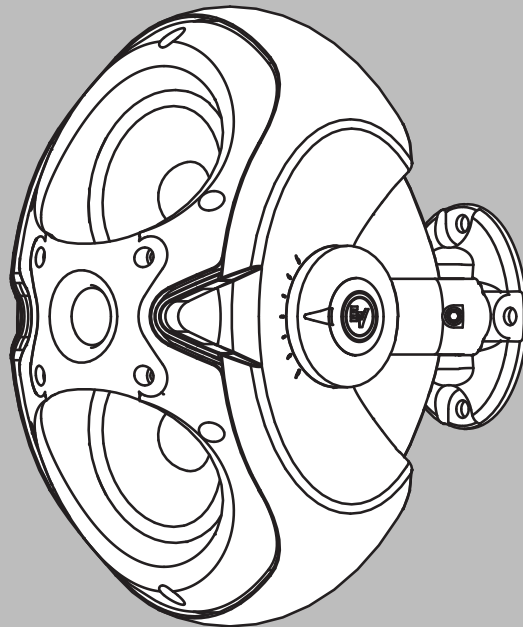


## **EVID Surface-mount loudspeakers**

EVID 4.2, EVID 4.2W, EVID 4.2T, EVID 4.2TW, EVID 6.2, EVID 6.2W,  
EVID 6.2T, EVID 6.2TW





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# 1 Safety

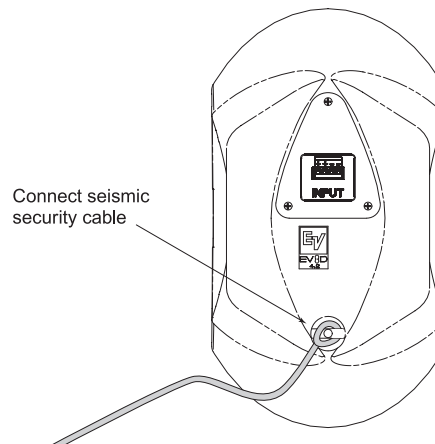


## Warning!

Suspending any object is potentially dangerous and should only be attempted by individuals who have a thorough knowledge of the techniques and regulations of suspending objects overhead. Electro-Voice strongly recommends that loudspeakers be suspended taking into account all current national, federal, state, and local laws and regulations. It is the responsibility of the installer to ensure all loudspeakers are safely installed in accordance with all such requirements. When loudspeakers are suspended, Electro-Voice strongly recommends the system be inspected at least once per year or as laws and regulations require. If any sign of weakness or damage is detected, remedial action should be taken immediately. The user is responsible for making sure the wall, ceiling, or structure is capable of supporting all objects suspended overhead. Any hardware used to suspend a loudspeaker not associated with Electro-Voice is the responsibility of others.

## Safety point

As an added safety measure, it is strongly recommended to utilize a properly rated secondary safety cable (provided by the installer) to securely fasten the speaker from the safety point on its back to a secondary mounting structure on the building.



## 2 Introduction

Thank you for purchasing EVID™ Series loudspeakers. Read through this manual to familiarize yourself with the features, applications, and precautions before you use these products. EVID™ Series loudspeakers use innovative design and materials to provide premium-level performance from compact surface-mount speakers.

### EVID™ 4.2 models

The compact EVID™ 4.2 delivers very full range sound from its dual 4-inch LF drivers and a 1-inch titanium tweeter with waveguide. It is able to deliver a 110-dB sound level over a wide coverage area. The EVID™ 4.2T includes a multi-tap transformer for 70 V or 100 V line distribution systems.

### EVID™ 6.2 models

The EVID™ 6.2 is an extended-range high-output loudspeaker with dual 6.5-inch woofers and a 1-inch titanium tweeter with waveguide, designed for high SPL over a wide coverage area. The EVID™ 6.2T includes a multi-tap transformer for a 70 V or 100 V line distribution system.

