
Enter security code [factory 1234]
Enter *, then press feature number (see list)
Follow the instructions for that feature

When done with each item, phone will announce "Program Complete"



A. To change phone number:

ENTER PROGRAMMING MODE (SEE ABOVE)
Press *, then 3, then press location number (start with 1)
Enter phone number, then press # (Listen for confirmation – then press #)
Press *, then 3, then 1 to test

B. To change voice message

ENTER PROGRAMMING MODE (SEE ABOVE)
Press *, then 1
Press # to start recording (you have 16 seconds) (# to shorten message)
Press *, then 1 to test

C. To delete voice message

ENTER PROGRAMMING MODE (SEE ABOVE)
Press *, then 1
Press # and after beep press # again (you will not hear 2nd beep)
Wait till phone says "Program Complete"
Press *, then 1 to test, you should hear beep then silence.

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K-TECH

601 DIALER

Table of Contents

Product Description

Thank you for buying the QuickTouch II (tm) automatic line dialer. QuickTouch II provides automatic dialing of up to three phone numbers for any phone on its line. It dials the number when: the phone is taken off hook; when one key on the phone is pressed; or, when any two keys on the fourth row of the phone are pressed at the same time.

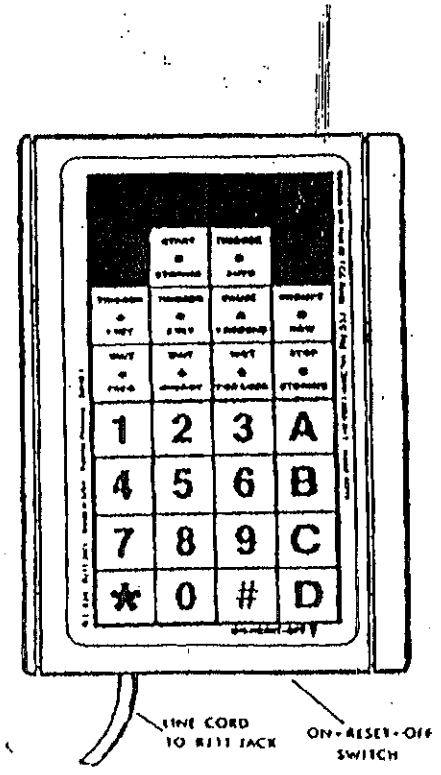
QuickTouch II stores up to 32 digits per phone number; both the normal DTMF Touch-Tone (R) digits and special fourth-column DTMF digits. Features include: three dialing speeds; audible beeps for programming and dialing; both 400 Hertz and energy dial tone detection; and a Wait-For-User feature that allow the caller to manually dial a phone number in the middle of an automatic dialing sequence.

Both the keypad and remote QuickTouch II models operate on line power with battery backup to retain memory. They can be installed on single- and multi-line phones, and have removable side panels so two or more units can be snapped together for easier installation.

Please take a few minutes to read this manual. There is a Quick Programming Guide so you can learn how to store and dial a phone number in just a matter of minutes. If you experience any problems, there is a Customer Service number you can call for assistance

Key and Switch Functions

The QuickTouch II keypad model contains 16 dialing keys (1-0, *, #, A-D) and 16 command keys that can be programmed into the dialing sequence.



Listed below is the key, its function, and the number of beep-tones (♪) you will hear when that key is pressed. During direct programming the keypad unit will play the beeps indicated. During remote programming, the keypad unit will play one high-low tone over the phone for each key pressed, while the remote unit (keypad or non-keypad) will respond by playing the beeps indicated.

Key	Function	Keypad/ Remote
TRIGGER SPEED FAST	Sets length of time before unit dials from 0.1 to 0.6 seconds, depending on the type of Trigger selected.	♪ ♪ ♪
TRIGGER SPEED SLOW	Sets length of time before unit dials from 1.1 to 4 seconds, depending on the type of Trigger selected.	♪ ♪ ♪
DIALING SPEED FAST	Sets dialing speed at twelve digits per second.	♪ ♪ ♪
DIALING SPEED SLOW	Sets dialing speed at five digits per second.	♪ ♪ ♪
FACTORY SET	Instructs unit to set Trigger and Dialing Speeds to medium (8 digits per second), On Line Beep to off.	♪ ♪ ♪
START STORING	Opens unit's memory to store dialing digits.	♪
TRIGGER AUTO	Instructs unit to dial after the phone is taken off hook.	♪

