



Installation and Owner's Manual

Sage Series ICS3

Sage Series SUB1

Minimal Appearance Point Source Loudspeaker

Gypsum 1/2" (13mm) and 5/8" (16mm) Mounting Platform

Table of Contents

Quick Start:	4
Preparing the Gypsum Mounting Platform.....	5
Before Installing the Platform with SUB1	5
Before Installing the Platform with ICS3	5
Mounting Platform Installed Accessories.....	6
Storing the mounting platform	6
Cutting the panel bracket.....	6
Installing the Gypsum Mounting Platform.....	7
Step 1 - ICS3-Backbox Attachment to Platform	7
Step 2 - Fasten.....	7
Step 3 - Support or Trim	7
Step 4 – ICS3 and SUB1 Wiring.....	8
Step 5 - SUB1 Port Tube Connection.....	8
Step 6 - Installing Drywall – Fit & Screw.....	8
Step 7 - Installing Drywall – Snap	8
Mudding the Panel.....	9
Step 1- Fill.....	9
Step 2- Tape	9
Step 3- 1st Coat Mud.....	9
Step 4- 2nd Coat Mud	9
Step 5- 3rd & 4th Coat Mud	9
Sanding	10
Step 1- Sand and Check.....	10
Step 2- Unscrew	10
Step 3- Pull	10
Painting	10
Step 1- Clean and Check.....	10
Step 2- Paint	10
Using Paint Shield to Adjust for Final Grill Depth	11
Adjust Grill Mounting Depth: ICS3	11
Adjust Grill Mounting Depth: SUB1.....	11

Document Conventions

This document contains general safety, installation, and operation instructions for the Wisdom Audio Sage Series Minimal Appearance loudspeakers. It is important to read this document before attempting to use this product. Pay particular attention to:

WARNING: Calls attention to a procedure, practice, condition, or the like that, if not correctly performed or adhered to, could result in injury or death.

CAUTION: Calls attention to a procedure, practice, condition, or the like that, if not correctly performed or adhered to, could result in damage to or destruction of part of or the entire product.

Note: Calls attention to information that aids in the installation or operation of the product.

Sage Series Minimal Appearance System Ordering and Planning

1. Planning Stage	2. Pre-construction / Pre-wire Stage		3. Finishing Stage	
Surface	Platform (Size & Shape)	Speaker	Final Assembly	Grille
Gypsum, 1/2" (13mm)	<ul style="list-style-type: none">1/2" round 3" Platform1/2" square 3" Platform1/2" round 4" Platform1/2" square 4" Platform	<ul style="list-style-type: none">ICS3-BackBoxSUB1	<ul style="list-style-type: none">ICS3-SPMD	<ul style="list-style-type: none">3" round3" square4" round4" square
Gypsum, 5/8" (16mm)	<ul style="list-style-type: none">5/8" round 3" Platform5/8" square 3" Platform5/8" round 4" Platform5/8" square 4" Platform			
Solid Surface Depth from 3/8" to 1-1/4" (9.5mm – 31.75mm)	<ul style="list-style-type: none">Solid Surface Mounting KitRouter Template Tool Kit			

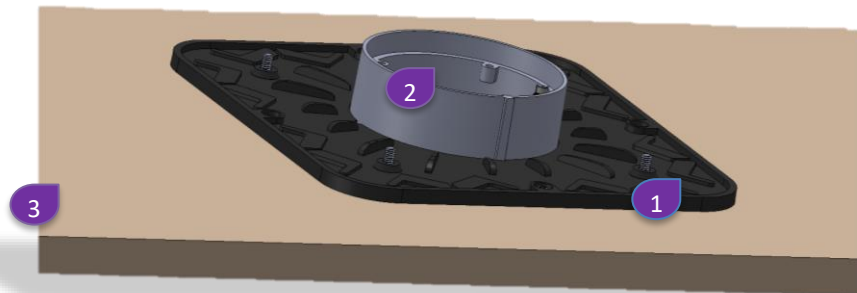
Quick Start:

