# VIKING PRODUCT MANUAL

SECURITY & COMMUNICATION SOLUTIONS

# K-1200-IP Series

VoIP Entry Phone System with 12 Button Auto Dialer October 25, 2016

# Vandal Resistant VoIP Entry Phone System with Built-In Directory and 12 Button Auto Dialer

The **K-1200-IP** entry phones provide a durable and attractive hands-free phone for apartment and residential door entry applications requiring a vandal resistant VoIP speaker phone. The **K-1200-IP** phone is designed to provide quick and reliable hands-free communication for SIP VoIP phone systems or cloud based service provider. The unit can be programmed from any PC on the same LAN or remotely using a Static IP Address. The **K-1200-IP** entry phone can dial up to 12 programmable numbers and another 12 rollover numbers. The brushed stainless steel faceplate has a built-in 12 resident directory with a waterproof, scratch resistant lens and 12 buttons for single push auto-dialing of a tenant's phone number or business extension.

When the **K-1200-IP** phone is connected to an apartment or business tenant, a built-in contact closure may be activated to control an electric gate or door strike. Up to 1,000 keyless entry codes may be programmed, providing tenants with keyless entry. A 26 Bit Wiegand input is provided for adding an optional proximity card reader with capacity to program up to 1,000 card numbers. Keyless entry codes and card numbers can be programmed to only allow access at specific times and/or day of the week. The **K-1200-IP** includes a request for exit (REX) input and also offers event logging with time and date stamp.

The **K-1200-IP-EWP** shares all of the features of the **K-1200-IP** in addition to Enhanced Weather Protection (EWP) for outdoor installations where the unit is exposed to precipitation or condensation. EWP products feature foam rubber gaskets and boots, sealed connections, gel-filled butt connectors, as well as urethane or thermal plastic potted circuit boards. For more information on EWP, see **DOD# 859**.



K-1200-IP
"Brushed 316 Stainless Steel"
(similar to brushed nickel)



K-1200-IP-EWP (shown in optional VE-5x10-SS surface mount box sold separately)

 $\triangle$ 

Installation requires the assistance of a Network Administrator / IT Technician.

#### **Features**

- Vandal Resistant Features: 14 gauge louvered 316 stainless steel faceplate with permanent laser etched graphics. Speaker/mic screen. Heavy duty metal keypad buttons and T-10 Security Torx drive mounting screws.
- Weather Resistant Features: Marine grade 316 stainless steel faceplate and screws. Keypad internally sealed per IP67. Mylar speaker. Self-draining mic mount. Faceplate, mic and speaker gaskets.
- Two sets of SPDT 2 Amp relay contacts for door/gate or camera control
- Optional RC-4A for Secure Remote Relay Control, see DOD# 582
- Blue "Call /Status" LED indicator
- SIP compliant (see pg 2 for list of compatible IP-PBX phone systems)
- PoE powered (class 2, <6.5 watts)
- · Automatic Noise Canceling (ANC) feature for operation in noisy environments
- Viking's proprietary VOX switching eliminates the need for "Push to Talk" mode
- · Network downloadable firmware
- 26 Bit Wiegand input for optional proximity card readers, see DOD# 221 & 228
- · Programmable to speed dial up to 12 numbers

- Cycles to roll over phone number on busy or no-answer
- Program up to 1,000 keyless entry codes and/or proximity card numbers
- Keyless entry codes and proximity card numbers can be programmed to only allow access at specific times and day of week
- · Event logging with time and date stamp
- Optional Enhanced Weather Protection (EWP), EWP products are designed to meet IP66 Ingress Protection Rating, see DOD# 859
- · Hangs up on busy signal, time-out or touch tone command
- Remotely programmable
- Extended temperature range (-40°F to 140°F)
- Programmable volume adjustments for microphone and speaker
- · Selectable auto-answer feature for monitoring
- · Zinc plated steel rough-in box included
- Optional VE-5x10 Surface Mount Box available, see DOD #424
- · Optional VE-LIGHT kit to illuminate the front panel at night, see DOD# 428
- Self diagnostics (testing: com, mic and speaker)

# **Applications**

- · Apartment Entry Phone
- · Residential Gate Entrance
- · Door Entry Phone
- Courtesy Assistance Phone
- Customer Service Phone
- Automated Teller (ATM) Phone
- Kiosk Phone with up to 12 number speed dialing
- Use with Viking PRX-1 or PRX-3 proximity card readers DOD# 221 & 228

Information: 715-386-8861 www.vikingelectronics.com

# **Specifications**

Power: PoE class 2 (<6.5 watts)

**Dimensions:** Overall: 5" x 10" x 2.5" (127mm x 254mm x 63.5mm)

Rough-in box: 4.5" x 9.12" x 2.5" (114mm x 232mm x 64mm)

**Shipping Weight:** K-1200-IP - 4.2 lbs (1.9 kg), K-1200-IP-EWP - 4.4 lbs (2.0 kg) **Operating Temperature:** -40°F to 140°F (-40° C to 60° C)

Humidity - Standard Products: 5% to 95% non-condensing Humidity - EWP Products: Up to 100%

Audio Codecs: G711u, G711a, G722 Network Compliance: IEEE 802.3 af PoE, SIP 2.0 RFC3261, 100BASE-TX with

auto cross over

Connections: (1) RJ45 10/100 Base-T, (14) gel-filled butt connectors

# **Viking VoIP SIP System Compatibility List**

**NOTE:** Exclusion from this list means only that compatibility has not been verified, <u>it does not mean incompatibility</u>.

For detailed configuration instructions for certain vendors below, see **Configuring Viking VolP Phone** and **SIP Servers**, **DOD# 944**.

	Infrastructure Class				
Vendor	Softswitch	РВХ	Proxy	SBC (session border controller)	Service Provider
3COM VCX		Х			
3CX		Χ			
Aastra		Х			
Asterisk		Х			
Atcom		Х			
Avaya Aura Communication Manager	Х				
Avaya IP Office		Х			
BlueBox		Х			
Brekeke		Х			
Callcentric					Х
Cisco Unified Communications Manager (CUCM)	Х	Х			
Cisco Unified Communications Manager Express (CUCME)	Х	Х			
Elastix		Х			
Freeswitch		Χ			
Grandstream		Х			
Interactive Intelligence	Х	Χ			
iPECS (Ericsson-LG)		Х			
iptel.org					Х
Kamailio			Х	Х	
MetaSwitch				Х	Х
NEC		Х			
OfficeSIP		Χ			
OpenSIPS		Х			
Panasonic** (with SIP Extension Card)		Х			
Samsung Communications Manager (SCM)	Х	Χ			
ShoreTel*		Χ			
Siemens Communications Server (SCS)		Х			
SIP Express Router (SER)			Х	Х	
sip.antisip.com					Х
Snom PBX		Х			
Sonus				Х	
Switchvox		Х			Х
Teksip			Х		
Toshiba					
VoIP.ms		X			

<sup>\*</sup> **Note:** Not compatible with ShoreTel Ring Group/Hunt Group (unit can be programmed to ring an extension 2 or 3 times then roll to the next number, for a total of 5 numbers).

<sup>\*\*</sup> Note: Relay operation commands are Not compatible with Panasonic Phone Systems (Panasonic does not transmit DTMF between station ports).

# **Definitions**

Client: A computer or device that makes use of a server. As an example, the client might request a particular file from the server.

**DHCP:** Dynamic Host Configuration Protocol. In this procedure the network server or router takes note of a client's MAC address and assigns an IP address to allow the client to communicate with other devices on the network.