Key	Function	Keypad/ Remote
ON LINE BEEP	Instructs unit to play a beep when the phone is taken off hook, indicating QuickTouch II is on-line and ready to dial. Since it is triggered by very small amount of energy (noise), it may beep when incoming calls are answered.	♪ ♪ ♪
TRIGGER 1 KEY	Instructs unit to dial after the first digit in the phone number is manually dialed by holding the key down for about one second.	♪
TRIGGER 2 KEY	Instructs unit to dial after any two keys on the fourth row of the phone (*, 0, #) are pressed at the same time for about one second. This trigger does not work on all phones.	♪
PAUSE 1 SECOND	Inserts a one second pause in the dialing sequence each time this key is pressed.	♪
PROMPT NOW	Instructs unit to play two beeps after it has finished dialing.	♪
WAIT FREQ(UENCY)	Instructs unit to dial 0.5 second after it detects a 400 Hz. dial tone	♪

Key	Function	Keypad/ Remote
WAIT ENERGY	Instructs unit to dial after hearing a steady dial tone (detection time varies from 2.3 to 3.0 sec depending on dialing speed).	♪
WAIT FOR USER	Pauses to allow the user to manually dial a phone number in the middle of an automatic dialing sequence, then continues dialing.	♪
STOP STORING	Closes unit's memory after dialing digits are stored.	♪ ♪ ♪
1 - 0, *, #	Used to enter regular DTMF (Touch-Tone) digits.	♪
A - D	Used to enter fourth-column DTMF digits.	♪

Trigger Speed

QuickTouch II dials after the following length of time for each of its three triggers (times are in seconds). Times given for AUTO trigger are measured after dial tone occurs, which varies from 0.5 to 1 second, depending on the particular phone line.

Trigger Setting	Fast Speed	Medium Speed	Slow Speed
AUTO	0.1	3.0	4.0
1 KEY	0.6	0.8	1.1
2 KEY	0.6	0.8	1.1

Dialing Speed

Dialing Speed can be set to Fast or Slow. Medium speed is automatically selected with the Factory Set option. Dialing Speed also selects the length of time for the Wait Energy detector as shown.

Dialing Speed	Fast	Medium	Slow
Digits/sec	12.0	8.0	5.0
Wait Energy (sec)	2.3	2.6	3.0

NOTE Some telephone companies have long ring signals which may cause QuickTouch II to false trigger when Wait Energy is used in conjunction with fast dialing speed. If this occurs, use a medium or slow dialing speed to create a longer Wait Energy detection.

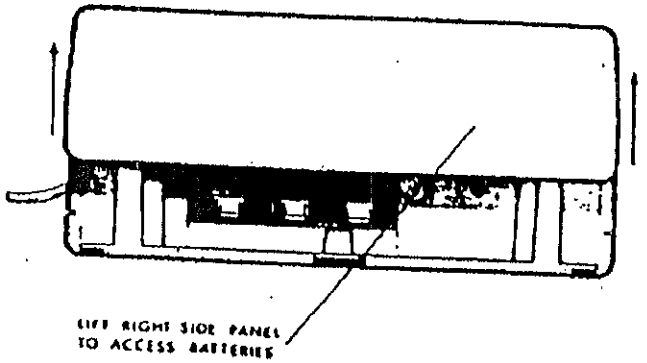
6

Installation

QuickTouch II has a five-foot line cord (hard-wired on the unit end) with modular plug that installs into any single-line RJ11 jack; either directly, or in tandem with a telephone using a T-jack adapter. Multi-line phones require their own particular adapter and should be installed by a professional.