1. Prewire speaker wires to each location.
2. Install SUB1 cabinet (for SUB1 locations only) to ceiling joists using included L-brackets.
3. Attach ICS3-Backbox to Mounting Platform (for ICS3 locations only).
4. Attach Mounting Platform to ceiling joists.
5. Connect speaker wires.
6. Connect SUB1 Bass-Snorkel (for SUB1 locations only), do not shorten the tube.
7. Install rest of drywall and tape, spackle, mud, sand and finish to Level 5 finish ([Level 5 Finish at www.usg.com](http://www.usg.com))
8. Remove Sanding Guide and paint ceiling with Paint Shield in place.
9. For SUB1, use Paint Shield to adjust grille depth, remove Paint Shield and install grille. SUB1 is complete.
10. For ICS3, remove and keep Paint Shield, remove SUB1 grille catch. Install ICS3-SPMD (Spiral Planar Magnetic Driver). Re-install Paint Shield to adjust grille depth, remove Paint Shield and install grille. ICS3 is complete.

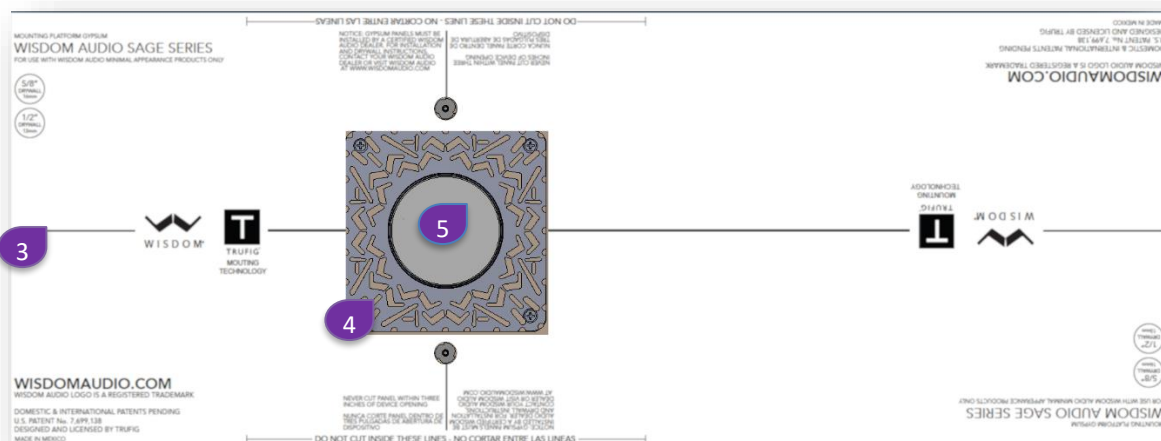
Mounting Platform Components:

1. Mounting Plate, Sanding Guide and Mud Ring (rear)
2. ICS3-Backbox and SUB1 Bass-Snorkel Mount
3. Gypsum
4. Mounting Plate, Sanding Guide and Mud Ring (front),
5. Sanding Shield, Paint Shield (magnetic attachment), SUB1 Grill Catch with Magnetic Recoil Fastener (Pat. Pend)

Rear of Platform (In-Ceiling)



Front of Platform (In-Room)



Preparing the Gypsum Mounting Platform

Before Installing the Platform with SUB1

The SUB1 is shipped with the subwoofer cabinet (band-pass box) and port tube “Bass Snorkel”. The cabinet should be mounted to the ceiling joists using the included L-Bracket screwed into the studs. The cabinet should not be allowed to rest on the ceiling surface gypsum. Alternatively, the cabinet can be mounted using a crossmember or other suitable platform.

