Your PDF Guides

You can read the recommendations in the user guide, the technical guide or the installation guide for ONKYO TX-SR309. You'll find the answers to all your questions on the ONKYO TX-SR309 in the user manual (information, specifications, safety advice, size, accessories, etc.). Detailed instructions for use are in the User's Guide.

User manual ONKYO TX-SR309
User guide ONKYO TX-SR309
Operating instructions ONKYO TX-SR309
Instructions for use ONKYO TX-SR309
Instruction manual ONKYO TX-SR309

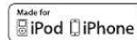## ONKYO.

AV Receiver

TX-SR309

Instruction Manual

Thank you for purchasing an Onkyo AV Receiver.
Please read this manual thoroughly before making connections and plugging in the unit.
Following the instructions in this manual will enable you to obtain optimum performance and listening enjoyment from your new AV Receiver.
Please retain this manual for future reference.

Made for
iPod iPhone

En

Contents

Manual abstract:

En Introduction WARNING: TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPARATUS TO RAIN OR MOISTURE. WARNING RISK OF ELECTRIC SHOCK DO NOT OPEN AVIS RISQUE DE CHOC ELECTRIQUE NE PAS OUVRIR CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK). NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL. The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons. The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance. Important Safety Instructions 1. 2. 3. 4.

5. 6. 7. 8. Read these instructions.

Keep these instructions. Heed all warnings. Follow all instructions. Do not use this apparatus near water. Clean only with dry cloth.

Do not block any ventilation openings. Install in accordance with the manufacturer's instructions. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat. @@A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. @@@@Only use attachments/accessories specified by the manufacturer. @@When a cart is used, use caution when moving the cart/apparatus combination to S3125A avoid injury from tip-over. Unplug this apparatus during lightning storms or when unused for long periods of time. Refer all servicing to qualified service personnel.

Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped. 15. Damage Requiring Service Unplug the apparatus from the wall outlet and refer servicing to qualified service personnel under the following conditions: A. When the power-supply cord or plug is damaged, B. If liquid has been spilled, or objects have fallen into the apparatus, C. If the apparatus has been exposed to rain or water, D. If the apparatus does not operate normally by following the operating instructions. Adjust only those controls that are covered by the operating instructions as an improper adjustment of other controls may result in damage and will often require extensive work by a qualified technician to restore the apparatus to its normal operation, E. If the apparatus has been dropped or damaged in any way, and F. When the apparatus exhibits a distinct change in performance this indicates a need for service.

16. Object and Liquid Entry Never push objects of any kind into the apparatus through openings as they may touch dangerous voltage points or short-out parts that could result in a fire or electric shock. The apparatus shall not be exposed to dripping or splashing and no objects filled with liquids, such as vases shall be placed on the apparatus. Don't put candles or other burning objects on top of this unit. 17.

Batteries Always consider the environmental issues and follow local regulations when disposing of batteries. 18. If you install the apparatus in a built-in installation, such as a bookcase or rack, ensure that there is adequate ventilation. Leave 20 cm (8") of free space at the top and sides and 10 cm (4") at the rear. The rear edge of the shelf or board above the apparatus shall be set 10 cm (4") away from the rear panel or wall, creating a flue-like gap for warm air to escape.

The temperature protection operates if the apparatus attain an abnormal high temperature. The apparatus cannot operate until it has cooled down. 9. 10. 11. 12. 13. 14. En 2 Precautions 1. Recording Copyright--Unless it's for personal use only, recording copyrighted material is illegal without the permission of the copyright holder.

2. AC Fuse--The AC fuse inside the unit is not userserviceable. If you cannot turn on the unit, contact your Onkyo dealer. 3. Care--Occasionally you should dust the unit all over with a soft cloth. For stubborn stains, use a soft cloth dampened with a weak solution of mild detergent and water. Dry the unit immediately afterwards with a clean cloth. Don't use abrasive cloths, thinners, alcohol, or other chemical solvents, because they may damage the finish or remove the panel lettering. 4. Power WARNING BEFORE PLUGGING IN THE UNIT FOR THE FIRST TIME, READ THE FOLLOWING SECTION CAREFULLY.

AC outlet voltages vary from country to country. Make sure that the voltage in your area meets the voltage requirements printed on the unit's rear panel (e.g., AC 230 V, 50 Hz or AC 120 V, 60 Hz). The power cord plug is used to disconnect this unit from the AC power source.

Make sure that the plug is readily operable (easily accessible) at all times. Pressing the [ON/STANDBY] button to select Standby mode does not fully disconnect from the mains. If you do not intend to use the unit for an extended period, remove the power cord from the AC outlet. Preventing Hearing Loss Caution Excessive sound pressure from earphones and headphones can cause hearing loss. Batteries and Heat Exposure Warning Batteries (battery pack or batteries installed) shall not be exposed to excessive heat as sunshine, fire or the like.

Never Touch this Unit with Wet Hands--Never handle this unit or its power cord while your hands are wet or damp. If water or any other liquid gets inside this unit, have it checked by your Onkyo dealer. Handling Notes · If you need to transport this unit, use the original packaging to pack it how it was when you originally bought it. · Do not leave rubber or plastic items on this unit for a long time, because they may leave marks on the case. · This unit's top and rear panels may get warm after prolonged use. This is normal. · If you do not use this unit for a long time, it may not work properly the next time you turn it on, so be sure to use it occasionally. For U.S. models FCC Information for User CAUTION: The user changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation.

If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures: · Reorient or relocate the receiving antenna. · Increase the separation between the equipment and receiver. · Connect the equipment into an outlet on a circuit different from that to which the receiver is connected. · Consult the dealer or an experienced radio/TV technician for help. 5. For Canadian Models NOTE: THIS CLASS B DIGITAL APPARATUS COMPLIES WITH CANADIAN ICES-003.

For models having a power cord with a polarized plug: CAUTION: TO PREVENT ELECTRIC SHOCK, MATCH WIDE BLADE OF PLUG TO WIDE SLOT, FULLY INSERT. 6. 7. Modèle pour les Canadien REMARQUE: CET APPAREIL NUMÉRIQUE DE LA CLASSE B EST CONFORME À LA NORME NMB003 DU CANADA. 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.

8. En 3 For British models Replacement and mounting of an AC plug on the power supply cord of this unit should be performed only by qualified service personnel. Supplied Accessories Make sure you have the following accessories: Indoor FM antenna (page 16) AM loop antenna (page 16) Power cord (Taiwan models) (page 16) Speaker cable labels (page 11) Remote controller (RC-799M) and two batteries (AA/R6) (page 4) (Note for China: The battery for the remote controller is not supplied for this unit.) * IMPORTANT The wires in the mains lead are coloured in accordance with the following code: Blue: Neutral Brown: Live As the colours of the wires in the mains lead of this apparatus may not correspond with the coloured markings identifying the terminals in your plug, proceed as follows: The wire which is coloured blue must be connected to the terminal which is marked with the letter N or coloured black. The wire which is coloured brown must be connected to the terminal which is marked with the letter L or coloured red.

