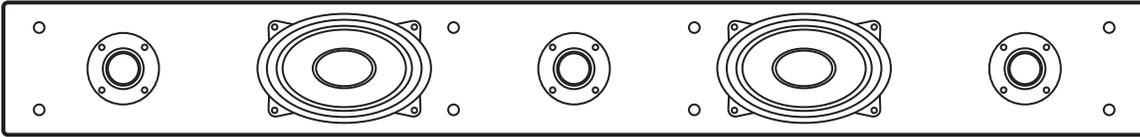


FS-7.0

7-Channel Soundbar

Instruction Manual



Atlantic
TECHNOLOGY

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FS-7.0 7-Channel Soundbar

Thank you for choosing Atlantic Technology products. Your new speaker components are precision-crafted to give you years of enjoyable, trouble-free service. This manual covers the Atlantic Technology FS-7.0 speaker system. It will show you how to incorporate this system into your present setup, as well as how to assemble a complete system. This system can be used with all current and past sound formats including Stereo, Dolby Surround®, Pro Logic®, Dolby Digital 7.1 and 5.1®, Dolby Digital EX®, DTS®, DTS ES®, DTS ES Discrete®, DTS Neo:6®, DVD-Audio and SACD Audio.

IMPORTANT: *Although it may seem like asking for driving directions, please take a few moments to read all of this booklet. It has many helpful tips and ideas on properly setting up and using your system. We promise that if you take the time to read and follow these tips you'll get better system performance and more enjoyment.*

Unpacking the Speaker

Use care when unpacking the speakers. Remember to keep the original boxes and packing material, in the unlikely event the speakers need servicing, or if you move.

For Future Reference

Record the serial number and date of purchase of the speaker here. The serial number is found on the back of the enclosure.

Serial Number _____

Date of Purchase _____

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Description

Model FS-7.0 7-Channel Soundbar

The Model FS-7.0 Sound Bar Loudspeaker is an integrated high-performance loudspeaker containing all seven channels of speakers in a single elegant, slim enclosure. The speaker can be either wall-mounted above or below the video display, or it can be placed on a shelf or in a flat-screen wall mount bracket that has the appropriate speaker adapter.

This speaker uses several advanced technologies to produce convincing 7-channel surround sound from a conventional-looking sound bar. The three 1" soft-dome tweeters deliver the high-frequency content for the three front LCR channels of the home theater system. These tweeters were chosen for their exceptionally flat, accurate response and wide dispersion.

The two 4 x 6-inch speakers on the front baffle are unique: Each is a dual voice coil driver—the left driver handles the left front channel and “half” of the center channel, while the right driver plays the right front channel and “half” of the center. This is a particularly advantageous situation, in that it preserves the tightly-focused LCR “imaging” that is the hallmark of a top-quality home-theater sound system, but saves space and reduces cost by only requiring two woofers instead of three. Additionally, the use of 4 x 6-inch drivers minimizes the height of the FS-7.0's cabinet compared to what it would be if 5 ¼" drivers were used while retaining virtually the same radiating area, for strong acoustic output.

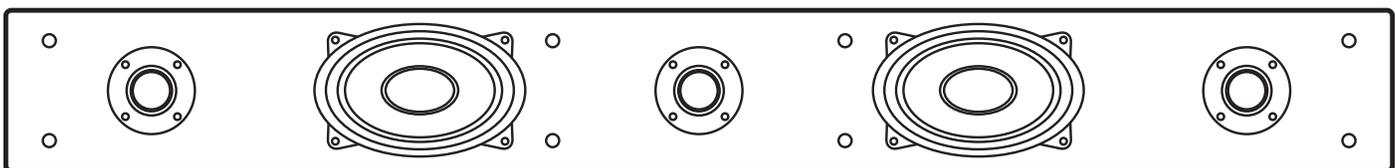
Even greater innovation is at work in the side-firing surround drivers. First, the angle at which the surround drivers fire back towards the rear wall has been precisely calculated to produce the greatest sense of surround “envelopment.”

Second, these drivers are patent-pending *triple* voice coil drivers: One voice coil handles part of the corresponding front left- or right-channel information, which imparts an impressive sense of spaciousness and “wideness” to the sound since the driver fires away from the primary listening position. The other two voice coils play the side 5.1 and back 7.1 surround channels, which is then reflected off the rear wall, off the side wall and around the listeners' ears.

