



Your PDF Guides

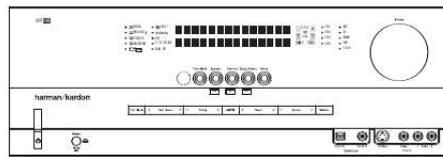
You can read the recommendations in the user guide, the technical guide or the installation guide for HARMAN KARDON AVR 240. You'll find the answers to all your questions on the HARMAN KARDON AVR 240 in the user manual (information, specifications, safety advice, size, accessories, etc.). Detailed instructions for use are in the User's Guide.

User manual HARMAN KARDON AVR 240
User guide HARMAN KARDON AVR 240
Operating instructions HARMAN KARDON AVR 240
Instructions for use HARMAN KARDON AVR 240
Instruction manual HARMAN KARDON AVR 240

harman/kardon®
Power for the Digital Revolution™

AVR 240

AUDIO/VIDEO RECEIVER
OWNER'S MANUAL



[You're reading an excerpt. Click here to read official HARMAN KARDON AVR 240 user guide](http://yourpdfguides.com/dref/1253133)
<http://yourpdfguides.com/dref/1253133>

Manual abstract:

@@@ Sur les modèles dont la fiche est polarisée: ATTENTION: Pour éviter les chocs électriques, introduire la lame la plus large de la fiche dans la borne correspondante de la prise et pousser jusqu'au fond. Typographical Conventions In order to help you use this manual with the remote control, front-panel controls and rear-panel connections, certain conventions have been used. EXAMPLE (bold type) indicates a specific remote control or front-panel button, or rear-panel connection jack EXAMPLE (OCR type) indicates a message that is visible on screen or on the front-panel information display I (number in a square) indicates a specific front-panel control j (number in a circle) indicates a rear-panel connection a (number in an oval) indicates a button or indicator on the remote Please register your product on our Web site at www.harmankardon.com. Note: You'll need the product's serial number. At the same time, you can choose to be notified about our new products and/or special promotions. The appearance of the text or cursor for your receiver's on-screen menus may vary slightly from the illustrations in this manual. Whether the text appears in all uppercase or upper- and lowercase characters, performance and operation remain the same. 2 TABLE OF CONTENTS INTRODUCTION Thank you for choosing Harman Kardon®! With the purchase of a Harman Kardon AVR 240, you are about to begin many years of listening enjoyment.

Designed to provide all the excitement and detail of movie soundtracks and every nuance of musical selections, the AVR 240 accomplishes its mission by harnessing advanced technologies usually found only in higher-priced receivers. The AVR 240 has been engineered so that it is easy to take advantage of all the power of its digital technology. However, to obtain the maximum enjoyment from your new receiver, we urge you to read this manual. A few minutes spent learning the functions of the various controls will enable you to take advantage of all the power the AVR 240 is able to deliver. If you have any questions about this product, its installation or its operation, please contact your retailer or custom installer.

They are your best local sources of information. Description and Features The AVR 240 is versatile and multifeatured, incorporating a wide range of listening options. In addition to Dolby® Digital and DTS® decoding for digital sources, a broad choice of Matrix surround-encoded or stereo surround modes are available for use with your CD, VCR, TV broadcasts and the AVR 240's own FM/AM tuner. Along with Dolby Digital EX, Dolby Pro Logic® IIx, DTS Neo:6®, DTS 96/24, Dolby 3 Stereo, and Hall and Theater modes, the AVR 240 offers Harman International's exclusive Logic 7® processing in both 5.1 and 7.

1 versions to create a wider, more enveloping field environment and more defined fly-overs and pans. Another exclusive is VMAx®, which uses proprietary processing to create an open, spacious sound field even when only two front speakers are available. Dolby Virtual Speaker is also available to create an enveloping sound field when fewer than six speakers are used. The latest Dolby Headphone modes provide a much more open and realistic presentation for private headphones listening. In addition to providing a wide range of listening options, the AVR 240 is easy to configure so that it provides the best results with your speakers and specific listening-room environment. On-screen menus combine with the EzSet+ system to automate speaker configuration and overall setup, resulting in a perfectly balanced sound field presentation that accurately reproduces the artist's intent. In tandem with EzSet+, the AVR 240 includes a full set of manual configuration settings for those who wish to custom-trim their system even further. A Quadruple Crossover bass management system makes it possible to enter different crossover settings for each speaker group. For the ultimate in flexibility, the AVR 240 features connections for five video devices, all with both composite and S-video inputs. Two additional audio inputs are available, and six digital inputs make the AVR 240 capable of handling all the latest digital audio sources.

For compatibility with the latest HDTV video sources and progressive scan DVD players, the AVR 240 also features assignable two-input, wide-bandwidth, lowcrosstalk component video switching. The front panel offers coax and optical digital inputs for direct connection to digital recorders. Two video recording outputs, a preamp-out and a color-coded eight-channel input make the AVR 240 virtually futureproof, with everything needed to accommodate tomorrow's new formats right onboard. Until now, Harman Kardon AVRs have been able to accommodate almost any source device equipped with line-level analog, optical digital or coaxial digital outputs, including most digital media players. With one simple connection between the AVR 240 and the optional Harman

Kardon Bridge, you are able to listen to materials stored on your compatible iPod®* (not included). Your AVR's system remote control has been preprogrammed with control codes that enable you to select tracks for playback and navigate many of your iPod's functions, even from across the room. The Bridge will even let you charge your iPod. The TM s A wide range of digital and matrix surround modes, including Dolby® Digital, Dolby Digital EX, Dolby Pro Logic® IIx, Dolby Virtual Speaker, Dolby Headphone, DTS®, DTS-ES® Discrete and Matrix, DTS 96/24® and DTS Neo:6® s Seven channels of high-current amplification s Harman Kardon's exclusive Logic 7® processing, available with both 7.1 and 5.1 processing in a variety of modes, and two modes of VMAx® TM TM s system with included microphone automatically configures speakers and sets delay times and output levels for optimal sound presentation TM s Programmable remote for control of AVR and seven additional source components s High-bandwidth, HDTV-compatible component video switching with assignable inputs s Discrete front-panel coaxial and optical digital inputs for easy connection to portable digital devices and video game consoles s Connects to Harman Kardon's Bridge (optional) for charging, playback and control of a compatible iPod® device (not included) The TM s Input titling for all input sources (except tuner) s Extensive bass management options, including four separate crossover groupings s On-screen menu and display system with choice of blue or black background screen s A/V Sync delay adjustable for each input delivers perfect lip sync with digital programs or video displays The AVR 240's powerful seven-channel amplifier uses traditional Harman Kardon high-current design technologies to meet the wide dynamic range of any program selection.

Harman Kardon invented the high-fidelity receiver more than fifty years ago.



[You're reading an excerpt. Click here to read official HARMAN KARDON AVR 240 user guide](http://yourpdfguides.com/dref/1253133)
<http://yourpdfguides.com/dref/1253133>

With state-of-the-art circuitry and time-honored circuit designs, the AVR 240 is the perfect combination of the latest in digital audio technology, a quiet yet powerful analog amplifier in an elegant, easy-to-use package. *Compatible with all iPod models equipped with a dock connector, including third-generation Click Wheel models and newer. Not compatible with iPod shuffle™ models. Although iPod video and photo models are compatible, video files and images stored on the iPod may not be viewed.

