AVR 3700, AVR 370, AVR 370C, AVR 2700, AVR 270, AVR 270C

Audio/Video Receiver

harman/kardon
by HARMAN

AVR

Introduction

Thank you for choosing a Harman Kardon product!

This quick-start guide contains all the information you need to connect and set up your new Harman Kardon audio/video receiver (AVR).

To conserve our natural resources, your AVR does not include a printed owner's manual. An owner's manual containing complete information about operating all of your new AVR's features is available at our Web site. Go to www.harmankardon.com and download the *AVR 3700, AVR 370, AVR 370C, AVR 2700, AVR 270, AVR 270C Owner's Manual.*

Place the AVR

- Place the AVR on a firm and level surface. Be certain that the surface and any mounting hardware can support the AVR's weight.

- Provide proper space above, below, behind and to the sides of the AVR for ventilation. Maintain a clearance of at least 12" (30cm) on each side of, above and behind the unit.

- If you install the AVR in a cabinet or other enclosed area, provide cooling air within the cabinet. Under some circumstances, a fan may be required.

- Do not obstruct the ventilation slots on the top of the AVR or place objects directly over them.

- Do not place the AVR directly on a carpeted surface.

- Do not place the AVR in moist or humid locations, in extremely hot or cold locations, in areas near heaters or heat registers, or in direct sunlight.

Connections

CAUTION: Before making any connections to the AVR, ensure that the AVR's AC cord is unplugged from the AVR and the AC outlet. Making connections with the AVR plugged in and turned on could damage the speakers.

Place Your Speakers

Determine the locations for your system's speakers according to their manufacturer's directions and the layout of your listening room. Use the illustrations below as a guide for 7.1-channel and 5.1-channel systems.
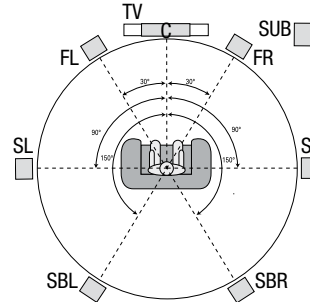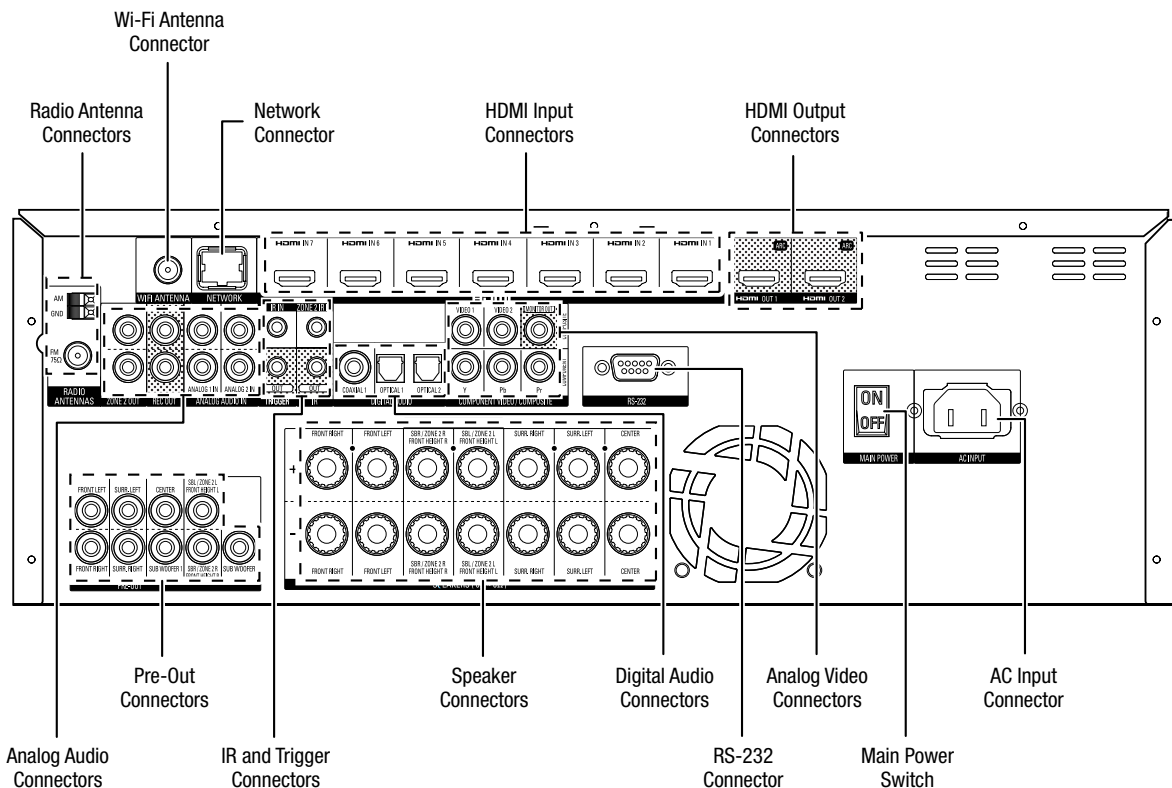
Speaker Positioning for
7.1-Channel Systems
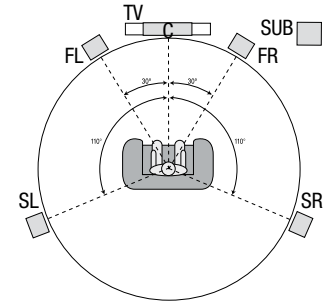
Speaker Positioning for
5.1-Channel Systems

For more detailed speaker placement information, including the use of front height speakers with the Dolby Pro Logic IIz mode, download the complete *AVR 3700, AVR 370, AVR 370C, AVR 2700, AVR 270, AVR 270C Owner's Manual* from www.harmankardon.com.
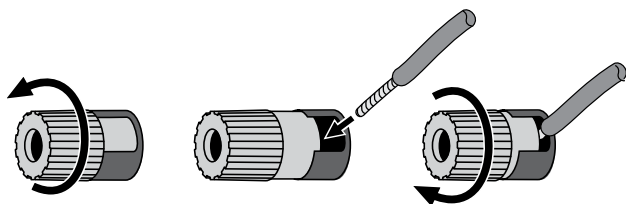
Rear-Panel Connection (AVR 3700 shown)

Note: Connectors will vary for different models. Not all connectors shown will be present on all models.