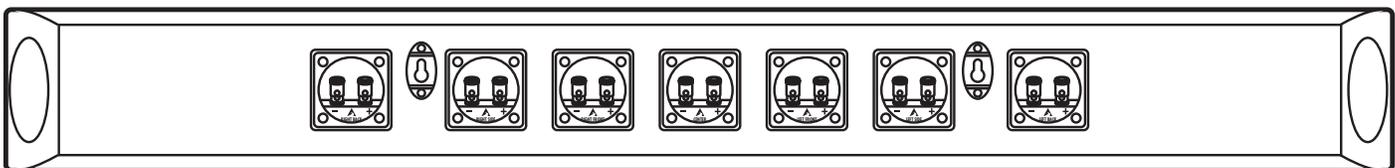
By utilizing these patent-pending drivers in an innovative array and taking full advantage of well-known psycho-acoustic effects, the FS-7.0 creates impressive and convincingly three-dimensional theater sound from virtually any movie soundtrack—*without the need for expensive on-board electronic processing circuitry and built-in amplifiers!*

Full 7-channel surround sound, with the simplicity of connection to a familiar surround receiver—and no speaker boxes cluttering up the room!

Figure 1



FS-7.0 front



FS-7.0 rear

Placement

Speaker Placement and Home Theater

Remember that the primary goal of a good home theater is not to make you believe that you are in a movie theater. It's to make you believe you're in the movie. For a home theater system, place the FS-7.0 speaker either above or below your flat screen display, centered horizontally. See Figure 2.

The FS-7.0 can be used as a set-top or shelf-mounted speaker. Self-adhesive rubber feet are included to prevent vibration, protect the mounting surface and serve to angle the speaker up or down if needed.

You may also simply mount the speaker to the wall using the built-in key-hole brackets.

CAUTION: Because of the high quality components used, the FS-7.0 speaker is very heavy for its size and care must be used when hanging it. Be sure to use a strong screw to drive into the wall, one whose head and shaft will fit properly within the keyhole opening and slot. Also be sure to drive the screw directly into a stud or to use a mounting device (such a molly-bolt) that is capable of safely holding the speaker's weight. Never simply drive a nail or screw into sheet rock or other wall materials, as this mounting method may not be sufficient to safely support the weight of the speaker.

NOTE: Always consult a knowledgeable installer regarding the proper mounting hardware to use with your speakers. Mounting the speaker safely and securely is the responsibility of the owner.