DNS Server: A DNS (Domain Name System) server translates domain names (ie: www.vikingelectronics.com) into an IP address.

Ethernet: Ethernet is the most commonly used <u>LAN</u> technology. An Ethernet Local Area Network typically uses twisted pair wires to achieve transmission speeds up to 1Gbps.

**Host:** A computer or device connected to a network.

**Host Name:** A host name is a label assigned to a device connected to a computer network that is used to identify the device in various forms of network communication.

**Hosts File:** A file stored in a computer that lists host names and their corresponding IP addresses with the purpose of mapping addresses to hosts or vice versa.

Internet: A worldwide system of computer networks running on IP protocol which can be accessed by individual computers or networks.

**IP:** Internet Protocol is the set of communications conventions that govern the way computers communicate on networks and on the Internet.

IP Address: This is the address that uniquely identifies a host on a network.

LAN: Local Area Network. A LAN is a network connecting computers and other devices within an office or building.

**Lease:** The amount of time a <u>DHCP</u> server reserves an address it has assigned. If the address isn't used by the host for a period of time, the lease can expire and the address can be assigned to another host.

**MAC Address:** MAC stands for Media Access Control. A MAC address, also called a hardware address or physical address, is a unique address assigned to a device at the factory. It resides in the device's memory and is used by routers to send network traffic to the correct IP address. You can find the MAC address of your **K-1200-IP** phone printed on a white label on the top surface of the PoE LAN port.

**Router:** A device that forwards data from one network to another. In order to send information to the right location, routers look at <u>IP Address</u>, <u>MAC Address</u> and <u>Subnet Mask</u>.

RTP: Real-Time Transport Protocol is an Internet protocol standard that specifies a way for programs to manage the real-time transmission of multimedia data over either unicast or multicast network services.

Server: A computer or device that fulfills requests from a client. This could involve the server sending a particular file requested by the client.

Session Initiation Protocol (SIP): Is a signaling communications protocol, widely used for controlling multimedia communication sessions such as voice and video calls over Internet Protocol (IP) networks. The protocol defines the messages that are sent between endpoints, which govern establishment, termination and other essential elements of a call.

**Static IP Address:** A static IP Address has been assigned manually and is permanent until it is manually removed. It is not subject to the <u>Lease</u> limitations of a <u>Dynamic IP Address</u> assigned by the <u>DHCP Server</u>. The default static IP Address is: **192.168.154.1** 

**Subnet:** A portion of a network that shares a common address component. On TCP/IP networks, subnets are defined as all devices whose IP addresses have the same prefix. For example, all devices with <u>IP addresses</u> that start with 100.100.100. would be part of the same subnet. Dividing a network into subnets is useful for both security and performance reasons. IP networks are divided using a subnet mask.

**TCP/IP:** Transmission Control Protocol/Internet Protocol is the suite of communications protocols used to connect hosts on the Internet. TCP/IP uses several protocols, the two main ones being TCP and IP. TCP/IP is built into the UNIX operating system and is used by the Internet, making it the de facto standard for transmitting data over networks.

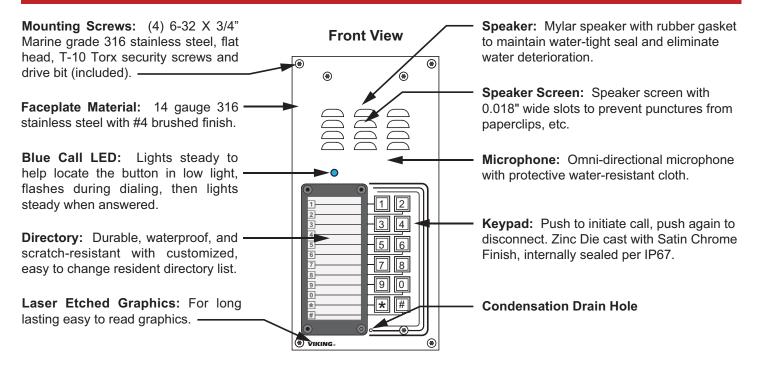
**TISP:** Telephone Internet Service Provider

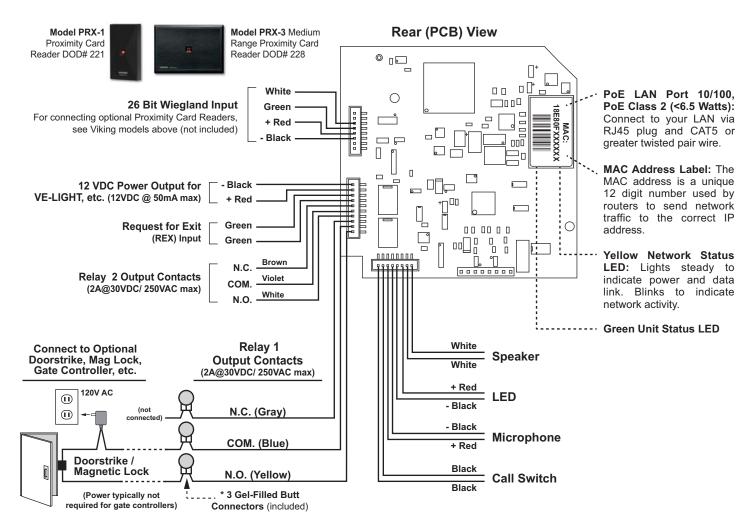
**WAN:** Wide Area Network. A WAN is a network comprising a large geographical area like a state or country. The largest WAN is the <u>Internet</u>.

Wireless Access Point (AP): A device that allows wireless devices to connect to a wired network using Wi-Fi, or related standards. The AP usually connects to a router (via a wired network) as a standalone device, but it can also be an integral component of the router itself.

**Wireless Repeater (Wireless Range Extender):** takes an existing signal from a wireless router or access point and rebroadcasts it to create a second network. When two or more hosts have to be connected with one another over the IEEE 802.11 protocol and the distance is too long for a direct connection to be established, a wireless repeater is used to bridge the gap.

# **Features Overview**

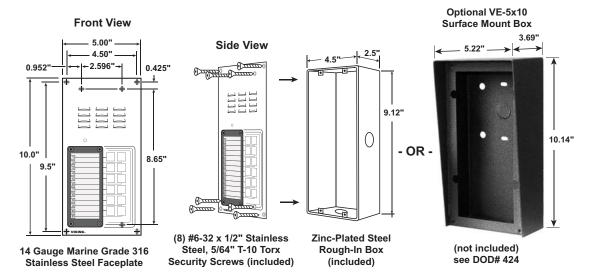




# **Installation and Mounting**

# A. Mounting

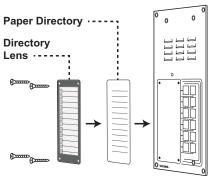
The **K-1200-IP** is designed to be installed in a sheltered location, and is not meant to be used outdoors. For outdoor applications use the **K-1200-IP-EWP**. The **K-1200-IP** can either be installed as a flush mount unit using the included rough in box, or as a surface mount unit using an optional **VE-5x10**. The rough in box uses the inner set of four holes on the face plate while the **VE-5x10** uses the outside set of holes. A set of dummy screws and nuts are provided to fill the unused mounting holes.



# **B.** Changing the Directory

To install a directory, remove the four screws that mount the directory lens to the front of the **K-1200-IP** using the included Allen wrench. Insert a paper directory behind the lens and secure the two back onto the front panel being careful to align the names with the front panel graphics.

