

VIKING

TECHNICAL Practice

TELECOM SOLUTIONS FOR THE 21ST CENTURY

K-1900-9

**AC Powered Single or
Multi-Number Dialer**

July 23, 2002

AC Powered Dialer with Increased Toll Restriction and Added Versatility




The **K-1900-9** may be used with any standard Touch Tone phone to provide single number (hot-line) or multi-number speed dialing.

The **K-1900-9** is capable of storing 100 telephone numbers in non-volatile E² memory and will operate on any standard loop start C.O. line or analog PABX/KSU station with a standard Touch Tone phone.

When programmed as a multi-number dialer, the **K-1900-9** will allow the user to enter a 1 or 2 digit Touch Tone code which will trigger the unit to speed dial one of up to 100 different telephone numbers. When programmed as a single number hot-line dialer, the **K-1900-9** will dial a single pre-programmed number when any off-hook condition is detected on the "PHONE" port. The **K-1900-9** can also be used as an alarm dialer, initializing speed dialing from a contact closure.

Phone...715.386.8861

Features

- Programmable as a single number hot-line dialer or a multi-number dialer
- Stores up to (100) **32-digit** phone numbers
- Non-volatile E² memory (no batteries required)
- Local or remote programmable with a standard Touch Tone phone
- **AC power allows installation on nearly any analog line**
- Touch Tone dialing with normal or high speed settings
- **Increased toll restriction (programmable on/off)**
- **Ring thru mode allows you to call the phone connected to the dialer**
- LED status indicator
- Push button security code override
- Allows 911 dialing 
- **Single number alarm dialer mode**
- **Programmable call timer**

Applications

- Turn any standard phone into a dedicated 100 number speed dialing phone
- Security phones
- Interactive point of sale displays
- Kiosks
- Catalog sales
- ATM's
- Hot-Line reservation phones for hotels, airlines, car rentals, etc.
- Alarm dial pagers, etc.



*To protect against toll fraud during power failures, the **K-1900-9** will not allow any dialing. A UPS is suggested if the phone may be used for emergency 911 dialing.*

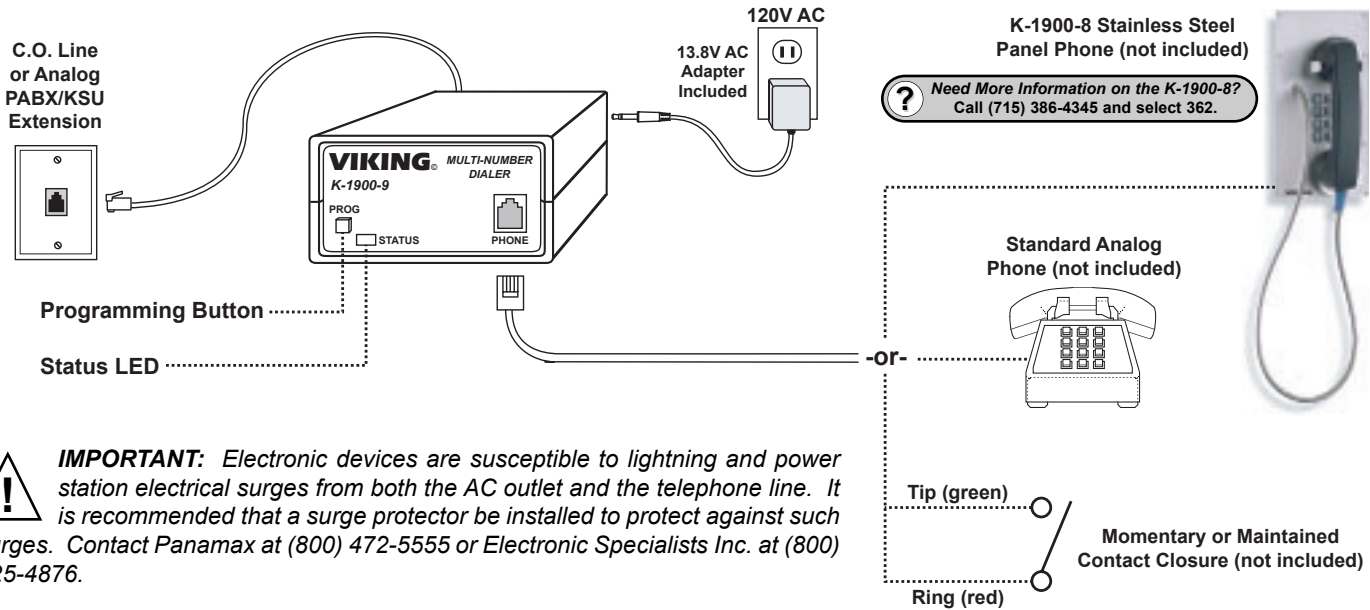
<http://www.vikingelectronics.com>

Specifications

Power: 120V AC/13.8V AC, 1.25A UL listed adapter provided
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
DTMF Dialing Speed: Normal = 120ms on/off, High Speed = 60ms on/off
Contact Closure Initialization: 100ms minimum
Connections: (1) RJ11 jack, (1) RJ11 plug