INTRODUCTION 3 SAFETY INFORMATION Important Safety Information Verify Line Voltage Before Use Your AVR 240 has been designed for use with 120-volt AC current. Connection to a line voltage other than that for which it is intended can create a safety and fire hazard and may damage the unit. If you have any questions about the voltage requirements for your specific model, or about the line voltage in your area, contact your selling dealer before plugging the unit into a wall outlet. Do Not Use Extension Cords To avoid safety hazards, use only the power cord attached to your unit. We do not recommend that extension cords be used with this product.

As with all electrical devices, do not run power cords under rugs or carpets or place heavy objects on them. Damaged power cords should be replaced immediately by an authorized service center with a cord meeting factory specifications. Handle the AC Power Cord Gently When disconnecting the power cord from an AC outlet, always pull the plug; never pull the cord. If you do not intend to use the unit for any considerable length of time, disconnect the plug from the AC outlet. Do Not Open the Cabinet There are no user-serviceable components inside this product. Opening the cabinet may present a shock hazard, and any modification to the product will void your guarantee. If water or any metal object such as a paper clip, wire or a staple accidentally falls inside the unit, disconnect it from the AC power source immediately, and consult an authorized service center. CATV or Antenna Grounding If an outside antenna or cable system is connected to this product, be certain that it is grounded so as to provide some protection against voltage surges and static charges. Section 810 of the National Electrical Code, ANSI/NFPA No. 70-1984, provides information with respect to proper grounding of the mast and supporting structure, grounding of the lead-in wire to an antenna discharge unit, size of grounding conductors, location of antenna discharge unit, connection to grounding electrodes and requirements of the grounding electrode.

NOTE TO CATV SYSTEM INSTALLER: This reminder is provided to call the CATV (Cable TV) system installer's attention to article 820-40 of the NEC that provides guidelines for proper grounding and, in particular, specifies that the cable ground shall be connected to the grounding system of the building, as close to the point of cable entry as possible. Installation Location s To ensure proper operation and to avoid the potential for safety hazards, place the unit on a firm and level surface. When placing the unit on a shelf, be certain that the shelf and any mounting hardware can support the weight of the product. s Make certain that proper space is provided both above and below the unit for ventilation. If this product will be installed in a cabinet or other enclosed area, make certain that there is sufficient air movement within the cabinet. Under some circumstances a fan may be required. s Do not place the unit directly on a carpeted surface. s Avoid installation in extremely hot or cold locations, or in an area that is exposed to direct sunlight or heating equipment. s Avoid moist or humid locations. s Do not obstruct the ventilation slots on the top of the unit, or place objects directly over them.

s Due to the weight of the AVR 240 and the heat generated by the amplifiers, there is the remote possibility that the rubber padding on the bottom IC 3 STEREO HEADPHONE DSP 5 7 CH. STEREO SURR. OFF LOGIC 7 VID 1 VID 2 VID 3 VID 4 DVD CD FMAM TAPE 6 8 CH Optical 4 Coaxial 4 Video 4 1 2 3 4 5 6 7 8 9 !# @) \$) % ^ & * (Ó Ô NOTE: To make it easier to follow the instructions that refer to this illustration, a larger copy may be downloaded from the Product Support section for this product at www.harmankardon.com.

1 Main Power Switch 2 Power Indicator 3 Standby/On Switch 4 Headphone Jack 5 Tone Mode 6 Speaker Selector 7 Surround Mode Group Selector 8 Surround Mode Selector 9 Tuning Selector) </> Buttons 1 Main Power Switch: Press this button to apply power to the AVR 240. When the switch is pressed in, the unit is in a Standby mode, as indicated by the amber Power Indicator 2. This button MUST be pressed in to operate the unit. To turn the unit off and prevent the use of the remote control, this switch should be pressed until it pops out from the front panel and the word "OFF" is seen at the top of the switch.

NOTE: This switch is normally left in the "ON" position.

2 Power Indicator: This LED lights amber when the unit is in the Standby mode to signal that the AVR is ready to be turned on. When the unit is in operation, the indicator is blue. 3 Standby/On Switch: When the Main Power Switch 1 is "ON," press this button to turn on the AVR 240; press it again to turn the unit off. The Power Indicator 2 turns blue when the unit is on. ! Tuner Band Selector @ Set Button # Digital Input Selector \$ Preset Station Selector % Delay Adjust Selector ^ Input Source Selector & Tuner Mode Selector * Optical 3 Digital Audio Input (Coaxial 3 Digital Audio Input Ó Video 4 Video Input Jacks 4 Headphone Jack: This jack may be used to listen to the AVR 240's output through a pair of headphones. The speakers will automatically be turned off when the headphone jack is in use. When configuring your system using EzSet+, the calibration microphone should be plugged into this jack using the supplied adaptor that converts the small mini-plug at the end of the microphone's cord to a 1/4" plug. 5 Tone Mode: This button controls the tone mode settings, enabling adjustment of the bass and treble boost/cut. You may also use it to take the tone controls out of the signal path completely for "flat" response. The first press of the button displays a TONE IN message in the Lower Display Line i and in the on-screen display.

To take the controls > out of the signal path, press either of the </> Buttons) until the display reads TONE OUT. To change the bass or treble settings, make sure that TONE IN appears in the Lower Display Line i > or press either of the </> Buttons) until it does. Ó Video 4 Audio Input Jacks Channel Adjust Selector Ò Volume Control Û Input Indicators Ü Speaker/Channel Input Indicators Õ Upper Display Line i Lower Display Line ^ Surround Mode Indicators ~ Remote Sensor Window Press the Tone Mode Button 5 until the desired option of TREBLE MODE or BASS MODE appears in the Lower Display Line i and in the > on-screen display and then press either of the </> Buttons) to enter the desired boost or cut setting.



[You're reading an excerpt. Click here to read official HARMAN KARDON AVR 240 user guide](http://yourpdfguides.com/dref/1253133)
<http://yourpdfguides.com/dref/1253133>

Both treble and bass contours may be boosted or cut by up to + or 10dB in increments of 2dB. See pages 22 and 32 for more information on the tone controls. NOTE: The AVR 240 is not equipped with a traditional Balance control. When listening to two-channel materials, if you wish to adjust the stereo image, you may increase or use the Channel Adjust Selector decrease the level of the left front channel by up to + or 10dB, and then to decrease or increase the right front channel by the corresponding amount. However, when listening to surround materials and most twochannel materials, it is recommended that you leave these settings at the results obtained during the configuration process described on pages 20 through 31. FRONT-PANEL CONTROLS 5 FRONT-PANEL CONTROLS 6 Speaker Selector: Press this button to begin the process of configuring the unit to match the type of speakers used in your listening room. (See pages 2729 for more information on speaker setup and configuration.)

