

Telecommunication Peripheral Products

## *Technical Practice*

**K-1900-1**

Multi-Number Dialer

July, 24 2000

### **Add Speed Dial Memory to Any Touch Tone Phone**

The **K-1900-1** adds speed dial memory to any Touch Tone phone. Alternately, the unit can be used as a dedicated, multi-number dialer.

The **K-1900-1** is capable of storing 100 telephone numbers in non-volatile E<sup>2</sup> memory and will operate on any standard loop start C.O. line or analog PABX/KSU station with any conventional phone.

When programmed as a dedicated dialer, the **K-1900-1** will only allow the user to dial one of 100 programmed telephone numbers by entering the 1 or 2 digit code. When programmed as an optional speed dialer, the user can dial through the unit as normal or enter a 1 or 2 digit code for the **K-1900-1** to speed dial one of 100 of your most commonly used numbers.



<http://www.VikingElectronics.com>

[E-mail...Sales@VikingElectronics.com](mailto:Sales@VikingElectronics.com)

### **Features**

- Programmable to add speed dial memory or be used as a dedicated, multi-number dialer
- Stores up to (10) 32 digit and (90) 16 digit phone numbers
- Non-volatile E<sup>2</sup> memory (no batteries required)
- Local or remote programmable with a standard Touch Tone phone
- Telephone line powered
- Touch Tone or pulse dialing with normal or high speed settings
- User dialing restriction (programmable on/off)
- LED programming indicator
- Push button security code override
- Allows 911 and 311 emergency dialing

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### **Applications**

- Add 100 number speed dial memory to any standard phone
- Security and emergency phones
- Interactive point of sale displays
- Kiosks
- Catalog sales
- ATM's
- Hot-Line reservation phones for hotels, airlines, car rentals, etc.

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

### **Specifications**

**Power:** Telephone line powered (24V DC/20mA minimum)

**Dimensions:** 70mm x 36mm x 120mm (2.8" x 1.4" x 4.7")

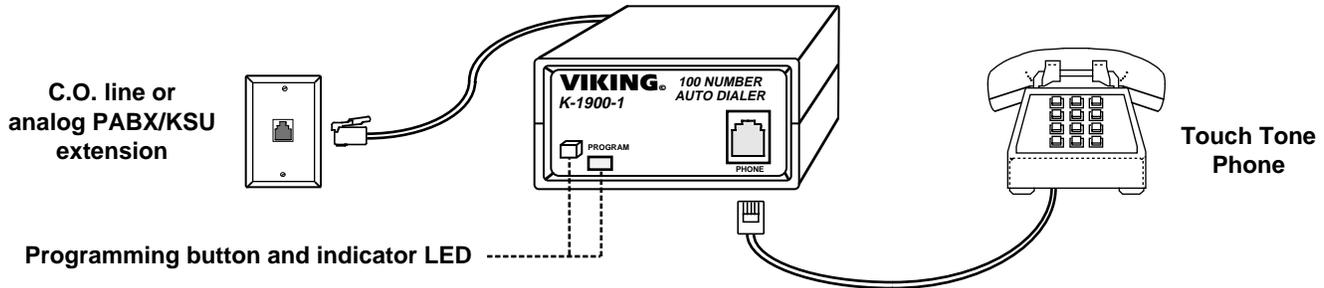
**Shipping Weight:** .45 kg (1lb)

**Environmental:** 0° C to 32° C (32° F to 90° F) with 5% to 95% non-condensing humidity

**Connections:** (1) RJ11 jack, (1) RJ11 plug

# Installation

The **K-1900-1** connects in series between a Touch Tone telephone and a C.O. line or analog PABX/KSU extension.



# Programming

## A. Accessing the Programming Mode

### 1. Remote Programming (with or without a security code)

- Connect the **K-1900-1** to a C.O. line or analog PABX/KSU station.
- From a Touch Tone phone, call the line connected to the **K-1900-1**.
- Take the phone connected to the dialer off hook (answer the phone).
- Momentarily press the programming button on the front of the **K-1900-1** or enter \* followed by the six digit security code (see section **C**). A double beep should be heard and the programming LED should light indicating you have entered programming.

### 2. Local Programming (without the Security Code)

- Connect the **K-1900-1** to a C.O. line or analog PABX/KSU station.
- Press and hold the programming button on the front of the **K-1900-1**.
- Take the phone connected to the dialer off hook. A double beep should be heard in the phone and the programming LED should light indicating you have entered programming. Release the button and begin programming.

**Note:** All valid Touch Tone programming sequences are acknowledged with a double beep. A triple beep indicates that a mistake has been made.

