

Telecommunication Peripheral Products

Technical Practice

PA-2A

Paging Amplifier-Loud Ringer

June 26, 2000

Add Paging and Multiple Line Loud Ringing to Any Phone System



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

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

Features

- · Two watts of paging power
- Fourth line input is optically coupled for use with fax switches and analog PABX/KSU stations
- Ring sensitivity adjustment
- Can provide background music from an external source
- Paging from an unused trunk port or paging port
- Loud ringing
- Provides loud electronic ring or night bell, from
 1 6 lines for warehouses, yards, etc.
- Output for controlling a 12 volt relay from 1 6 ringing lines

Made in the U.S.A.

Applications

- · Amplified loud paging
- Night bell
- · Background music
- Loud ringing

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: 1.36 kg (3 lbs)

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

condensing humidity

Paging Output: 2 watts - powers up to (3) 8 ohm or (16) 45 ohm

speakers

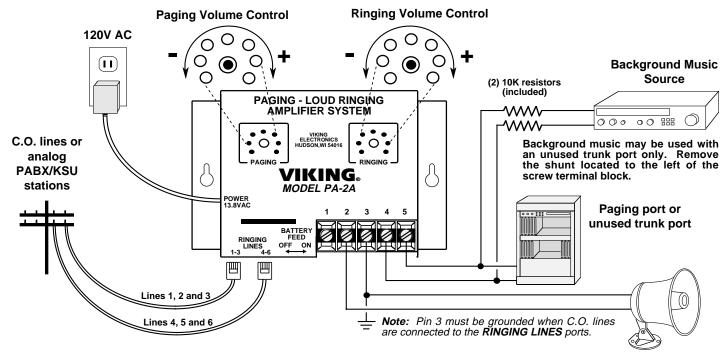
Sound Pressure: 110 dB @ 1 meter

Speakers: (1) **25AE** 8 ohm paging horn included, (3) maximum **Maximum Speaker Run:** 91 m (300 ft) maximum 18 AWG

Talk Battery: 24V DC

Connections: (2) RJ25 jacks, (1) 5 position screw terminal block

Installation/Programming



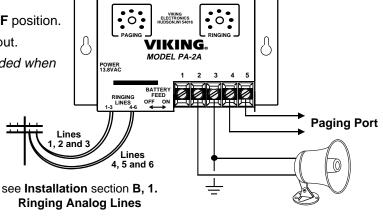
A. Paging and Loud Ringing

1. Paging Port

- a. Move the BATTERY FEED switch to the OFF position.
- b. Connect pins 4 and 5 to the paging port output.

Important: Background music can NOT be added when interfacing the **PA-2A** to a Paging Port.

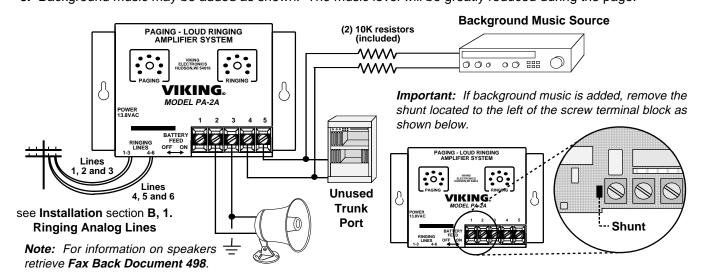
Note: For information on speakers to use, ambient noise levels, and speaker wiring retrieve **Fax Back Document 498**.



PAGING - LOUD RINGING AMPLIFIER SYSTEM

2. Trunk/Line Port

- a. Set the BATTERY FEED switch to the ON position.
- **b.** Connect pins **4** and **5** to an unused trunk or line input.
- c. Background music may be added as shown. The music level will be greatly reduced during the page.

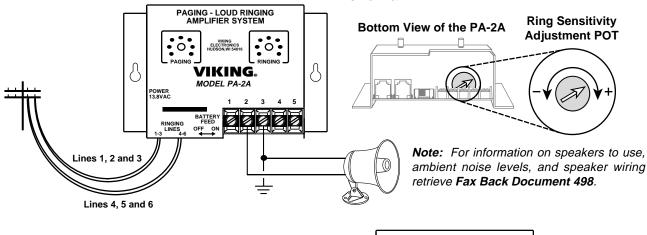


B. Loud Ringing/Night Bell

1. Ringing Analog Lines

- a. Connect lines 1 (R/G), 2 (Y/BK) and 3 (BL/W) to 1-3.
- **b.** Connect lines 4 (R/G), 5 (Y/BK) and 6 (BL/W) to **4-6**.

