# VIKING ©

# Up to Eight Emergency Phones
# Can Share One Telephone Line
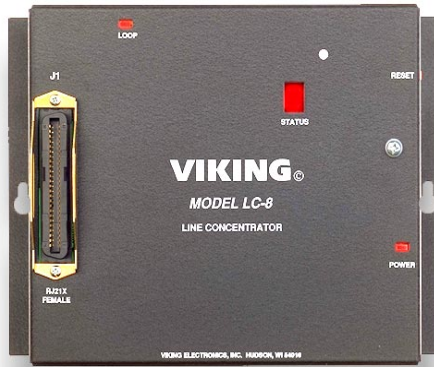


The **LC-8** Line Concentrator eliminates the monthly charges for dedicated phone lines to each elevator cab in an office, college, hotel, hospital, etc. A call initiated by any emergency phone is sent to the C.O. line. Subsequent calls activate call waiting tones to alert the emergency personnel that another phone has gone off-hook.

All inbound calls are answered by the **LC-8**. The emergency personnel then dials a Touch Tone command to connect to one of eight phones.

On both inbound and outbound calls, the emergency personnel can redirect the call to any of the other phones without hanging up. The **LC-8** is compatible with all **Viking** emergency elevator phones, standard phones, modems and credit card readers.

## *http://www.VikingElectronics.com*
## *E-mail...Sales@VikingElectronics.com*

## Features

- Automatic answering of inbound calls

- Connects up to (8) emergency phones

- Touch Tone transferring

- Fire floor phone connection

- Built in talk battery for fire floor phone

- Call waiting notice

- Paging feature

- Fully functional battery backup

- Non-volatile E2 memory for all programmable features

## Applications

**Sharing one line with up to (8):**

- Elevator phones

- Emergency phones

- Modems

- Credit card readers

- Standard telephones

## *Sales...(715) 386 - 8861*
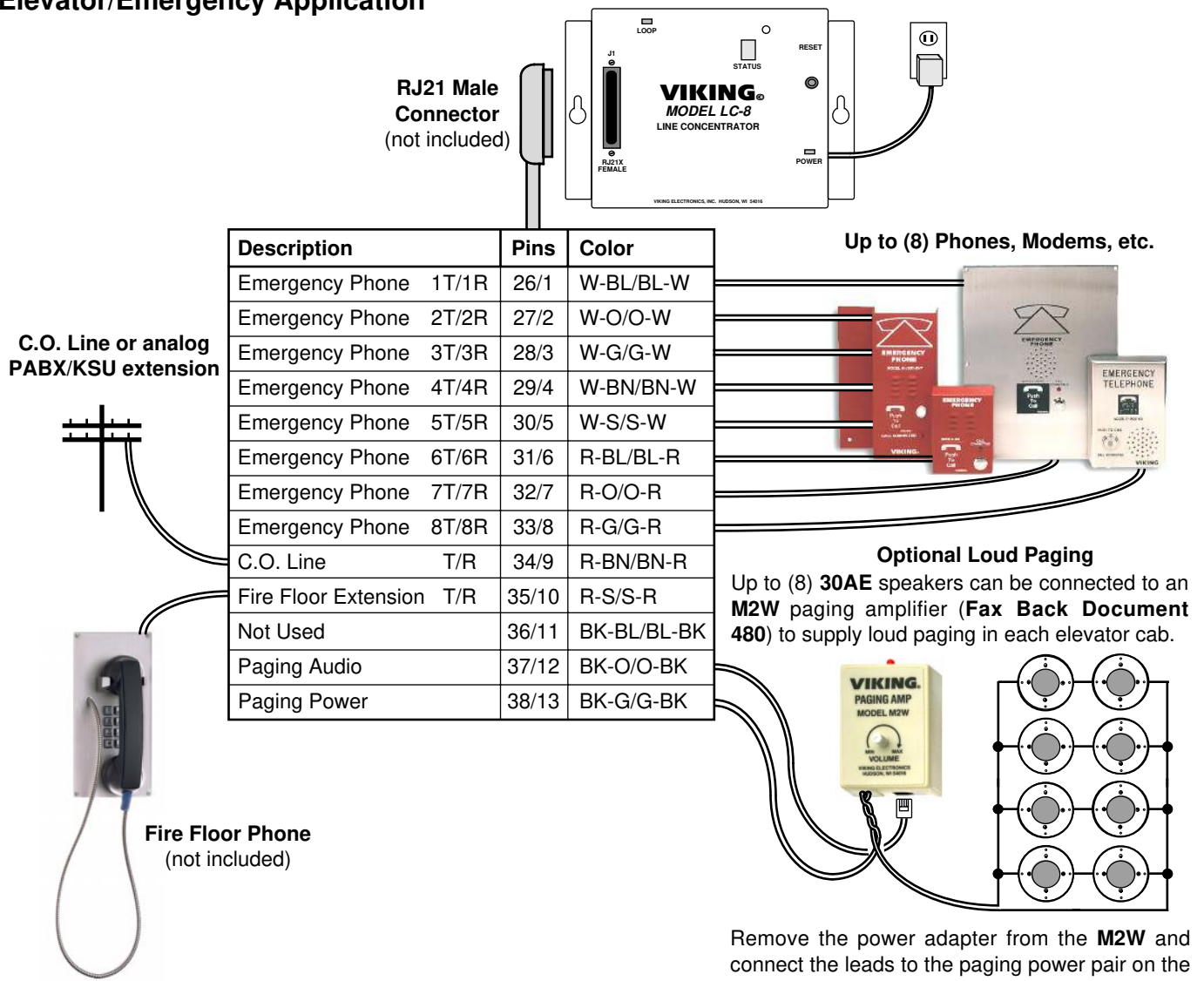
