



TECHNICAL Practice

TELECOM SOLUTIONS FOR THE 21ST CENTURY

LC-3

Line Concentrator

February 27, 2015

Allow Three Emergency Phones to Share a Single Line



The **LC-3** Line Concentrator allows up to three emergency phones to share a single line. A call initiated by any emergency phone is given the line. If a second emergency phone attempts to make a call while another emergency call is in use, the **LC-3** will provide a busy signal until the line is available. Viking emergency phones can be programmed to redial on busy.

All inbound calls are answered by the **LC-3**. The emergency personnel then dials a touch tone command to connect to one of three phones.

A Fire Floor Phone port is provided as a means for local dedicated telephones to directly connect to any of the three emergency phones.

A secondary mode of operation allows two emergency phones to share an existing analog line of a phone system.

Features

- Automatic answering of inbound calls
- Inbound calls can be Touch Tone transferred to any port
- Connects up to 3 emergency phones, or 2 phones can share a line with a phone system
- Fire Floor Phone port provided to meet elevator code
- Modular connection for easy installation
- During power outages, the emergency phones are all connected to the phone line

Applications

- Sharing one line with three Emergency Phones
- Where elevator code requires a "means for emergency personnel within the building to establish two way voice communication to each car individually"

Specifications

Power: 120V AC/13.8V AC 1.25A UL listed adapter provided
Dimensions: 127mm x 127mm x 38mm (5" x 5" x 1.5")
Shipping Weight: 0.9 Kg (2 lbs)
Environmental: 0°C to 32°C (32°F to 90°F) with 5% to 95% non-condensing humidity
Talk Battery Voltage: 32VDC
Connections: (5) RJ-11 modular jacks

<http://www.vikingelectronics.com>

IF YOU HAVE A PROBLEM WITH A VIKING PRODUCT, PLEASE CONTACT: VIKING TECHNICAL SUPPORT AT (715) 386-8666

Our Technical Support Department is available for assistance Monday 8am - 4pm and Tuesday through Friday 8am - 5pm central time. So that we can give you better service, before you call please:

1. Know the model number, the serial number and what software version you have (see serial label).
2. Have your Technical Practice in front of you.
3. It is best if you are on site.

RETURNING PRODUCT FOR REPAIR

The following procedure is for equipment that needs repair:

1. Customer must contact Viking's Technical Support Department at 715-386-8666 to obtain a Return Authorization (RA) number. The customer MUST have a complete description of the problem, with all pertinent information regarding the defect, such as options set, conditions, symptoms, methods to duplicate problem, frequency of failure, etc.
2. Packing: Return equipment in original box or in proper packing so that damage will not occur while in transit. Static sensitive equipment such as a circuit board should be in an anti-static bag, sandwiched between foam and individually boxed. All equipment should be wrapped to avoid packing material lodging in or sticking to the equipment. Include ALL parts of the equipment. C.O.D. or freight collect shipments cannot be accepted. Ship cartons prepaid to:
Viking Electronics, 1531 Industrial Street, Hudson, WI 54016
3. Return shipping address: Be sure to include your return shipping address inside the box. We cannot ship to a PO Box.
4. RA number on carton: In large printing, write the R.A. number on the outside of each carton being returned.

RETURNING PRODUCT FOR EXCHANGE

The following procedure is for equipment that has failed out-of-box (within 10 days of purchase):

1. Customer must contact Viking's Technical Support at 715-386-8666 to determine possible causes for the problem. The customer MUST be able to step through recommended tests for diagnosis.
2. If the Technical Support Product Specialist determines that the equipment is defective based on the customer's input and troubleshooting, a Return Authorization (R.A.) number will be issued. This number is valid for fourteen (14) calendar days from the date of issue.
3. After obtaining the R.A. number, return the approved equipment to your distributor, referencing the R.A. number. Your distributor will then replace the product over the counter at no charge. The distributor will then return the product to Viking using the same R.A. number.
4. **The distributor will NOT exchange this product without first obtaining the R.A. number from you. If you haven't followed the steps listed in 1, 2 and 3, be aware that you will have to pay a restocking charge.**

TWO YEAR LIMITED WARRANTY

Viking warrants its products to be free from defects in the workmanship or materials, under normal use and service, for a period of two years from the date of purchase from any authorized Viking distributor. If at any time during the warranty period, the product is deemed defective or malfunctions, return the product to Viking Electronics, Inc., 1531 Industrial Street, Hudson, WI., 54016. Customer must contact Viking's Technical Support Department at 715-386-8666 to obtain a Return Authorization (R.A.) number.

