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You can read the recommendations in the user guide, the technical guide or the installation guide for DENON AVR-770SD. You'll find the answers to all your questions on the DENON AVR-770SD in the user manual (information, specifications, safety advice, size, accessories, etc.). Detailed instructions for use are in the User's Guide.

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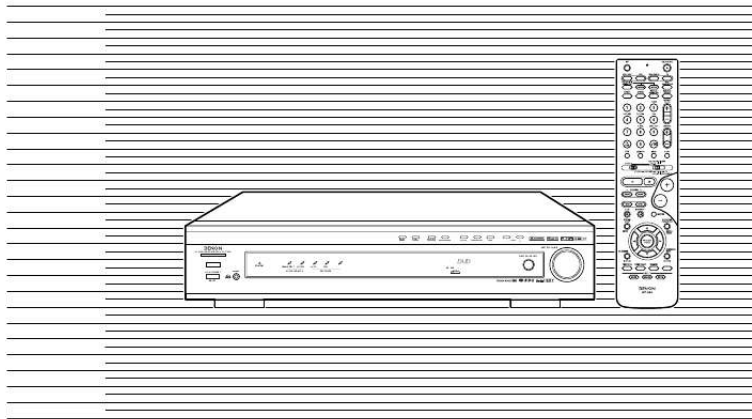
# DENON

AV SURROUND RECEIVER

## AVR-770SD

OPERATING INSTRUCTIONS  
BEDIENUNGSANLEITUNG  
MODE D'EMPLOI  
ISTRUZIONI PER L'USO

INSTRUCCIONES DE OPERACION  
GEBRUIKSAANWIJZING  
BRUKSANVISNING



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### Manual abstract:

@@Keep the set free from moisture, water, and dust. Do not let foreign objects in the set. @@Do not let insecticides, benzene, and thinner come in contact with the set. Never disassemble or modify the set in any way. The ventilation should not be impeded by covering the ventilation openings with items, such as newspapers, table-cloths, curtains, etc. No naked flame sources, such as lighted candles, should be placed on the apparatus. No objects filled with liquids, such as vases, shall be placed on the apparatus. 2 To be sure you take maximum advantage of all the features the AVR-770SD has to offer, read these Pay attention to the following before using this unit: · Moving the set To prevent short circuits or damaged wires in the connection cords, always unplug the power cord and disconnect the connection cords between all other audio components when moving the set. Before turning the power switch on Check once again that all connections are proper and that there are not problems with the connection cords. Always set the power switch to the standby position before connecting and disconnecting connection cords.

Store this instructions in a safe place. After reading, store this instructions along with the warranty in a safe place. Note that the illustrations in this instructions may differ from the actual set for explanation purposes. Instructions carefully and use the set properly. Be sure to keep this manual for future reference, should any questions or problems arise.

This remarkable component has been engineered to provide superb surround sound listening with AV theater sources such as DVD, as well as providing outstanding high fidelity reproduction of your favorite music sources. As this product is provided with an immense array of features, we recommend that before you begin hookup and operation that you review the contents of this manual before proceeding. Noise or disturbance of the picture may be generated if this unit or any other electronic equipment using microprocessors is used near a tuner or TV. If this happens, take the following steps: · Install this unit as far as possible from the tuner or TV. Set the antenna wires from the tuner or TV away from this unit's power cord and input/output connection cords.

Noise or disturbance tends to occur particularly when using indoor antennas or 300 ohms feeder wires. we recommend using outdoor antennas and 75 ohms coaxial cables. For heat dispersal, leave at least 10 cm of space between the top, back and sides of this unit and the wall or other components. 2

ACCESSORIES Check that the following parts are included in addition to the main unit: q Operating instructions. Switching the input function when input jacks are not connected A clicking noise may be produced if the input function is switched when nothing is connected to the input jacks. If this happens, either turn down the MASTER VOLUME control or connect components to the input jacks. Because of this, the output signals are greatly reduced for several seconds after the power switch is turned on or input function, surround mode or any other-set-up is changed. If the volume is turned up during this time, the output will be very high after the muting circuit stops functioning. Always wait until the muting circuit turns off before adjusting the volume. Whenever the power switch is in the OFF state, the apparatus is still connected on AC line voltage.

Please be sure to unplug the cord when you leave home for, say, a vacation. Dolby Virtual Speaker compatibility The AVR-770SD is equipped with power amplifiers that make it compatible with new Dolby Virtual Speaker technology for recreating a 5. Surround sound can be achieved with the Dolby Virtual Speaker mode for CDs and other 2-channel sources in combination with the Dolby Pro Logic II decoder. 1-channel surround format proposed by Dolby Laboratories that allows users to enjoy in their homes the "DOLBY DIGITAL SURROUND EX" audio format jointly developed by Dolby Laboratories and Lucas Films and first used for the movie "Star Wars Episode 1 Phantom Menace". the 6. 1 channels of sound, including surround back channels, provide improved sound positioning and expression of space. 3. DTS-ES Extended Surround and DTS Neo:6 The AVR-770SD is compatible with DTS-ES Extended Surround, a new multi-channel format developed by Digital Theater Systems Inc. DTS 96/24 compatibility The AVR-770SD can be decoded with sources recorded in DTS 96/24, a new multi-channel digital signal format developed by Digital Theater Systems Inc. DTS 96/24 sources can be played in the multichannel mode on the AVR-770SD with high sound quality of 96 kHz/24 bits or 88.

Dolby Pro Logic II decoder Dolby Pro Logic II is a new format for playing multichannel audio signals that offers improvements over conventional Dolby Pro Logic. It can be used to decode not only sources recorded in Dolby Surround but also regular stereo sources into five channels (front left/right, center and surround left/right). In addition, various parameters can be set according to the type of source and the contents, so you can adjust the sound field with greater precision. 6. On Screen Display Troublesome operations such as adjusting the delay time and other parameters according to the listening environment are greatly simplified.

The various parameters can be set simply by selecting the graphic displayed on the monitor screen according to the listening room's system environment. With this function, the AVR-770SD's monitor out connector and the monitor (TV) can be connected with video pin-plug cords or an S-Video connection cord. 1 channels of wide-range, high fidelity surround sound, from sources such as laser disc, DVD and specially-encoded music discs. 10. Component Video Switching In addition to composite video and "S" video switching, the AVR-770SD provides 2 sets of component video (Y, PB/CB, PR/CR) inputs assignable, and one set of component video outputs to the television, for superior picture quality.