## B. Programming Features

	Enter Digits	+	Memory Location
Telephone number memory positions 00-09 (1-32 digits) .....	Phone number	+	# 00-09
Telephone number memory positions 10-99 (1-16 digits) .....	Phone number	+	# 10-99
Clear all speed dial numbers from memory .....	###		
Dedicated dialer mode (factory setting) (see <b>Operation/Applications</b> section <b>A</b> ) ...	##0		
Speed dialer mode (see <b>Operation/Applications</b> section <b>B</b> ) .....	##1		
Disable hang up before speed dialing in dedicated dialer mode .....	##2		
Hang up before speed dialing (factory setting) .....	##4		
Emergency number position one (1-32 digits, factory set to 911) .....	Phone number	+	##5
Emergency number position two (1-32 digits, factory set to 311) .....	Phone number	+	##6
Security code (factory set to 845464) .....	6 digits (0 - 9)	+	##8
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 (DTMF:120ms on/off, Pulse:10pps. factory setting) .....	*1		
Set dialing speed to fast (DTMF: 50ms on/off, Pulse: 20pps) .....	*2		
Restrict user dialing in dedicated dialer mode (factory setting) .....	*3		
Enable user dialing in dedicated dialer mode .....	*4		
Set pause before dialing to normal (approximately 1 second, factory setting) .....	*5		
Set pause before dialing to short (approximately .5 seconds) .....	*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		
Touch Tone speed dialing (factory setting) .....	*9		
Pulse speed dialing .....	*0		

**\*Notes:** Special features such as a pause, a Touch Tone "\*" and a Touch Tone "#", use a single digit in the speed dialing string.

## C. Security Code

A 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.

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

## D. Selecting the Dialer Mode

The **K-1900-1** can be programmed as a speed dialer or a dedicated multi-number dialer (see **Operation** sections **A.** and **B.**) To configure the **K-1900-1** as a dedicated dialer (factory default), enter **##0** while programming. To configure the **K-1900-1** as a speed dialer, enter **##1** while programming.

## E. Hang-up Before Dialing

If your telephone's Touch Tones break dial tone while entering the desired memory position, the **K-1900-1** can be programmed to hang up momentarily (approximately 1 second) before dialing. To disable the hang-up before dialing enter **##2** while programming. To enable the hang up before dialing (factory default), enter **##4**.

## F. Emergency Numbers

The **K-1900-1** can be programmed to dial specific telephone numbers when 911 or 311 are entered. If no telephone numbers are programmed in these memory positions (**##5** and **##6**) they will default to the factory setting and the **K-1900-1** will dial 911 or 311 respectively.

## G. Pulse/Tone Dialing

The **K-1900-1** can be programmed to dial fast or slow in both Touch Tones or pulse. To program the **K-1900-1** to pulse dial, enter \*0 while programming. To program the **K-1900-1** to Touch Tone dial (factory default), enter \*9 while programming. For normal dialing speed (factory default), enter \*1 while programming. For fast dialing speed, enter \*2 while programming. Normal dialing speed is 120ms on/off for Touch Tones and 10 pps for pulse. Fast dialing speed is 50ms on/off and 20 pps for pulse. **Note:** \*'s and #'s can not be pulse dialed.

## H. Restrict User Dialing (dedicated dialer mode only)

The **K-1900-1** can be programmed to restrict any user dialing by disconnecting on any Touch Tone or pulse dialing detected after the unit has dialed. This feature can only be enabled in the "dedicated dialer mode". To allow user dialing, enter \*4 while programming. To prohibit user dialing (factory default) enter \*3 while programming.

## I. Automatic Pause Before Dialing

A short pause is inserted before the **K-1900-1** will dial. This insures that dial tone has been returned. To program a short pause (approximately 500 ms), enter \*6 while programming. For a long pause (approximately 1 second, factory default), enter \*5.

**Note:** This feature is only operational with the hang-up before speed dialing feature enabled, enter **##4** while programming.

## J. Pauses in the Dialing String

The **K-1900-1** allows pauses to be programmed in the dialing string for such applications as dialing pagers, etc. To program a four second pause, enter a \*7 at any point in the dialing string, while in programming. For a one second pause, enter \*8.