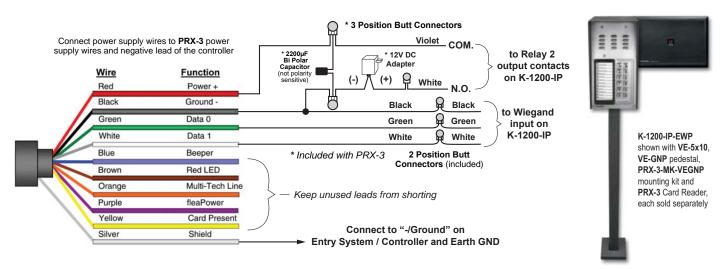
**Note:** To print directory forms for the **K-1200-IP**, go to www.vikingelectronics.com and enter "930" in the DOD field at the top of the page for a direct link to the PDF.



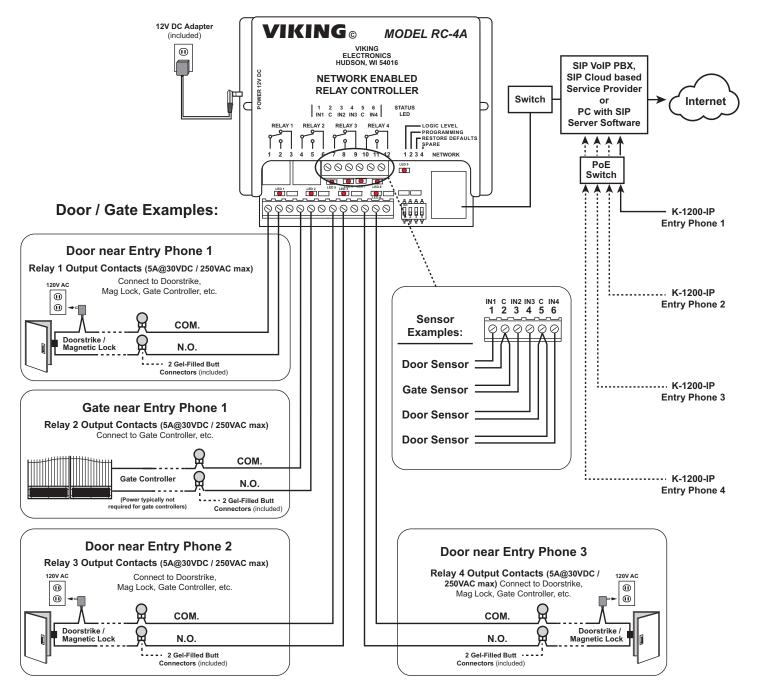
# **Applications and Wiring**

# A. Adding a Viking Model PRX-3 Medium Range Proximity Card Reader

When mounting a **PRX-3** in close proximity of the **K-1200-IP** (ie: using a **PRX-3-MK-GNP** mounting kit), you must set "Relay 2 mode" to "Alarm" in Programming and wire as shown below. When using the **PRX-3** with any Viking Entry System/Controller, the provided 12V DC 500mA power adapter and 2200µF bi polar capacitor should be used. For more information on **PRX-3**, see DOD# 228.



# B. Using a Viking Model RC-4A For Secure Remote Relay Control



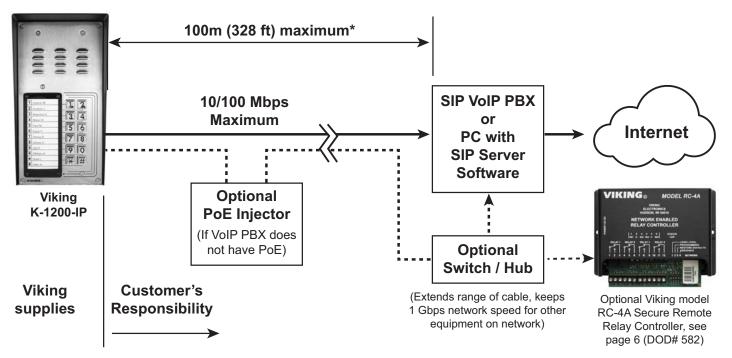
The front panel of the **K-1200-IP** is mounted using security Torx screws to help prevent intruders from removing the panel and accessing the on board door strike/gate control relays. For applications requiring additional security, a Viking model **RC-4A** remote relay controller can be used. The relay controller is mounted securely inside the building and connected to the same LAN as the **K-1200-IP**. The on board door strike relays would not be used in this case as the **K-1200-IP** will send an encrypted message to the **RC-4A** to activate its relays which control the door strikes/gates.

Up to 4 K-1200-IP's can communicate with one RC-4A allowing you to securely control four entrances.

When using an RC-4A for remote relay control the K-1200-IP's relays should be set to "External" in the PC programming.

**Note:** If the **K-1200-IP** loses communications with the **RC-4A**, the LED on the front panel of the **K-1200-IP** will flash 3 times every 2 seconds indicating the communication error. If this error occurs, make sure the **RC-4A** is powered, has a network connection and has the correct IP address and security code of the **K-1200-IP** displaying errors.

# Typical Installation on SIP Based VoIP Phone System



<sup>\*</sup> **Note:** A PoE extender can be used for an additional 100 meters per extender. For longer runs (up to 2 km / 1.2 miles) a ethernet to fiber media converter can be used.

# **PC Requirements**

- IBM compatible personal computer with:
  Windows 2000 (service pack 4 or higher)
  Windows XP (service pack 2 or higher)
  Windows Vista (SP2 or newer), 32 or 64 bit versions
  Windows 7
  - Windows 8
  - Windows 10
- Adobe Acrobat Reader 8 or higher
- K-1200-IP hardware
- Available LAN with PoE (class 2, <6.5 watts)</li>
- Ethernet cable (CAT5 min.)
- 1 MB minimum free hard drive space for installation
- 16MB of free physical RAM

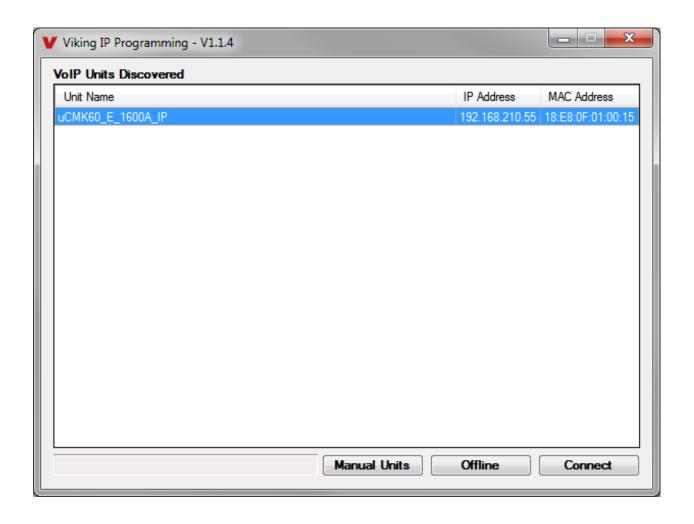
# **PC Programming**

A DVD is included with each **K-1200-IP** VoIP Entry Phone. The DVD contains the application "**Viking IP Programming**" used to program the unit using a PC running Windows 2000, XP, Vista, Windows 7, Windows 8 or Windows 10 (see System Requirements above). The PC must be connected to the same LAN as the **K-1200-IP** VoIP phone. Install the application on your PC by placing the DVD into your PC's drive. Click "I Accept" on the bottom of the first screen, then select "Viking IP Programming" and click the "Install" button. Follow the directions on the screen. To start the Viking IP Programming application, click on the Viking IP Programming icon on your desk top. The Main screen will appear, allowing the user to program any **K-1200-IP** phone connected to that LAN.