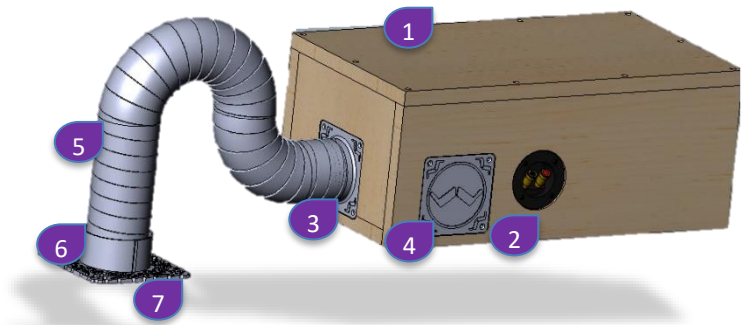
The speaker wires should be pre-wired to the cabinet location and connected once the SUB1 is installed in the ceiling joists.

The port tube should be connected to the SUB1 cabinet and must be connected to the Mounting Platform before closing up the ceiling. No access to the port tube is possible once the ceiling has been finished.

After the ceiling is finished (mud and paint) the grille depth is adjusted, and the grille will be installed.

SUB1 Components:

1. SUB1 Band-Pass Cabinet
2. Speaker Termination Binding Posts
3. Primary Bass Snorkel Port Tube Output
4. Alternate Bass Snorkel Port Tube Output
5. Bass Snorkel Port Tube
6. Bass Snorkel Attachment to Mounting Platform
7. Clamping Plate, Sanding Shield, Mud Ring and Grille Catch Magnetic Recoil Fastener (Pat. Pend) (Included on Mounting Platform)
8. Gypsum Board (Mounting Platform – Not Shown)



Before Installing the Platform with ICS3

The ICS3-Backbox will need to be attached to the Mounting Platform and installed into the ceiling joists. For easiest installation into the ceiling, the ICS3-Backbox should be screwed to the mounting platform and then the entire platform (gypsum board with mud ring and paint shield plus the ICS3-Backbox) can be installed into the ceiling.

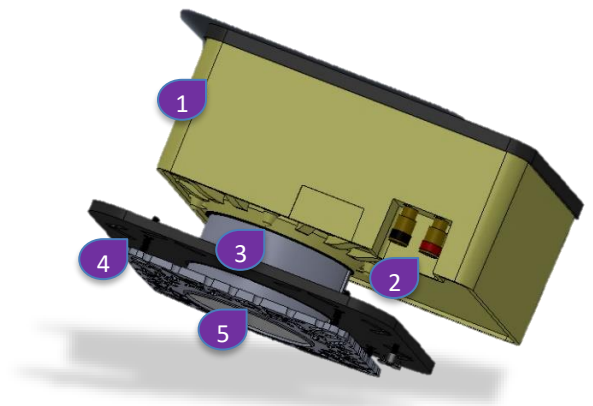
The speaker wires should be pre-wired to the ICS3 location and connected once the ICS3-Backbox is installed in the ceiling joists.

No access to the ICS3-Backbox is possible once the ceiling has been finished.

After the ceiling is finished (mud and paint) the grille depth is adjusted, and the ICS3-SPMD (Spiral Planar Magnetic Driver) and grille will be installed.

ICS3 Components:

1. ICS3-Backbox (Mid-Woofer and Crossover)
2. Speaker Termination Binding Posts
3. Backbox to Mounting Platform Attachment
4. Clamping Plate, Sanding Shield and Mud Ring (Mounting Platform)
5. ICS3-SPMD (Spiral Planar Magnetic Driver) with Magnetic Recoil Fastener (Pat. Pend) for grille
6. Gypsum Board (Mounting Platform – Not Shown)



Mounting Platform Installed Accessories

The gypsum, 1/2" (13mm) and 5/8" (16mm) mounting platform ships with the Clamping Plate installed and ready for either (1) mounting to an ICS3-Backbox or (2) a SUB1 port tube. A mud ring, sanding shield and paint shield are also pre-installed within the mounting platform.