This warranty does not cover any damage to the product due to lightning, over voltage, under voltage, accident, misuse, abuse, negligence or any damage caused by use of the product by the purchaser or others. This warranty does not cover non-EWP products that have been exposed to wet or corrosive environments. This warranty does not cover stainless steel surfaces that have not been properly maintained.

NO OTHER WARRANTIES. VIKING MAKES NO WARRANTIES RELATING TO ITS PRODUCTS OTHER THAN AS DESCRIBED ABOVE AND DISCLAIMS ANY EXPRESS OR IMPLIED WARRANTIES OR MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE.

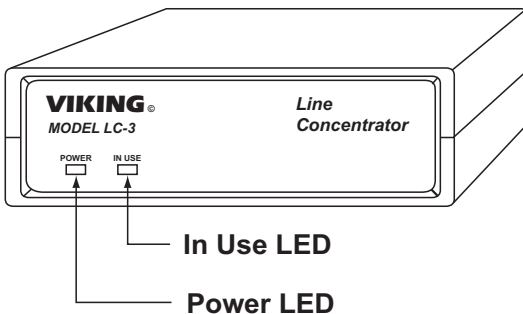
EXCLUSION OF CONSEQUENTIAL DAMAGES. VIKING SHALL NOT, UNDER ANY CIRCUMSTANCES, BE LIABLE TO PURCHASER, OR ANY OTHER PARTY, FOR CONSEQUENTIAL, INCIDENTAL, SPECIAL OR EXEMPLARY DAMAGES ARISING OUT OF OR RELATED TO THE SALE OR USE OF THE PRODUCT SOLD HEREUNDER.

EXCLUSIVE REMEDY AND LIMITATION OF LIABILITY. WHETHER IN AN ACTION BASED ON CONTRACT, TORT (INCLUDING NEGLIGENCE OR STRICT LIABILITY) OR ANY OTHER LEGAL THEORY, ANY LIABILITY OF VIKING SHALL BE LIMITED TO REPAIR OR REPLACEMENT OF THE PRODUCT, OR AT VIKING'S OPTION, REFUND OF THE PURCHASE PRICE AS THE EXCLUSIVE REMEDY AND ANY LIABILITY OF VIKING SHALL BE SO LIMITED.

IT IS EXPRESSLY UNDERSTOOD AND AGREED THAT EACH AND EVERY PROVISION OF THIS AGREEMENT WHICH PROVIDES FOR DISCLAIMER OF WARRANTIES, EXCLUSION OF CONSEQUENTIAL DAMAGES, AND EXCLUSIVE REMEDY AND LIMITATION OF LIABILITY, ARE SEVERABLE FROM ANY OTHER PROVISION AND EACH PROVISION IS A SEPARABLE AND INDEPENDENT ELEMENT OF RISK ALLOCATION AND IS INTENDED TO BE ENFORCED AS SUCH.

Features Overview

Front View of the LC-3



Port for a local phone that can be used for emergency personnel to call each Emergency Phone

