

# TECHNICAL Practice

**TELECOM SOLUTIONS FOR THE 21ST CENTURY**

## E-75 Series

**Double Gang Video  
Entry Phones with Built-In  
Proximity Card Reader**

February 8, 2010

## Video Entry Phones with Built-In Proximity Card Reader



**E-75-SS**

"Brushed Stainless Steel" (similar to brushed nickel) Optional **VE-5x5** surface mount box shown (not included)



**E-75-BN**

"Oil Rubbed Bronze"  
(satin dark brown powder paint with fine copper metallic)



**E-75-PB**

"Polished Brass"  
(with clear gloss powder paint to prevent tarnishing)



**E-75-WH**

"Satin White"  
(satin white powder paint)



**E-75-BK**

"Satin Black"  
(fine texture satin black powder paint)

The **E-75** Series Video Entry phones are compact, weather and vandal resistant speaker phones designed to provide two-way hands-free audio communication and color composite video of who is at your door or gate. The **E-75** also includes a built-in 125KHz HID compatible proximity card reader. The card reader outputs industry standard 26-bit Wiegand data, allowing it to be used with a **Viking ES-1** door controller or any controller compatible with 26-bit Wiegand format. The **E-75**'s compact size allows it to be mounted in a standard double gang electrical box. The **E-75** is available in five different attractive finishes to match your door hardware, light fixtures, etc. Replacement **E-75** faceplates (**PNL75**) can be purchased separately and are available in all five standard finishes. The **E-75** entry phones can share a single phone line with house or small business telephones when used with a **Viking** model **C-200**, **C-250** or **C-2000B** Entry Phone controller. The **E-75** entry phones can also be connected to an unused analog station port (programmed for ring down) on a phone system or connected directly to a telephone line when used with a **Viking** model **K-1900-5** auto dialer. The **E-75** features a built-in high resolution color video camera, a built-in proximity card reader, microphone and speaker volume controls, selectable auto answer for monitoring and intelligent call progress detection for automatic hang-up when the call is completed. For outdoor environments or corrosive atmospheres, the **E-75** is available with Enhanced Weather Protection (EWP), see DOD# 859.

## Features

- Built-in 125KHz HID compatible 26-bit Wiegand proximity card reader with LED and beep card read confirmation and EWP board protection
- Built-in high resolution color video camera with wide viewing, tilt/swivel adjustments, and wide operating temperature of -30° F to 150° F
- Audio and video transmission on one CAT5E cable (see page 5)
- Compact size:** Front panel is the size of a typical double gang mid-size wall plate
- Mounting:** Flush mounts in a double gang electrical box (2.25" deep x 3.7" wide x 2.84" tall minimum) or surface mounts in a Viking model **VE-5x5** (not included, see DOD# 424) for mounting to a wall, post or VE-GNP Gooseneck Pedestal (EWP recommended)
- Available in 5 standard faceplate finishes:** Brushed Stainless Steel, Oil Rubbed Bronze, Polished Brass, Satin Black and Satin White
- PNL-75 faceplates:** Replacement faceplates with matching screws available in all five standard finishes
- Features:** Mylar speaker, faceplate gasket, mic and speaker gasket, internally sealed (IP67) push button switch, self draining mic mount and UV stable weather resistant powder coating (excludes **E-75-SS** stainless steel faceplate)
- Vandal Resistant Features:** 16 gauge polished brass or 18 gauge stainless steel faceplate, stainless steel push button, stainless steel speaker screen, scratch resistant powder coating, hex drive mounting screws
- Optional Enhanced Weather Protection (EWP, recommended for outdoor applications) Features:** Urethane potted circuit board, internally sealed POTS and dip switches, potted microphone and push-button switch, etc.
- Blue LED helps locate the push button, indicate ringing and off-hook
- Programmable Intelligent call progress detection for automatic hang-up on CPC, silence, busy signal, or time out

## Applications

- Door or gate communication, business delivery entrances
- Use with a **Viking C-200** or **C-250** to control one **E-75** on a single phone line
- Use with a **Viking C-2000B** to control 1 to 4 **E-75**'s and door/gate control on a single phone line
- Use with a **Viking ES-1** for proximity card reader door control
- Provide unique front and back door chimes and paging when used with a **Viking SLP-1** or **SLP-4** and **C-2000B**
- Residential, commercial and industrial door security
- Use with a **Viking K-1900-5** for automatic speed dialing on telephone lines or analog PABX/KSU station ports
- Use on any analog PABX station port with programmable ringdown capability

Phone...715.386.8861

info@vikingelectronics.com

http://www.vikingelectronics.com

## Specifications

**Dimensions:** Faceplate: 123.8mm x 125.4mm x 4.3mm (4.875" x 4.938" x 0.171"), Phone: 72mm x 46mm x 42mm (2.84" x 1.8" x 1.65")

**Shipping Weight:** 0.55 kg (1.2 lbs)

**Operating Temperature:** -34° C to 65° C (-30° F to 150° F)

**Connections:** (2) gel-filled butt connectors (3M Scotchlok UR2)

(See page 2 for complete specifications)

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

Our Technical Support Department is available for assistance Monday 8am - 4pm and Tuesday through Friday 8am - 5pm 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 Technical Practice 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 your distributor, referencing the R.A. number. Your distributor will then replace the product over the counter at no charge. The distributor will then return the product to Viking 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.**

### 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 one year from the date of purchase from any authorized Viking distributor or 18 months from the date manufactured, whichever ever is greater. 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.

**NO OTHER WARRANTIES. VIKING MAKES NO WARRANTIES 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.

### FCC REQUIREMENTS

This equipment complies with Part 68 of the FCC rules and the requirements adopted by the ACTA. Inside the front panel of this equipment is a label that contains, among other information, a product identifier in the format US:AAAEQ#TXXXX. If requested, this number must be provided to the telephone company.