See Figures 3 and 4 on next page for mounting instructions

Figure 2
Speaker Placement

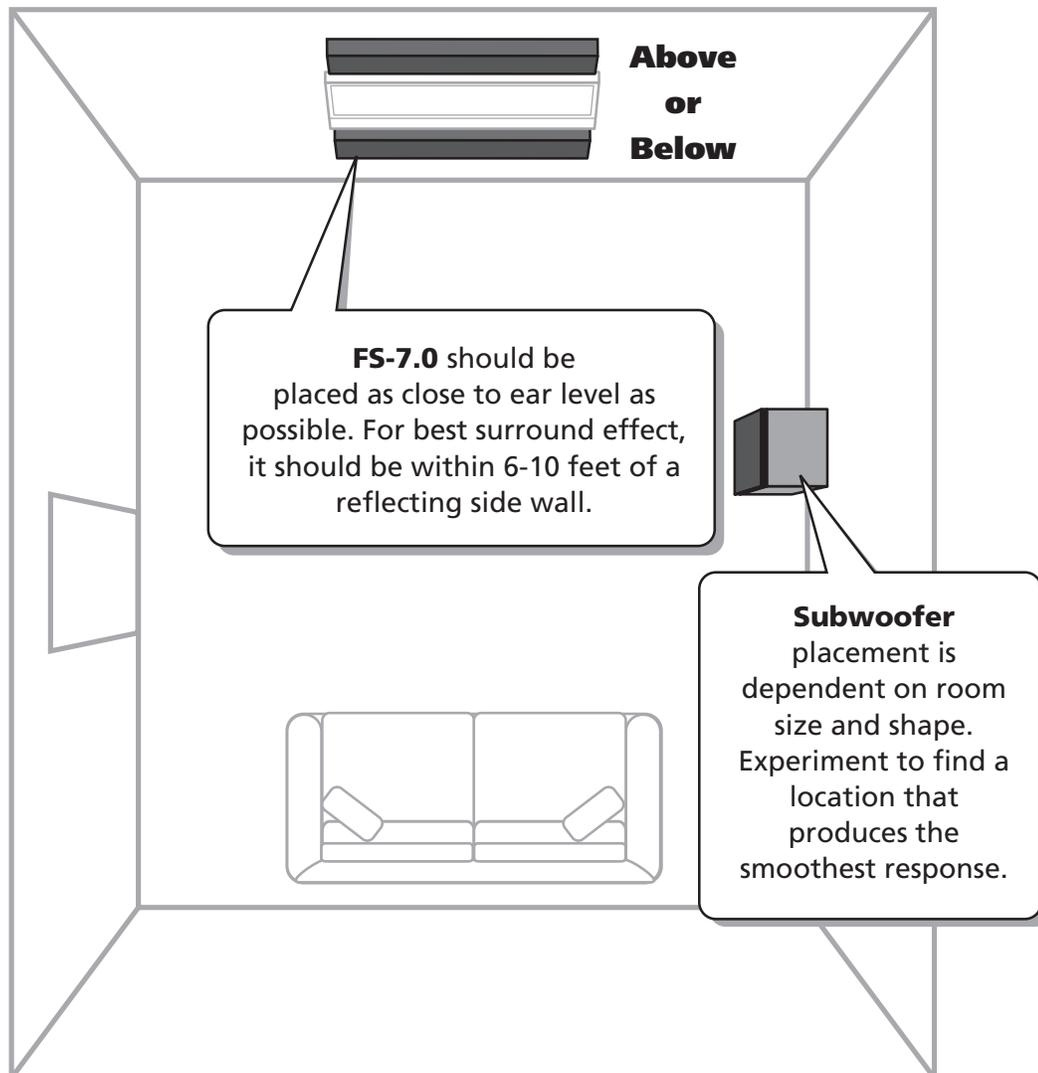
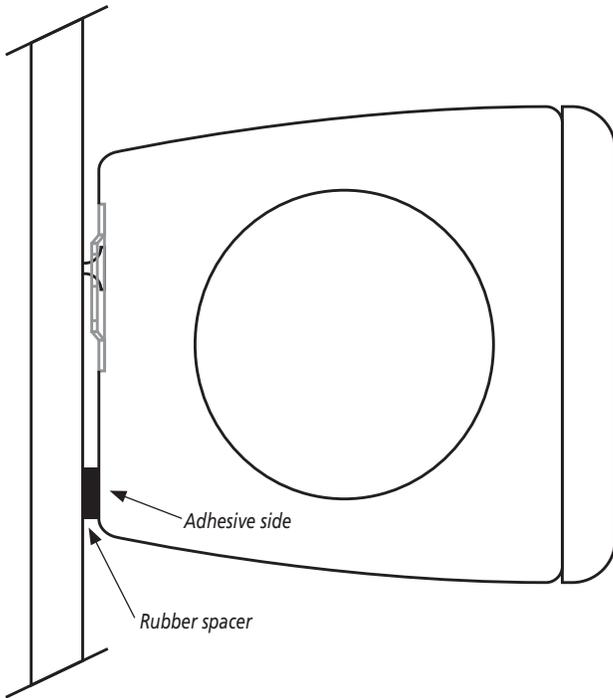
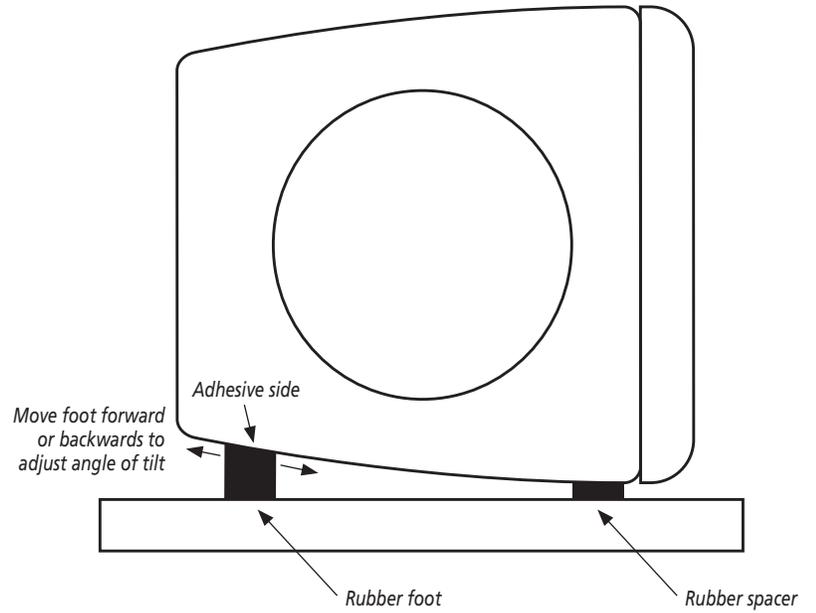