## 2.1 Applicable products

This manual is applicable to these products:

### 8-ohm impedance

- EVID 4.2 Surface mount speaker 4" 8 Ohm bk pair
- EVID 4.2W Surface mount speaker 4" 8 Ohm wh pair
- EVID 6.2 Surface mount speaker 6" 8 Ohm bk pair
- EVID 6.2W Surface mount speaker 6" 8 Ohm wh pair

### 70- and 100-volt equipped units

- EVID 4.2T Surface mount speaker 4" 70/100V bk pair
- EVID 4.2TW Surface mount speaker 4" 70/100V wh pair
- EVID 6.2T Surface mount speaker 6" 70/100V bk pair
- EVID 6.2TW Surface mount speaker 6" 70/100V wh pair

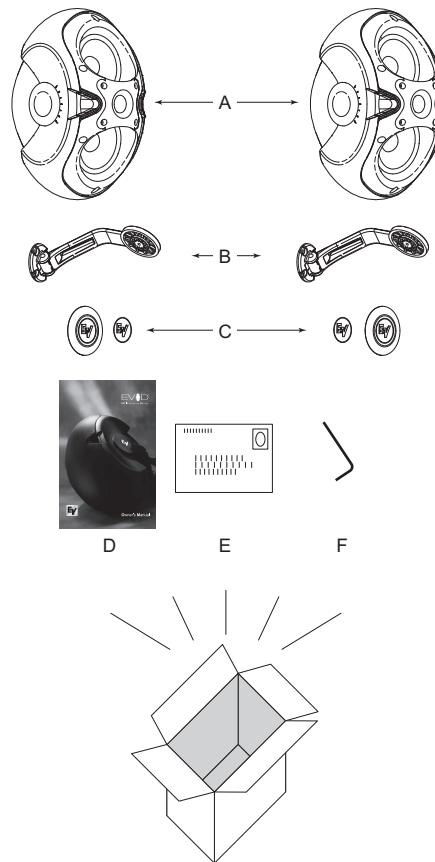
## 2.2 Parts included

Make sure that all parts are included and not damaged. If the packaging or any parts are damaged, contact your shipper. If any parts are missing, contact your Sales or Customer Service Representative.

EVID 4.2 and EVID 6.2 models

Quantity	Component
2	Loudspeaker system (A)
2	SAM™ assembly (B)
2	Large logo cap (C)
2	Small logo cap (C)
1	Installation manual (D)
1	Warranty card (E)

Quantity	Component
1	SAM™ mounting tool (F)



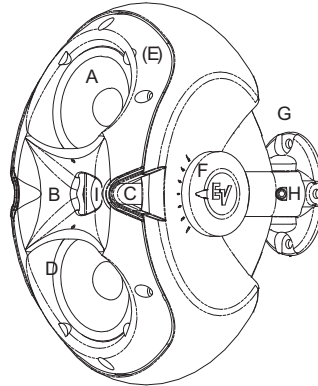
## 2.3

### System features

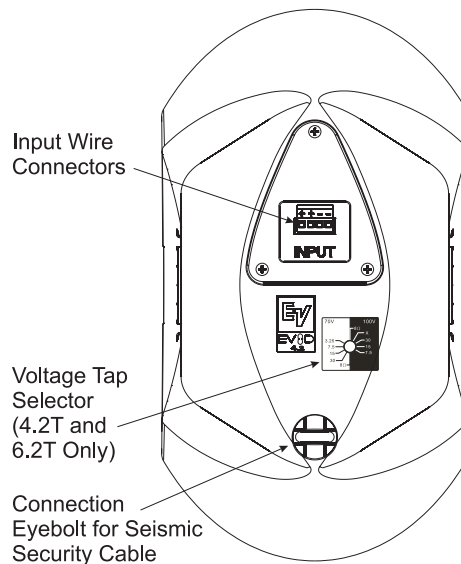
- Line-array enhanced coverage control.
- Organic, unobtrusive shape.
- SAM™ (Strong-Arm-Mount™) system for secure and reliable mounting.
- Extremely large loudspeaker swing and rotation ranges for flexible placement and coverage everywhere.
- Full bandwidth overload protection.
- Weather resistant and paintable.
- Dual LF transducers.
- Extended bass.
- Greater power handling and output.
- Titanium HF transducers (4.2, 6.2 waveguide coupled).
- High sensitivity.
- Shielded for video applications.