#### A. Connect/Disconnect

Open the "Viking IP Programming" software on the PC and the start screen shown below will appear. Any Viking IP phones that are connected to the network will appear on the list. Simply select the K-1200-IP on the list and click on the "Connect" button at the bottom or double click the selected phone. If the security code of the selected phone is still set to default (845464), the PC software will not require entering a security code to connect to the phone. K-1200-IP's have a default name of "uCMK60\_E\_1600A\_IP", so if many phones are connected to the same network that all have the default name, MAC addresses must be used to identify each phone.

When finished programming, click on the "Disconnect" button at the bottom. Closing the program will also automatically disconnect the unit.

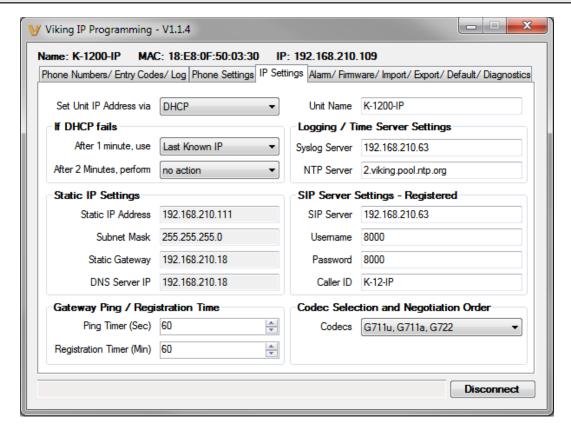


#### B. Manually Muting SIP/Network Failure Alarm Beeps (3 beeps repeated every 30 seconds)

With the unit connected and powered (Green LED on and Yellow LED off or blinking) it will output 3 beeps every 30 seconds and turn the call LED on and off once per second to indicate a SIP registration failure, failure to receive an echo reply from pinged gateway or Ethernet connection failure. You can manually disable the beeps by pressing and holding the "\*" button for 5 seconds (2 beeps will then be heard) or by clicking the "Mute Alarm Until Next Failure" button in the Viking VoIP programming software. The LED will continue to flash allowing you to trouble shoot the failure.

# C. Configuring the K-1200-IP Network Settings

Step 1.	Open the "Viking IP Programming" software on a windows PC that is connected to the same LAN as the <b>K-1200-IP</b> phone to be programmed.
Step 2.	The window in the upper left corner of the menu will show you each <b>K-1200-IP</b> phone that is connected to that LAN. Select the unit with the same MAC address shown on the label located on the top of the Ethernet connector on the <b>K-1200-IP</b> phone.
Step 3.	Click the "Connect" button. If a pop up window appears, enter the unit's security code (factory set to 845464) then click "OK".
Step 4.	The program will then read and display the <b>K-1200-IP</b> phone's IP and programming settings.
Step 5.	Click on the "IP Settings" tab and fill in the three required fields of SIP Server, Username and Password. The SIP provider or the phone system programmer provide the information to put in these fields. The SIP Server field can contain an IP address or a fully qualified domain name. Some examples are shown below. Our phones use port "5060" for traffic by default but another port can be specified by adding a ":" (colon) and the desired port number at the end of the SIP server IP address (for example "192.168.210.61:5070" to specify port "5070"). You can also assign a name for the <b>K-1200-IP</b> in the Unit Name field. When finished, click on the "Apply" button to send the IP settings to the connected unit. See Examples 1 and 2 of the required fields below:



# D. Manually Resetting the Security Code to Enter Programming

Step 1.	Power down the <b>K-1200-IP</b> phone by disconnecting the LAN Cable (RJ45 plug).		
Step 2.	Press and hold the # key on keypad, then reconnect the LAN Cable (RJ45 plug).		
Step 3.	Continue to hold # key until you hear 2 beeps, (approximately 6 seconds). Then release the button. The "Call" LED will remain off for the first 3 seconds, flash slowly for 3 seconds then fast flash (after 2 beeps), indicating when to release button.		
Step 4.	The security code is now reset to <b>845464</b> (factory default).		
Step 5.	You can now enter programming by following the steps in section A.		

# E. Manually Resetting All Network Parameters to Factory Default

Step 1.	Power down the <b>K-1200-IP</b> phone by disconnecting the LAN Cable (RJ45 plug).			
Step 2.	Press and hold the # key on keypad, then reconnect the LAN Cable (RJ45 plug).			
	Continue to hold # key until you hear 2 beeps, (approximately 6 seconds). Continue to hold # key until you hear 4 more beeps, approximately 6 seconds later, then release the button. The "Call" LED will remain off for the first 3 seconds, flash slowly for 3 seconds (2 beeps), fast flash for 6 seconds (4 beeps), then light steady indicating when to release button.			
Step 4.	You can now enter programming by following the steps in section <b>A</b> .			

# **Programming Features Index**

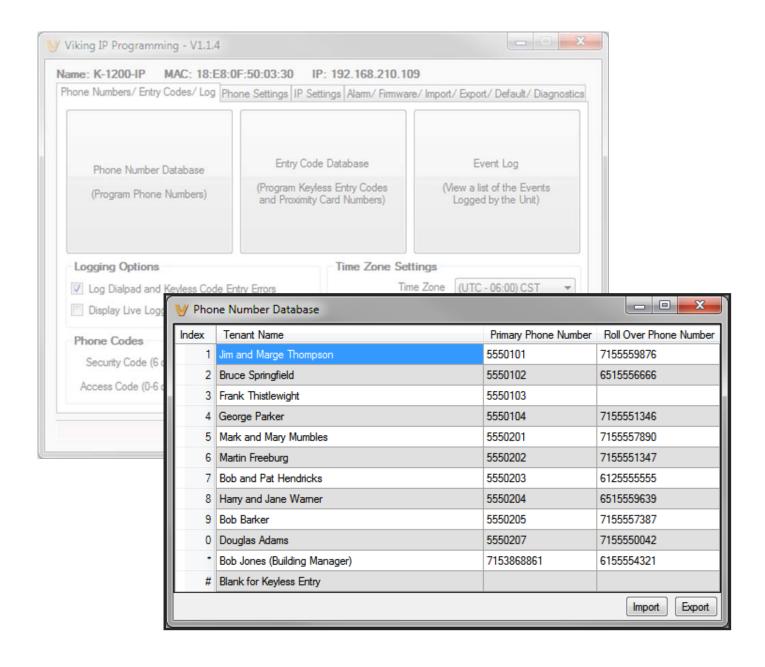
DESCRIPTION	Section	Page
Connect/Disconnect	А	8
Phone Number Database	1	11
Event Log	2	12
Entry Code Database	3	13
Phone Name	4	13
Mute Alarm Until Next Failure	5	13
Phone Firmware	6	13
IP Firmware	7	13
Import/Export	8	14
Default Phone Settings	9	14
Diagnostics (used to check mic, speaker, relays and proximity card reader operation)	10	14
Security code (factory set to 845464)	11	14
Access Code (1-6 digits, blank = disabled, factory set to 123456)	12	14
Inbound Call Mode (Disabled, Auto Answer, Auto Answer-Secure, Silent Monitor, Silent Monitor-Secure)	13	14
Select Time Zone	14	15
Daylight Savings	15	15
Keyless/Card Logging	16	15
Relay 1 or 2 Mode (Door Strike, Outbound Call, In/Outbound Call, Doorbell, Alarm Mode, factory set to Door Strike)	17	15
Relay 1 or 2 Command (1 or 2 digits, factory set to ** and *2) (Relay Mode must be set to Door Strike)	18	15
Relay 1 or 2 Time (0.5 - 99 sec, factory set to 5 sec)	19	15
Relay 1 or 2 Int/Ext (factory set to Internal)	20	15
Relay Activation Delay (Disabled or 0.5 - 99 sec, factory set to Disabled)	21	16
Relay Buzz (Activation Tone) Volume (1 digit 0-3, 0 = off, factory set to 3)	22	16
Relay Latch Commands (Enabled or Disabled, factory set to Enabled)	23	16
Speaker Volume (0-9, factory set to 2)	24	16
Microphone Volume (0-9, 0 = Auto, factory set to 5)	25	16
Talk/Listen Delay (VOX) (.1 to .9 sec, factory set to .5 sec)	26	16
Audio Call Progress (OFF, ON, factory set to ON)	27	16
Audio Detect Level (1-9, 1 = min, 9 = max, factory set to 5, power cycle unit after setting)	28	16
Call Length Time Out (disabled or 1 to 9 min, factory set to 3 min)	29	17
Dial Next Number on RNA (Ring No Answer) (disabled, 1 - 9 = number of rings, factory set to 7)	30	17
Dial Next Number on Busy (disabled or enabled, factory set to enabled)	31	17
REX Input	32	17