In catalogs and on packaging, the letter at the end of the product name indicates the color. Specifications and operations are the same regardless of color. Installing the batteries Note · If the remote controller doesn't work reliably, try replacing the batteries. · Don't mix new and old batteries or different types of batteries. Batteries (AA/R6) · If you intend not to use the remote controller for a long time, remove the batteries to prevent damage from leakage or corrosion. · Remove expired batteries as soon as possible to prevent damage from leakage or corrosion. IMPORTANT The plug is fitted with an appropriate fuse. If the fuse needs to be replaced, the replacement fuse must approved by ASTA or BSI to BS1362 and have the same ampere rating as that indicated on the plug. Check for the ASTA mark or the BSI mark on the body of the fuse. If the power cord's plug is not suitable for your socket outlets, cut it off and fit a suitable plug.

Fit a suitable fuse in the plug. For European Models Declaration of Conformity We, ONKYO EUROPE ELECTRONICS GmbH LIEGNITZERSTRASSE 6, 82194 GROEBENZELL, GERMANY declare in own responsibility, that the ONKYO product described in this instruction manual is in compliance with the corresponding technical standards such as EN60065, EN55013, EN55020 and EN61000-3-2, -3-3. GROEBENZELL, GERMANY K. MIYAGI Aiming the remote controller To use the remote controller, point it at the AV receiver's remote control sensor, as shown below. Remote control sensor AV receiver Approx. 16 ft. (5 m) ONKYO EUROPE ELECTRONICS GmbH En 4 Contents Introduction Important Safety Instructions ....

...dicator (26) MUTING indicator (28) Message area Rear Panel (North American, European, Australian and Asian models) (Taiwan models) DIGITAL IN COAXIAL and OPTICAL jacks COMPONENT VIDEO IN and OUT jacks HDMI IN and OUT jacks FM ANTENNA jack and AM ANTENNA terminal SUBWOOFER PRE OUT jack SPEAKERS terminals (FRONT A, CENTER, SURROUND, FRONT B) REMOTE CONTROL jack Composite video and analog audio jacks (BD/DVD IN, VCR/DVR IN and OUT, CBL/SAT IN, GAME IN, TV/CD IN) MONITOR OUT V jack AC INLET (Taiwan models) See "Connecting the AV Receiver" for connection (pages 10 to 16).

En Power cord (North American, European, Australian and Asian models) 8 Remote Controller Controlling the AV Receiver To control the AV receiver, press RECEIVER to select Receiver mode. You can also use the remote controller to control Onkyo Blu-ray Disc/DVD player, CD player, and other components. See "Entering Remote Control Codes" for more details (page 40). For detailed information, see the pages in parentheses. button (17) REMOTE MODE/INPUT SELECTOR buttons (18, 40 to 41) TONE and Tone Level buttons (36) SP A/B button (26) Arrow / / / and ENTER buttons SETUP button (29) LISTENING MODE buttons (23) DIMMER button (27) DISPLAY button (27) MUTING button (28) VOL / button (18) RETURN button HOME button (26) SLEEP button (26) Controlling the tuner To control the AV receiver's tuner, press AM or FM. Arrow / buttons (20) D. TUN button (21) DISPLAY button (21) CH +/ button (21) Number buttons (21) En 9 Connections Connecting the AV Receiver Connecting Your Speakers

Connecting the Speaker Cables The following illustration shows which speaker should be connected to each pair of terminals. Surround right Surround left Front B right Front B left Front A right Center Front A left Speakers B Speakers A Push-type speaker terminals Strip 3/8" to 1/2" (10 to 12 mm) of insulation from the ends of the speaker cables, and twist the bare wires tightly, as shown. 3/8" to 1/2" (10 to 12 mm) En 10 Speaker Configuration The following table indicates the channels you should use depending on the number of speakers that you have. No matter how many speakers you use, a powered subwoofer is recommended for a really powerful and solid bass. To get the best from your surround sound system, you need to set the speaker settings manually (page 31). Number of channels Front speakers Center speaker Surround speakers 2 3 4 5 Attaching the Speaker Cable Labels The speaker terminals are color-coded for identification purpose. Speaker Front left Front right Center Surround left Surround right Color White Red Green Blue Gray · Don't connect more than one cable to each speaker terminal.

Doing so may damage the AV receiver. · Don't connect one speaker to several terminals. The supplied speaker cable labels are also color-coded and you should attach them to the positive (+) side of each speaker cable in accordance with the table above.

Then all you need to do is to match the color of each label to the corresponding speaker terminal. Using a Powered Subwoofer To find the best position for your subwoofer, while playing a movie or some music with good bass, experiment by placing your subwoofer at various positions within the room, and choose the one that provides the most satisfying results. Tip · If your subwoofer is unpowered and you're using an external amplifier, connect the subwoofer pre out jack to an input on the amplifier. Speaker Connection Precautions Read the following before connecting your speakers: · You can connect speakers with an impedance of between 6 and 16 ohms. If you use speakers with a lower impedance, and use the amplifier at high volume levels for a long period of time, the built-in amp protection circuit may be activated. · Disconnect the power cord from the wall outlet before making any connections. · Read the instructions supplied with your speakers. · Pay close attention to speaker wiring polarity. In other words, connect positive (+) terminals only to positive (+) terminals, and negative () terminals only to negative () terminals. If you get them the wrong way around, the sound will be out of phase and will sound unnatural. · Unnecessarily long, or very thin speaker cables may affect the sound quality and should be avoided. · Be careful not to short the positive and negative wires. Doing so may damage the AV receiver. · Make sure the metal core of the wire does not have contact with the AV receiver's rear panel. Doing so may damage the AV receiver.

LINE INPUT LINE INPUT Powered subwoofer Corner position 1/3 of wall position En 11 About AV Connections Connected image with AV components HDMI cable : Video & Audio Other cables : Video : Audio AV receiver AV receiver TV, projector, etc. Blu-ray Disc/ DVD player Game console TV, projector, etc. Blu-ray Disc/ DVD player Game console · Before making any AV connections, read the manuals supplied with your AV components. · Don't connect the power cord until you've completed and double-checked all AV connections. · Push plugs in all the way to make good connections (loose connections can cause noise or malfunctions).

