

## Cost Effective Paging Horn for 70V Paging Systems

The **25AE-70V** paging horn provides economical paging coverage for 70 Volt paging systems.

In outdoor factory or warehouse environments, **25AE-70V** paging horns are the best method of producing understandable sound. In these environments the directional design allows the installer to focus the sound cone down aisles and toward work areas.

The **25AE-70V** paging horn provides a built-in step-down transformer for use with 25V or 70V paging systems such as Viking models **PA-30**, **PA-60**, **PA-250**, **PA-250-IP** and **PP-250**. The transformer has a range of 5 separate switch selectable power taps, which can be used to adjust the



**25AE-70V**

volume of each speaker. These higher voltage distributed audio paging systems also have the advantage of being able to connect more speakers using lighter gauge wire runs while having less volume lost in wire resistance. This saves wiring costs compared to 8 ohm systems.

### Features

- 5 inch diameter horn
- 10 watt power handling
- Compatible with 25V or 70V paging systems
- Adjustable base for easy mounting and directional adjustment
- Compact design for discrete mounting
- Five switch selectable power taps
- High efficiency
- Designed to meet IP53 ingress protection rating when mounted with horn pointing downward at least 45 degrees from horizontal

### Applications

Add additional speakers and coverage areas to existing paging systems such as Viking models:

- **PA-30** (DOD 489)
- **PA-60** (DOD 493)
- **PA-250** (DOD 500)
- **PA-250-IP** (DOD 501)
- **PP-250** (DOD 511)

### Specifications

**Max Power :** 10 Watts

**70V Power Taps:** .62W, 1.25W, 2.5W, 5W, 10W

**25V Power Taps:** .08W, .16W, .31W, .62W, 1.25W

**Viking Taps:** .16W, .31W, .62W, 1.25W, 2.5W

**Connection:** 12" 22 awg Pigtail wires

**Dimensions:** 5" (127 mm) Diameter

**Shipping Weight:** 1.8 lbs (0.8 kg)

**Frequency Response:** 400 Hz to 7,000 Hz

[www.VikingElectronics.com](http://www.VikingElectronics.com)  
**Information: 715-386-8861**

## Installation

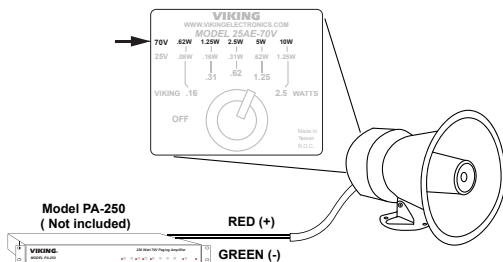
The **25AE-70V** paging horn is designed to be surface mounted to any rigid surface. For outdoor applications, it is recommended to mount the paging horn underneath an eave, and have the horn pointed downward, to keep water from pooling in the horn.



## Wiring

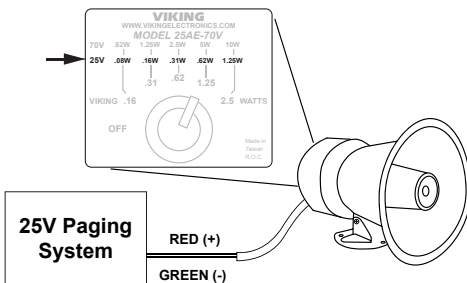
### A. 70V Paging System

<b>Step 1.</b>	Connect the RED (+) and GREEN (-) wires to the 70V output of a paging system.
<b>Step 2.</b>	Use the 70V scale on the back of the <b>25AE-70V</b> Paging Horn to manage power and adjust the volume by turning the selection knob to the .62W, 1.25W, 2.5W, 5W, or 10W setting.



### B. 25V Paging System

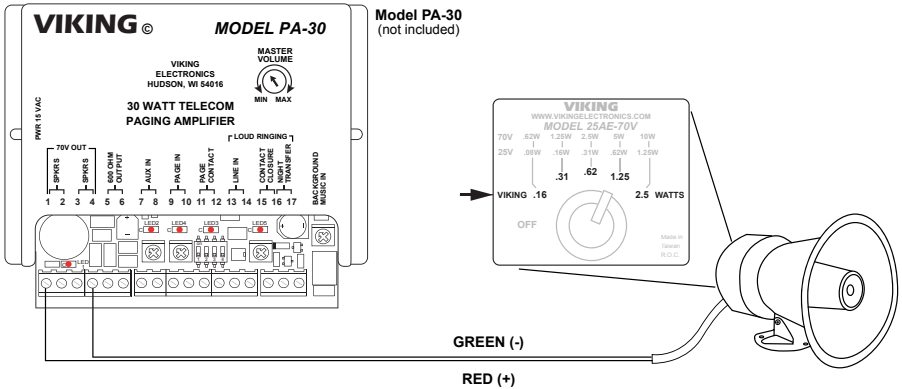
<b>Step 1.</b>	Connect the RED (+) and GREEN (-) wires to the 25V output of a paging system.
<b>Step 2.</b>	Use the 25V scale on the back of the <b>25AE-70V</b> Paging Horn to manage power and adjust the volume by turning the selection knob to the .08W, .16W, .31W, .62W, or 1.25W setting.