Connect Your Speakers

How to use the AVR speaker terminals:

1. Unscrew Cap   2. Insert Bare Wire   3. Tighten Cap

Always connect the colored (+) terminal on the AVR to the (+) terminal on the speaker (usually red), and the black (–) terminal on the AVR to the (–) terminal on the speaker (usually black).

IMPORTANT: Make sure the (+) and (–) bare wires do not touch each other or the other terminal. Touching wires can cause a short circuit that can damage your AVR.
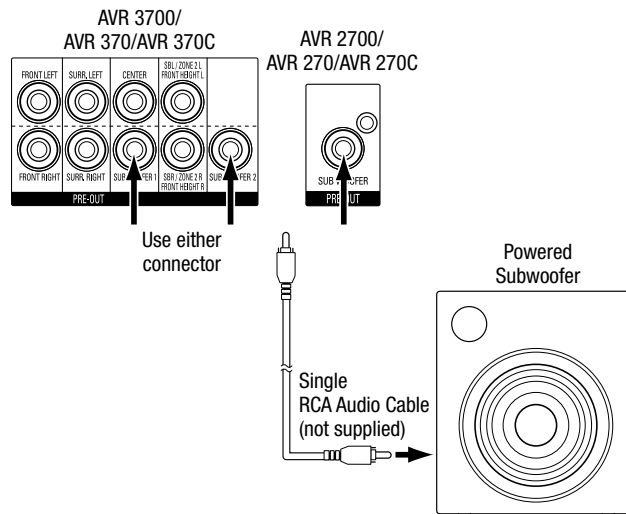
Connect the speakers as shown in the illustration.

Connect Surround Back L/R Speakers
-OR- Front Height L/R Speakers Here
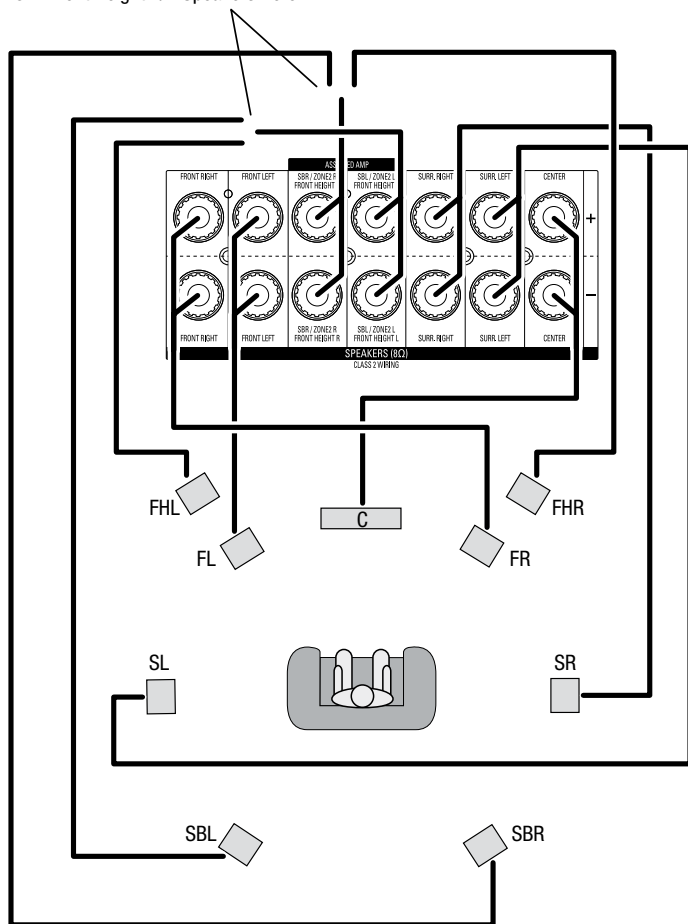
Connect Your Subwoofer

Use a single RCA audio cable to connect your subwoofer to AVR's Sub Woofer Pre-Out connector, as shown in the illustration at the top of the next column. (For the AVR 3700/AVR 370 you can use either the Sub Woofer 1 or Sub Woofer 2 connector when you're using a single subwoofer, or you may connect two subwoofers for increased bass performance in larger listening rooms.) Consult your subwoofer's user manual for specific information about making connections to it.

AVR 3700/
AVR 370/AVR 370C

AVR 2700/
AVR 270/AVR 270C

Use either
connector

Single
RCA Audio Cable
(not supplied)

Powered
Subwoofer

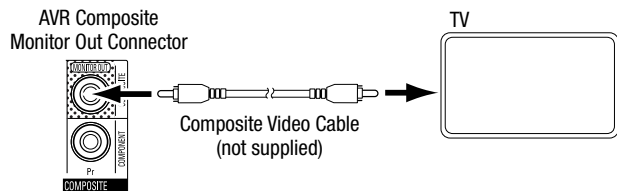# Connect Your TV or Video Display

If your TV has an HDMI connector: Use an HDMI cable (not included) to connect it to the AVR's HDMI Out connector. (For the AVR 3700/AVR 370 you can use either HDMI Out connector.) You do not need to make any other connections to your TV from the AVR or from any of your video source components.

