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) relay which provides DPDT contacts for muting background music during paging. The relay is also activated by AC ring for providing 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.

### 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) #6 x ¾ 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 models **FXI-1** (DOD 494), **PA-15** (DOD 486), or **RAD-1A** (DOD 410).*

### Specifications
- **Power:** 120V AC/12V DC 500mA, UL listed adapter provided
- **Dimensions:** 4.38” x 2.97” x 1.38” (111mm x 76mm x 36mm)
- **Shipping Weight:** 1.06 lbs (0.48 kg)
- **Environmental:** 32°F to 90°F (0°C to 32°C) with 5% to 95% non-condensing humidity
- **Relay Contacts:** 30V DC@1A, 110V DC@0.3A, 125V AC @ 0.5A
- **Maximum Ring Output:** 0.5V AC RMS no load, 0.4V AC RMS @ 600 ohms
- **VOX Minimum Audio Signal to Activate Relay:** At 1KHz with VOX sensitivity POT set to minimum: -17dbm, with POT set to maximum: -37dbm
- **VOX Time Out Delay:** 0.9 second minimum and 4.3 second maximum
- **Talk Battery:** 22V DC

www.VikingElectronics.com
Information: 715-386-8861
**Installing and Programming**

**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.

**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 from 0.9 to 4.3 seconds.

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

**Ring Volume Control:** Turn the pot to the left to decrease and the right to increase the ringing (warble) volume. Minimum: 0mV RMS, maximum: 490mV RMS.

### Pin Description

<table>
<thead>
<tr>
<th>Pin</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>12</td>
<td>Positive 12V: A regulated 12VDC output provided to operated external relays or other devices (use terminal 11 as common).</td>
</tr>
<tr>
<td>11</td>
<td>Ground: Used as the ground (common) for terminals 10 and/or 12.</td>
</tr>
<tr>
<td>10</td>
<td>Night Ring Contact Closure Input: Produces ringing over the paging system when shorted to Ground (terminal 11).</td>
</tr>
<tr>
<td>9</td>
<td>Line in: A ringing line will produce ringing over the paging system.</td>
</tr>
<tr>
<td>8</td>
<td>Normally closed relay contact</td>
</tr>
<tr>
<td>7</td>
<td>Common relay contact</td>
</tr>
<tr>
<td>6</td>
<td>Normally open relay contact</td>
</tr>
<tr>
<td>5</td>
<td>Audio Out: Floating 600 Ohm output, connect to input of paging amplifier.</td>
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<tr>
<td>4</td>
<td>Audio Out: To Paging Amplifier Input (600 Ohm)</td>
</tr>
<tr>
<td>3</td>
<td>Audio In: Connect to a page port output or an unused C.O. line input (trunk/FXO port).</td>
</tr>
<tr>
<td>2</td>
<td>Audio In:</td>
</tr>
<tr>
<td>1</td>
<td>Audio In:</td>
</tr>
</tbody>
</table>

### A. Paging

#### 1. Paging Port

**Step 1.** Move the Talk Battery Switch to the PP position.

**Step 2.** Connect terminals 1 & 2 to the paging port.

**Step 3.** Connect terminals 3 & 4 to line level input on amplifier.

**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 from 0.9 to 4.3 seconds.

**VOX Trigger Sensitivity**

Turn the pot to the left to decrease and the right to increase VOX trigger sensitivity.

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**Features Overview**

- **VOX Time Out Delay**
- **VOX Trigger Sensitivity**
- **Ring Pitch Control**
- **Ring Volume Control**
- **Auxiliary Relay**
- **Talk Battery Switch**
- **Power Input**
- **Internal view of the PI-1A**

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**Notes:**

- PP: For Use with: Paging port output of PABX/KSU
- T: For Use with: Unused Line/Trunk input of PABX/KSU

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**Internal view of the PI-1A**

**Talk Battery Switch**

**Power Input:** 12V DC (adapter included)

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**Pin Description**

- **Pin 12:** Positive 12V: A regulated 12VDC output provided to operated external relays or other devices (use terminal 11 as common).
- **Pin 11:** Ground: Used as the ground (common) for terminals 10 and/or 12.
- **Pin 10:** Night Ring Contact Closure Input: Produces ringing over the paging system when shorted to Ground (terminal 11).
- **Pin 9:** Line in: A ringing line will produce ringing over the paging system.
- **Pin 8:** Normally closed relay contact
- **Pin 7:** Common relay contact
- **Pin 6:** Normally open relay contact
- **Pin 5:** Audio Out: Floating 600 Ohm output, connect to input of paging amplifier.
- **Pin 4:** Audio Out: To Paging Amplifier Input (600 Ohm)
- **Pin 3:** Audio In: Connect to a page port output or an unused C.O. line input (trunk/FXO port).
- **Pin 2:** Audio In:
- **Pin 1:** Audio In:

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**Diagram of the PI-1A**

- **PP:** For Use with: Paging port output of PABX/KSU
- **T:** For Use with: Unused Line/Trunk input of PABX/KSU

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**Additional Notes:**

- **VOX Trigger Sensitivity:** The VOX trigger sensitivity should not need adjusting unless the PI-1A is disconnecting in the middle of a page (turn clockwise to increase sensitivity if this happens) or the PI-1A is not disconnecting on periods of silence longer than the VOX time out delay (turn counter clockwise to decrease sensitivity if this happens).
2. Trunk / FXO Port

Step 1. Move the Talk Battery Switch to the T position.
Step 2. Connect terminals 1 & 2 to the trunk/FXO port.
Step 3. Connect terminals 3 & 4 to a line level input on your amplifier.

B. Adding Background Music to Your Paging System in All Page Modes

Step 1. Connect a background music source to terminals 3 & 7.
Step 2. Connect a jumper wire between terminals 4 & 5.
Step 3. Connect a line level input on your amplifier to terminals 3 & 6.
**C. Loud Ringing / Night Bell**

**1. Ringing Analog Line**

**Step 1.** Connect terminals 8 & 9 to a ringing line, FXS or analog PABX station.

**Step 2.** Adjust the Ring Pitch Control as desired.

**Step 3.** Adjust the Ring Volume Control as desired.

**Internal view of the PI-1A**

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

**Ring Volume Control:** Turn the pot to the left to decrease and the right to increase the ringing (warble) volume. Minimum: 0mV RMS Maximum: 490mV RMS

**Power Input:** 12V DC (adapter included)

**Note:** Either method may be used.

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**Warranty**

**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.

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

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