## C. Use with Viking Model PA-30 or PA-60 Amplifiers

Viking models **PA-30 (DOD 489)** and **PA-60 (DOD 493)** have the ability to drive 25V and 70V paging speakers. This is achieved by bridging together two differential 8 ohm outputs to get a high voltage output (see **DOD 489** and **493** for additional information). The achieved output voltage is actually between the 25V and 70V standards. Because of this, the **25AE-70V** paging horn shows a third scaling option for the transformer tap selection knob called **"VIKING WATTS"** in which there are six settings ranging from .16W to 2.5W. Use this scale to manage power handling and adjust volume of each **25AE-70V** paging horn. Best results are achieved if the power sum of all **25AE-70V** paging horns used does not excessively exceed the power output of the **PA-30** or **PA-60** amplifier.

<b>Step 1.</b>	Connect the RED (+) and GREEN (-) wires to the "70V OUT" screw terminals of the <b>PA-30</b> or <b>PA-60</b> .
<b>Step 2.</b>	Use the "VIKING WATTS" scale on the back of the <b>25AE-70V</b> Paging Horn to adjust the volume by turning the selection knob to the .16W, .31W, .62W, 1.25W, or 2.5W setting.



## Other Viking Speakers

### *Cost Effective Speakers for Indoor and Outdoor Use*



The **300AE** paging horn provides a direct voice coil connection for use with 8 ohm paging systems such as Viking models **PA-2A, PA-15, PA-60, HF-3W, DVA-2WA** and **M2W**. Even though its 30 watt rating is greater than some lower power paging amplifiers provide, the **300AE** is an excellent choice because it is more efficient than Viking's smaller **25AE** paging horn. In other words, the larger **300AE** only needs 1 watt of power to play as loud as 2 watts being driven into the smaller **25AE** paging horn.

The **300AE** paging horn also provides a built-in step-down transformer for use with 25V or 70V paging systems such as Viking models **PA-30, PA-60, PA-250, PP-250** and **PA-250-IP**. The transformer has a range of power taps that are selectable with a 6 position rotary switch, so that installers are able to independently adjust the volume of each paging horn. Higher voltage paging systems also have the advantage of being able to connect more speakers using lighter gauge wire runs and still have less volume lost in wire resistance. For more information on the **300AE**, see **DOD 497**.

Additional Speakers	8 Ohm Models	70V Models
Weather Resistant 5 inch Horn	25AE	25AE-70V
8" Metal Grill Ceiling Speaker	30AE	30AE-70V
8" Metal Grill Ceiling Speaker with Volume Control	35AE	
8" Modern Looking Ceiling Speaker	40AE	



For more information on the 8 Ohm Models, see **DOD 498**.

## Speaker Recommendations

Ambient Noise Environment	Level	Typical Examples	Ceiling Height	Distance Between Speakers
<b>Quiet</b> - Conversations very easily understood.	<b>50dB</b>	Hotel lobby, hospital area, quiet office	9 ft 14 ft	35 ft 50 ft
<b>Normal</b> - Conversations easily understood.	<b>60dB</b>	Bank lobby, department store, auditorium	9 ft 14 ft	25 ft 35 ft
<b>Noisy</b> - Voice must be raised to be understood.	<b>70dB*</b>	Assembly line, supermarket, restaurant	9 ft 14 ft	15 ft 25 ft
<b>Very Noisy</b> - Conversation difficult or impossible.	<b>80dB*</b>	Punch press, printing plant, garage, yard	Paging Horns	25 ft to 75 ft

\* **Note:** An **FBI-1A Feedback Eliminator** is recommended. For more information, see **DOD 465**.

## Warranty

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

Our Technical Support Department is available for assistance Monday to Friday 8:00am - 5:00pm central time. So 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 the Product Manual 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. The original product boxes are not designed for shipping - an overpack box is required to prevent damage 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 RA 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 (RA) number will be issued. This number is valid for fourteen (14) calendar days from the date of issue.
3. After obtaining the RA number, return the approved equipment to your distributor. Please reference the RA number on the paperwork being shipped back with the unit(s), and also the outside of the shipping box. The original product boxes are not designed for shipping - an overpack box is required to prevent damage in transit. Once your distributor receives the package, they will replace the product over the counter at no charge. The distributor will then return the product to Viking using the same RA number.
4. **The distributor will NOT exchange this product without first obtaining the RA 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.**

### 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 (RA) 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.

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

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