EVID 4.2 and EVID 6.2 models

- A. Shielded dual woofers
- B. Coherent Coverage Waveguide horn (4.2 and 6.2 only)
- C. Dual low-frequency ports
- D. Treated woofer cones
- E. Durable zinc-plated steel grille (not shown)
- F. Cast aluminum Strong-Arm-Mount™(SAM™)
- G. Over 100 degrees of swing; 90 degrees of rotation
- H. Simple keyed socket head adjustments
- I. Titanium dome tweeters with neodymium magnet structures



**Figure 2.1:** EVID features (front)



**Figure 2.2:** EVID features (back)

## 2.4

### Accessories

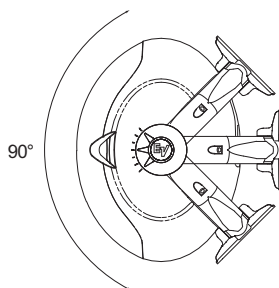
#### SAM™ (Strong-Arm-Mount™) System

EVID™'s SAM™ system (Strong-Arm-Mount™) excels at meeting the four requirements for mounting FGM/BGM systems: simple, quick, versatile, and reliable.

Three easy steps and you are done:

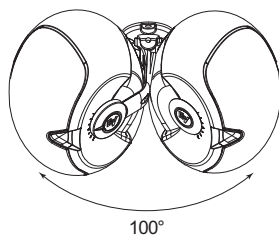
1. Attach the surface bracket to the wall or ceiling.
2. Attach the EVID™ enclosure to the bracket with the sockethead bolt.
3. Aim the enclosure and tighten the bolt.

SAM™ allows greater flexibility for aiming than ball-type mounts that limit range of motion when not on center. Typical ball designs have limited rotation when pointing straight ahead, and even that is reduced when the enclosure contacts the wall and is moved off axis. By contrast, SAM™ allows full rotation even at full sweep. SAM™'s range of rotation is 90°. EVID™'s curved cabinet allows it to rotate much further than a rectangular or trapezoidal box).



**Figure 2.3:** Rotation range (90°)

SAM™'s range of sweep motion left and right on the wall is 100° for all models.



**Figure 2.4:** Sweep range (100°)



## 3 Installation

### 3.1 Mounting the SAM bracket to the wall or ceiling

Before you mount the SAM™ bracket to the wall or ceiling:

- ▶ Determine whether you want to mount the bracket on the left or right side of the speaker before you bolt the speaker to the bracket.

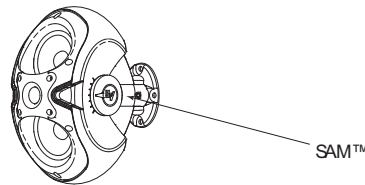
You can mount the SAM™ bracket on either side of the speaker. This enables optimal configuration for any installation. It is best to mount the bracket on the side away from the direction in which the speaker will be aimed. This ensures that the full swing angle is available for aiming on that side and provides easier access to the swing tightening bolt on the wall bracket (see Fig. 10, Step 3).



#### Warning!

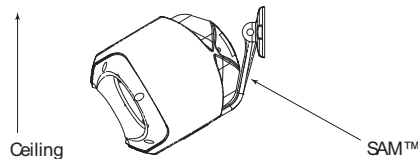
Make sure the mounting surface can support more than the speaker's weight. Use only industry-accepted fasteners and mounting methods when mounting the bracket. Consult an expert if you are not sure.