Power/Batteries

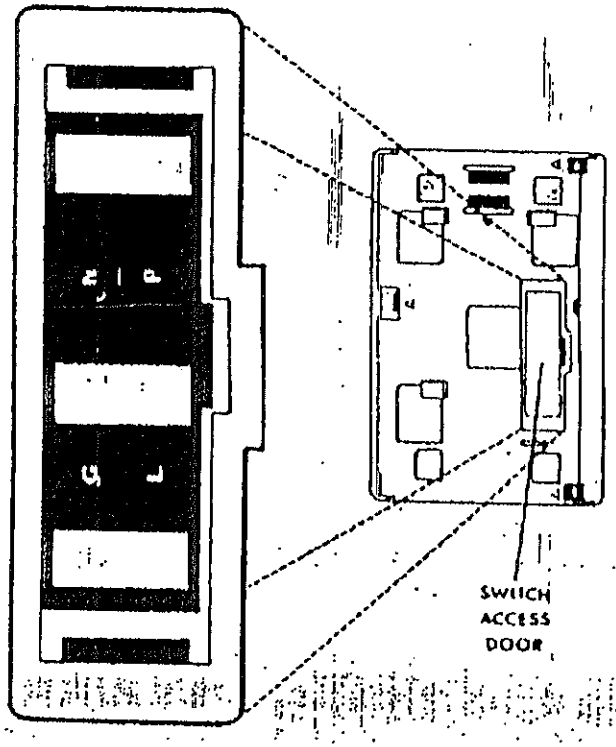
QuickTouch II operates on phone line power with memory backup via three 1.5VDC button batteries. Change batteries at least every two years using type A76, or equivalent. To retain memory, change batteries with the unit on-line and any phone on that line off-hook. If this is not possible, remove and replace the worn batteries one at a time. Exchange each battery within ten seconds to prevent memory loss.



7

Ground/Loop Start

To work with both single- and multi-line phones, QuickTouch II has a selectable Ground/Loop start switch. This switch is located behind the access door on underside of unit. After QuickTouch II is installed, set the Ground/Loop start switch to the proper position. If you are not sure what that position is, try using QuickTouch II in the L (loop) start position. If that does not work, move the switch to the G (ground) start position and try again.



SWITCH DETAIL
(UNDER DOOR)

Quick Programming Guide

With the batteries installed and the unit on- or off-line, the QuickTouch II keypad unit is programmed as follows:

1. Move the ON/OFF switch to RESET for one second, then move it to OFF.
2. Press 1, 4, 7, *. You will hear "beep, beep".
3. Press FACT SET. You will hear "beep..beep, beep".
4. Press START STORING. You will hear "beep".
5. Press the trigger desired (AUTO, 1-KEY, or 2-KEY). You will hear "beep".
6. Enter the number you want to store, plus any pauses and/or waits desired. You will hear a beep for each key pressed.
7. Press STOP STORING. You will hear "beep..beep, beep".
8. Move the ON/OFF switch to RESET for one second, then move it to ON.

For detailed information, including how to use dial tone detection with a long distance authorization code, refer to the example in the Direct Programming section.

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Programming

Quicktouch II is available with a keypad (model #2315) for both direct and remote programming, or without a keypad (model #2316) for remote programming only. It can store three different access numbers and codes (up to 32 digits each), one in each trigger. Each number or command uses one digit in QuickTouch II's memory with the exception of all waits, prompts, pause, and the digit 'D' which uses two digits.

Direct Programming

The QuickTouch II keypad unit provides an audible beep-tones each time a key is pressed (see **Key and Switch Functions** for details). Five beeps indicate a programming error or that its memory is full. If you make an error, press STOP STORING and start over from step 4 (START STORING).

1. Move the ON/OFF switch to the RESET position for one second, then to OFF. To protect memory, QuickTouch II automatically shuts-down one minute after the last key depression. It will play two beeps to indicate it has done so. If this occurs, simply move the switch back to RESET for one second and then back to OFF again.

2. Press 1, 4, 7, * in sequence. QuickTouch II is now activated and will beep twice to indicate it is ready. If it does not, repeat step 1 above.

3. Press FACTORY SET. QuickTouch II will beep three times to indicate it is ready. It is now set for the following: Trigger Speed medium, Dialing Speed medium, On Line Beep off.

   To change these settings, press TRIGGER SPEED FAST or TRIGGER SPEED SLOW, DIALING SPEED FAST or DIALING SPEED SLOW, or ON LINE BEEP, *after* pressing FACTORY SET.

4. Press START STORING to open QuickTouch II's memory.

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5. Press AUTO, 1 KEY, or 2 KEY for the type of trigger desired. If more than one trigger is desired, each must be individually programmed by repeating steps 4 through 8.

6. Enter the phone number you want to store including any Pauses or Waits. An initial wait for dial tone is assumed and does not have to be entered.

7. Press STOP STORING to close QuickTouch II's memory. It will beep once in response to the key, then twice to indicate that the number has been stored.

NOTE To avoid misdialing, it's a good idea to clear any unused triggers at this time by pressing START, TRIGGER (AUTO, 1-KEY or 2-KEY), STOP.

