

Provide Door Entry for up to 250 Apartments or Offices




The **K-1900-3** provides reliable and economical door entry control for apartments or business complexes.

The **K-1900-3** converts any Touch Tone phone into a multi-number auto dialer that will store up to 250 telephone numbers in non-volatile E² memory. Use with **Viking's K-1700-3** or **K-1900-8** phones to provide vandal resistant handsfree or handset communication.

When a call initiated by the **K-1900-3** is answered by an apartment or business tenant, a built-in contact

closure may be activated to control electronic gates or door strikes. A keyless entry code can also be programmed, allowing tenants to let themselves in.

The **K-1900-3** can be programmed locally or remotely using a standard Touch Tone phone.

 This Technical Practice is only for use with the **K-1900-3** with the optional **EXP250-KIT**. All other applications must use **Fax Back Document 312**.

<http://www.VikingElectronics.com>

Features

- Compatible with **Viking's** vandal resistant **K-1700-3**, **K-1900-8** or any Touch Tone phone
- Non-volatile E² memory (no batteries required)
- Remotely or locally programmable
- Stores 250 tenant Touch Tone phone numbers
- Programmable relay activation code (controlled by inside tenant)
- Programmable keyless entry code (can be disabled for high security)
- Normally open and normally closed (DPDT) relay contacts for controlling door strikes and magnetic locks
- Auxiliary relay input to trigger a timed relay activation for postal locks, etc.
- Provides 18V DC to power doorstrikes, magnetic locks, etc.
- Touch Tone and pulse dialing toll restriction
- Always allows 911 and 311 outside calls

Applications

- Complete apartment entry system when used with:
 - **K-1700-3** (Fax Back Document 157)
 - or-
 - **K-1900-8** (Fax Back Document 362)
 - **D-Series** directories (Fax Back Document 158)
- Multi-tenant, gated communities
- Office parks and multi-business complexes
- Hot-Line reservation phones for hotels, airlines, car rentals, etc.

Specifications

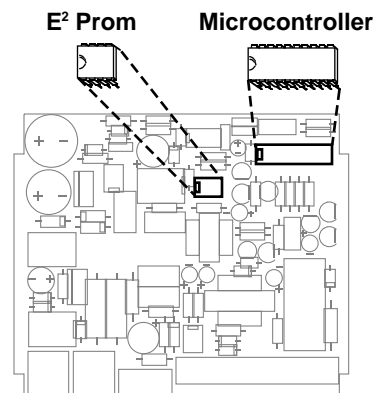
Power: 120V AC / 13.8V AC 1.25A, UL listed adapter provided
Dimensions: 89mm x 46mm x 132mm (3.5" x 1.8" x 5.2")
Shipping Weight: .74 kg (1.65 lbs)
Environmental: 0° C to 32° C (32° F to 90° F) with 5% to 95% non-condensing humidity
Talk Battery Output: 32V DC nominal
Door Strike Power Output: 18V DC / 200mA maximum
Connections: (2) RJ11 jacks, 10 pin screw terminal block
DTMF dialing speed: 120ms on/100ms off
Relay contact ratings: 5 Amps @ 30V DC/250V AC
EXP250-KIT: (1) 8 pin E² prom, (1) 18 pin microcontroller

Installation

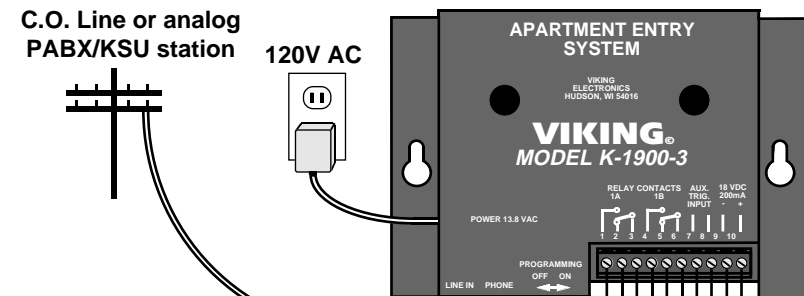
A. Upgrading the K-1900-3 with the EXP250-KIT

Important: Electronic components are sensitive to static electricity. Personnel and the work area should be grounded before handling.