For standard vertical installation, mount the SAM™ bracket on the side.



**Figure 3.1:** SAM™ mounted on side

For horizontal mounting configurations, mount the bracket on the bottom side. It is easiest and safest, and allows mounting the speaker closer to the ceiling.



**Figure 3.2:** SAM™ mounted on bottom

### 3.2 Selecting the wattage tap

This instruction is applicable to EVID 4.2T , EVID 4.2TW , EVID 6.2T , and EVID 6.2TW models only.

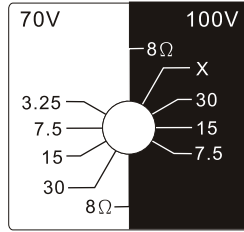
Before mounting the speaker to the bracket:

- ▶ Select the proper wattage tap setting for your installation.

The wattage selector switch is located at the rear of the speaker below the input terminal panel. A guide on the back of each speaker shows which switch positions to use for the power settings at 70V and 100V.

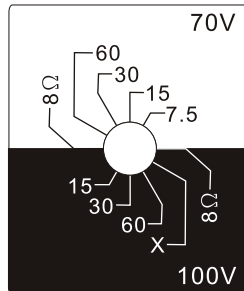
EVID 4.2T and  
EVID 4.2TW

The power taps are 30 W, 15 W and 7.5 W at both 70.7 V and 100 V, with a 3.7 W tap for 70.7 V only, as well as an 8 Ohm transformer bypass setting.

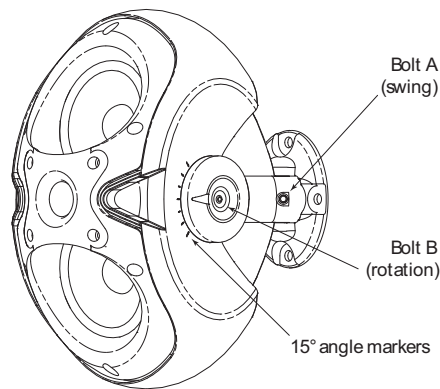


EVID 6.2T and EVID 6.2TW

The power taps are 60 W, 30 W and 15 W at both 70.7 V and 100 V, with a 7.5 W tap for 70.7 V only, as well as an 8 Ohm transformer bypass setting.



### 3.3 Mounting the speaker to the SAM bracket



**Figure 3.3:** Tighten socket head bolts

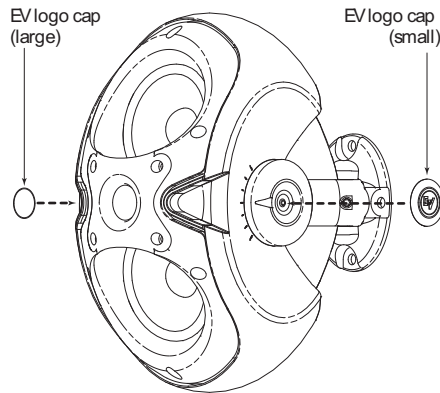
1. Attach the speaker to the SAM™ bracket with bolt B.
2. Adjust the horizontal position of the speaker.
3. Tighten the locking bolt A with an Allen wrench (supplied).  
If available, use an Allen wrench with a longer handle to make it easier to apply the necessary force to achieve the recommended torque. Refer to Recommended torque settings for bolts A and B.
4. Adjust the vertical angle of the speaker.
5. Tighten the locking bolt B with an Allen wrench (supplied).  
If available, use an Allen wrench with a longer handle to make it easier to apply the necessary force to achieve the recommended torque. Refer to Recommended torque settings for bolts A and B.

Model	Torque
EVID 4.2 models	30-50 in-lbs (3.4-5.2 N-m)

Model	Torque
EVID 6.2 models	70-90 in-lbs (7.9-10.2 N-m)

**Table 3.1:** Recommended torque settings for bolts A and B

- 6. Attach both logo caps.