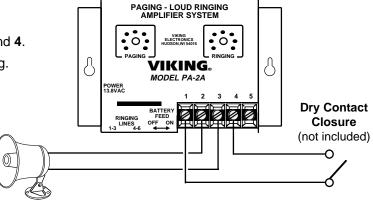
Note: Line 4 is optically coupled for use with fax switches and analog station ports. If the **PA-2A** is installed on unusually noisy lines, loud ringing may stay on steady. Rotate the ring sensitivity adjustment POT counter clockwise until operation is normal.



2. Dry Contact Closure (not included)

- a. Connect the dry contact closure to pins 1 and 4.
- **b.** A dry contact closure will initiate loud ringing.

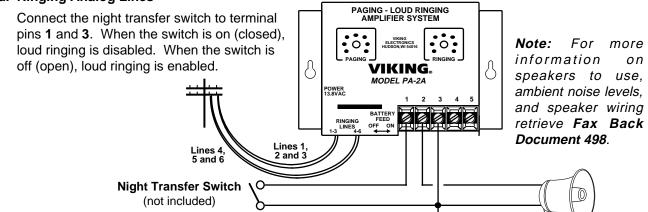
Note: For information on speakers to use, ambient noise levels, and speaker wiring retrieve **Fax Back Document 498**.



3. Night Transfer Switch (not included)

A night transfer switch may be used to enable or disable loud ringing.

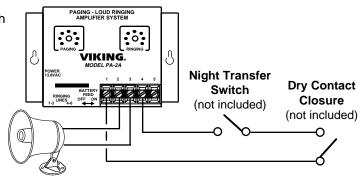
a. Ringing Analog Lines



b. Dry Contact Closures

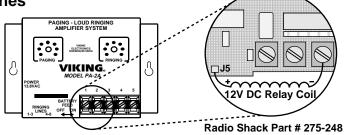
Interface the night transfer switch in series with the contact closure. When the switch is on (closed), loud ringing is enabled. When the switch is off (open), loud ringing is disabled.

Note: For information on speakers to use, ambient noise levels, and speaker wiring retrieve **Fax Back Document 498**.



C. Contact Closure from up to 6 Ringing Lines

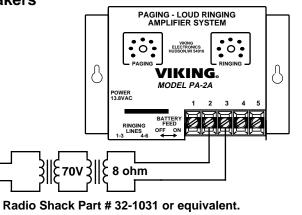
When a 12V DC relay coil (Radio Shack part: # 275-248, not included) is connected as shown in the diagram, the relay is activated for the duration of each ring on 1 - 6 C.O. lines or analog PABX/KSU stations.



D. Long Runs Between Amplifier and Speakers

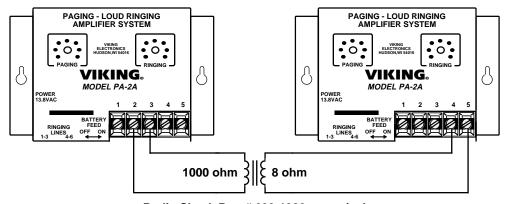
Very long runs between the **PA-2A** and the speakers may require step-up transformers.

Note: For information on speakers to use, ambient noise levels, and speaker wiring retrieve **Fax Back Document 498**.



E. Connecting Multiple PA-2As

When more than 6 ringing lines are to be monitored or additional amplifiers need to be added, a matching transformer is required.



Radio Shack Part # 233-1380 or equivalent.

Operation

When interfacing the **PA-2A** to a paging port, the **BATTERY FEED** switch must be **OFF**. The **PA-2A** will amplify all signals sent from the paging port.

When interfacing with a trunk port, the **BATTERY FEED** switch must be **ON** and the **PA-2A** must be connected to an unused line port. Simply access that line port and talk into the handset to page.

In both instances, the **PA-2A** may monitor 1 - 6 C.O. lines, 1 - 6 analog PABX/KSU stations or a dry contact closure for loud ringing. The **PA-2A** will produce an electronic warble tone when ring voltage is detected on these line inputs or a contact is closed on pins 1 and 4.

Product Support Line...(715) 386-8666

Fax Back Line...(715) 386-4345

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