

Cost Effective 8-Inch Ceiling Speaker for 70V Paging Systems

The **30AE-70V** paging ceiling speaker provides economical paging coverage for 70 Volt paging systems.

In office and restaurant environments, it is best to distribute sound evenly. Ceiling mounted **30AE-70V** speakers in close proximity offer the best distribution and are cost effective.

The **30AE-70V** ceiling speaker 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 5 separate power taps, which can be used to adjust the 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

- 8-inch diameter speaker
- 10 Watt power handling
- Compatible with 25V or 70V paging systems
- Five selectable power taps
- White metal grill for flush mounting in office ceilings
- Mounting hardware included
- Excellent frequency response

Information: 715-386-8861
www.VikingElectronics.com

Applications

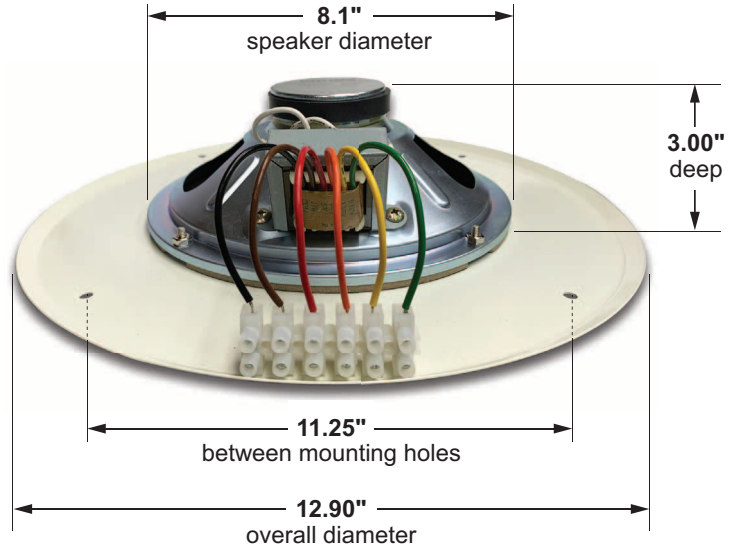
- Office paging
- Background music in restaurants
- Speakers for Viking paging systems, such as:
 - **PA-30** (DOD 489)
 - **PA-60** (DOD 493)
 - **PA-250** (DOD 500)
 - **PA-250-IP** (DOD 501)
 - **PP-250** (DOD 511)

Specifications

Maximum Power: 10 Watts
70V Power Taps: 0.62W, 1.25W, 2.5W, 5W, 10W
25V Power Taps: 0.08W, 0.16W, 0.31W, 0.62W, 1.25W
Viking Taps: 0.16W, 0.31W, 0.62W, 1.25W, 2.5W
Dimensions: 12.9" x 3.0" (327 mm x 76 mm)
Shipping Weight: 3.4 lbs (1.5 kg)
Environmental: 5% to 95% non-condensing humidity
Frequency Response: 45 Hz to 15,000 Hz
Mounting: Flush mount in a 8.25" to 10.0" diameter hole
Connections: 6 positional screw terminal block

Installation

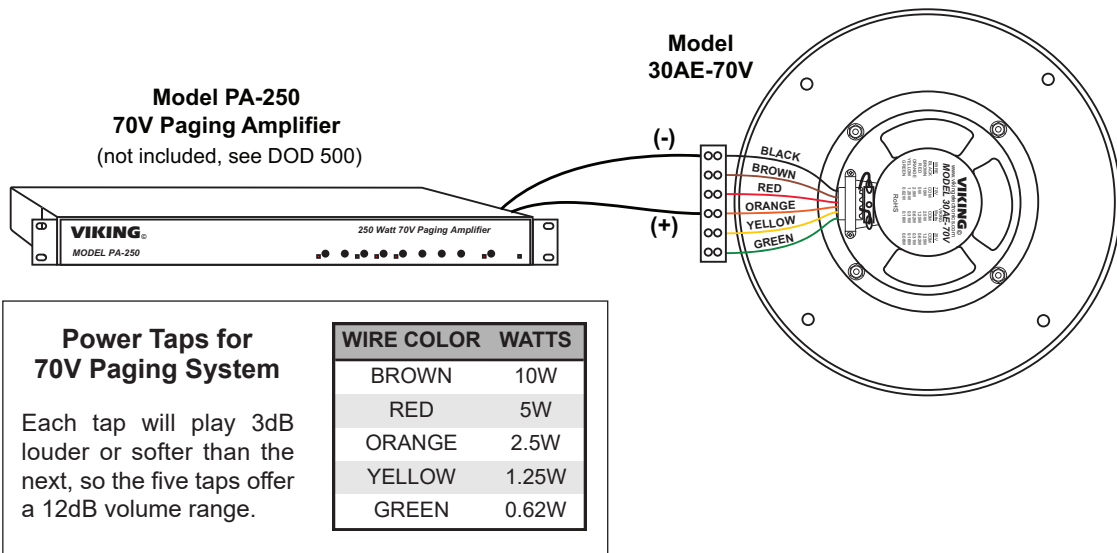
Mounting hardware for the **30AE-70V** ceiling speakers is included for easy installation into an 8.25" to 10" diameter cutout in drop ceilings or speaker enclosures.



Installation

A. 70V Paging System

Step 1	Using the supplied terminal block, connect the 70V paging amplifier's (-) output to the BLACK wire.
Step 2	Connect the 70V paging amplifier's (+) output to the desired Power Tap. Example below uses ORANGE for 2.5 Watts.