11. Auto Surround Mode This function stores the surround mode last used for an input signal in the memory and automatically sets that surround mode the next time that signal is input. For details on the functions of these parts, refer to the pages given in parentheses ( ). For details on the functions of these parts, refer to the pages given in parentheses ( ). This AV Surround Receiver must be setup before use. Next, insert the batteries into the remote control unit. The following is an example of the basic layout for a system consisting of 7 speaker systems and a television monitor: Subwoofer Center speaker system Surround back speaker system Front speaker systems Set these at the sides of the TV or screen with their front surfaces as flush with the front of the screen as possible. When making connections, also refer to the operating instructions of the other components. The power to these outlets is turned on and off when the power is switched between on and standby from the remote control unit or power switch.



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*Do not plug in the AC cord until all connections have been completed.*

*Be sure to connect the left and right channels properly (left with left, right with right). Do not use them for hair driers, etc. Note that binding pin plug cords together with AC cords or placing them near a power transformer will result in generating hum or other noise. Noise or humming may be generated if a connected audio equipment is used independently without turning the power of this unit on. If this happens, turn on the power of the this unit. Connecting a CD player Connect the CD player's analog output jacks (ANALOG OUTPUT) to this unit's V. SWITCHED (total capacity 100 W) The power to these outlets is turned on and off in conjunction with the POWER operation switch on the main unit, and when the power is switched between on and standby from the remote control unit. No power is supplied from these outlets when this unit's power is at standby. Never connect equipment whose total capacity is above 100 W. nOTE: Only use the AC OUTLET for audio equipment.*

*Never use them for hair driers, TVs or other electrical appliances. MD recorder, CD recorder or other component equipped with digital input/output jack CD player or other component equipped with digital output jacks Connecting the DIGITAL jacks Use these for connections to audio (video) equipment with digital output. Use optical cables for optical connections, removing the cap before connecting. The main unit's power must be turned on when recording the AVR-770SD. Connections for recording: Connect the tape deck's recording input jacks (LINE IN or REC) to this unit's tape recording (CDR/TAPE OUT) jacks using pin plug cords.*

*Connections for playback: Connect the tape deck's playback output jacks (LINE OUT or PB) to this unit's tape playback (CDR/TAPE IN) jacks using pin plug cords. Using an improper cable can result in a drop in video quality. When making connections, also refer to the operating instructions of the other components. The REC OUT terminals have no conversion function, so when recording only connect the video terminals. When making connections, also refer to the operating instructions of the other components.*

*A note on the S input jacks The input selectors for the S inputs and pin jack inputs work in conjunction with each other. The REC OUT terminals have no conversion function, so when recording only connect the S-Video terminals. DVD player or video disc player (VDP) DVD player or video disc player (VDP), etc. Connecting a DVD player or a video disc player (VDP) DVD · It is also possible to connect a video disc player, DVD/VDP player, video camcorder, game machine, etc. Connecting a DVD player or a video disc player (VDP) DVD · It is also possible to connect a video disc player, DVD player, video game, etc. Only audio signals are input to the digital input jacks. When connecting the AVR-770SD with a monitor TV or DVD player equipped with an SCART connector, use a converter cable (sold separately) as shown in the diagram. There are two sets of video deck (VCR) jacks, so two video decks can be connected for simultaneous recording or video copying. When making connections, also refer to the operating instructions of the other components. The signals input to the color difference (component) video jacks are not output from the VIDEO output jack (yellow) or the S-Video output jack.*

*In addition, the video signals input to the VIDEO input (yellow) and S-Video input jacks are not output to the color difference (component) video jacks. Some video sources with component video outputs are labeled Y, CB, CR, or Y, Pb, Pr, or Y, R-Y, B-Y. These terms all refer to component video color difference output. At SYSTEM SETUP, the component video input terminal can be assigned for the input sources to which you want to connect AV devices. Connect the DVD player's color difference (component) video output jacks (COMPONENT VIDEO OUTPUT) to the COMPONENT DVD IN jack using 75 ohms coaxial video pin-plug cords. In the same way, another video source with component video outputs such as a TV/DBS tuner, etc., can be connected to the TV/DBS color difference (component) video jacks. Connect the TV's color difference (component) video input jacks (COMPONENT VIDEO INPUT) to the COMPONENT MONITOR OUT jack using 75 ohms coaxial video pin-plug cords. The color difference input jacks may be indicated differently on some TVs, monitors or video components ("CR, CB and Y", "R-Y, B-Y and Y", "Pr, Pb and Y", etc.).*

*For details, carefully read the operating instructions included with the TV or other component. With the antenna on top any stable surface. Do not connect two FM antennas simultaneously. Even if an external AM antenna is used, do not disconnect the AM loop antenna. Make sure AM loop antenna lead terminals do not touch metal parts of the panel.*

*These jacks are for inputting multi-channel audio signals from an outboard decoder, or a component with a different type of multi-channel decoder, such as a DVD Audio player, etc. even when the remote control unit is operated nearby the set. (The included battery is only for verifying operation. Replace it with a new battery as soon as possible. Once all connections with other AV components have been completed as described in "CONNECTIONS" (see pages 6 to 10), make the various settings described below on the display. These settings are required to set up the listening room's AV system centered around the this unit.*

*Use the following buttons to set up the system: This setting assigns the surround back / subwoofer speaker terminals. This sets whether or not to display the onscreen display that appears on the monitor screen when the controls on the remote control unit or main unit are operated. Use the following buttons to set up the system: SYSTEM SETUP button Press this to display the system setup on the display. The AVR-770SD's on-screen display function is designed for use with high resolution monitor TVs, so it may be difficult to read small characters on TVs with small screens or low resolutions. The setup menu is not displayed when headphones are being used. , 0, 1) Press this change what appears on the display. eNTER button Press this to switch the display. Also use this button to complete the setting. System setup items and default values (set upon shipment from the factory) System setup Input the combination of speakers in your system and their corresponding sizes (SMALL for regular speakers, LARGE for full-size, fullrange) to automatically set the composition of the signals output from the speakers and the frequency response. This selects the subwoofer speaker for playing deep bass signals.*

*Set the frequency (Hz) below which the bass sound of the various speakers is to be output from the subwoofer. Check that all the components are correct, then press the POWER operation switch on the main unit to turn on the power.*



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This parameter is for optimizing the timing with Front Front Surround Surround Subwoofer Center which the audio signals are produced from the L R L R Back speakers and subwoofer according to the 3. This adjusts the volume of the signals output Front Front Surround Surround Subwoofer Center from the speakers and subwoofer for the L R L R Back different channels in order to obtain optimum 0 dB 0 dB 0 dB 0 dB 0 dB 0 dB effects. This assigns the digital input jacks for the different input sources. Press the SYSTEM SETUP button again to finish system set up. System set up can be finished at any time. The changes to the settings made up to that point are entered. This assigns the component video input jacks for the different video input sources. The composition of the signals output to the different channels and the frequency response are adjusted automatically according to the combination of speakers actually being used.

