

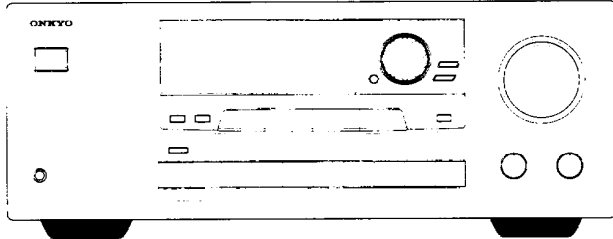
Audio Video Control Amplifier

A-SV640

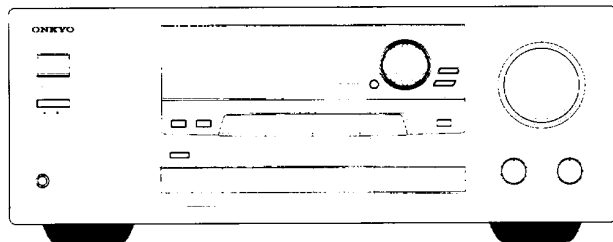
Instruction Manual

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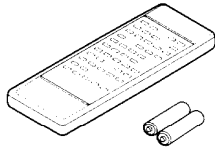
U.S. and Canadian models



Other than U.S. and Canadian models

Thank you for purchasing an Onkyo Audio Video Control Amplifier. Please read this manual thoroughly before making connections and turning on the power. Following the instructions in this manual will enable you to obtain optimum performance and listening enjoyment from your new Audio Video Control Amplifier. Please retain this manual for future reference.

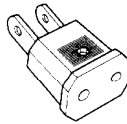
Supplied accessories



RC-344S

- 1 Remote controller
- 2 Batteries (size AA, R6, or UM-3)

The following accessories are available only for worldwide models.



- 1 CV plug (Shape may vary according to the area where purchased.)

FOR BRITISH MODEL

Replacement and mounting of an AC plug on the power supply cord of this unit should be performed only by qualified service personnel.

• **IMPORTANT**

The wires in the mains lead are colored in accordance with the following code:

- Blue : Neutral
- Brown : Live

As the colors of the wires in the mains lead of this apparatus may not correspond with the colored 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.

• **IMPORTANT**

A 5 amp fuse is fitted in this plug. Should the fuse need to be replaced, please ensure that the replacement fuse has a rating of 5 amps and that it is approved by ASTA or BSI to BS1362. Check for the ASTA mark or the BSI mark on the body of the fuse.

IF THE FITTED MOULDED PLUG IS UNSUITABLE FOR THE SOCKET OUTLET IN YOUR HOME, THEN THE FUSE SHOULD BE REMOVED AND THE PLUG CUT OFF AND DISPOSED OF SAFELY. THERE IS A DANGER OF SEVERE ELECTRICAL SHOCK IF THE CUT OFF PLUG IS INSERTED INTO ANY 13 AMP SOCKET.

If in any doubt, please consult a qualified electrician.

FOR U.S. MODEL

FCC Information for User

CAUTION:

Changes or modifications not expressly approved by the manufacturer 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 other equipment and the 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.

FOR CANADIAN MODEL

POUR LE MODELE CANADIEN

- 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.

- THIS DIGITAL APPARATUS DOES NOT EXCEED THE CLASS B LIMITS FOR RADIO NOISE EMISSION FROM DIGITAL APPARATUS SET OUT IN THE RADIO INTERFERENCE REGULATIONS OF THE CANADIAN DEPARTMENT OF COMMUNICATIONS.

- 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.

- L'INTERFÉRENCE RADIO ÉLECTRIQUE GÉNÉRÉE PAR CET APPAREIL NUMÉRIQUE DE TYPE B NE DÉPASSE PAS LES LIMITES ÉNONCÉES DANS LE RÈGLEMENT SUR LES PERTURBATIONS RADIO ÉLECTRIQUES, SECTION APPAREIL NUMÉRIQUE, DU MINISTÈRE DES COMMUNICATIONS.