B. 25V Paging System

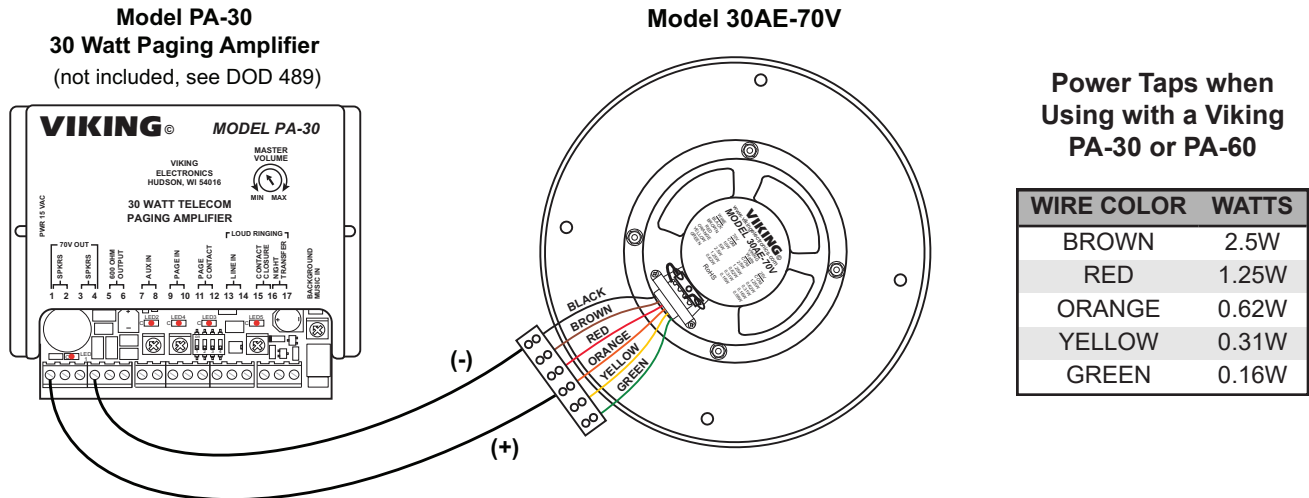
The **30AE-70V** ceiling speakers can be used with 25V paging amplifiers. The lower voltage means less speaker volume. Connect the same as described above in 70V Paging System, but use the scaling shown to the right for the Power Taps.

Power Taps for 25V Paging System

WIRE COLOR	WATTS
BROWN	1.25W
RED	0.62W
ORANGE	0.31W
YELLOW	0.16W
GREEN	0.08W

C. Use with a Viking Model PA-30 or PA-60 Amplifier

Viking models **PA-30** and **PA-60** 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, a third Power Tap scaling should be used when connecting to a Viking model **PA-30** or **PA-60** amplifier. Connect the same as described in the 70V Paging System section, but use the Power Tap scaling shown below to manage power handling and adjust volume of each **30AE-70V** ceiling speaker. Best results are achieved if the power sum of all speakers used does not excessively exceed the power output of the **PA-30** or **PA-60** amplifier.



Viking Speakers

PICTURE	MODEL	DESCRIPTION	8 OHM	25V	70V	MAXIMUM POWER	VOLUME CONTROL	WEATHER RESISTANT	DOD
	300AE	10-Inch High Power Paging Horn (see NOTE below)	Yes	Yes	Yes	30 Watts	Yes	Yes	497
	25AE	5-Inch Paging Horn	Yes			12 Watts		Yes	498
	25AE-70V	5-Inch 70V Paging Horn		Yes	Yes	10 Watts	Yes	Yes	471
	30AE	8-Inch Metal Grill Ceiling Speaker	Yes			6 Watts			498
	30AE-70V	8-Inch 70V Metal Grill Ceiling Speaker		Yes	Yes	10 Watts	5 Power Taps		501
	35AE	8-Inch Metal Grill Ceiling Speaker with Volume Control	Yes			6 Watts	Yes		498
	40AE	8-Inch Modern Look Ceiling Speaker	Yes			15 Watts			498

NOTE: Even though the **300AE**'s 30 Watt rating is greater than some of Viking's lower power paging amplifiers, it is an excellent choice because it is more efficient than Viking's smaller 5-inch paging horns. In other words, the larger 10-inch **300AE** only needs 1 Watt of power to play as loud as 2 Watts being driven into the smaller 5-inch paging horn.

Speaker Recommendations

Ambient Noise Environment	Level	Typical Examples	Ceiling Height	Distance Between Speakers
Quiet - Conversations very easily understood.	50dB	Hotel lobby, hospital area, quiet office	9 ft 14 ft	35 ft 50 ft
Normal - Conversations easily understood.	60dB	Bank lobby, department store, auditorium	9 ft 14 ft	25 ft 35 ft
Noisy - Voice must be raised to be understood.	70dB*	Assembly line, supermarket, restaurant	9 ft 14 ft	15 ft 25 ft
Very Noisy - Conversation difficult or impossible.	80dB*	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: 715-386-8666

Our Technical Support Department is available for assistance Monday through Friday 8:00am to 5:00pm central time. 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 (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.

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.

IT IS EXPRESSLY UNDERSTOOD AND AGREED THAT EACH AND EVERY PROVISION OF THIS AGREEMENT WHICH PROVIDES FOR DISCLAIMER OF WARRANTIES, EXCLUSION OF CONSEQUENTIAL DAMAGES, AND EXCLUSIVE REMEDY AND LIMITATION OF LIABILITY, ARE SEVERABLE FROM ANY OTHER PROVISION AND EACH PROVISION IS A SEPARABLE AND INDEPENDENT ELEMENT OF RISK ALLOCATION AND IS INTENDED TO BE ENFORCED AS SUCH.

Product Support: 715-386-8666

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