AVR 3700/
AVR 370/AVR 370C

AVR 2700/
AVR 270/AVR 270C

Use either
connector

HDMI Cable
(not supplied)

TV
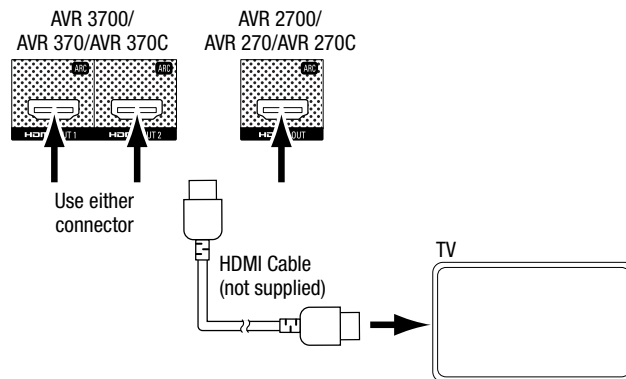
AVR 3700/AVR 370 only: Connect a single TV to either of the HDMI Out connectors. If you have a second TV you can connect it to the AVR's HDMI Out 2 connector. Both TVs will display the same picture.

Note: If your TV is equipped with the HDMI Audio Return Channel Function, you can feed its sound to the AVR via the HDMI Out connection's Audio Return Channel, and it will not require additional audio connections to the AVR. Refer to the complete *Assign the HDMI Audio Return Channel,* on page 9.

If your TV does not have an HDMI connector: Use a composite video cable (not included) to connect the AVR's Composite Monitor Out connector to your TV's composite video connector.

AVR Composite
Monitor Out Connector

TV

Composite Video Cable
(not supplied)

Note: The HDMI connection to your TV is preferred. If you use the composite video connection to your TV, you will not be able to view the AVR's on-screen menus and will need to use the AVR's front-panel display to set up the AVR.

Connect Your Audio and Video Source Devices

Source devices are components where a playback signal originates, e.g. a Blu-ray Disc™ or DVD player; a cable, satellite or HDTV tuner; etc. Your AVR has several different types of input connectors for your audio and video source devices: HDMI, component video, composite video, optical digital audio, coaxial digital audio and analog audio. The connectors are not labeled for specific types of source devices; they are labeled numerically, so you can connect your devices according to your individual system's make-up.

Your AVR's various source buttons have default assignments to different input connectors (listed in the "Default Connector(s)" column of the table below). For ease of setup, you should connect each source device to the connector where the corresponding default source button is assigned (e.g., connect your Blu-ray Disc player to HDMI 1).

However, you can connect your source devices as you wish and re-assign any of the input connections to any of the Source Buttons listed in the table according to where you actually connect each of your source devices.

As you connect your various source devices, fill out the "Connected Component" column in the table – it will make it easier for you to assign the various source buttons after you have completed making all of the connections. (You will make any changes to the source-button assignments and fill in the "Assigned Connector(s)" column later in the setup process.)

Note: You cannot assign connectors to the Network, Radio and USB source buttons.

Source Button	Default Connector(s)	Assigned Connector(s)	Connected Device
Disc	HDMI 1		
Cable/Sat	HDMI 2		
Game	HDMI 3		
Media Server	HDMI 4		
DVR	HDMI 5		
TV	None/Optical Digital Audio 1		
Aux	HDMI Front		
A (red)	HDMI 6		
B (green)	HDMI 7		
C (yellow)	Composite Video 1/Analog Audio 1		
D (blue)	Composite Video 2/Analog Audio 2		

Monitor Output Connector	———	———	Connected Device
HDMI Out 1	———	———	
HDMI Out 2 (AVR 3700/AVR 370 only)	———	———	
Composite Video Monitor Out	———	———	

| Record Output Connector	———	———	Connected Device
Analog Audio Rec Out	———	———	

Source Buttons and Assigned Connectors

HDMI Devices

If any of your source devices have HDMI connectors, using them will provide the best possible video and audio performance quality. Since the HDMI cable carries both digital video and digital audio signals, you do not have to make any additional audio connections for source devices you connect via HDMI connectors.

AVR HDMI Connectors

HDMI Cable (not supplied)

To HDMI Output

HDMI-Equipped Source Device
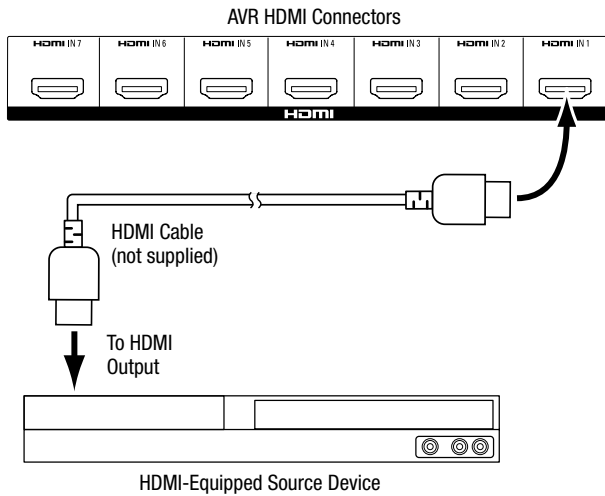
Component Video Devices

If any of your video source devices have component video connectors (and do not have HDMI connectors), using the component video connectors will provide superior video performance. You will also need to make an audio connection from the source device to the AVR.