Figure 3

Small round rubber spacer (2 per package) placement for wall mount and table mount isolation

**Figure 4**

Large rectangular rubber foot (2 per package) and small round rubber spacer (2 per package) placement for shelf or set-top placement



Receiver Setup for use with FS-7.0

Setting the OUTPUT Levels:

1. In the Receiver Setup Menu:
 - a. Go to Speakers or Audio Setup, Find Speaker Loudness or Volume
 - b. For the Left, Center, and Right Channels, lower the output of each to a -3dB, (minus 3dB).
 - c. For each Rear and/or Surround Channel, Left and Right, leave the output at 0dB.
2. If you have a particularly big room, or want a little more surround effect, then raise the Surround Channels to +1 or +2dB (leaving the front Left, Center, and Right channels at -3dB).

- e. If the left or other sidewall is more than 10 feet away, simply adjust the distance to the receiver's maximum setting. That will provide a satisfying surround effect in most circumstances.

IMPORTANT NOTE: *The power recommendation for this speaker system assumes that you will not operate your amplifier/receiver in a way that produces distortion. Even rugged speakers like these can be damaged by an amplifier driven into audible distortion. The harsh amplifier distortion ("clipping") that occurs in this situation will eventually cause damage to the speaker system. This type of damage may be cumulative and can build up over time, as the amplifier is driven into overload again and again. Such damage is easily identifiable through examination of the damaged speaker's voice coil and is not covered by the warranty.*

This speaker will play very loudly when provided with enough undistorted power to do so. If necessary, consult your dealer or Atlantic Technology for additional information.

Setting the Delay Distance on Your Receiver for Best Results

The FS-7.0 will deliver convincing 3-dimensional surround sound from its single enclosure. For maximum effect, we recommend you set your receiver as follows:

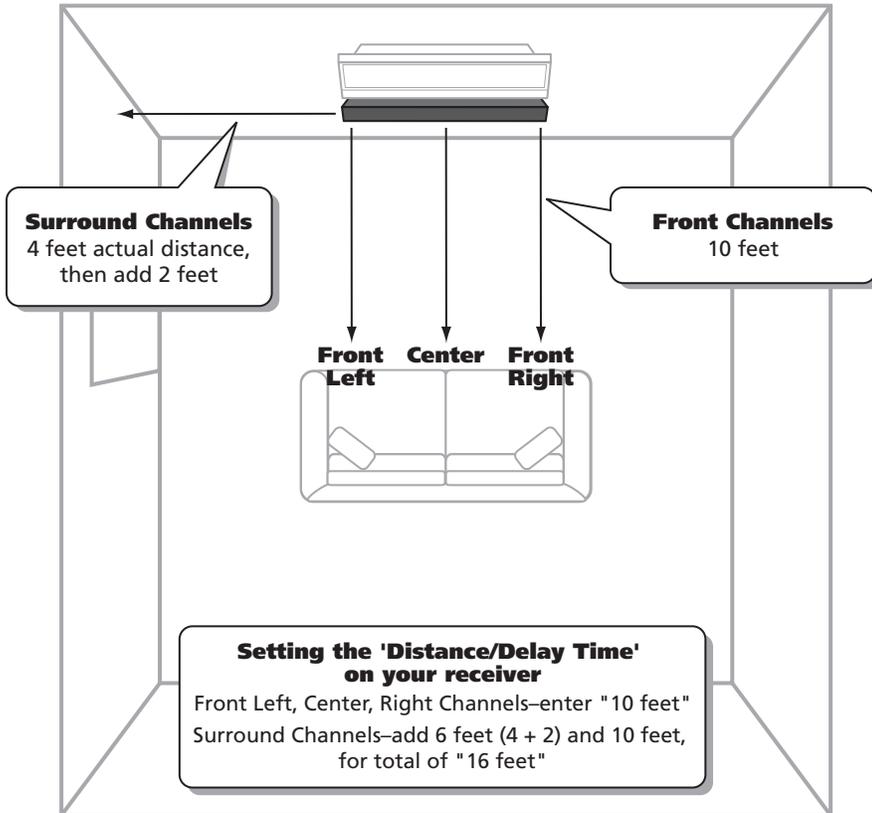
Most AV Receivers today make it pretty easy to set the "Time Delay" for each of the different channels. In the Receiver Setup, usually in the Speaker menu area, one option will be "Delay" or "Distance" It will then take you to each Channel and ask you to enter the "number of feet" you normally sit from each speaker.

