AMBISONIC

AM5600IW • AM3600IW • AMD10IWSUB • M2500IC

IN-WALL LCR SPEAKERS
IN-WALL SURROUND SPEAKERS
IN-WALL SUBWOOFERS
IN-CEILING SPEAKERS

AMBISONIC MARQUEE HOME THEATER SYSTEM
***IN WALL** INSTALLATION MANUAL*

AMBISONIC HOME CINEMA COLLECTION

AMBISONIC

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1. INTRODUCTION

Congratulations on selecting the Ambisonic Marquee Home Theater System: Ambisonic Systems' first dedicated High-Performance Planar Ribbon Home Theater System.

At Ambisonic, we take pride in providing you with a high quality product, all speakers are designed to have excellent sound quality, longevity, and a simple installation process.

Ambisonic Systems has delivered high performance experiences in luxury outdoor settings for decades. Now, our new Ambisonic Marquee home theater system features the same proprietary technologies and quality materials into dedicated home theaters.

This instruction booklet covers the necessary information for a smooth installation. It includes the tool list you will need, step-by-step instructions for installation, troubleshooting tips for any errors that may occur, and all warranty information.

If for any reason you experience problems or if you have installation questions please call us at (844) 674-4461. Hours of operation are 8:00am to 5:00pm (Pacific Time), Monday through Friday.

Scan the QR Code for full instructions for this product.

2. SPECIFICATIONS

MODEL	AM5600IW (In-Wall) • AM5600OW (On-Wall)
DESCRIPTION	*Front of House LCR Speakers (bi-amped)*
System Type	Three-way full range, screen or music
Tweeter	3" Magnetic Planar Ribbon Tweeter with Exclusive Waveguide
Midrange	2 x 5 ¼" Woven Fiberglass Mid-Woofers
Woofer	2 x 8" Woven Fiberglass Woofers
Crossover	DSP Bi-Amp LF, passive mid-hi custom 2 way
Frequency Response	32Hz-20KHz (-10dB) • 43Hz-20KHz (-3dB) • 49Hz-20KHz (+/- 1.5dB)
Maximum SPL @ 1m	120 dB Continuous Program • 123 dB Peak
System Coverage	100° Horizontal • 60° Vertical
Sensitivity, 1W/1m	94 dB
Power Handling	LF = 200W AES noise • 400W program • 800W peak. MH = 100W AES noise • 200W program • 400W peak
Recommended Amp Power	LF-200W - 800W @ 4 ohms MH-100 - 400W @ 4ohms
Rated Impedance	4 ohms
Enclosure Material	Extruded Aluminum Enclosure
IW Cabinet Dimensions	43 ⅝" H x 13" W (1108 mm H x 330 mm W)
IW Mounting Depth	3 7/16" D (88 mm D)

MODEL	AM3600IW (In-Wall) • AM3600OW (On-Wall)
DESCRIPTION	*Surround Speakers*
System Type	Two-way full range, surround, screen or music
Tweeter	3" Magnetic Planar Ribbon Tweeter with Exclusive Waveguide
Mid-Woofers	2 x 5 ¼" D (88 D mm)" Woven Fiberglass Mid-Woofers
Crossover	Passive custom 2 way
Frequency Response	45Hz-20KHz (-10dB) • 70Hz-20KHz (-3dB) • 81Hz-20KHz (+/- 1.5dB)
Maximum SPL @ 1m	115 dB Continuous Program • 118 dB Peak
System Coverage	100° Horizontal • 60° Vertical
Sensitivity, 1W/1m	92 dB
Power Handling	100W AES noise • 200W program • 400W peak
Recommended Amp Power	LF-200W - 800W @ 4 ohms 100 - 400W @ 4ohms
Rated Impedance	4 ohms
Enclosure Material	Extruded Aluminum Enclosure
IW Cabinet Dimensions	21 9/16" H x 13" W (548 mm H x 330 mm W)
IW Mounting Depth	3 7/16" D (88 mm D)

MODEL	AMD10IWSUB (In-Wall) • AMD10WSUB (On-Wall)
DESCRIPTION	*Subwoofer*
System Type	Subwoofer, screen or music
Subwoofer	Dual 10" Aluminum Cone Long Throw Woofers
Crossover	Recommended HPF=20Hz 12dB/oct BW • LPF= 80hz 12dB/oct BW
Frequency Response	22Hz-200Hz (-10dB) • 29Hz-200Hz (-3dB) • 33Hz-116Hz (+/- 1.5dB) (w/ recommended DSP)
Maximum SPL @ 1m	116 dB Continuous Program • 122 dB Peak
System Coverage	100° Horizontal • 60° Vertical
Sensitivity, 1W/1m	90 dB
Power Handling	500W AES noise • 1000W program • 2000W peak
Rated Impedance	4 ohms
Enclosure Material	Extruded Aluminum Enclosure
IW Cabinet Dimensions	34 ⅝" H x 13" W (800 mm H x 330 mm W)
IW Mounting Depth	3 7/16" D (88 mm D)

MODEL	M2500IC (In-Ceiling) (Atmos® Speaker)
DESCRIPTION	*In-Ceiling/ Height Channel*
Tweeter	3/4" Titanium Multi-Motion™ Pivoting Tweeter
Midrange	3 1/2" Coated Paper Mid-Woofer
Woofer	10" Coated Paper Woofer
Frequency Response	70Hz-20KHz
Power Handling	50W AES Noise • 100W Program • 150W Peak
Rated Impedance	4 ohms
Diameter	11 ¼" (286 mm)
Grille Diameter	11 ¾" (298 mm)
Cut-Out Diameter	10 ⅜" (264 mm)
Mounting Depth	6 ¼" (158 mm)

*All product specifications are subject to change. Please refer to ambisonicsystems.com for latest information.

3. MODEL IW LINEDRAWINGS

(A) Speaker arrives with Wooden Protection Cover

(B) Speaker with Baffle

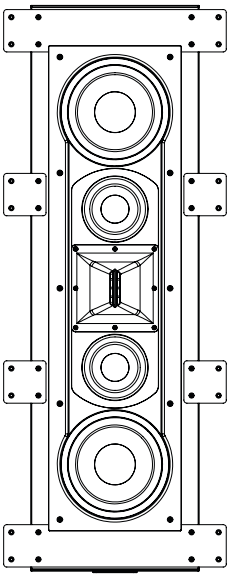
(C) Speaker Side Profile

(D) Speaker with Grille

- AM5600IW

(A)

(B)



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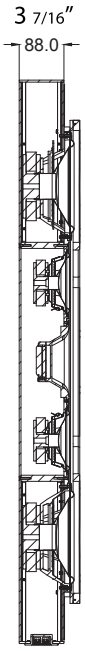

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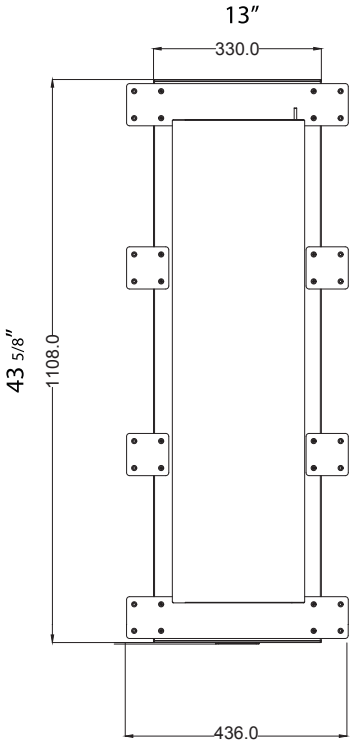
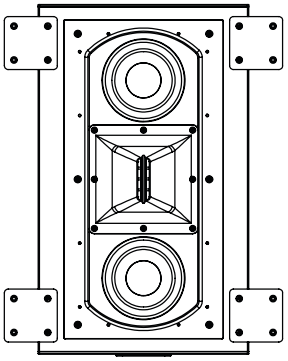


- AM3600IW

(A)

(B)



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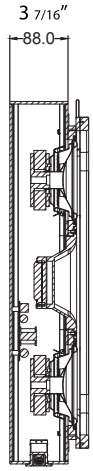

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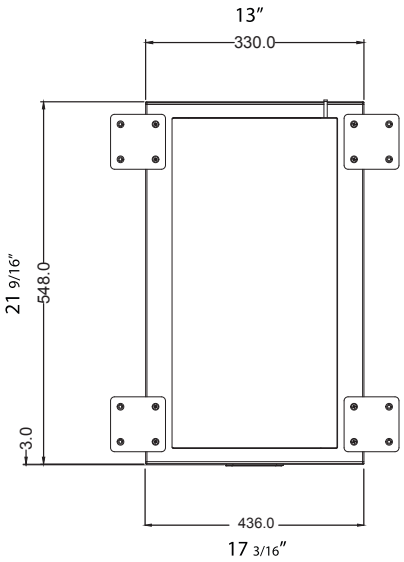


(A) Speaker arrives with Wooden Protection Cover

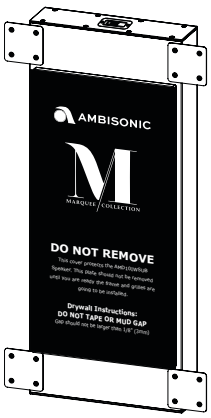
(B) Speaker with Baffle

(C) Speaker Side Profile

(D) Speaker with Grille

- AMD10SUBIW

(A)