AVR Analog Video Connectors

Component Video Cable (not supplied)

To Component Video Outputs

Component Video-Equipped Source Device
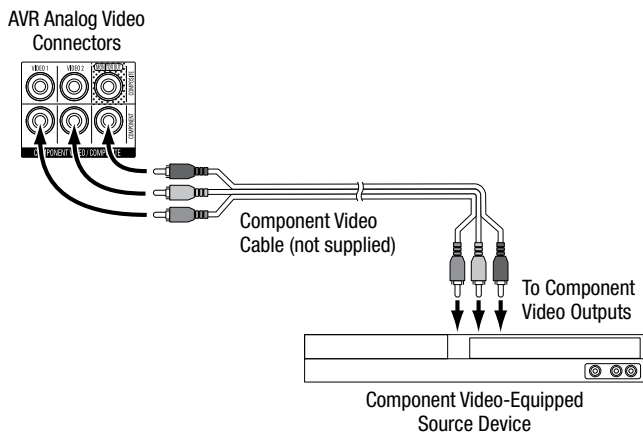
Composite Video Devices

Use composite video connectors for video source devices that don't have HDMI or component video connectors. You will also need to make an audio connection from the source device to the AVR.

AVR Analog Video Connectors

Composite Video Cable (not supplied)

To Composite Video Output

Composite Video-Equipped Source Device
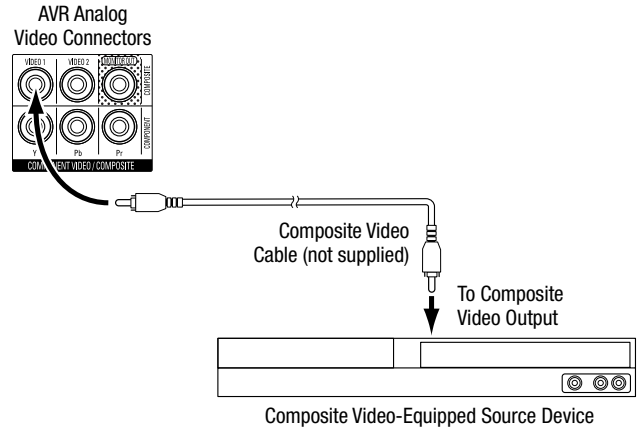
Optical Digital Audio Devices

If your non-HDMI source devices have optical digital outputs, connect them to the AVR's optical digital audio connectors. NOTE: Make only one type of digital connection (HDMI, optical or coaxial) from each source device.

AVR Digital Audio Connectors

Optical Digital Audio Cable (not supplied)

To Optical Digital Audio Output

Optical-Equipped Source Device
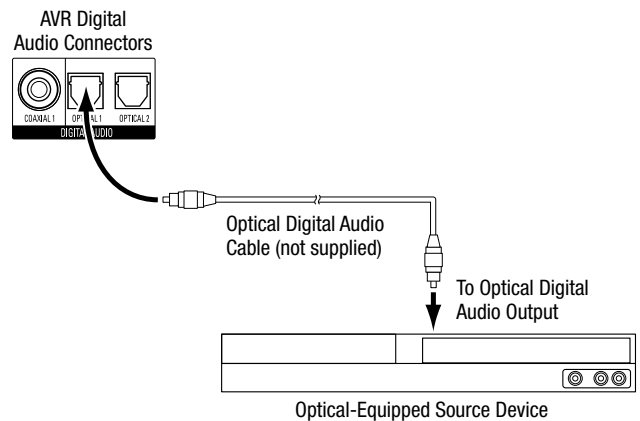
Coaxial Digital Audio Devices

If any of your non-HDMI source devices have coaxial digital outputs, connect them to the AVR's coaxial digital audio connector. NOTE: Make only one type of digital connection (HDMI, optical or coaxial) from each source device.

AVR Digital Audio Connectors

Coaxial Digital Audio Cable (not supplied)

To Coaxial Digital Audio Output

Coaxial-Equipped Source Device
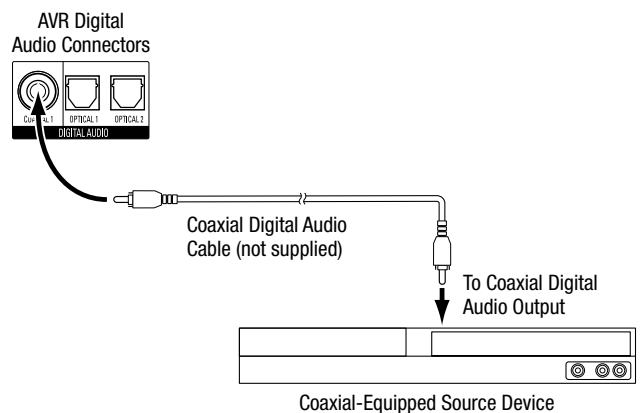
Analog Audio Devices

Use the AVR's analog audio connectors for source devices that don't have HDMI or digital audio connectors.


Analog Source Device
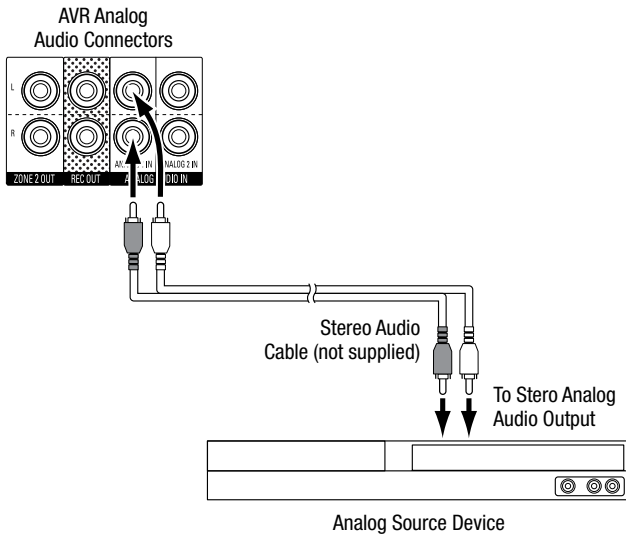
Audio Recorders

Connect an analog audio recorder's inputs to the AVR's analog audio Rec Out connectors. You can record any analog audio input signal.