8. Move the switch to the ON position. QuickTouch II is now ready to use.

Example

To store a typical long distance network dial-up, do the following:

1. Move the ON/OFF switch to the RESET position for one second, then move it to OFF.

2. Press 1, 4, 7, * in sequence.

3. Press FACTORY SET. To change these settings, press TRIGGER SPEED FAST or TRIGGER SPEED SLOW, DIALING SPEED FAST or DIALING SPEED SLOW, or ON LINE BEEP, *after* pressing FACTORY SET.

4. Press START STORING.

5. Press AUTO, 1 KEY, or 2 KEY for the type of trigger desired. If more than one trigger is desired, each must be individually programmed by following steps 4 through 8.

6. Enter the local access number.

7a. Press WAIT ENERGY, or

7b. Press WAIT FREQUENCY if your long distance network has a 400 Hertz dial tone, or

7c. Press WAIT FOR USER if your long distance network requires that the authorization code be entered *after* you dial the long distance number.

8. Enter the long distance authorization code.

9. Press PROMPT NOW if you want QuickTouch II to play two beeps when it has finished dialing.

10. Press STOP STORING.

11. Move the ON/OFF to RESET for one second, then move it to ON.

QuickTouch II will now dial the local long distance network access number, wait for dial tone (or for the user, if so programmed), and then dial the authorization code.

Remote Programming

Programming a QuickTouch II remote unit with a keypad unit is done over the phone line with both units on-line and off-hook. There should be a person on each end of the line to operate the units during programming. Since QuickTouch II uses audible tones to verify its commands, you will hear tones from both the programming (keypad) unit and the remote unit over the phone (refer to Key and Switch Functions for details). *Remote programming will not change the keypad unit's memory in any way.*

If you are using phones that share the same line, you must first turn off dial tone. To do so, try dialing the first three digits of the telephone number you are calling from, plus 0048. For example: if your number is 555-1234, dial 555-0048. To turn dial tone back on, hold down the switch hook for one second. This technique does not work in all areas.

1. Move the ON/OFF switch on the programming (keypad) unit to the RESET position. Open the access door on the underside of this unit (refer to diagram on page 8) and move the two slide switches that are facing each other to the P (Program) position. Now, move the ON/OFF switch to OFF.

2. Move the ON/OFF switch on the remote unit to the RESET position for one second, then to OFF. Once programming has started, supress any outside noise (don't talk).

3. Press 2, 5, 8, 0 on the keypad unit in succession. After the last digit is pressed, you will hear four tones, and then two quick beeps in response. This indicates that the remote unit has been activated. To avoid error, allow at least one second between key presses while programming.

4. The remote unit can now be programmed directly from the key pad unit. Each time a key is pressed, you will hear a high-low tone from the programming unit, and one or more tones in response from the remote unit (refer to Key and Switch Functions for details). There may be very little change in volume between these tones, so listen carefully.

NOTE: If you do not hear the response tone(s) indicated, press the key again. If you still do not hear a response, and there is no line interference, repeat step 2 and start over.

5. After you have pressed the STOP STORING key, move the ON/OFF switch on the programming unit to the RESET position. Move the P switches back to the N (Normal) position. Then, move the ON/OFF switch to ON.

6. Move the ON/OFF switch on the remote unit to the RESET position for one second, then move it to ON. The remote unit is now programmed and ready to use.

K-Tech International, Inc.

56 Ella Grasso Avenue
Torrington, CT 06790 USA
Phone (860) 489-9399 Fax (860) 489-4399

FACIMILE MESSAGE

To: Ray
Jersey Elevator

Date: 1/24/97

From: Julie

FAX# 908/739-2251

Subject: Programming Instructions

This facsimile transmission includes this cover page and 2 additional page(s) and a short message as follows:

Please call w/questions

Programming For:

ET 201
ET1201

OLD VERSION
PRIOR TO 7/94
SN # 24606 ↓

4. Programming: ***(Read completely before beginning)***

A. A "live" phone line must be connected to the screw terminals marked "phone line".

B. Determine if the phone line is PULSE or TONE and put switch SW1 in correct position.

C. Determine the phone number to be programmed.
Note: If your phone system recognizes location codes, enter required "pauses" after the phone number (each pause is 3.5 seconds), and then enter code.

D. Program number as follows:
   1. Press the activating pushbutton on front of faceplate. As soon as you hear dial tone, use the internal keypad to enter the first digit only of the phone number to be programmed. Stop.
   2. Wait 5 seconds.
   3. Finish entering the rest of the phone number. If you make a mistake, disconnect one of the phone line wires, wait 5 seconds, reconnect the wire and try again.