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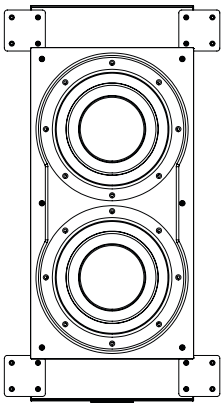

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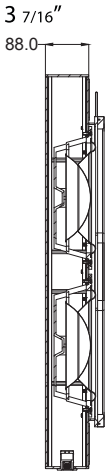

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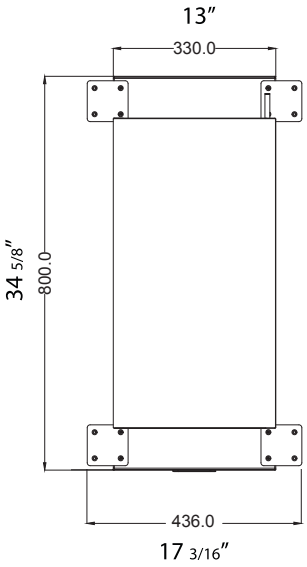
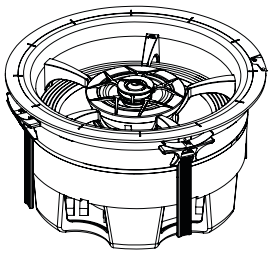
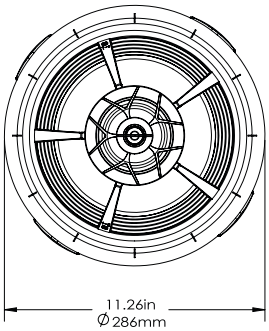
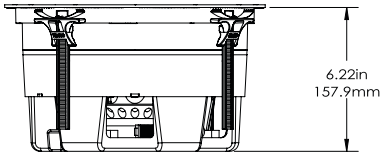
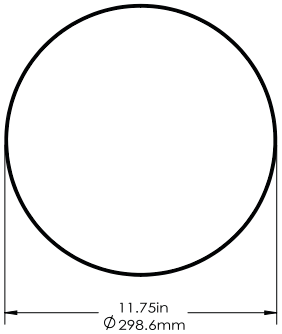


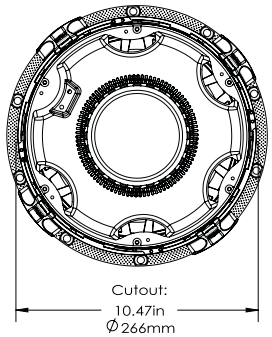
- M2500IC











4A. WHAT'S INCLUDED

• AM5600IW

- Long Mounting Brackets (2pcs)
- Short Mounting Brackets (4pcs)
- Mount Screws - M4 x 8mm (16pcs)
- Baffle Screws - M6 x 35mm (10pcs)
- 1" Wall Stud Screws (16pcs)
- Grille (1pc)
- Baffle (1pc)
- Wood Protection Cover (1pc)
- Quick Start Guide

• AM3600IW

- Short Mounting Brackets (4pcs)
- Mount Screws - M4 x 8mm (8pcs)
- Baffle Screws - M6 x 35mm (6pcs)
- 1" Wall Stud Screws (8pcs)
- Grille (1pc)
- Baffle (1pc)
- Wood Protection Cover (1pc)
- Quick Start Guide

• AMD10IWSUB

- Short Mounting Brackets (4pcs)
- Mount Screws - M4 x 8mm (8pcs)
- Baffle Screws - M6 x 35mm (6pcs)
- 1" Wall Stud Screws (8pcs)
- Grille (1pc)
- Baffle (1pc)
- Wood Protection Cover (1pc)
- Quick Start Guide

• M2500IC

- Speaker Grille
- Bayonet Ring
- Cut-Out Template
- Quick Start Guide

4B. REQUIRED TOOLS

- Speaker Wire
- Pencil
- Wire Stripper
- Measuring Tape
- Drywall Saw
- Drill & Drill Bit ⅛” (3mm)
- Hex wrench
- Stiff Wire
- Stud Finder
- Level
- Fish Tape
- Compressed Air

4C. RECOMMENDED AMPLIFIERS

- **THE RECOMMENDED AMBISONIC MARQUEE SPEAKER BUNDLES WITH THE ORIGIN PRO AMPLIFIERS HAVE BEEN BUILT TO OPTIMIZE SPEAKER AUDIO PERFORMANCE.**

- The minimum recommended amplifier for an AM3600 speaker system setup is the Origin PRO ProA250.1 Amplifier
- The minimum recommended amplifier for an AM5600 LCR speaker system setup is the Origin PRO ProA1200.2 Amplifier
- The minimum recommended amplifier for an AMD10SUB Subwoofer speaker system setup is the Origin PRO ProA1000.1 Amplifier

4D. IN-WALL SPEAKER PRECAUTIONS

• THE IW SPEAKERS ARRIVE WITH A WOODEN PROTECTION COVER SCREWED ONTO THE FACE OF THE SPEAKER.

IMPORTANT! DO NOT REMOVE COVER UNTIL AFTER DRYWALL INSTALLATION.

THESE IN-WALL SPEAKERS ARE DESIGNED FOR NEW CONSTRUCTION INSTALLATIONS, ONLY TO BE INSTALLED BEFORE DRYWALL INSTALLATION.

5A. SYSTEM DESIGN GUIDANCE

The final result of a quality home theater is more than simply the sum of its components. Great care must be taken to integrate it aesthetically and acoustically into the space. The dimensions of the room and the seating position will determine the geometry of the speaker placement so as to create the proper sound-stage both horizontally and vertically.

Ideally, the tweeter of the front LCR speakers will be at ear level whereas the side and rear channels can be anywhere from slightly above the listener to in the ceiling itself. If you are laying out a Dolby Atmos® system, the side and rear channel speakers should be in or on the walls while the height channels would be in the ceiling to create the proper "over-head" effect.

Subwoofer locations are critical as nodes and lobes can dramatically affect the amount of bass experienced at the listening position. Regardless of the size of the woofer or the amount of power, bass waves can cancel each other and leave you will little or no perceived bass. One suggestion is to place the subwoofer at the listening positions and then walk the room in search of where the bass appears to be loudest. Placing the subwoofer in the loudest position will often result in substantial bass where you want it most. Dual subwoofers will typically limit this effect and allow for smoother overall bass response.

Quality electronics will also have a huge impact on the loudspeaker's ability to accurately recreate the soundtrack. All amplification is not created equal, nor is all signal processing.

If you are not comfortable with making these decisions on your own, please consult a professional A/V integrator, or email sales@originacoustics.com for more information.

5B. SYSTEM DESIGN PRECAUTIONS

• THE SPEAKERS SHOULD BE MOUNTED ACCORDING TO YOUR HOME THEATER DESIGN CONFIGURATION. PLEASE REFER TO YOUR THEATER DESIGN FOR OPTIMAL HEIGHTS, DISTANCES, AND CONFIGURATION REQUIREMENTS.

• FOR OPTIMAL SETTINGS, USE THE RECOMMENDED THEATER DESIGN DSP PROFILE FOR THE ORIGIN PRO AMPLIFIER BEING USED.

6. SYSTEM POSITIONING TIPS

For the best possible surround sound, all the speakers (except the subwoofer) should be placed at the same distance from the listening position.

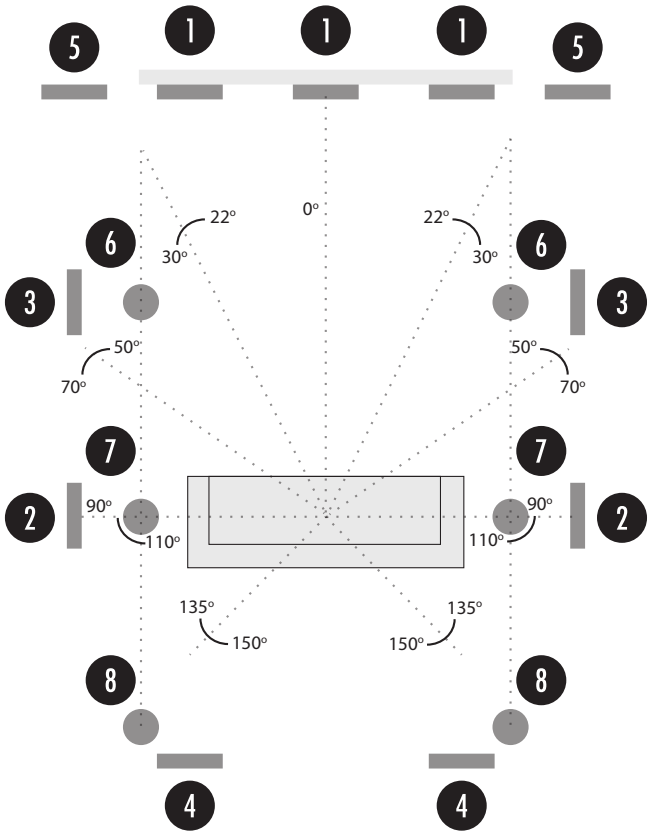
1. The illustration below shows an example of positioning a 9.2.6 system, as reference. (The images in this illustration differ from the actual units for explanation purposes.)