7 Surround Mode Group Selector: Press this button to select the top-level group of surround modes. Each press of the button will select the current or last used mode in each of the surround mode groups (e.g., Dolby, DTS, DTS Neo:6, Logic 7, DSP, Stereo). When the button is pressed so that the name of the surround mode group appears in the on-screen display and in the Lower Display Line i, press the Surround Mode Selector 8 to cycle through the individual modes available.

For example, press this button to select Dolby modes, and then press the Surround Mode Selector 8 to choose from the various Dolby mode options. 8 Surround Mode Selector: Press this button to select from among the available surround mode options for the mode group selected. The specific modes will vary based on the number of speakers available, the mode group and if the input source is digital or analog. For example, press the Surround Mode Group Selector 7 to select a main mode grouping such as Dolby or Logic 7, and then press this button to see the specific mode choices available. Note that the digital surround modes, such as Dolby Digital and DTS, may not be accessed unless that type of source signal is present, such as when a DVD movie or television signal programmed in Dolby Digital or DTS surround sound is playing.

For more information on surround mode selection, see pages 22 and 33. 9 Tuning Selector: Press the left side of the button to tune lower-frequency stations and the right side of the button to tune higher-frequency stations. When the tuner is in the Manual mode, each tap will increase or decrease the frequency by one increment. When the tuner receives a strong enough signal for adequate reception, MANUAL TUNED will appear in the on-screen display and the Lower Display Line i. When the tuner is the Auto mode, press the button once, and the tuner will scan for a station with acceptable signal strength. When the next station with a strong signal is tuned the scan will stop and the on-screen display and Lower Display Line i will indicate AUTO TUNED. When an FM Stereo station is tuned, the display will read AUTO ST TUNED. To switch back and forth between the Auto and Manual tuning modes, press the Tuner Mode Selector &.) </> Buttons: When configuring the AVR 240's settings, use these buttons to select from all the available choices. ! Tuner Band Selector: Press this button to turn the AVR on and to select the Tuner as the input.

Press it again to switch between the AM and FM frequency bands. (See page 39 for more information on the tuner.) @ Set Button: When making choices during the setup and configuration process, press this button to enter the desired setting into the AVR 240's memory. # Digital Input Selector: Press this button to select one of the digital audio inputs or the analog audio input for any source. (See pages 3639 for more information on digital audio.) \$ Preset Stations Selector: Press this button to scroll up or down through the list of stations that have been entered into the preset memory. (See page 39 for more information on tuner presets.) % Delay Adjust Selector: Press this button to begin the steps required to enter delay settings. (See pages 2930 for more information on delay times.) ^ Input Source Selector: Press this button to change the input by scrolling up or down through the list of Input Indicators Ú. & Tuner Mode Selector: Press this button to select Auto or Manual tuning. When the button is pressed so that the AUTO appears in the Lower Display Line i, the tuner will search for the next station with an acceptable signal when the Tuning Selector 9u is pressed. When the button is pressed so that MANUAL appears in the Lower Display Line i, each press of the Tuning Selector 9u will increase the frequency. This button may also be used to switch between Stereo and Mono modes for FM radio reception. When weak reception is encountered, press the button so that MANUAL appears in the Lower Display Line i and on the on-screen display to switch to Mono reception.

Press it again to switch back to Stereo mode. (See page 39 for more information on using the tuner.) * Optical 3 Digital Audio Input: Connect the optical digital audio output of an audio or video product to this jack. When the input is not in use, the built-in shutter will close to avoid dust contamination that might degrade future performance. (Coaxial 3 Digital Audio Input: This jack is used for connection to the output of portable audio devices, video game consoles or other products that have a coax digital audio jack.

Ó Video 4 Video Input Jacks: These jacks may be used for temporary connection to the composite or S-video output of video games, camcorders or other portable video products. You may make a connection to either jack at any time, but not to both simultaneously. Ô Video 4 Audio Input Jacks: These audio jacks may be used for temporary connection to video games or portable audio/video products such as camcorders and portable audio players. NOTE: The AVR 240 is shipped with two covers that may be installed over the front-panel input jacks when they are not in use. Channel Adjust Selector: Press this button to begin the process of trimming the channel output levels using an external audio source. (For more information on output level trim adjustment, see page 40.) Ò Volume Control: Turn this knob clockwise to increase the volume, counterclockwise to decrease the volume. If the AVR 240 is muted, adjusting the Volume Control Òb will automatically release the unit from the silenced condition. Ú Input Indicators: The current selected source will appear as one of these indicators. When the unit is turned on, the entire list of available modes will light briefly, and then revert to normal operation with only the active mode indicator illuminated.

NOTE: When Bridge /DMP has been selected as the input source, no Input Indicator N will light. DMP/THE BRIDGE IS CONNECTED will scroll across the Upper Display Line P, unless you have retitled the source name, in which case that name will appear.



[You're reading an excerpt. Click here to read official HARMAN](http://yourpdfguides.com/dref/1253133)

[KARDON AVR 240 user guide](http://yourpdfguides.com/dref/1253133)

<http://yourpdfguides.com/dref/1253133>

See page 21 for more information on input titling. The **TM** **U** Speaker/Channel Input Indicators: These indicators are multipurpose, indicating both the speaker type selected for each channel and the incoming datasingal configuration. The left, center, right, side surround and back surround speaker indicators are composed of three boxes, while the subwoofer is a single box. The center box lights when a "small" speaker is selected, and the two outer boxes light when "large" speakers are selected. When none of the boxes are lit for the center, surround or subwoofer channels, no speaker has been assigned that position. (See pages 2729 for more information on configuring speakers.) The letters inside each box display the active input channels. For standard analog sources, only the L and R will light, indicating a stereo input.

For a digital source, the indicators will light to display the channels being received at the digital input. When the letters flash, the digital input has been interrupted. (See page 37 for more information on the Channel Indicators.) **6 FRONT-PANEL CONTROLS** **FRONT-PANEL CONTROLS** **U** Upper Display Line: Depending on the unit's status, a variety of messages will appear here. In normal operation, this line will show current input source and which analog or digital input is in use.

When the tuner is the input, this line will identify the station as AM or FM and show the frequency and preset number, if any. **i** Lower Display Line: Depending on the unit's status, a variety of messages will appear here. In normal operation, the current surround mode will show here. **^** Surround Mode Indicators: The current selected surround mode will appear as one of these indicators. Note that when the unit is turned on, the entire list of available modes will light briefly, and then revert to normal operation with only the active mode indicator illuminated.