E. The number is stored in memory. You will hear the second party ringing. When the call is answered, carry on a conversation while adjusting the volume control to a satisfactory level. (Putting the faceplate into the box will increase the volume.) The phone will automatically shut off within 2.5 minutes.

F. After the phone shuts off, verify programmed number by reactivating the phone. It should automatically dial and complete the call.

NOTE: IT MAY HELP TO DISCONNECT THE 2 PIN MICROPHONE CONNECTION WHILE PROGRAMMING TO AVOID FEED BACK FROM THE TONES.
* REMEMBER TO RECONNECT THE MICROPHONE.

ached to K-Phone. DO NOT program unit if it will be kept in storag not connected to phone line).

1. Determine number to be programmed.
   a. Determine if you need to dial a 9 to access an outside line.
   b. If your system is using a location display, you may program pauses between phone number and Emergency location #.

   (each pause is 4 seconds)
2. Place memory back up switch to ON position (this turns on 3V battery)
3. Place ON LINE/PROGRAM switch to PROGRAM position.
4. Enter desired telephone number using key pad.
5. Place ON-LINE/PROGRAM switch to ON-LINE position.
6. Leave memory back up switch ON. CAUTION: *If unit will not be connected to line for more than a week,leave this switch OFF and program unit at that time.*
7. Connect telephone line (if not done so already) and press activating push button.
8. You will hear the second party's phone ringing. When the call is answered, carry on a conversation while adjusting the volume control to a satisfactory level. (Putting the faceplate into the box will increase the volume.)
9. Have the second party press the pound key "#" on their phone -the LED indicator will flash. The flashing can be stopped if they press the "0" key. K-Phone will shut off automatically after the second party hangs up, or within 2.5 minutes.
10. After the phone shuts off, verify programmed number by reactivating the phone. It should automatically dial and complete the call.
11. Have the second party call back the K-Phone (after it has shut off) in order to check the AUTO-ANSWER feature.
12. Once system is tested and working, mount the faceplate back onto the rear enclosure and/or elevator panel with the vandal resistant screws.

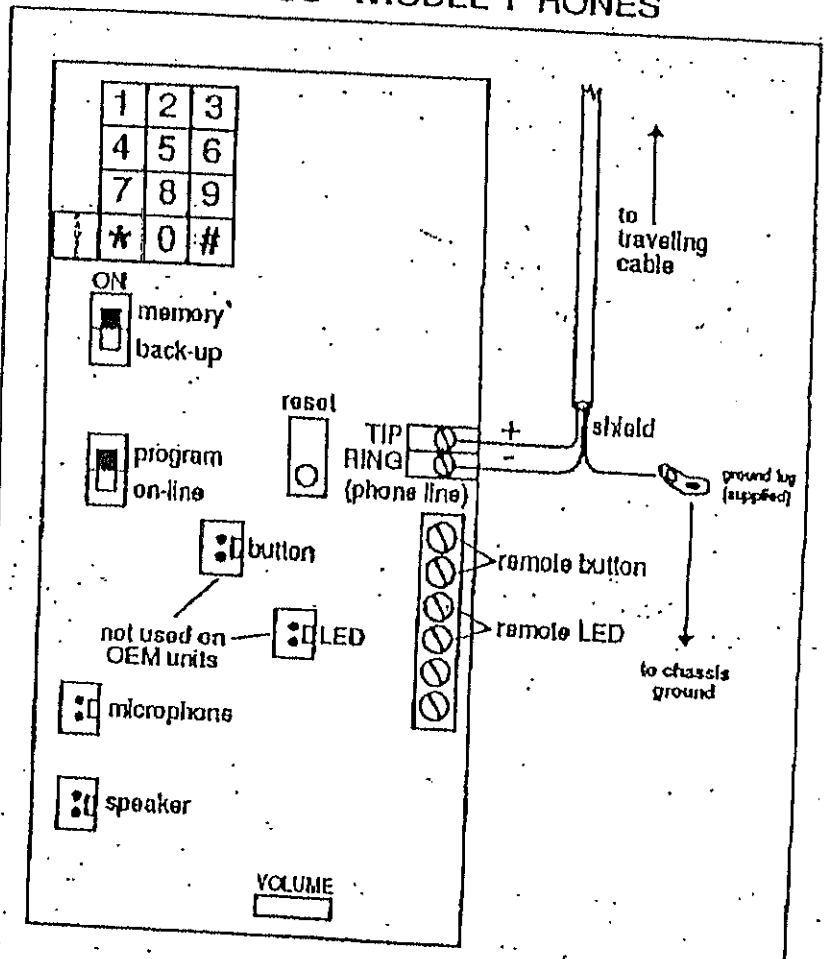
Caution: Make sure wires don't interfere with components and keypad when finalizing installation.

