



# TECHNICAL Practice

**TELECOM SOLUTIONS FOR THE 21ST CENTURY**

**PI-1A**  
**Telecom  
Paging Interface**

July 22, 2010

## **Interface Your Paging System with Nearly Any Phone System!**



Viking's Telecom Paging Interface allows you to provide paging from nearly any phone system instead of from a microphone. You can also provide background music and electronic night bell over the audio system.

The **PI-1A** features a built-in voice activated (VOX) or AC ring activated relay which provides D.P.D.T. contacts for muting background music during paging or to provide an electronic night bell. These contacts are necessary when interfacing with systems such as Panasonic, South Western Bell, Intertel, etc., which do not provide a paging contact closure.

In the event a paging port is not available, the **PI-1A** can provide talk battery to allow connection of the public address system to an unused line/trunk input on the phone system.

The electronic night bell feature is activated by a standard ringing analog PABX/KSU station circuit or by a common audible contact closure provided by an electronic key system. The ring pitch and volume are adjustable allowing you to differentiate between multiple ringing lines.

### **Features**

- Floating 600 ohm output
- **Selectable 22V DC talk battery for interfacing with unused phone system line input/trunk ports**
- Paging port interface
- Ringing analog line input for night bell
- Contact closure input for night bell
- DPDT normally open and normally closed VOX activated contacts for cutting out background music
- Adjustable VOX contact time-out
- **Adjustable VOX trigger sensitivity**
- Adjustable ring volume
- **Adjustable ring pitch**
- Wall mount housing: (2) #6x3/4 panhead screws included

### **Applications**

- Integrate your public address system with nearly any phone system
- Cut out background music during paging
- Electronic night bell from ringing line or contact closure

**Note:** The **PI-1A** is not compatible with ring trip paging applications. See Viking model **CPA-7B DOD# 455**.

### **Specifications**

**Power:** 120V AC/12V DC 500mA, UL listed adapter provided  
**Dimensions:** 111mm x 76mm x 36mm (4.38" x 2.97" x 1.38")  
**Shipping Weight:** .48 kg (1.06 lbs)  
**Environmental:** 0°C to 32°C (32°F to 90°F) with 5% to 95% non-condensing humidity  
**Relay Contacts:** 30V DC@1A, 110V DC@0.3A, 125V AC @0.5  
**Maximum Ring Output:** 0.5V AC RMS no load, 0.4V AC RMS @ 600 ohms  
**VOX Minimum Audio Signal to Activate Relay:** -37dbm minimum / -17dbm minimum @ 1KHz with VOX sensitivity POT at minimum / maximum positions  
**VOX Time Out Delay:** 0.9 sec minimum / 4.3 sec maximum  
**Talk Battery:** 22V DC

<http://www.vikingelectronics.com>

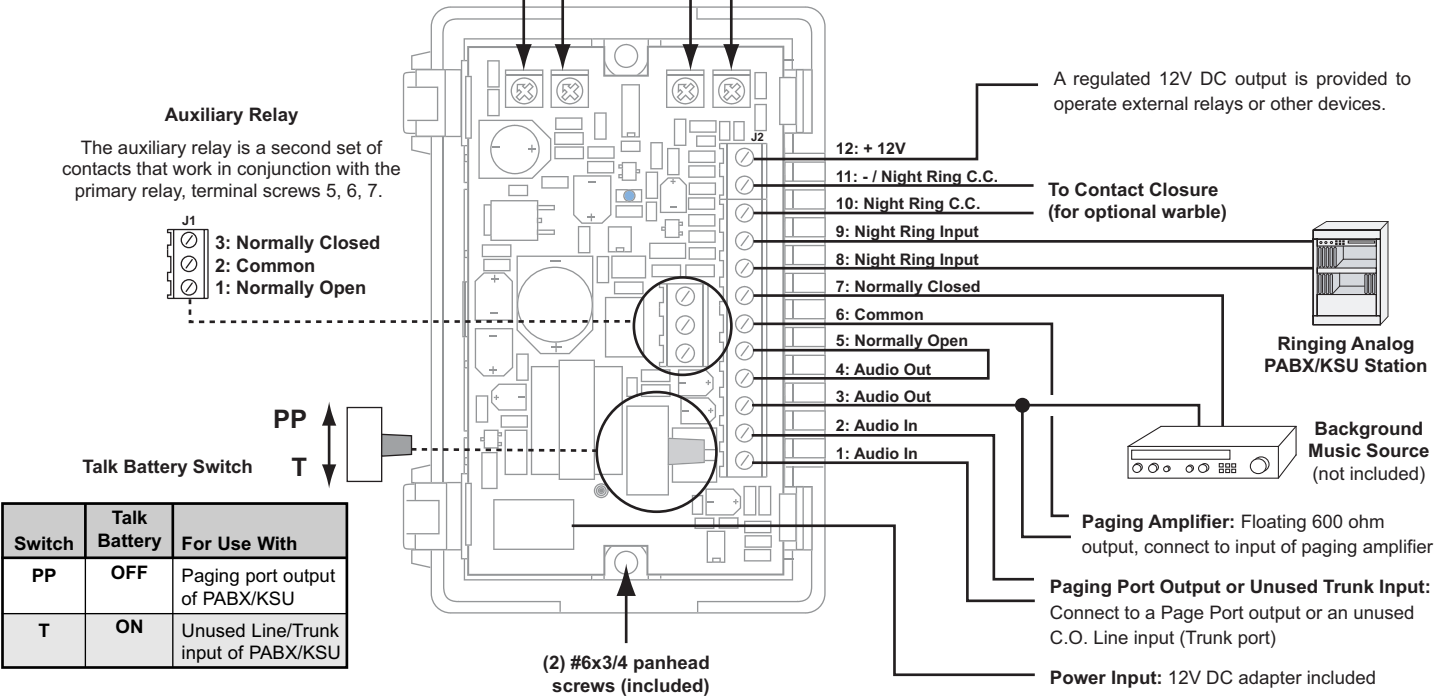
Installation

**VOX Trigger Sensitivity:** Turn the pot to the left to decrease and the right to increase VOX trigger sensitivity.

**VOX Time Out Delay:** The voice activated contact closures terminal screws 1, 2, 3 (Aux Relay) and 5, 6, 7 (Primary Relay) on the **PI-1A** have an adjustable time out delay.

**Ring Pitch Control:** Turn the pot to the left to decrease and the right to increase the ringing (warble) pitch.

**Ring Volume Control:** The ringing (warble) output volume is adjustable as shown to the right. Minimum: 0mV RMS, maximum: 490mV RMS.



Operation

When voice is detected on the “AUDIO IN” circuit, the **PI-1A** opens the normally closed contacts and closes the normally open contacts allowing background music source to be interfaced without interfering with paging. Depending on the VOX time-out delay setting, the music source will come back between 0.9 and 4.3 seconds after the last word. A floating 600 ohm output is provided to interface with most standard public address systems. The **PI-1A** will also produce a 600 ohm night bell warble from a contact closure or a ringing analog PABX/KSU station. This warble volume can be adjusted using the **RING VOL** potentiometer as shown above.

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:
- 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.
  - 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**
  - Return shipping address: Be sure to include your return shipping address inside the box. We cannot ship to a PO Box.
  - 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):
- 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.
  - 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.
  - 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.
  - 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.

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