NOTE: When the Dolby Virtual Speaker mode is in use, no Surround Mode Indicator R will light. However, the surround mode name will scroll in the Lower Display Line **Q**. **~** Remote Sensor Window: The sensor behind this window receives infrared signals from the remote control. Aim the remote at this area and do not block or cover it. **FRONT-PANEL CONTROLS** **7 REAR-PANEL CONNECTIONS** **c b a Z Y X W V U j ki hfd ge b ca · ° fl j TM** The Bridge **£ ¢ § ¶ · ¸ / ¨ < > fi** **NOTE:** To make it easier to follow the instructions that refer to this illustration, a larger copy may be downloaded from the Product Support section for this product at www.harmankardon.com. **j** FM Antenna Jack **TM** CD Audio Inputs **£** Tape Outputs **¢** Tape Inputs Remote IR Input **§** Remote IR Output **¶**

Preamp Outputs · Subwoofer Output **°** Front Speaker Outputs , Surround Back Speaker Outputs / Surround Speaker Outputs **¨** Center Speaker Outputs **<** Component Video Monitor Outputs **>** Component Video 1 Inputs **fi** Component Video 2 Inputs **fl** AC Power Cord Switched AC Accessory Outlet **°** Unswitched AC Accessory Outlet · Optical Digital Audio Output **a** Coaxial Digital Audio Output **b** Coaxial Digital Audio Inputs **c** S-Video Monitor Output **d** DVD S-Video Input **e** Bridge DMP Connector **f** Video 1 S-Video Input **g** Optical Digital Audio Inputs **h** Video 1 S-Video Output **i** Video 2 S-Video Input **TM** **j**

6/8-Channel Direct Inputs **k** Video 2 S-Video Output **U** Video 3 S-Video Input **V** Video Monitor Output **W** DVD Audio/Video Inputs **X** Video 1 Audio/Video Inputs **Y** Video 1 Audio/Video Outputs **Z** Video 2 Audio/Video Inputs **a** Video 2 Audio/Video Outputs **b** Video 3 Audio/Video Inputs **c** AM Antenna Terminals

NOTE: To assist in making the correct connections for multichannel input, output and speaker connections, all connection jacks and terminals are colorcoded in conformance with the CEA standards as follows: Front Left: White Red Front Right: **j** FM Antenna Jack: Connect the supplied indoor (or an optional external) FM antenna to this terminal. **TM** CD Audio Inputs: Connect these jacks to the analog audio outputs of a compact disc player or CD changer.

Center: Surround Left: Surround Right: Surround Back Left: Surround Back Right: Subwoofer: Coaxial Digital Audio: Green Blue Gray Brown Tan Purple Orange Composite Video: Component Video "Y": Component Video "Pr": Component Video "Pb": Yellow Green Red Blue **£** Tape Outputs: Connect these jacks to the RECORD/INPUT jacks of an audio recorder.

¢ Tape Inputs: Connect these jacks to the PLAY/OUT jacks of an audio recorder. Remote IR Input: If the AVR 240's front-panel IR sensor is blocked due to cabinet doors or other obstructions, an external IR sensor may be used. Connect the output of the sensor to this jack. **8 REAR-PANEL CONNECTIONS** **REAR-PANEL CONNECTIONS** **§** Remote IR Output: This connection permits the IR sensor in the receiver to serve other remote controlled devices. Connect this jack to the "IR IN" jack on Harman Kardon (or other compatible) equipment. **¶** Preamp Outputs: Connect these jacks to an optional, external power amplifier for applications where higher power is desired. · Subwoofer Output: Connect this jack to the linelevel input of a powered subwoofer. If an external subwoofer amplifier is used, connect this jack to the subwoofer amplifier input. **°** Front Speaker Outputs: Connect these outputs to the matching + or terminals on your left and right speakers. When making speaker connections always make certain to maintain correct polarity by connecting the color-coded (white for front left and red for front right) (+) terminals on the AVR 240 to the red (+) terminals on the speakers and the black () terminals on the AVR 240 to the black () terminals on the speakers.

See page 15 for more information on speaker polarity. , Surround Back Speaker Outputs: These speaker terminals are normally used to power the surround back speakers in a 7.1-channel system. Connect these outputs to the matching + and terminals on your surround back channel speakers. In conformance with the CEA color-code specification, the brown terminal is the positive, or "+," terminal that should be connected to the red (+) terminal on the left Surround Back speaker.

The tan terminal is the positive, or "+," terminal that should be connected to the red (+) terminal on the right Surround Back speaker. Connect the black () terminals on the AVR to the matching black negative () terminals on the surround back speakers. (See page 15 for more information on speaker polarity.) / Surround Speaker Outputs: Connect these outputs to the matching + and terminals on your surround channel speakers. In conformance with the CEA color-code specification, the blue terminal is the positive, or "+," terminal that should be connected to the red (+) terminal on the Surround Left speaker, while the gray terminal should be connected to the red (+) terminal on the Surround Right speaker.



[You're reading an excerpt. Click here to read official HARMAN KARDON AVR 240 user guide](http://yourpdfguides.com/dref/1253133)
<http://yourpdfguides.com/dref/1253133>

Connect the black () terminal on the AVR to the matching black negative () terminals for each surround speaker. (See page 15 for more information on speaker polarity.) ❏ Center Speaker Outputs: Connect these outputs to the matching + and - terminals on your center channel speaker. In conformance with the CEA color-code specification, the green terminal is the positive, or "+," terminal that should be connected to the red (+) terminal on the center speaker. Connect the black () terminal on the AVR to the black () terminal on your speaker. (See page 15 for more information on speaker polarity.) < Component Video Monitor Outputs: Connect these outputs to the component video inputs of a video projector or monitor. When a source connected to one of the Component Video Inputs >fi is selected, the signal will be sent to these jacks. > Component Video 1 Inputs: Connect the Y/Pr/Pb component video outputs of a DVD player, HDTV set-top converter, satellite receiver or other video source device with component video outputs to these jacks. fi Component Video 2 Inputs: Connect the Y/Pr/Pb component video outputs of a DVD player, HDTV set-top converter, satellite receiver or other video source device with component video outputs to these jacks.

See page 21 for information on assigning the Component Video 1 and 2 Inputs >fi to the appropriate source inputs. fl AC Power Cord: Connect the AC power cord to a non-switched AC wall outlet. Switched AC Accessory Outlet: These outlets may be used to power any device you wish to have turned on when the AVR 240 is turned on. ° Unswitched AC Accessory Outlet: This outlet may be used to power any AC device. The power will remain on at this outlet regardless of whether the AVR 240 is on or off. NOTE: The total power consumption of all devices connected to the accessory outlets should not exceed 100 watts. ·

Optical Digital Audio Output: Connect this jack to the optical digital input connector on a CD-R/RW, MiniDisc or other digital recorder. a Coaxial Digital Audio Output: Connect this jack to the coaxial digital input of a CD-R/RW, MiniDisc or other digital recorder. b Coaxial Digital Audio Inputs: Connect the coax digital output from a DVD player, HDTV receiver, LD player or CD player to these jacks. The signal may be a Dolby Digital signal, DTS signal or a standard PCM digital source.

Do not connect the RF digital output of an LD player to these jacks. c S-Video Monitor Output: If any of the input sources used in your system have S-video connections to the AVR, connect this jack to the S-video input on your television, projector or other video display. d DVD S-Video Input: Connect the S-video output of a DVD player or other video source to this jack. e Bridge Digital Media Player (DMP) Connector: With the AVR 240 turned off, connect the optional Harman Kardon Bridge to this connector. When the Digital Media Player source is selected, you may view iPod control and navigation messages on your video display (if one is connected to one of the Video Monitor Outputs cV), and in the Upper and Lower Display Lines PQ.