# **Programming Features**

#### 1. Phone Number Database

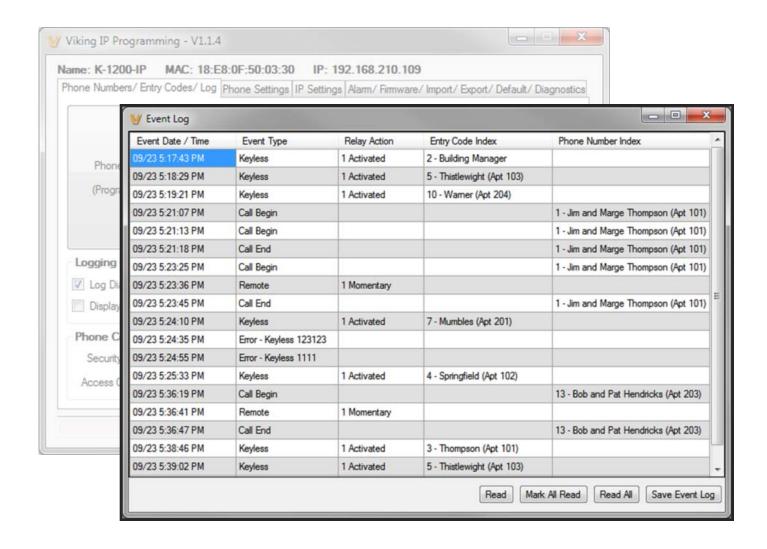
Clicking on the "Phone Number Database" button will open a screen allowing you to program all the Tenants Name's, Speed Dial Numbers, and Primary and Roll Over phone numbers. Tenant names are stored locally on the PC and are not uploaded.

The Speed Dial Number is the single digit number visitors enter on the **K-1200-IP**'s keypad for the unit to call the tenant. 3 seconds after the number is entered, the unit will then dial the Primary Phone Number associated with that Speed Dial Number. If there is no answer or a busy signal is detected, the **K-1200-IP** will then dial the Roll Over Phone Number.



# 2. Event Log

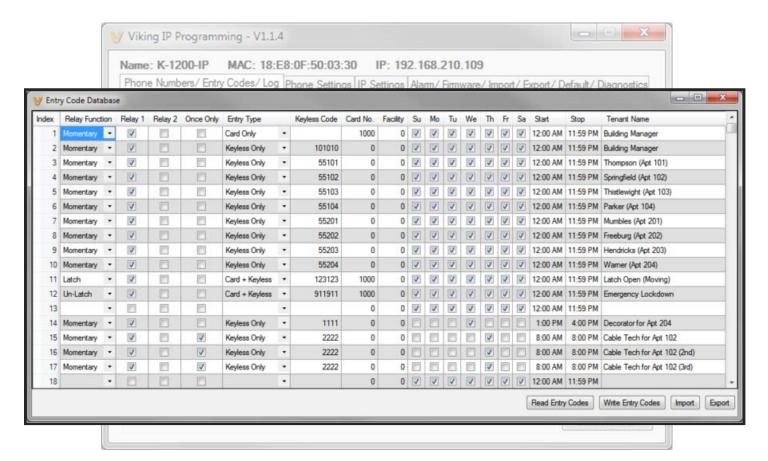
The Event Log button is used to open the Event Log screen. The Event Log screen shows you the time and date of each event, the event type, relay action (which door/gate was opened or closed), entry code index and phone number index with tenant name. The Event Log can store up to 4,095 events. Events are stored in a first in first out format. When the memory is full, new events will over write the oldest events. The Event log can be saved in one of two file formats: Tab Delimited Text or Comma Separated Variable.



# 3. Entry Code Database

Clicking on the "Entry Code Database" button will open the Entry Code Database screen.

The Entry Code Database will then download, this can take over a minute. The Entry Code Database will allow you to program the Relay Function, Relay 1 or 2, once only (one time use only), Entry Type (Card, Keyless or both), Keyless Code, Proximity Card #, Facility Code, Day of week, Time of Day and Tenant Name. Tenant names are stored locally on the PC and are not uploaded. When "Card + Keyless" is selected, a valid card must be presented and the keyless code entered within 15 seconds.



#### 4. Phone Name

Up to a 31 character phone name can be assigned to the **K-1200-IP** being programmed. Often times the building name and entrance location near the unit are used for the name.

### 5. Mute Current / Next Alarm

A network failure alarm will be indicated by providing 3 beeps every 30 seconds in the handset of the **K-1200-IP**. A network failure indicates the unit is not registered to the SIP server or there is a communication failure with the gateway. The three beeps can be muted by clicking on "Mute Current / Next Alarm".

#### 6. Phone Firmware

If new **K-1200-IP** firmware is available, after opening the programming software a pop up window will ask if you would like to update firmware. Another way to update is accomplished by clicking the phone firmware "Update" button. You can then browse to the folder that contains the HEX file for updating the unit's firmware. This method is typically only used when Viking Technical Support has sent you updated firmware.

#### 7. IP Firmware

If new **K-1200-IP** firmware is available, after opening the programming software a pop up window will ask if you would like to update firmware. Another way to update is accomplished by clicking the IP firmware "Update" button. You can then browse to the folder that contains the PIP file for updating the unit's IP firmware. This method is typically only used when Viking Technical Support has sent you updated IP firmware

# 8. Import/Export

The Import/Export feature is useful for backing up all the **K-1200-IP's** programming or for importing programming when installing multiple units with a majority of the same programming.

# 9. Default Phone Settings

Clicking on the "Default Phone Settings" button in programming will reset all of the Programming Features back to their factory default settings. *Note:* This command will not change or reset your IP settings.

# 10. Diagnostics

The Diagnostics section in the Viking IP Programming can be used to test the functionality of the two relays, read current relay status or to display information on the last card or fob detected by the card reader.