This screen is not displayed when not using a subwoofer. Set the crossover frequency and subwoofer mode according to the speaker system being used. Set whether or not speakers are connected and, if so, their size parameters. Select this when using speakers that can fully reproduce low sounds of below 80 Hz. small.

Select this when using speakers that cannot reproduce low sounds of below 80 Hz with sufficient volume. When this setting is selected, low frequencies of below 80 Hz are assigned to the subwoofer. none. Select this when no speakers are installed. yes/No.

Select "Yes" when a subwoofer is installed, "No" when it's not installed. NOTE: Select "Large" or "Small" not according to the physical size of the speaker, but according to the bass reproduction capacity at 80 Hz. If you cannot determine the best setting, try comparing the sound when set to "Small" and when set to "Large", at a level that will not damage the speakers. Caution: In case the subwoofer is not used, be sure to set "Subwoofer = No", or the bass sound of front channel is divided to subwoofer channel and not reproduced in some mode. If the subwoofer has sufficient low frequency playback capacity, good sound can be achieved even when "Small" is set for the front, center and surround speakers. For the majority of speaker system configurations, using the Small setting for all five main speakers and Subwoofer On with a connected subwoofer will yield the best results. The signals produced from the subwoofer channel are LFE signals (during playback of Dolby Digital or DTS signals) and the low frequency signal range of channels set to "SMALL" in the setup. The low frequency signal range of channels set to "LARGE" are produced from those channels. -- Crossover Frequency -- · When "Subwoofer" is set to "Yes" at the "Speaker Configuration Setting", set the frequency (Hz) below which the bass sound of the various speakers is to be output from the subwoofer (the crossover frequency). For speakers set to "Small", sound with a frequency below the crossover frequency is cut, and the cut bass sound is output from the subwoofer instead.

nOTE: For ordinary speaker systems, we recommend setting the crossover frequency to 80 Hz. When using small speakers, however, setting the crossover frequency to a high frequency may improve frequency response for frequencies near the crossover frequency. -- Subwoofer mode -- · The subwoofer mode setting is only valid when "Large" is set for the front speakers and "YES" is set for the subwoofer in the "Speaker Configuration" settings (see page 12). When the "LFE+MAIN" playback mode is selected, the low frequency signal range of channels set to "Large" are produced simultaneously from those channels and the subwoofer channel. In this playback mode, the low frequency range expand more uniformly through the room, but depending on the size and shape of the room, interference may result in a decrease of the actual volume of the low frequency range. Selection of the "LFE" play mode will play the low frequency signal range of the channel selected with "Large" from that channel only. Therefore, the low frequency signal range that are played from the subwoofer channel are only the low frequency signal range of LFE (only during Dolby Digital or DTS signal playback) and the channel specified as "Small" in the setup menu. Select the play mode that provides bass reproduction with quantity. When the subwoofer is set to "Yes", bass sound is output from the subwoofer regardless of the subwoofer mode setting in surround modes other than Dolby/DTS. In surround modes other than Dolby Digital and DTS, if the subwoofer is set to "YES", the low frequency portion is always output to the subwoofer channel.

Input the distance between the listening position and the different speakers to set the delay time for the surround mode. Preparations: Measure the distances between the listening position and the speakers (L1 to L5) on the diagram at the right). Subwoofer L1: Distance between center speaker and listening position L2: Distance between front speakers and listening position SL L3: Distance between surround speakers and listening position L4: Distance between surround back speaker and listening position L5: Distance between subwoofer and listening position CAUTION: Please note that the difference for every speaker should be 4. Set the distance between the speaker and listening position. Use this setting to adjust to that the playback level between the different channel is equal.

From the listening position, listen to the test tones produced from the speakers to adjust the level. The level can also be adjusted directly from the remote control unit. When you adjust the channel levels while in the TEST TONE mode, the channel level adjustments made will affect all surround modes. You can adjust the channel levels for each of the following surround modes: DIRECT, STEREO, DOLBY/DTS SURROUND, 5/6 CH STEREO, MONO MOVIE, ROCK ARENA, JAZZ CLUB, VIDEO GAME, MATRIX and DOLBY VIRTUAL SPEAKER. Auto: Adjust the level while listening to the test tones produced automatically from the different speakers.

Manual: Select the speaker from which you want to produce the test tone to adjust the level. This setting assigns the digital input jacks of the AVR-770SD for the different input sources. If the "Auto" mode is selected: Test tones are automatically emitted from the different speakers. The test tones are emitted from the different speakers in the following order, at 4-second intervals the first time and second time around, 2-second intervals the third time around and on: Use the CURSOR left and right buttons to adjust all the speakers to the same volume. The volume can be adjusted between 12 dB and +12 dB in units of 1 dB. When the "Manual" mode is selected Use the CURSOR up and down to select the speaker for which you want to output test tones, then use the CURSOR left and right to adjust so that the volume of the test tones from the various speakers is the same.



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example: When the volume is set to 12 dB while the Front Lch speaker is selected This setting assigns the color difference (component) video input jacks of the AVR-770SD for the different input sources. Select according to the specifications of the player being used. This setting assigns the surround back / subwoofer speaker terminals. For the three kinds of input signals as shown below, the surround mode played the last is stored in the memory.

SIGNAL q w e Analog and PCM 2-channel signals 2-channel signals of Dolby Digital, DTS or other multichannel format Multichannel signals of Dolby Digital, DTS or other multichannel format Select "ON" if you want to use the auto surround mode, "OFF" if you do not want to use it. BACK" to use as the surround back channel, "SUBWOOFER" to use as the subwoofer out. Use this to turn the on-screen display (messages other than the menu screens) on or off. Use this to automatically search for FM broadcasts and store up to 40 stations at preset channels A1 to 8, B1 to 8, C1 to 8, D1 to 8 and E1 to 8. nOTE: · If an FM station cannot be preset automatically due to poor reception, use the "Manual tuning" operation to tune in the station, then preset it using the manual "Preset memory" operation. Turn on the power of the different components before operating them. While this remote control is compatible with a wide range of infrared controlled components, some models of components may not be operated with this remote control. Once the system is set up, there is no need to make the settings again unless other components or speakers are connected to or the speaker layout is changed. : Manual search (forward and reverse) 2 : Stop 1 : Play 8, 9 : Auto search (cue) 3 : Pause DISC SKIP + : Switch discs (for CD changers only) Rewind Fast-forward Stop Forward play Reverse play Switch between decks A and B Tuner system buttons SHIFT : CHANNEL +, : TUNING +, : BAND : MODE MEMORY Switch preset channel range Preset channel up/down Frequency up/down Switch between the AM and FM bands : Switch between auto and mono : Preset memory TUNER can be operated when the switch is at "AUDIO" position. DENON and other makes of components can be operated by setting the preset memory.