FOR European MODEL

Declaration of Conformity

We, ONKYO EUROPE
ELECTRONICS GMBH
INDUSTRIESTRASSE 18/20
82110 GERMERING,
GERMANY



declare in own responsibility, that the ONKYO product described in this instruction manual is in compliance with the corresponding technical standards such as EN55013, EN55020, EN60555-2, -3 and EN60065

GERMERING, GERMANY

H. YAMAZOE

ONKYO EUROPE ELECTRONICS GMBH

WARNING:

TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.

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.



WARNING
RISK OF ELECTRIC SHOCK
DO NOT OPEN



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 Safeguards

1. **Read Instructions** – All the safety and operating instructions should be read before the appliance is operated.
2. **Retain Instructions** – The safety and operating instructions should be retained for future reference.
3. **Heed Warnings** – All warnings on the appliance and in the operating instructions should be adhered to.
4. **Follow Instructions** – All operating and use instructions should be followed.
5. **Water and Moisture** – The appliance should not be used near water – for example, near a bathtub, washbowl, kitchen sink, laundry tub, in a wet basement, or near a swimming pool, and the like.
6. **Carts and Stands** – The appliance should be used only with a cart or stand that is recommended by the manufacturer.

PORTABLE CART WARNING


- 6A. An appliance and cart combination should be moved with care. Quick stops, excessive force, and uneven surfaces may cause the appliance and cart combination to overturn.
7. **Wall or Ceiling Mounting** – The appliance should be mounted to a wall or ceiling only as recommended by the manufacturer.
8. **Ventilation** – The appliance should be situated so that its location or position does not interfere with its proper ventilation. For example, the appliance should not be situated on a bed, sofa, rug, or similar surface that may block the ventilation openings; or if placed in a built-in installation, such as a bookcase or cabinet that may impede the flow of air through the ventilation openings, there should be free space of at least 20 cm (8 inches) and an opening behind the appliance.
9. **Heat** – The appliance should be situated away from heat sources such as radiators, heat registers, stoves, or other appliances (including amplifiers) that produce heat.
10. **Power Sources** – The appliance should be connected to a power supply only of the type described in the operating instructions or as marked on the appliance.
11. **Polarization** – If the appliance is provided with a polarized plug having one blade wider than the other, please read the following information:
The polarization of the plug is a safety feature. The polarized plug will fit the outlet only one way. If the plug does not fit fully into the outlet, try reversing it. If there are still problems, the user should seek the services of a qualified electrician. Under no circumstances should the user attempt to defeat the polarization of the plug.
12. **Power-Cord Protection** – Power-supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them, especially near plugs, convenience receptacles, and the point where they exit from the appliance.
13. **Cleaning** – The appliance should be cleaned only as recommended by the manufacturer.
14. **Power Lines** – An outdoor antenna should be located away from power lines.
15. **Nonuse Periods** – The power cord of the appliance should be unplugged from the outlet when left unused for a long period of time.
16. **Object and Liquid Entry** – Care should be taken so that objects do not fall and liquids are not spilled into the enclosure through openings.
17. **Damage Requiring Service** – The appliance should be serviced by qualified service personnel when:
 - A. The power-supply cord or the plug has been damaged; or
 - B. Objects have fallen, or liquid has been spilled into the appliance; or
 - C. The appliance has been exposed to rain; or
 - D. The appliance does not appear to operate normally or exhibits a marked change in performance; or
 - E. The appliance has been dropped, or the enclosure damaged.
18. **Servicing** – The user should not attempt to service the appliance beyond what is described in the operating instructions. All other servicing should be referred to qualified service personnel.

Precautions

1. Warranty Claim

You can find the serial number on the rear panel of this unit. In case of warranty claim, please report this number.

2. Recording Copyright

Recording of copyrighted material for other than personal use is illegal without permission of the copyright holder.

3. AC Fuse

The fuse is located inside the chassis and is not user-serviceable. If power does not come on, contact your Onkyo authorized service station.

4. Care

From time to time you should wipe the front and rear panels and the cabinet with a soft cloth. For heavier dirt, dampen a soft cloth in a weak solution of mild detergent and water, wring it dry, and wipe off the dirt. Following this, dry the unit immediately with a clean cloth. Do not use rough material, thinner, alcohol or other chemical solvents or cloths, since these could damage the finish or remove the panel lettering.