1. For the Left, Center, and Right Channels, for example, if your listening position is 10ft from the front of the speaker bar, then enter "10 feet" for the left Channel, "10 feet" for the Center Channel, and "10 feet" for the right Channel. Simply measure the distance from where you sit to the front of the speaker bar and enter that number.

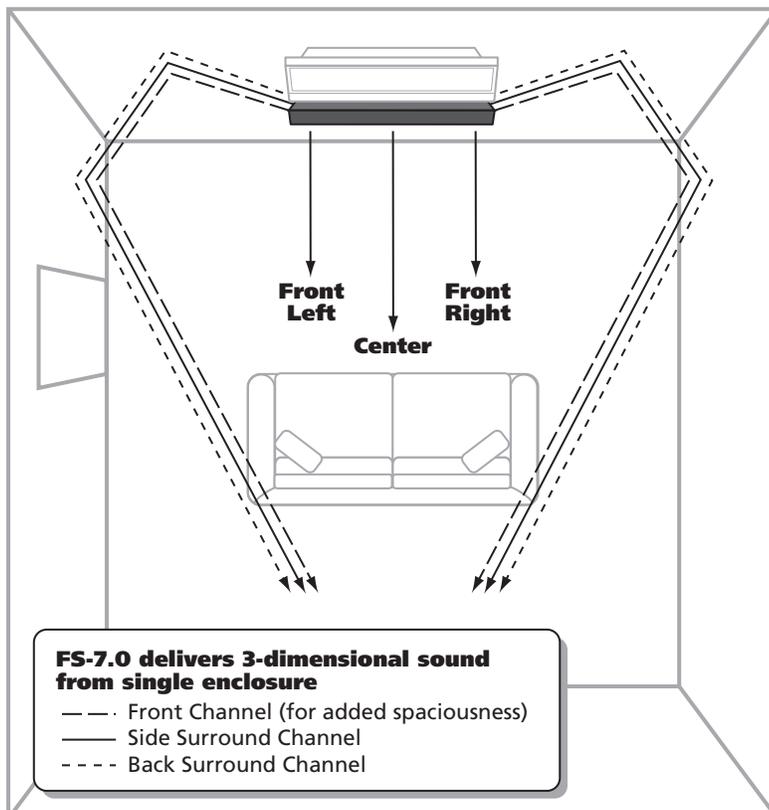
Sounds from the left and right Side Surround and left and right Back Surround Channels come from the speakers at each end of the FS-7.0, which are angled to the side and back.

2. **IMPORTANT:** The key here for distance measurement depends on how far away the closest side wall is to either the left or right FS-7.0 surround speakers. For example, let's say right side wall is closest to the bar. Measure the distance from the right rear speaker in the FS-7.0 to the right side wall. Let's say it is 4 feet.
 - a. Add 2 feet to that distance, so now you have 6 feet.
 - b. Then add that 6 feet to the distance measured from the front of the speaker bar to your sitting area, which was 10 feet, in the example above. Now you have 10 feet + 6 feet, which totals 16 feet.
 - c. Put the total feet, 16 feet into the "Delay" for the Right Side Surround, and the same for the Right Back channel if your setup is for 7.1 instead of 5.1.
 - d. Repeat the procedure for the other surround speaker. Note that it may yield a different result, since the distance to the side wall may be different on one side of the FS-7.0 compared to the other.

