



Owner's Manual
512D, SW8-APR & SW-12

Aperion Audio Owner's Manual

Table Of Contents

Aperion Audio Difference	1
DiAural® Breakthrough	1
What You'll Need For Installation.....	2
Choosing The Right Wire, Cables & Connectors	3
Placement:	4 - 7
- Stereo Placement.....	4
- 5.1 Home Theater Placement - Optimizing For Surround Sound.....	5
- Speaker Placement For Home Theater.....	6
- 5.1 Channel Home Theater Layout.....	7
Connections:	8 - 12
- Making The Connection	8
- Stereo Connection Diagram Low Level Sub Output.....	9
- Stereo Connection Diagram Speaker Level Sub Output	10
- 5.1 Home Theater Connection Diagram - Low Level Output.....	11
- 5.1 Home Theater Connection Diagram - Speaker Level Output	12
Settings:	13 - 14
- Setting the Aperion Audio SW-12 Subwoofer.....	13
- Setting the Aperion Audio SW8-APR Subwoofer	14
Listening.....	15
Adjusting Your Room Or Speakers	16
Troubleshooting	17 - 18
Specifications	19
Warranty	20



www.aperionaudio.com

Thank you for purchasing Aperion Audio™ loudspeakers. Your new speakers incorporate the very latest audio technology, yet they are built with old-fashioned care and craftsmanship. We designed your new Aperion Audio sound system to give you years of listening pleasure. Whether you're enjoying music or watching a film in your home theater, Aperion Audio speakers will deliver pure and accurate sound. The speaker cabinets feature a dual composition design with a solid wood exterior, and—like fine furniture— they will maintain their beauty indefinitely if properly maintained.

It isn't hard to hook up your Aperion Audio speakers—even if you've never set up a home audio system before. Just take your time and keep this guide handy. We've filled it with tips, notes on what you'll need, and step-by-step instructions. If you get stuck, please call or send us an e-mail.

Then sit back and enjoy the pure, rich sound of Aperion Audio speakers with DiAural® technology. You'll hear the difference.

Aperion Audio

The Aperion Audio Difference

Now that you've decided to invest in a home theater system, you know that movie viewing has been forever transformed by surround sound. Dolby® Digital or DTS® surround sound immerses us in the action of movies by transporting the sound stage to the center of the theater, allowing acoustic elements emanating from every direction to roll over us as we watch the film.

It's thrilling to hear the teeth-shattering bass of explosions and other action elements. Surround sound carries us into the landscape of a film by allowing us to hear even very subtle, natural sounds.

You Deserve More...

A home theater system with surround sound is great when you're watching a movie, but what happens when you want to listen to music? Unfortunately, most home theater systems aren't able to reproduce stereo and 5.1 music as brilliantly as film sounds.

We think you deserve a sound system that can deliver your favorite concerto or banjo riff at the same stunning level as a movie sound track. The challenge is getting a small speaker to reproduce the expansive sound stage of music accurately, cleanly, and with volume levels able to compete with its larger ancestors. Your new Aperion Audio speakers achieve this by using patented DiAural® Technology.

The DiAural® Breakthrough

The DiAural® Circuit is a new, patented crossover geometry that allows for proper communication and interaction between the transducers (woofer, mid-range, and tweeter). This innovative process results in fewer parts, less distortion, and renders the high frequency and mid range transducers virtually burn-out proof.

Aperion Audio's speaker design centers on a Vifa® woofer/mid-range driver that is engineered to handle a very wide frequency range combined with an exceptional Vifa® soft-dome tweeter to produce the very high frequencies. By using DiAural® circuitry to interconnect the drivers, your Aperion Audio speakers reproduce music and movies with a coherent, open and natural sound that brings the original source to life in your home.

What You'll Need for Installation

A little planning will make your installation a breeze. You'll want to have all of the necessary equipment and supplies by your side before you begin. You'll save yourself the headache of a last-minute trip to the store mid-installation.

For your convenience, Aperion Audio carries high-quality wires, cables, and connectors. Visit our web site www.aperionaudio.com if you need these accessories.

For Stereo or Multichannel Music Installation:

- Two or more Aperion Audio satellite speakers
- One or more Aperion Audio subwoofer(s)
- A stereo receiver or stereo amplifier and preamplifier
- An audio source: CD, DVD, turntable, tape player, etc.
- Speaker wire (14 gauge or better) with banana clips, spade terminals, or pin-type termination. Note: 5-way binding posts will accept bare wire but terminated speaker wire is the preferred connection method.
- Subwoofer connection materials: RCA terminated interconnect cable or additional speaker wire if making a speaker-level connection to your subwoofer. Note: Low level RCA connection is the preferred connection method.
- Source interconnects: Digital coaxial or optical interconnect or RCA cables depending on your equipment.

For Multichannel Home Theater Installation:

- Five or more Aperion Audio satellite speakers
- One or more Aperion Audio subwoofer(s)
- A multichannel receiver or amplifier and processor
- An audio/video source: DVD, laserdisc or VCR player
- Speaker wire (14 gauge or better) with banana clips, spade terminals, or pin-type termination. Note: 5-way binding posts will accept bare wire but terminated speaker wire is the preferred connection method.
- Subwoofer connection materials: RCA terminated interconnect cable or additional speaker wire if making a speaker-level connection to your subwoofer. Note: Low level RCA connection is the preferred connection method.
- Source interconnects: Digital coaxial or optical interconnect or RCA cables depending on your equipment.

Choosing the Right Wires, Cables, and Connectors

Speaker Wire:

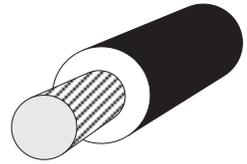
We recommend using speaker wire that is at least 14 gauge. (For runs longer than 15 feet, use 12 gauge or larger.) The wire should be cut into equal lengths for each pair of speakers and long enough to reach from the rear of your amplifier or receiver to where the speakers will be placed in the room, keeping excess wire to a minimum.

Important:

If you will be running wires in the walls or through the floor, use wire that meets your local code for that type of installation.