· To prevent interference, keep audio and video cables away from power cords and speaker cables. Right! Wrong! AV Cables and Jacks Signal Video and Audio Video Cable HDMI Component video Jack HDMI Description HDMI connections can carry digital video and audio. Component video separates the luminance (Y) and color difference signals (PB, PR), providing the best picture quality (some TV manufacturers label their component video sockets slightly differently). Composite video is commonly used on TVs, VCRs, and other video equipment. Optical digital connections allow you to enjoy digital sound such as PCM*, Dolby Digital or DTS. The audio quality is the same as coaxial. Coaxial digital connections allow you to enjoy digital sound such as PCM*, Dolby Digital or DTS. The audio quality is the same as optical. Analog audio connections (RCA) carry analog audio. Y PB PR Green Blue Red V Composite video Audio Optical digital audio Coaxial digital audio Analog audio (RCA) L Yellow OPTICAL Orange White Red R * Available sampling rate for PCM input signal is 32/44.

1/48/88.2/96 kHz. Even 176.4/192 kHz is effective in case of the HDMI connection. Note · The AV receiver does not support SCART plugs. · The AV receiver's optical digital jacks have shutter-type covers that open when an optical plug is inserted and close when it's removed. Push plugs in all the way. Caution · To prevent shutter damage, hold the optical plug straight when inserting and removing. En 12 Connecting Components with HDMI Game console TV, projector, etc. Satellite/cable set-top box, etc.

Blu-ray Disc/DVD player Connect your components to the appropriate jacks. The default input assignments are shown below. : Assignment can be changed (page 30). Jack Input HDMI IN1 HDMI IN2 HDMI IN3 Output HDMI OUT Components Blu-ray Disc/DVD player Satellite/cable set-top box, etc. Game console TV, projector, etc.

Assignable See also: · "Connection Tips and Video Signal Path" (page 47) · "About HDMI" (page 49) · "Using an RIHD-compatible TV, Player, or Recorder" (page 50) Audio return channel (ARC) function Audio return channel (ARC) function enables an HDMI capable TV to send the audio stream to the HDMI OUT of the AV receiver (page 35). · To use ARC function, you must select the TV/CD input selector, your TV must support ARC function and "HDMI Ctrl(RIHD)" is set to "On" (page 35). Tip · To listen to audio received by the HDMI IN jacks through your TV's speakers: Set the "HDMI Ctrl(RIHD)" setting to "On" for an -compatible TV. Set the "Audio TV Out" setting to "On" (page 35) when the TV is not compatible with setting to "Off". Set your Blu-ray Disc/DVD player's HDMI audio output setting to PCM.

To listen to TV audio through the AV receiver, see "Connecting Your Components" (page 14). Note · When listening to an HDMI component through the AV receiver, set the HDMI component so that its video can be seen on the TV screen (on the TV, select the input of the HDMI component connected to the AV receiver). If the TV power is off or the TV is set to another input source, this may result in no sound from the AV receiver or the sound may be cut off. · When the "Audio TV Out" setting is set to "On" (page 35) to hear from your TV's speakers, by controlling the AV receiver's volume, the sound will be output from the AV receiver's speakers, too. When the "HDMI Ctrl(RIHD)" setting is set to "On" (page 35) to hear from speakers of -compatible TV, by controlling the AV receiver's volume, the AV receiver's speakers will produce sound while the TV's speakers are muted. To stop the AV receiver's speakers producing sound, change the settings, change your TV's settings, or turn down the AV receiver's volume. or the "HDMI Ctrl(RIHD)" En 13 Connecting Your Components The on-screen setup menus appear only on a TV that is connected to the HDMI OUT. If your TV is connected to the MONITOR OUT V or the COMPONENT VIDEO OUT, use the AV receiver's display when changing settings. Connect your components to the appropriate jacks.

The default input assignments are shown below.

: Assignment can be changed (page 30). No. Jack AUX INPUT VIDEO AUDIO L/R USB, AUX INPUT VIDEO*1 USB*2 DIGITAL IN OPTICAL 1 (GAME) 2 (TV/CD) COAXIAL (BD/DVD) COMPONENT VIDEO MONITOR OUT BD/DVD IN VCR/DVR IN CBL/SAT IN GAME IN TV/CD IN IN 1 (BD/DVD) IN 2 (CBL/SAT) OUT iPod/iPhone (video playback) iPod/iPhone, MP3 player, USB flash drive Game console TV, CD player Blu-ray Disc/DVD player Blu-ray Disc/DVD player, RI dock Satellite/cable set-top box, RI dock, etc. TV, projector, etc. TV, projector, etc. Blu-ray Disc/DVD player VCR, DVD recorder/Digital Video Recorder, RI dock Satellite/cable set-top box, etc. Game console, RI dock TV, CD player, cassette tape deck, MD, CD-R, Turntable*3, RI dock Components Camcorder, etc. Assignable *1 *2 *3 When USB input is selected, you can input video signals from the AUX INPUT VIDEO jack. Video signals input from AUX INPUT VIDEO will be output from the MONITOR OUT jack. Do not connect the AV receiver's USB port to a USB port on your computer.

Music on your computer cannot be played through the AV receiver in this way. Connect a turntable (MM) that has a phono preamp built-in. If your turntable (MM) doesn't have it, you'll need a commercially available phono preamp. If your turntable has a moving coil (MC) type cartridge, you'll need a commercially available MC head amp or MC transformer as well as a phono preamp. See your turntable's manual for details.

· With connection , you can enjoy Dolby Digital and DTS. · If your Blu-ray Disc/DVD player has both the main stereo and multichannel outputs, be sure to connect the main stereo output using connection . How to record the video See "Recording" to make a connection for video recording (page 28). En 14 Connecting Onkyo Components 1 2 3 Make sure that each Onkyo component is connected with an analog audio cable (connection in the hookup examples) (page 14). Make the connection (see the illustration).

If you're using an RI Dock or cassette tape deck, change the Input Display (page 27). With (Remote Interactive), you can use the following special functions: System On/Auto Power On When you start playback on a component connected via , if the AV receiver is on Standby, it will automatically turn on and select that component as the input source. Direct Change When playback is started on a component connected via , the AV receiver automatically selects that component as the input source. Remote Control You can use the AV receiver's remote controller to control your other -capable Onkyo components, pointing the remote controller at the AV receiver's remote control sensor instead of the component. You must enter the appropriate remote control code first (page 40). R L ANALOG AUDIO OUT e.g., CD player e.g., DVD player R L ANALOG AUDIO OUT Note · Use only cables for connections.

cables are supplied with Onkyo players (DVD, CD, etc.). · Some components have two jacks. You can connect either one to the AV receiver. The other jack is for connecting additional -capable components. · Connect only Onkyo components to jacks. Connecting other manufacturer's components may cause a malfunction. · Some components may not support all functions. Refer to the manuals supplied with your other Onkyo components. Connecting a Recording Component See "Recording" on the recording (page 28).

