

Telecommunication Peripheral Products

Technical Practice

FBI-1A

Anti-Feedback Paging Interface

August 4, 1999

Totally Eliminate Paging Feedback



Even the best designed paging systems can experience feedback. Now you can eliminate annoying feedback over your paging speakers with **Viking's** model **FBI-1A** digital antifeedback paging interface.

The FBI-1A utilizes state of the art digital recording technology to record the "live" page from a phone system's paging port output or unused trunk port. The FBI-1A then immediately plays back the recorded page once

or twice (selectable) over the paging system.

Pages of up to 16 seconds (expandable to 60 seconds) can be stored and the **FBI-1A** automatically adjusts to the page length for faster processing. In addition, the **FBI-1A** can be programmed to provide pre-page and post-page alert tones.

http://www.VikingElectronics.com E-mail...Sales@VikingElectronics.com

Features

- High quality (64K) digital message storage
- High output 2V RMS into 600 ohms
- 16 second record time expands to 1 minute using an ERAM-60 Memory Kit
- Compatible with Paging ports or Trunk ports
- Activate recording from VOX detection, contact closure or loop detect (Trunk mode only)
- VOX sensitivity adjustment
- Cancel page feature
- Selectable page repeat
- Selectable pre-page alert tone
- Selectable post-page alert tone
- Adjustable alert tone volume
- N.O./N.C. relay contacts control paging system
- Record/Playback LED indicator
- Compatible with virtually all paging and telephone systems

Applications

Eliminate Paging Feedback in:

- · Warehouses, Factories, Offices
- · Retail Stores, Hotels, Airports
- Stadiums, School Gymnasiums, Pools
- Casinos, Bingo Halls, Dining Establishments
- Other large noisy areas

Sales...(715) 386 - 8861

Specifications

Power: 120V AC/13.8V AC 1.25A, UL listed adapter provided **Dimensions:** 133mm x 89mm x 44mm (5.25" x 3.5" x 1.75")

Shipping Weight: 0.73 kg (1.6 lbs)

Environmental: 0°C to 32°C (32°F to 90°F) with 5% to 95% non-

condensing humidity

Sampling Rate: 64K (equivalent)

Maximum Page Length: 16 seconds (expandable to 60 seconds

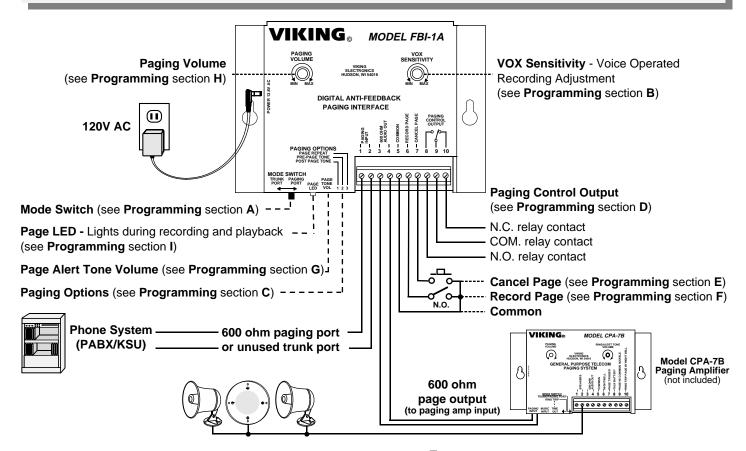
with Viking model ERAM-60 memory upgrade kit)

Output Impedance: 600 ohm

Maximum Audio Output: 2V RMS (driving a 600 ohm load)

Talk Battery: 24V DC (Trunk mode only) **Connections:** 10 position screw terminal block

Installation



Programming

A. Mode Switch

In the Trunk Port position, 24V talk battery is supplied for connecting the FBI-1A paging input to a phone system's unused trunk port. In the Paging Port position, a 600 ohm audio input is supplied for connecting to a phone system's paging port output.

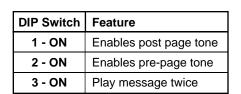
B. VOX Sensitivity

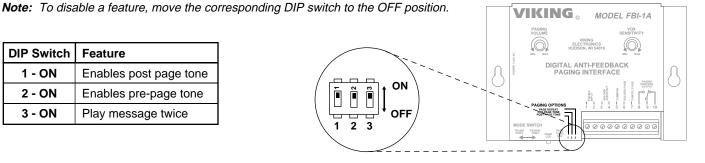
If the FBI-1A is installed on a phone system's paging port that does not supply a page control contact (normally open relay contact that closes while the paging port is activated) the VOX (Voice Operated Recording) feature may be used. The VOX sensitivity may require adjustment. Rotate the POT clockwise to increase the sensitivity for low level input signals (see **Programming** section **I**).

Note: The VOX (Voice Operated Recording) feature is not used in the trunk mode or when a page control contact is connected to the record page input of the FBI-1A to trigger the recording. In these applications, set the VOX sensitivity to the minimum level.

C. Paging Options

- 1. Post-page Tone The FBI-1A will output a short (high) beep after the entire page has been played, indicating that it is ready to record a new page.
- 2. Pre-page Tone The FBI-1A will output a (low) beep before the page, alerting listeners of the oncoming page.
- 3. Page Repeat The FBI-1A will play the recorded page twice, eliminating the need to repeat pages.