The 9.2.6 indicates the following:

9 - This number represents the number of traditional speakers (front, center, surround, etc.)

2 - This number represents the number of subwoofers you can connect to your receiver

6 - This number represent the number of overhead or Dolby Atmos enabled speakers you can use in this setup



1- Left, Center & Right Speakers (3 pcs)

2- Side Surround Speakers (2 pcs)

3- Front Surround Speakers (2 pcs)

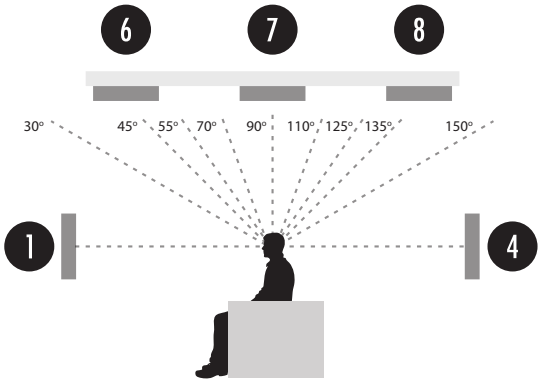
4- Back Surround Speakers (2 pcs)

5- Subwoofers (2 pcs)

6- Front Overhead Speakers (2 pcs)

7- Middle Overhead Speakers (2 pcs)

8- Rear Overhead Speakers (2 pcs)



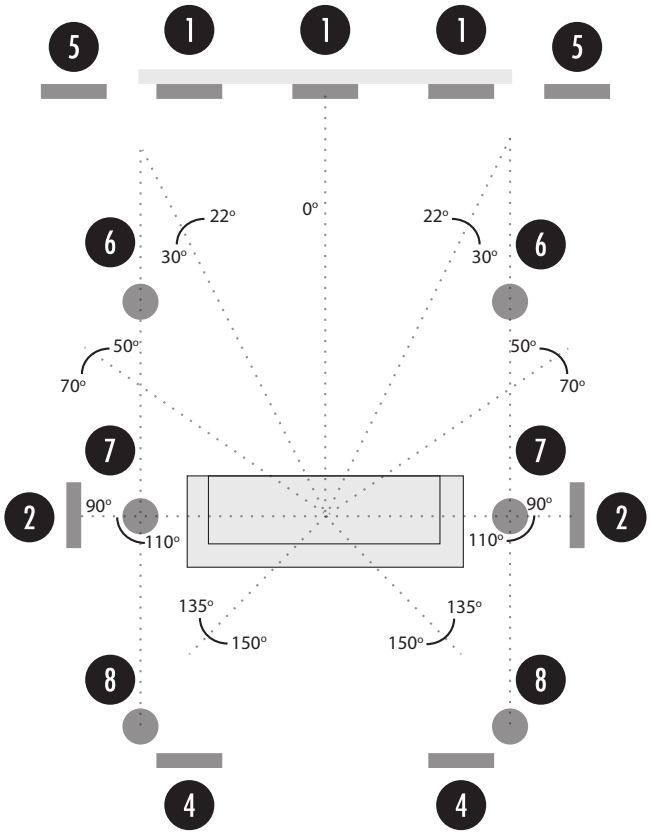
2. The illustration below shows an example of positioning a 7.2.6 system, as reference. (The images in this illustration differ from the actual units for explanation purposes.)

The 9.2.6 indicates the following:

7 - This number represents the number of traditional speakers (front, center, surround, etc.)

2 - This number represents the number of subwoofers you can connect to your receiver

6 - This number represent the number of overhead or Dolby Atmos enabled speakers you can use in this setup



1- Left, Center & Right Speakers (3 pcs)

2- Side Surround Speakers (2 pcs)

3. X (Front Surrounds not used)

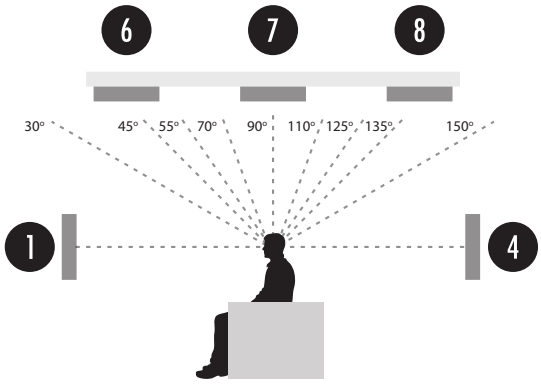
4- Back Surround Speakers (2 pcs)

5- Subwoofers (2 pcs)

6- Front Overhead Speakers (2 pcs)

7- Middle Overhead Speakers (2 pcs)

8- Rear Overhead Speakers (2 pcs)



Your system may have a different configuration (e.g. 5.1.2) depending on the number of speakers you plan to set up in the room.

6A. Speaker Height Rule of Thumb

• The ideal position of the front LCR and surround speakers will be so that the center height of the speaker is level/ equal with the listener's ears, for the best sound experience. This is because the exclusive Ambisonic wave guide is centered on each speaker, and this alignment will allow for the optimal listening experience.

6B. Front LCR Speaker Positions

1. Front Right / Left Speakers (Center speakers using acoustic transparent projection screen)

• Place the front speakers to the sides of the monitor or screen and as flush with the screen surface as possible.

• The ideal position of the Front/LCR and Surround Speakers should be so that the center height of the speaker is level/equal with the listener's ears. This alignment will allow for the optimal listening experience, as because the exclusive wave guide is centered on each speaker. Bear in mind, the average sitting height is 42".

ALWAYS FOLLOW YOUR HOME THEATER DESIGN BLUE PRINTS.

2. Front Center Speaker (For LCD, LED, OLED, etc)

• Place the center speaker above or below the monitor or screen so that the center channel's sound is localized.

6C. Surround Speaker Positions

3. Surround Right / Left Speakers

• ***The surround speakers may be mounted to the left and right of the listener just above the head level.*** Place these speakers in line or slightly behind your listening position by about 10° to 20°.

4. Surround Rear Right / Left Speakers

• Place these speakers behind your listening position on right and left sides.

6D. Subwoofer Positions

5. Subwoofer(s)

• Always follow your home theater design blue prints. The basic rule of thumb is to place the subwoofer at the front, near to the Left or Right speakers, and place on the corresponding side to the wall (corner).

• ***If not indicated in your home theater design blue print, leave 12 inches as a minimal clearance distance between the floor and the bottom of the subwoofer.***

6E. In-Ceiling Speaker Positions

6. Overhead Front Right / Left speakers

• Mount these speakers in the ceiling at about 45° from the listener towards the front on both left and right sides.

7. Overhead Rear Right / Left speakers

• Mount these speakers in the ceiling at about 45° from the listener towards the rear on both left and right sides

7A. SPEAKER WIRE TIPS

You will need a wire that has at least two conductors; one that can be identified as the positive and the other as the negative. All two conductor wires have some means of identifying which conductor is which, but at times this identification may be subtle. It's crucial that you keep track of which wire you use for positive (+) and negative (-). Typically, if the wires are colored red and black, the red wire is used for positive and the black wire is used for negative, but sometimes other colors or patterns are used. You can choose whichever color of wire you want to be positive and negative as long as you remain consistent throughout the install.

On both your amplifier and your speaker, the connectors will be identified as red for positive and black for negative. It is very important to look carefully at the speaker wires and be certain that the same wire that is attached to the positive connector in the amplifier is attached to the positive connector in the speaker. If the negative and positive wires are switched, speaker performance will be drastically impacted.

7B. RECOMMENDED WIRE

WIRE INSTALLATION

Wire Length	Wire Gauge
0 - 100′ (0 - 30m)	16
50 - 150′ (15 - 45m)	14
Over 100′ (30m)	12

The gauge of wire used can have an impact on the performance of your speakers. Use a multi-stranded wiring designed for amplifier to speaker connections. Which gauge to select depends on the length of wire to be used on any particular speaker. The longer your run is, the larger your wire size must be.

7C. WIRE ROUTING

Behind the Baseboard

The wire can be routed behind the baseboard by cutting a groove out of the back of the baseboard, or by buying special baseboard designed for concealing wires.

Through Walls

When running wires through a wall, be sure to avoid all obstacles such as AC wiring, pipes, and ducts.

Attic or Basement

When available, you can route the wire through an attic or crawlspace.

Under the Carpet

One option is to lift the carpet and route “tape wire” under the carpet.

Plan how you’ll route the wire to the desired speaker location. There are several methods for routing the wire, and you may need to combine several of them.

8A. IN-WALL SPEAKER INSTALLATION

• Decide the location of the speaker to be mounted on the wall, referring to your home theater design configuration.

• The front LCR and surround speakers should be ideally mounted at the listener's ear height when seated for the best sound experience.

The speaker arrives with a wooden protection cover screwed onto the face of the speaker. REMEMBER:

THE WOODEN PROTECTION COVER SHOULD NOT BE REMOVED UNTIL FINAL STEP OF BAFFLE ATTACHMENT.