# 11. Security Code

The security code allows the user/installer to program the **K-1200-IP** phone. The factory set security code is 845464. It is recommended that the factory set security code be changed.

**Note:** The security code must be 6 digits and cannot include a \* or a #.

#### 12. Access Code

The Access Code is used for remotely operating the relays (Doorstrike, Mag-Lock, etc) by calling into the unit. This code provides basic security and only allows operation of the relays and not the ability to change any of the programming parameters. Once entered, any of the "Remote Access Operation Commands" can be used. The code can be 1 to 6 digits in length and cannot contain a "\*" or "#". Simply call the **K-1200-IP** phone (set to auto-answer/auto-answer secure), the unit will automatically answer the line and output one beep. You then enter the programmed 1 to 6 digit access code, 2 beeps should be heard. You can now enter any "Remote Access Operation Commands" (see page 19).

#### 13. Inbound Call Mode

The Inbound Call Mode determines how the **K-1200-IP** handles incoming calls. One option is to generate a loud ring sound through the handset receiver, allowing someone to lift the handset to answer the inbound call. The **K-1200-IP** can also auto answer the call, to allow remote control of the doorstrike relays and the ability to listen to transmit audio from the handset of the phone. The last option is the silent monitor mode, which allows callers to listen to the transmit audio from the handset of the phone at a much higher volume than normal. The "secure" options for auto answer and silent monitor require the callers to dial the access code in order to remain connected and listen to the audio from the handset.

Disabled - Inbound calls are not allowed.

Auto Answer - Inbound calls are auto answered on the first ring.

Auto Answer Secure – Inbound calls are auto answered and the caller must dial the access code in order to listen or talk on the

Silent Monitor – Inbound calls are auto answered and the caller hears transmit audio from the microphone at a much higher volume level.

Silent Monitor Secure – Inbound calls are auto answered and the caller must dial the access code in order to listen to transmit audio from the microphone (volume level is still at a much higher volume level).

#### 14. Select Time Zone

When using date and time logged events or setting the access date and times of keyless codes or proximity cards in the Entry Code Database, you must program the unit to your time zone. Example: You are installing the **K-1200-IP** in the Central standard time zone: Select (UTC - 06:00) CST, which is 6 hours behind Coordinated Universal Time (UTC).

# 15. Daylight Savings

The Daylight Saving Time programming can be enabled or disabled and can be programmed to start on any Sunday in March and stopped on any Sunday in November. Currently, daylight saving time starts on the second Sunday in March and ends on the first Sunday in November, with the time changes taking place at 2:00AM local time.

# 16. Keyless/Card Logging

Keyless Entry Code and Proximity Card logging can be set to Log Errors. With Log Errors selected (default selection), the **K-1200-IP** will not only log all valid Keyless Entry Code and Proximity Card entries, but also log any errors, incorrect codes, or non-valid card reads.

Keyless Entry Code and Proximity Card logging can also be set to Live Logging. With Live logging selected and the **K-1200-IP** programming software open and connected to a unit, each Keyless Entry Code entered or Proximity Card read will immediately open the Event Log screen and display the latest entry.

# 17. Relay Mode

**Doorstrike Mode:** When programmed for Doorstrike Mode the relay is intended for door strike, maglock or gate control. The relay can also be touch tone activated by dialing a "#" plus a valid keyless entry code or by scanning a valid proximity card that has been assigned to that relay.

**Outbound Call Mode:** When programmed for Outbound Call Mode the relay will activate continuously for the duration of any outbound call from the Entry phone.

**Inbound/Outbound Call Mode:** When programmed for Inbound/Outbound Call Mode the relay will activate continuously for the duration of any inbound or outbound call to or from the Entry phone. This mode is useful for turning on IR flood lights, for VoIP phones with cameras, etc.

**Doorbell Mode:** When programmed for Doorbell Mode the relay will momentarily activate the relay for the preprogrammed relay activation time on any outbound call from the Entry phone. This mode is useful for activating a door chime, etc. When activating door chimes, a 0.5 - 1 second relay activation time is recommended. **Note:** Activation time must be set before Doorbell Mode is selected.

**Alarm Mode:** When programmed in Alarm Mode the relay will activate continuously while the Entry phone is powered and registered to the SIP server. In the event the unit loses power and/or SIP registration the relay will turn off, which can be used to signal an alarm device.

# 18. Relay 1 or 2 (Activation) Command

The one or two digit code stored in the Relay Activation Command is the touch tone command that the person being called must enter on their phone in order to momentarily activate relay 1 or 2 to control a doorstrike, mag-lock, gate controller, or other device. The code can contain the characters 0 - 9, # or \*. The code cannot match a relay latching or toggle command (11, 10, 1#, 21, 20, or 2#). The code must be entered while the remote phone is communicating with the Entry phone. The Entry phone determines which direction the touch tone is coming from and only responds to touch tones from the called phone. The factory setting is \*\* for relay 1 and \*2 for relay 2.

# 19. Relay 1 or 2 Activation Time

The value stored in the Relay 1 or 2 Activation Time is the amount of time relay 1 or 2 will be energized after a correct momentary touch tone command is entered, "#" plus a valid keyless entry code or a proximity card was scanned that is programmed to momentarily activate the relay. This number can range from 0.5 to 99 seconds. The factory setting is 5 seconds.

#### 20. Relay 1 or 2 Internal / External

With relay 1 and/or 2 set to "Internal" the **K-1200-IP** will activate its on board relays for door strike / gate control. Relay 1 and/or 2 should be set to "External" for higher security installations when using a Viking remote model **RC-4A** relay controller to activate the door strike / gate controller (see page 6).

# 21. Relay Activation Delay

A relay activation delay of 0.5 to 99 seconds or disabled can be programmed in the **K-1200-IP**. A relay activation delay is useful in two door vestibule entrance applications. This allows you to program a delay time from when relay 1 (outside door) is activated to when relay 2 (inside door) is activated. The programmed delay time should be set to the average time it takes a person to walk from the outside door to the inside door. If set to "Disabled" only relay 2 will activate.

When a request for exit (REX) is activated, relay 2 will activate first, then after the programmed delay relay 1 will activate.

# 22. Relay Buzz (Activation Tone) Volume

The relay activation tone is a buzzing sound that is heard at the Entry phone when the door strike relay is activated. After the called party enters the correct relay activation command, the called party will hear 2 short confirmation beeps and the entry phone will output a buzzing sound (relay activation tone) when the door strike relay is activated. The tone (buzz) length will match the relay activation time up to a maximum of 5 seconds. The tone (buzz) can be programmed to three different volume settings 1 = Low, 2 = Medium, 3 = High or it can be disabled.

The volume will also vary with the speaker volume setting.

# 23. Relay Latch Commands

When programmed to "Enable" (factory default) the Remote Access Operation Commands to Un-Latch, Latch or Toggle the relay are enabled.

When programmed to "Disable" the Remote Access Operation Commands to Un-Latch, Latch or Toggle the relay are disabled. Disabling the Latch commands can be useful in applications where you want to eliminate the possibility of inadvertently entering a latch command leaving a gate open/closed, etc.

# 24. Speaker Volume

The speaker volume can be set from 0 to 9 (0 = lowest volume setting, 9 = the highest, factory set to 2).

# 25. Microphone Volume / Automatic Noise Cancelling Mode

The microphone volume can be set from 1 to 9 (1 = lowest volume setting, 9 = the highest, factory set to 5). Alternatively the microphone can be placed in the "Auto" Automatic Noise Cancelling mode. With the mic in the Auto mode, when background noise increases, the mic gain will automatically decrease. When background noise decreases the mic gain will automatically increase. The Auto mode is useful in applications where the background noise level can change drastically such as a gas car running vs a diesel truck.