info@vikingelectronics.com

Installation



IMPORTANT: Electronic devices are susceptible to lightning and power station electrical surges from both the AC outlet and the telephone line. It is recommended that a surge protector be installed to protect against such surges. Contact Panamax at (800) 472-5555 or Electronic Specialists Inc. at (800) 225-4876.

Programming

A. 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:

Step 1.	Access programming as shown in section B.
Step 2.	Enter your new security code followed by ##8 .
Step 3.	To exit remote programming, do NOT enter any Touch Tones for at least 20 seconds. To exit local programming simply hang up the phone.

Note: The security code must be six digits in length and **MUST NOT** contain a * or #. If you have forgotten your security code, see section "B, 2. Local Programming Without Using the Security Code."

B. Accessing the Programming Mode

1. Remote Programming

Step 1.	Connect the line cord on the K-1900-9 to a C.O. line or analog PABX/KSU station.
Step 2.	From a Touch Tone phone, call the line connected to the K-1900-9 .
Step 3.	When the K-1900-9 answers a single beep should be heard, enter "*" followed by the six digit security code, factory set to 845464 (see section A above). A double beep will indicate that programming has been entered.
Step 4.	Program as shown in sections C - I.
Step 5.	To exit programming, do NOT enter any Touch Tones for approximately 20 seconds. Three beeps will be heard, followed by an automatic disconnect.

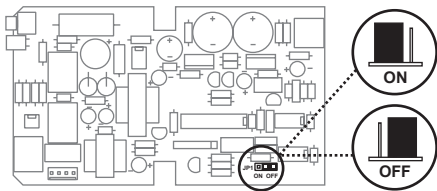
2. Local Programming Without Using the Security Code

Step 1.	Connect the line cord on the K-1900-9 to a C.O. line or analog PABX/KSU station.
Step 2.	Press and hold the "PROGRAM" button on the front of the K-1900-9 .
Step 3.	Take the phone connected to the dialer off-hook. A double beep should be heard and the programming LED should brighten indicating you have entered programming. Release the button and begin programming as shown in sections C - I.
Step 4.	To exit programming, simply hang-up the phone.

C. Programming Features Quick Reference	Enter Digits	- then -	Memory Location
Speed dial (telephone number) memory positions 00-99 (1-32 digits)	Phone number	+	# 00-99
Clear all speed dial numbers and reset programming to factory default	###		
PABX line access number (1 digit + 2 second pause, factory disabled)	1 digit (0-9)	+	##2
Disable PABX line access number			##2
Maximum call time (01 - 99 minutes, factory disabled)	2 digits (01-99)	+	##6
Disable maximum call time			##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, factory setting)	##3		
Set dialing speed to fast (DTMF: 60ms on/off)	##4		
Restrict user hookflash or pulse dialing (factory setting)	*1		
Allow user hookflash or pulse dialing	*2		
Restrict user Touch Tone dialing	*3		
Enable user Touch Tone dialing (factory setting)	*4		
Ring-thru mode OFF (factory setting)	*5		
Ring-thru mode ON	*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		
Single number hot-line dialer mode (automatically dials number in location 00)	*9		
Multi-number dialer mode (factory setting)	*0		

D. Dialer Mode

To set the dialer mode, enter Programming as shown in section B, then choose a mode as shown in the chart below.

To Set the K-1900-9 Mode to...	Description
...a multi-number dialer (see Operation section B - factory default)	Enter *0
...a hot-line single number dialer (see Operation section C)	Enter *9
...an alarm dialer (see Operation section D) Note: You are not required to enter Programming to set the alarm dialer mode. <div style="text-align: center;"> JP1 ON - Alarm Dialer Mode Enabled JP1 OFF - Alarm Dialer Mode Disabled </div>	Move JP1 to ON as shown below 

E. Touch Tone Dialing Speed

To set the dialing speed, access the Programming mode as shown in section B, then choose a speed as shown in the chart below.

To Set the K-1900-9 Touch Tone Dialing Speed to...	Enter Digits
...normal (120ms Touch Tones with 120ms pauses between tones - factory default)	##3
...fast (60ms Touch Tones with 60ms pauses between tones)	##4

F. Restrict User Touch Tone Dialing

To restrict or allow user Touch Tone dialing on the third digit or the first "0" manually dialed (after the unit has dialed), access the Programming mode as shown in section B, then choose allow or restrict as shown in the chart below.

