FS-7.1 7-Channel Soundbar

nstruction

Atlantic

Table of Contents

2 Unpacking the Speaker

- 3 Description
- 3 Model FS-7.1 7-Channel Soundbar
- 4 Placement
- 4 Speaker Placement and Home Theater
- 5 Mounting
- 6 Receiver Setup for use with FS-7.1
- 6 Setting the OUTPUT Levels
- 6 Setting the Delay Distance on Your Receiver for Best Results
- 7 Setting the Delay Levels on Your Receiver
- 7 Speaker Radiation Pattern
- 8 System Setup
- 8 System Setup when using a Subwoofer
- 8 System Setup Without a Subwoofer
- 9 System Wiring
- 10 Connecting Your System
- 10 Care of Your Speaker
- 11 Specifications

FS-7.1 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-7.1 speaker system. This speaker 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 speaker. Remember to keep the original box and packing material, in the unlikely event the speaker needs 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

The contents of this manual are Copyright ©2011 by Atlantic Technology International, Corp., and may not be duplicated or reproduced by any means, whether physical, electronic or otherwise without prior written consent from Atlantic Technology International, Corp.

Atlantic Technology and the Atlantic Technology logo are registered trademarks of Atlantic Technology International, Corp.

Specifications are those in effect at the time of printing. Atlantic Technology International, Corp. reserves the right to change specifications or designs at any time without notice without obligation to modify existing units.

Description

Model FS-7.1 7-Channel Soundbar

The Model FS-7.1 Surround 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 attached to a flatscreen 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.

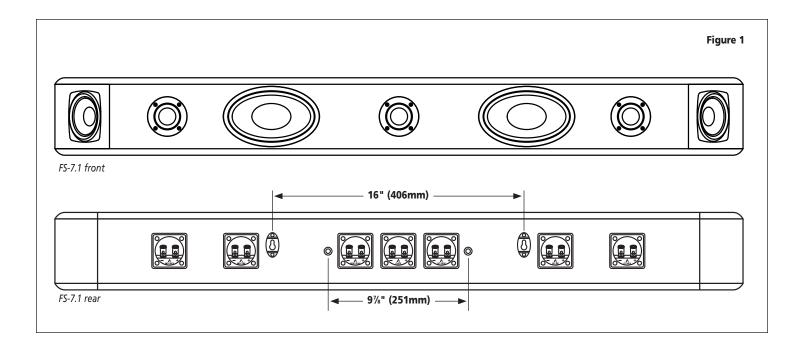
The two 4 x 6-inch speakers on the front baffle are unique: Each is a dual voice coil driver—the left driver handles the left front channel and "half" of the center channel, while the right driver plays the right front channel and "half" of the center. This is a particularly advantageous situation, in 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 drivers instead of three. Additionally, the use of 4 x 6-inch drivers minimizes the height of the FS-7.1'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 out into the room has been precisely calculated to produce the greatest sense of surround "envelopment" by the listeners.

These drivers are also dual voice coil drivers: The two voice coils play the side 5.1 and back 7.1 surround channels, which is then reflected off the side wall and around the listeners' ears.

By utilizing these unique drivers in an innovative array and taking full advantage of well-known psycho-acoustic effects, the FS-7.1 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!



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-7.1 speaker either above or below your flat screen display, centered horizontally. See Figure 2.

The FS-7.1 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.

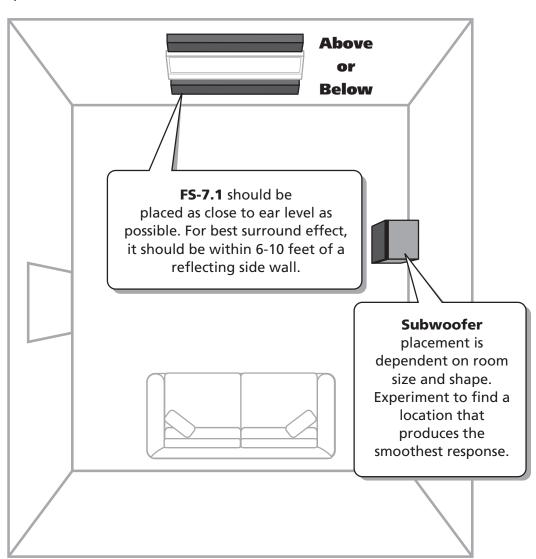
You may also simply mount the speaker to the wall using the built-in key-hole brackets or attach it to a suitably equiped articulating flat-panel TV wall mount via the threaded inserts on the rear panel of the FS-7.1.