This remote control unit can be used to operate components of other manufacturers without using the learning function by registering the manufacturer of the component as shown on the List of Preset Codes (pages 283~285). Operation is not possible for some models. Some models cannot be operated with this remote control unit. 2. Video disc player (VDP) system buttons POWER : Power on/standby (ON/SOURCE) 6, 7 : Manual search (forward and reverse) 2 : Stop 1 : Play 8, 9 : Auto search (cue) 3 : Pause 0~9, +10 : 10 key POWER : Power on/standby (ON/SOURCE) OFF : DENON DVD Power off 6, 7 : Manual search (forward and reverse) 2 : Stop 1 : Play 8, 9 : Auto search (to beginning of track) 3 : Pause 0~9, +10 : 10 key DISC SKIP : Disc skip + (for DVD changer only) DISPLAY : Switch display MENU : Menu RETURN : Return SETUP : Setup D, H, F, G : Cursor up, down, left and right ENTER : Enter setting Referring to the included List of Preset Codes, use the number buttons to input the preset code (a 3-digit number) for the manufacturer of the component whose signals you want to store in the memory.

To store the codes of another component in the memory, repeat steps 1 to 4. The signals for the pressed buttons are emitted while setting the preset memory. To avoid accidental operation, cover the remote control unit's transmitting window while setting the preset memory. Depending on the model and year of manufacture, this function cannot be used for some models, even if they are of makes listed on the included list of preset codes. Some manufacturers use more than one type of remote control code.

The preset memory can be set for one component only among the following: CDR/MD, DVD/VDP and DBS/CABLE. The preset codes are as follows upon shipment from the factory and after resetting: TV, VCR. Some manufacturers use different names for the DVD remote control buttons, so also refer to the instructions on remote control for that component. Digital broadcast satellite (DBS) tuner and cable (CABLE) system buttons POWER : Power on/standby (ON/SOURCE) MENU : Menu RETURN : Return D, H, F, G : Cursor up, down, left and right ENTER : Enter CHANNEL : Switch channels +, 0~9, +10 : Channels DISPLAY : Switch display VOL +, : Volume up/down "Punch Through" is a function allowing you to operate the PLAY, STOP, MANUAL SEARCH and AUTO SEARCH buttons on the CD, TAPE, CDR/MD, DVD/VDP or VCR components when in the DBS/CABLE or TV mode. Monitor TV (TV) system buttons POWER : Power on/standby (ON/SOURCE) MENU : Menu RETURN : Return D, H, F, G : Cursor up, down, left and right ENTER : Enter CHANNEL : Switch channels +, 0~9, +10 : Channels DISPLAY : Switch display TV/VCR : Switch between TV and video player TV VOL : Volume up/down +, Input the number of the component you want to set. For this CD, CDR, MD and TAPE components, buttons can be operated in the same way as for Denon audio components (page 16). The TV can be operated when the switch is at DVD/VDP, VCR, TV position. (only when operating with the remote control unit) Input mode selection function Different input modes can be selected for the different input sources. the selected input modes for the separate input sources are stored in the memory. Q AUTO (auto mode) In this mode, the types of signals being input to the digital and analog input jacks for the selected input source are detected and the program in the AVR770SD's surround decoder is selected automatically upon playback.

This mode can be selected for all input sources other than TUNER. The presence or absence of digital signals is detected, the signals input to the digital input jacks are identified and decoding and playback are performed automatically in DTS, Dolby Digital or PCM (2 channel stereo) format. If no digital signal is being input, the analog input jacks are selected. Use this mode to play Dolby Digital signals. W PCM (exclusive PCM signal playback mode) Decoding and playback are only performed when PCM signals are being input. Note that noise may be generated when using this mode to play signals other than PCM signals. E DTS (exclusive DTS signal playback mode) Decoding and playback are only performed when DTS signals are being input. IN (external decoder input jack selection mode) The signals being input to the external decoder input jacks are played without passing through the surround circuitry. € ON/STANDBY The power turns on and power indicator is lit. Several seconds are required from the time the power operation switch is set to the "€ ON/STANDBY" position until sound is output.

This is due to the built-in muting circuit that prevents noise when the power switch is turned on and off. Set the power operation switch to this position to turn the power on and off from the included remote control unit.



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£ OFF The power turns off and power indicator is off. In this position, the power cannot be turned on and off from the remote control unit. Note that noise will be output when CDs or LDs recorded in DTS format are played in the "PCM" (exclusive PCM signal playback) or "ANALOG" (exclusive PCM signal playback) mode.

select the AUTO or DTS mode when playing signals recorded in DTS. Notes on playing a source encoded with DTS · Noise may be generated at the beginning of playback and while searching during DTS playback in the AUTO mode. In some rare cases the noise may be generated when you preform the operation to stop playback of a DTS-CD or DTS-LD. input mode when playing DTS sources · Noise will be output if DTS-compatible CDs or LDs are played in the "ANALOG" or "PCM" mode. When playing DTS-compatible sources, be sure to connect the source component to the digital input jacks (OPTICAL/COAXIAL) and set the input mode to "DTS".

IN jacks are output directly to the front (left and right), center, surround (left and right) speaker systems without passing through the surround circuitry. To select the surround mode while adjusting the surround parameters, tone defeat or tone control, press the surround mode button then operate the selector. In play modes other than the external input mode, the signals connected to C, SL, SR and SW jacks cannot be played. In addition, signals cannot be output from channels not connected to the input jacks. The external input mode can be set for any input source. To watch video while listening to sound, select the input source to which the video signal is connected, then set this mode. IN), the play mode (DIRECT, STEREO, DOLBY/DTS SURROUND, 5CH/6CH STEREO, VIRTUAL SURROUND (DOLBY VIRTUAL SPEAKER) or DSP SIMULATION) cannot be selected. The volume level is displayed on the master volume level display. The DIG indicator lights when digital signals are being input properly. If the DIG indicator does not light, check whether the digital input component setup (page 14) and connections are correct and whether the component's power is turned on.