The REN is used to determine the number of devices that may be connected to a telephone line. Excessive REN's on a telephone line may result in the devices not ringing in response to an incoming call. In most but not all areas, the sum of the REN's should not exceed five (5.0). To be certain of the number of devices that may be connected to a line, as determined by the total REN's, contact the local telephone company. For products approved after July 23, 2001, the REN for this product is part of the product identifier that has the format US:AAAEQ#TXXXX. The digits represented by # are the REN without a decimal point (e.g., .03 is a REN of 0.3). For earlier products, the REN is separately shown on the label.

The plug used to connect this equipment to the premises wiring and telephone network must comply with the applicable FCC Part 68 rules and requirements adopted by the ACTA. If your home has specially wired alarm equipment connected to the telephone line, ensure the installation of this E-75 does not disable your alarm equipment. If you have questions about what will disable alarm equipment, consult your telephone company or a qualified installer.

If the E-75 causes harm to the telephone network, the telephone company will notify you in advance that temporary discontinuance of service may be required. But if advance notice isn't practical, the telephone company will notify the customer as soon as possible. Also, you will be advised of your right to file a complaint with the FCC if you believe it is necessary.

The telephone company may make changes in its facilities, equipment, operations, or procedures that could affect the operation of the equipment. If this happens, the telephone company will provide advance notice in order for you to make

the necessary modifications to maintain uninterrupted service.

If trouble is experienced with the E-75, for repair or warranty information, please contact:

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

If the equipment is causing harm to the telephone network, the telephone company may request that you disconnect the equipment until the problem is resolved.

Connection to Party Line Service is subject to State Tariffs. Contact the state public utility commission, public service commission or corporation commission for information.

**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 activities in the off-peak hours, such as early morning or late evenings.

It is recommended that the customer install an AC surge arrester in the AC outlet to which this device is connected. This is to avoid damaging the equipment caused by local lightning strikes and other electrical surges.

### 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.

## Specifications

### Entry Phone Specifications

**Power:** Telephone line powered. Minimum 18V DC talk battery voltage with a minimum loop current of 20mA. Loop current may be boosted on low current lines with a Viking model **TBB-1B** Talk Battery Booster (see **DOD# 632**).

**Dimensions:** Faceplate: 123.8mm x 125.4mm x 4.3mm (4.875" x 4.938" x 0.17"), Phone: 72mm x 46mm x 42mm (2.84" x 1.8" x 1.65")

**Speaker Volume:** Approximately 62db maximum @ 1m

**Ring Voltage:** 25V AC RMS minimum (for auto answer)

**CPC Disconnect Time:** 300ms minimum

**REN:** 0.8A

### Camera Specifications

**Power:** 3.5-6V DC regulated 150mA (5V DC regulated adapter included)

**Image Sensor:** 1/4" color CMOS

**Video Output:** 1 VP-P composite, NTSC, 75 ohms

**Resolution:** 420 lines (640 x 480 @ 30fps / 307,200 pixels)

**Sensitivity:** 0.26 LUX (20 IRE) F 2.0

**Lens:** 3.4mm, pinhole 70° FOV (Field of View)

**Tilt/Swivel Adjustment:** Vertical +/- 20°, horizontal

+/- 30° (see **Diagram A**)

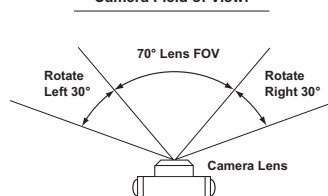
**IR Compatibility:** This camera is equipped with an OLP (Optical Low Pass) filter to maintain correct video color in outside applications. The standard camera is **NOT** compatible with IR illuminators. If IR illumination is required, you will need to replace the existing camera with a Viking model **VCAM-11R**, see **DOD# 190**.

**Maximum Wire Run Length:** 750 ft with

\*RG59/RG6 for video and CAT5 for power (3 pairs) and entry phone audio (1 pair).

150 ft with CAT5E for video, power and entry phone audio (longer video runs are possible by using video balun transceivers, see **Installation** section F, page 5).

Diagram A  
Camera Field of View:



### Entry Phone / Camera Specifications

**Operating Temperature:** -34° C to 65° C (-30° F to 150° F)

**Humidity:** Standard model: 5% to 95% non-condensing, EWP model: Up to 100%

**Connections:** (5) gel-filled butt connectors (3M Scotchlok UR2)

**Shipping Weight:** 0.55 kg (1.2 lbs)

**Recommended Electrical Box for Flush Mounting:** Single gang with minimum inside dimensions of 2.25" deep x 2.00" wide x 2.84" tall (Carlton BH234R or equivalent)

**Recommended Surface Mount Box:** Viking model **VE-5x5 (DOD# 424)**

**WARNING:** Do **NOT** use a typical "wet location box" as not all styles seal properly with the **E-75** faceplate.

### Proximity Card Reader Specifications

**Power:** 5 to 14V DC @ 60mA maximum

**Maximum Cable Length:** 500 ft 24 Awg stranded shielded (Belden 9537)

**Frequency:** 125KHz

**Format:** 26 bit Wiegand

**Read Range:** 1.25" to 2.0"

**Credential Compatibility:** HID - Proxcard II, ISOProx II and ProxTag II and Pyramid Series Cards and Tags (PSC-1, PSI-4, PSM-2 and PSK-3)

**Transducer:** Beeps during card read

**LED:** Red, turns off during card read

**Humidity:** Up to 100% (fully potted EWP)

**Operating Temperature:** -34° C to 65° C (-30° F to 150° F)

\* **Note:** RG59 or RG6 with solid center conductor and 95% bare copper braid shield.