

VIKING

TECHNICAL Practice

TELECOM SOLUTIONS FOR THE 21ST CENTURY

K-1900-5
Hot-Line Touch
Tone Dialer

February 8, 2005

Replace Dedicated Phone Lines with a Touch Tone Hot-Line Dialer



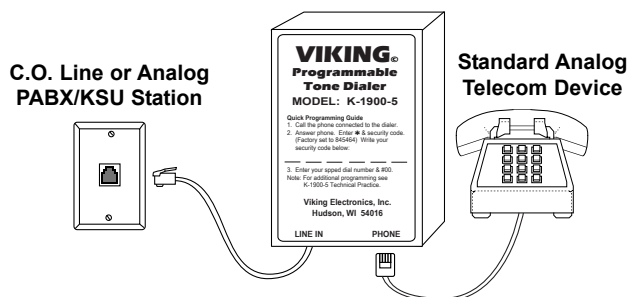
⚠ This product does not eliminate the possibility of toll fraud! To further protect against fraudulent calls, use with a TR-1 Toll Restrictor (Fax Back Document 705).

Features

- Touch Tone programmable
- Telephone line powered
- Non-volatile E² memory (no batteries required)
- Ring detection (won't dial on inbound calls)
- User programmable security code
- Programmable pauses in one and four second increments
- Programmable to interrupt user Touch Tone dialing to help control fraudulent calls from hand held dialers, etc.
- Programmable dialing speed (normal or fast)
- Can be configured to operate from a contact closure (**Fax Back Document 818**)

Installation

Install the **K-1900-5** in series between a telephone and a C.O. line or analog PABX/KSU station.



Why pay the premium of leased or dedicated phone lines?

The **K-1900-5** will automatically dial a preprogrammed number, of up to 32 digits, whenever an associated telephone is taken off hook. Using non-volatile E² memory, the **K-1900-5** is telephone line powered and will operate on any loop start central office line or analog PABX/KSU extension.

The **K-1900-5** is easily programmed remotely or locally using a standard Touch Tone phone.

Applications

- Security and emergency phones
- Interactive point of sale displays
- Apartment security
- Catalog sales
- Automated Teller Machines (ATM's)
- Replaces leased ring down circuits
- Hot-Line reservation phones for hotels, airlines, car rentals, etc.

Specifications

Power: Telephone line powered (24V DC 20 mA minimum)*
Dimensions: 74mm x 53mm x 25mm (2.9" x 2.1" x 1.0")
Shipping Weight: .45 kg (1 lb)
Environment: 0°C to 32°C (32°F to 90°F) with 5% to 95% non-condensing humidity
Connections: (1) RJ11 plug, (1) RJ11 jack
Dialing Speed: Normal - 120ms on/off, Fast - 50ms on/off

* **Note:** When installing multiple line powered products (**K-1900-5** and **E-10/E-15/E-20A/K-1500-EHF**) on the same line, additional talk battery voltage and loop current may be required.

A. Accessing the Programming Mode

1. Connect the **K-1900-5** to a C.O. line or analog PABX/KSU station.
2. From a Touch Tone phone, call another phone connected to the **K-1900-5**.
3. Take the phone connected to the dialer off hook (answer the phone).
4. Enter * followed by the six digit security code (see section **D** on the next page). A double beep will indicate that you have accessed the programming mode.
5. You can now program your speed dial number and the following features listed in section **B** below.

Note: Programming from a cell-phone may not be suitable in areas with weak coverage.

B. Programming Features

	Digits	+	Memory Location
Speed dial number (1-32 digits*)	Number		+ #00
To add a * at any point in the dialing string	**		
To add a # at any point in the dialing string	##		
Set dialing speed to normal (120ms on/off, factory setting)	*1		
Set dialing speed to fast (50ms on/off)	*2		
Restrict Touch Tone user dialing before, during and after the dialing string (factory setting)	*3		
Allow Touch Tone user dialing after speed dial	*4		
Set pause before dialing to normal (factory setting)	*5		
Set pause before dialing to short	*6		
To add a four second pause at any point in the dialing string	*7		
To add a one second pause at any point in the dialing string	*8		
Enable Touch Tone and flash restriction before and during speed dial (factory setting)	*01		
Disable Touch Tone and flash restriction (overrides *3, *4, *09 and *00)	*02		
Enable user flash restriction (factory setting)	*09		
Disable user flash restriction	*00		
Clear programming and change back to factory settings	###		
Dialing delay timer (01 - 99 seconds, 00 disables)	2 digits		+ #40
Change security code (factory set to 845464)	6 digits (0 - 9)		+ #47

Note: Special features such as a pause, a Touch Tone "" and a Touch Tone "#" count as a single digit.