“Wire Tip”

Wire size is expressed by its American Wire Gauge (AWG) number. The lower the AWG number, the thicker the wire, i.e., A 12 gauge wire is larger than a 14 gauge wire.



Subwoofer Connection Materials:

Depending on your equipment or set-up preference, you'll need one of the following connection solutions:

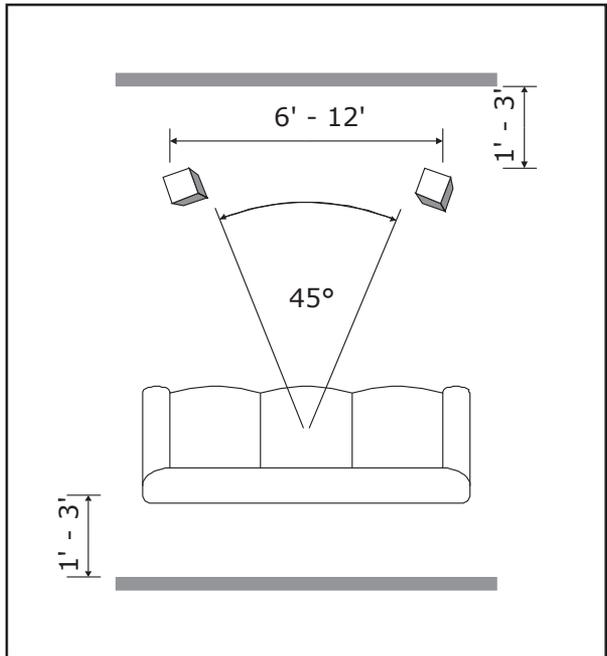
- A) If your receiver or preamplifier has a “sub-out” connection on the rear panel, you will need an RCA terminated interconnect cable to connect it to the subwoofer.
- B) If you do not have a “sub-out” connection, or choose to use speaker-level connections, you will need an additional pair of speaker wires (14 gauge or better) to run from your amp or receiver to the subwoofer speaker level inputs. Then you'll need another pair of wires to run from the subwoofer speaker level outputs to each speaker. Each pair should be of equal length, keeping excess wire to a minimum.

Stereo Placement

For two channel music listening, there are two speakers—one left and one right. Where a speaker is placed will influence the way it sounds. Sound consists of waves, and they can be reflected, absorbed and diffracted. You can have no bass at all or incredible booming bass depending on your speaker placement. Your room acoustics will play a large role in set-up and some experimentation is necessary to get the best results.

For optimal soundstaging in a stereo set-up, the distance between the speakers and listening position is important. Generally, the goal is to reduce or eliminate the number of surfaces that can interfere with the sound before it reaches the listener. Follow these simple guidelines for the best results:

- Place your speakers on stands 28"-30" off the floor.
- Set the speakers 6-12 feet apart and 1-3 feet from the wall facing the listening position.
- Create a triangle consisting of the left & right speakers and the listener. The distance between the speakers should be less than or equal to the distance from the listener to the speaker and a 45 degree angle should be created. (See illustration)
- For best results, the listening position should be at least 1-3 feet from the back wall.
- Set the speakers so they are toed-in to face the sweet spot in the listening room.
- Experiment with variations until you achieve the sound you desire.



5.1 Home Theater Placement

Optimizing A Theater Set-Up For Surround Sound

Home theater and multi-channel music has introduced a new speaker configuration to home audio. Instead of the large floor mounted stereo speakers of the '70's and 80's, your Aperion Audio sound system is comprised of 5 smaller satellite or bookshelf speakers designed to carry mid-range and upper tones, with a separately powered subwoofer to handle the lower bass frequencies. These speakers are arranged around the listener in an array with 3 speakers in the front and 2 in the rear.

There are no ideal positions for home theater and stereo components that will work for every room. The acoustic properties of any room, unless it was specifically designed to be a home theater, are not perfect, and each room is unique. Start with the following guidelines for setting up your speakers, but don't be afraid to experiment. Often a small difference in placement can yield a big improvement in sound.

- Be aware that many bare surfaces in a room can add harshness to the sound or muddy the dialogue. Sound absorbing surfaces like carpeting and drapes will help.
- Perfectly square rooms, or rooms where one dimension is exactly twice another can cause unwanted resonance that color the sound.
- If possible, the seating area should be centered between the sidewalls.
- For the best bass, try not to place your seating area so that it is against a wall, or at a position that is 1/2 or 1/4 the room's width or length.
- A speaker's bass output grows stronger the closer a speaker is placed to the corners. If a speaker is placed too close to a corner it can sound unbalanced.
- Aperion Audio speakers will work together better and create a more precise soundstage (a system's ability to recreate the original recording room and placement of the instruments in space) if the left, right and center speakers are not placed directly against a wall.

Left and Right Front Speakers

Try to place the front speakers in the same plane as your TV (flush with the screen), separated by 45° when viewed from the seating position. They should be positioned at the same height as the listeners' ears when seated. 28-inch stands will put your speakers at the correct height.

Center Speaker

A good position for the center speaker is right on top of your TV (or just below, if your TV is mounted high). Try to place the center speaker on the same plane, or slightly behind the plane formed by the front left and right speakers.