The volume can be adjusted within the range of 70 to 0 to 18 dB, in steps of 1 dB. However, when the channel level is set as described on page 23, if the volume for any channel is set at +1 dB or greater, the volume cannot be adjusted up to 18 dB. The DIG indicator will light when playing CDRoms containing data other than audio signals, but no sound will be heard. DIRECT mode Use this mode to achieve good quality 2channel sound while watching images. In this mode, the audio signals bypass such circuits as the tone circuit and are transmitted directly, resulting in good quality sound. With the name of the volume to be adjusted selected, turn the SELECT knob to adjust the level. STEREO mode Use this mode to adjust the tone and achieve the desired sound while watching images. If you do not want the bass and treble to be adjusted, turn on the tone defeat mode. The signals do not pass through the bass and treble adjustment circuits, so it provides higher quality sound. NOTE: To prevent hearing loss, do not raise the volume level excessively when using headphones. The speaker output is automatically turned off when headphones are connected. Use this to turn off the audio output temporarily. [4] Combining the currently playing sound with the desired image Before playing with the surround function Simulcast playback Use this switch to monitor a video source other than the audio source. Before playing with the surround function, be sure to use the test tones to adjust the playback level from the different speakers. This adjustment can be performed with the system setup (see page 11) or from the remote control unit, as described below.

Adjusting with the remote control unit using the test tones is only possible in the "Auto" mode and only effective in the DOLBY/DTS SURROUND modes. The adjusted levels for the different modes are automatically stored in the memory. Also, the unit's operating status can be checked during playback by pressing the remote control unit's ON SCREEN/DISPLAY button. Also, the unit's operating status can be checked during (Main unit) playback by pressing the main unit's STATUS button. Test tones are output from the different speakers.

After adjusting using the test tones, adjust the channel levels either according to the playback sources or to suit your tastes, as (described) below. Dolby Digital mode (only with digital input) and DTS Surround (only with digital input) Select the speaker whose level you want to adjust. The level of the selected speaker can be adjusted within the range of +12 to 12 dB using the cursor buttons. SW channel level can be turned off by decreasing one step from 12 dB. When performing this operation from the main unit's panel, press the SURROUND MODE button, then turn the SELECT knob and select Dolby Pro Logic II or DTS NEO:6. Play a program source with the When the SIGNAL DETECT indicator is lit, we recommend turning the surround back channel using the SURROUND BACK button on the remote control unit during playback. To use DTS 96/24 sources with the optimum system, we recommend turning the surround back channel off. The Dolby Surround Pro Logic II Cinema or Music mode can be chosen directly by pressing the CINEMA or MUSIC button on the remote control unit during playback in the Dolby Surround Pro Logic II mode. Select the function to which the component you want to play is connected.

Dialogue normalization is a basic function of Dolby Digital which automatically normalizes the dialog level (standard level) of the signals which are recorded at different levels for different program sources, such as DVD, DTV and other future formats that will use Dolby Digital.

These contents can be verified with the ON SCREEN button. The number indicates the normalization level when the currently playing program is normalized to the standard level. Play a program source with the mark. To perform this operation from the remote control unit, check that the mode selector switch is set to "AUDIO". The DTS NEO:6 Cinema or Music mode can be chosen directly by pressing the CINEMA or MUSIC button on the remote control unit during playback in the DTS NEO:6 mode. Select the function to which the component you want to play is connected. To perform this operation from the remote control unit, check that the mode selector switch is set to "AUDIO". (Cinema Equalizer): The Cinema EQ function gently decreases the level of the extreme high frequencies, compensating for overly-bright sounding motion picture soundtracks. Select this function if the sound from the front speakers is too bright.

This function only works in the Dolby Pro Logic II, Dolby Digital and DTS Surround modes.

@@@ sB CH OUT (Surround Back): "OFF" . Playback is conducted without using the surround back speaker. "ON".



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Playback is conducted using the surround back speaker. "NON MTRX".

Playback is conducted using the surround back speaker. @@ "MTRX ON". Playback is conducted using the surround back speaker. Surround back channel is reproduced using digital matrix processing. "NRML (OFF)".

Playback is conducted without using the surround back speaker. "NRML (ON)". Playback is conducted using the surround back speaker. Surround back channel is reproduced using digital matrix processing. @@@@ select "OFF" or "ON". @@The control can be set in 7 steps from 0 to 6. @@The control can be set in 8 steps from 0 to 7. @@ 1-channel sources. @@ Music This mode is suited mainly for playing music. @@@@ With a multi-channel speaker configuration (for example 5.

@@If nothing is done for 6 seconds from when the parameter is displayed, the normal display reappears. WIDE (Wide mode) This mode expands the front channel sound field. When listening with the volume turned relatively low, at night for example, set this to the "HI" side to lower the peak of the sound and amplify the quieter sounds, narrowing the dynamic range and making the sound easier to listen to. The mode is not displayed if it cannot be selected. When Dolby Digital encoded software is played, it is recommended that the LFE LEVEL be set to 0 dB for correct Dolby Digital playback. When DTS encoded movie software is played, it is recommended that the LFE LEVEL be set to 0 dB for correct DTS playback. @@ The LFE level can be adjusted in steps of 1 dB between -10 dB and 0 dB. When "YES" is selected, the settings are restored to the factory defaults. When the surround parameters are displayed, use the "And" cursor buttons on the remote control unit to switch to previous or following items. once the surround parameters have been set, stop operating the buttons.

After several seconds, the normal display reappears and the settings are automatically entered. This switches automatically according to the format of the playback source. When 2-channel signals are input, one of two playback modes can be selected and set according to the 2channel mode setting, Virtual 1 or Virtual 2. (The Virtual 1 mode is set by factory default. ) Virtual 1 : 2-channel sources are played in virtual surround using Dolby Pro Logic II Cinema processing.

Virtual 1 : 2-channel sources are played in virtual surround using Dolby Pro Logic processing. This unit is equipped with a high performance DSP (Digital Signal Processor) which uses digital signal processing to synthetically recreate the sound field. One of 6 preset surround modes can be selected according to the program source and the parameters can be adjusted according to the conditions in the listening room to achieve a more realistic, powerful sound. These surround modes can also be used for program sources not recorded in Dolby Surround Pro Logic, Dolby Digital or DTS. In this mode, the signals of the front left channel are output from the left surround channel, the signals of the front right channel are output from the right surround channel, and the same (in-phase) component of the left and right channels is output from the center channel.