5. Power

WARNING

BEFORE PLUGGING IN THE UNIT FOR THE FIRST TIME, READ THE FOLLOWING SECTION CAREFULLY.

- The voltage of the available power supply differs according to country or region. Be sure that the power supply voltage of the area where this unit will be used meets the required voltage (e.g., AC230 V 50 Hz or AC120 V 60 Hz) written on the rear panel.
- Models Equipped with a Voltage Selector
Worldwide models are equipped with a voltage selector to conform to local power supplies. Be sure to set this switch to match the voltage of the power supply in your area before plugging in the unit.

Memory Preservation

This unit does not require memory preservation batteries. A built-in memory power back-up system preserves the contents of the memory during power failures and even when the unit is unplugged. The unit must be plugged in to charge the back-up system.

The memory preservation period after the unit has been unplugged varies depending on climate and placement of the unit. On the average, memory contents are protected over a period of a few weeks after the last time the unit was unplugged. This period is shorter when the unit is exposed to a highly humid climate.

Features

Amplifier


- 120 W/ch into 8Ω at 0.08% THD, 20-20 kHz (stereo); 100 Watts × 3 plus 30 watts per surround speaker (surround modes) (U.S. and Canadian models)
- 100 W/ch into 6Ω, 1 kHz (stereo); 95 Watts × 3 plus 35 watts per surround speaker (surround modes), DIN (European and Asian models)
- Powerful discrete high-current, low-impedance-drive amplifiers for all 5 channels
- Low negative feedback, wideband circuitry
- High resolution 20-bit Delta Sigma A/D and D/A converters for greater precision
- 3-D Bass function to enhance front L/R/C channel low-level frequencies
- Main/Remote Speaker selector and outputs, with amplifier to drive other-room speakers

Audio/Video Features

- 5.1 Channel external decoder inputs
- Powerful Motorola 24-Bit Symphony DSP56004 processor for better signal-to-noise ratio and faster DSP
- Lucasfilm Cinema Re-EQ™ circuit
- 5 Surround modes: Dolby Pro Logic (processed in the digital domain), Hall, Live, Arena, Studio
- Smart Scan Controller to preset stations and select surround modes, parameters, volume-level adjustments of all 6 channels, and more
- IPM—Intelligent Power Management for switching on entire A/V system with TV power button
- 5 Audio and 3 A/V inputs
- Rec Out selector to dub audio sources on video tapes, or for recording while listening to different sources
- 2 Sets of heavy-duty, multiway speaker binding posts (3 sets for European & Asian models)
- 3 Pre Out terminals, including a dedicated line-level sub-woofer output
- Adjustable digital delay for optimum sound in various room sizes and shapes
- Cassette tape and videocassette dubbing

General Features

- Multiroom/Multisource capability (U.S. & Canadian models compatible with Xantech® products)
- 35-Segment dot-matrix fluorescent display
- 3-Mode dimmer (bright, normal, low)
- Headphone jack
- Audio mute button (remote)
- Sleep timer (remote)
- Battery-free memory backup

*Manufactured under license from Dolby Laboratories Licensing Corporation. "Dolby", "Pro Logic" and the double-D symbol  are trademarks of Dolby Laboratories Licensing Corporation. Copyright 1992 Dolby Laboratories, Inc. All rights reserved.

*Re-Equalization and the "Re-EQ" logo are trademarks of Lucasfilm Ltd. Manufactured under license of Lucasfilm Ltd.

Introduction

Surround System

Since the A-SV640 is equipped with front, center, and Surround amplifiers, you can produce Dolby Pro Logic, Hall, Live, Arena, and Studio Surround effects. You can enjoy the feeling of a movie theater or concert hall in your own living room.

DOLBY PRO LOGIC Surround

Many motion pictures produced have been released in the 4-channel "Dolby Stereo" sound, with music, dialogue, and panned effects coming from the 3-channel front soundstage, and surround effects and ambience emanating from the sides and rear of the theater.