Surround Speakers

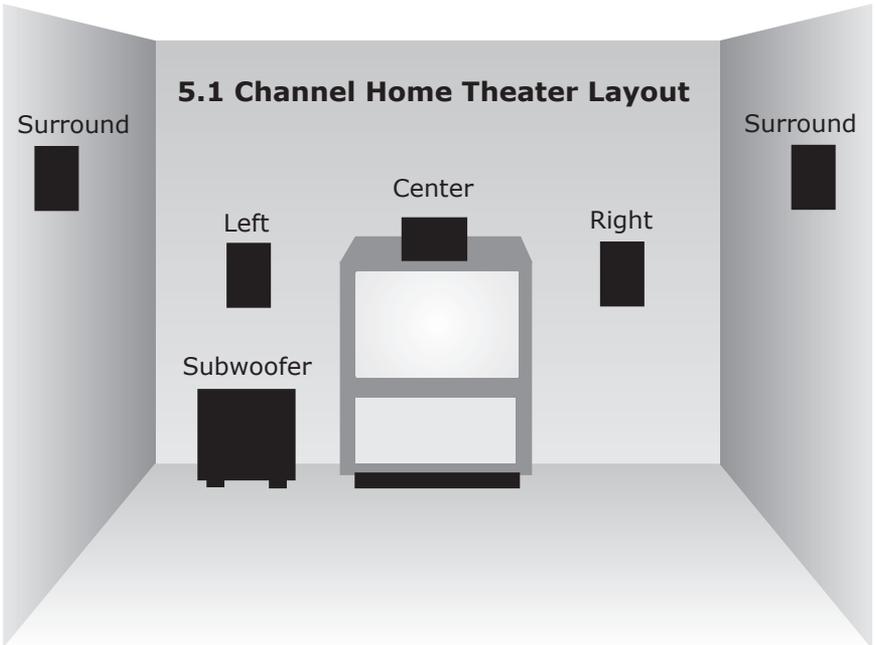
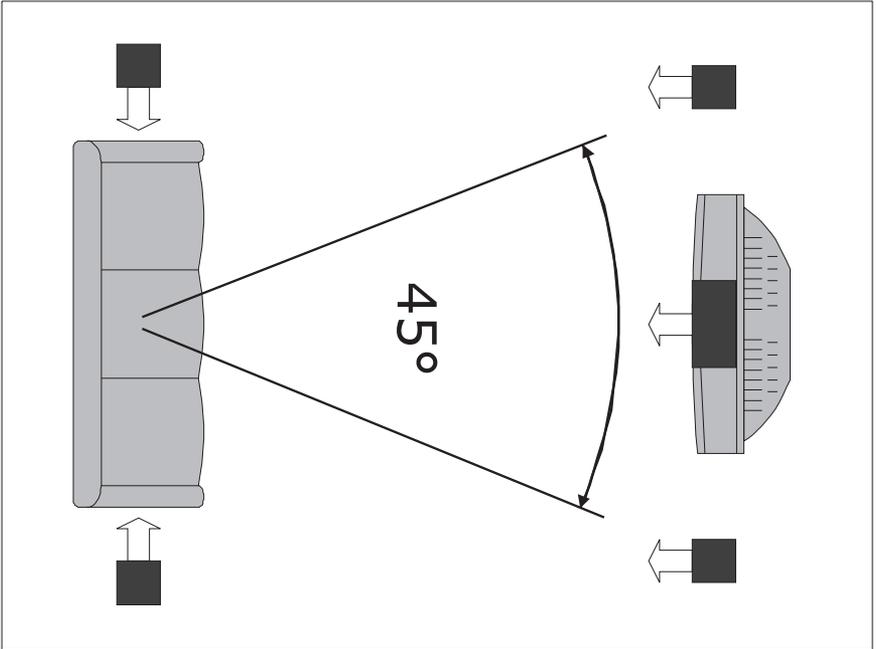
There is a bit of controversy about where the surround speakers should ideally be placed. Because of the precision that Digital recording techniques give to moviemakers allowing them to place sound effects at many different places, we believe that correctly placed direct radiating surrounds produce the most accurate surround sound field.

If possible, the surround speakers should be placed directly to each side of the listeners, not behind them. Placing the speakers a little above the listeners' ears, or angled back slightly, can help to minimize localization effects.

The Subwoofer

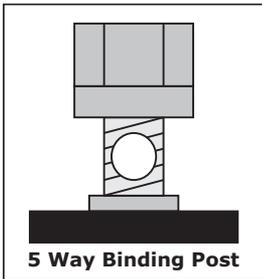
The human ear cannot localize the long wavelengths of bass frequencies below about 100Hz. As long as your Aperion Audio Subwoofer is set at the recommended cut-off of 80-85 Hz or below, you will have a lot of flexibility as to where you place it. Keep in mind that placing a subwoofer near a corner will make it sound louder and can distort the bass response. If the distance from the sub to the listener is significantly different than the front and center speakers, try using the phase reverse switch to see it improves the bass response.

Satellite Speaker Placement For Home Theater



Making The Connection

First, turn off the power and unplug from the electrical outlet your audio equipment before making any connections.



Connecting to a 5-Way Binding Post

If you're using banana clips, just insert the clip into the end of each terminal. Be sure that the knobs on each terminal are screwed down tight so that they don't rattle. If your receiver or amp has clip connectors, you will have to use either bare wire or a pin connector at that end of the wire.

If you're connecting with just bare wire, strip off about $\frac{1}{2}$ inch of insulation at each end and twist the wire ends tightly, making sure there are no stray ends. Unscrew the red and black knobs far enough to expose the hole (see illustration above). Insert the twisted ends of the wires, or the pin connector through the holes in the threaded shaft. With your thumb, tighten the connectors back down clockwise to secure the wires. Be sure no stray strands of wire from one post can touch the other post.

For spade plugs, unscrew the red (+) and black (-) plastic compression screws and slide the lugs over the threaded shaft, and thumb tighten the connectors back down clockwise to secure the wires.

