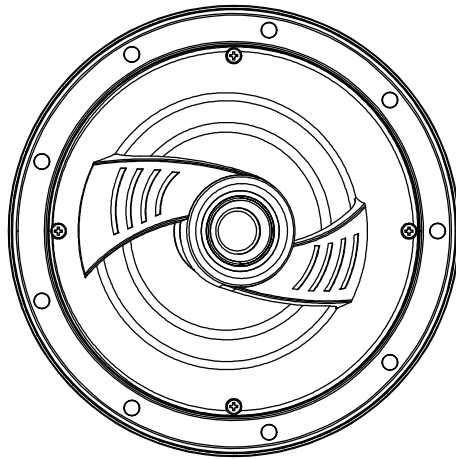




[www.soundavo.com](http://www.soundavo.com)



## **AT-6CF**

**2-Way Angled In-Ceiling Loudspeaker**

---

Dear Customer, Thank you for choosing Soundavo speaker products. Take the time to read this manual carefully before installing your speakers. It contains tips for getting the most benefit and instructions for using them safely. We strongly recommend that you keep the packaging and this manual for future use.

---

OWNERS MANUAL

# SAFETY WARNINGS AND GUIDELINES

- These speakers are intended for indoor use only.
- Do not expose these speakers to water or moisture of any kind.
- If operating these speakers in a humid environment, ensure that no condensation occurs. Condensation could cause damage to the speaker cones and voice coils.
- Power off and unplug all Audio/Video components when making wired connections. Only apply power after all connections have been made.
- Double-check all connections prior to applying power to ensure that speaker polarity is properly made and that there are no stray wire strands, which could short the connections, either on the backs of the speakers or the AV receiver/amplifier.
- Do not use full volume until after the speakers have been fully broken-in.
- If you hear distortion, reduce the volume until the distortion is no longer audible. Distortion can sound like a buzzing, scratching, or hammering sound. Distortion can damage to or destroy the delicate speaker coils.
- Do not use cleaning fluids, solvents, or other chemicals to clean the speaker frames or grilles.
- Do not use excessive volume when listening to these speakers. If you experience pain, discomfort, or dizziness, reduce volume immediately. Prolonged exposure to excessive volume can cause permanent hearing damage.
- Do not disassemble or attempt to service these speakers.
- You must use speaker wire rated for in-wall use.
- Do not attempt to install these speakers near power outlets, wall switches, or ceiling fixtures. These objects indicate the presence of AC power lines within the wall or ceiling and should be avoided.
- When checking for the presence of objects behind the wall, do not try to force the wire past obstructions.
- Always check and adhere to your local building and fire safety codes before installing these speakers and running wires through the walls and ceiling.

# INTRODUCTION

Thank you for purchasing Soundavo Premium In-Wall/In-Ceiling Speakers!

Our In-ceiling speakers are special designed and fine tuned by Soundavo engineering team, provide the excellent sound quality and styling for your best listening experience. This range of speaker are designed for the stereo music playback, multi-channel audio, home theater surround, or any primary listening application.

Rather than cluttering the room with large box speakers trailing speaker wires, the speakers are virtually invisible, while filling the room with high fidelity audio. Featuring removable and paintable grilles, these speakers use carbon fiber woofers for superior bass and mid-range reproduction and ribbon (in-wall models only) or air-motion (in-ceiling models only) tweeters for sweeter and cleaner highs.

## IN-WALL VERSUS IN-CEILING SPEAKERS

In-Wall and In-Ceiling speakers are identical in concept and differ only in their form. Wall speakers are traditionally square, like windows and doors, while ceiling speakers are traditionally round, like light fixtures. The instructions in this manual specify installation into a wall, but the same procedures apply to ceiling installations.

# SPEAKER WIRE PREPARATION

Before attempting to make any connections it is best to look at the situation, get all the necessary materials together, and then make all the connections at once.

First, look at the back of your amplifier or receiver to determine what options it offers for making connections. Amplifiers and receivers typically employ either 5-way binding posts, spring-loaded terminals, or push terminals for the speaker connections.

A 5-way binding post can accept bare speaker wire, spade plugs, pin plugs, and banana plugs, while spring loaded terminals and push terminals can accept either bare speaker wire or pin plugs. Refer to the documentation that came with your amplifier or receiver to determine the maximum size/gauge speaker wire the speaker terminals can accept.

The in-ceiling speakers feature push terminals, which can accept pin plugs or bare wire up to 14AWG. The in-wall speakers feature blade connectors. You should use .250" 16-14AWG crimp style blue female disconnects (not included) on the speaker end of the speaker wire.