The motion picture masters are used for production of stereo VHS, VHS-Hi-Fi, Beta Hi-Fi, and stereo laser discs that you can buy or rent at your video store. The A-SV640 incorporates the Digital Dolby Pro Logic Surround Circuit, which is designed to decode the four-channel audience experience found in DOLBY STEREO movies. Dolby Pro Logic Surround is capable of recreating a multi-dimensional soundstage, but with the increased channel separation it gives a far greater sense of "movement" and sound localization. Just like in the theater, the addition of the active center channel ensures that all audience members hear dialogue coming from its on-screen sources, regardless of seating position.

HALL Surround

This mode is especially suitable for media that already has a substantial amount of reverb sound, such as classical music, since it simulates the atmosphere of a concert hall.

LIVE Surround

This mode reproduces the feeling of a live performance.

ARENA Surround

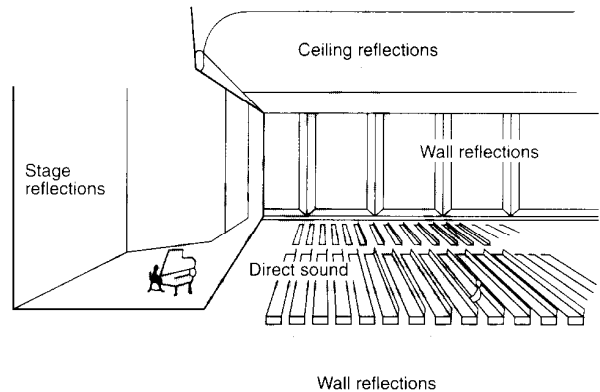
This mode recreates the mood of listening to a concert in a domed stadium.

STUDIO Surround

This mode is good for studio recordings that may have few reverb sounds such as pop and jazz.

DSP (Digital Signal Processor)

The DSP converts the musical signal into digital form and produces reflected sound from the digital signal. This is applied to the musical signal to yield an effect approaching that of a live performance.



NOTES:

- The concert hall effect is produced from the reflections and reverberations contained in the original recording. These are converted into reflected sound that is reproduced from four directions. Thus, in some cases an unnatural impression can be conveyed if there are too few reflections in the recording or if the effects in the original recording were produced artificially.
- The concert hall effect is not merely an artificial reverberation unit, but a sophisticated effect that spreads existing reverberation around.

Multi-Room Remote System (MRS)

Using the Multi-Room Remote System equipment, you can operate all components connected to the A-SV640 from either the main room or the sub-room. (Refer to page 24 and page 25 for more details).

The following equipment (sold separately) is essential for using the Onkyo Multi-Room System:

USA and Canada

- * Onkyo's Multi-Room System kits HKT-600, HKT-700 (IR Remote Controller Extension System) and
- * Xantech's Multi-Room System

Other areas

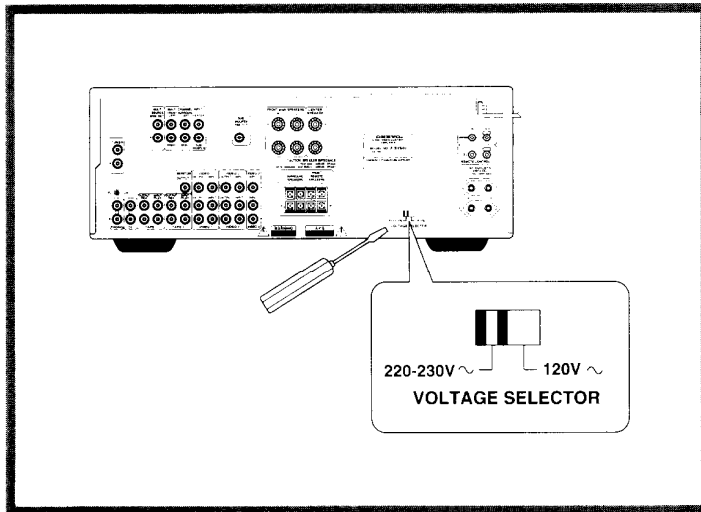
- * Sensor Unit: Model No. HR-10
- * Remote Emitter: Model No. HE-50 (AC)
- * Remote Emitter Head: Model No. HE-10

The following secondary remote controller can be used to operate the system from the sub-room:

- * Secondary Remote Controller for Multi-Room Remote System: Model No. RC-MR1H

Consult your nearest Onkyo service center when replacing your Onkyo Multi-Room System with a Xantech Multi-Room System.