This equipment should be tested on a periodic basis.

We strongly recommend 20AWG shielded/twisted wire from the K-Phone, through the traveling cable, to the incoming telephone line termination. Make sure shield is connected to chassis ground at K-Phone end ONLY! This will minimize interference from AC, RF and controller signals.

IMPORTANT: maintain proper TIP/RING polarity throughout installation. Use a voltmeter to check line: Tip is (+) and Ring is (-).

INTERNAL CIRCUIT BOARD FOR ALL "*PLUS" MODEL PHONES



K-Tech International, Inc.

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E-Mail : sales@ktechonline.com

Fax Cover Sheet

Date : June 8, 1999

Pages : Cover plus 4

To : Ray Pichler

Company : Jersey Elevator Keyport, NJ

Fax Number : 732-739-2251

Phone Number: 732-739-2265 Ext.

From : Chris Zarzycki/Customer Service

Subject : **Phone troubleshooting**

( ) Important - please hand deliver! Thank you.

Ray,

Since you are taking over a job, here is some information to help the technician troubleshoot the phones if needed.

QS ETH '11

K-Tech Emergency Elevator Phones Quick Service Guide

The following information will help us promptly and efficiently handle your technical call:

- ❑ Job Site location (street address and building name)
- ❑ Model(s) at site
- ❑ Serial number of unit in question and dialer if separate unit
- ❑ Line voltage at phone (and dialer) and open circuit voltage
- ❑ Battery voltage of units
- ❑ Any recent changes to phone service or wiring
- ❑ Number the phone is dialing and the number of the phone line itself

Model Specific Troubleshooting:

ET501 and Dialers – Most problems are caused by low battery voltage.
Remember there are batteries in both the phone and the dialer.
These phones are polarity sensitive – so mark all wires prior to removal! If any doubt, confirm polarity with a voltmeter.
The battery in the phone is a 9v (6V min under load) Nickel Cadmium rechargeable battery. The voltage at the phone must be 42V + in order to keep the battery charged. A 9V alkaline battery can be used for testing only! Damage will occur if left in the phone.
The battery in the dialer is usually a 3v (2.7v minimum) lithium (solder in) battery.

ET201 – Most problems are caused by low battery voltage, which causes the phone dialer to lose memory. The 3v (2.7 min) battery is either solder in or replaceable. K-Tech can convert a solder in style to a replaceable style. We can also perform any applicable board updates at that time.

ET901 – Most problems are programming related. If a multiple phone installation, program ID code prior to phone installation.

General Phone Installation Instructions:

- ✓ K-Tech recommends 20 AWG shielded twisted pair wire with the shielding continuous from the phone to the input line for all phones.
- ✓ Shield should be grounded at phone end only to a proper earth ground.
- ✓ Route wiring away from controllers and other AC or RF sources.
- ✓ Do not wrap excess wire around conduit or other electrical source.

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Updated 03/24/99

DRAFT

ET 501A FAQ

Q. The phone will not dial out.

A. Most likely the battery has gone bad. However it could be a problem with the dialer. Early phones had a signal generator (1500 Hz) which if not in tune will cause the dialer not to recognize the phone.

Q. I am getting false activation on my phone. I have grounded the shield for the twisted pairs to the phone.

A. The shield for the twisted pair should be grounded to the elevator not the phone. The ground connection on the phone should then go to this ground. Only ground the shielded pair at the elevator. Also the dialer should not be attached to the controller. It should be in a separate area.

Q. When I hook up the phone it does not work properly and I measure a significant voltage drop on the line.

A. If you have 48 volts and it drops down more than a volt or two when you hook up the phone, then check the following:

If between 30 - 48
1. Reverse polarity,
2. Additional devices on line (fax machine etc.),
3. Problem with a wiring splice (connection),
4. Problems with phone line itself.

If between 15 - 30
1. Problem with phone constantly activating.
   a. Check remote button and wiring for shorts.
   b. Problem with phone board.
2. Problem with phone line itself.