## Specifications

**Power:** 120V AC/13.8V AC 1.25A UL listed adapter provided
**Dimensions:** 210mm x 159mm x 44mm (8.25" x 6.25" x 1.75")
**Shipping Weight**: 1.8 Kg (4 lbs)
**Environmental:** 0°C to 32°C (32°F to 90°F) with 5% to 95% non-condensing humidity
**Connections:** (1) RJ21
**Battery Backup:** 4 hours

## *Made in the U.S.A.*

## A. Elevator/Emergency Application

**RJ21 Male Connector** (not included)

**C.O. Line or analog PABX/KSU extension**

**Up to (8) Phones, Modems, etc.**

| Description | | Pins | Color |
|---|---|---|---|
| Emergency Phone | 1T/1R | 26/1 | W-BL/BL-W |
| Emergency Phone | 2T/2R | 27/2 | W-O/O-W |
| Emergency Phone | 3T/3R | 28/3 | W-G/G-W |
| Emergency Phone | 4T/4R | 29/4 | W-BN/BN-W |
| Emergency Phone | 5T/5R | 30/5 | W-S/S-W |
| Emergency Phone | 6T/6R | 31/6 | R-BL/BL-R |
| Emergency Phone | 7T/7R | 32/7 | R-O/O-R |
| Emergency Phone | 8T/8R | 33/8 | R-G/G-R |
| C.O. Line | T/R | 34/9 | R-BN/BN-R |
| Fire Floor Extension | T/R | 35/10 | R-S/S-R |
| Not Used | | 36/11 | BK-BL/BL-BK |
| Paging Audio | | 37/12 | BK-O/O-BK |
| Paging Power | | 38/13 | BK-G/G-BK |

**Optional Loud Paging**

Up to (8) **30AE** speakers can be connected to an **M2W** paging amplifier (**Fax Back Document 480**) to supply loud paging in each elevator cab.

**Fire Floor Phone** (not included)

Remove the power adapter from the **M2W** and connect the leads to the paging power pair on the **LC-8** as shown above.

## B. Modem Application

The **LC-8** can be used for up to eight modems to share one conditioned C.O. line for data transmissions. This gives multiple modems the high speed data transmission advantages of a conditioned line for the cost of only one conditioned line. For more information on this application, retrieve **Fax Back Document 820**.