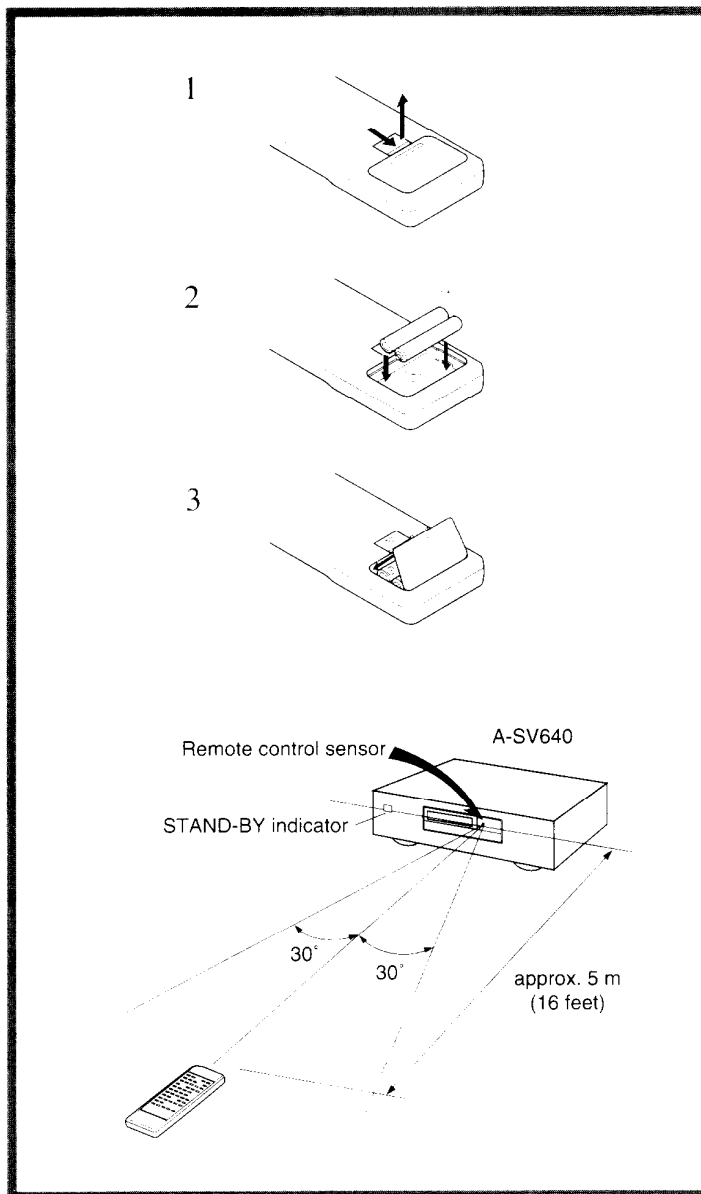
Before operating the unit



Setting the Voltage selector (Worldwide models only)

Worldwide models are equipped with a voltage selector to conform to local power supplies. Be sure to set this switch to match the voltage of the power supply in your area before you plug in the unit.

1. Determine the proper voltage for your area: 220-230V or 120V.
2. If the preset voltage is not correct for your area, insert a screwdriver into the groove in the switch. Slide the switch all the way to the right (120V) or to the left (220-230V), whichever is appropriate.



Installing the batteries

1. Follow the illustrations at left to remove the battery compartment cover.
2. Insert two AA (R6- or UM-3)-size batteries into the battery compartment. Carefully follow the polarity diagram (positive (+) and negative (-) symbols) inside the battery compartment.
3. After batteries are installed and seated correctly, replace the compartment cover.