Setting the Delay Levels on Your Receiver



Speaker Radiation Pattern



System Setup

System Setup When Using a Subwoofer

Some older surround sound decoders and receivers offer a choice of “Normal” or “Wide-band” modes for the center channel speaker. The FS-7.0 speaker is designed to be used in the Normal mode.

Modern digital processing multi-channel systems provide a Bass Management menu, which typically requires you to select between “Small” or “Large” speakers during system set-up. When using this speaker with a dedicated subwoofer, please set all the speakers on the receiver’s set-up menu to Small.

Many of the newer surround receivers and processors give you a choice of subwoofer-to-satellite crossover frequency. If yours does, we recommend that you start with a setting of around 80Hz for the LCR and 120Hz for the surrounds for the smoothest blend between the subwoofer and the FS-7.0.

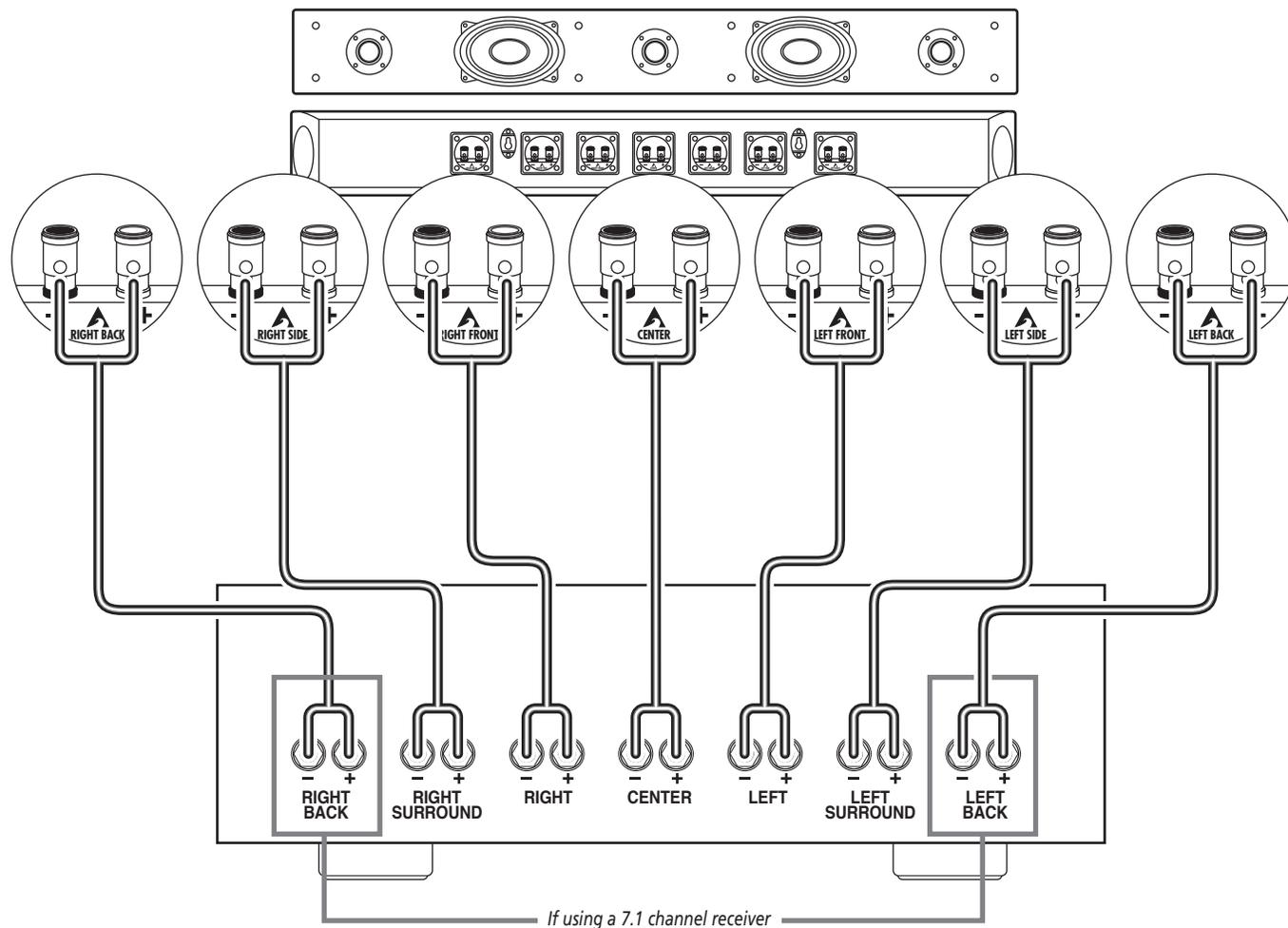
System Setup Without a Subwoofer

For some listeners, a full home theater setup with a separate subwoofer may not be feasible or desired. In that case, the FS-7.0 will provide high quality sound all by itself—far better than the small speakers built into most televisions. In those situations, we recommend you set your surround sound receiver’s set-up menu to “Subwoofer—No.”

Then set the speaker's size to “small.” Set the front crossover to 60Hz. Set the surround crossover to 100Hz. That way, all the bass from 60Hz and above will be sent to the FS-7.0, which will result in a full-bodied, credibly full-range sound to be reproduced by the FS-7.0, while at the same time, preventing the very low bass signals (below 60Hz) from overdriving the receiver’s amplifier section at high output levels.

System Wiring

Be sure to connect red (+) on the speaker to red (+) on the amplifier and black (-) on the speaker to black (-) on the amplifier.



Connecting Your System

We recommend that you connect your system using high quality dual conductor stranded wire of 16 gauge or heavier, for lengths up to 25 feet (8m) . Remember, the lower the gauge number, the heavier the wire. Use heavier gauge wire for longer runs. Please contact your audio/video dealer or installer for specific cable recommendations and further information regarding special circumstances.

WARNING: *To prevent risk of electrical shock or damage to your equipment, always switch off the amplifier or receiver when making any system connections.*

- 1. Remove ½" (13mm) of insulation from each wire end.**
- 2. Twist the stranded wire together, keeping the two ends separate.**
- 3. Place the appropriate wire through the postholes in the connectors. These holes are revealed when you push down on the post.**