This mode provides all speaker surround sound, but without directional steering effects, and works with any stereo program source. Select this when watching monaural movies for a greater sense of expansion. Use this mode to achieve the feeling of a live concert in an arena with reflected sounds coming from all directions. This mode creates the sound field of a live house with a low ceiling and hard walls. This mode gives jazz a very vivid realism. Use this to enjoy video game sources. Select this to emphasize the sense of expansion for music sources recorded in stereo. Signals consisting of the difference component of the input signals (the component that provides the sense of expansion) processed for delay are output from the surround channel. This can be selected if there is no digital input signal, if the digital input is a PCM or Dolby Digital 2-channel signal and if the input is analog. Turn the SURROUND/SELECT control on the main unit or use the 0 and 1 cursor buttons on the remote control unit to select the desired 2channel mode.

Depending on the program source being played, the effect may not be very noticeable. In this case, try other surround modes, without worrying about their names, to create a sound field suited to your tastes. NOTE 1: When playing sources recorded in monaural, the sound will be one-sided if signals are only input to one channel (left or right), so input signals to both channels. If you have a source component with only one audio output (monophonic camcorder, etc. ) obtain a "Y" adapter cable to split the mono output to two outputs, and connect to the L and R inputs. Personal Memory Plus This set is equipped with a personal memorize function that automatically memorizes the surround modes and input modes selected for the input different sources. When the input source is switched, the modes set for that source last time it was used are automatically recalled. The surround parameters, tone control settings and playback level balance for the different output channels are memorized for each surround mode. Surround parameters r VIRTUAL1 (Virtual 1 mode): In this mode, 2-channel sources are played with Dolby Pro Logic II Cinema processing. This mode is suited for playing movie sources recorded in Dolby Surround and regular stereo sources.

VIRTUAL2 (Virtual 2 mode): In this mode, 2-channel sources are played with Dolby Pro Logic processing. This mode is compatible with regular Dolby Pro Logic playback. The 2-channel mode cannot be set when Dolby Digital or DTS 5. The 2-channel mode is set and stored in the memory individually for the different functions. The surround mode switches in the following order each time the SURROUND PARAMETER button is pressed: The surround parameter switches in the following order each time the SURROUND PARAMETER button is pressed for the different surround modes.

When the "5CH/6CH STEREO" mode is selected, the display differs according to the Surround Back CH ON/OFF. Surround parameters t ROOM SIZE: This sets the size of the sound field. "small" recreates a small sound field, "large" a large sound field. eFFECT LEVEL: This sets the strength of the surround effect. The level can be set in 15 steps from 1 to 15.

DELAY TIME: In the matrix mode only, the delay time can be set within the range of 0 to 300 ms. Signals and adjustability in the different modes Channel output SURROUND L/R E E B B B B B B B B B B E SUBWOOFER B B B B B B B B B B E SURROUND BACK L/R E E B B \*2 B \*2 B \*2 B \*2 B \*2 B \*2 B \*2 B \*2 B \*2 E E When playing Dolby Digital Signals C C E C \*1 C \*1 C E C C C C C C C SURROUND PARAMETER Signals and adjustability in the different modes Parameter (default values are shown in parentheses) C: Able E: Unable \* 1 Only for 2 ch contents \* 2 Signal output can be changed with BASS: +8 dB, TREBLE: 4 dB Only without surround speakers 2 ch source only Cinema, DOLBY PL Mode only Cinema Mode only The AVR-770SD is equipped with the Dolby Headphone mode, a technology developed jointly by Dolby Laboratories and Lake Technology for achieving 3D sound over regular headphones.



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The Dolby Headphone mode is set when headphones are connected to the AVR-770SD's headphones jack. There are actually four Dolby Headphone modes creating different sound field effects: DH1, DH2, DH3 and Bypass (normal stereo playback). With 2-channel sources, playback in the Cinema, Music 1 and Music 2 modes can be selected with the 2-channel mode setting. If nothing is done for 6 seconds from when the parameter is displayed, the normal display reappears. Reference room (small room with little reverberation) DH2 . Live room (room with more reverberation than DH1) DH3 . Large room (Larger room than DH1). Use this mode to achieve a sense of distance and diffusion of the sound.

) **BYPASS** . Stereo playback **DECODER**: These can be selected when playing 2-channel sources (analog, PCM, etc. ). The signals are processed by one of the following decoders to achieve multiple channels then played in the Dolby Headphone mode. Signals played in the Dolby Headphone mode with 2 channels. When headphones are plugged in, the output to the speakers is automatically turned off and no sound is produced from the speakers. Can be selected when there is no signal or when playing a 2-channel source. There are also the same parameters as those described under "(2) Playing in the Dolby Virtual Speaker mode", namely: B D. cOMP. Setting B LFE level setting B DEFAULT setting When the surround parameters are displayed, use the "And" cursor buttons on the remote control unit to switch to previous or following items.

When the function is set to DVD, this is also shown on the display. Automatic searching begins, then stops when a station is tuned in. When in the auto tuning mode on the FM band, the "STEREO" indicator lights on the display when a stereo broadcast is tuned in. At open frequencies, the noise is muted and the "TUNED" and "STEREO" indicators turn off. To preset other channels, repeat steps 1 to 4.

A total of 40 broadcast stations can be preset 8 stations (channels 1 to 8) in each of blocks A to E. The frequency changes continuously when the button is held in. When the manual tuning mode is set, FM stereo broadcasts are received in monaural and the "STEREO" indicator turns off. The preset (broadcast) stations can be checked on the on screen display (OSD). RDS (works only on the FM band) is a broadcasting service which allows station to send additional information along with the regular radio program signal.

The following three types of RDS information can be received on this unit: The program types and their displays are as follows: Watching the display, press the SHIFT button to select the preset memory block. This allows you to easily find out the latest traffic conditions in your area before you leaving home. 2 Radio Text (RT) RT allows the RDS station to send text messages that appear on the display. NOTE: The operations described below using the RDS, PTY and RT buttons will not function in areas in which there are no RDS broadcasts. The main unit's display switches as follows each time the RDS buttons are pressed. This is the screen when operated. This is the screen when operated. If no other RDS station is found when all the frequencies are searched, "NO RDS" is displayed. Watching the display, press the 0 and 1 cursor buttons to call out the desired program type.

If no other station broadcasting the designated program type is found when all the frequencies are searched, "NO PROGRAMME" is displayed. If no RDS stations is found with above operation, all the reception band are searched. When a broadcast station is found, that station's name appears on the display.