Analog Recording Device
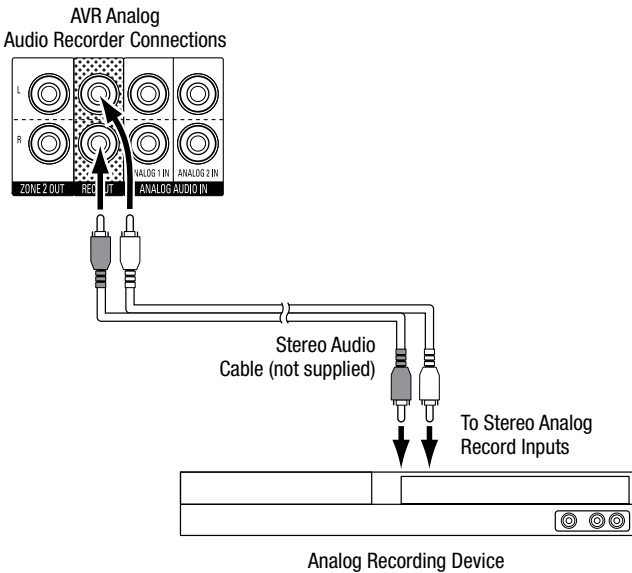
Video Recorders

Connect an analog video recorder's video input connector to the AVR's Composite Monitor Out connector. You can record any composite video signal. To record the audio from the source device, connect the AVR's Analog Rec Out connectors to the analog video recorder's audio inputs. NOTE: If you have connected the AVR's Composite Monitor Out video connector to your TV you cannot connect a VCR to the AVR for recording.


Analog Video Recording Device
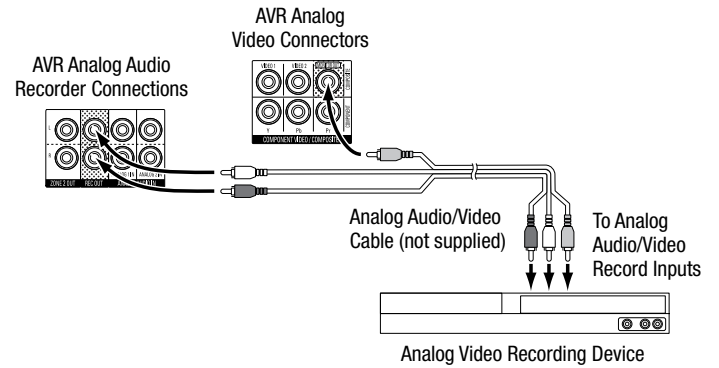
USB and iOS Devices

Use the AVR's front-panel USB port to connect an iPod, iPhone or iPad using an Apple cable (not supplied) or to directly connect a USB memory stick. You can play audio files from the device or memory stick and use the AVR's remote to control playback.
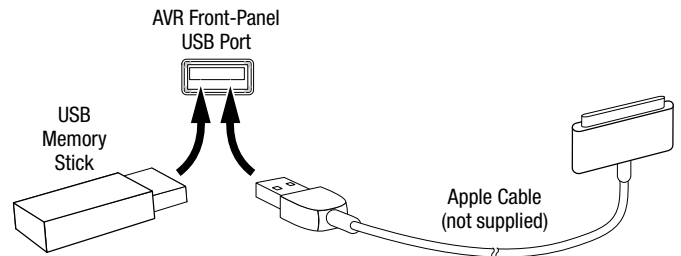

Connect Your Home Network

Use a Cat. 5 or Cat. 5E cable (not supplied) to connect the AVR's Network connector to your home network to enjoy AirPlay™, Internet radio and content from DLNA®-compatible devices that are connected to the network.
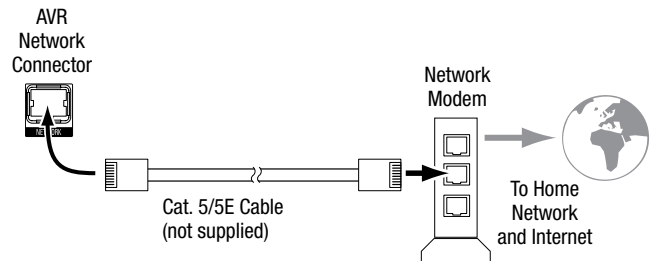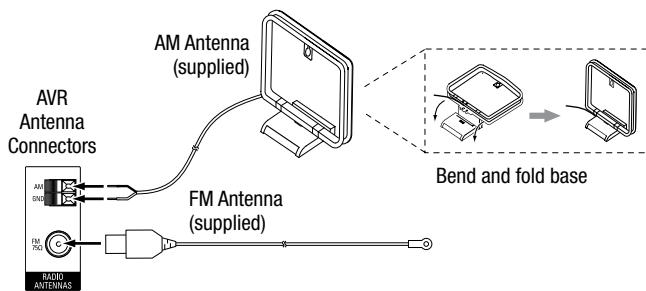
AVR 3700/AVR 370 only:

If your home network is Wi-Fi®, attach the supplied Wi-Fi antenna to the AVR. You do not need to make a wired network connection.
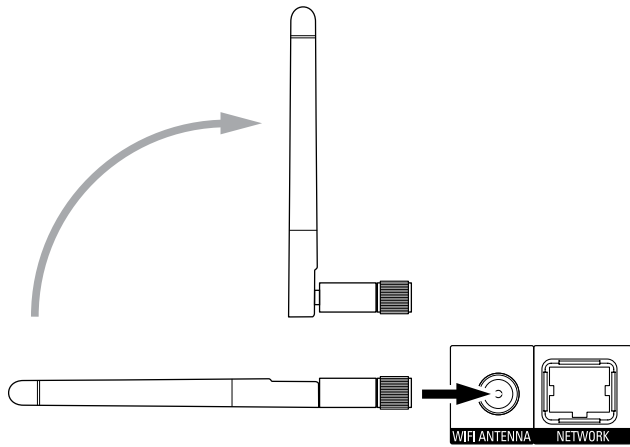
For complete network setup instructions, download the complete AVR *3700, AVR 370, AVR 370C, AVR 2700, AVR 270, AVR 270C Owner's Manual* from www.harmankardon.com.