C. Programming Examples

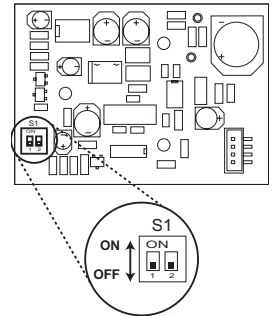
Programming the K-1900-5...	Enter Digits	Enter Memory Location
... to dial 386-8861	3868861	#00
... to dial 9 (for outside line), pause four seconds, and dial 1-612-555-1212	9*716125551212	#00
... to dial *67	**67	#00
... to enable unlimited user dialing after the K-1900-5 has speed dialed	*4	none

Note: *7 places a four second pause after digit 9.

D. Security Code

The six digit number can 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. If you have forgotten your security code, remove the cover, locate DIP switch 2 (see diagram to the right), move switch 2 to **ON** and follow steps 1-3 in section A. Two beeps will indicate you have entered the programming mode. When finished programming, move DIP switch 2 back to **OFF**.

Note: The security code must be six digits in length and can NOT contain a * or #.



E. Interrupt User Dialing This is not complete toll fraud protection!

The K-1900-5 interrupts all pulse dialing and can be programmed to interrupt any Touch Tone dialing it did not generate. The K-1900-5 reacts by continuously repeating Touch Tone #'s until the associated phone has been hung up. To enable unlimited user dialing after the K-1900-5 has speed dialed, enter *4 while programming. Entering a *3 will prohibit user dialing. Note: This feature is factory set to block user dialing.

F. Dialing Delay Timer

The K-1900-5 can be programmed to delay from 1 to 99 seconds before dialing the number programmed in its memory (see Programming section B above). Note: Many CO's provide only 20 seconds of dial tone, so that if the delay is longer than 20 seconds the call would not be connected.

FCC Requirements

Type of Service
The K-1900-5 is designed to be used on standard device telephone lines. The K-1900-5 is connected to the telephone line by means of a standard RJ-11 plug. Connection to telephone company-provided coin service (central office implemented systems) is prohibited. Connection to party line service is subject to State tariffs.

Telephone Company Procedures
The goal of the telephone company is to provide you with the best service it can. In order to do this it may occasionally be necessary for them to make changes in their equipment, operations, or procedures. If these changes affect your service of the operation equipment, the telephone company will give you notice in writing, allowing you to make any changes necessary to maintain uninterrupted service. If you have any questions about your telephone line, such as, how many pieces of equipment you can connect to it, the telephone company will provide you information upon request. In certain circumstances, it may be necessary for the telephone company to request information from you, concerning the equipment which is connected to your telephone line. Upon request request of the telephone company, provide the FCC registration number and the ringer equivalence number (REN) of the equipment which is connected to your line; both of these items are listed on the equipment label. The sum of all the REN's on your telephone lines should be less than five in order to assure proper service from your telephone company. In some cases, a sum of five may not be usable on a given line.

If Problems Arise
If any of your telephone equipment is not operating properly, you should immediately remove it from your telephone line as it may cause harm to the telephone network. If the telephone company notes a problem, they may temporarily discontinue service. When practical, they will notify you in advance of this disconnection. If notified, you will be given the opportunity to correct the problem and informed of your right to file a complaint with the FCC. In the event repairs are ever needed on your Viking product, they should be performed by Viking Electronics, Inc. and/or an authorized representative of Viking Electronic, Inc.. For more information contact Viking Product Support at (715)386-8666

FCC Part 15 Limitations
This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will have to correct the interference at his own expense.

Product Support Line...715.386.8666

Fax Back Line...715.386.4345

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