You may navigate the iPod and select tracks for playback using the /</> Buttons no, the Set Button p and Transport Controls ` on your AVR remote. See page 40 for more information. The TM The TM f Video 1 S-Video Input: If the product connected to the Video 1 Audio Inputs X has S-video capability, connect this jack to the PLAY/OUT S-video jack on that unit and then make certain that the S-Video Monitor Output c is connected as described above. g

Optical Digital Audio Inputs: Connect the optical digital output from a DVD player, HDTV receiver, LD player or CD player to these jacks. The signal may be a Dolby Digital signal, a DTS signal or a standard PCM digital source.

h Video 1 S-Video Output: If the product connected to the Video 1 Audio Outputs Y has S-video capability, connect this jack to the REC/IN S-video jack on that unit. i Video 2 S-Video Input: If the product connected to the Video 2 Audio Inputs Z has S-video capability, connect this jack to the PLAY/OUT S-video jack on that unit and then make certain that the S-Video Monitor Output c is connected as described above. j 6/8-Channel Direct Inputs: These jacks are used for connection to source devices such as DVDAudio or SACDTM players with discrete analog outputs. Depending on the source device in use, all eight jacks may be used, though in many cases only connections to the front left/right, center, surround left/right and LFE (subwoofer input) jacks will be used for standard 5.1 audio signals. k Video 2 S-Video Output: If the product connected to the Video 2 Audio Outputs a has S-video capability, connect this jack to the REC/IN S-video jack on that unit. U Video 3 S-Video Input: If the product connected to the Video 3 Audio Inputs b has S-video capability, connect this jack to the PLAY/OUT S-video jack on that unit and then make certain that the S-Video Monitor Output c is connected as described above. V Video Monitor Output:

Connect this jack to the composite video input of a TV monitor or video projector to view the on-screen menus and the output of a standard video source. REAR-PANEL CONNECTIONS 9 REAR-PANEL CONNECTIONS W DVD Audio/Video Inputs: Connect the composite video and L/R analog audio outputs of a DVD player or other video source to these jacks. X Video 1 Audio/Video Inputs: Connect the composite video and L/R analog audio PLAY/OUT jacks of a VCR or other video source to these jacks.

Y Video 1 Audio/Video Outputs: Connect the composite video and L/R analog audio REC/IN jacks of a VCR or other video recording device such as a DVD recorder or PVR to these jacks. Z Video 2 Audio/Video Inputs: Connect the composite video and L/R analog audio PLAY/OUT jacks of a cable television box or other video source to these jacks. a Video 2 Audio/Video Outputs: Connect the composite video and L/R analog audio REC/IN jacks of a VCR or other video recording device such as a DVD recorder or PVR to these jacks. b Video 3 Audio/Video Inputs: Connect the composite video and L/R analog audio PLAY/OUT jacks of an HDTV tuner or other video source to these jacks. c AM Antenna Terminals: Connect the AM loop antenna supplied with the receiver to these terminals. If an external AM antenna is used, make connections to the AM and GND terminals in accordance with the instructions supplied with the antenna. NOTE ON VIDEO CONNECTIONS: When connecting a video source product such as a VCR, DVD player, satellite receiver, cable set-top box, personal video recorder or video game to the AVR 240, you may use either a composite or S-video connection, but not both. 10 REAR-PANEL

CONNECTIONS REMOTE CONTROL FUNCTIONS a Power Off Button b IR Transmitter Window c Program Indicator d Power On Button e Input Selectors f AVR Selector g AM/FM Tuner Select h Dim Button i Test Button j Sleep Button k DSP Surround Mode Selector l Night Mode m Channel Select Button n / </> Buttons o < /> Buttons p Set Button q Digital Select r Numeric Keys s Tuner Mode t Direct Button u Tuning Up/Down v OSD Button w Dolby Mode Selector x DTS Digital Mode Selector y Logic 7 Mode Select Button z Skip Up/Down Buttons ` Transport Controls R Stereo Mode Select Button S DTS Neo:6 Mode Select T Macro Buttons U Disc Skip Button V Preset Up/Down W Clear Button X Memory Button Y Delay/Prev.



[You're reading an excerpt. Click here to read official HARMAN KARDON AVR 240 user guide](http://yourpdfguides.com/dref/1253133)
<http://yourpdfguides.com/dref/1253133>

Ch. Z Speaker Select a Spare Button b Volume Up/Down c TV/Video Selector d DMP Bridge Selector e 6-Channel/8-Channel Direct Input f Mute The TM c
ba POWER d e f g h i j k l m n o q n r p ON OFF MUTE 42 AVR VCR VID1 DVD CBL/SAT VID2 CD TV VID3 6/8 CH TAPE VID4 THE BRIDGE 41 40 39
DIM AM/FM DMP SLEEP CH.

SURR. TEST NIGHT TV VOL. 38 GU I DE M E 37 CH . SP K R NU 36 SET o 35 T PR 1 5 2 6 9 DIRECT 3 7 0 CLEAR 4 8 MEM 34 33 s t u v TUN-M
TUNING OSD D.SKIP PRESET V.

E CH TA L L DE AY . I DIG EX I 32 31 M1 M2 M3 DTS SUR M4 DTS NEO:6 30 29 w y DOLBY SUR x z DWN LOGIC 7 STEREO 28 SKIP UP `NOTES: ·
The function names shown here are each button's feature when used with the AVR 240. Most buttons have additional functions when used with other devices.
See pages 4748 for a list of these functions. · To make it easier to follow the instructions that refer to this illustration, a larger copy may be downloaded from
the Product Support section for this product at www.

harmankardon.com. © 240 REMOTE CONTROL FUNCTIONS 11 REMOTE CONTROL FUNCTIONS IMPORTANT NOTE: The AVR 240's remote may be
programmed to control up to eight devices, including the AVR 240. Before using the remote, it is important to remember to press the Input Selector Button e
that corresponds to the unit you wish to operate. The AVR 240's remote is shipped from the factory to operate the AVR 240 and most Harman Kardon CD or
DVD players and cassette decks. The remote is also capable of operating a wide variety of other products using the control codes that are part of the remote.

Before using the remote with other products, follow the instructions on page 44 to program the proper codes for the products in your system. It is also
important to remember that many of the buttons on the remote take on different functions, depending on the product selected using the Device Control
Selectors. The descriptions shown here primarily detail the functions of the remote when it is used to operate the AVR 240. (See pages 4548 for information
about alternate functions for the remote's buttons.

) a Power Off Button: Press this button to place the AVR 240 or a selected device in the Standby mode. b IR Transmitter Window: Point this window toward
the AVR 240 when pressing buttons on the remote to make certain that infrared commands are properly received. c Program Indicator: This three-color
indicator is used to guide you through the process of programming the remote. (See page 44 for information on programming the remote.) d Power On
Button: Press this button to turn on the power to a device selected by pressing one of the Input Selectors e. e Input Selectors: Pressing one of these buttons
will perform three actions at the same time. First, if the AVR 240 is not turned on, this will power up the unit. Next, it will select the source shown on the
button as the input to the AVR 240. Finally, it will change the remote control so that it controls the device selected. After pressing one of these buttons you
must press the AVR Selector Button f again to operate the AVR 240's functions with the remote.

f AVR Selector: Pressing this button will switch the remote so that it will operate the AVR 240's functions. If the AVR 240 is in the Standby mode, it will also
turn the AVR 240 on. g AM/FM Tuner Select: Press this button to select the AVR 240's tuner as the listening choice. Pressing this button when the tuner is
already in use will select between the AM and FM bands. See page 32 for more information on the Sleep Function.

