

Owner's Manual

Sage ICS7a Planar Magnetic Hybrid Loudspeaker

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Introduction

About this manual

Congratulations on purchasing your new Wisdom Audio Loudspeakers. They incorporate many features designed to give you a lifetime of performance and pleasure.

While we expect your local Wisdom Audio dealer to take care of the setup and calibration of the system, we recommend that you review this and the other manuals for the components in your system in order to better understand the full system capabilities.

Registering your waranty

You do not have to do anything to register the warranty for your Wisdom Audio products.

Please keep your sales receipt with the serial numbers of each component in a safe place. Should you move or lose touch with your original dealer, it will serve as the proof of warranty.

In the unlikely event that your loudspeakers ever require service, please contact the dealer from whom you purchased them. Should you move or lose contact with your original dealer, please contact the factory at (775) 887-8850 or by email at information@wisdomaudio.com.

Installing the ICS7a

The Wisdom Audio Sage Series ICS7a in-ceiling speaker is shipped fully assembled. Please use caution when unpacking the ICS7a so as not to be injured by the weight of the unit.

Installation Instructions

- 1. Using the installation template included in the box, tack or tape the template to the ceiling where the speaker module is to be installed.
- 2. Using a pencil or pen trace the outline of the cutout for the speaker.
- 3. Cut out the outline traced on the ceiling.
- 4. Carefully remove the the magnetic grille, gripping the edge of the grille and lifting it off the speaker from one side to the other to avoid damaging the grille. Lay the grille on a flat surface.
- 5. Reach into the opening you cut into the ceiling and push any insulation out of the space where the speaker module will be mounted. Make sure insulation is not blocking the area in the ceiling where the dog toggles will rest. If there is not any insulation in the ceiling, loosely fill the space with insulation to reduce cavity resonances and improve the overall performance.
- 6. Hold the speaker module near the cutout in the ceiling and connect the cable to the + and connectors on the rear of the speaker module, paying attention to the polarity.
- 7. If the IC-LAT accessory was purchased to make the installation more precise, attach it to the speaker module now as shown in **Fig. 1.** on the next page. The guide tabs on the IC-LAT must be aligned with the guide holes on the top of the Planar Magnetic Transducer housing.

A. If the IC-LAT is used, proceed with step 8. If the IC-LAT is NOT used, skip to step 9.

Installing the ICS7a Cont.



Fig. 1 IC-LAT attached to the ICS7a Planar Magnetic Hybrid Loudspeaker

Installation Instructions Cont.

8. **If the IC-LAT is used:** Turn the laser on the IC-LAT on by rotating the thumbscrew slowly in a counter-clockwise direction until the laser is activated. Rotate the speaker module until the IC-LAT laser is pointing to the desired listening position. Tighten the four screws that control the dog ears until the speaker module is fixed tightly to the ceiling.

Installing the ICS7a Cont.

Installation Instructions Cont.

9. If the IC-LAT is NOT used: Locate the directivity indicators on the rim of the speaker module, Fig. 2. Rotate the speaker module until the directivity indicators are centered on the desired listening position. Tighten the four screws that control the dog ears until the speaker module is fixed tightly to the ceiling.



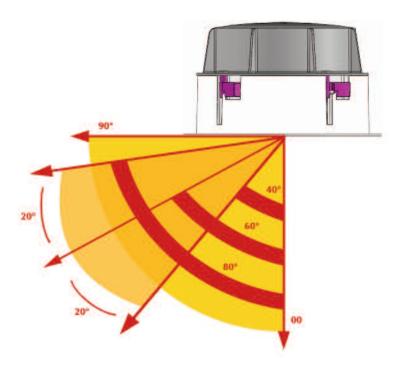
Fig. 2. Directivity indicators

10. Place the grille onto the speaker module so the scrim is facing the speaker module and the edge of the grille slightly wraps the edge of the speaker module. The grille is secured to the speaker module with magnets and will gently snap into place.