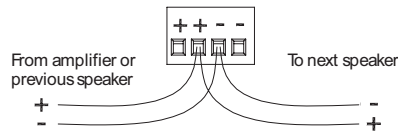
**Figure 3.4:** Attach logo caps

### 3.4

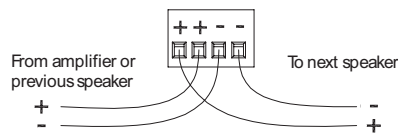
## Attaching the wiring to the terminal connector and wiring the speaker

The 4-pin phoenix-style plug-in connector provides for a pass-thru audio connection to daisy-chain a line of speakers.

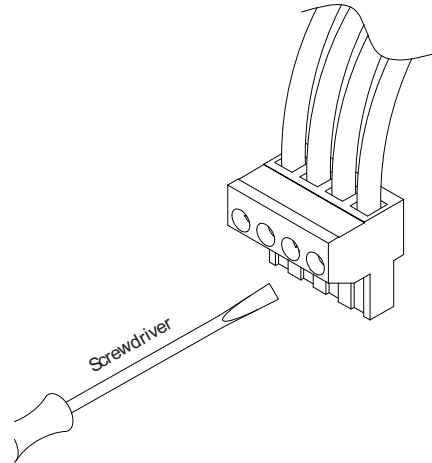
- Insert the bare end of wire into the appropriate connector terminals.
  - In **parallel wiring**, when one input connector is removed, subsequent speakers will remain connected.



- In **daisy-chaining**, when one input connector is removed, subsequent speakers will be disconnected.



- Screw down the hold-down screw until tight, using a small screwdriver. The connector accepts up to 12 gauge wire.



**Figure 3.5:** Tighten with screwdriver

### 3.5 Installing a secondary safety cable to the safety point

As an added safety measure, it is strongly recommended to utilize a properly rated secondary safety cable (provided by the installer) to securely fasten the speaker from the safety point on its back to a secondary mounting structure on the building.



**Caution!**

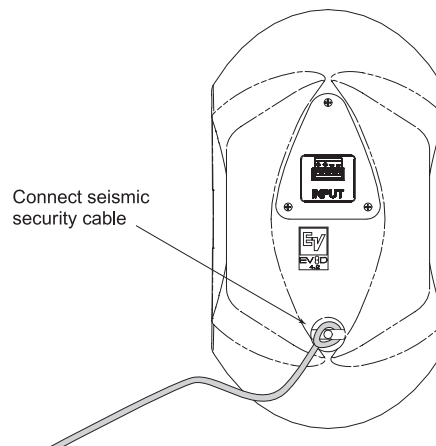
The safety point (auxiliary support ring) is not intended for primary suspension of the loudspeaker. The safety point should only be used as a secondary safety point.



**Caution!**

Surface mount speaker's safety cable

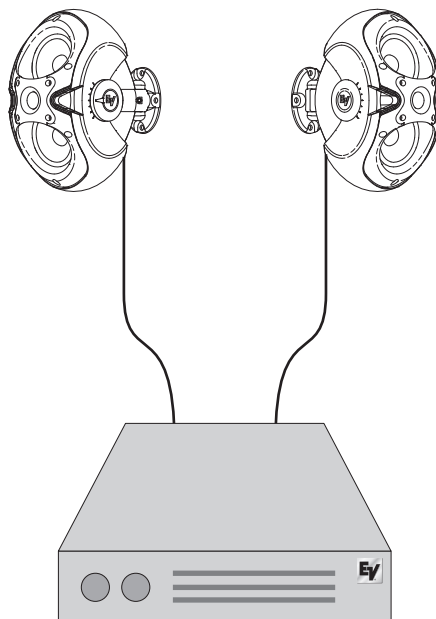
The safety cable should be installed with as little slack as possible. Less than 1 in (25.4 mm) is preferable.



