

# **AW8070V/blk**

## **70V Distributed Indoor/Outdoor Speaker System**

### **INTRODUCTION**

Congratulations on your purchase of the AW8070V 70 Volt Distributed Indoor/Outdoor Speaker System from Proficient. The AW8070V is ideal for installations that require a high number of speakers for paging and background music in large facilities such as malls, restaurants and office facilities. The number of speakers is only limited by the total draw (in watts) of all the speakers (as configured for the system) and the power of the amplifier. The AW8070V features a convenient five-position rotary switch for selecting tap wattage and a dual two-terminal barrier strip, providing easy 'in' and 'out' parallel connectivity. The case is a sturdy and attractive ABS enclosure that is weather resistant, but the AW8070V System should not be installed in direct sunlight or where it will be exposed to water. To be sure that you optimize the performance of your AW8070V Speakers, please read this manual carefully.

### **PLACEMENT**

AW8070V Speakers can be installed indoors or outdoors. When installing indoors, placement high on a wall or on a ceiling is recommended to provide best coverage over the paging/background music area. Mounting the speakers too low will cause the sound to be muffled or blocked by planters, furniture, fountains or even foot traffic. Space the speakers evenly over the paging/background music area to provide even coverage over the entire area.

#### **Outdoor Placement**

When mounting your speakers outdoors, the eaves of a roof provide an ideal location. They reduce the exposure of constant direct sunlight, salt spray, and precipitation. Avoid areas near sprinklers, fountains, misters or any location that could be exposed directly to rain. Space the speakers evenly over the paging/background music area to provide even coverage over the entire area.

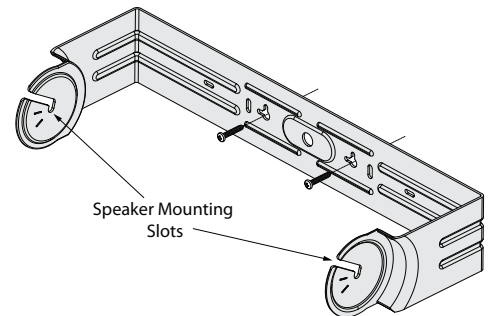
#### **Installation**

AW8070V Speakers should be installed horizontally as shown in **Diagram 1** for maximum dispersion of sound over the widest area. The AW8070V Speakers can be mounted vertically but will not cover as wide an area as a horizontal mount.

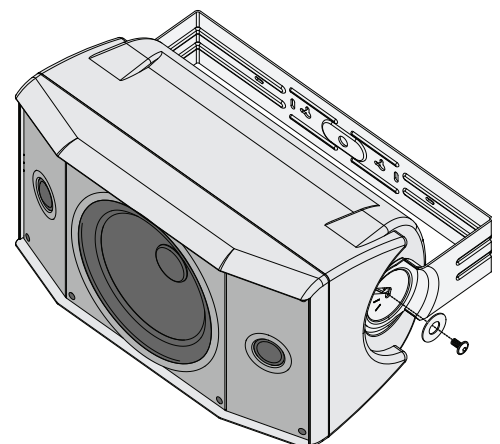
Be sure the Speaker Mounting Slots on the Mounting Bracket are directed in an upward position as shown in **Diagram 1**. This is necessary to assure that the speakers do not fall out of the bracket, should the mounting hardware come loose over time.

Attach the Mounting Bracket to an eave, frame or studs whenever possible for a secure mount. Test the security of the Mounting Bracket before attaching the speaker.

Loosely screw on washers and bolts, slide the Speaker into the Mounting Bracket. Make sure washer is outside of bracket as shown in **Diagram 2**. Do not fully tighten. Leave enough play to rotate the speaker to make connections and set Tap Wattage.