1. Disconnect the power to the **K-1900-3**
2. Remove the cover.
3. Insert the chips carefully into the appropriate sockets with the indents facing in the direction shown to the right.
4. Replace the cover of the **K-1900-3**.

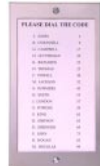


B. Installing the K-1900-3



Door Strikes/Magnetic Locks: For door strike/magnetic lock information, contact your distributor or JLM Wholesale (800) 522-2940.

D-Series Directory
(Fax Back Document 158) | **K-1900-8** (Fax Back Document 362) | **K-1700-3** (Fax Back Document 157)

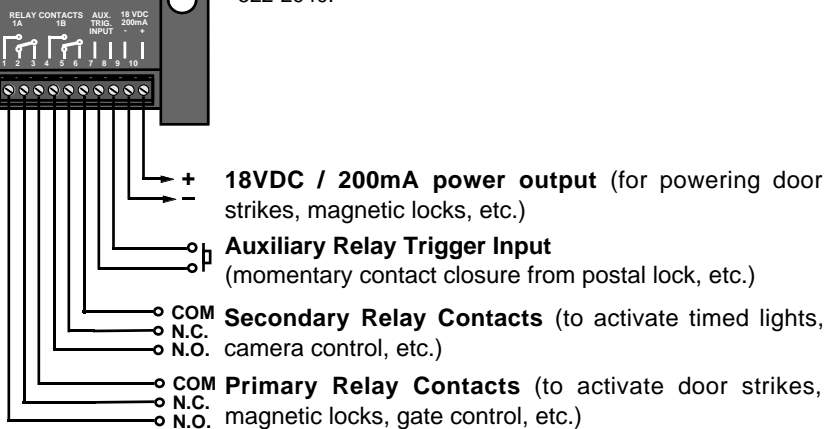


Analog Entry Phone
(not included)

K-1900-8 and K-1900-7
shown with optional back boxes (Fax Back Document 424).

BD = Brass, D = Stainless Steel

Model	# of Names
D6/BD6	6
D10/BD10	10
D22/BD22	22
D32/BD32	32
D44/BD44	44
D56/BD56	56



18VDC / 200mA power output (for powering door strikes, magnetic locks, etc.)

Auxiliary Relay Trigger Input
(momentary contact closure from postal lock, etc.)

Secondary Relay Contacts (to activate timed lights, camera control, etc.)

Primary Relay Contacts (to activate door strikes, magnetic locks, gate control, etc.)

Local Programming/ Security Code Bypass Switch

Programming

A. Accessing the Programming Mode

1. Remote Programming

- a. Connect the **LINE IN** port to a C.O. line or analog PABX/KSU station.
- b. From a Touch Tone phone, call the line connected to the **K-1900-3**.
- c. When the **K-1900-3** answers, enter "*" followed by the six digit security code (see section **D** on the following page). A double beep will indicate that programming has been entered.
- d. Program as shown in sections **B - F**.

2. Local Programming Using the Security Code (from entry phone)

- a. Take the phone connected to the **PHONE** port off-hook.
- b. Enter a "*" followed by the six digit security code (see section **D**). A double beep will indicate that programming has been entered.
- c. Program as shown in section **B - F**.

3. Local Programming Without the Security Code (from entry phone)

- a. Move the **PROGRAMMING** switch to the **ON** position.
- b. Take the phone connected to the **PHONE** port off-hook. A double beep will indicate that programming has been entered.
- c. Program as shown in section **B - F**.
- d. When finished, the programming switch must be placed back in the **OFF** position for normal operation.

Note: To exit programming, do NOT enter any Touch Tones for approximately 20 seconds. Three beeps will be heard, followed by a fast busy signal indicating you have exited programming.