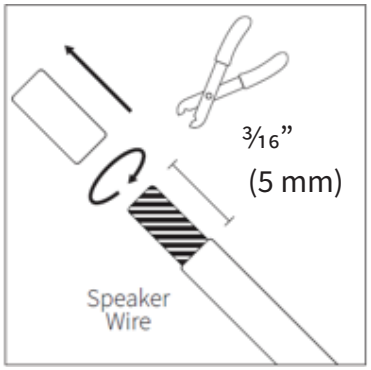
8B. INSTALLATION OF WIRE TO THE AMPLIFIER

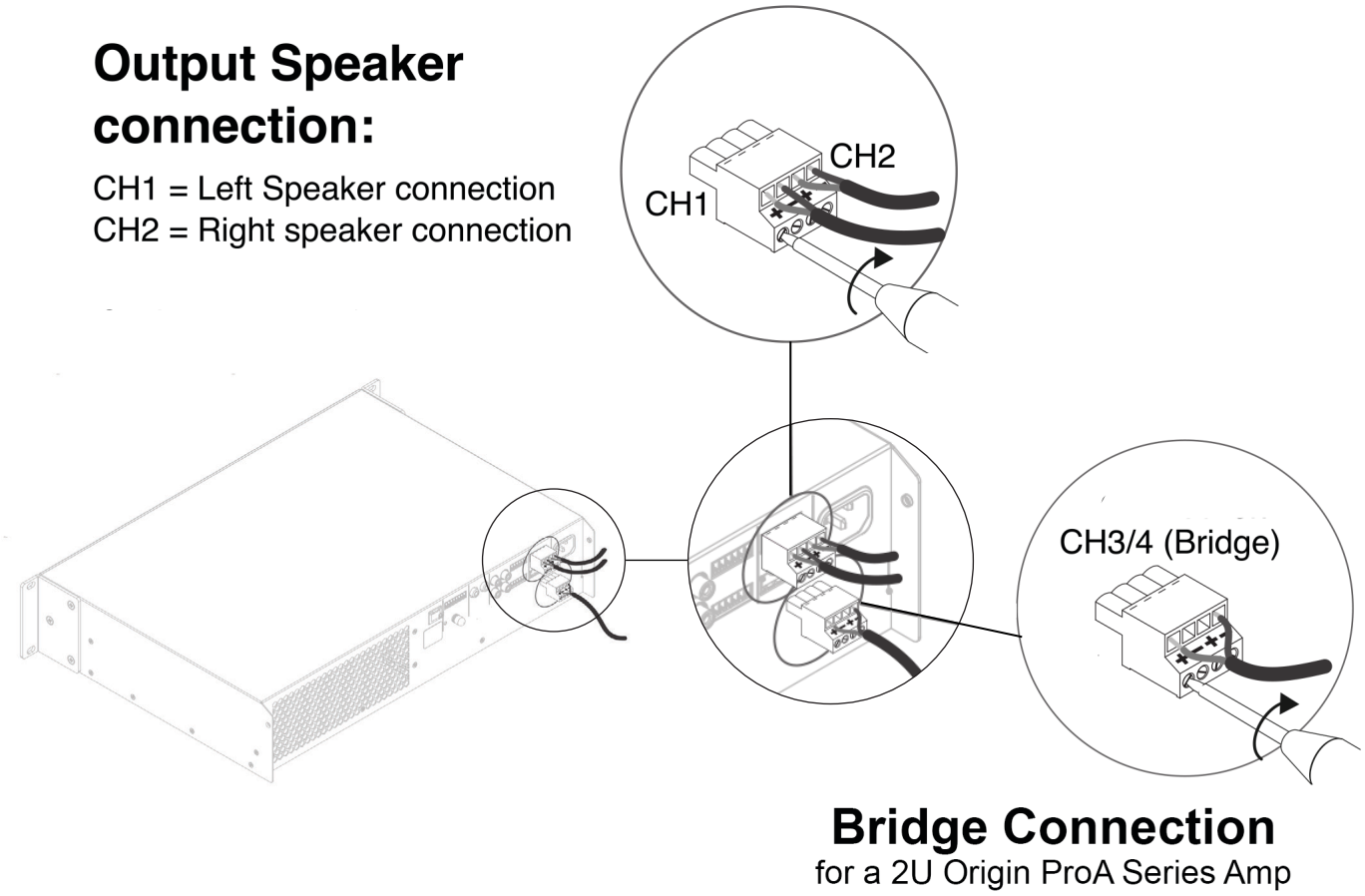
• Strip 3⁄16 inches (5 mm) of the insulation off both ends of the wire.

• To avoid stray strands, twist them at the end.

• Connect the speaker wire to the amplifier, but don't plug in the AC power just yet.

• Route this wire to the speaker location. Continue speaker wiring in the following step.





8C. ATTACHMENT OF WIRE TO THE SPEAKER

Depending on how you ran the wires to the speaker location, the wires can be attached to the connectors at one end of the enclosure.

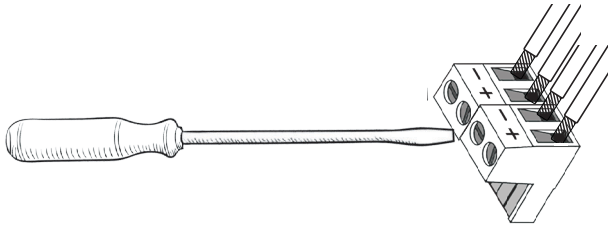
- Route the wire and insert into the corresponding Phoenix connector on each speaker.
- Use a small flat head screwdriver to tighten the screw to secure the wire.

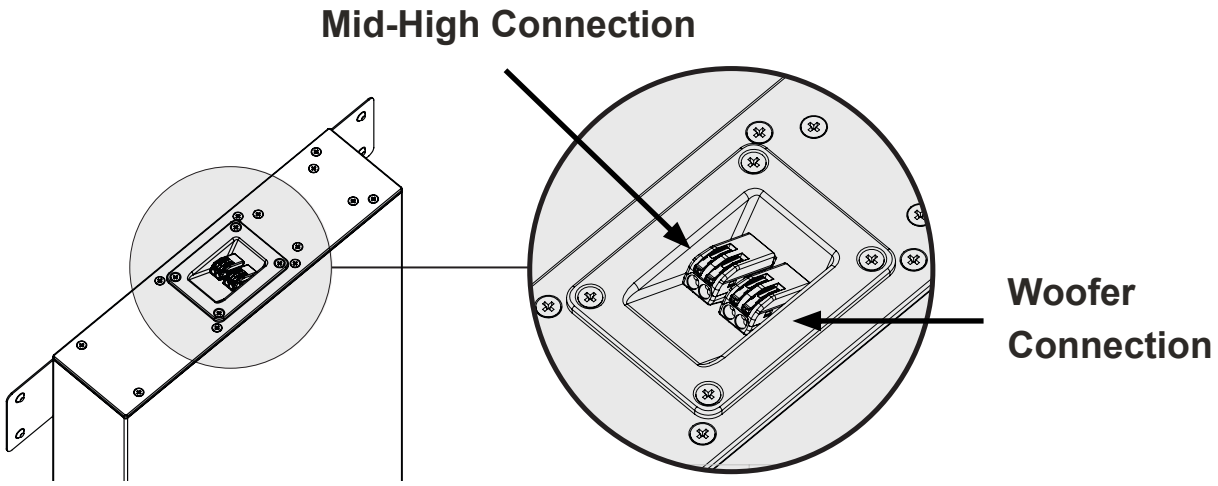
- ***Each LCR Speaker uses dual 2PIN connectors and requires 4 x wire conductors.***
- ***Each Surround Speaker/ Subwoofer uses a singular 2PIN connector and requires 2 wire conductors.***
- ***Pay attention to speaker wire polarity, Positive (+) and Negative (-), when wiring to the amplifier speaker wires.***

8D. INSERTING 2 PIN CONNECTIONS

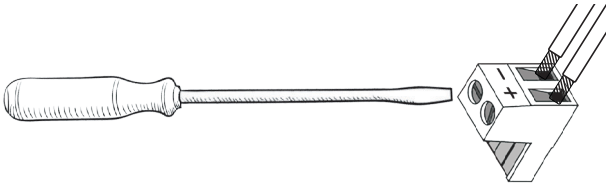
AM5600IW

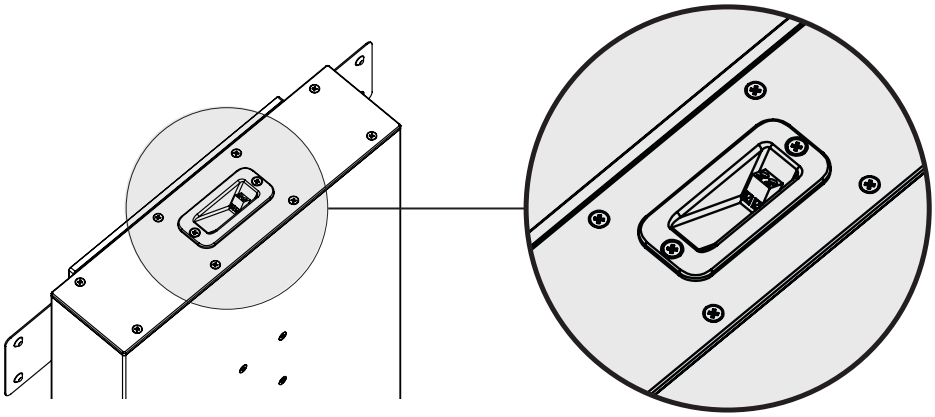
Unit is Bi-Amplified: Check correct speaker wire connection between the Woofer speaker wire and the Mid-High speaker wire