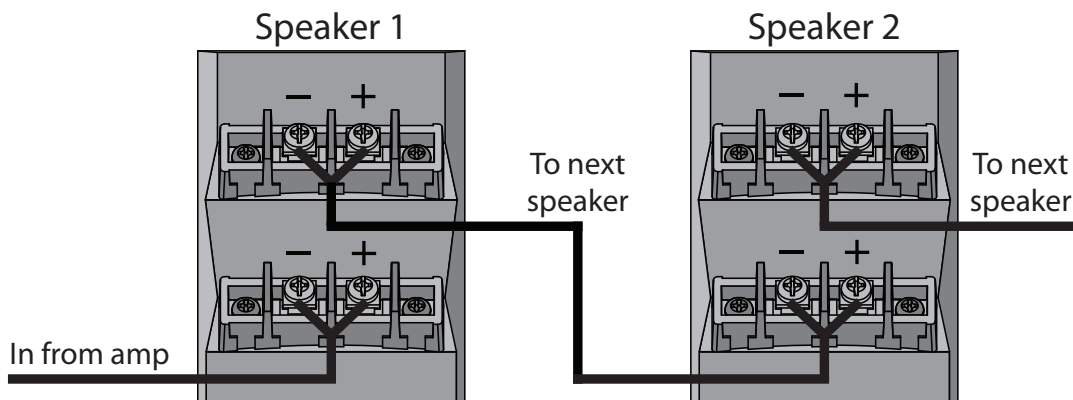
**Diagram 1:**  
*Installing Mounting Bracket*



**Diagram 2:**  
*Mounting The Speaker*

## WIRING

The AW8070V is primarily designed for use in 70 volt systems but can also be used in low impedance ( $4\ \Omega$ ) systems (See Section: **Selecting Tap Wattage**). For a 70 volt system, pull 18AWG two-conductor stranded unshielded speaker wire in a daisy-chain configuration from the amp to the first speaker, then to the next speaker and so on, as shown in **Diagram 3**. For a low impedance system, pull minimum 16/2 speaker wire in home runs from each speaker location directly to the amplifier.



**Diagram 3:**  
*Multiple Speaker Connections*

## CONNECTIONS

Attach the speaker cable, maintaining proper polarity with the amplifier, connecting + to + (red) and - to - (black). The amp may be connected to either terminal set on the speaker, (they are parallel) however, when connecting multiple speakers, be sure that polarity (+ and -) is correct on all terminals as connections are made from speaker to speaker as shown in **Diagram 3**.

## SELECTING TAP WATTAGE

In a 70V system, selecting tap wattage sets the relative volume for all speakers and determines the amplifier power requirement of the system. See **Diagram 4**.

### Speaker Volume (70V)

In a 70V System, for low volume level, set the Tap Wattage Switch to the 8W setting. Set to higher wattage for higher volume and use the 64W setting for largest areas, outdoor installations or areas with high ambient noise conditions. When using a low impedance ( $4\ \Omega$ ) audio amplifier, set the switch to Bypass (BP).

### Amplifier Power (70V)

In a 70V System, add the total of the Tap Wattage Settings for all speakers in the system and multiply times 1.2. This will be the minimum power 70V Distribution Amp that should be used for the system. This will allow for about a 20% loss of efficiency, typical in this transformer type of system. Example: 4 pair at 8W (32 Watts); 2 pair at 32W (64 Watts); and 4 pair at 64W (256 Watts) = 352 Watts Total.  $352\ \text{Watts} \times 1.2 = 422.4\ \text{Watts}$ , the minimum power 70V amp for this system.

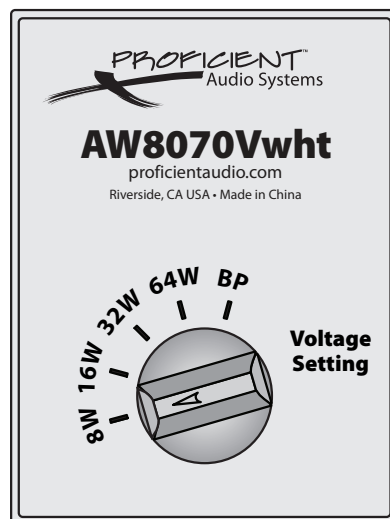
When using a low impedance amp, be sure it is  $4\ \Omega$  stable and utilize one speaker per amplifier channel.

## TIGHTEN MOUNTING HARDWARE

After all speaker wire connections have been made and the Tap Wattage Switch has been properly set, rotate the speaker to the desired position and tighten the mounting hardware to secure the speaker to the Mounting Bracket with provided Allen wrench. Do not overtighten.

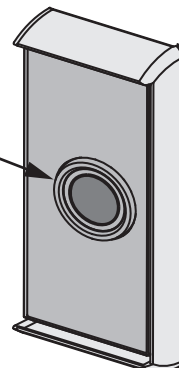
## ADJUSTING THE PIVOTING TWEETERS

Depending upon your listening area, adjusting the tweeter position can help narrow or widen the dispersion over the listening area. For more narrow dispersion, point the tweeters inward. For wider dispersion, point the tweeters outward. **NOTE:** Do not push on the dome itself.