- Remove low-voltage batteries immediately to avoid damage due to corrosion. Never mix old and new batteries.
- The manganese batteries supplied with this unit have a service life of approximately six months, depending on the frequency of use.
- Use spare batteries of the type specified in the table below.

Type	Voltage	Size
Manganese or Alkaline	1.5V	AA, R6 (UM-3) or LR6 (AM-3)

We recommend long-life AA (LR6 or AM-3) size alkaline batteries.

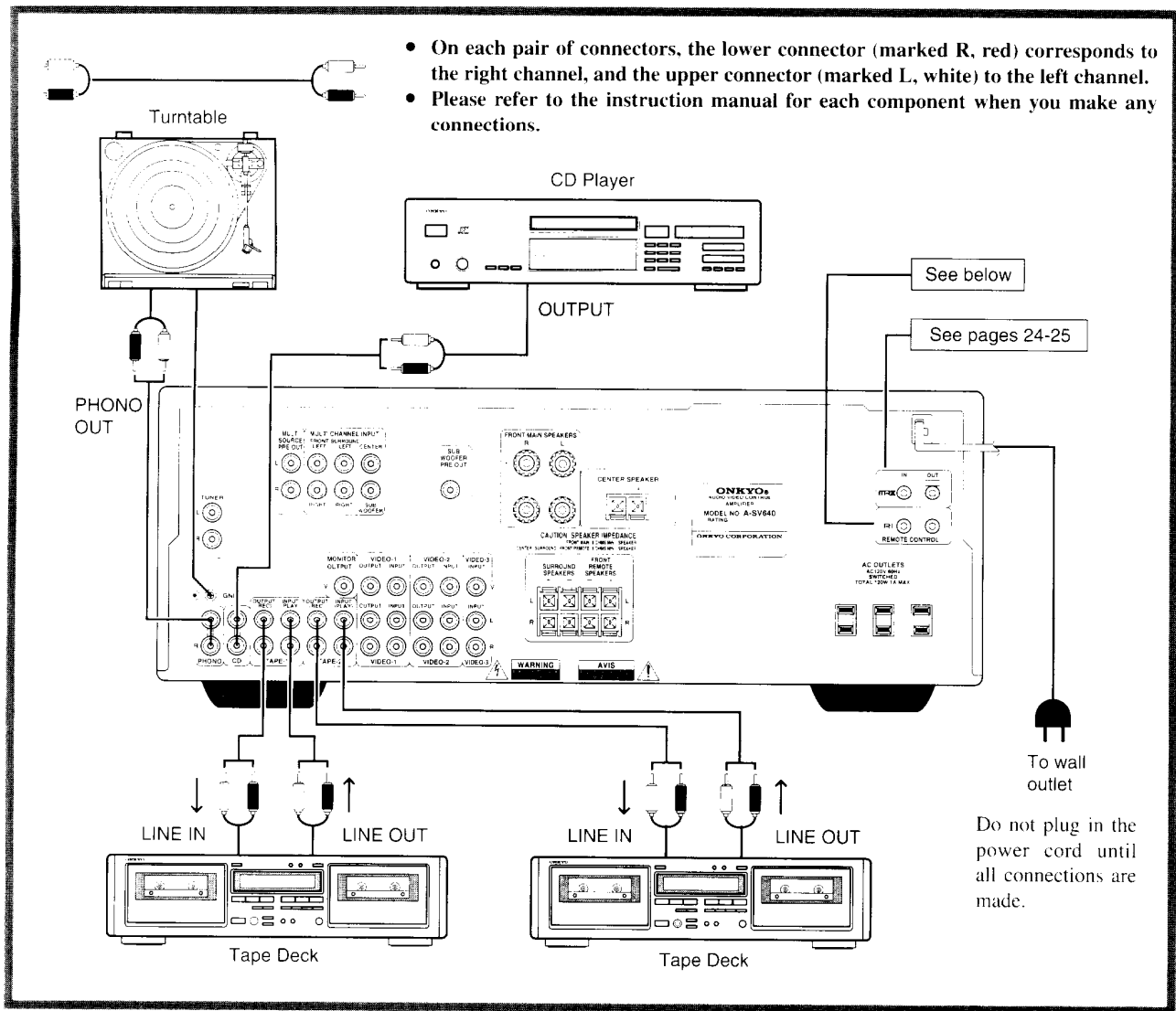
Using the remote controller

The STAND-BY indicator lights up when the unit receives a signal from the remote controller.