This is the screen when operated. This is the screen when operated. This is the screen when operated. If there is no station broadcasting the designated program type with above operation, all the reception bands are searched. When the RDS button is pressed until "RT" appears on the display while receiving an RDS broadcast station, the text data broadcast from the station is displayed. To turn the display off, use the 0 and 1 cursor buttons on the remote control unit. The main unit's display switches as follows each time the RDS buttons are pressed.

This is the screen when operated. This unit is equipped with a last function memory which stores the input and output setting conditions as they were immediately before the power is switched off. This function eliminates the need to perform complicated resettings when the power is switched on. The unit is also equipped with a back-up memory. This function provides approximately one week of memory storage when the main unit's power switch is off and with the power cord disconnected.

This is the screen when operated. When the indication of the display is not normal or when the operation of the unit does not shows the reasonable result, the initialization of the microprocessor is required by the following procedure. Switch off the unit using the main unit's power operation switch. If no TP station is found with above operation, all the reception bands are searched. If no other TP station is found when all the frequencies are searched, "NO PROGRAMME" is displayed.

Hold the following 5CH/6CH STEREO button and DIRECT/STEREO button, and turn the main unit's power operation switch on. Check that the entire display is flashing with an interval of about 1 second, and release your fingers from the 2 buttons and the microprocessor will be initialized. If step 3 does not work, start over from step 1. If the microprocessor has been reset, all the button settings are reset to the default values (the values set upon shipment from the factory). This is the screen when operated. Turning on the main unit's power from the standby mode without using the remote control unit · Press the power switch on the main unit while pressing the 5CH/6CH STEREO button on the main unit's panel to turn on the power. Optimum surround sound for different sources There are currently various types of multi-channel signals (signals or formats with more than two channels). 2 Types of multi-channel signals Dolby Digital , Dolby Pro Logic , DTS , high definition 3-1 signals (Japan MUSE Hi-Vision audio) , DVD-Audio , SACD (Super Audio CD) , MPEG multi-channel audio , etc. "Source" here does not refer to the type of signal (format) but the recorded content. Sources can be divided into two major categories.

This makes it easy to achieve sound positioned directly behind the listener, something that was previously difficult with sources designed for conventional multi surround speakers. In addition, the acoustic image extending between the sides and the rear is narrowed, thus greatly improving the expression of the surround signals for sounds moving from the sides to the back and from the front to the point directly behind the listening position.



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Signals created to be played in movie theaters. In general sound is recorded to be played in movie theaters equipped with multiple surround speakers, regardless of the format (Dolby Digital, DTS, etc. Movie theater sound field Listening room sound field In this case it is important to achieve the same sense of expansion as in a movie theater with the surround channels. To do so, in some cases the number of surround speakers is increased (to four or eight) or speakers with bipolar or dipolar properties are used. With this set, speaker(s) for 1 or 2 channels are required to achieve a 6. Adding these speakers, however, increases the surround effect not only with sources recorded in 6. All the Denon original surround modes (see page 28) are compatible with 7. 1-channel playback, so you can enjoy 6.

1-channel sound with any signal source. 2 Number of surround back speakers Though the surround back channel only consists of 1 channel of playback signals for 6. When using speakers with dipolar characteristics in particular, it is essential to use two speakers. Using two speakers results in a smoother blend with the sound of the surround channels and better sound positioning of the surround back channel when listening from a position other than the center. 2 Placement of the surround left and right channels when using surround back speakers Using surround back speakers greatly improves the positioning of the sound at the rear.

Because of this, the surround left and right channels play an important role in achieving a smooth transition of the acoustic image from the front to the back. As shown on the diagram above, in a movie theater the surround signals are also produced from diagonally in front of the listeners, creating an acoustic image as if the sound were floating in space. To achieve these effects, we recommend placing the speakers for the surround left and right channels slightly more towards the front than with conventional surround systems. Doing so sometimes increases the surround effect when playing conventional 5. These signals are designed to recreate a 360° sound field using three to five speakers.

In this case the speakers should surround the listener from all sides to create a uniform sound field from 360°. Ideally the surround speakers should function as "point" sound sources in the same way as the front speakers. These two types of sources thus have different properties, and different speaker settings, particularly for the surround speakers, are required in order to achieve the ideal sound. When not using surround back speakers Here we describe a number of speaker settings for different purposes. Use these examples as guides to set up your system according to the type of speakers used and the main usage purpose. 1. DTS-ES compatible system (using surround back speakers) (1) Basic setting for primarily watching movies This is recommended when mainly playing movies and using regular single way or 2-way speakers for the surround speakers. Set the front speakers with their front Surround back Surround speaker surfaces as flush with the TV or monitor speaker Point slightly Front speaker downwards screen as possible. Set the center speaker between the front left and right speakers and 60 to 90 cm no further from the listening position than the front speakers. Consult the owner's manual for your As seen from the side subwoofer for advice on placing the subwoofer within the listening room.

If the surround speakers are direct-radiating (monopolar) then place them slightly behind and at an angle to the listening position and parallel to the walls at a position 60 to 90 centimeters (2 to 3 feet) above ear level at the prime listening position. When using two surround back speakers, place them at the back facing the front at a narrower distance than the front left and right speakers. When using one surround back speaker, place it at the rear center facing the front at a slightly higher position (0 to 20 cm) than the surround speakers. This effectively prevents the surround back channel signals from reflecting off the monitor or screen at the front center, resulting in interference and making the sense of movement from the front to the back less sharp. Set the front speakers with their front surfaces as flush with the TV or monitor screen as possible. Set the center speaker between the front left and right speakers and no further from the listening position than the front speakers. Consult the owner's manual for your subwoofer for advice on placing the subwoofer within the listening room. If the surround speakers are direct-radiating (monopolar) then place them slightly behind and at an angle to the listening position and parallel to the walls at a position 60 to 90 centimeters (2 to 3 feet) above ear level at the prime listening position. The AVR-770SD is equipped with a digital signal processing circuit that lets you play program sources in the surround mode to achieve the same sense of presence as in a movie theater. 1" channels - front left, front right, center, surround left, surround right, and an additional channel exclusively reserved for additional deep bass sound effects (the Low Frequency Effects LFE channel, also called the "

1" channel, containing bass frequencies of up to 120 Hz). Unlike the analog Dolby Pro Logic format, Dolby Digital's main channels can all contain full range sound information, from the lowest bass, up to the highest frequencies 22 kHz. The signals within each channel are distinct from the others, allowing pinpoint sound imaging, and Dolby Digital offers tremendous dynamic range from the most powerful sound effects to the quietest, softest sounds, free from noise and distortion. (2) Setting for primarily watching movies using diffusion type speakers for the surround speakers For the greatest sense of surround sound envelopment, diffuse radiation speakers such as bipolar types, or dipolar types, provide a wider dispersion than is possible to obtain from a direct radiating speaker (monopolar). Place these speakers at either side of the prime listening position, mounted above ear level.