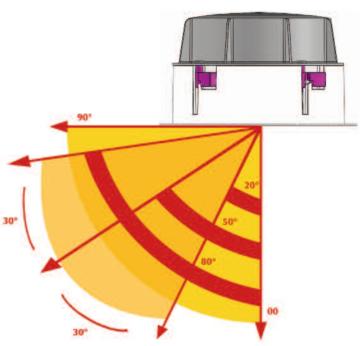
Vertical Sound Dispersion

A sound radiation pattern demonstrates how sound pressure is spread from a loudspeaker out into the room surrounding the loudspeaker. In the diagrams below the ICS7a has a normalized vertical radiation pattern that disperses sound uniformly across the field of sound radiation. The ICS7a was designed to maximize sound levels throughout the listening area.

Without ECW



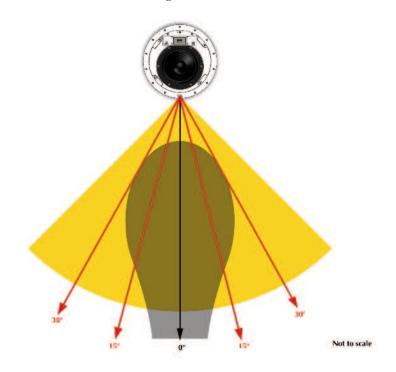
With ECW



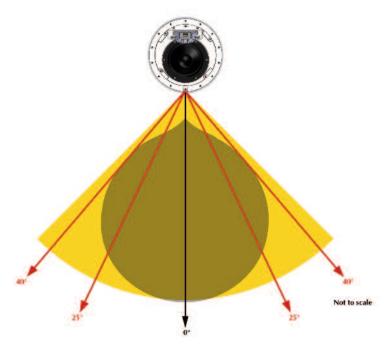
Horizontal Sound Dispersion

In the diagrams below the ICS7a does not have a normalized horizontal sound radiation pattern. This is caused by a principle of mathematics called a Head Related Transfer Function (HRTF). HRTF explains how our ears understand sound that comes from above us. The ICS7a horizontal sound radiation pattern is produced by optimizing the HRTF for maximum sound levels throughout the listening area. The Extended Coverage Waveguide (ECW) not only creates a wider horizontal spread of sound dispersion but also affects the distance of the sound dispersion. This is why the use of the ECW is highly recommended for all surround channels but not for the main Left, Right or Center channels.

Without ECW



With ECW



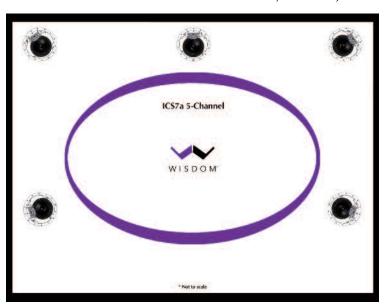
Room Placement Multi-Channel Audio

The ICS7a was designed to give a full theater experience from an in-ceiling speaker. If used in a multi-channel configuration special attention must be taken to ensure the loudspeaker's performance is not diminished by boundary effects. Installing the loudspeaker too close to the adjacent walls will cause the dynamic range to be amplified beyond factory recommendations. Similarly, placing the loudspeaker too far from the adjacent walls will cause the dynamic range to be diminished below factory recommendation. The diagrams below show where to place the ICS7a loudspeakers relative to the listening area for both five and seven channel systems.

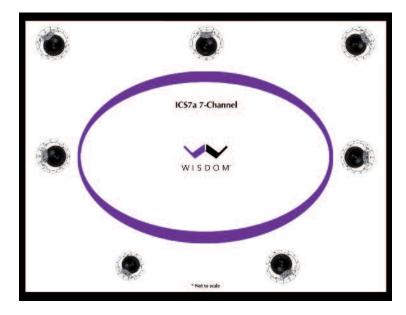
Two important rules to note when placing the ICS7a for proper boundary considerations are:

- 1. The ICS7a must be between 12-18" from one adjacent wall.
- 2. The ICS7a must be a minimum of 30" from any of the adjacent walls.