**Diagram 4:**  
*Selecting Tap Wattage*

Push gently at the edge of the tweeter to point the tweeter in the desired direction. Do not touch tweeter dome.



**Diagram 5:**  
*Tweeter Adjustment*

## SPEAKER SPECIFICATIONS

<b>Model:</b>	<b>AW8070Vblk</b>
<b>Type:</b>	70V Two-Way Speaker System
<b>Woofers:</b>	8" Polypropylene Cone
<b>Tweeters:</b>	Two 1¼" Aluminum Dome
<b>Impedance:</b>	4Ω (in Transformer Bypass)
<b>Sensitivity:</b>	89dB 2.0V/1m
<b>Frequency Response:</b>	70Hz - 20kHz (-3dB)
<b>Power Handling:</b>	90 Watts
<b>Transformer:</b>	70V + 4Ω Bypass
<b>Tap Wattages:</b>	8W, 16W, 32W, 64W, BP (Bypass)
<b>Magnetic Shielding:</b>	No
<b>Enclosure Type:</b>	Sealed
<b>Enclosure Material:</b>	ABS
<b>Colors:</b>	White or Black
<b>Terminals:</b>	Dual Two-Terminal Barrier Strips for Input and Output; Gold Plated Screws; Daisy-Chain Pass Through
<b>Weight:</b>	14.0 lbs
<b>Dimensions (H x W x D):</b>	9" x 16" x 9"
<b>Mounting System:</b>	Wall-Mount Swivel Bracket With Theft Deterrent Security Bolts

*Features and specifications are subject to change without notice.*

## LIMITED TEN-YEAR WARRANTY

Proficient Audio Systems ("Proficient") warrants to the original retail purchaser only ("you") that this product will be free from defects in materials and workmanship for a period of ten years (the "Warranty Period"), subject to the limitations and exclusions set out in this Limited Warranty. This warranty is not transferable to subsequent owners of the product. If you discover a defect in material or workmanship within the Warranty Period, you can obtain warranty service by contacting Proficient during the Warranty Period at 877.888.9004 or [techsupport@proficientaudio.com](mailto:techsupport@proficientaudio.com) or by sending the product to Proficient at 940 Columbia Avenue, Riverside, CA 92507 or to the dealer from whom you purchased the product. Defective products must be shipped, prepaid and insured, together with proof of purchase. Warranty service requests made without proof of date of purchase will be denied. Freight collect shipments will be refused. It is preferable to ship this product in the original shipping container to lessen the chance of transit damage. In any case, the risk of loss or damage in transit is to be borne by the purchaser.

If, upon examination by Proficient or its authorized dealer, it is determined that the unit is in fact defective, Proficient will, at its option:

- Repair or replace the product at no additional charge; or
- If the model is no longer available and can not be repaired effectively, replace the unit with a current model of equal or greater value. In some cases where a new model is substituted, a modification to the mounting surface may be required. If mounting surface modification is required, Proficient assumes no responsibility or liability for such modification.

Proficient will bear the cost of returning the repaired or replaced product to you, freight prepaid. All replaced parts and product become the property of Proficient Audio Systems. The foregoing is your **sole and exclusive** remedy for breach of warranty. If the product is not found to be defective, Proficient will contact you to arrange for return of the product to you, at your expense.

For technical inquiries please call 877.888.9004 or email us at [techsupport@proficientaudio.com](mailto:techsupport@proficientaudio.com). We are available to assist you every weekday, except holidays, between the hours of 7:00 a.m. and 5:00 p.m. PST.

### EXCLUSIONS:

- This Warranty does not include service or parts to repair damage caused by accident, disaster, misuse, abuse, negligence, inadequate packing or shipping procedures, voltage inputs in excess of the rated maximum of the unit, or service, repair or modification of the product by unauthorized dealers. This Warranty also excludes normal cosmetic deterioration caused by environmental conditions.
- This Warranty will be void if:
  - the Serial Number on the product has been removed, tampered with or defaced.
  - the product was not purchased from an authorized dealer.

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940 Columbia Avenue, Riverside, CA 92507  
877.888.9004 • Fax 951.750.6304 • [proficientaudio.com](http://proficientaudio.com)



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