It's important to observe polarity while making speaker connections: red (+) terminals on the amplifier to red (+) on the speaker, black (-) on the amplifier to black (-) on the speaker. Look carefully at the wires you are using and note that one of the conductors of each pair will typically be identified by color, printing on the outer jacket, ridges on the outer jacket, or a thread intertwined with the wire strands. By convention, the marked wire is connected to the red (+) terminal. Whether you are connecting a complete system, or adding a single speaker component to your present system, the wiring should look like the system wiring diagrams on the opposite page

WARNING: *Before turning on the amplifier, be certain that no stray wire strands are touching across any terminals as this might damage your amplifier.*

Finally, check the polarity of your speakers by listening to some stereo music with good bass content. If the sound seems "hollow", unusually spread out, or seem to have weak bass, recheck your connections for proper polarity and correct any out of phase connections by reversing the connections to one speaker only, if necessary.

Care of Your Speakers

Clean your cabinets using a soft, lint-free cloth. If you wish, you can slightly moisten the cloth with plain water. Do not use any other cleaning agents or chemicals. Be careful not to get any water on the driver cones or tweeter domes. After carefully removing the grilles from the speakers by pulling them forward, gently clean them with a quick pass from a vacuum cleaner with a brush attachment. This should remove any dust accumulation.

Avoid placing your speakers in direct sunlight or near a source of heat that may, over time, damage the finish.

IMPORTANT: SAVE YOUR BOXES! *If you can do so, save the cartons, packing pieces, and plastic bags that came with your speakers. They will be useful in case you move or have to ship your loudspeakers for any reason. In any case, save all packing materials until you are certain that the systems have suffered no damage in shipment. If you find such damage, either visible or internal, contact your dealer immediately.*

Specifications

Model	FS-7.0
Type	7-Channel Soundbar
Drivers	Woofer LCR (2) 4 x 6" (102 x 153mm) Dual Voice Coil Surround (2) 3¼" (83mm) Triple Voice Coil Tweeter (3) 1" (25mm) soft dome
Frequency Response	75Hz – 20kHz ±3dB
Nominal Impedance	8 Ohms
Crossover Frequency	2.5kHz
Sensitivity	89dB
Recommended Amplifier Power	10 – 125 Watts RMS
Dimensions w/ grille (W x H x D)	40 x 4¾ x 5¼" 1016 x 121 x 134mm
Weight (ea)	37lbs; 17kg

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