This button is also used to change channels on your TV when the TV is selected. k DSP Surround Mode Selector: Press this button to cycle through the DSP,
VMaX and Stereo surround modes such as Hall, Theater, VMaX Near and Far, and Surround Off. This button is also used to tune channels when the TV is
selected using the device Input Selector e. l Night Mode: Press this button to activate the Night mode. This mode is available in specially encoded digital
sources, and it preserves dialogue (center channel) intelligibility at low volume levels.

m Channel Select Button: This button is used to start the process of setting the AVR 240's output levels to an external source. Once this button is pressed, use
the //⌘ Buttons n to select the channel being adjusted, then press the Set Button p, followed by the //⌘ Buttons n again, to change the level setting. (See pages
30 and 40 for more information.) However, Harman Kardon recommends that you first perform the EzSet+ procedure, as described on pages 24 to 26. h Dim
Button: Press this button to activate the Dimmer function, which reduces the brightness of the front-panel display, or turns it off entirely. The first press of the
button shows the default state, which is fullbrightness, by indicating VFD FULL in the Lower Display Line i. Press the button again within five seconds to
reduce the brightness by 50%, as indicated by VFD HALF showing in the Lower Display Line i. Press the button again within five seconds and the main
display will go completely dark. Note that this setting is temporary, in that regardless of any changes, the display will always return to full brightness when
the AVR is turned on. In addition, the Power Indicator 2 will always remain at full brightness regardless of the setting.

This is to remind you that the AVR is still turned on. i Test Button: Press this button to begin the sequence used to calibrate the AVR 240's output levels. (See
pages 24, 30 and 40 for more information on calibrating the AVR 240.) j Sleep Button: Press this button to place the unit in the Sleep mode. After the time
shown in the display, the AVR 240 will automatically go into the Standby mode. Each press of the button changes the time until turn-off in the following order:
n //⌘ Buttons: These multipurpose buttons are used to change or scroll through items in the onscreen menus, make configuration settings such as digital inputs
or delay timing, or to select surround modes. When changing a setting, first press the button for the function or setting to be changed (e.g., press the DSP
Surround Mode Selector k to select a sound field mode or the Digital Select Button q to change a digital input) and then press one of these buttons to scroll
through the list of options or to increase or decrease a setting. The sections in this manual describing the individual features and functions contain specific
information on using these buttons for each application.

o </> Buttons: These buttons are used to change the menu selection or setting during some of the setup procedures for the AVR 240. p Set Button: This button
is used to enter settings into the AVR 240's memory. It is also used in the setup procedures for delay time, speaker configuration and channel output level
adjustment.



[You're reading an excerpt. Click here to read official HARMAN
KARDON AVR 240 user guide
http://yourpdfguides.com/dref/1253133](http://yourpdfguides.com/dref/1253133)

q Digital Select: Press this button to assign one of the digital inputs *(bg to a source. (See pages 22 and 36 for more information on selecting digital inputs.) r Numeric Keys: These buttons serve as a 10button numeric keypad to enter tuner preset positions. They are also used to select channel numbers when TV, Cable or SAT has been selected on the remote, or to select track numbers on a CD, DVD or LD player, depending on how the remote has been programmed. I Tuner Mode: Press this button when the tuner is in use to select between automatic tuning and manual tuning. When the button is pressed so that MANUAL appears in the Lower Display Line i, pressing the Tuning Buttons 9u will move the frequency up or down in single-step increments. When the FM band is in use, pressing this button when a station's signal is weak will change to monaural reception.

(See page 39 for more information.) J Direct Button: Press this button when the tuner is in use to start the sequence for direct entry of a station's frequency.

After pressing the button, simply press the proper Numeric Keys r to select a station. (See page 39 for more information on the tuner.) 12 REMOTE CONTROL FUNCTIONS REMOTE CONTROL FUNCTIONS u Tuning Up/Down: When the tuner is in use, these buttons will tune up or down through the selected frequency band. If the Tuner Mode Button s& has been pressed so that AUTO appears in the onscreen display and Lower Display Line i, pressing and holding either of the buttons for three seconds will cause the tuner to seek the next station with acceptable signal strength for quality reception. When MANUAL appears in the Lower Display Line i, pressing these buttons will tune stations in single-step increments. (See page 39 for more information.) v OSD Button: Press this button to activate the On-Screen Display (OSD) system used to set up or adjust the AVR 240's parameters. w Dolby Mode Selector: This button is used to select from among the available Dolby Surround processing modes.

Each press of this button will select one of the Dolby Pro Logic II or IIx, or Dolby Virtual Speaker modes or Dolby 3 Stereo. When a Dolby Digital-encoded source is in use, the Dolby Digital mode may also be selected. When the headphones are in use, this button selects from among the Dolby Headphone modes. (See pages 3435 for the available Dolby surround mode options.) x DTS Digital Mode Selector: When a DTSencoded digital source is selected, each press of this button will scroll through the available DTS modes. The specific choice of modes will vary according to whether or not the source material contains DTS-ES 6.1 Discrete encoding. When a DTS source is not in use, this button has no function. (See page 34 for the available DTS digital options.) y Logic 7 Mode

Select Button: Press this button to select from among the available Logic 7 surround modes.

(See page 34 for the available Logic 7 options.) z Skip Up/Down Buttons: These buttons do not have a direct function with the AVR 240, but when used with a compatibly programmed CD or DVD player they will change to the next or previous track. `Transport Controls: These buttons do not have any functions for the AVR 240, but they may be programmed for the forward/reverse play operation of a wide variety of CD or DVD players, and audio or video cassette recorders. When the DMP Bridge source is in use, these buttons may be used to operate some functions on a compatible iPod® if it is docked in The Bridge.

See page 40 for more information on using Bridge .

The TM When the remote is used to control the AVR, or the VID2 or VID3 device, by default these buttons are programmed to operate the DVD player. However, you may use the Transport Control Punch-Through feature described on page 46 to program these buttons to operate another device's transport controls when the AVR, VID2 or VID3 has been selected. R Stereo Mode Select Button: When the button is pressed so that SURROUND OFF appears in the Lower Display Line i, with only the Surr Off Surround Mode Indicator ^ lit, the AVR will operate in a bypass mode with true, fully analog, two-channel left/right stereo mode with no surround processing or bass management, unlike other modes where digital processing is used. When the button is pressed so that SURROUND OFF appears in the Lower Display Line i, with both the DSP and Surr Off Surround Mode Indicators ^ lit, you may enjoy a two-channel presentation of the sound along with the benefits of bass management. Depending on whether your system is configured for 5.