If your amplifier can accept it, you should use 14AWG speaker wire. Using pin plugs is highly recommended for several reasons. Plugs are easier to connect, don't run the risk of stray wire strands shorting the connections, allow for use of heavier gauge speaker wire in most cases, and it is much easier to identify the polarity from a color coded ring on a plug then from a subtle marking along the length of a wire.

Because the speaker wires will necessarily be run through your walls, you must use in-wall rated wire. This is required by fire safety codes and ensures that the wire jacket will not act as an accelerant in the event of a fire.

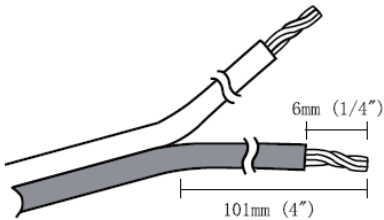
Rather than using fixed length speaker wires, it is best to get a roll and cut the wires to the length you will need them. This ensures that there is a minimum amount of excess wire. However, even if your amplifier is off-center, the lengths of wire used for each speaker pair should be identical. This keeps the impedance

on each channel the same, which ensures that the volume levels, frequency ranges, and tonalities are identical. Any excess wire should be snaked back and forth, not coiled, to avoid creating an inductor/antenna for stray radio signals.

Before making the actual connections, cut each length of wire to size. Note the markings on the wire that differentiate between each conductor. Sometimes the marking clearly identifies a positive and negative side. Some common clearly positive and negative markings or identifiers are:

Positive	Negative
Red	Black
Copper	Silver
+++	---

In many cases, the mark is a single stripe on the jacket of one of the connectors. In this case the side with the stripe is generally considered the positive side, but it really does not matter as long as you are consistent and always using the stripe as positive or always using it as negative.



When you are ready to prepare your speaker wires, first separate about 4" of wire, then strip about 1/4" (6mm) insulation from the end and twist it to prevent stray strands. If you plan to use banana or pin plugs (highly recommended), install the plugs on the wire.

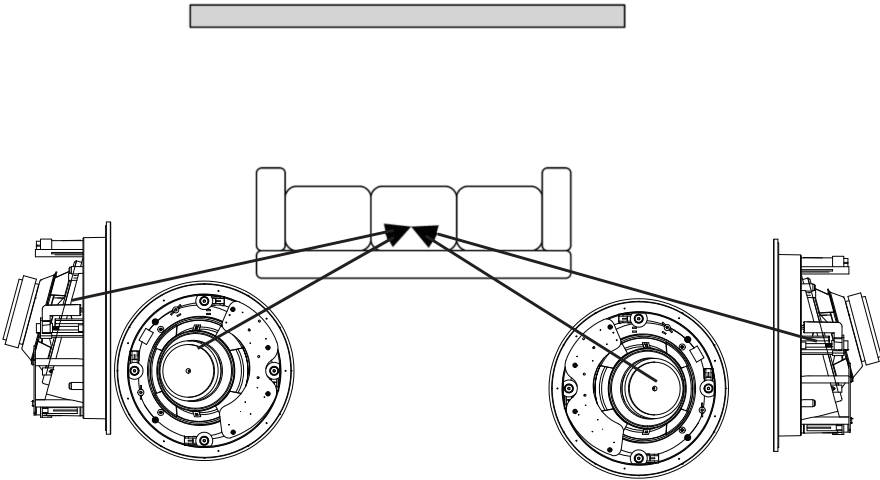
# POSITIONING THE SPEAKERS

Soundavo AT-6CF Angled In-Ceiling for Home Theater applications, it employs a 2-way design that features a 6.5” carbon fiber woofer and a aluminum dome tweeter with swivel capability. The woofer drivers mounted at a 15° angle to the ceiling surface, this allows the speaker to have identical performance characteristics from any listening position in the room.

For the Home Theater setup, the AT-6CF In-ceiling speakers can be used as front or rear channel speakers, and it should be located behind the main listening position and above ear level, if possible.

The rear-channel speakers should be mounted so the tweeter is “aimed” directly at the main listening position, when installing the speakers in the ceiling, place them from 3 to 6 feet (90 to 100 cm) behind the listening position from the corners of the room. Placing these speakers too near the rooms corners will accentuate the low frequency response

Once the AT-6CF In-Ceiling Speaker is mounted in place, adjust the speaker’s pivoting tweeter for best listening results.



# INSTALLATION

## Mounting surface preparations / Finished ceilings and walls

Preparing the surfaces / finishes of walls and ceilings Before installing the speakers, it is necessary to install the cables in the intended location. Contact your dealer for more information on cable installation. Once the cable is properly installed, you are ready to install your speakers.