AM3600IW & AMD10IWSUB





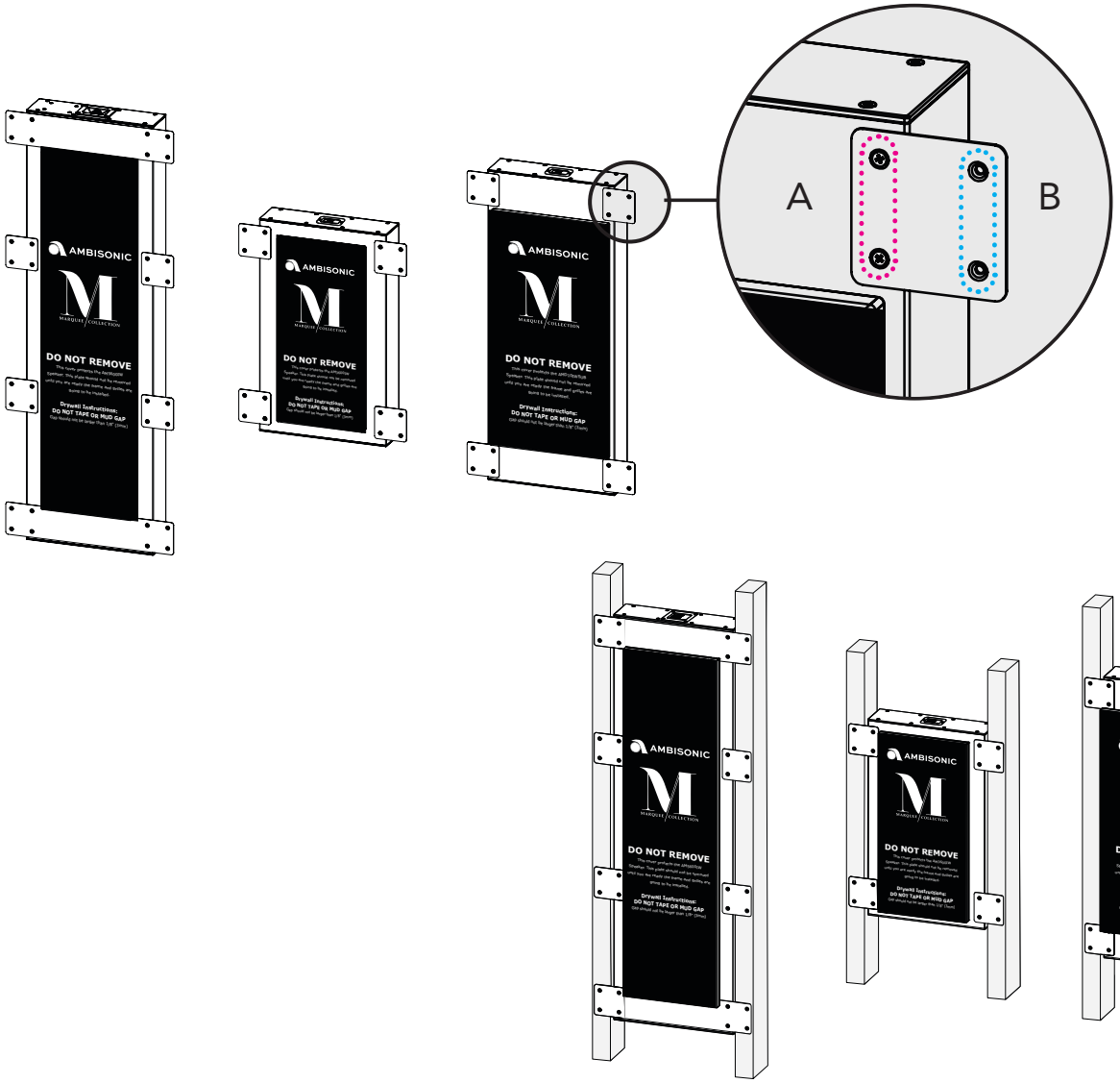
8E. MOUNTING THE SPEAKERS

Once the speaker is wired, secure each IW speaker into its mount bracket.

Then, secure the mounted speaker in brackets to the wall studs.

- ***Use the 2 INNER SCREW HOLES (A) on each mount bracket to secure the speaker to the bracket, using the M4 x 8mm screws·***

- ***Use the 2 OUTER SCREW HOLES (B) on each mount bracket to secure the bracket and speaker to the wall studs, using the 1" Wall Stud Screws.***



Next, test each speaker.

8F. TESTING THE MOUNTED SPEAKERS

WE RECOMMEND TESTING THE SYSTEM AT THIS TIME
TO ENSURE THE SPEAKER IS INSTALLED AND WORKING PROPERLY.

IMPORTANT:

TO CONDUCT A SOUND AND POLARITY TEST:

TAKE OFF THE PROTECTION COVER BY UNSCREWING THE 4 SCREWS.

REPLACE IT BEFORE THE NEXT DRYWALL STEP.

ENSURE THE PROTECTION COVER REMAINS IN PLACE OVER THE SPEAKER,
UNTIL AFTER THE DRYWALL INSTALLATION.

8G. INSTALLING DRYWALL OVER SPEAKERS

STEP 1. MEASURE & TRANSFER PERIMETER

Once the drywall is ready to go up, use a tape measure to accurately measure around the PERIMETER of the speaker protection cover.

Take the following 8 DIMENSIONS to the CORNERS of the wooden protection cover.
(See Illustrations 1 & 2):

4 X HORIZONTAL MEASUREMENTS:

- **H1 & H2:** *Measure from:*

LEFT EDGE OF DRYWALL *to:*
TOP LEFT CORNER OF WOODEN PROTECTION COVER.
BOTTOM LEFT CORNER OF WOODEN PROTECTION COVER.

- **H3 & H4:** *Measure from:*

LEFT EDGE OF DRYWALL *to:*
TOP RIGHT CORNER OF WOODEN PROTECTION COVER.
BOTTOM RIGHT CORNER OF WOODEN PROTECTION COVER.