B. Programming Features

	<u>Digits</u>	+	<u>Location</u>
Speed dial memory locations: 001-249 (1-14 digits)	phone number	+	# 001-249
Speed dial memory location: 000 (1-30 digits)	phone number	+	# 000
Clear all speed dial numbers from memory	###		
PABX line access number: single digit + 3 second pause (factory disabled) ...	1 digit (0 - 9)	+	##2
Relay activation time: 1/2 - 99 seconds (00 = 1/2 sec., factory set to 5 sec.) ...	2 digits (00 - 99)	+	##3
Relay activation code: ⁽¹⁾ two digits (factory set to 36)	2 digits (00 - 99)	+	##4
To add a 4 second pause anywhere in the dialing string	*7		
Security code (factory set to 845464)	6 digits (0 - 9)	+	##5
Keyless entry code (factory disabled).....	4 - 6 digits (0 - 9)	+	##6

(1) The relay may be activated with a single digit, but must be programmed with a "0" + the digit (see section C, example 3). When a single digit relay activation code is programmed (0-9), the activation Touch Tone must be held for a minimum of 150 ms.

Notes: Each pause uses a single speed dial digit. To clear a memory location, enter only the location (no digits). A valid programming entry will be indicated by a double beep. An invalid entry will be indicated with three beeps.

C. Programming Examples

These examples would be entered after accessing programming as shown in section A.

Programming the K-1900-3...	Enter Digits	Enter Location
1. ...to dial 555-1234 when a "1" is entered at the entrance phone	5551234	#001
2. ...to dial a 9 and pause 3 seconds prior to dialing all speed dial numbers	9	##2
3. ...to activate the door strike/magnetic lock when the tenant dials a "6"	06	##4

D. Security Code

A six digit number may be used to access the programming mode. The security code has been factory set to 845464 (V-I-K-I-N-G). It is recommended that you change the security code to a personal 6 digit number as follows:

1. Access programming as shown in section A.
2. Enter your new security code followed by **##5**.
3. Do NOT enter any Touch Tones for at least 20 seconds to exit programming.

Note: The security code must be six digits in length and can NOT contain a * or #. If you have forgotten your security code, see section A. "**Local Programming Without the Security Code.**"

E. Keyless Entry Code

The **K-1900-3** can be programmed to perform keyless entry. When a 4 - 6 digit keyless entry code is programmed, a person may activate the door strike from the entry phone by dialing a "#" followed by the keyless entry code.

F. Built in Maximum Call Time and Toll Restriction

The maximum call time for the **K-1900-3** is 2 minutes and cannot be changed. If the call exceeds 2 minutes, both phones will be disconnected followed by three beeps indicating the termination of the call. This limits unnecessary and lengthy conversations. The **K-1900-3** will also disconnect on any Touch Tone or pulse dialing generated by the entry phone after speed dialing has been completed.

Operation

When a visitor accesses the entry phone, simulated dial tone is heard. After the visitor enters the appropriate one to three digit tenant number, the **K-1900-3** speed dials the tenants phone number and bridges the phone line to the entry phone. If an unprogrammed tenant number is entered, a simulated fast busy signal will be heard on the entry phone. When the tenant confirms the visitors identity, a one or two digit relay activation code may be entered from the tenant's phone. Two beeps will indicate that a valid activation code has been entered. A buzzing sound is then heard on the entry phone to indicate the door strike has been activated. If an incorrect relay activation code is entered, the unit will disconnect. A simulated fast busy signal will also be returned to the entry phone if the telephone line has become disconnected. A tenant may let themselves in by taking the entrance phone off-hook and entering a # followed by the keyless entry code. **Note:** To avoid busy signals, call waiting is recommended on each tenants phone line.

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, its affiliates and/or subsidiaries assume no responsibility for errors and/or omissions contained in this information. Revisions of this document or new editions of it may be issued to incorporate such changes.

Please use these charts to record the numbers programmed (use pencil).

Security Code: _____

Relay Activation Code: _____

Keyless Entry Relay Code: _____

Memory Location	Apt #	Telephone #
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Memory Location	Apt #	Telephone #
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