### 1. Determine the best location for mount your speakers

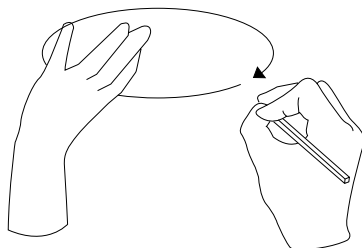
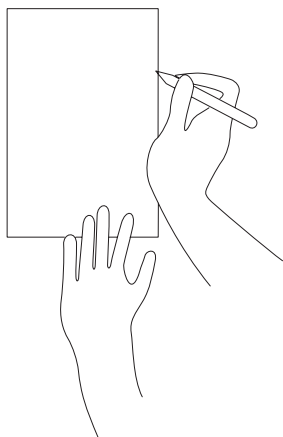
The location chosen should be free of obstacles such as electrical conduits, air conditioning ducts, or water pipes. Access to an attic or crawl space can help you locate their location.

### 2. Find the studs / joists nearest the desired speaker mounting location

Make sure there are no nails and other parts around the location of your speakers. If you place the speakers near other devices, be sure to check the size of the brackets, which extend beyond the mounting cutout.

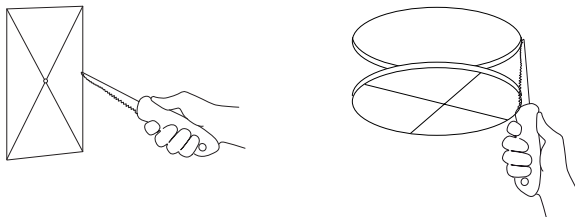
### 3. Make the hole

A punch out template for setting the hole is provided in the box. Position the template in the desired position and pencil an outline on the wall or ceiling.



## 4. Cutting the hole

Caution : this is the most important part of the entire installation. If you are uncertain about obstructions in the mounting area, you should start by cutting a small hole within the penciled area with a drywall saw. Cutting at a 45 degree angle will make drywall repair much easier should you need to patch the hole due to obstructions. Once you have determined there are no obstructions in your desired mounting location, start cutting the finished hole at a 90 degree angle to the wall surface. This step is the most important step in the entire installation. If you are not sure of the obstacles in the cutting area, start by cutting a small hole in the cutting area with a drywall saw. If obstacles are present, cutting at a 45 degree angle will make repair much easier. Once you have made sure there are no obstacles in the chosen location, cut the wall or ceiling at an angle of 90 degrees to the surface.



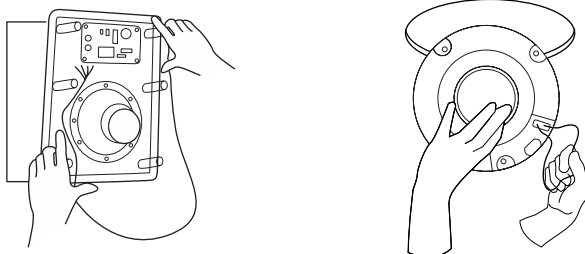
## 5. Add insulation

If the area in the ceiling or wall is not already insulated, add an adequate amount of insulation material to fill the cavity. If the insulation material used is faced with foil or paper, position the foil or paper away from the speaker.

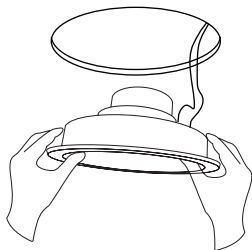
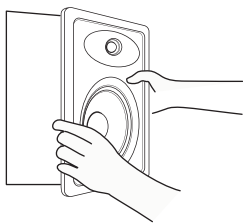
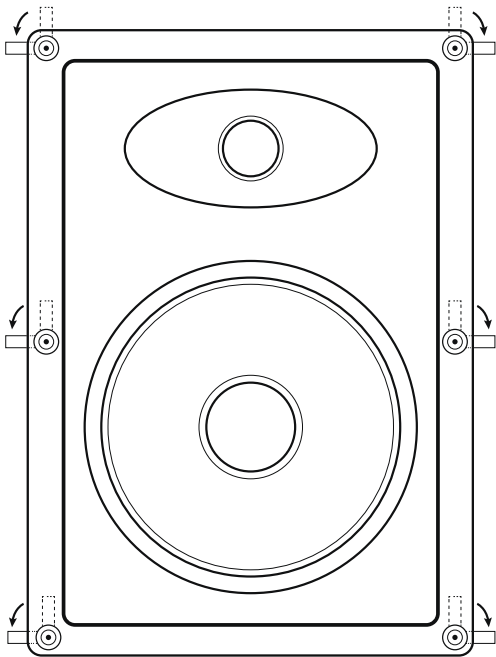
The integral mounting-feet system incorporated into your speaker allows for a quick installation by following these easy steps.