ICS7a 5-Channel



ICS7a 7-Channel



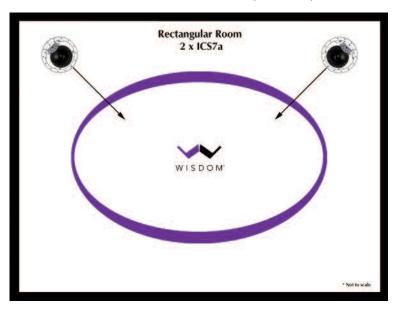
Room Placement for Distributed Audio

The ICS7a may be used in high quality distributed audio applications. If used in this configuration special attention must be paid to ensure the loudspeaker's performance is not diminished by boundary effects. Installing the loudpseaker too close to the adjacent wall will cause the dynamic range to be amplified beyond factory recommendation. Similary, placing the loudspeaker too far from the adjacent wall will cause the dynamic range to be diminished below facory recommendation. The diagrams below show where to place the ICS7a loudspeakers in rooms of different shapes for distributed audio.

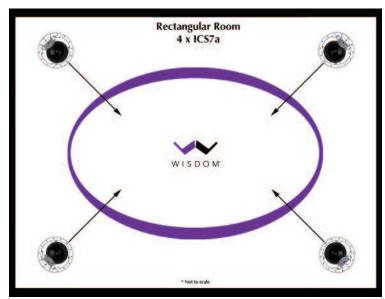
The two most important rules to note when following the boundary rules are;

- 1. The ICS7a must be between 12-18" from one adjacent wall.
- 2. The ICS7a must be 30" or farther from any other adjacent walls.

Rectangular Room w/2 ICS7a



Rectangular Room 4 ICS7a



Care & Maintenance

To clean, with the grille on the ICS7a, use a feather duster or a lint-free soft cloth to remove dust from the grille on the speaker module.

To remove stubborn dirt and fingerprints from the grille, we recommend isopropyl alcohol and a soft cloth. Lightly dampen the cloth with the isopropyl alcohol then clean the grille of the ICS7a with the cloth. Do NOT use excessive amounts of isopropyl alcohol - damp is better.

Never attempt to remove the grille to clean the surface of the speaker as this may cause non-warranty damage.



Do not touch the surface of the planar magnetic drivers, under any circumstances. The thin film has been carefully pre-tensioned at the factory; any subsequent contact can only damage it.

North American Warranty

Standard Warranty

When purchased from and installed by an authorized Wisdom Audio dealer, Wisdom Audio[®] loudspeakers are warranted to be free from defects in material and workmanship under normal use for a period of five years from the original date of purchase.

The transducers (drivers) in your Wisdom Audio speakers are warranted to be free from defects in material and workmanship under normal use for a period of twenty years from the original date of purchase.

Harsh Conditions Use

The Sage Series loudspeakers are designed for installation and operation in environmentally controlled conditions such as are found in normal residential environments. When used in harsh condition such as outdoors or in marine applications, the warranty is three years from the original date of purchase.

During the warranty period, any Wisdom Audio loudspeaker exhibiting defects in materials and/or workmanship will be repaired or replaced, at our option, without charge for either parts or labor, at our factory. The warranty will not apply to any Wisdom Audio loudspeaker that has been misused, abused, altered, or installed and callibrated by anyone other than an authorized Wisdom Audio dealer.

Any wisdom Audio loudspeaker not performing satisfactorily may be returned to the factory for evaluation. A return authorization must be obtained by calling or writing the factory prior to shipping the component back. The factory will pay for return shipping charges only in the event the loudspeaker is found to be defective as mentioned above. There are other stipulations that may apply to shipping charges.

There is no other express warranty on this loudspeaker. Neither this warranty nor any other warranty, express or implied, including any implied warranties of merchantability or fitness, shall extend beyond the warranty period. No responsibility is assumed for any incidental or consequential damages. Some states do not allow limitations on how long an implied warranty lasts and other states do not allow the exclusion or limitation of incidental or consequential damanges, so the above limitation or exclusion may not apply to you.