IMPORTANT:

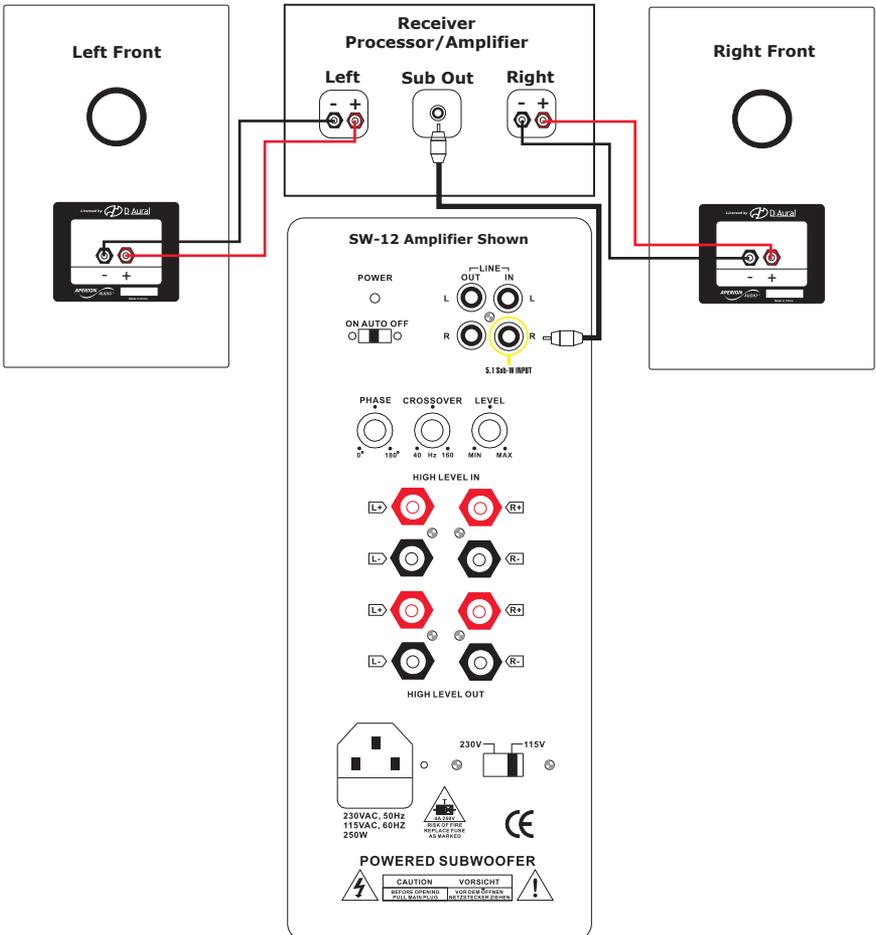
Speaker wire is coded to identify which of the two wire strands is positive and which is negative. The positive (+) strand is usually marked with a colored line, ribbing, or a different shape. The negative (-) strand is usually not colored or ribbed. However, if the manufacturer uses colored wire you may choose one wire color to represent positive (+) and one wire color to represent negative (-). Be sure to maintain this determination for all speaker wire connections on your receiver and your speakers. (i.e. red to red and black to black)

Stereo Connection - Low Level Sub Output

This is the preferred connection method if your receiver has a "Subwoofer Out" on its rear panel. Refer to your receiver or amplifier owner's manual for specific hook-up information.

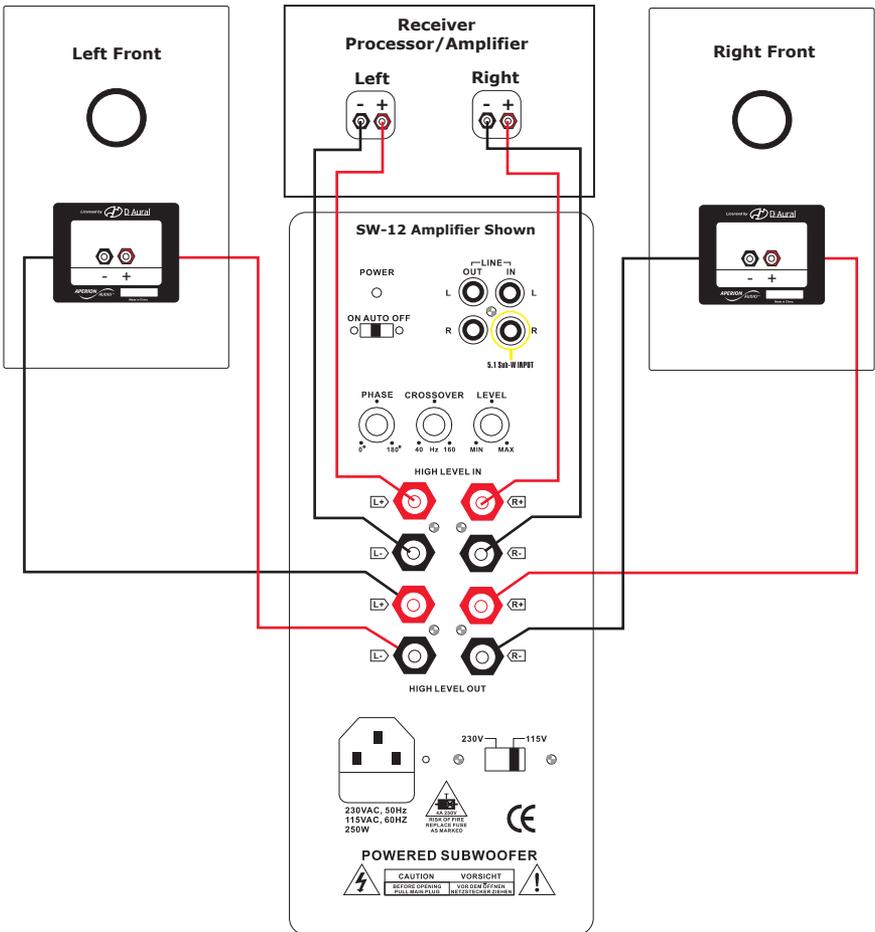
The powered subwoofer is connected to the receiver's subwoofer output jack by a shielded audio signal cable with RCA plugs at each end.

NOTE: Your subwoofer is supplied with two low-level inputs (L&R), but if your receiver or processor has a single sub-out connector, connect it to the input labeled "5.1 sub input" or you can use a "y" plug to connect to both the left and right inputs. We recommend use of a "y" plug which will give you a +3dB boost in output.