Rear View of the LC-3

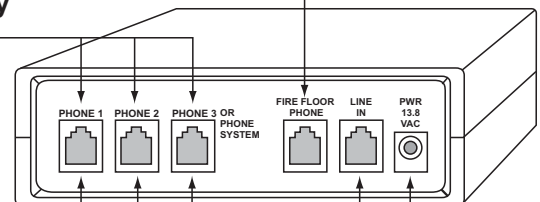
Three Emergency Phone Ports

- OR -

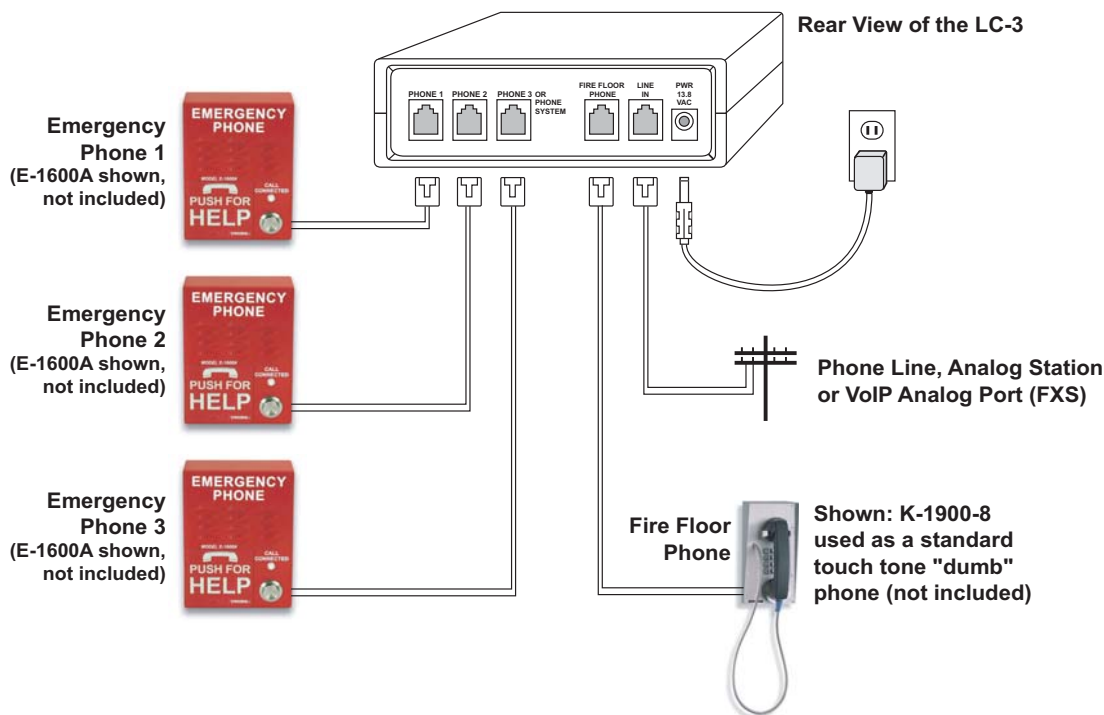
Two Emergency Phones that share a line with a phone system

Line In Port

Power Input 13.8V AC adapter provided



Installation



Operation

A. Front Panel LEDs

The **LC-3** has two front panel LEDs. The "POWER" LED lights to show the unit is powered up. The "IN USE" LED lights whenever any of the phones are in use.

B. Outbound Calls

Any of the three emergency phones can make an outbound call to the phone line through the **LC-3**. If a second emergency phone attempts to make a call while another emergency phone is in use, the **LC-3** will provide a busy signal until the line is available. Viking emergency phones can be programmed to redial on busy, this way the second emergency phone will continue to try until it is able to place a call for help.

C. Inbound Calls

The **LC-3** immediately answers the ringing line and gives a double beep indicating it has answered. The person calling in then has 4 seconds to enter a single touch tone "1", "2" or "3" before it drops the line. If a single touch tone is detected, the **LC-3** will ring-through to emergency phone port 1, 2 or 3 respectively. All Viking emergency phones are set up to automatically answer a ringing line. Once answered, the inbound call has talk path to that emergency phone.

D. Fire Floor Phone

The Fire Floor Phone port provides 32 volts of DC talk battery to operate a Fire Floor Phone (any standard single line touch tone phone can be used). When the Fire Floor Phone comes off-hook, the **LC-3** gives a double beep. At any time, a single touch tone "1", "2" or "3" can be entered to call emergency phone port 1, 2 or 3. This means emergency personnel do not even need to hang up the Fire Floor Phone to call another emergency phone. It is recommended the Fire Floor Phone has access limited to authorized personnel only. It would also be beneficial to mark the Fire Floor Phone as such, and label the touch tone keypad as to which elevators of the three keys dial.

E. Power Fail Condition

If power is lost to the **LC-3**, all three emergency phones will be connected directly to the phone line within the **LC-3**. In this state any of the three emergency phones can make an outbound call to the phone line through the **LC-3** even though the **LC-3** has no power. A second emergency phone could then barge into the same call, but Viking emergency phones have a privacy feature that prevents this from happening. Additional emergency phones can make their own call for help, once the line is again available. If the Fire Floor Phone functionality is required during a power outage, the **LC-3** needs to be plugged into an uninterruptable back-up power supply (UPS) so that power is not lost.