Note · The AV receiver must be turned on for recording. Recording is not possible while it's in Standby mode. · If you want to record directly from your TV or playback VCR to the recording VCR without going through the AV receiver, connect the TV/VCR's audio and video outputs directly to the recording VCR's audio and video inputs. See the manuals supplied with your TV and VCR for details. · Video signals connected to composite video inputs can be recorded only via composite video outputs.

If your TV/VCR is connected to a composite video input, the recording VCR must be connected to a composite video output. · The surround sound and DSP listening modes cannot be recorded. · Copy-protected Blu-ray discs and DVDs cannot be recorded. · Sources connected to a digital input cannot be recorded. Only analog inputs can be recorded.

· DTS signals will be recorded as noise, so don't attempt analog recording of DTS CDs or LDs. L AUDIO IN R VIDEO IN VCR, DVD recorder, cassette tape deck, CDR, MD recorder, etc. En 15 Connecting Antenna This section explains how to connect the supplied indoor FM antenna and AM loop antenna. The AV receiver won't pick up any radio signals without any antenna connected, so you must connect the antenna to use the tuner. Caution · Be careful that you don't injure yourself when using thumbtacks. North American and Taiwan models European, Australian and Asian models Push. Insert wire. Release. Insert the plug fully into the jack. Insert the plug fully into the jack.

Assembling the AM loop antenna Thumbtacks, etc. AM loop antenna (supplied) Indoor FM antenna (supplied) Note · Once your AV receiver is ready for use, you'll need to tune into a radio station and position the antenna to achieve the best possible reception. · Keep the AM loop antenna as far away as possible from your AV receiver, TV, speaker cables, and power cords. Tip · If you cannot achieve good reception with the supplied indoor FM antenna, try a commercially available outdoor FM antenna instead. · If you cannot achieve good reception with the supplied indoor AM loop antenna, try using it with a commercially available outdoor AM antenna. Connecting the Power Cord 1 (Taiwan models) Connect the supplied power cord to the AV receiver's AC INLET. Note · Before connecting the power cord, connect all of your speakers and AV components. · Turning on the AV receiver may cause a momentary power surge that might interfere with other electrical equipment on the same circuit. If this is a problem, plug the AV receiver into a different branch circuit. · Do not use a power cord other than the one supplied with the AV receiver.

The supplied power cord is designed exclusively for use with the AV receiver and should not be used with any other equipment. · Never disconnect the power cord from the AV receiver while the other end is still plugged into a wall outlet. Doing so may cause an electric shock. Always disconnect the power cord from the wall outlet first, and then the AV receiver. To AC wall outlet 2 En Plug the power cord into an AC wall outlet.

16 Turning On & Basic Operations Turning On/Off the AV Receiver ON/STANDBY RECEIVER Turning On 1 Press or ON/STANDBY on the front panel. Press RECEIVER followed by on the remote controller. The AV receiver comes on, the display lights.

Turning Off 1 Press or ON/STANDBY on the front panel. Press RECEIVER followed by on the remote controller.

The AV receiver will enter standby mode. To prevent any loud surprises when you turn on the AV receiver, always turn down the volume before you turn it off. Tip · See "Auto Standby" about a power management setting (page 34). En 17 Playback This manual describes the procedure using the remote controller unless otherwise specified. Controlling Contents of USB Devices See "Controlling Other Onkyo Components" about the operation of other components (page 40). Playing the Connected Component Operating with the remote controller 1 2 Press RECEIVER followed by INPUT SELECTOR. Start playback on the source component. See also: · "Playing iPod/iPhone via USB" (page 19) · "Playing USB Device" (page 20) · "Listening to AM/FM Radio" (page 20) · "iPod/iPhone Playback via Onkyo Dock" (page 38) · "Controlling Other Onkyo Components" (page 40) To adjust the volume, use VOL / . Select a listening mode and enjoy! See also: · "Using the Listening Modes" (page 23) Press USB first. 3 4 TOP MENU This button displays the top menu for each media or service.

Operating on the AV receiver / and ENTER These buttons navigate through the menus. 1 2 3 4 Use the input selector buttons to select the input source. Start playback on the source component. To adjust the volume, use the MASTER VOLUME control. Select a listening mode and enjoy! / This button cycles through pages. PLAYLIST / In Standard Mode (iPod/iPhone), this button selects playlists. This button starts playback. This button selects the beginning of the current song. Pressing this button twice selects the previous song. This button fast-reverses the current song.

This button pauses playback. SEARCH You can toggle between the playback screen and the list screen during playback. REPEAT Press this button repeatedly to cycle through the repeat modes. To cancel repeat playback, press REPEAT repeatedly until you select Off. DISPLAY This button switches between song informations.

En 18 CH +/ In Standard Mode (iPod/iPhone), this button selects albums. Playing iPod/iPhone via USB The on-screen navigation menus appear only on a TV that is connected to the HDMI OUT. This section explains how to play music files on the iPod/iPhone. Compatible iPod/iPhone models Made for: iPod touch (1st, 2nd, 3rd and 4th generation), iPod classic, iPod with video, iPod nano (1st, 2nd, 3rd, 4th, 5th and 6th generation), iPhone 4, iPhone 3GS, iPhone 3G, iPhone RETURN This button returns to the previous menu. This button selects the next song.

This button fast-forwards the current song. This button stops playback. MODE You can switch between Standard Mode and Extended Mode during iPod/iPhone playback. RANDOM This button performs random playback. All of the songs in the current folder will be played in random order. When all of the songs in the folder have been played once, they'll all be played again in a different random order. To cancel random playback, press this button again. Note · The buttons you can use will differ depending on the devices and media used for playback. 1 2 Press USB to select the "USB" input. Connect the USB cable that comes with the iPod/iPhone to the USB port at the front of the AV receiver.

While reading the contents of your iPod/iPhone, the message "Connecting..." appears on the display. Press MODE to switch to Extended Mode. A list of your iPod/iPhone model's contents appears. Use / to open a folder, and then press ENTER. Tip · With the default settings, iPod/iPhone is operated in Standard Mode. · Pressing MODE again switches back to Standard Mode. · When you disconnect the iPod/iPhone, the AV receiver stores the mode.

This means that if you disconnect when in Extended Mode, the AV receiver will start in Extended Mode when you next connect the iPod/iPhone. · You can also use the / , ENTER and TUNING MODE buttons on the front panel. TUNING MODE allows you to switch modes. · When connecting your iPod/iPhone with a USB cable, we recommend you use an official USB cable from Apple Inc. 3 Understanding Icons on the Display This section describes icons that appear on the display during media playback.