1 or 6.1/7.1 channels, the next press of the button will cause either 5 CH STEREO or 7 CH STEREO to appear, and the stereo signal will be routed to all five (or seven) speaker channels. (See page 35 for more information on stereo playback modes.) S DTS Neo:6 Mode Select: Press this button to select a DTS Neo:6 mode. These modes take a twochannel stereo- or matrix surround-encoded source and create a full five-, six- or seven-channel sound field. (See page 34 for the DTS Neo:6 options.) T Macro Buttons: Press these buttons to store or recall a "Macro", which is a preprogrammed sequence of commands stored in the remote. (See page 44 for more information on storing and recalling macros.) U Disc Skip Button: This button has no direct function for the AVR 240 but is most often used to change to the next disc in a CD or DVD player when the remote is programmed for that type of device.

(See page 45 for more information on using the remote with products other than the AVR 240.) V Preset Up/Down: When the tuner is in use, press these buttons to scroll through the stations programmed into the AVR 240's memory. When some source devices, such as CD players, VCRs and cassette decks, are selected using the device Input Selectors e, these buttons may function as Chapter Step or Track Advance. W Clear Button: Press this button to clear incorrect entries when using the remote to directly enter a radio station's frequency. X Memory Button: Press this button to enter a radio station into the AVR 240's preset memory. First, tune the desired station, and then press this button. Two underline indicators will flash at the right side of the Upper Display Line P, and within five seconds press the Numeric Keys r for the preset number between 01 and 30 that you wish to assign to the station. (See page 39 for more information.) Y Delay/Prev Ch.: Press this button to begin the process for setting the delay times used by the AVR 240 when processing surround sound. After pressing this button, the delay times are entered by pressing the Set Button p and then using the //⌘ Buttons n to select A/V SYNC DELAY or the delay setting for any available channel. Press the Set Button p, and then use the //⌘ Buttons n to change the setting. Press the Set Button p again to complete the process. (See page 29 for more information.) However, Harman Kardon recommends that you first perform the EzSet+ procedure, as described on pages 24-

26.



[You're reading an excerpt. Click here to read official HARMAN KARDON AVR 240 user guide](http://yourpdfguides.com/dref/1253133)
<http://yourpdfguides.com/dref/1253133>

Z Speaker Select: Press this button to begin the process of configuring the AVR 240's bass management system for use with the type of speakers used in your system. Once the button has been pressed, use the **/</> Buttons n** to select the channel you wish to set up. Press the **Set Button p** and then use the **/</> Buttons n** to select the appropriate speaker size. Press the **Set Button p** to enter the new setting, and then use the **/</> Buttons n** again to select another channel to configure. When all adjustments have been completed, press the **Set Button p** twice to exit the settings and return to normal operation.

(See page 27 for more information.) However, Harman Kardon recommends that you first perform the EzSet+ procedure, as described on pages 2426. a **Spare Button:** This button has no direct function for the AVR 240, but may be used by other devices. b **Volume Up/Down:** Press these buttons to raise or lower the system volume. By default, the **Volume Up/Down Buttons b** are programmed at the factory to control the AVR 240's volume, no matter which source device has been selected (except TAPE). You may reprogram these buttons to control the volume of another device, such as your TV, using the **Volume Control Punch-Through** instructions found on page 46. c **TV/Video Selector:** This button does not have a direct function on the AVR 240, but when used with a compatible VCR, DVD or satellite receiver, pressing this button will switch between the output of the device and the external video input. Consult the owner's manual for your specific player or receiver for the details of how it implements this function. The **TM REMOTE CONTROL FUNCTIONS 13 REMOTE CONTROL FUNCTIONS d Bridge Digital Media Player (DMP) Selector:** When Harman Kardon's Bridge (optional) is connected to Bridge Digital Media Player (DMP) Connector **e** and a compatible iPod® is docked in Bridge , pressing this selector will select the iPod as the audio source input device for the AVR 240. In addition, if a video display is connected to one of the Video Monitor Outputs **cV**, the iPod's messages will appear on screen, and in the Upper and Lower Display Lines **PQ**.

The **/</> Buttons no**, the **Set Button p** and the **Transport Controls`** may be used to navigate the iPod and to operate many functions. See page 40, and the manuals for The Bridge and your iPod for more information. The **TM The TM The TM The TM e 6-Channel/8-Channel Direct Input:** Press this button to select the device connected to the 6/8-Channel Direct Inputs **j**. (See page 32 for more information.) When the device connected to the 6/8-Channel Direct Input **j** is also a video source, such as a DVD or DVD-Audio player with an onboard audio decoder, you must first select that video source by pressing its **Input Selector e**, then press this button to choose the device connected to the 6/8-Channel Direct Input **j** as the audio source. Note that if you desire, you may select any video source to be used in conjunction with the 6/8Channel Direct Input **j** as the audio source. f **Mute:** Press this button to momentarily silence the AVR 240 or TV set being controlled, depending on which device has been selected. When the AVR 240 remote is being programmed to operate another device, this button is pressed with the **Input Selector Button e** to begin the programming process. (See page 44 for more information on programming the remote.) 14 **REMOTE CONTROL FUNCTIONS INSTALLATION AND CONNECTIONS System Installation** After unpacking the unit, locating it in a place with adequate ventilation and placing it on a solid surface capable of supporting its weight, you will need to make the connections to your audio and video equipment.

IMPORTANT NOTE: For your personal safety and to avoid possible damage to your equipment and speakers, it is always a good practice to turn off and unplug the AVR and ALL source equipment from the AC outlet before making any audio or video system connections. Audio Equipment Connections We recommend that you use high-quality interconnect cables when making connections to source equipment and recorders to preserve the integrity of the signals.

1. Connect the analog outputs of a CD player to the CD Audio Inputs **TM**. NOTE: When the CD player has both fixed and variable audio outputs, it is best to use the fixed output unless you find that the input to the receiver is so low that the sound is noisy, or so high that it is distorted.
2. Connect the analog Play/Out jacks of a cassette deck, MD, CD-R or other audio recorder to the Tape Input Jacks **¢**. Connect the analog Record/In jacks on the recorder to the Tape Output Jacks **£** on the AVR 240. 3. Connect the output of any digital sources such as a CD or DVD changer or player, advanced video game, a digital satellite receiver, HDTV tuner or digital cable set-top box or the output of a compatible computer sound card to the Optical and Coaxial Digital Audio Inputs **bg*(¢**.

We recommend connecting the coaxial digital audio output of your DVD player to the Coax I Digital Audio Input , since that digital input is assigned to the DVD source by default. The Video 2/Cable/Sat source defaults to the Optical I Digital Audio Input **g**. If your cable television set-top box or satellite receiver is equipped with an optical digital audio output, we recommend that you connect it to this input to obtain the benefits of higher-quality digital audio (such as PCM, Dolby Digital 2.0 or Dolby Digital 5.1 signals when broadcast by your cable or satellite provider). 4. Connect the Coaxial or Optical Digital Audio Outputs **-a** on the rear panel of the AVR 240 to the matching digital input connections on a CD-R or MiniDisc or other digital recorder. 6. Connect the supplied FM antenna to the FM (75ohm) Connection **j**. The FM antenna may be an external roof antenna, an inside powered or wirelead antenna or a connection from a cable TV system.