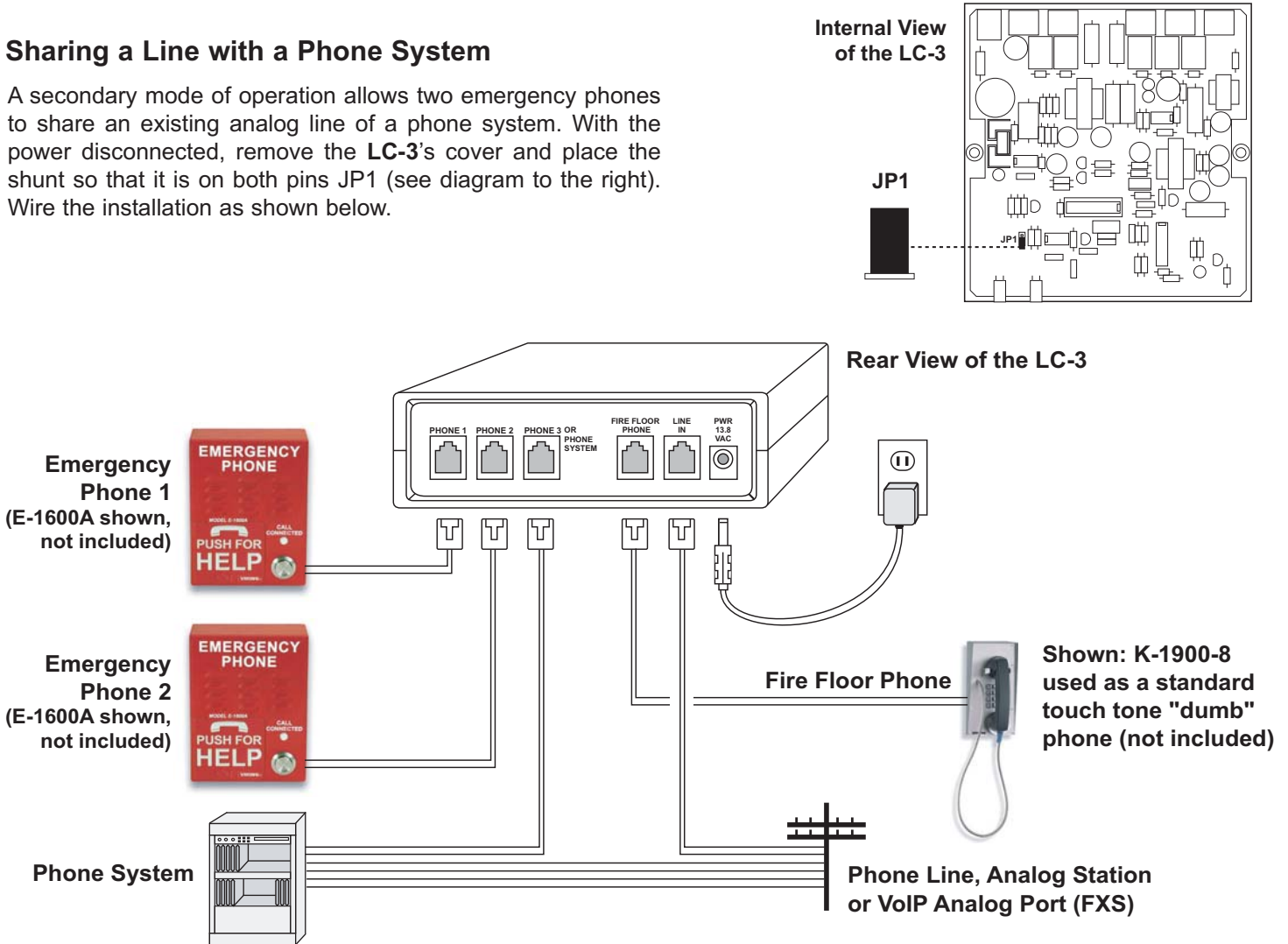
F. Prank Condition

An emergency phone that is left off-hook is considered a prank phone. When the **LC-3** is left in this state, the other emergency phones can not make a call for help. Prevent prank phones by installing Viking emergency phones, as they intelligently know when to automatically hang up. It is also important to install the Fire Floor Phone with access restricted to authorized personnel only because when the Fire Floor Phone is off hook, the phone line is not available.

Alternate Application

Sharing a Line with a Phone System

A secondary mode of operation allows two emergency phones to share an existing analog line of a phone system. With the power disconnected, remove the **LC-3**'s cover and place the shunt so that it is on both pins JP1 (see diagram to the right). Wire the installation as shown below.



If an emergency phone comes off-hook to place an outbound call while the phone line is being used by the phone system, the phone line is removed from the phone system to simulate a hang up. After 2 second, fresh dial tone is given to the emergency phone for dialing. Because of this extra delay, it is recommended that a 4 second pause is programmed at the beginning of each emergency phone's dialing string. The phone system is given a busy signal while an emergency phone call is in place.

Inbound calls are answered immediately by the **LC-3**. In this mode, instead of giving a double-beep, the **LC-3** gives a double ringback tone to indicate it has answered. The person calling in then has 4 seconds to enter a single touch tone "1" or "2" before it gives a second double ringback tone indicating the call has been sent to the phone system. If a single touch tone is detected the **LC-3** will ring-through to that emergency phone port.

Front panel LEDs, Fire Floor Phone, Power Fail and Prank Conditions all function as normal.

Product Support Line...715.386.8666

Fax Back Line...715.386.4345

Due to the dynamic nature of the product design, the information contained in this document is subject to change without notice. Viking Electronics, and its affiliates and/or subsidiaries assume no responsibility for errors and omissions contained in this information. Revisions of this document or new editions of it may be issued to incorporate such changes.