Displayed Icons Icon Description Folder Track Playback Pause Fast Forward Fast Reverse Artist 4 Use / to select a music file, and press ENTER or to start playback. Note · Do not disconnect the USB device or USB cable that comes with iPod/iPhone to the USB port at the front of the AV receiver, while the message "Connecting..." appears on the display.

Standard Mode control Album Repeat One Track Repeat Folder (USB Device) Repeat Shuffle Shuffle Album (iPod/iPhone) The content information is not displayed on-screen, but can be operated using the iPod/iPhone or the remote controller (USB). Note · The following iPod models are not supported in Standard Mode. These iPod models can only be controlled in Extended Mode. iPod with video iPod nano (1st generation) En 19 Extended Mode control The content information is displayed (lists are displayed) on-screen, and you can control the content while looking at the screen. Top screen list: Playlists, Artists, Albums, Genres, Songs, Composers, Shuffle Songs, Now Playing Listening to AM/FM Radio This section describes the procedure using the buttons on the front panel unless otherwise specified. Using the Tuner With the built-in tuner you can enjoy AM and FM radio stations. You can store your favorite stations as presets for quick selection. You can change the frequency steps (page 34). Playing USB Device The on-screen navigation menus appear only on a TV that is connected to the HDMI OUT. This section explains how to play music files on a USB device (e.

g., USB flash drives and MP3 players). See also: · "USB Features" (page 48). 1 Press AM or FM to select either "AM" or "FM". In this example, FM has been selected. Band Frequency 1 2 3 4 Press USB to select the "USB" input. Plug your USB device into the USB port at the front of the AV receiver. While reading the contents of your USB device, the message "Connecting...

" appears on the display. Press ENTER. A list of the device's contents appears. To open a folder, use / to select it, and then press ENTER. Use / to select a music file, and press ENTER or to start playback.

(Actual display depends on the country.) Tuning into Radio Stations Auto tuning mode 1 2 Press TUNING MODE so that the AUTO indicator lights on the display. Press TUNING / . Searching stops when a station is found. When tuned into a station, the TUNED indicator lights. When tuned into a stereo FM station, the FM STEREO indicator lights on the display, as shown.

FM STEREO Note · If the media you connect is not supported, the message "No Storage" will appear on the display. · If you connect a USB hard disk drive to the AV receiver's USB port, we recommend that you use its AC adapter to power it. · The AV receiver supports USB MP3 players that support the USB Mass Storage Class standard, which allows USB storage devices to be connected to computers without the need for special drivers or software. Note that not all USB MP3 players support the USB Mass Storage Class standard. Refer your USB MP3 player's instruction manual for details. · Protected WMA music files on an MP3 player cannot be played. · Onkyo accepts no responsibility whatsoever for the loss or damage to data stored on a USB mass storage device when that device is used with the AV receiver. We recommend that you back up your important music files beforehand. · MP3 players containing music files that are managed with special music software are not supported.

· Operation with all USB mass storage devices including the ability to power them is not guaranteed. · Do not connect your USB mass storage device via a USB hub. The USB mass storage device must be connected directly to the AV receiver's USB port. · If the USB mass storage device contains a lot of data, the AV receiver make take a while to read it. · USB memory devices with security functions cannot be played. · Do not disconnect the USB device or USB cable that comes with iPod/iPhone to the USB port at the front of the AV receiver, while the message "Connecting..." appears on the display. AUTO TUNED Tip · Tuning into weak FM stereo stations If the signal from a stereo FM station is weak, it may be impossible to get good reception.

In this case, switch to manual tuning mode and listen to the station in mono. · Alternatively, you can use the remote controller's MODE and arrow buttons. En 20 Manual tuning mode In manual tuning mode, FM stations will be in mono. Selecting Presets 1 2 Press TUNING MODE so that the AUTO indicator goes off on the display. Press and hold TUNING / .

The frequency stops changing when you release the button. Press the buttons repeatedly to change the frequency one step at a time. 1 To select a preset, use PRESET / on the AV receiver, or the remote controller's CH +/. Tip · You can also use the remote controller's number buttons to select a preset directly. Deleting Presets Tuning into stations by frequency You can tune into AM and FM stations directly by entering the appropriate frequency.

1 2 Select the preset that you want to delete. See the previous section. While holding down MEMORY, press TUNING MODE. The preset is deleted and its number disappears from the display. 1 On the remote controller, press AM or FM to select "AM" or "FM", followed by D.TUN. Using RDS (excluding North American and Taiwan models) (Actual display depends on the country.) 2 Within 8 seconds, use the number buttons to enter the frequency of the radio station. For example, to tune to 87.5 (FM), press 8, 7, 5.

If you have entered the wrong number, you can retry after 8 seconds. RDS works only in areas where RDS broadcasts are available. When tuned into an RDS station, the RDS indicator lights. When the station is broadcasting text information, the text can be displayed. What is RDS? RDS stands for Radio Data System and is a method of transmitting data in FM radio signals. It was developed by the European Broadcasting Union (EBU) and is available in most European countries. Many FM stations use it these days. In addition to displaying text information, RDS can also help you find radio stations by type (e.g., news, sport, rock, etc.

). The AV receiver supports four types of RDS information: PS (Program Service) When tuned to an RDS station that's broadcasting PS information, the station's name will be displayed. Pressing DISPLAY will display the frequency for 3 seconds. RT (Radio Text) When tuned to an RDS station that's broadcasting text information, the text will be shown on the display as described in the next section. PTY (Program Type) This allows you to search for RDS radio stations by type (page 22).

TP (Traffic Program) This allows you to search for RDS radio stations that broadcast traffic information (page 22). Note · In some cases, the text characters displayed on the AV receiver may not be identical to those broadcast by the radio station. Also, unexpected characters may be displayed when unsupported characters are received. This is not a malfunction. · If the signal from an RDS station is weak, RDS data may be displayed intermittently or not at all. Presetting AM/FM Stations You can store a combination of up to 40 of your favorite AM/FM radio stations as presets. 1 2 Tune into the AM/FM station that you want to store as a preset. See the previous section. Press MEMORY. The preset number flashes. (Actual display depends on the country.) 3 4 While the preset number is flashing (about 8 seconds), use PRESET / to select a preset from 1 through 40. Press MEMORY again to store the station or channel. The station or channel is stored and the preset number stops flashing. Repeat this procedure for all of your favorite AM/FM radio stations.