1. Remove the grid and set aside in a clean dust-free environment.

2. Attach the speaker cable (observing the proper polarity with your amplifier : + to +, - to -). Make sure the left channel of the amplifier channel is connected to the left speaker channel and the right amplifier channel to the right speaker channel.



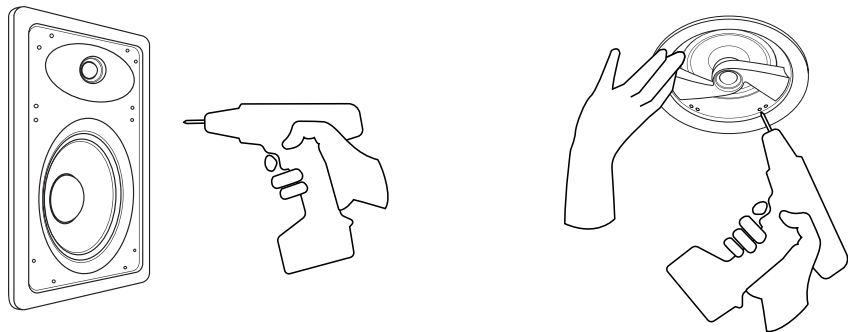
3. Make sure the mounting feet are turned inward to clear the opening and insert the speaker into the ceiling or wall. Position the speaker into the hole.





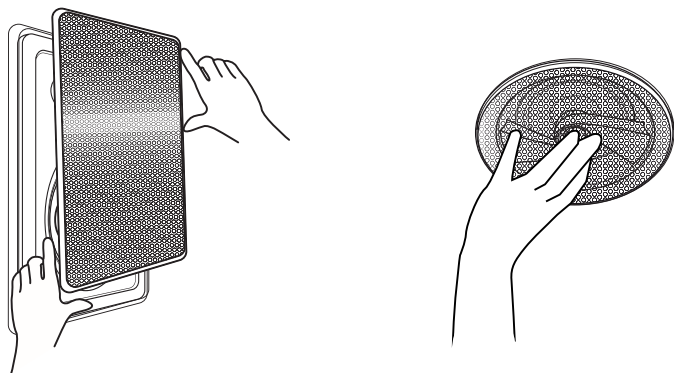
Note : The flange of the speaker is designed to flex and conform to any small imperfections in the wall surface. Tighten the 6 screws on the front of the baffle only enough to make the flange become snug against the ceiling or wall. As you tighten the screws, the feet will automatically flip into an outward position, thereby clamping the drywall between the feet and the flange.

Caution : Over-tightening may warp the baffle, crack the wall, cause the flange to distort, and make the grid difficult to install.



4. Secure the grid into place.

Note : The speaker flange incorporates high strength magnets to secure the grid into place. Simply line the grid with the speaker flange.



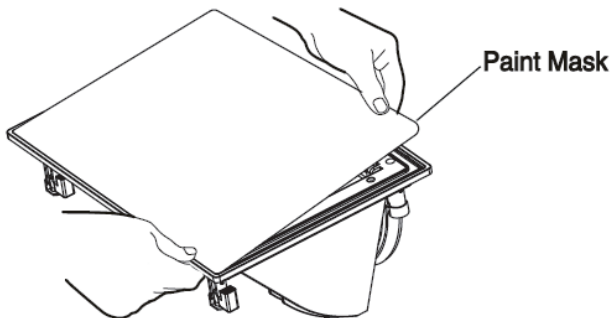
# PAINTING INSTRUCTIONS

The grids can be painted to match your walls, making the speaker even less noticeable. However, great care should be taken not to clog the holes, as this will greatly reduce the sound quality of the speakers.

If you plan on paint your grids, we recommend that it be done prior to installation. The scrim cloth backing must be removed prior to painting the grids. The surface should be cleaned with a light solvent to remove any dust or residue. Soundavo recommends a light spray-painting using 5 parts thinning agent to 1 part paint. Do not paint the grid while they are attached to the speaker, before proceeding with installation. Ensure that the holes in the grille are not blocked by paint.