The following information will help you get optimal use from the remote controller.

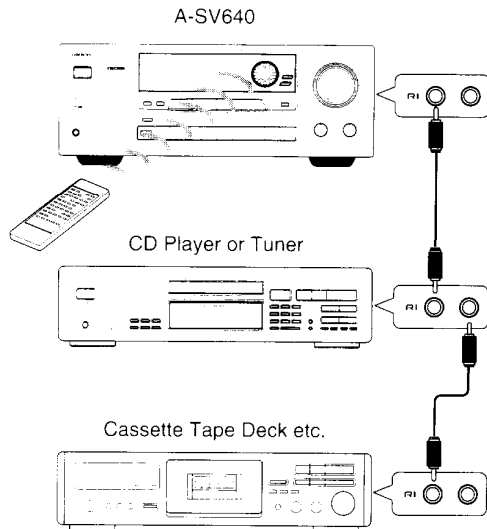
- Place this unit away from direct bright light, which could prevent proper operation of the remote control.
- Make sure audio rack doors do not have tinted glass. Placing the unit behind such a door may prevent proper remote controller operation.
- Using other remote controllers along with the unit's remote controller in the same room may cause interference.

Audio equipment connections



Connections for remote control (RI)

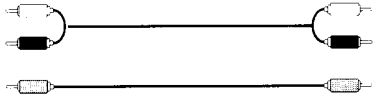
You can use the remote controller of this amplifier to operate cassette tape decks and compact disc players that are equipped with an Onkyo **RI** connector.



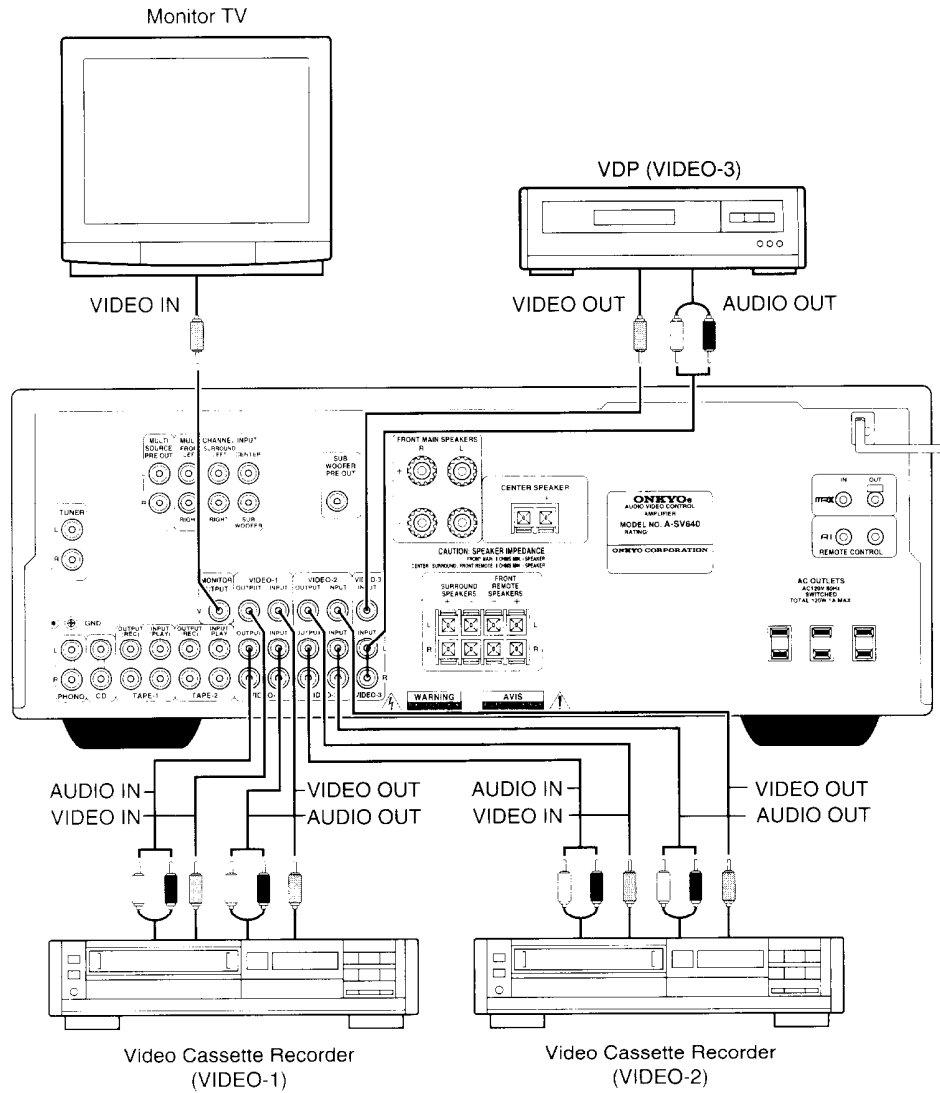
Connect a remote control cable to the black connector with the **RI** mark. Never connect it to the gray or green connector with the **MR** mark.