For use with the ICS3, wiring to the back-box must be completed after installation into the ceiling and before the final assembly and finish work. Be careful not to play audio through the system until installation is completed. The final ICS3 installation includes installing the ICS3-SPMD (Spiral Planar Magnetic Driver) and grille. The ICS3-SPMD includes the Magnetic Recoil Fastener (Patent Pending) magnetic grille catch and depth adjustment which allows for the grille to fit perfectly flush with the ceiling. This is done with the 3 set screws behind the paint shield, using the paint shield as a depth alignment tool after the ICS3-SPMD is installed and before the grille is installed.

For use with the SUB1, connect the port tube to the mounting platform before ceiling finish work is completed. Install the platform within 12" – 24" (305mm – 610mm) of where the SUB1 band pass box will be installed for proper connection of the port tube. Behind the mud ring and paint shield is the Magnetic Recoil Fastener (Patent Pending) magnetic grille catch and depth adjustment which allows for the grille to fit perfectly flush with the ceiling. This is done with the 3 set screws behind the paint shield, using the paint shield as a depth alignment tool and can be done before the grille is installed.

NOTE: DO NOT THROW AWAY THE PAINT SHIELD UNTIL AFTER GRILL DEPTH ADJUSTMENT.

Storing the mounting platform

It is recommended that all materials are kept in their original packaging until just before installation. Store them off the ground in a secure, dry area until they are needed. Keep all materials dry and above freezing. At the time of installation and finishing, all materials must be at a temperature of 55°F (12.8°C) or above.

Cutting the panel bracket

Mounting platforms are designed so that the opening can be positioned anywhere within standard 12" (305mm) O.C. to 24" (610mm) O.C. joist spacing. However, many installations will require the panel bracket to be cut to size. The panel is made of 100% pressed gypsum board - it can be cut using the score and snap method or using a circular saw with a fine-tooth blade (or table saw). To cut the panel using the score and snap method, first score the panel from the frontside - this may take multiple passes. Next, flip the panel over - face side down - and snap the panel towards the cut line.

Installing the Gypsum Mounting Platform

NOTE: The installation and finishing of the gypsum panel requires knowledge and experience in finishing to a Level 5 finish. If you are not familiar with this level of finish, consult with an experienced drywall installer.

Step 1 - ICS3-Backbox Attachment to Platform

NOTE: For SUB1 skip to Step 2. The SUB1 port tube connects directly to the back of the mounting platform.

The ICS3-Backbox attaches to the Clamping Plate using 4 screws. The back-box and the Mounting Plate have a keyed connection and can only fit one way.

It is easiest to place the ICS3-Backbox on a table with the port facing up and line up the mounting platform.

Remove the Sanding Guide and Paint Shield. These are held in with magnets and are screwed to each other. Leave protective tape in place!

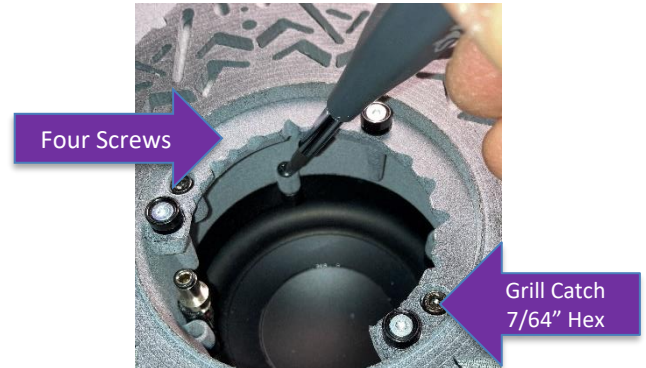
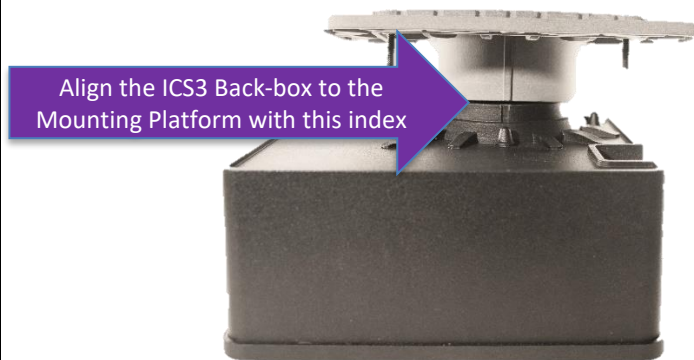
DO NOT THROW AWAY THE SANDING GUIDE / PAINT SHIELD!