Path of the surround sound from the speakers to the listening position Set the front speakers, center speaker and Surround back Surround speaker subwoofer in the same positions as in speaker Point slightly Front speaker downwards example (1). It is best to place the surround speakers 60 to directly at the side or slightly to the front of 90 cm the viewing position, and 60 to 90 cm above the ears. Using dipolar speakers for the surround back speakers as well is more effective. The signals from the surround channels reflect off the walls as shown on the diagram at the left, creating an enveloping and realistic surround sound presentation. For multi-channel music sources however, the use of bipolar or dipolar speakers mounted at the sides of the listening position may not be satisfactory in order to create a coherent 360 degree surround sound field.



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Connect another pair of direct radiating speakers as described in example (3) and place them at the rear corners of the room facing towards the prime listening position. 1" playback channels as Dolby Digital (front left, front right and center, surround left and surround right) as well as the stereo 2-channel mode. The signals for the different channels are fully independent, eliminating the risk of deterioration of sound quality due to interference between signals, crosstalk, etc. DTS features a relatively higher bit rate as compared to Dolby Digital (1234 kbps for CDs and LDs, 1536 kbps for DVDs) so it operates with a relatively low compression rate. Because of this the amount of data is great, and when DTS playback is used in movie theaters, a separate CD-ROM synchronized with the film is played. With LDs and DVDs, there is of course no need for an extra disc; the pictures and sound can be recorded simultaneously on the same disc, so the discs can be handled in the same way as discs with other formats. There are also music CDs recorded in DTS. They do not include picture data, but they offer surround playback on CD players that are equipped with digital outputs (PCM type digital output required). DTS surround track playback offers the same intricate, grand sound as in a movie theater, right in your own listening room. Please use a commercially available adapter when connecting the Dolby Digital RF output jack of the LD player to the digital input jack.

please refer to the instruction manual of the adapter when making connection. Some DVD digital outputs have the function of switching the Dolby Digital signal output method between "bit stream" and "(convert to) PCM". when playing in Dolby Digital surround on the AVR770SD, switch the DVD player's output mode to "bit stream". In some cases players are equipped with both "bit stream + PCM" and "PCM only" digital outputs. Dolby Pro-Logic II is a new multi-channel playback format developed by Dolby Laboratories using feedback logic steering technology and offering improvements over conventional Dolby Pro Logic circuits. Dolby Pro Logic II can be used to decode not only sources recorded in Dolby Surround ( ) but also regular stereo sources into five channels (front left, front right, center, surround left and surround right) to achieve surround sound. In addition, the surround channels were monaural (the surround left and right channels were the same) with previous Dolby Pro Logic, but Dolby Pro Logic II they are played as stereo signals. Various parameters can be set according to the type of source and the contents, so it is possible to achieve optimum decoding (see page 24, 25). Sources recorded in Dolby Surround These are sources in which three or more channels of surround have been recorded as two channels of signals using Dolby Surround encoding technology. Dolby Surround is used for the sound tracks of movies recorded on DVDs, LDs and video cassettes to be played on stereo VCRs, as well as for the stereo broadcast signals of FM radio, TV, satellite broadcasts and cable TV.

Decoding these signals with Dolby Pro Logic II makes it possible to achieve multi-channel surround playback. The signals can also be played on ordinary stereo equipment, in which case they provide normal stereo sound. there are two types of DVD Dolby surround recording signals. Q 2-channel PCM stereo signals w 2-channel Dolby Digital signals When either of these signals is input to the AVR-770SD, the surround mode is automatically set to Dolby Pro Logic

II when the "DOLBY/DTS SURROUND" mode is selected. 2 Sources recorded in Dolby Surround are indicated with the logo mark shown below. Dolby Surround support mark: Manufactured under license from Dolby Laboratories. DTS signals are recorded in the same way on CDs and LDs as PCM signals. Because of this, the undecoded DTS signals are output as random "hissy" noise from the CD or LD player's analog outputs. If this noise is played with the amplifier set at a very high volume, it may possibly cause damage to the speakers. To avoid this, be sure to switch the input mode to "AUTO" or "DTS" before playing CDs or LDs recorded in DTS.

Also, never switch the input mode to "ANALOG" or "PCM" during playback. The same holds true when playing CDs or LDs on a DVD player or LD/DVD compatible player. For DVDs, the DTS signals are recorded in a special way so this problem does not occur. The signals provided at the digital outputs of a CD or LD player may undergo some sort of internal signal processing (output level adjustment, sampling frequency conversion, etc. ). In this case the DTS-encoded signals may be processed erroneously, in which case they cannot be decoded by the AVR-770SD, or may only produce noise. Before playing DTS signals for the first time, turn down the master volume to a low level, start playing the DTS disc, then check whether the DTS indicator on the AVR-770SD (see page 23) lights before turning up the master volume. A DVD player with DTS-compatible digital output is required to play DTS DVDs. While offering high compatibility with the conventional DTS Digital Surround format, DTS-ES Extended Surround greatly improves the 360-degree surround impression and space expression thanks to further expanded surround signals. This format has been used professionally in movie theaters since 1999.

in addition to the 5. 1 surround channels (FL, FR, C, SL, SR and LFE), DTS-ES Extended Surround also offers the SB (Surround Back, sometimes also referred to as "surround center") channel for surround playback with a total of 6. 1 channels. DTS-ES Extended Surround includes two signal formats with different surround signal recording methods, as described below. 1 channels (including the SB channel) are recorded independently using a digital discrete system. The main feature of this format is that because the SL, SR and SB channels are fully independent, the sound can be designed with total freedom and it is possible to achieve a sense that the acoustic images are moving about freely among the background sounds surrounding the listener from 360 degrees.

Though maximum performance is achieved when sound tracks recorded with this system are played using a DTS-ES decoder, when played with a conventional DTS decoder the SB channel signals are automatically down-mixed to the SL and SR channels, so none of the signal components are lost. 2 DTS-ESTM Matrix 6. 1 With this format, the additional SB channel signals undergo matrix encoding and are input to the SL and SR channels beforehand. Upon playback they are decoded to the SL, SR and SB channels.

The performance of the encoder used at the time of recording can be fully matched using a high precision digital matrix decoder developed by DTS, thereby achieving surround sound more faithful to the producer's sound design aims than with conventional 5. 1 format can be achieved even with 5.



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