**Figure 3.6:** Secure seismic security cable

### 3.6 Testing the system operation

- ▶ After all connections are made, test the complete system operation.  
Refer to *Troubleshooting, page 14* to locate many speaker-related problems.



**Figure 3.7:** EVID™ system

**Refer to**

- *Troubleshooting, page 14*

## 4 Troubleshooting

Problem	Possible causes	Action
<b>No sound</b>	Amplifier	Connect a known working test speaker to the amplifier outputs. If there is no sound, check that all electronics are on, the signal routing is correct, the source is active, the volume is turned up, and so on. Correct, repair or replace as necessary. If there is sound, the problem is in the wiring.
	Wiring	Verify that you have connected the correct wire pairs to the amplifier. Play something at low level through the amplifier, for example, from a CD player or tuner. Connect the test speaker in parallel with the malfunctioning line. If the sound is gone or very weak, the line has a short in it: possibly a severe scrape, pinch, or staple puncture. If the sound level is normal, the wire is open: possibly a cut wire or missed connection. Using the test speaker, move down the line, test each connection / junction until you find the problem, and correct it. Observe proper polarity.
<b>Poor low-frequency response</b>	Speakers wired out-of-polarity	When two speakers are connected out of polarity (out of phase), the low frequencies will cancel each other acoustically. Carefully observe the wire markings or tracers on your speaker wires. Verify that the amplifier (+) terminal is connected to the red speaker terminals and

Problem	Possible causes	Action
		the amplifier (-) terminal is connected to the black speaker terminals.
	Improperly wired subwoofer panel	Using a test speaker, verify that all amplifier and speaker wires are connected to their proper terminals with the correct polarity. Reversing just one set of amplifier wires can cut out all bass output from the subwoofer.
<b>Intermittent output such as crackling or distortion</b>	Faulty connection	Check all connections at amplifier and speakers to ensure they are clean and tight. If the problem persists, it may be in the amplifier or wiring. See other actions.
<b>Constant noise, such as buzzing, hissing, humming</b>	Defective amplifier or other electronic device	If the noise is present, but no program material is playing, the likely cause is the signal chain in the electronics. Evaluate each component as necessary to isolate the problem.
	Poor system grounding or ground loop	Check and correct the system grounding, as required.
<b>If none of these suggestions solves your problem, contact your nearest Electro-Voice service center or Electro-Voice distributor.</b>		

## 5 Maintenance

Your EVID™ system provides years of durability and reliable service. No routine maintenance is necessary.

### To clean the system:

- Wipe with a soft, damp cloth.
- Never use solvents or harsh cleaning agents of any kind.

Electro-Voice® products are guaranteed against malfunction due to defects in materials or workmanship for a specified period, as noted in the individual product line statement(s), or in the individual product datasheet or Installation manual, beginning with the date of original purchase. If such malfunction occurs during the specified period, the product will be repaired or replaced (at our discretion) without charge. The product will be returned to the customer prepaid.

### 5.1 Painting the EVID speakers

#### Painting the loudspeakers

The EVID™ 4.2 and 6.2 are made of high-impact ABS, which accepts a wide variety of paints.

1. Remove the grille and mask the baffle.
2. Clean the cabinet and grille by rubbing the speaker with a lightly dampened cloth.



#### Warning!

Do not use abrasives such as sandpaper or steel wool. Never use gasoline, kerosene, acetone, MEK, paint thinner, harsh detergents, or other chemicals, as these agents may cause permanent damage to the enclosure.

3. Apply latex or enamel paint.  
Spraying is recommended



#### Notice!

Painting the grille

Painting the grille requires spray painting. If the grille is rolled or brush painted, the mesh may become clogged with paint and poor sound quality may result.