Connect the Radio Antennas

• Connect the supplied FM antenna to the AVR's FM 75Ω antenna connector. For the best reception, extend the FM antenna as far as possible.

• Bend and fold the base of the supplied AM antenna as shown and connect the antenna wires to the AVR's AM and Gnd connectors. (You can connect either wire to either connector.) Rotate the antenna as necessary to minimize background noise.

NOTE: To connect RS-232, multi-zone, remote IR and trigger equipment, please download the *AVR 3700, AVR 370, AVR 2700, AVR 270 Owner's Manual* from www.harmankardon.com.
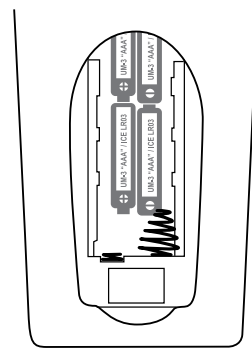
Connect to AC Power

Connect the AC power cord to the AVR's AC Input connector and then to a working, non-switched AC power outlet.
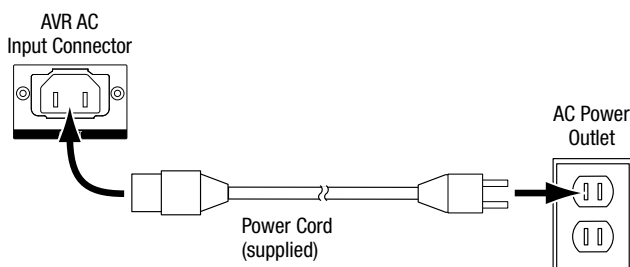
Set Up the AVR

### Install the Batteries in the Remote Control

Remove the remote control's battery cover, insert the four supplied AAA batteries as shown in the illustration, and replace the battery cover.

NOTE: Remove the protective plastic from the AVR's front panel so it doesn't reduce the remote control's effectiveness.

Turn On the AVR

1. Set the rear-panel Main Power switch to "On." (The front-panel Power indicator will glow amber.)

2. Press the front-panel Power button.
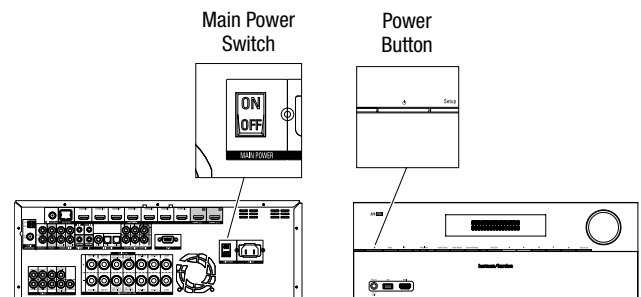
Configure Your Speakers

1. Plug the supplied EzSet/EQ™ microphone into the AVR's Headphone connector.
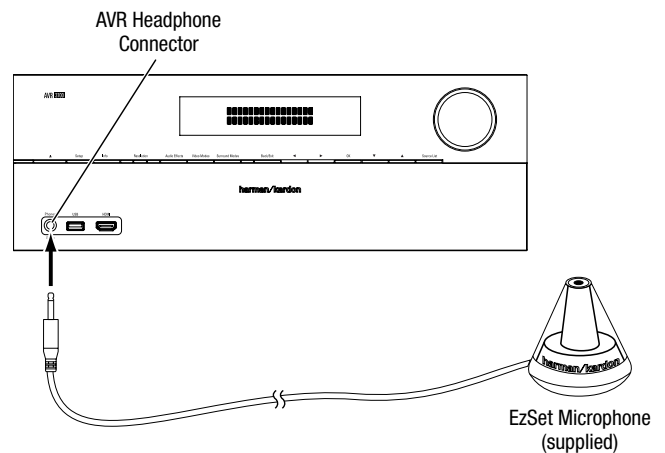
2. Place the microphone at ear height in your listening position.

3. Turn on your TV and select the TV input where you connected the AVR in *Connect Your TV*, on page 3.

4. Press the remote control's AVR button. The AVR's on-screen display (OSD) setup menu will appear on the TV. (Note: If you have used a composite video connection to your TV, the OSD menus will not appear on your TV. Follow the steps below using the AVR's front-panel display.)

5. Use the remote's arrow and OK buttons to select "Speaker Setup."
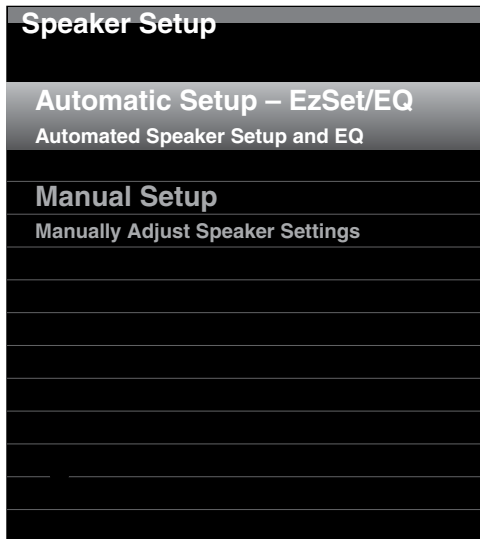
6. Select "Automatic Setup – EzSet/EQ."