# 26. Talk / Listen Delay (VOX)

This feature selects switching time between talk and listen modes (VOX switching time). The Talk/Listen Delay can be programmed from .1 to .9 seconds.

Note: The factory default is .5 seconds.

# 27. Audio Call Progress (In-Band Audio Call Progress Detection)

The In-Band Audio Call Progress Detection can be set to enabled or disabled. In-Band Audio Call Progress detection should be enabled in applications where you are making an outbound call through your VoIP phone system and are relying on In-Band analog audio for ringback or busy detection. The factory default is: Enabled.

# 28. Audio Detect Level (In-Band Audio Detection Level / Sensitivity)

The In-Band Audio Detection level (Sensitivity) can be set from 1 to 9 (1 = minimum setting, 9 = the highest, factory set to 5). Increasing or decreasing the sensitivity may be required in applications where you are making an outbound call through your VoIP phone system and are relying on In-Band analog audio detection.

# 29. Call Length Time Out

This feature selects the maximum length of time that calls can be connected. Programmable in increments of 1 minute up to a maximum of 9 minutes or disabled. With the call length disabled, the **K-1200-IP** phone must rely on a call ended signal, busy signal, silence, Ring No Answer limit, or return to dial tone to hang-up.

Note: The factory default is 3 minutes.

# 30. Dial Next Number on RNA (Ring No Answer)

If enabled and a ring-no-answer is detected, the **K-1200-IP** phone will dial the "Roll Over" speed dial number. **Note:** Factory set to redial if not answered after 7 rings.

# 31. Dial Next Number on Busy

If enabled and a busy is detected, the **K-1200-IP** phone will dial the "Roll Over" speed dial number. **Notes:** This feature is enabled in the factory default setting. If the busy signal is interrupted with a promotional message, contact your central office to have it removed.

# 32. REX Input

The **K-1200-IP** has one Request for Exit (REX) trigger input. The REX switch must have a momentary, normally open contact. When the **K-1200-IP** detects a contact closure on the REX trigger input it performs one of the following actions, based on the Relay Mode settings for each relay (see section 22):

Relay 1 "Door Strike", relay 2 other: Relay 1 will be activated for the programmed Relay 1 Activation Time.

Relay 1 other, relay 2 "Door Strike": Relay 2 will be activated for the programmed Relay 2 Activation Time.

Relay 1 "Door Strike", relay 2 "Door Strike": If the Relay Activation Delay is disabled, Relay 2 will be activated for the programmed Relay 2 Activation Time. If Relay Activation Delay is not disabled, Relay 2 will be activated for the programmed Relay 2 Activation Time, then after the Relay Activation Delay time has passed, Relay 1 will be activated for the programmed Relay 1 Activation Time. This is useful in two door vestibule applications where Relay 1 is used to unlock the outside door, and Relay 2 is used to unlock the inside door.

# **Operation**

# A. Keypad Button

When a Keypad button is pressed, the **K-1200-IP** immediately dials the pre-programmed telephone number stored in the corresponding Phone Number Database Index location (1-#). The Call Status LED momentarily flashes during dialing. In the event the line is busy or there is a ring-no-answer, the unit can be programmed to call a second roll over number.

When the call is answered, relay activation commands can be entered or the # key can be used to force the phone to hang-up.

After communication is established, enter the 1 or 2 digit relay activation command (factory set to "\*\*" for Relay 1 and "\*2" for Relay 2) to momentarily activate the entry phone (door strike) relay. Two beeps will be heard confirming that the relay has been activated. If you require the relay to remain on continuously (ie: a truck delivery), enter Touch Tones "11" or "21" to continuously activate relay 1 or relay 2 respectively. A double beep will indicate that the relay is latched on. When the visitor calls in again (ie: they are finished unloading the truck), enter Touch Tones "10" or "20" to deactivate relay 1 or relay 2 respectively. A single beep will indicate the relay is latched off. The relays can be toggled by entering "1#" and "2#" for relays 1 and 2.

# **B.** Remote Access Operation Commands

The following commands can be entered after answering an inbound call from the entry phone. The commands can also be entered on an outbound call to the entry phone. After the entry phone auto answers the call, one or two beeps will be heard. If the access code has been disabled (two beeps heard), you can now enter the Remote Access Operation Commands below. If an Access code has been programmed (one beep heard), enter the Access code digits. With the correct code entered, two beeps will be heard and you can now enter the Remote Access Operation Commands below. The relay must be set to "Door Strike" Mode to be controlled by these commands.

Feature	Touch Tone Command	Description
Momentarily Activate Relay 1	** or ————	Momentarily activate relay 1 (1 or 2 digits, factory set to ★★).
Latch Relay 1	11	Latch* (continuously activate) relay 1.
Un-Latch Relay 1	10	Un-latch* (deactivate) relay 1.
Toggle Relay 1	1#	Toggle relay 1 from last position.
Momentarily Activate Relay 2	*2 or	Momentarily activate relay 2 (1 or 2 digits, factory set to ★2).
Latch Relay 2	21	Latch* (continuously activate) relay 2.
Un-Latch Relay 2	20	Un-latch* (deactivate) relay 2.
Toggle Relay 2	2#	Toggle relay 2 from last position.
Disconnect	#	Disconnects or forces the phone to hang up.

<sup>\*</sup> Note: Relay latch commands must be enabled in programming.

# C. Keyless Entry Codes and One Time Use Keyless Entry Codes

Keyless entry codes may be used by the tenants to provide keyless entry. The **K-1200-IP** can be programmed with a combination of up to 1000\* keyless entry codes or one time use keyless entry codes. The keyless entry codes can be programmed to be from 1 to 6 digits in length. Each keyless entry code can be programmed to activate relay 1 and/or 2 in four different relay modes: Momentary, Latch, UnLatch and Toggle. To use a keyless entry code the tenant simply dials "#" followed by the entry code on the **K-1200-IP**'s keypad. After the one time use keyless entry code has been used, it is instantly cleared from the unit's memory. This is ideal for issuing keyless entry codes to service personnel, etc.

**Notes** 1. A short buzz sound indicates when the relay has been activated and the visitor can now open the door.

2. If keyless entry codes are used, leave the "#" position blank in the Phone Number Database.

#### D. Proximity Cards

Proximity cards can also be used by the tenants to provide keyless entry. The **K-1200-IP** can be programmed with up to 1000\* proximity card numbers. Each proximity card number can be programmed to activate relay 1 and/or 2 in four different relay modes: Momentary, Latch, Un-Latch and Toggle. To use a proximity card the tenant simply presents a preprogrammed proximity card within \*\*6 inches of the proximity card reader attached to the **K-1200-IP**. A short beep will be heard from the card reader indicating a card scan. If the card matches a valid preprogrammed card number a short buzz sound (if enabled) will be heard indicating the relay has been activated and the visitor can now open the door or gate.

# **Troubleshooting**

If the unit cannot register with the programmed SIP server, the LED will blink on and off every second, and three error beeps will be heard every 30 seconds until communication is restored. This alerts a potential user of a problem with the device that will prevent an emergency phone call from being made.

<sup>\*</sup> Note: 1000 is the total number of Keyless Entry Codes and/or Proximity Card numbers that can be programmed in the Entry Code Database.