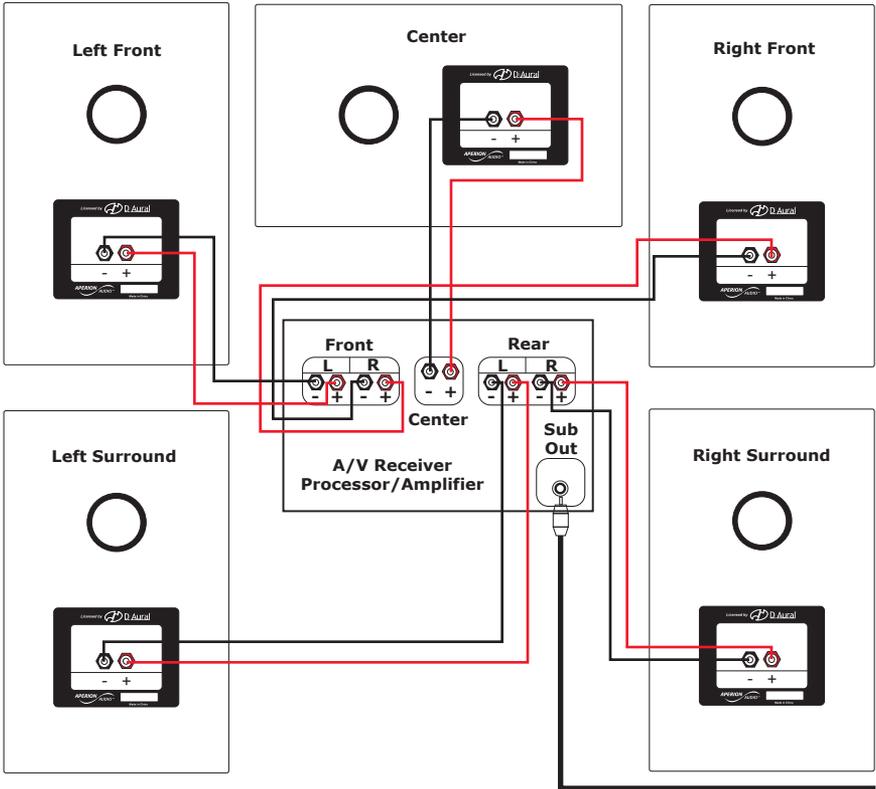


Stereo Connection - Speaker Level Sub Output

There are a few reasons why one might choose to use the speaker level inputs on the subwoofer instead of the low level inputs. RCA terminated coaxial cable can be hard to find in long lengths. Some older stereo receivers or preamplifiers are not equipped with "sub-out" or "pre-out" jacks or you may want to bypass the hi/lo filters on your AVR receiver, thereby activating the sub's crossover which will allow you more control in selecting the crossover point. In these instances, connecting a powered subwoofer with speaker wire is the best method.



5.1 Home Theater Connection - Low Level Sub Output

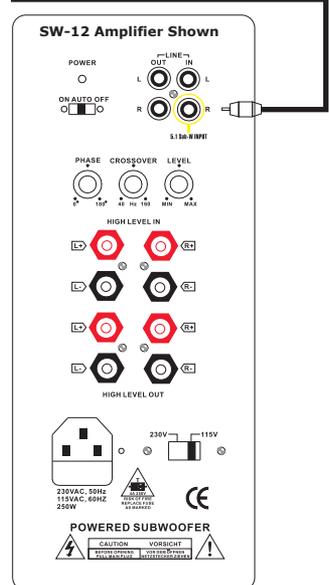


Low Level Sub Output

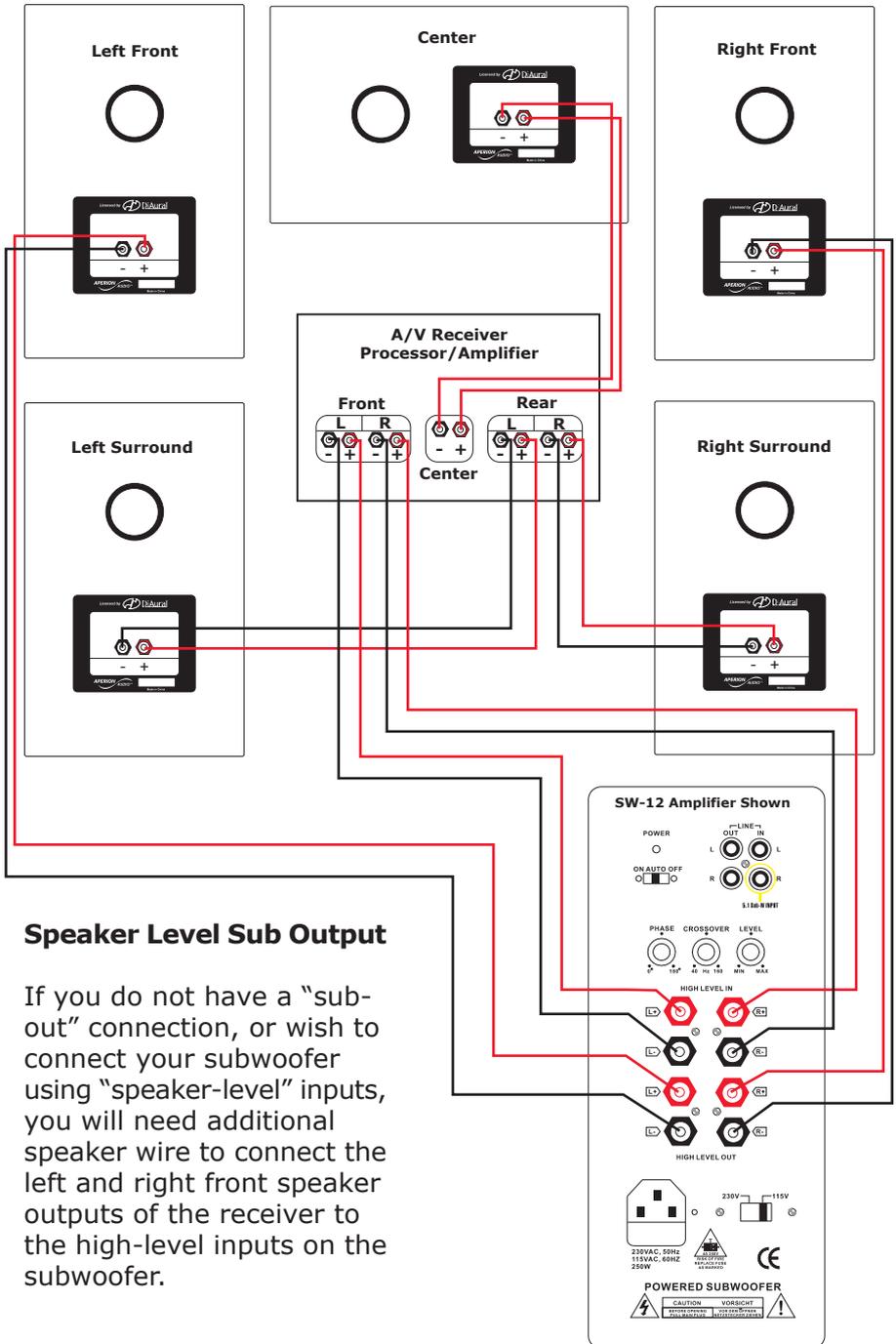
While setting up a home theater system is more complicated than a stereo system, it doesn't have to be difficult. Please refer to the diagram on this page for complete speaker wiring instructions.