## K. Programming Examples

These examples would be entered after following the steps in section **A.**

Programming the K-1900-1...	Enter Digits	Enter Location
...to dial a 9, pause 4 sec, and dial 1 (612) 555-1212 when a 2 is entered	9*716125551212	#02
...to dial the number 9#888*8 when a 1 is entered	9*#888*8	#01
...to store a 9, pause 1 second, 911 in emergency position one	9*8911	##5
...to clear the number stored in memory position 15		#15

**Note:** \*7 and \*8 place a four or one second pause respectively.

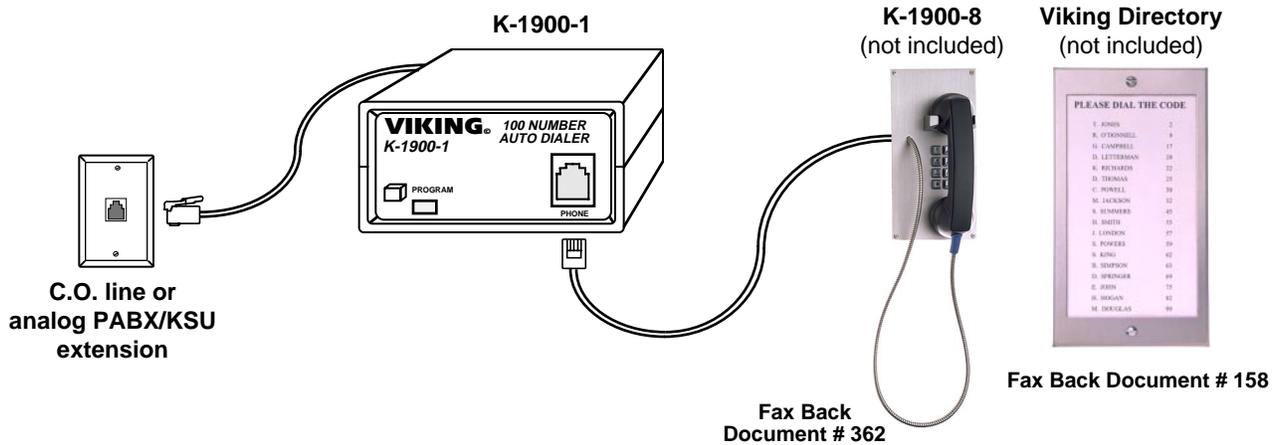
# Operation/Applications

## A. Dedicated Dialer Mode (manual user dialing is not allowed)

In the “dedicated dialer” mode, the **K-1900-1** will dial a programmed phone number after the user has entered the one or two digit memory position code. There is a single digit time out, so it is not necessary to enter **02** for memory position 2, just enter **2**. If that memory position has not been programmed, the **K-1900-1** will disconnect and return to dial tone. Manual user dialing is not allowed in the dedicated dialer mode.

If 911 or 311 is entered, the number stored in emergency position one or two (respectively) will be dialed. If these positions have not been programmed, 911 or 311 will be dialed.

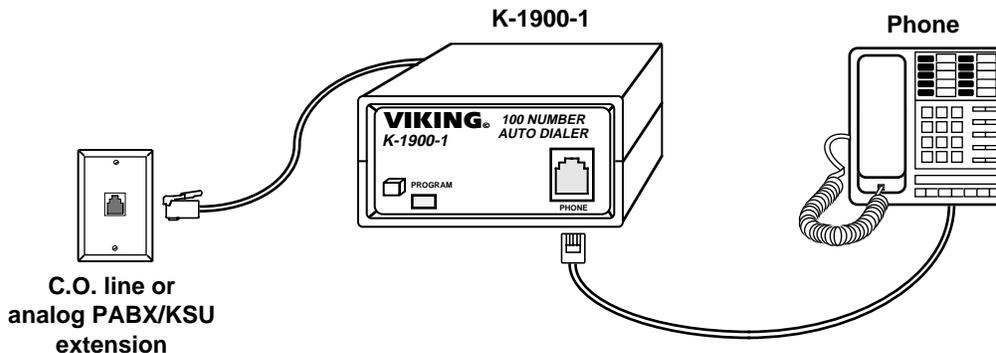
**Notes:** If its required for users to enter digits after the K-1900-1 has speed dialed, program the unit to enable user dialing (see **Programming** section B). If your telephone's Touch Tones break dial tone while entering the desired memory position, set the programming command to hang up before dialing (see **Programming** section B).



## B. Speed Dialer Mode (manual user dialing or speed dialing is allowed)

In the “speed dialer” mode, the user may use the **K-1900-1** as a speed dialer or dial manually. If only one or two Touch Tone digits are entered, the **K-1900-1** will momentarily disconnect the telephone line (factory programmed setting) and speed dial the phone number stored in the associated memory position. For faster speed dialing, enter your 1 or 2 digit speed dial memory code followed by a **#** or **\***. This will bypass the three second time out and the **K-1900-1** will immediately begin speed dialing. If three or more digits are dialed by the user, the **K-1900-1** is transparent and will not dial, allowing the user to dial manually.

**Note:** The **K-1900-1** will not restrict or disconnect in the “speed dial” mode.



**Product Support Line...(715) 386-8666**

**Fax Back Line...(715) 386-4345**

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