<sup>\*\*</sup> Note: Read range is dependent on the card reader type.

# Surface or Pedestal Mount Viking Products While Maintaining Weather and Vandal Resistance

The VE-3x5, VE-5x5, VE-6x7 and VE-5x10 add vandal and weather resistance, as well as versatility to many Viking products. The VE-Series backboxes are available in black fine texture powder painted steel or marine grade 316 stainless steel. The weather resistant boxes are designed to be surface mounted to a wall, post, single gang box, or a VE-GNP gooseneck pedestal. Note: The VE-3x5 is not compatible with the VE-GNP pedestals and is not available in stainless steel.



The **VE-GNP** gooseneck pedestals are designed to be used with the **VE-5x5**, **VE-6x7** and **VE-5x10** backboxes and are ideal for drive up communications. **Note:** The **VE-3x5** is not compatible with the **VE-GNP** pedestals.



The **VE-PNL**'s are **VE-Series** backboxes with a blank aluminum panel. The user can customize the clear-coated aluminum panel to mount an **PRX-1** card reader, **PRX-2** keypad or switch. The kits come complete with box, gasket, panel and screws. Model numbers that end with "SS" are stainless steel version. **Note:** The use of magnets to mount the **VE-Series** enclosure to a metal surface can affect the operation of the enclosed product.

For more information on Viking Surface Mount Boxes and Pedestals, see DOD# 424.

# Add Panel Lighting to Your Viking VolP Entry Phone

The **VE-LIGHT** kit adds bright LED illumination to any VoIP entry phone that is housed in a Viking **VE-5x5**, **VE-6x7** or **VE-5x10** enclosure.

The stainless steel bracket is easily mounted using existing holes and hardware. Two bright white LEDs are used as the light source, so there are no filaments to break or bulbs to burn out.

12 VDC power adapter included. Any power source between 12 and 24 volts, AC or DC can be used to supply the **VE-LIGHT** with power. The **K-1200-IP** provides 12VDC power to power the **VE-LIGHT**(see page 4).

For more information, See DOD# 428.

VE-LIGHT shown right with Viking E-30 and VE-5x5 (not included)



# Control Relay Contacts Across a Local Area Network

The **RC-4A** Network Enabled Relay Controller provides networked control of four relays via an easy-to-use web interface. The same interface can be used to check the status of four contact closure inputs. Relays can be toggled on or off, or user-programmed timed closures can be activated.

The **RC-4A** can be configured to work as a remote relay for Viking VoIP series entry phones, controlling door strikes and gates when a remote relay is required for security reasons. It can also be programmed to send an email or text message in response to a change in one or more of the sensor inputs. Two **RC-4A's** can be set up so that activity on a sensor input of one unit will automatically send a message across the network to activate one of the relays on the other unit. Two levels of user access permit selected users to have full operational and programming rights while others have operational control but not programming capability.

VIKING MODEL RC-4A

VICING
ELECTRONICS
HUDSON, WI 54016

NETWORK ENABLED
RELAY CONTROLLER

IN C R2 NO C R4

LED

RELAY RELAY RELAY RELAY RESTORE DEFAULTS
PROGRAMMING.
RESTORE DEFAULTS
PROGRAMMING.
RESTORE DEFAULTS
RESTOREDEFAULTS

For more info, see DOD# 585

# 125KHz Proximity Card Reader



PRX-1

The model **PRX-1** is a 125KHz proximity card reader and is designed to be mounted directly to a metal door or window frame (mullions), making it ideal for applications requiring an access credential. The proximity card reader transmits data in 26-Bit Wiegand format, making it compatible with any of the Wiegand equipped Viking entry controllers.

The **PRX-1** delivers non-contact read ranges up to 6 inches (152 mm), and operates from 5 to 14 VDC. Physical size is

a compact  $3.2 \times 1.7 \times 0.70$  inches (80 x 43 x 17 mm). Mounting is simplified with horizontal and vertical mounting slots, which allow the reader to be conveniently adjusted and leveled. To allow both indoor and outdoor operation the electronics are sealed in tamper resistant epoxy potting. Concealing the mounting hardware, the **PRX-1** ships with both Black and Ash (Off-White) covers standard. **See DOD# 221 for more information.** 

# 125KHz Proximity Cards

The PRX-C and PRX-C-ISO are non-contact security cards that can be presented to the front of a K-1770/75-IP proximity card reader to allow entrance into a secured area. The PRX-C is a clam shell card made made from 0.070" thick plastic to resist bending and folding. A slot is provided at one end to allow a lanyard to be



added for creating a "dog tag" style neck strap. The **PRX-C-ISO** is a thin 0.032" thick flexible "ISO" style proximity card. Much like a credit card, the **PRX-C-ISO** is perfect for storing in your wallet.

The **PRX-FOB** is a proximity key ring fob with brass eyelet designed to attach to a key chain or necklace. The **PRX-FOB**'s compact size is only 1.5" x 1.2" x 0.15" making it one of the smallest available.

The cards and fobs are custom pre-programmed. For more information see DOD# 198.

# Medium Range 125KHz Proximity Card Reader



PRX-3

The model **PRX-3** is a high performance medium range 125KHz proximity card reader. The **PRX-3**'s compact size yet long read range of up to 16 inches\* make it ideal for parking control, gate access, turnstiles, etc. It is designed to be mounted

directly to a wall, post, single gang electrical box or use an optional mounting kit for attaching it to a gooseneck pedestal. Mounting is simplified with horizontal and vertical mounting slots, which allow the reader to be conveniently adjusted and leveled. To increase vandal resistance the chassis is a single piece design with the mounting screws concealed behind a UV stable label.

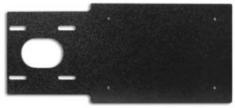
The proximity card reader transmits data in 26-Bit Wiegand format, making it compatible with any of the Wiegand equipped Viking entry controllers. The **PRX-3** is equipped with Enhanced Weather Protection (EWP) for outdoor installations where the unit is exposed to precipitation or condensation. With its sealed connections and fully potted electronics the **PRX-3** is designed to meet an IP66 Ingress Protection Rating. **For more information see DOD# 228.** 

# Gooseneck Pedestal Mounting Kit



For more info see DOD# 229

The model PRX-3-MK-VEGNP is a mounting kit for attaching the PRX-3 proximity card reader and a VE-5x5, VE-6x7 or VE-5x10 (surface mount entry phone box) to a VE-GNP gooseneck pedestal. It includes the required mounting hardware, has a mounting plate made from durable 3/8 inch thick black UV stable textured ABS plastic and a gasket for sealing the back side of the VE surface mount box. See page 5 for wiring.



# Warranty

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

Our Technical Support Department is available for assistance Monday through Friday 8:00am to 5:00pm 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 Product Manual 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 <u>your distributor, referencing the R.A. number</u>. Your distributor will then replace the Viking product 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 WARRANTÍES 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.

If trouble is experienced with the K-1200-IP phone, for repair or warranty information, please contact:

Viking Electronics, Inc., 1531 Industrial Street, Hudson, WI 54016 (715) 386-8666

#### WHEN PROGRAMMING EMERGENCY NUMBERS AND (OR) MAKING TEST CALLS TO EMERGENCY NUMBERS:

Remain on the line and briefly explain to the dispatcher the reason for the call. Perform such tests in off-peak hours, such as early morning or late evenings.

#### **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 be required to correct the interference at his own expense.

# **Product Support: (715) 386-8666**

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.