To Set the K-1900-9 to...	Enter Digits
...restrict user-dialing on the third digit or the first "0" manually dialed	*3
...allow user-dialing (factory default)	*4

G. Pauses in the Dialing String

To set pauses in the dialing string, access the Programming mode as shown in section B, then the digits shown in the chart below.

To Set the K-1900-9 to...	Enter Digits
...dial a four second pause at any point in the dialing string	*7
...dial a one second pause at any point in the dialing string	*8

H. PABX Line Access

A PABX line access number may be programmed to allow the dialer to insert an outside line access number and a 2 second pause in front of every speed dial number. Access the Programming mode as shown in section B, then enter the digits shown in the chart at the right.

To Set the K-1900-9 to...	Enter Digits
...dial 1 digit (0-9) for outside line access	1 digit (0-9) + ##2
...disable outside line access	##2

I. Programming Examples

These examples would be entered after accessing the Programming mode as shown in section B.

To Program the K-1900-9 to...	Enter Digits	Enter Location
...dial pager number 555-1212, pause 8 seconds, then dial call back number 386-8861 when a contact closure is activated (see section D)	5551212*7*73868861	#00
...store a 9 then pause 2 seconds prior to dialing all telephone numbers	9	##2
...clear the number stored in memory position 42		#42

Operation

A. 911 Dialing

When programmed as a multi-number dialer, the **K-1900-9** will allow 911 calls. When the user goes off-hook on the "Phone" port and dials 911, the **K-1900-9** automatically redials 911 on the outside line and bridges the phone line to the phone port. If a PABX access number is entered in location **##2**, this number will precede 911. **Note:** To protect against toll fraud during power failure, the **K-1900-9** will not allow any dialing. A UPS is suggested if the phone may be used for 911 dialing.

B. Multi-Number Dialer Mode

The multi-number dialer mode (see **Programming** section D) is useful when using the **K-1900-9** in applications such as Kiosks or any other user selectable speed dialing application when 100 phone numbers or less are required. An off-hook on the phone port will return simulated dial tone. The user can then enter their one or two digit speed dial memory position. The **K-1900-9** speed dials the phone number programmed in that memory position then bridges the phone to the line. The dialer can be programmed to allow or restrict manual user dialing, either to prevent any further dialing or to allow navigation through auto-attendants, etc. If user hookswitch and pulse dialing is disabled and the user attempts to pulse dial or flash the line for fresh dial tone (to make a toll call), the **K-1900-9** will restrict the call by switching the phone back to artificial talk battery with simulated dial tone. **Note:** If this phone is to receive in-bound calls, select the **Ring Thru Mode** (see section E below).

C. Single Number Hot-Line Dialer Mode

In the single number hot-line dialer mode (see **Programming** section D), when any phone connected to the "phone" port goes off-hook, the **K-1900-9** speed dials the phone number programmed in memory location "00" then bridges the phone to the line. If user hookswitch and pulse dialing is disabled and the user attempts to pulse dial or flash the line for fresh dial tone (to make a toll call), the **K-1900-9** will restrict the call by switching the phone back to artificial talk battery with simulated dial tone. The dialer can be programmed to allow or restrict manual user dialing, either to prevent any further dialing or to allow navigation through auto-attendants, etc.

D. Alarm Dialer Mode

With the **K-1900-9** in the alarm dialer mode (see **Programming** section D), a momentary (100ms minimum) or maintained contact closure across tip and ring (red and green wires) of the phone port will initiate the dialing sequence (only dialing the phone number that is programmed in memory location "00"). When the dialing sequence is completed, the unit will release the line. **Note:** When dialing a pager, it is recommended that several pauses (see **Programming** section C) be added to the dialing string between the dialed number and the call back number.

E. Ring Thru Mode

In the ring thru mode (see **Programming** section C), incoming calls are allowed to ring through the **K-1900-9** to the phone connected to the "PHONE" port. After the phone has answered, the **K-1900-9** is watching for the security code and will seize the line if a valid code is detected. In this manner, the **K-1900-9** may still be remotely programmed. If the ring thru mode is turned off, the **K-1900-9** will answer all inbound calls.

F. Status LED

The status LED indicates when the unit has seized the line, when the unit is dialing, outputting confirmation beeps, or simply that the unit has power.

K-1900-9 LED is...	Status
...on steady (dim)	Power/Idle/Phone has line
...on steady (bright)	In programming mode
...short dimming pulses	Confirmation tone output
...off	Dialer has seized line
...flashing on/off	Unit is Touch Tone dialing

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.