If your receiver does have a "sub out" connection, you will need an RCA terminated interconnect cable to connect the receiver to the subwoofer.

NOTE: Your subwoofer is supplied with two low-level inputs (L&R), but if your receiver or processor has a single sub-out connector, connect it to the input labeled "5.1 sub input" or you can use a "y" plug to connect to both the left and right inputs. We recommend use of a "y" plug which will give you a +3dB boost in output.



5.1 Home Theater Connection - Speaker Level Sub Output



Speaker Level Sub Output

If you do not have a “sub-out” connection, or wish to connect your subwoofer using “speaker-level” inputs, you will need additional speaker wire to connect the left and right front speaker outputs of the receiver to the high-level inputs on the subwoofer.

Setting the Aperion Audio SW-12 Subwoofer

In addition to the high and low-level speaker connections on the rear of your subwoofer, you will see three round knobs and two switches. The first knob, labeled "phase" allows you to adjust the polarity of your subwoofer. The second knob, "crossover" sets the crossover frequency and the "level" knob controls the sub's volume.

The power switch has three settings - on, off and auto. When the switch is set in the "auto" setting, it will automatically turn the sub on when a signal is present. You'll know the subwoofer is on because the power light will be illuminated.

The SW-12 also has switchable voltage control. Please be sure the appropriate voltage has been selected for your area. (US 115V - European 230V) The illustration to the right shows a recommended starting point for settings. You will want to adjust these based on personal preference and room dynamics.

Recommended Sub Settings

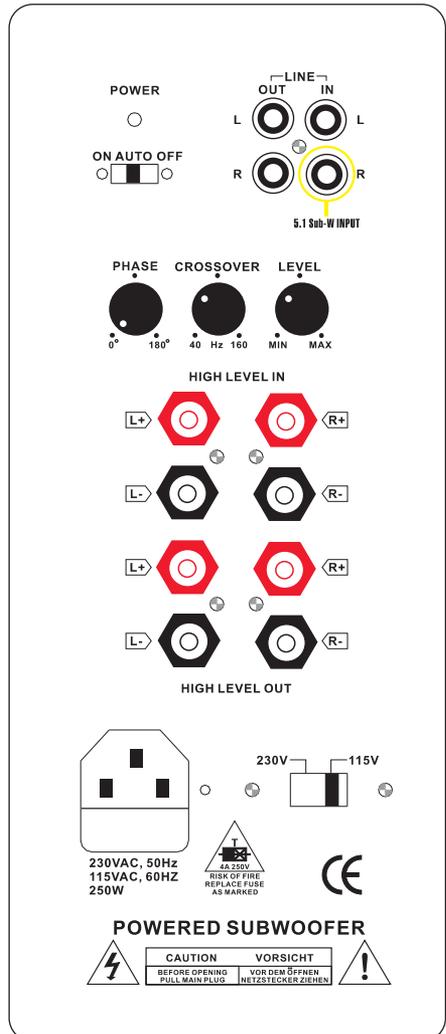
- Phase: Start at 0°
- Crossover: 80 - 85Hz
- Level: 1/3 to 1/2
- Power: Auto

Receiver Set-Up

Please consult your owner's manual for specific receiver set-up instructions but use these guidelines when configuring your receiver.

- Front speakers: Small
- Crossover frequency: 80Hz
- Subwoofer: On

Once you have set up the subwoofer, the only setting that may change is the "level," as you adjust the bass volume for music and movies.



Setting the Aperion Audio SW8-APR Subwoofer

In addition to the high and low-level speaker connections on the rear of your subwoofer, you will see two round knobs and two switches. The first knob, labeled "level," controls the subwoofer's volume. The second knob, "crossover frequency," sets the crossover frequency.

The power switch has three settings - on, off and auto. When the switch is set in the "auto" setting, it will automatically turn the sub on when a signal is present. You'll know the subwoofer is on because the lamp will be illuminated. The "phase" switch reverses the subwoofer's polarity.

The illustration to the right shows a recommended starting point for settings. You will want to adjust these based on personal preference and room dynamics.

Recommended Sub Settings

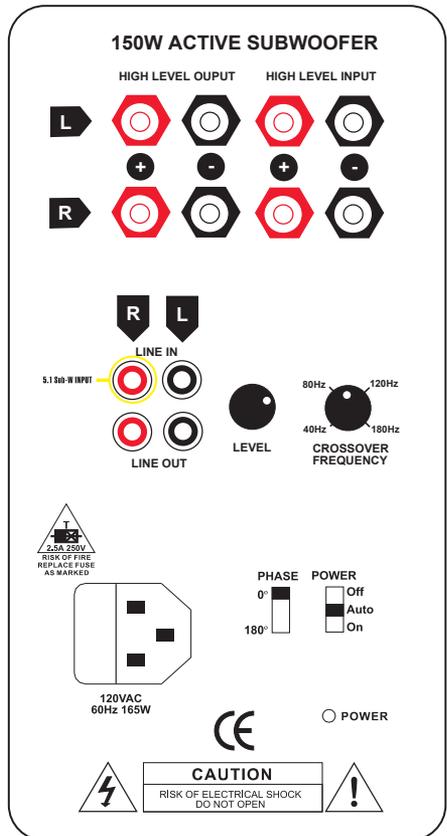
- Phase: 0°
- Crossover: 80 - 100Hz
- Level: 1/2 to Full
- Power: Auto

Receiver Set-Up

Please consult your owner's manual for specific receiver set-up instructions but use these guidelines when configuring your receiver.