En 21 Displaying Radio Text (RT) RDS program types (PTY) Type None News reports Current affairs Information Sport Education Drama Culture Science and technology Varied Pop music Rock music Middle of the road music Light classics Serious classics Other music Weather Finance Children's programmes Social affairs Religion Phone in Travel Leisure Jazz music Country music National music Oldies music Folk music Documentary Alarm test Alarm Display None News Affairs Info Sport Educate Drama Culture Science Varied Pop M Rock M Easy M Light M Classics Other M Weather Finance Children Social Religion Phone In Travel Leisure Jazz Country Nation M Oldies Folk M Document TEST Alarm! 1 Press RT/PTY/TP once. The RT information scrolls across the display. Note · The message "Waiting" may appear while the AV receiver waits for the RT information. · If the message "No Text Data" appears on the display, no RT information is available. Finding Stations by Type (PTY) You can search for radio stations by type. 1 2 3 4 Press RT/PTY/TP twice. The current program type appears on the display. Use PRESET / to select the type of program you want. See the table shown later in this chapter. To start the search, press ENTER.

The AV receiver searches until it finds a station of the type you specified, at which point it stops briefly before continuing with the search. When a station you want to listen to is found, press ENTER. If no stations are found, the message "Not Found" appears. Listening to Traffic News (TP) You can search for stations that broadcast traffic news.

1 Press RT/PTY/TP three times.

If the current radio station is broadcasting TP (Traffic Program), "[TP]" will appear on the display, and traffic news will be heard as and when it's broadcast. If "TP" without square brackets appears, this means that the station is not broadcasting TP. To locate a station that is broadcasting TP, press ENTER. The AV receiver searches until it finds a station that's broadcasting TP. If no stations are found, the message "Not Found" appears.

2 En 22 Using Basic Functions Using the Listening Modes Selecting Listening Modes See "Listening Modes" for detailed information about the listening modes (page 24). Listening Mode Buttons MOVIE/TV button This button selects the listening modes intended for use with movies and TV. MUSIC button This button selects the listening modes intended for use with music. GAME button This button selects the listening modes intended for use with video games. STEREO button This button selects the Stereo listening mode and All Channel Stereo listening mode. · The Dolby Digital and DTS listening modes can only be selected if your Blu-ray Disc/DVD player is connected to the AV receiver with a digital audio connection (coaxial, optical, or HDMI). · The listening modes you can select depends on the format of the input signal. To check the format, see "Displaying Source Information" (page 27). · While a pair of headphones is connected, you can select the following listening modes: Mono, Direct, and Stereo. · While Speakers A and B are on, you can select only the Direct, Stereo, Mono, or T-D (Theater-Dimensional) listening mode.

Press RECEIVER first. MUSIC MOVIE/TV GAME STEREO MOVIE/TV, MUSIC, GAME About Listening Modes The AV receiver's listening modes can transform your listening room into a movie theater or concert hall, with high fidelity and stunning surround sound. Explanatory Notes Input Source The following audio formats are supported by the listening mode. This is mono (monophonic) sound. This is stereo (stereophonic) sound. Two independent audio signal channels are reproduced through two speakers. This is 5.1-channel surround sound. This surround system has five main channels of sound and a sixth subwoofer channel (called the point-one channel). *1 This is 7.

1-channel surround sound. This is a further sound enhancement to 5.1 channel sound with two additional speakers that provide greater sound envelopment and more accurate positioning of sounds. *1 The AV receiver outputs this source in 5.1-channel surround sound.

En 23 Speaker Layout The illustration shows which speakers are activated in each channel. See "Sp Config (Speaker Configuration)" for the speaker setup (page 31). Front speakers Center speaker Subwoofer Surround speakers Onkyo-Original DSP Listening Modes Listening Mode Orchestra*1 Or ches t r a Description Suitable for classical or operatic music, this mode emphasizes the surround channels in order to widen the stereo image, and simulates the natural reverberation of a large hall. Suitable for acoustic instruments, vocals, and jazz, this mode emphasizes the front stereo image, giving the impression of being right in front of the stage. Suitable for rock or pop music, listening to music in this mode creates a lively sound field with a powerful acoustic image, like being at a club or rock concert.

This mode adds realistic acoustics to TV shows produced in a TV studio, surround effects to the entire sound, and clarity to voices. In this mode, the sound has a dramatic feel with a similar atmosphere to Orchestra mode. In this mode, sound localization is distinct with emphasis on bass. Input Speaker Source Layout Unplugged*1 Un p l u g g e d Studio-Mix*1 S t u d i o M i x TV Logic*1 TV Log i c Game-RPG*1 G ame RPG Game-Action*1 G ame A c t i o n Game-Rock*1 G ame R o c k In this mode, sound pressure is emphasized to heighten live feel. Game-Sports*1 G ame S p o r t s In this mode, reverberation is increased and sound localization decreased slightly. All Ch Stereo Al l Ch St e r eo Ideal for background music, this mode fills the entire listening area with stereo sound from the front, surround, and surround back speakers. In this mode, all speakers output the same sound in mono, so the sound you hear is the same regardless of where you are within the listening room. With this mode you can enjoy a virtual surround sound even with only two or three speakers. This works by controlling how sounds reach the listener's left and right ears. Good results may not be possible if there's too much reverb, so we recommend that you use this mode in an environment with little or no natural reverb.

Full Mono Fu l l Mo n o T-D (TheaterDimensional)*1 TD Listening Modes Listening Mode Direct Di rec t Description In this mode, audio from the input source is output without surround-sound processing. The speaker configuration (presence of speakers) and speaker distance settings are enabled, but much of the processing set via Home menu is disabled. A/V Sync does not have effect on the analog audio. See "Advanced Setup" for more details (page 29). Sound is output from the front left and right speakers and subwoofer. Input Speaker Source Layout Stereo St e r eo Mono Mo n o En Use this mode when watching an old movie with a mono soundtrack, or use it with the foreign language soundtracks recorded in the left and right channels of some movies. It can also be used with DVDs or other sources containing multiplexed audio, such as karaoke DVDs. 24 Listening Mode Multichannel Mu l t i c h Description This mode is for use with PCM multichannel sources. Input Speaker Source Layout Dolby Pro Logic II PL PL PL Mo v i e Mu s i c Game Dolby Pro Logic II expands any 2-channel source for 5.1-channel playback.

It provides a very natural and seamless surround-sound experience that fully envelops the listener. As well as music and movies, video games can also benefit from the dramatic spatial effects and vivid imaging. · Dolby PLII Movie Use this mode with DVDs and videos that bear the Dolby Surround logo or TV shows that feature Dolby Surround. You can also use this mode with stereo movies or TV shows and the AV receiver will create a 5.1 surround mix from the 2-channel stereo.

· Dolby PLII Music Use this mode to add 5.1 surround to stereo sources such as music CDs and DVDs. · Dolby PLII Game Use this mode when playing game discs. In this mode, audio from the input source is output without surround-sound processing. The speaker configuration (presence of speakers), crossover frequency, speaker distance, A/V Sync and much of the processing set via Home menu are enabled.