If the antenna or connection uses 300-ohm twin-lead cable, you must use an optional 300ohm-to-75-ohm adaptor to make the connection. 7. With the AVR 240 turned off, connect the optional Harman Kardon Bridge to Bridge Digital Media Player (DMP) Connector **e**. Your compatible iPod® may be docked in Bridge when you wish to use it as an audio source device. Video materials stored on the iPod may not be viewed via Bridge . The **TM 5. Assemble the AM Loop Antenna** supplied with the unit so that the tabs at the bottom of the antenna loop snap into the holes in the base. Connect it to the AM Antenna Terminals **c**. When connecting wires to the speakers, observe proper polarity. Note that the positive (+) terminal of each speaker connection may carry a specific color code, as noted on page 8.

However, many speakers still use a red terminal for the positive (+) connection. Connect the "negative" or "black" wire to the same terminal on both the receiver and the speaker. NOTE: While most speaker manufacturers adhere to an industry convention of using black terminals for negative and red ones for positive, some may vary from this configuration.



[You're reading an excerpt. Click here to read official HARMAN KARDON AVR 240 user guide](http://yourpdfguides.com/dref/1253133)
<http://yourpdfguides.com/dref/1253133>

To ensure proper phase and optimal performance, consult the identification plate on your speaker or the speaker's manual to verify polarity. If you do not know the polarity of your speaker, ask your dealer for advice before proceeding, or consult the speaker's manufacturer.

We also recommend that the length of cable used to connect speaker pairs be identical. For example, use the same length piece of cable to connect the front-left and front-right or surround-left and surround-right speakers, even if the speakers are a different distance from the AVR 240. 9. Connections to a subwoofer are normally made via a line-level audio connection from the Subwoofer Output to the line-level input of a subwoofer with a built-in amplifier.

When a passive subwoofer is used, the connection first goes to a power amplifier, which will be connected to one or more subwoofers.

If you are using a powered subwoofer that does not have line-level input connections, follow the instructions furnished with the speaker for connection information. 10. If an external multichannel audio source with 5.1, 6.1 or 7.1 outputs such as an external digital processor/decoder, DVD-Audio or SACD player is used, connect the outputs of that device to the 6/8-Channel Direct Inputs j. Video Equipment Connections Video equipment is connected in the same manner as audio components. The use of high-quality interconnect cables is recommended to preserve signal quality. 1. Connect a VCR's, DVD recorder's, personal video recorder's or other video source's audio and video Play/Out jacks to the Video 1 Audio/Video and/or S-Video Input Jacks OX on the rear panel.

The Audio and Video Record/In jacks on the recorder should be connected to the Video 1 Audio/Video and/or S-Video Output Jacks QY on the AVR 240. Although any video device may be connected to these jacks, we recommend connecting your video recorder to take advantage of the fact that the remote control is preprogrammed with video recorder product codes for the Video 1 device. The TM The TM The TM 8. Connect the front, center, surround and surround back speaker outputs to the respective speakers. To ensure that all the audio signals are carried to your speakers without loss of clarity or resolution, we suggest that you use high-quality speaker cable. Many brands of cable are available and the choice of cable may be influenced by the distance between your speakers and the receiver, the type of speakers you use, personal preferences and other factors. Your dealer or installer is a valuable resource to consult in selecting the proper cable. Regardless of the brand of cable selected, we recommend that you use a cable constructed of multistrand copper with a gauge of 14 or smaller. Remember that in specifying cable, the lower the number, the thicker the cable. Cable with a gauge of 16 may be used for short runs of less than 10 feet.

We do not recommend that you use cables with an AWG equivalent of 18 or higher, due to the power loss and degradation in performance that will occur.

Cables that are run inside walls should have the appropriate markings to indicate listing with UL, CSA or other appropriate testing agency standards. Questions about running cables inside walls should be referred to your installer or a licensed electrician who is familiar with the NEC and/or the applicable local building codes in your area. INSTALLATION AND CONNECTIONS 15 INSTALLATION AND CONNECTIONS 2. Connect the analog audio and video outputs of a satellite receiver, cable TV converter, television set or any other video source to the Video 2 Audio/ Video and S-Video Input Jacks RZ.

Although any video device may be connected to these jacks, we recommend connecting your cable TV converter or satellite receiver to take advantage of the fact that the remote control is preprogrammed with the product codes of these device types for the Video 2 device. 3. Connect the analog audio and video outputs of a television or other video device to the Video 3 Audio and Video Input Jacks Ub on the rear panel. Although any video or audio device may be connected to these jacks, we recommend connecting your television so that you may take advantage of the fact that the remote control is preprogrammed with TV product codes for the Video 3 device. Important: If you are only using the television as a display device (i.

e., if you receive your TV programs through a cable box or satellite receiver), do not connect the television's outputs to the Video 3 Audio/Video and S-Video Input Jacks Ub, or to any other inputs on the AVR 240. 4. Connect the analog audio and video outputs of a DVD or laser disc player to the DVD Audio/Video and S-Video Inputs dW. 5. Connect the digital audio outputs of a DVD player, satellite receiver, cable box or HDTV converter to the appropriate Optical or Coaxial Digital Inputs bg*(. Remember that the DVD source defaults to the Coaxial 1 Digital Input , and the Video 2/Cable/Sat source defaults to the Optical 1 Digital Audio Input g. All other sources default to their analog inputs, although any source may be assigned to any digital audio input on the receiver.

NOTE: When connecting a digital cable box or other set-top tuner product with a digital audio output, we recommend that you connect both the digital and analog outputs of the product to your AVR. The audio input polling feature of the AVR will then be able to make certain that you have a constant audio feed; it will automatically switch the audio input to the analog jacks if the digital feed is interrupted or unavailable for a particular channel.

6. Connect the Video and/or S-Video Monitor Output cV jacks on the receiver to the composite or Svideo input of your TV monitor or video projector. 7. If both your video display monitor and at least one video source device, such as a DVD player or HDTV set-top box, is equipped with component video capability, then you may connect the component video outputs of the device to one of the two Component Video Inputs >fi. It is recommended that you connect a DVD player or a digital recorder to the Component Video 1 Inputs >, as this input is assigned to the DVD, CD, Tuner and Tape sources by default. Thus, whenever any of these sources is selected, you may view the component video output of the device connected to the Component Video 1 Inputs >, enabling you to view and listen to different sources. Similarly, it is recommended that you connect any other audio/video device, equipped with component video outputs, such as a DVD-Audio or SACD player or HDTV set-top box, to the Video 1, Video 2 or Video 3 sources, or the 6-/8-channel direct inputs, as the Component Video 2 Inputs fi are assigned to the Video 1, Video 2, Video 3 and 6-/8-channel source audio inputs by default. However, you may connect any component video source to either set of component video inputs, as they are assignable to any source. You will still need to connect either the analog or digital audio outputs, or the 6-/8-channel audio outputs, of your component video device to the analog audio inputs corresponding to the source (such as DVD or Video 2 for a cable converter box), or to any of the Optical or Coaxial Digital Audio Inputs bg*(.



[You're reading an excerpt. Click here to read official HARMAN KARDON AVR 240 user guide](http://yourpdfguides.com/dref/1253133)
<http://yourpdfguides.com/dref/1253133>