The easiest thing to try is to just switch the wires at the phone, regardless of color coding or meter reading and see what happens.

Q. How often should I replace the battery?

A. We recommend 15 – 18 months, however battery life may vary. You should also check the charging voltage of the phone. With a line voltage of at lease 42VDC, you should see about 14 volts across the battery terminals with the battery disconnected.

Q. The phones worked when they were installed, however, now the batteries keep going dead. We are using another manufacturer's dialer.

A. The K-Tech dialer is designed to pass full voltage to the phones. Some of our competitors dialer have a voltage drop to the phones. Disconnect everything. Measure the line voltage coming in. It should be 48 V. Now hook up the dialer only and measure the voltage on the phone side of the dialer. It should be 48V +/- 1 volt. If it is less than this, the phones will not see enough voltage to charge the batteries. Your options are to purchase our dialer, or buy AC power boosters for the phones.

Q. On a multiple phone installation, what is the quickest way to determine if the problem is with the phone, line or battery?

A. The easiest way is to isolate the problem.

If any of the following are not okay – stop and call K-Tech.

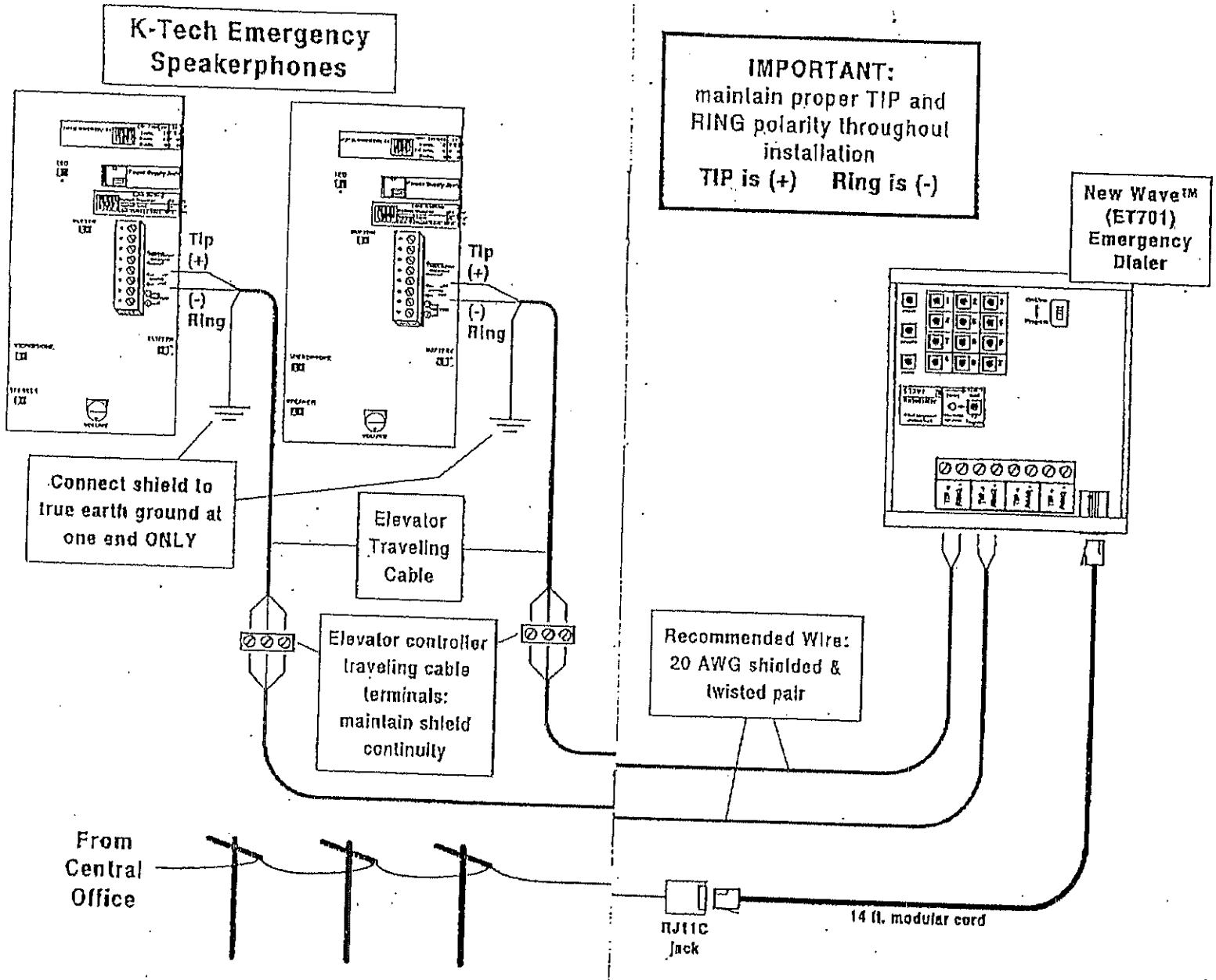
1.Disconnect all phones, (marking the wires), except for one.
2. Disconnect the battery on the hooked up phone.
3. Check line voltage at the phone, it should be 42 + volts.
4. Check the voltage across the battery tabs, it should be 12 V +
5. Check battery voltage, it should be 8.5 V +
6. Hook up the battery, line voltage should stay 42V +
7. Activate phone, battery voltage should stay above 6V
8. You should hear a dial tone and the phone should start dialing.