See "Advanced Setup" for more details (page 29). Dolby Digital Do l b y D Dolby Digital Plus*2 Do l b y D + Dolby TrueHD Do l b y T r u e HD DTS DTS DTS-HD High Resolution Audio D T S HD HR DTS-HD Master Audio D T S HD MS T R DTS Express DTS Exp r ess DSD*3 DSD DTS 96/24 DTS 96 / 24 This mode is for use with DTS 96/24 sources.

This is high-resolution DTS with a 96 kHz sampling rate and 24-bit resolution, providing superior fidelity. Use it with DVDs that bear the DTS 96/24 logo. This mode expands any 2-channel source for up to 5.1-channel playback. It uses seven full-bandwidth channels of matrix decoding for matrix-encoded material, providing a very natural and seamless surround sound experience that fully envelops the listener. · Neo:6 Cinema Use this mode with any stereo movie (e.g., TV, DVD, VHS).

· Neo:6 Music Use this mode with any stereo music source (e.g., CD, radio, cassette, TV, VHS, DVD). Neo:6 Ne o : 6 Ne o : 6 C i n ema Mu s i c Note *1 *2 *3 These listening modes cannot be selected during USB or iPod playback. For the Blu-ray Discs, Dolby Digital is used. AV receiver can input the DSD signal from HDMI IN. Setting the output setting on the player side to PCM might obtain a better sound according to the player. In that case, set the output setting on the player side to PCM. · The listening modes cannot be selected with some source formats. En 25 Using the Home Menu The Home menu provides you quick access to frequently used menus without having to go through the long standard menu.

This menu enables you to change settings and view the current information. The Home menus appear only on a TV that is connected to the HDMI OUT. If your TV is connected to the MONITOR OUT V or the COMPONENT VIDEO OUT, use the AV receiver's display when changing settings. Selecting Speakers A and B You can use two sets of front speakers with the AV receiver: Speakers A for up to 5.1-channel playback in your main listening room and Speakers B for 2-channel stereo playback in another room.

1 Press RECEIVER followed by SP A/B repeatedly to cycle through the selection: Speakers A Speakers A&B Speakers B Off Speaker indicators and output channels are shown below. Speaker indicators A A B B 1 2 Press RECEIVER followed by HOME. The Home menu will be superimposed on the TV screen. Use / and ENTER to make the desired selection. Input You can select the input source while viewing the information as follows: the name of input selectors, input assignments.

Press ENTER to display the current input source, followed by / to select the desired input source. Pressing ENTER again switches to the selected input source. Audio You can change the following settings: "Bass", "Treble", "Subwoofer Level", "Center Level", "Late Night", "Music Optimizer", and "Cinema Filter". See also: · "Using the Audio Settings" (page 36) Info*1 You can view the information of the following items: "Input" and "Output". Listening Mode You can select the listening modes that are grouped in the following categories: "MOVIE/TV", "MUSIC" and "GAME". Use / to select the category and / to select the listening mode. Press ENTER to switch to the selected listening mode. Output channel Speakers A: 5.1 channels Speakers A: 2.1 channels* Speakers B: 2 channels Speakers B: 2 channels No sound * While Speakers B is on, channels are reduced to 2.

1 in the main room. Tip · Alternatively, you can use the AV receiver's SPEAKERS A and B. Using the Sleep Timer With the sleep timer, you can set the AV receiver to turn off automatically after a specified period. 1 Press RECEIVER followed by SLEEP repeatedly to select the required sleep time. The sleep time can be set from 90 to 10 minutes in 10 minute steps. The SLEEP indicator lights on the display when the sleep timer has been set. The specified sleep time appears on the display for about 5 seconds, then the previous display reappears. Tip · If you need to cancel the sleep timer, press SLEEP repeatedly until the SLEEP indicator goes off. · To check the time remaining until the AV receiver sleeps, press SLEEP. Note that if you press again on SLEEP as the time being displayed is equal or inferior to 10 minutes, the sleep timer will go off.

Note *1 Depending on the input source and listening mode, not all channels shown here output the sound. En 26 Setting the Display Brightness You can adjust the brightness of the AV receiver's display. Changing the Input Display When you connect an -capable Onkyo component, you must configure the input display so that can work properly. This setting can be done only from the front panel. 1 Press RECEIVER followed by DIMMER repeatedly to select: dim, dimmer, or normal brightness.

Tip · (North American and Taiwan models) Alternatively, you can use the AV receiver's DIMMER. 1 2 Press TV/CD, GAME or VCR/DVR. "TV/CD", "GAME" or "VCR/DVR" appears on the display. Press and hold down the same button (about 3 seconds) to change the input display. Repeat this step to select the desired input display.

TV/CD: TV/CD DOCK TAPE Displaying Source Information You can display various information about the current input source as follows. 1 Press RECEIVER followed by DISPLAY repeatedly to cycle through the available information. GAME: GAME DOCK VCR/DVR: VCR/DVR DOCK Note · DOCK cannot be selected for multiple input selectors at the same time. · Enter the appropriate remote control code before using the remote controller for the first time (page 40). The following information can typically be displayed. Input source & volume*1 Listening mode Tip · Alternatively, you can use the AV receiver's DISPLAY. *1 When AM or FM radio is used, the band, preset number, and frequency are displayed. * If the input signal is analog, "Analog" is displayed. If the input signal is PCM, the sampling frequency is displayed. If the input signal is digital but not PCM, the signal format is displayed.

Information is displayed for about three seconds, then the previously displayed information reappears. Using the Music Optimizer The Music Optimizer function enhances the sound quality of compressed music files. 1 Press MUSIC OPTIMIZER on the front panel. The M.Opt indicator lights on the display. Tip · Alternatively, you can use the remote controller's HOME and arrow buttons. · See "Music Optimizer" for more details (page 37). En 27 Muting the AV Receiver You can temporarily mute the output of the AV receiver. Recording Separate AV Sources Here you can record audio and video from completely separate sources, allowing you to overdub audio onto your video recordings. This function takes advantage of the fact that when an audio-only input source (TV/CD) is selected, the video input source remains unchanged.

@@@@@@@@@@@@You can watch the source while recording. @@On your recorder, start recording. On the source component, start playback. @@Prepare the VCR for recording. Press AUX input selector.

Press TV/CD input selector. @@@@@If your TV is connected to the MONITOR OUT V or the COMPONENT VIDEO OUT, use the AV receiver's display when changing settings.