CAUTION: Because of the high quality components used, the FS-7.1 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 mollybolt) 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



Mounting

Figure 3Small round rubber spacer (4 per package) placement for wall mount and table mount isolation

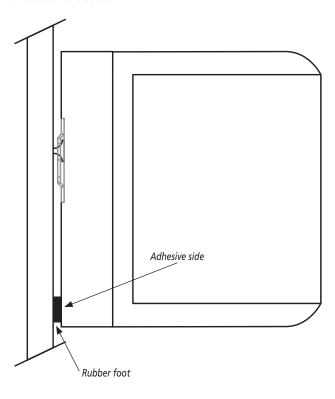
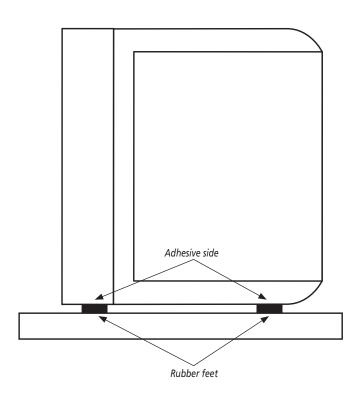
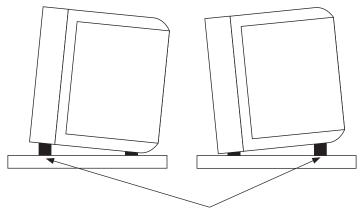


Figure 4Large rectangular rubber foot (2 per package) and small round rubber spacer (2 per package) placement for shelf or set-top placement





Use taller feet for up or down tilt

NOTE: Tilting the speaker is primarily for visual aethetics, as the excellent dispersion of the FS-7.1's drivers generally yield outstanding sound distribution without such tilting.

Receiver Setup for use with FS-7.1

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).

Setting the Delay Distance on Your Receiver for Best Results

The FS-7.1 will deliver convincing 3-dimensional surround sound from it's single enclosure. For maximum effect, we recommend you set your receiver as follows:

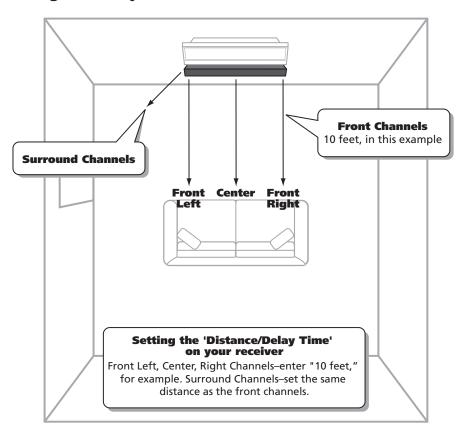
Most AV Receivers today make it pretty easy to set the "Time Delay" for each of the different channels. In the Receiver Setup, usually in the Speaker menu area, one option will be "Delay" or "Distance." It will then take you to each Channel and ask you to enter the "number of feet" you normally sit from 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-7.1, which are angled to the side.
- 2. Set the distance for the surround channels the same as for the front channels. For example, if the fronts are set to "10 feet," set the side and back surround channels to "10 feet" also.