**RJ21 Male Connector** (not included)

**Up to 8 Modems**
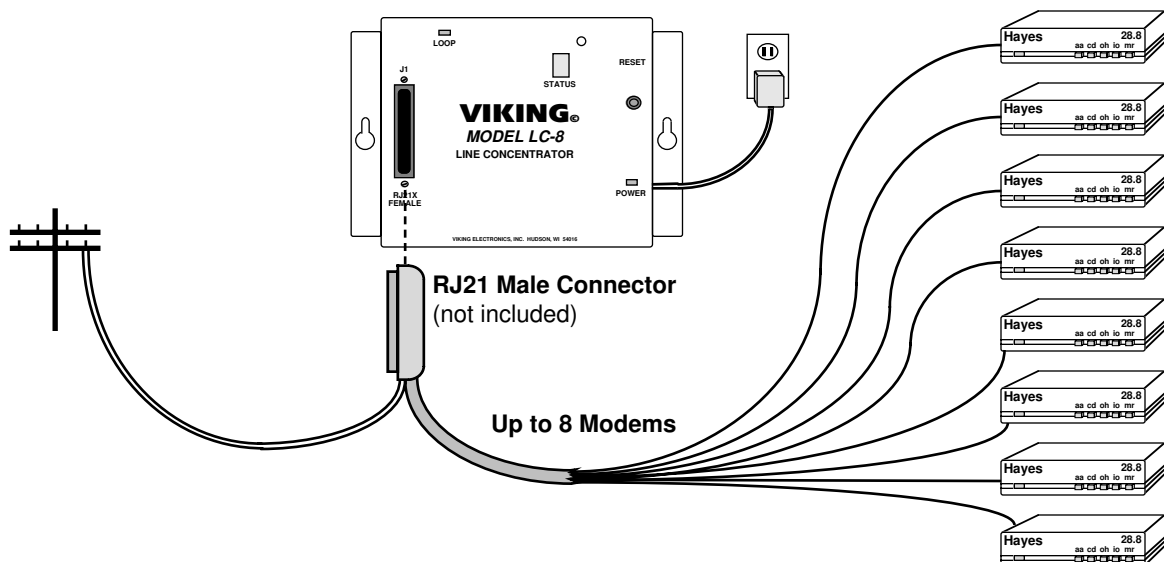
# Programming

## A. Accessing the Programming Mode

1. With a Touch Tone phone, either call into the **LC-8** or come off-hook on the fire floor extension.
2. The **LC-8** will answer with a double beep.
3. Enter your six digit security code. (factory set to **845464**)
4. A double beep indicates the **LC-8** is in the programming mode.

## B. To Program these Features

| | Enter Digits | | Memory Location |
|---|---|---|---|
| Fire floor extension has priority (factory setting) ............................................. | ✶1 | | |
| C.O. Line has priority .......................................................................................... | ✶2 | | |
| Halt and start command (three beeps) ................................................................ | ✶3 | | |
| No Touch Tone # required on transfers, page and call waiting (factory setting) ............ | ✶4 | | |
| Touch Tone # required on transfers, page and call waiting ........................................ | ✶5 | | |
| Enable call waiting (factory setting) ................................................................... | ✶6 | | |
| Disable call waiting .............................................................................................. | ✶7 | | |
| Enable retry feature (see section **J**) ................................................................. | ✶8 | | |
| Disable retry feature (factory setting) ................................................................ | ✶9 | | |
| Maximum ring count on transfers, two digits 01 - 99 (factory set to 10) ......................... | 2 digits | + | **#15** |
| Maximum call time in minutes, two digits 01 - 99 (factory set to 10) ............................ | 2 digits | + | **#17** |
| Maximum idle time in seconds, two digits 01 - 99 (factory set to 10) ........................... | 2 digits | + | **#18** |
| Security code, six digits 1 - 9 (factory set to 845464) ................................................ | 6 digits | + | **#19** |

## C. Security Code

This is the six digit number required to access the programming mode. It is recommended that you change the security code number from **845464** (**V-I-K-I-N-G**) to your own personal number. The security code must be six digits in length and can not contain a **0**, a ✶ or a **#**. The security code can only be set once and can never be changed. Once in programming, enter your new six digit security code, followed by **#19**.

## D. Priority

Priority can be assigned either to the fire floor phone or the C.O. line. In the event that both the C.O. line and the fire floor phone are accessed, the **LC-8** will connect the emergency phone to the assigned priority. The **LC-8** is factory set with the fire floor phone having priority.

## E. Transfer Protocol

The **LC-8** is factory set so that a single Touch Tone **1 - 8** is used for transfers. A single Touch Tone **9** is used for paging and a single Touch Tone **0** is used for call waiting. The **LC-8** can be programmed to require a Touch Tone **#** as a prefix for transfers, page and call waiting.

## F. Call Waiting

The **LC-8** is factory set with the call waiting feature enabled. If the **LC-8** is installed in a modem sharing application in which call waiting tones will cause data errors, the call waiting features should be disabled.

## G. Maximum Ring Count

When an emergency phone is selected, the **LC-8** is factory set to ring that phone up to ten times. The maximum ring count is programmable from 1 to 99 rings.