D. Paging Control Output

If required, these optional relay contacts can control your paging system. The contacts will activate during page playback.

E. Cancel Page Input

The **FBI-1A** is capable of cancelling a page in progress. Connect the **Cancel Page** input to a normally open remote switch or button at the receptionist's desk. Momentarily pressing the button will cancel the page in progress (during recording or playback).

F. Record Page Input

Connect the **Record Page Input** to the normally open paging control contact of your phone system. Place the VOX sensitivity POT in the "**MIN**" position. The **FBI-1A** will record the page while the contact closure is maintained. **Note:** Using the Record Page Input is preferred over using the VOX circuit to control recording.

G. Page Alert Tone Volume

The **FBI-1A** has a POT for adjusting pre-page and post-page alert tone levels (see diagram, right).

H. Paging Volume

Rotate the **Paging Volume** POT clockwise to increase the paging volume and counter-clockwise to decrease the paging volume (see diagram, right).







SENSITIVITY

I. Page LED

This is a recording and playback indicator. When recording in the **Trunk Port** mode, the LED will light steady while the phone system's trunk port is accessed. When recording in the **Paging Port** mode, the LED can be used as a maximum VOX sensitivity adjustment indicator; the LED should flash only when the paging port is accessed and paging audio is present, if the LED lights steady when the paging port is not accessed, the VOX sensitivity is set too high and should be decreased until the LED turns off (see **Programming** section **B**).

During playback in either mode, the LED will light steady for the entire duration of the message playback.

Operation

A. Trunk Port Mode

Important: The MODE SWITCH must be in the TRUNK PORT position.

- 1. Access the phone system's trunk port that is interfaced to the FBI-1A.
- 2. Announce the page.
- 3. Hang-up.

Note: The **FBI-1A** will record the entire time the trunk port is off hook. It is important that you hang-up immediately after announcing the page to avoid recording silence.

B. Paging Port Mode

Important: The **MODE SWITCH** must be in the **PAGE PORT** position.

- 1. Access the phone system's paging port.
- 2. Announce the page.
- 3. Hang-up.

If you are using the **Record Page Input** (see **Programming** section **F**), the **FBI-1A** will record the entire time you are off hook on the paging port. It is important to hang-up immediately after announcing the page to avoid recording silence.

If you are NOT using the **Record Page Input**, the **FBI-1A**'s VOX (voice activated recording) circuit will sense the paging audio and automatically begin recording the page. The **FBI-1A** will continue to record until 2 seconds of silence is detected. The **FBI-1A** will then playback the recorded page. In this mode, the VOX sensitivity may require adjustment (see **Programming** section **B**).

Other Paging Products

A. Multiple Purpose Paging System



The **CPA-7B** is a cost effective, multi-purpose, telecom paging system.

The **CPA-7B** features a low noise, high fidelity amplifier, providing 6 watts of power for a variety of telecom paging applications. It can also provide background music and night bell/common audible. In addition, multiple units may be daisy-chained for larger paging applications.

The **CPA-7B** is compatible with ringing C.O. lines, Centrex lines and analog PABX/KSU station ports as well as unused trunk inputs and will also interface directly with standard paging ports. For loud ringing, the **CPA-7B** generates an adjustable loud warble from a dry contact

closure, a ringing C.O. or a ringing analog PABX/KSU station.

The **CPA-7B** is easy to install and can eliminate the installation of multiple bells, relays and paging cards. The unit comes complete with a power supply, amplifier and (1) paging horn.

For more information on the CPA-7B, retrieve Fax Back Document 455.

B. Paging and Loud Ringing Amplifier

The **PA-2A** provides loud ringing and paging to electronic key systems, 1A2 Key systems, PABX's as well as No-KSU phones and multi-line phones.

Paging is accomplished by connecting the **PA-2A** to a paging port or unused C.O. line input of nearly any phone system.

The **PA-2A** will also generate an adjustable loud warble from up to 6 C.O. lines, 6 analog PABX/KSU extensions or from a dry contact closure. An external "night transfer" switch can be added to turn loud ringing on or off in night bell applications.



The **PA-2A** is easy to install and eliminates the installation of multiple bells, relays and paging cards. The unit comes complete with a power supply, amplifier and (1) paging horn.

For more information on the PA-2A, retrieve Fax Back Document 485.

C. Four Zone Paging Interface



The **ZPI-4** is a four-zone Touch Tone controlled paging system capable of switching a line level signal to amplifiers or an amplified signal to speakers.

The **ZPI-4** features balanced audio circuitry throughout for low noise and compatibility with balanced paging system inputs and outputs. There are separate level controls for paging and background music. Background music can be disabled on a per-zone basis. Also provided, is a night bell (with adjustable volume) activated by a dry contact closure, a ringing C.O. or a ringing analog PABX/KSU station.

The **ZPI-4** is compatible with ringing C.O. lines, Centrex lines and analog PABX/KSU station ports as well as unused trunk inputs and will also interface directly with standard paging ports. For applications requiring more than four paging zones, up to three additional **ZPI-4**s may be cascaded to provided up to 16 zones.

For more information on the **ZPI-4**, retrieve **Fax Back Document 499**.

Product Support Line...(715) 386-8666 Fax Back Line...(715) 386-4345

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