Note · The on-screen setup menus are displayed when: There is no video input, or The video input is 480p, 576p, 720p, 1080i, or 1080p. Common Procedures in Setup Menu Remote indicator RECEIVER ENTER // / SETUP RETURN Setup Menu 1. 2. 3. 4. 5. 6. 7. 8. 9. 10. HDMI Input Component Digital Audio Sp Config Sp Distance Level Cal Audio Adjust Source Setup Hardware HDMI Setup BD/DVD VCR/DVR CBL/SAT GAME AUX TUNER TV/CD The on-screen setup menus appear on the connected TV and provide a convenient way to change the AV receiver's various settings. Settings are organized into 10 categories on the main menu.

Carry out the settings by using the on-screen display. 1 Press RECEIVER followed by SETUP. Tip · If the main menu doesn't appear, make sure the appropriate external input is selected on your TV. HDMI Input (page 30) BD/DVD VCR/DVR CBL/SAT GAME AUX TUNER TV/CD Level Cal (page 32) Left Center Right Surround Right Surround Left Subwoofer 2 3 Use / to select a menu, and then press ENTER. Use / to select target, and use / to change the setting. Press SETUP to close the menu. Press RETURN to return to the main menu. Component (page 30) BD/DVD VCR/DVR CBL/SAT GAME AUX TUNER TV/CD Audio Adjust (page 32) Input Ch (Mux) Input Ch (Mono) Panorama Dimension Center Width Center Image Listening Angle Note · This procedure can also be performed on the AV receiver by using SETUP, arrow buttons, and ENTER. Digital Audio (page 30) BD/DVD VCR/DVR CBL/SAT GAME AUX TUNER TV/CD Source Setup (page 33) A/V Sync Name Audio Selector Fixed Mode Sp Config (page 31) Subwoofer Front Center Surround Crossover Double Bass Hardware (page 34) Volume OSD Remote ID AM/FM Freq Step Auto Standby Sp Distance (page 31) Unit Left Center Right Surround Right Surround Left Subwoofer HDMI Setup (page 35) HDMI Ctrl (RIHD) HDMI Through Audio TV Out Audio Return Ch LipSync En 29 Explanatory Notes Menu Sp Config Component (Component Video Input) Menu Component Subwoofer Yes: Select if a subwoofer is connected. No: Select if no subwoofer is connected.

@ @ @ @ @ @ @ @ @ @ @ @- - - - -: Select if you're not using the HDMI OUT. Each HDMI input cannot be assigned to two input selectors or more.

@ @ @ @ @ @ @ @ @ @ @ @ @ @ @(20 cm) 6-1/2 to 8 in. (16 to 20 cm) 5-1/4 to 6-1/2 in. (13 to 16 cm) 3-1/2 to 5-1/4 in.

(9 to 13 cm) Under 3-1/2 in. @ @ @ @ @ @ @ @ @ @ @No: Select if no subwoofer is connected. @ @ @ @ @To get the best bass performance from your speaker system, you need to set the crossover frequency according to the size and frequency response of your speakers. 40Hz, 50Hz, 60Hz, 70Hz, 80Hz, 90Hz, 100Hz, 120Hz, 150Hz, 200Hz Use the diameter of the smallest speaker in your system when choosing the crossover frequency. Unit feet: Distances can be set in feet.

Range: 1ft to 30ft in 1 foot steps. meters: Distances can be set in meters. Range: 0.3m to 9.0m in 0.3 meter steps. (The default setting varies from country to country.) Left, Center, Right, Surround Right, Surround Left, Subwoofer Specify the distance from the each speaker to your listening position. En 31 Level Cal (Level Calibration) Menu Level Cal Dolby Settings PLII Music (2ch Input) These settings apply to only 2-channel stereo sources. Panorama On Off Turn this setting on to broaden the width of the front stereo image when using the Dolby Pro Logic II Music listening mode.

Dimension 3 to 0 to +3 With this setting, you can move the sound field forward or backward when using the Dolby Pro Logic II Music listening mode. Higher settings move the sound field backward. Lower settings move it forward. If the stereo image feels too wide, or there's too much surround sound, move the sound field forward to improve the balance. Conversely, if the stereo image feels like it's in mono, or there's not enough surround sound, move it backward. Center Width 0 to 3 to 7 With this setting, you can adjust the width of the sound from the center speaker when using the Dolby Pro Logic II Music listening mode. Normally, if you're using a center speaker, the center channel sound is output from only the center speaker. (If you're not using a center speaker, the center channel sound will be distributed to the front left and right speakers to create a phantom center). This setting controls the front left, right, and center mix, allowing you to adjust the weight of the center channel sound. Here you can adjust the level of each speaker with the built-in test tone so that the volume of each speaker is the same at the listening position.

*Left, Center*1, Right, Surround Right, Surround Left 12 dB to 0 dB to +12 dB in 1 dB step. Subwoofer*1 15 dB to 0 dB to +12 dB in 1 dB step. Note · Speakers that you set to "No" or "None" in the "Sp Config (Speaker Configuration)" (page 31) cannot be selected. ·These settings cannot be calibrated in either of the following cases: a pair of headphones is connected. Speakers B is on.*

*Speakers A is off. the "Audio TV Out" setting is set to "On" (page 35). "HDMI Ctrl (RIHD)" is set to "On" (page 35) and you're listening through your TV speakers. the AV receiver is muted. *1 For the center speaker and subwoofer, the level settings made by using HOME are saved here as the default settings. Tip · If you're using a handheld sound level meter, adjust the level of each speaker so that it reads 75 dB SPL at the listening position, measured with C-weighting and slow reading. Audio Adjust Menu Audio Adjust With the Audio Adjust functions and settings, you can adjust the sound and listening modes as you like. DTS Setting Neo:6 Music Multiplex/Mono Settings Multiplex Input Ch (Mux) Main Sub Main/Sub This setting determines which channel of a stereo multiplex source is output. @ @ @Setting a value "0" in the middle is set to hear a sound. @ @ @ @Narrow: Select if the listening angle is 20 degrees. @ @ @ @ @ @ @ @ @ @ @ @ @COAXIAL: This can be selected when COAXIAL IN has been assigned as an input source. If both coaxial and HDMI inputs have been assigned, coaxial input is automatically selected as a priority. OPTICAL: This can be selected when OPTICAL IN has been assigned as an input source. If both optical and HDMI inputs have been assigned, optical input is automatically selected as a priority. Analog: The AV receiver always outputs analog signals.*

You can set priorities of audio output when there are both digital and analog inputs. Note · The setting is stored individually for each input selector. · This setting can be made only for the input source that is assigned as HDMI IN, COAXIAL IN, or OPTICAL IN. If both HDMI (HDMI IN) and digital audio inputs (COAXIAL IN or OPTICAL IN) are assigned, HDMI input will be selected as a priority by setting to "ARC" (page 35). To select the digital audio input, see "Digital Audio (Digital Audio Input)" (page 30).