4 X VERTICAL MEASUREMENTS:

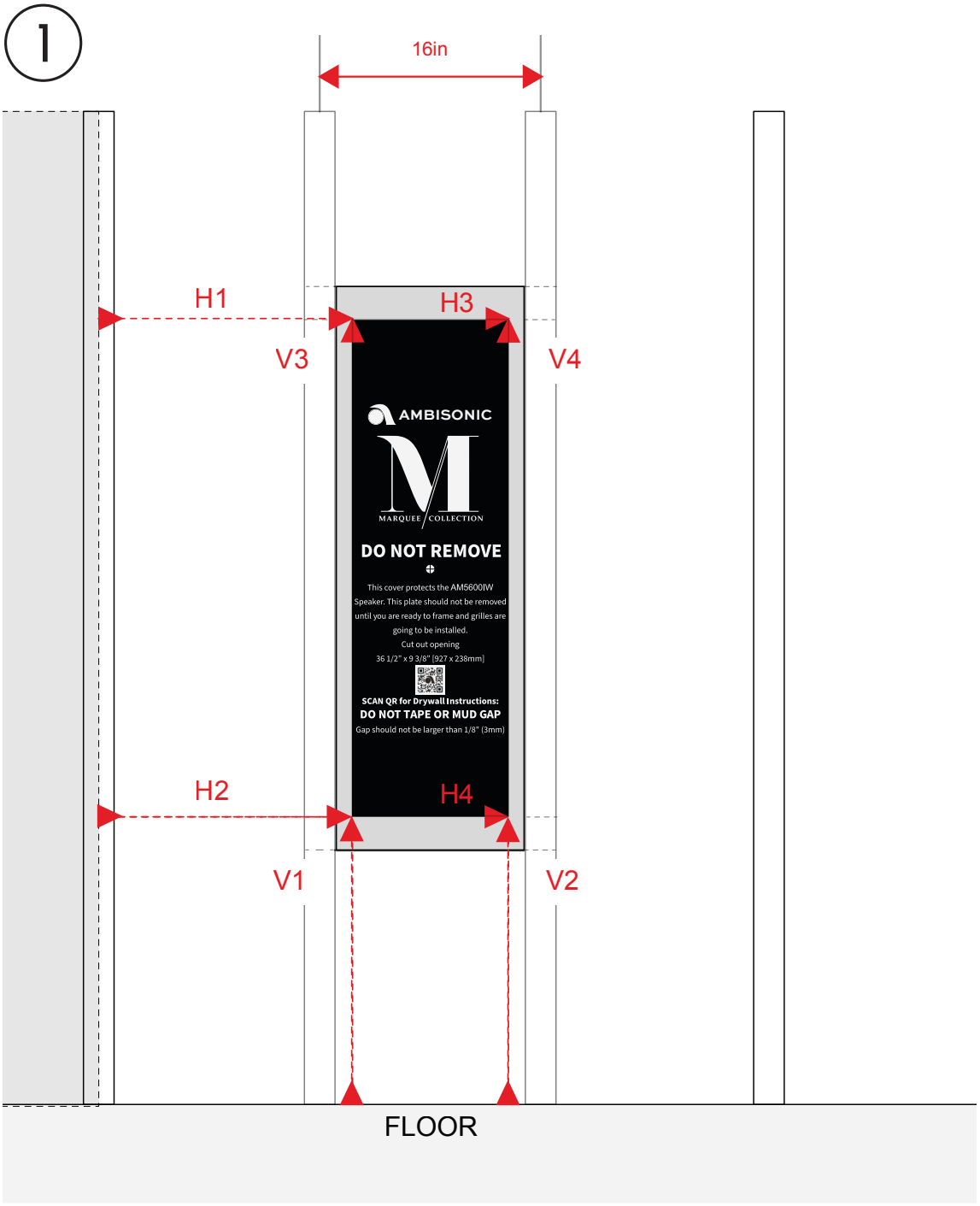
- **V1 & V2:** *Measure from:*

BOTTOM EDGE OF FLOOR *to:*
LEFT BOTTOM CORNER OF WOODEN PROTECTION COVER.
RIGHT BOTTOM CORNER OF WOODEN PROTECTION COVER.

- **V3 & V4:** *Measure from:*

BOTTOM EDGE OF FLOOR *to:*
LEFT TOP CORNER OF WOODEN PROTECTION COVER.
RIGHT TOP CORNER OF WOODEN PROTECTION COVER.

• Taking the 4 x Horizontal & 4 x Vertical Measurements from Step 1 ***(See Illustration 1: H1/H2/H3/H4 & V1/ V2/ V3/V4)***, directly transfer them to the drywall sheet you are going to install ***(See Illustration 2)***.



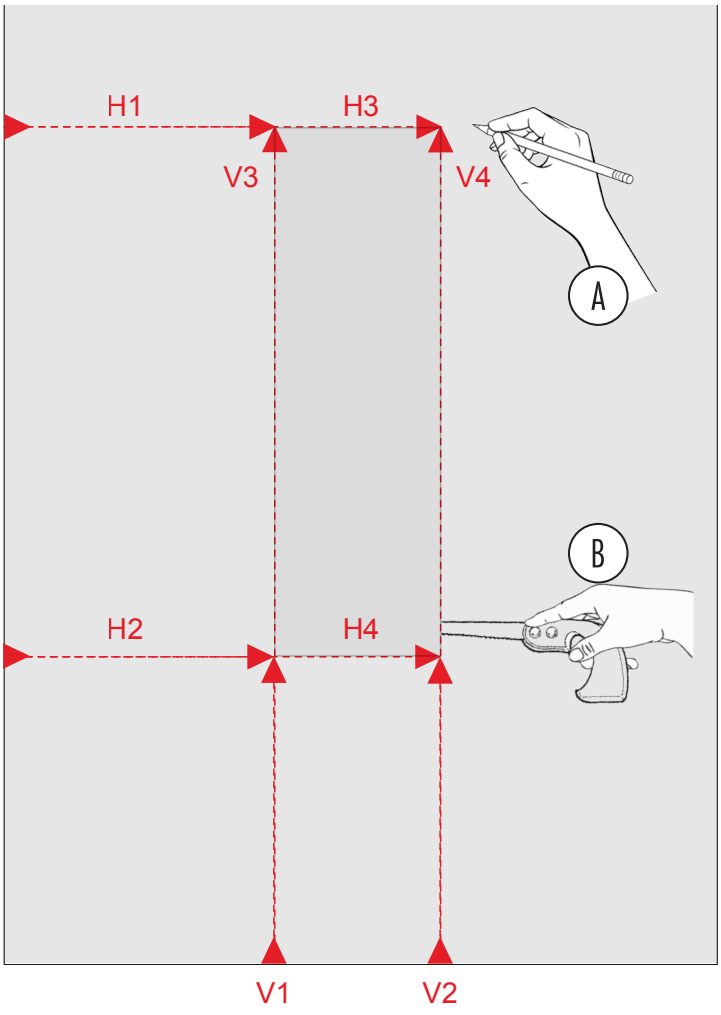
<u>NOTE:</u> For accuracy, it is recommended to transfer each measurement one by one, directly moving the tape measure to the drywall, each time as soon as each measurement is taken, to mark it on the drywall board.

<u>NOTE:</u> If you are going to use the back of the drywall to make the marks, pay attention to the edge that is making contact when you transfer your measurements.

STEP 2. CUT OUT PERIMETER

• On the drywall, use your markings to draw out 2 x Vertical and 2 x Horizontal cut lines ***(See Illustration 2 A)***, to identify the rectangular cut out area. Insert a keyhole saw or use a router to cut along the perimeter of this cut out area ***(See Illustration 2 B).***

2



STEP 3. FIT & SECURE DRYWALL

• Fit the drywall piece over speaker, and locate wall studs to secure the drywall around speaker perimeter, leaving only the Speaker Protection Cover visible. ***(See Illustration 3).***

• Insert the included 16 x Wall Stud Screws around the wood enclosure, as shown. ***(See Illustration 4).***

• Use care not to hit the speaker mount brackets.

TAKE CARE TO CUT DRYWALL TO THE EDGE OF THIS PROTECTION COVER. THE GAP BETWEEN PROTECTION COVER & DRYWALL SHOULD NOT BE LARGER THAN ⅛" (3MM). DO NOT TAPE OR MUD GAP.

• Now the drywall can be prepared/textured, and painted according to the required final room finish.

3

4


AMBISONIC
MARQUEE COLLECTION
DO NOT REMOVE
Drywall Instructions:
DO NOT TAPE OR MUD GAP
AMBISONIC
MARQUEE COLLECTION
DO NOT REMOVE
Drywall Instructions:
DO NOT TAPE OR MUD GAP
AMBISONIC
MARQUEE COLLECTION
DO NOT REMOVE
Drywall Instructions:
DO NOT TAPE OR MUD GAP

8H. BAFFLE ATTACHMENT

Each In-Wall Speaker arrives with the Protection Cover screwed onto the face of the speaker, using 4 machine screws.

These 4 machine screws MUST BE REUSED, in addition to the supplied bagged machine screws, in order to complete the final baffle attachment.

See install details as follows:

When ready to install the speaker baffle:

Start by removing the wooden protection cover.

- ***By removing the protection cover, this will* RELEASE *the 4 machine screws (A1/A2/A3/A4).***

- ***To insert the baffle into the enclosure:***

You will* REUSE *these 4 x M6 machine screws (A1/A2/A3/A4) from the protection cover, (See illustration 5) and:

- ***Add the corresponding bagged M6 machine screws (B1/B2/B3/B4/B5/B6) for each speaker (See illustration 5).***

AM5600IW: Includes 6 x bagged M6 machine screws

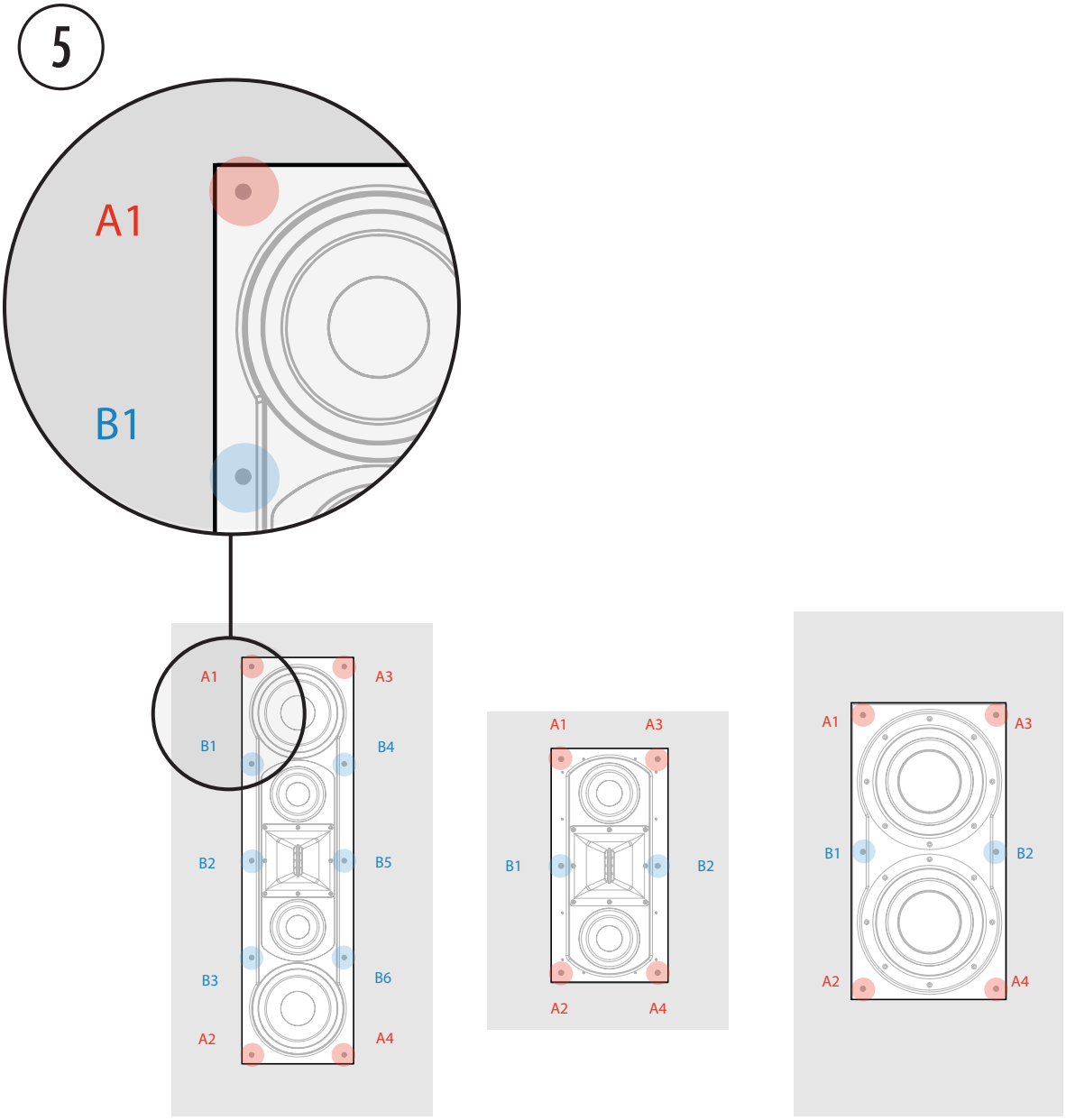
AM3600IW: Includes 2 x bagged M6 machine screws