7. Select "Continue."

8. Follow the instructions that appear on the screens. Remain quiet while the test noise plays through the speakers.

Assign Connectors to the AVR's Source Buttons

1. Review the input connections you listed on the *Source Buttons and Assigned Connectors* table, on page 4. Note what changes (if any) you want to make from the default connector assignments that appear on the list.

2. Turn on your TV and select the TV input where you connected the AVR in *Connect Your TV*, on page 3.

3. Press the remote control's AVR button. The AVR's on-screen display (OSD) setup menu will appear on the TV. (Note: If you have used a composite video connection to your TV, the OSD menus will not appear on your TV. Follow the steps below using the AVR's front-panel display.)
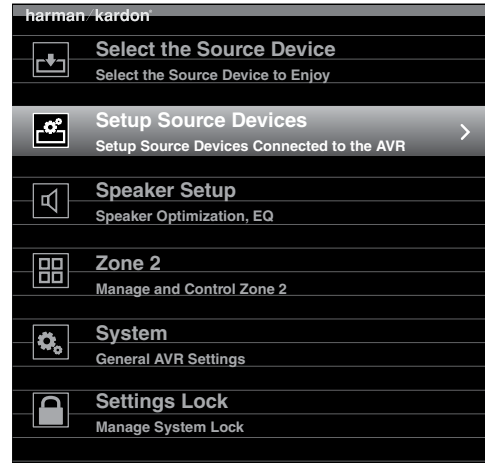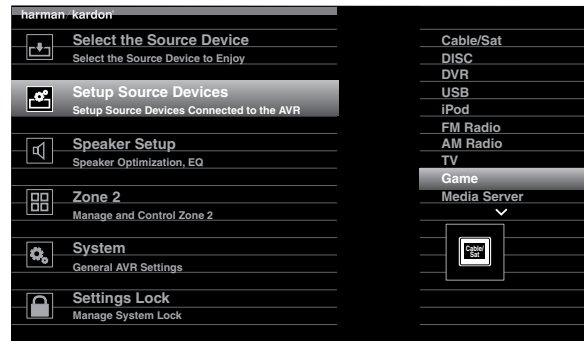

4. Use the remote's arrow and OK buttons to select "Setup Source Devices," and select a source button with connectors that you want to re-assign from the list that appears. Press the OK button.

5. Select "Video Input From Source" and select the video input connector you want to assign to the source button. Press the OK button.
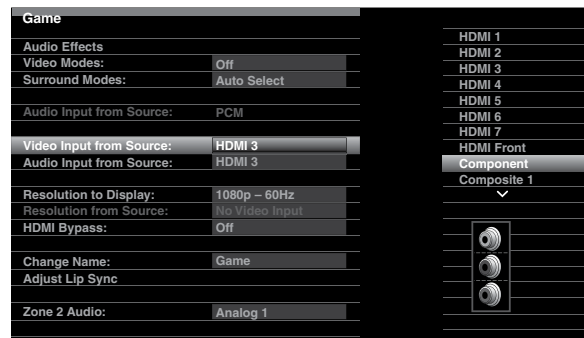
6. Select "Audio Input from Source" and select the audio input connector you want to assign to the source button. Press the OK button.

Game		∧
Audio Effects		HDMI 4
Video Modes:	Off	HDMI 5
Surround Modes:	Auto Select	HDMI 6
		HDMI 7
Audio Input from Source:	PCM	HDMI Front
		Optical 1
Video Input from Source:	Component	Optical 2
Audio Input from Source:	Analog 1	Coaxial
		Analog 1
Resolution to Display:	1080p – 60Hz	Analog 2
Resolution from Source:	No Video Input	
HDMI Bypass:	Off	
Change Name:	Game	
Adjust Lip Sync		
Zone 2 Audio:	Analog 1	
		∨

7. Press the remote's Back/Exit button and repeat steps 3 – 6 for the remaining source buttons with connectors you want to re-assign.

Assign the HDMI Audio Return Channel

If you have connected the AVR to your TV using an HDMI connection and if your TV is equipped with the HDMI Audio Return Channel Function, you can feed its sound to the AVR via the HDMI Out connection's Audio Return Channel. This lets you listen to HDMI devices that are connected directly to your TV (such as an Internet connection) without making an additional connection from the device to the AVR.

To activate the AVR's Audio Return Channel:

1. Turn on your TV and select the TV input where you connected the AVR in *Connect Your TV,* on page 3.

2. Press the remote control's AVR button. The AVR's on-screen display (OSD) setup menu will appear on the TV. (Note: If you have used a composite video connection to your TV, the OSD menus will not appear on your TV. Follow the steps below using the AVR's front-panel display.)
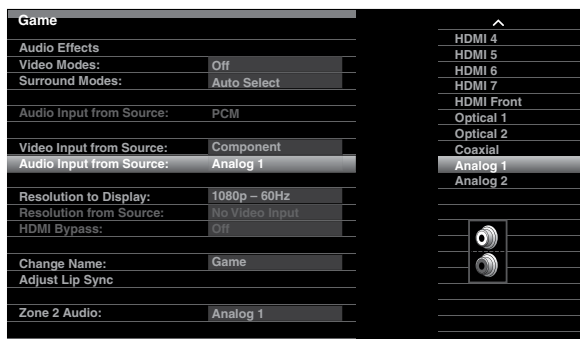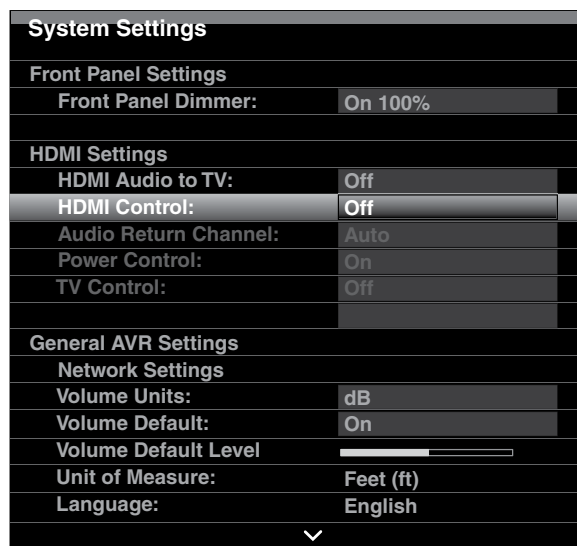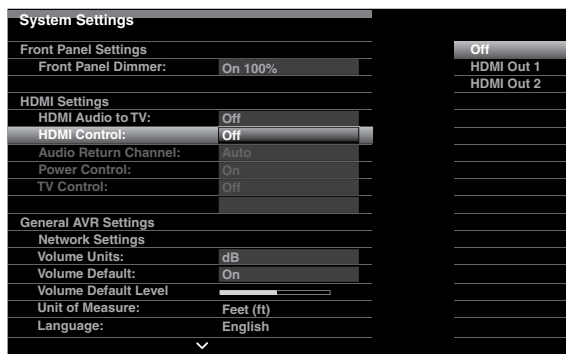
3. Use the remote's arrow and OK buttons to select "System." The System Settings screen will appear.
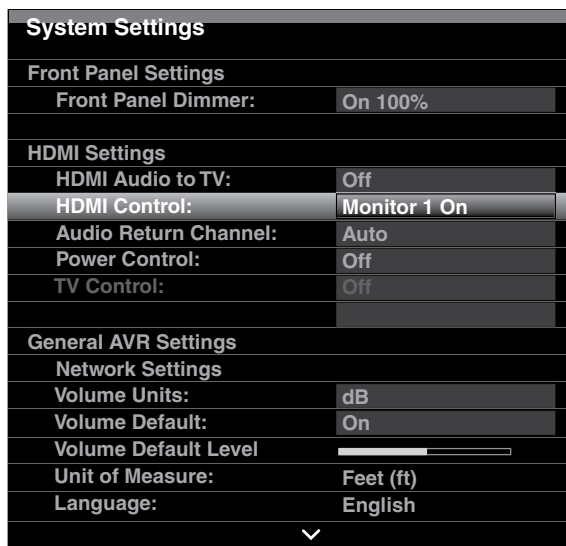
System Settings	
Front Panel Settings	
Front Panel Dimmer:	On 100%
HDMI Settings	
HDMI Audio to TV:	Off
HDMI Control:	Off
Audio Return Channel:	Auto
Power Control:	On
TV Control:	Off
General AVR Settings	
Network Settings	
Volume Units:	dB
Volume Default:	On
Volume Default Level	
Unit of Measure:	Feet (ft)
Language:	English
∨	

4. Select "HDMI Control." A slide-in menu will appear.

System Settings		
Front Panel Settings		Off
Front Panel Dimmer:	On 100%	HDMI Out 1
		HDMI Out 2
HDMI Settings		
HDMI Audio to TV:	Off	
HDMI Control:	Off	
Audio Return Channel:	Auto	
Power Control:	On	
TV Control:	Off	
General AVR Settings		
Network Settings		
Volume Units:	dB	
Volume Default:	On	
Volume Default Level		
Unit of Measure:	Feet (ft)	
Language:	English	
∨		

• For the AVR 2700/AVR 270, select "On" and press the OK button.

• For the AVR 3700/AVR 370, select the HDMI Monitor Out connector you used for your TV and press the OK button. If you connected TVs to both HDMI Monitor Out connectors, select the TV that has HDMI sources connected directly to it.

The HDMI Control setting will change to show your selection and the Audio Return Channel setting will illuminate "Auto."

System Settings	
Front Panel Settings	
Front Panel Dimmer:	On 100%
HDMI Settings	
HDMI Audio to TV:	Off
HDMI Control:	Monitor 1 On
Audio Return Channel:	Auto
Power Control:	Off
TV Control:	Off
General AVR Settings	
Network Settings	
Volume Units:	dB
Volume Default:	On
Volume Default Level	
Unit of Measure:	Feet (ft)
Language:	English
∨	

Press the remote's AVR button to exit the setup menu.

You are now ready to enjoy your AVR!

IMPORTANT: For complete information about using all of your audio/video AVR's features and capabilities, download the *AVR 3700, AVR 370, AVR 2700, AVR 270 Owner's Manual* from www.harmankardon.com.

For easy control of your AVR with a hand-held device, download the free app from iTunes App Store for compatible Apple products, or from Google Play for compatible Android powered smartphones and tablets.

General Specifications

Power consumption (AVR 3700):	<0.5W (standby); 440W (maximum)
(AVR 370):	<0.5W (standby); 440W (maximum)
(AVR 2700/AVR 270):	<0.5W (standby); 370W (maximum)
Dimensions (W x H x D):	17-5/16" x 6-1/2" x 14-13/16" (440mm x 165mm x 377mm)
Weight (AVR 3700/AVR 370):	20.7 lb (9.4kg)
(AVR 2700/AVR 270):	20.2 lb (9.2kg)

Part #: 950-0461-001, Rev. A

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