**Perform the following steps to safely paint them without damaging the speaker.**

- Remove the center portion of the cardboard installation template/paint mask. The central portion is the paint mask, while the outer portion is the installation template.
- Completely remove the grille by inserting a paper clip or the included grille removal tool into one of the holes and pulling to lift it off the frame.
- Remove the foam insert and set it aside.
- Insert the paint mask, covering the speaker while leaving the frame exposed.
- Paint the speaker frame and grille. It is best to use spray paint to avoid paint clogging the holes in the grille.
- Allow the paint to completely dry

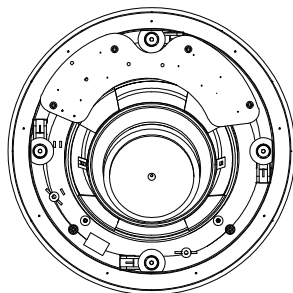
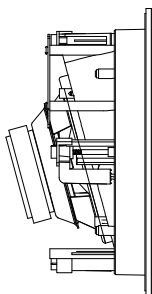
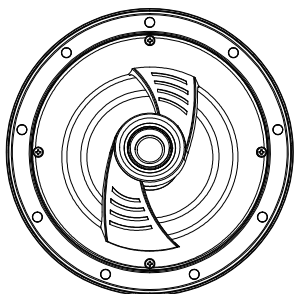


# PRODUCT SPECIFICATIONS

## AT-6CF

2-way 15 Degree Angled In-Ceiling Loudspeaker

- Drivers are angled at 15° to direct sound towards your listening position
- Ideal for the front/rear left, right, or center channel of an in-ceiling home theater system
- 20mm Aluminum dome tweeter
- 6.5" carbon fiber woofer with rubber surround
- 60W RMS / 120W Peak
- Frequency Response: 50-20,000 Hz
- Sensitivity: 89 dB
- Impedance: 8 ohms
- Paintable magnetic grille



# PRODUCT SPECIFICATIONS

## WARNING

The packaging (cartons and foams) has been designed to effectively protect your SOUND-AVO electronics during transport and shipping. We invite you to keep them for future use.

Protect the environment: if you want to get rid of the packaging, note that it is recyclable. We invite you to make the arrangements for the best respect of the environment according to the possibilities which are offered to you (sorting for example). At the end of his life, this device should not be thrown into a conventional trash bin. It must be returned to a recycling center for electronic equipment. This symbol on the product indicates that it is designed to be recycled according to a particular process. You will make a very significant contribution to the preservation of the environment. This device complies with the RoHS European directive. This means that it does not release polluting substances during recycling (Lead, Mercury, Cadmium, Hexavalent Chromium, Polybrominated biphenyls, Polybrominated diphenyl ethers).



### Precautions for proper use

This product was designed according to rigorous norms and complies with safety standards. It should only be used under normal conditions as described below. Verify the electrical voltage before connecting it to a power source. This electronic device was designed to work in numerous countries. We advise you to hook it up completely before connecting it to the AC power source. Take care when unplugging the power cord. When you unplug the power cord from the power source, do so by pulling on the head of the plug rather than on the cable. If you do not expect to use this device for a prolonged period of time, you are advised to unplug it from the power source. Do not open the case. This device contains no parts that can be exchanged by the user. Accessing the inside of this device's case can lead to electric shock. Any modification to the product will nullify the guarantee. If a foreign object or liquid falls into the case, contact your retailer to arrange for a technician to remove it from the device safely.



## WARRANTY

Soundavo platinum is designed and manufactured to the highest quality standards. If there is a defect in your Soundavo product, Soundavo customer service or an authorized dealer may take care of the repair within the limits of this warranty.

The warranty is 2 years from the date of purchase from an authorized dealer.

**Definition of Warranty** The warranty is limited to the repair of Soundavo equipment. Under no circumstances is the transport, the associated costs and the installation covered by the guarantee.

The warranty is only applicable to the first owner and is not transferable.

The guarantee does not apply in the following cases:

- The damage is caused by incorrect installation or connection.
- The damage is caused by improper use, other than that described in this manual, by negligence, or modification of the product by a person not authorized by Soundavo.
- Damage caused by accidents, lightning, water, fire, excessive heat or any other cause that can not be controlled by Soundavo.
- In the case of repair by unauthorized personnel. This warranty supplements the legal warranties in force in the country of the authorized dealer.

**How to repair a product under warranty** Simply contact your authorized dealer. To ensure transport in good conditions, always use the original packaging. If you use a product in a country other than where you bought it, contact the importer in your country of residence who will refer you to an authorized service center.

**The list of authorized distributors is available on the website:**

<http://www.soundavo.com> To validate your warranty, you must produce as proof of purchase the original of your invoice containing the date of your purchase and the stamp of your dealer.