AMD10IWSUB: Includes 2 x bagged M6 machine screws

Use the bagged machine screws and the 4 machine screws from the Protection Cover, to firmly attach the baffle to the enclosure. ***Do not over-tighten.***

- ***Each AM5600IW baffle uses a total of 10 x M6 screws for each Baffle to be secured into the speaker enclosure.***

- ***Each AM3600IW / AMD10IWSUB baffle uses a total of 6 x M6 screws for each Baffle to be secured into the speaker enclosure.***



8I. MOUNTING THE GRILLE

- Fit the grille over the speaker; the grille will be held securely by the magnets.

9. IN-CEILING SPEAKER INSTALLATION

1) INSTALLING THE WIRE

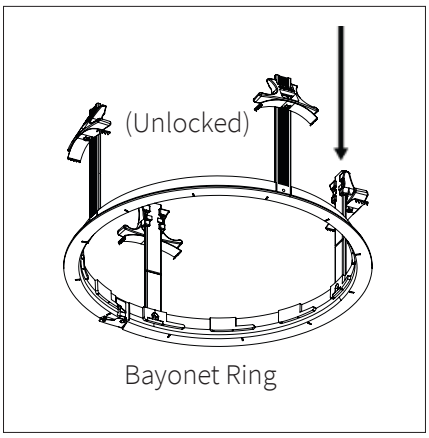
Strip ¼ to ½ inches (6 to 12 mm) of the insulation off both ends of the wire. To avoid stray strands, twist them at the end. Connect the wire to the amplifier, and make sure the wire connected to the left speaker output will be routed to the left speaker, right output to right speaker, etc.

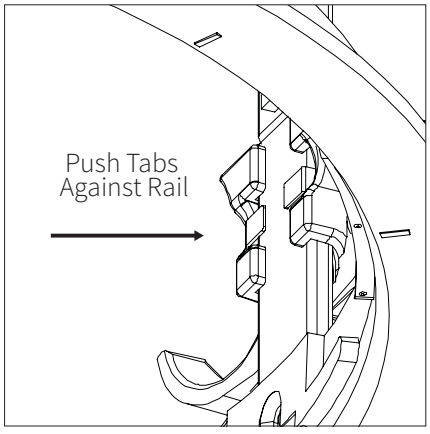
2) CUTTING THE HOLE

When you've decided on the locations for all of the speakers, use the template to trace a circle lightly in pencil where the hole should be. (If you don't have a template, check the Specifications section for cutout sizes.) If you're unsure on whether there may be obstacles (such as pipes or wires) where you plan on installing the speaker, drill a ⅛ inch hole in the center of the circle, then put a bent coat hanger through the hole to feel around. Use a keyhole or drywall saw to cut the hole.

3) INSTALLING THE BAYONET RING

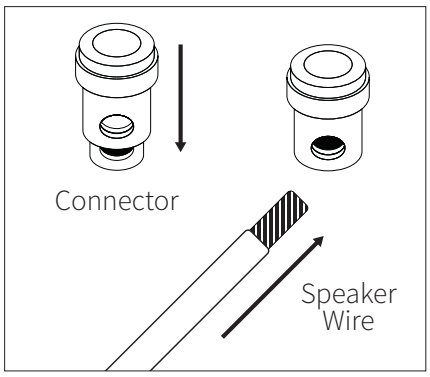
Adjust the clips so that they're positioned at the top of the rail. If they're not already there you can do this by pushing the release tabs (or metal "buttons") on the inside of the rail and pulling the clips to the top of the rails. Insert the bayonet ring into the hole in the ceiling by gently bending the clips inward. Reach inside the bayonet ring and push the clips down so that the ring is firmly in place, but not too tight. If for some reason the bayonet ring needs to be removed, reach inside and push the release tabs to fully remove the clips. After the clips have been removed, the bayonet ring can be taken out.





4) CONNECTING THE WIRE

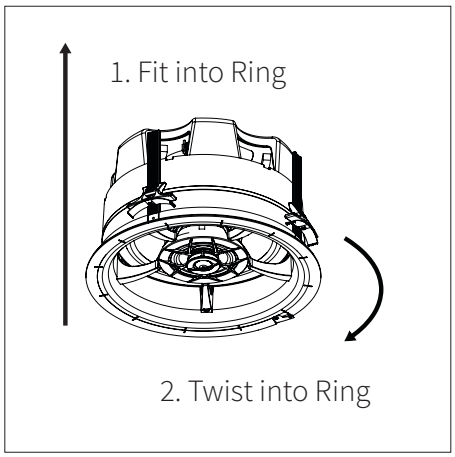
Push down to open the connector. Insert the wires into the connectors, making sure that the positive wire is being attached to the red connection and the negative wire is being attached to the black connection. If the wires are switched, speaker performance will be drastically impacted.

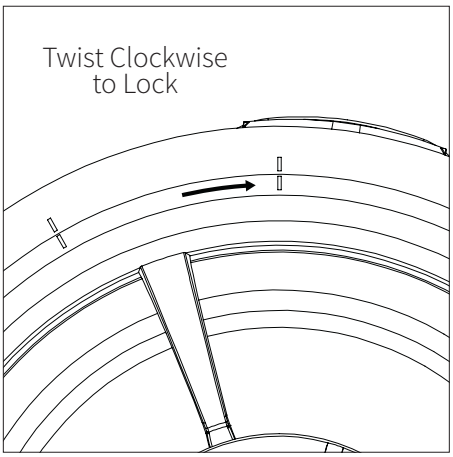


5) INSTALLING THE SPEAKER

STEP 1:

Fit the loudspeaker into the bayonet ring. Then twist the speaker about 15 degrees clockwise into place. When the loudspeaker is properly seated, the indicators on the ring and the speaker will line up.





***IMPORTANT* THE INDICATORS MUST LINE UP TO ENSURE THE SPEAKER IS PROPERLY SEATED.**

STEP 2:

The bayonet ring also features a metal lock to ensure the correct installation of the loudspeaker. Out of the box, the lock will be in its closed position. Open the lock tab to its unlocked position to remove the speaker from the ring. Once the speaker is installed, close the lock tab by pushing it back into place, flush with the perimeter of the bayonet ring.

***IMPORTANT* PUSH THE METAL LOCK TAB INTO ITS "LOCK" (CLOSED) POSITION AFTER SPEAKER IS INSTALLED PER STEP 1.**

THIS WILL SECURE THE INSTALLATION. (SEE FIGURE A)

The loudspeaker must be properly seated, else the metal lock tab will not lock.

To uninstall the speaker, push the metal lock tab to its "UNLOCK" (open) position and twist the loudspeaker counterclockwise. (See Figure B)

Figure A

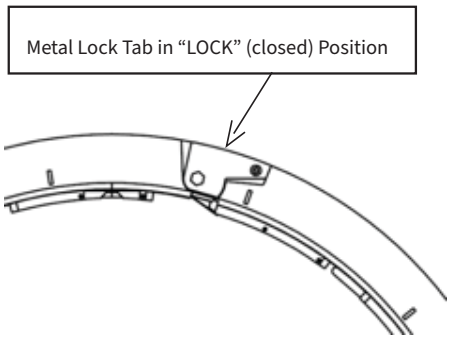
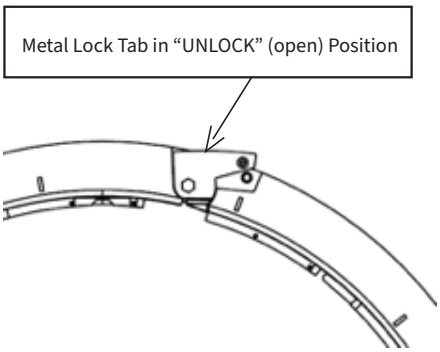


Figure B



6) INSTALLING THE GRILLE

Fit the grille over the speaker. The grille uses magnets to be held in place.