- Front speakers: Small
- Crossover frequency: 80Hz
- Subwoofer: On

Once you have set up the subwoofer, the only setting that may change is the "level," as you adjust the bass volume for music and movies.



Listening

We recommend that you **break-in the speakers prior to listening**, so you will want to give them a few days of playing at low and medium volumes. Similar to an athlete stretching before a track meet, breaking in the speakers will limber-up the driver components so that they are ready to perform their very best.

Once your speakers have been broken-in, use your AVR (audio/video receiver) or DVD player's surround sound set-up mode to **select proper speaker configuration**. Most AVR's have the option of selecting "large" or "small" speakers. We recommend starting with the AVR set to "small". However, you may prefer the sound when they are set to "full". This does not present a problem, so long as audible distortion from the source or AVR is not present at high volume levels (refer to your AVR or DVD player owner's manual for more information on this).

Using your AVR test-tone function, or white noise generator, can help in determining all individual speakers are getting a matched, balanced signal of equal volume (refer to your AVR or DVD player owner's manual for more information on this).

Once your speakers are properly set-up, take some time to **calibrate your system**. The easiest and most accurate way of calibrating your system is to use an audio/video calibration DVD or CD. We recommend the Avia DVD (you can purchase this at amazon.com or go to ovationsw.com). If you don't have the disc, or would rather do it the "old-fashioned" way, follow these steps:

Start with just two-channel music. Listen to hi-fi recordings that are familiar to you. Things to listen for are:

1. **Imaging between L and R.** Do they seem balanced? Can you hear voices and instruments coming from between the speakers?
2. **Timbre of individual instruments.** Do you hear the rich overtones from a trumpet? The warmth of strings? Vocals?
3. **Integration between subwoofer and satellites.** As the bass notes ascend and descend, do you hear a seamless transition between the low-mids in the satellites and the lower frequencies in the subwoofer? Does the bass seem to emanate from the front wall, where the front L and R speakers are?

Now move on to surround sound movies (Dolby Digital, DTS, Surround EX, etc). Things to listen for with movies are:

1. Listen for a **seamless soundstage** throughout all five satellite speakers.
2. **Listen to dialogue from the center channel.** Does it sound open? Are whispers and soft voices intelligible?
3. **Integration between sub and satellites.** As the bass notes ascend and descend, do you hear a seamless transition between the low-mids in the satellites and the lower frequencies in the subwoofer? Does the bass seem to emanate from the front wall, where the front L and R speakers are?

Adjusting Your Room or Speakers for best performance

Room acoustics have just as much effect on sound quality as the speakers themselves. In order to obtain the best sound, the way the recording engineers and movie-producers intended, you may need to make just a few minor adjustments to your room set-up. Small adjustments can yield big results in accurate sound performance.

Some equipment and room adjustments are listed below:

- 1. Speaker balance for Front L and R.** The front L and R should be equidistant from the listening position, and at the same height. Also check the speaker set-up on you AVR to ensure the speakers are programmed for the same distance from the listening position.
- 2. Speaker balance for center and rear L and rear R.** Check the AVR's set-up menu and adjust the dB output of each speaker to meet your needs. To increase localization and sound output of the center and/or surrounds try toeing-in the speakers towards the listening position. To decrease the localization and sound output of the center and surround speakers, try aiming them slightly off-axis from the listening position.
- 3. Tonal balance of individual satellites.** If the sound seems heavy in the mid-range and low-mids, try pulling the speakers away from the wall more. The closer they are to the wall, the more resonant the low frequencies become. Conversely if the sound is too bright, place them closer to a wall. Or try dampening the wall space around the speaker, and on the wall opposite the speaker's face. Using wall hangings, drapes, or pillows can help this.
- 4. Tonal balance of subwoofer.** If the subwoofer sounds heavy or muddy, moving it away from the corners and walls will help. Also experiment with the gain, or volume control. It may be set too high.
- 5. Crossover/Volume of subwoofer.** If certain bass notes stick out more than others, corrective adjustments can be made to either the crossover and volume settings, the position of the subwoofer, or both. If certain upper bass notes seem too prevalent, turn the crossover down a few degrees. Also try turning down the volume slightly. If that doesn't help then try turning the crossover up. This may even out the bass response. If it's still not quite right then change the position of the subwoofer - pull it away from walls, corners, anything that resonates. Try using the feet to raise it up off the floor as this decreases the floor vibrations from the sub. A little patience will be rewarded greatly, so take your time with the subwoofer. It's usually the hardest to calibrate to your room.

Troubleshooting

Setting up a home theater system can seem like a daunting task. The speaker connections are usually the easiest part. It is important to plan out how you will be connecting your components and speakers before you start. Read the instructions provided with your components *even if you don't usually read instructions*. You will save yourself a lot of time and potential aggravation. Below are possible solutions to some common problems.

I'm certain all my equipment is hooked up correctly. Why don't I have sound?

- Check your receiver to see if it has *A and B* or *1 and 2* buttons or switches to control the output to two sets of speakers. If this is the case, check to make sure that this switch is set to correspond with your speaker connections.
- Your receiver may also have a button or switch marked *Tape Monitor* or it may simply say *Tape*. First turn the volume all the way down on your receiver. Turn off the "tape" monitor function by making sure that the button or switch is not depressed or in the "on" position.

Why don't I get any bass?