---



## 6

## Technical data

1) Half space (wall mounting)

2) Long term program rating,

3 dB greater than continuous noise pink noise rating

3) Avg. half space (wall mounting)

4) When mounting with long axis in vertical plane

	EVID 4.2 / 4.2T models	EVID 6.2 / 6.2T models
Frequency range (-10 dB) (Hz) <sup>1</sup>	65 Hz – 20,000 Hz	62 Hz – 20,000 Hz
Power handling (program) (W) <sup>2</sup>	200 W	300 W
Axial sensitivity (dB SPL 1W/1m) <sup>3</sup>	90 dBspl 1W/1m	95 dBspl 1W/1m
Nominal impedance (Ω)	8 Ω	8 Ω
Maximum sound pressure level at a distance of 1 m (dB)	111 dB	116 dB
Coverage angle HxV (°) <sup>4</sup>	100° x 90°	100° x 90°
LF transducer size (in)	2 x 4 in	6 in
LF transducer size (mm)	90 mm	90 mm
HF transducer size (in)	1 in	1 in
HF transducer size (mm)	25 mm	25 mm
Protection	Full system	Full system
Suspension / Swing x Rotation	Multi-Axis 100° x 45°	Multi-Axis 100° x 45°
Connector type	Phoenix (removable screw connector); 4-pin Phoenix	Phoenix (removable screw connector); 4-pin Phoenix
Material	Plastic (ABS) (paintable)	Plastic (ABS) (paintable)
“t”-version wattage taps	70 V: 3.25 W 70 V/100 V: 7.5 W, 15 W, 30 W, 8 ohm Bypass	70 V: 7.5 W 70 V/100 V: 15 W, 30 W, 60 W, 8 ohm Bypass
Dimensions (H x W x D) (in)	9.2 in x 5.1 in x 6.5 in	16.5 in x 9 in x 11.75 in
Dimensions (H x W x D) (mm)	234 mm x 127 mm x 165 mm	419 mm x 228 mm x 298 mm
Weight (lb)	8.50 lb	12 lb
Weight (kg)	3.90 kg	5.30 kg
Shipping weight (lb)	19 lb	27 lb
Shipping weight (kg)	8.60 kg	12.30 kg
Included accessories	SAM, hex key	SAM, hex key

## 7 Uniform Limited Warranty

### Exclusions and Limitations

The Limited Warranty does not apply to:

- Exterior finish or appearance.
- Certain specific items described in the individual product-line statements, or in the individual datasheet or Installation manual.
- Malfunction resulting from use or operation of the product other than as specified in the product datasheet or Installation manual.
- Malfunction resulting from misuse or abuse of the product.
- Malfunction occurring at any time after repairs have been made to the product by anyone other than Electro-Voice® Service or any of its authorized representatives.

### Obtaining warranty service

To obtain warranty service, a customer must deliver the product, prepaid, to Electro-Voice® Service or to any of its authorized service representatives, together with proof of purchase of the product in the form of a bill of sale or receipted invoice.

A list of authorized service representatives is available from Electro-Voice® Service at:

12000 Portland Avenue

Burnsville, MN 55337

Phone: (877) 863-4166.

### Incidental and consequential damages excluded

Product repair or replacement and return to the customer are the only remedies provided to the customer. Electro-Voice® shall not be liable for any incidental or consequential damages including, without limitation, injury to persons or property or loss of use. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you.

### Other Rights

This warranty gives you specific legal rights, and you may also have other rights, which vary from state to state.