## H. Maximum Call Time (Prank)

The **LC-8** is factory set to limit the call time of any emergency phone to 10 minutes before it is considered a "prank" and is disconnected. The maximum call time is programmable from 1 to 99 minutes. For modem applications, the maximum call time can be eliminated by entering **#17** without the two digit call time.

## I. Maximum Idle Time

After answering the C.O. line, the **LC-8** is factory set to sit idle for 10 seconds waiting for a transfer request. If no transfer is requested, the **LC-8** will time out and hang up. The maximum idle time is programmable from 10 to 99 seconds.

## J. Retry Feature

The retry feature can reduce emergency phone communication time by calling just once to a remote location (with the **LC-8** installed) and collecting/transmitting data to multiple phones at that location. When a device on one of the eight extensions of the **LC-8** hangs up, the **LC-8** will hold the line (for the programmed idle time), give two beeps and watch for a Touch Tone transfer request. If a Touch Tone transfer is detected the **LC-8** will ring that device and allow communications. Enable the retry feature by entering ✶8 when in the programming mode. Increasing idle time to 30 seconds will allow more time for a transfer request.

# Operation

## A. Battery

The **LC-8** has an internal rechargeable battery to provide up to 4 hours of operation. To turn off the **LC-8** without discharging the battery, unplug the power adapter and press the reset button until the **POWER** LED goes out.

## B. Inbound Calls

The **LC-8** immediately answers the ringing C.O. line, gives two beeps indicating it has answered, then listens for Touch Tone commands. A single Touch Tone **1 - 8** will select that emergency phone. Strings of Touch Tones are not considered an emergency phone selection. Two seconds after a valid single Touch Tone is detected, the **LC-8** will ring that emergency phone. When the emergency phone answers, it will be connected to the C.O. line. The other 7 emergency phones will be handled with "call waiting" or "page" features.

## C. Fire Floor Extension

The fire floor extension provides balanced 32VDC talk battery to run a fire floor phone (any standard single line phone). When the **LC-8** detects a phone off-hook on the fire floor extension, the phone is treated like an inbound call as described above. With priority set to the fire floor extension (factory setting), inbound calls will not be answered when the fire floor phone is in use.

## D. Outbound Calls

Any one of the 8 emergency phones can make an outbound call. While one emergency phone is off-hook, the other seven phones, are handled with "call waiting" or "page" features. Outbound calls are connected to the C.O. line but may be interrupted by the fire floor phone if it has priority.

## E. Transfers

A transfer can be made on inbound or outbound calls on the C.O. line or when using the fire floor extension. A single Touch Tone 1 - 8 will transfer to the selected phone. Two seconds after a single valid Touch Tone is detected, the original emergency phone will be disconnected and the **LC-8** will ring the selected phone.

## F. Call Waiting

If one of the eight emergency phones is in use and a second emergency phone comes off-hook, the second phone will hear normal ring back tones and the emergency personnel talking to the first phone will hear a call waiting tone. The emergency personnel may then access the second emergency phone by entering a single Touch Tone "0". The first emergency phone will then be disconnected. The call waiting feature may be disabled to prevent data errors for modem applications.

## G. Page

If a call waiting beep is heard and the emergency personnel does not want to abandon the call in progress, the page feature may be used. A single Touch Tone "9" will allow the audio from the call in progress to be heard on any of the other seven phones which may be off-hook. This enables the emergency personnel to page a general announcement. Another Touch Tone "9" will cancel the page. The **LC-8** provides a very short beep every six seconds indicating you are in the page mode. Loud paging into each elevator is possible by installing a **Viking** model **M2W** paging amplifier and model **30AE** ceiling speakers.

## H. Prank Phone

An emergency phone that is left off-hook for more than 10 minutes (programmable from 1 - 99 minutes) is considered a prank phone. The **LC-8** will remove the prank phone from the line so that the remaining emergency phones can make calls. A prank phone is displayed as a flashing number (1 through 8) on the front of the **LC-8**. Incoming calls are answered with three beeps, call waiting is disabled, and "page" is activated.

## I. Display

The **LC-8**'s front panel is equipped with a seven segment display. It will display the number of the emergency phone that is in use. If an emergency phone has exceeded the maximum call time (programmable from 1 to 99 minutes) the display will flash the number of that prank phone.

## J. Retry Feature

To make an initial connection to a distant emergency phone that is connected to an **LC-8**, dial the line connected to the **LC-8**. When the **LC-8** answers, dial the port (1-8) to ring the selected emergency phone. Once a communication path has been established and then disconnected, another emergency phone can be selected using standard Touch Tones.

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