- Check to make sure that the powered subwoofer is plugged in to a working power outlet. The power indicator lamp should light up.
- Check to make sure that the sub's *gain* (volume) knob is set high enough and that the *frequency* knob is set between 85 and 120 Hz.
- Try reversing the phase of the subwoofer using the phase switch on the rear panel.
- The position of the woofer in a subwoofer/satellite system in a room with respect to walls and floors will have a major influence on the bass output from your speakers. Generally, a speaker will have the MOST bass when it's in a corner, a little LESS when it is against the wall but not in a corner, and LEAST when it is away from the walls and off the floor. If you are getting low bass output and your speakers are in phase, experiment with the room position of your speakers. See our *Speaker Placement* section for a more detailed discussion on how room position influences the bass output of speakers.
- If you have a Dolby Digital receiver, be sure that the speaker selection is set to small so that the low level signal is being sent to the subwoofer. (see your receiver manual)

Why is there no sound from the rear channels?

Make sure the speakers are attached to the rear channel outputs, and your receiver is in surround sound mode. A simple test for correct set-up of your receiver and speakers is to use the test tone function of your receiver or decoder. Refer to your receiver's manual for instructions on how to perform this test.

Note: In general, when watching movies, the amount of sound coming from the rear speakers is much less than that coming from the front and center speakers. When listening to music in stereo the rear speakers will not be activated.

Why is there no sound from the center speaker?

In order to get center channel output, your receiver must be in Pro Logic, or Dolby Digital surround mode and the program source must be in a surround format. Use the Dolby test tone function mentioned above to check the set-up of your speakers and receiver. See your receiver or preamplifier owner's manual for complete instructions.

Why am I getting ONLY center channel output from TV broadcast or videotape?

The station is broadcasting in Mono, not Stereo. If you're playing a videotape and get only the center channel, the movie is not in stereo and/or you have a Mono VCR. You need a stereo VCR to get surround sound from prerecorded tapes. Rental tapes of movies that have been in circulation for months may have poor sound quality.

How can I turn the speakers on my TV on and off?

Most TVs have a switch on the back panel, or an on-screen menu that needs to be accessed. If the line output of your TV is marked "variable," you'll need to turn up the volume on your TV and then turn off the speakers so they do not interfere with the sound from your surround sound speaker system. See your TV owner's manual for details.

Resources

Call us at 888-880-8992 if this information doesn't solve your problems or if you have additional questions. You can also visit our web site at: www.aperionaudio.com, and send email to: customerservice@aperionaudio.com.

Technical Specifications:

Aperion Audio 512D-LR & 512D-C

Frequency response (+/- 3 dB): 60hz to 20Khz
Nominal speaker impedance: 6-8 ohms
Maximum recommended power (continuous): 50 watts
Maximum recommended power (average): 100 watts
Maximum recommended power (peak): 150 watts
Minimum recommended power: 50 watts
Sensitivity/efficiency (1 watt @ 1 meter): 86 dB
Speaker enclosure type: 2 Way Vented, Video Shielded
Tweeter (diameter): 1"
Woofers (diameter): 5.25"
Dimensions (HxWxD): 6.75" X 11" X 6.75" (7.25" with grill)
Weight: 11 pounds

Aperion Audio SW-12 Subwoofer

Frequency response (+/- 3 dB): 20hz to 180hz
Amplifier power output: 250 watts
Speaker enclosure type: Vented, Self-Powered Subwoofer
Sensitivity/efficiency (1 watt @ 1 meter): 92 dB
Variable crossover range: 40-160hz
Variable phase adjustment: 0 to 180 Degrees
Variable volume control
Auto-sensing 3-position power switch
Low & High level inputs & outputs
Woofers diameter: 12"
Dimensions (HxWxD): 20.5" x 15" x 21.5"
Weight: 66 pounds

Aperion Audio SW8-APR Subwoofer

Frequency response (+/- 3 dB): 35hz to 180hz
Amplifier power output: 150 watts
Speaker enclosure type: Sealed, Self-Powered Subwoofer
Sensitivity/efficiency (1 watt @ 1 meter): 88 dB
Variable crossover range: 40-180hz
Phase adjustment: 0 or 180 Degrees
Variable volume control
Auto-sensing 3-position power switch
Low & high level inputs & outputs
Woofers diameter: 1-8" Active, 2-8" Passive
Dimensions (HxWxD): 13" x 12.25" x 12.5"
Weight: 27.5 pounds

Limited Warranty

Aperion Audio provides a limited **five (5) year** warranty on its speakers and a **one (1) year** limited warranty on subwoofer amplifiers which covers all defects in material and workmanship with the following specific exceptions:

- Damage caused by improper installation or adjustment
- Damage caused by accident, unreasonable use, or neglect
- Damage caused by an act of God
- Damage from failure to follow instructions contained in the Owner's Manual
- Damage from repairs performed by someone not authorized by Aperion Audio
- Any unit on which the serial number has been effaced, modified, or removed
- Damage occurring during shipment, other than that arranged by Aperion Audio
- Units which have been altered or modified in design, appearance or construction

This warranty covers only the actual defects within the products themselves. IT DOES NOT cover costs of installation in (or removal from) a fixed installation, or normal setup, claims based on any misrepresentation by the seller, or performance variations resulting from installation related circumstances such as signal quality, AC power or incompatibilities with other system components.

During the warranty period, Aperion Audio will, at its option, either repair the defect, or replace the defective product, or the defective parts, or components thereof with the then current product/component in use by Aperion Audio, at no charge to the owner for parts and labor covered by this warranty. If necessary repairs are not covered by this warranty, or if a unit is examined which is not in need of repair, you will be charged for the repairs and/or the examination.

If non-warranted repairs are needed, we will notify you of the estimated cost and ask for your authorization to perform said repairs. You must pay shipping charges incurred in getting your product to the factory. We will pay the return shipping charges if the repairs are covered by the warranty. Please save the original shipping cartons as the unit MUST be returned in the original carton and packing. (Replacement cartons are available at a modest charge.)