Locate the four screw locations on the mounting plate and line them up to the four screw holes on the back box. Once in place, secure with the screws included in the ICS3-Backbox.

NOTE: It may be easier to remove the SUB1 Grill Catch from the Mounting Platform to gain access to all 4 screws, but it is not necessary if you are careful!

Replace the Sanding Guide and Paint Shield. At this time, you can install the complete assembly into the ceiling joists. Be careful as the speaker system is heavier than it looks!

Have an assistant to hold the platform in place is helpful!!!



Step 2 - Fasten

Using three drywall screws per joist, fasten the mounting platform to the framing. Be careful as the ICS3-Backbox can be heavy. Support it properly until installed.

NOTE: If using the platform in conjunction with a SUB1 subwoofer, be sure to locate the opening of the platform within 12" (305mm) to 24" (610mm) of the SUB1 cabinet location.



Step 3 - Support or Trim

Place at least one of the provided patch clips on each of the sides with unsupported drywall. Attach the patch clips to the panel bracket using at least one 1-1/4" (32mm) drywall screw. Trim off any unsupported drywall that does not have a patch clip attached.



Step 4 – ICS3 and SUB1 Wiring

Make speaker wire connections on the back of the ICS3 enclosure or the SUB1 band-pass box prior to continuing to the next step.

We strongly recommend using some strain relief on the speaker wire to ensure the connection remains in place during construction.

For ICS3 skip to Step 6.

Step 5 - SUB1 Port Tube Connection

Attach to the rear of the Clamping Plate using the screw down collar. Tighten the clamps on both ends of the port tube. Take care not to kink the tube. The minimum distance needed to make a 90-degree bend is 4-1/2 inches (115mm).

The clamp should fit snug before being tightened. If not, flip the clamp and check again. The inside of the clamp has slightly smaller inside dimensions for the side to be used with the snorkel and slightly larger inside dimension for the side to be used with the mounting plate.

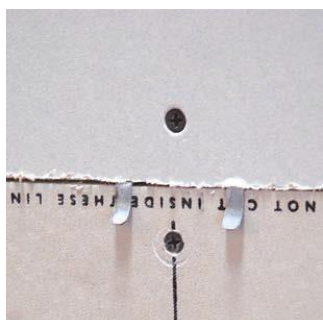
NOTE: Bass Snorkel Tube length is not to be altered as it will severely impact the operation of the subwoofer.



NOTE: Once the drywall work is complete, there is no easy access to the speaker terminals or the SUB1 port tube attachments on the back of the enclosure.

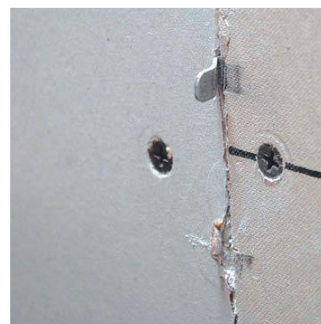
Step 6 - Installing Drywall – Fit & Screw

Have the drywall contractor fit & install the drywall around the mounting platform being sure to fasten at least one 1-1/4" (32mm) drywall screw to each patch clip location.



Step 7 - Installing Drywall – Snap

After all drywall has been hung and patch clips are fastened, snap off the patch clip tabs as shown below using a pair of pliers.



Mudding the Panel

Step 1- Fill

Before applying mud, be sure that the sanding shield is still in place securing in the speaker opening. Using quick-set compound, fill all gaps and let fully cure.