This warranty gives you specific legal rights, and you may have other rights which vary from state to state. This warranty is applicable in North America only. Outside of North America, please contact your local, authorized Wisdom Audio distributor for warranty and service information.

Obtaining Service

We take great pride in our dealers. Experience, dedication, and integrity make these professionals ideally suited to assist with our customers' service needs.

If your Wisdom Audio loudspeaker must be serviced, please contact your dealer. Your dealer will then decide whether the problem can be remedied locally, or whether to contact Wisdom Audio for futher service information or parts, or to obtain a Return Authorization. The Wisdom Audo Service Department works closely with your dealer to solve your service needs expediently.



Important!

Return authorization must be obtained from Wisdom Audio's Service Department BEFORE a unit is shipped for service.

It is extremely important that information about a problem be explicit and complete. A specific, comprehensive description of the problem helps your dealer and the Wisdom Audio Service Department locate and repair the issue as quickly as possible.

A copy of the original bill of sale will serve to verify warranty status. Please include it with the unit when it is brought in for warranty service.



Warning!

All returned units must be packaged in their original packaging, and the proper return authorization numbers must be marked on the outer carton for identification. Shipping the unit in improper packaging may void the warranty, as Wisdom Audio cannot be responsible for the resulting shipping damage.

Your dealer can order a new set of shipping materials for you if you need to ship your loudspeaker and no longer have the original packaging. There will be a charge for this service. We strongly recommend saving all packing materials in the unlikely event you will need to ship your unit back to the factory.

If the packaging to protect the unit is, in our opinion or that of our dealer, inadequate to protect the unit we reserve the right to repackage it for return shipment at the owener's expense. Neither Wisdom Audio nor your dealer can be responsible for shipping damage due to improper (that is, non-original) packaging.

ICS7a Specifications

Specifications are subject to change at any time in order to improve the product.

■ Frequency Response: 57 Hz-20 kHz

■ Crossover Frequency: 650 Hz 4th Order Linkowitz-Reily

■ Nominal Impedence 4.5 Ohms

■ Minimum Impedence 3.0 Ohms

■ Sensitivity: 87dB/2.83V/1m

Power Handling, Continuous
300 Watts

■ Maximum SPL 105dB@2.5m

■ **Dimentions:** See dimensions drawings on page 11

■ Maximum Ceiling Thickness: 2in./5.8cm.

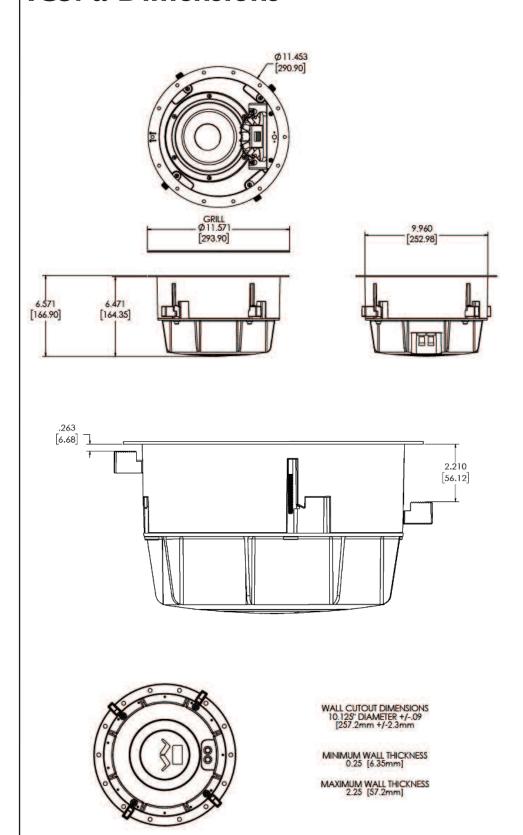
■ Shipping Weight, Each: TBD

For more information, see your Wisdom Audio dealer, or contact:

Wisdom Audio 1572 College Parkway, Suite 164 Carson City, NV 89706 www.wisdomaudio.com information@wisdomaudio.com

Ph: 775.887.8850 Fax: 775.887.8820

ICS7a Dimensions







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