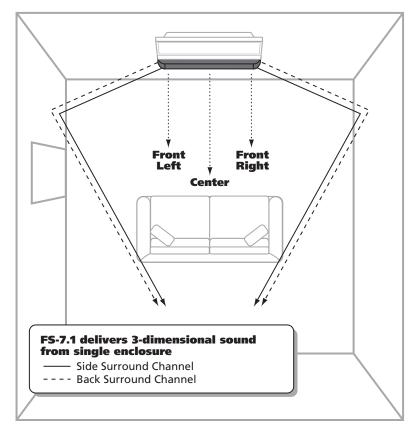
IMPORTANT NOTE: The power recommendation for this speaker system assumes that you will not operate your amplifier/receiver in a way that produces distortion. Even rugged speakers like these can be damaged by an amplifier driven into audible distortion. The harsh amplifier distortion ("clipping") that 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 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-7.1 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.

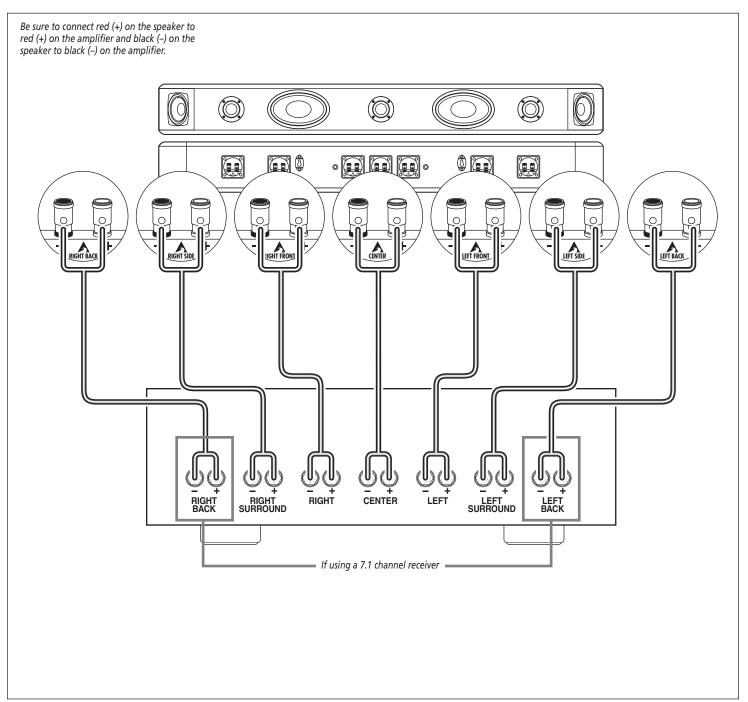
Many of the newer surround receivers and processors give you a choice of subwoofer-to-satellite crossover frequency. If yours does, we recommend that you start with a setting of around 80Hz for the LCR and 120Hz for the surrounds for the smoothest blend between the subwoofer and the FS-7.1.

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-7.1 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—Yes."

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-7.1, which will result in a full-bodied, credibly full-range sound to be reproduced by the FS-7.1, 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



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.
- Twist the stranded wire together, keeping the two ends separate.
- 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.

Care of Your Speaker

Clean your cabinet 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 speaker, gently clean them with a very slightly damp, lint-free cloth.

To do so, use a fine awl or pick to gently pry the center grille forwards. Protect the cabinet's pry area with a piece of thin cardboard (like a matchbook cover, etc.).

The screws which secure the end grilles will then be visible.

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

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

Specifications

Model		FS-7.1		
Туре		7-Channel Soundbar		
Drivers	Woofer LCR Surround Tweeter	(2) 4 x 6" (102 x 153mm) Dual Voice Coil (2) 3¼" (83mm) Dual Voice Coil (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)		43½ x 5½ x 5¼" 1105 x 140 x 134mm		
Weight (ea)		37lbs; 17kg		

Specifications are those in effect at the time of printing. Atlantic Technology reserves the right to change specifications or appearance at any time without notice.

Dolby Digital, 5.1, Dolby Stereo and Dolby Pro Logic are trademarks of Dolby Laboratories Licensing Corporation. DTS is a registered trademark of DTS Technology.