Step 2- Tape

Using mesh tape, apply tape around all adjoining surfaces. This includes areas around the mounting platform and around the speaker opening as shown in the photo below.



Step 3- 1st Coat Mud

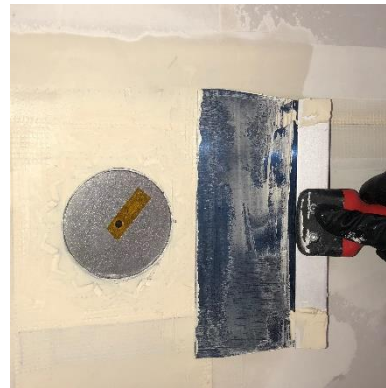
Coat the tape and entire Mounting Platform with joint compound. This ensures all pits and valleys have been filled. Before fully cured scrape off any raised portions. Let mud fully cure.

NOTE: this coat is a very thin layer. DO NOT build the first layer of mud to the top of the mud dam.



Step 4- 2nd Coat Mud

Next, cover the entire 1st coat with another layer of mud being sure to work from the opening and pulling outward towards the perimeter. This coat will cover the entire 1st coat area plus even more to create a smooth transition. Again, this coat should not reach the top of the mud dam. It should be very thin. Let mud fully cure but DO NOT SAND.



Step 5- 3rd & 4th Coat Mud

Continue to build coats three and four in a similar fashion. Build upon the previous layer and expanding the mud perimeter over the previous layer's perimeter. **On the 4th and final coat, be sure to completely cover the sanding shield with mud.** Allow this coat to dry. This will be the last and final coat before sanding.

Sanding

Step 1- Sand and Check

Using a sanding pole with a 60-micron film, sand the drywall and the opening until the entire perimeter of the sanding shield is exposed.

The sanding shield and drywall compound should be completely flush, and drywall should be smooth.



Step 2- Unscrew

Once the sanding is complete, push firmly on the sanding shield to break any adhesion to surrounding surfaces. Next, remove the screw in the center of the shield. It is under protective yellow tape.



Step 3- Pull

Then remove the shield using a screw and a pair of pliers or a slotted screwdriver. This will expose the paint shield. Do not remove the paint shield.

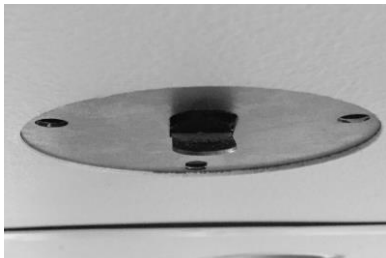


Painting

Step 1- Clean and Check

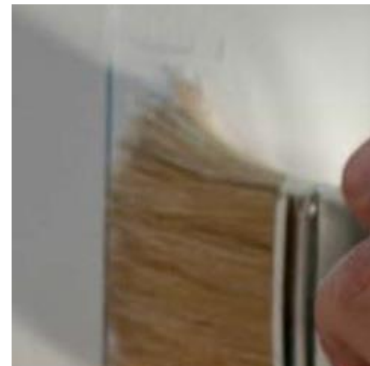
Before painting the surface, it is important to make sure the provided paint shield is still in place. This shield provides for a precise and easy way to mask the opening. First, make sure the opening is completely free of excess drywall mud and debris.

NOTE: no additional masking tape is needed over the paint shield. After grille depth is adjusted and the painting is complete, it will be discarded.



Step 2- Paint

Painting a wall/ceiling with Minimal Appearance openings is no different than painting any other drywall surface. The paint can be rolled directly over the openings - cutting around with a brush is not necessary. Before the paint is completely dry, it is a good idea to clean-up the area inside the mud dam using a dry mini roller (1" or 25mm) or a dry paintbrush. Simply roll the roller or run the paintbrush around the mud dam edge to help prevent any unnecessary build-up, or drips around the opening.



NOTE: The Paint Shield is used to set the final grille depth with 3 screws that will adjust the depth of the mounting ring.