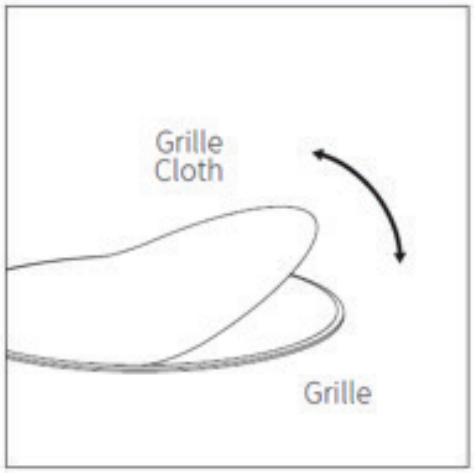
NOTE: PAINTING THE GRILLE

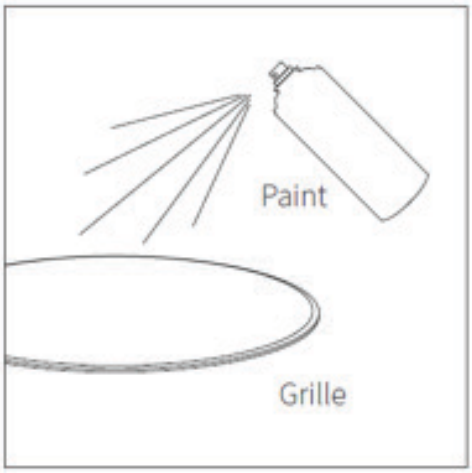
In some situations, you may prefer to paint the grille, so that the color may match the walls, ceiling, or trim in the room. The grille must be painted with spray paint, and most hardware stores will mix a can of paint to match whatever color you need.

Before painting, carefully remove the thin cloth on the underside of the grille.

Lightly spray the front of the grille with the paint from a distance, being careful not to plug any of the holes. Diluting the paint with paint thinner will lessen the risk of filling any holes.

If a hole gets plugged use a can of compressed air to open it. Once the paint is dry, put the cloth back on the grille.





10. CONNECTING THE SYSTEM

• Depending on your TV and other equipment you wish to connect, there are various ways you could connect the system.

• Please refer to the manuals of your TV, AV source player, or other devices as necessary to make the best connections.

• Make sure the source player is connected directly to the TV. Tune the TV to the correct video input channel.

• Connect the Front LCR, Surround, Subwoofer, and In-Ceiling speakers with the ProA amplifier using speaker wire. Insert the wires into the connectors, making sure that the positive wire is being attached to the red connector and the negative wire is being attached to the black connector. If the negative and positive wires are switched, speaker performance will be drastically impacted.

• ***Select and set up the corresponding DSP profile to each speaker, for optimum sound and bass control. This will give a complete surround sound system, with the main speakers as well as the subwoofer(s) in place.***

Scan the QR code below or see docs.orginacoustics.com to access the correct DSP profile.

• Connect the amplifier to the power supply. Double check all the wiring before turning on.

PLEASE CONTACT OUR CUSTOMER SERVICE FOR ANY INQUIRY REGARDING THE SETUP.

11. TESTING THE SYSTEM

Turn on the home theater receiver / amplifier. Calibrate all the speakers in the system according to the AV receiver / amplifier's manufacturer's instructions.

MAKING AMPLIFIER ADJUSTMENTS

1. From your ProA amplifier, select the DSP profile according to the speaker that its connected. Select the correct input source and adjust the gains accordingly

2. "Phase" adjustment should come next. This adjustment can have a subtle effect, but it is worth doing. You won't need to sweat getting it exact; the important thing is to avoid getting it wrong. When tuning by ear:

a. If you are using a home theater receiver, during set-up there will be section asking you to enter the distance from the listener to the speakers. You should do this before proceeding. If you are using a receiver that does not have this feature, don't worry, the following steps will still get everything right.

b. For source material, a test CD with an 80Hz or 100Hz test tone (either sine wave or ⅓ octave pink noise) is best but anything with constant bass can also work well.

c. Set the volume so that the bass level sounds approximately right to slightly bass heavy.

d. You will want to be in the critical listening area. Have a helper adjust the phase control until the bass level sounds the loudest. If you are using music or video tracks for this test, listen for the mid-bass level as the low bass will be unaffected. At this stage you're listening for the loudest bass, not the best.

3. When tuning by measurement, you will use the same method as above except:

a. Replace your ear with an SPL meter. An inexpensive SPL meter works fine or you can download a free app for use on your phone.

b. Unfortunately, the music CD with constant bass won't work here. You will need to use a test CD.

12. TROUBLESHOOTING

If you have a problem, try isolating it first. For example, if you're playing a Blue-Ray and there is no sound, try connecting a music streamer to see if you get sound. If it does work, then the problem is with the television, Blue-Ray player, or the cables connecting them. If it doesn't work, the problem will be with the amplifier, speakers, or those cables.

Problem	Possible Cause
No Sound	The volume may be turned down or muted. Check the volume settings on both the amplifier and the Blue-Ray player/television/computer/etc.
No Sound	Make sure the proper source is selected on the amplifier or receiver.
No Sound	Check the cord connecting the amplifier with the source. The cord may be damaged or plugged into the wrong input or output.
No Sound	Check the wires connecting the amplifier with the speakers. Make sure they're connected properly and not damaged in any way.
No Sound	Check the ProA Gain levels using the Origin PRO Web App/ GUI
No Sound	Check the ProA Input routing using the Origin PRO Web App/ GUI
Poor Sound Quality	If you hear something like static, or the sound is cutting in and out, check the audio cables. If the problem increases when a cable is being moved, then the cable is most likely faulty or not connected properly.
Poor Sound Quality	Today's audio systems may have several places to adjust the volume, for example your MP3 player may have a volume control, and your amplifier may also have one. Check to be certain that the volume isn't turned up past 80% on any device.
Poor Sound Quality	Try changing sources to be certain that the selection you've chosen is a good quality recording.

13. TECHNICAL ASSISTANCE

If you have any questions or concerns about installing or using this product, you can reach us through one of the following methods:

Phone: (844) 674 - 4461

Hours of operation: 8:00am - 5:00pm (Pacific Time), Mon - Fri

Email: sales@originacoustics.com

If you are having technical trouble, please include the model number and briefly explain what steps you took to resolve the problem in your email, or be prepared to answer these questions over the phone. If you are considering returning the product, it's required that you contact Ambisonic prior to any return attempts. This way we can determine if the issue can be resolved without returning the product, or if needed we can provide instructions and support for the return process.

14. LIMITED 5 YEAR WARRANTY

Ambisonic warrants to the original retail purchaser only that this Ambisonic product will be free from defects in materials and workmanship, provided the speaker was purchased from an Ambisonic authorized dealer.

If the product is determined to be defective, it will be repaired or replaced at Ambisonic's discretion. If the product must be replaced yet it is no longer manufactured, it will be replaced with a model of equal to or greater value that is the most similar to the original. If this is the case, installing the replacement model may require mounting modifications; Ambisonic will not be responsible for any such related costs. (Note: Origin ProA amplifier will also carry its own limited warranty, refer to its manual.)

14A. REQUIREMENTS & WARRANTY COVERAGE

This warranty may not be valid if the product was purchased through an unauthorized dealer. This warranty only applies to the individual that made the original purchase, and it cannot be applied to other purchases. The purchaser must be prepared to provide proof of purchase (receipt). This warranty will not be valid if the identifying number or serial number has been removed, defaced, or altered.

**All warranties and warranty conditions are subject to change.*

Please refer to www.ambisonicsystems.com for the latest information.

14B. NOT COVERED BY WARRANTY

- Accidental damage
- Damage caused by abuse or misuse
- Damage caused by attempted repairs/modifications by anyone other than Ambisonic or authorized dealers
- Damage caused by improper installation
- Normal wear, maintenance, and environmental issues
- Damage caused by voltage inputs in excess of the rated maximum of the unit
- Damage inflicted during the return shipment
- Performance issues caused by modifications. ie: painting of the shell.

15. RETURN PROCESS

Before making any return attempts, it is required that you first contact Ambisonic customer support team. Return product to Ambisonic or your dealer, either in person or by mail. It's preferable if the product is returned in the original packaging. If this isn't possible, the customer is responsible for insuring the shipment for the full value of the product.

This warranty is in lieu of all other expressed or implied warranties. Some states do not allow limitations on implied warranties, so this may not apply depending on the customer's location. (For more information, see Magnuson-Moss Warranty Act.)

6975 S Decatur Blvd, Las Vegas, NV 89118 • www.ambisonicsystems.com • 844-674-4461