Leaving the phone hooked up, now hook the second one up and go back to step 1 to test the second phone.

Note: for testing, a standard 9V alkaline battery can be used <u>temporarily!</u>

Q. I have to hold the button in for the phone to stay on.

A. It is possible that the activation chip has been damaged. This can happen from too high or too low a line voltage. Often power surges or lightning strikes might cause this. It is rare, but careless handling of the board in high static conditions may also cause this problem. Of course first check for regular problems like low line voltage and/or a bad battery.



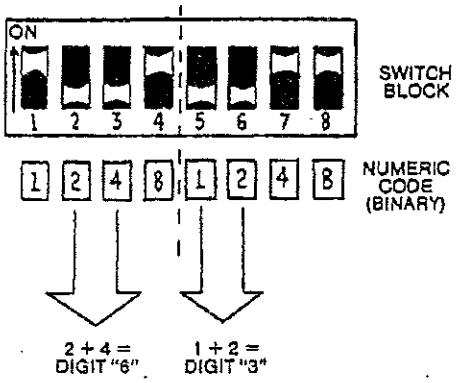
4/8

501 DIALER PCB - ET501D
P/N 412005-001 Rev B

K-TECH

ET-501D Pulse Dialer Programming Instructions

Program switches starting with SW1 (1-4) for first digit, (5-8) for second digit and alternate through towards SW6 until desired phone number is programmed. Up to 12 digits can be programmed.



Digit Desired	Switch Number In Off (DOWN) Position	
	Left Side	Right Side
1	1	5
2	2	6
3	1 & 2	5 & 6
4	3	7
5	1 & 3	5 & 7
6	2 & 3	6 & 7
7	1, 2, & 3	5, 6, & 7
8	4	8
9	1 & 4	5 & 8
0	2 & 4	6 & 8
Blank	All ON	All ON
Pause	1, 2, & 4	5, 6, & 8

K-TECH INTERNATIONAL, INC.

**** WARNING! ****

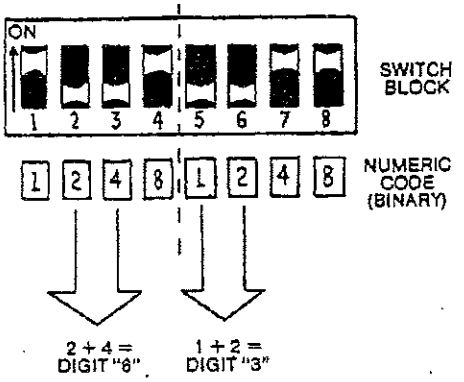
Do not mount near AC noise source such as controllers, motors, generators, etc.

501 DIALER PCB - ET501D
P/N 412005-001 Rev B

K-TECH

ET-501D Pulse Dialer Programming Instructions

Program switches starting with SW1 (1-4) for first digit, (5-8) for second digit and alternate through towards SW6 until desired phone number is programmed. Up to 12 digits can be programmed.



Digit Desired	Switch Number In Off (DOWN) Position	
	Left Side	Right Side
1	1	5
2	2	6
3	1 & 2	5 & 6
4	3	7
5	1 & 3	5 & 7
6	2 & 3	6 & 7
7	1, 2, & 3	5, 6, & 7
8	4	8
9	1 & 4	5 & 8
0	2 & 4	6 & 8
Blank	All ON	All ON
Pause	1, 2, & 4	5, 6, & 8

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