Using Paint Shield to Adjust for Final Grill Depth

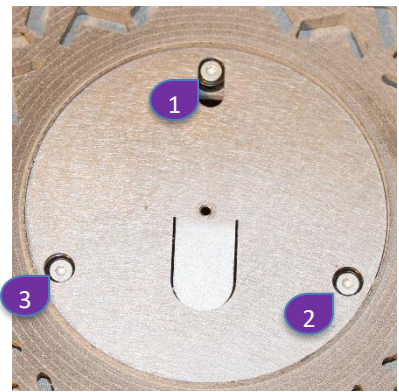
The paint shield is held in place with magnets and has access holes for three (3) adjustment screws as part of the Magnetic Recoil Fastener (Patent Pending). The paint shield is the same thickness as the speaker grille that will be installed at the end of the installation. Use the paint shield to adjust the three screws for a perfectly level and flush installation. For the SUB1 this can be done as soon as the painting is completed.

NOTE For ICS3: The paint shield and Sub1 grille catch will be removed for the ICS3-SPMD (Spiral Planar Magnetic Driver) to be installed. The paint shield *must* be kept for adjustment of the grille depth. The ICS3-SPMD is installed *after* painting is completed. To install the ICS3-SPMD the SUB1 Grille Catch must be removed first.

NOTE For SUB1: The paint shield is used to set the final grille depth. Do not throw away until after grille depth is set. For the SUB1, grille adjustment can be made once painting is completed as the SUB1 Grille Catch is pre-installed and has the Magnetic Recoil Fastener (Pat. Pend).

Adjust Grill Mounting Depth: ICS3

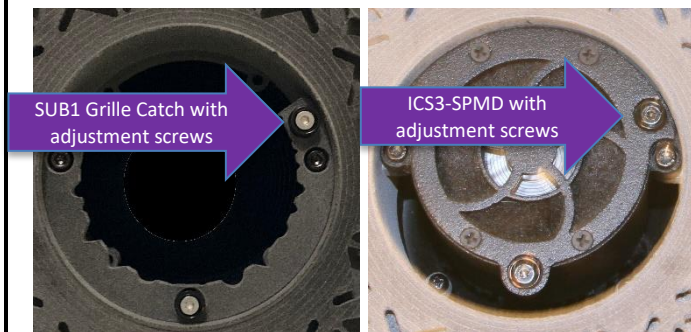
The paint shield is held in place with magnets and has three holes that allow access to the three set screws. Save the metal paint shield while installing the ICS3. *After* installing the ICS3-SPMD and *before* installing the grille, use the paint shield to set the depth of the 3 set screws of the Magnetic Recoil Fastener (Pat. Pend) so that the paint shield is flush with the surface. Remove the paint shield and replace with the grille.



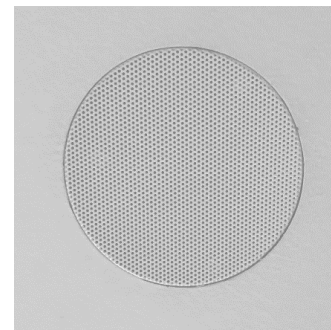
Adjust Grill Mounting Depth: SUB1

The paint shield is held in place with magnets and has three holes that allow access to the three set screws. Use the paint shield to set the depth of the 3 set screws of the Magnetic Recoil Fastener (Pat. Pend) so that the paint shield is flush with the surface. Remove the paint shield and replace with the grille.

Remove the Paint Shield using a pick tool or screwdriver. It is held in magnetically. This will expose the Subwoofer Grill Catch (for SUB1) or the ICS3-SPMD (for ICS3) .



Place the grille on the magnetic Grille Catch.
Done!



Caution!

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.

WISDOM and the stylized W are registered trademarks of Wisdom Audio

Magnetic Recoil Fastener (Pat. Pend)

Wisdom Audio 1572 College Parkway, Suite 164

Carson City, Nevada 89706 USA

Telephone: 775.887.8850

Fax: 775.887.8820

www.wisdomaudio.com