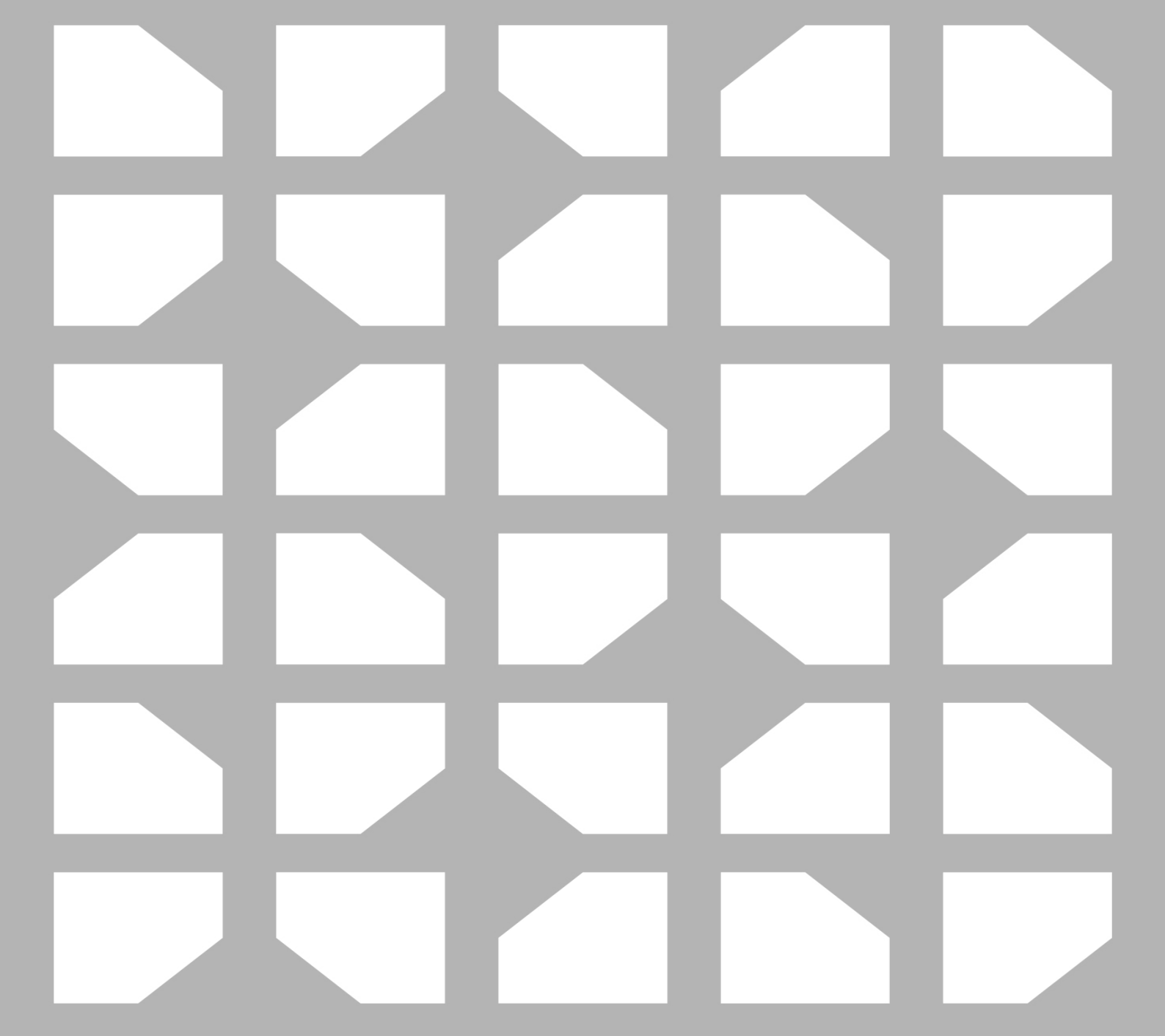
### Speakers and electronics

Electro-Voice® speakers and speaker systems are guaranteed against malfunction due to defects in materials or workmanship for a period of five (5) years from the date of original purchase.

The Limited Warranty does not apply to burned voice coils or malfunctions such as cone and/or coil damage resulting from improperly designed enclosures.

Electro-Voice® active electronics associated with the speaker systems are guaranteed for three (3) years from the date of original purchase. Additional details are included in the Uniform Limited Warranty statement.





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202307271320