- An **RI** remote control cable equipped with a 3.5mm (1/8 in.)-diameter miniature two-conductor phone plug comes with every compact disc player or cassette tape deck that has an **RI** connector.
- Remote control operation is not possible when only the remote control cable is connected – the audio connection cables must also be connected.
- This amplifier's remote controller cannot be used to control Onkyo turntables.

Video equipment connections



- On each pair of connectors, the lower connector (marked R, red) corresponds to the right channel, and the upper connector (marked L, white) to the left channel.
- The yellow connector (marked V) is used for video connection.
- Please refer to the instruction manual for each component when you make any connections.



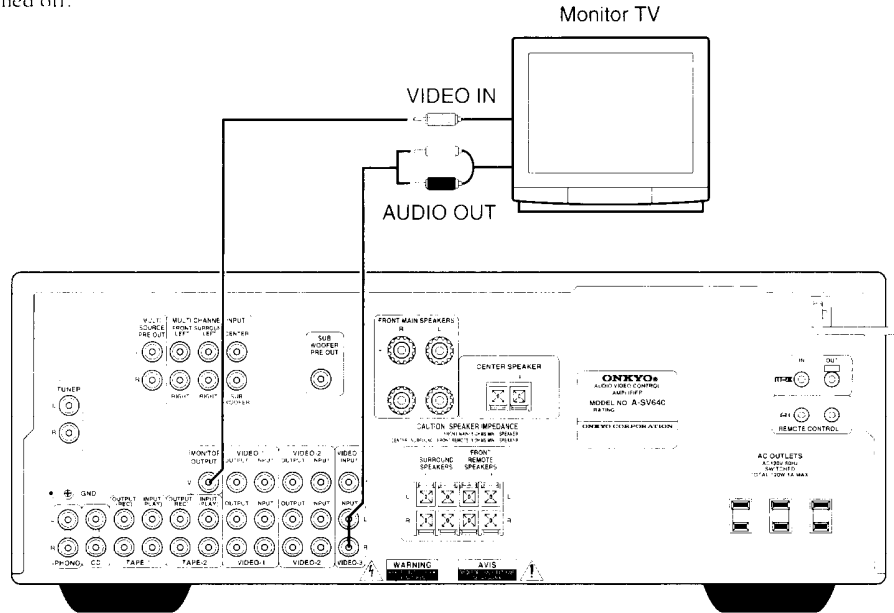
- This unit can be used only with a monitor TV equipped with a video input.
- When using a playback-only VCR, connect its output to the A-SV640's video input connector.

Video equipment connections

IPM (Intelligent Power Management) System

The A-SV640 is equipped with an IPM system, which automatically turns on or off the amplifier's power when the TV is turned on or off. To use the IPM system, you must connect the audio output of a monitor TV to the VIDEO-3 INPUT connectors and press the VIDEO-3 VDP/TV button of the input selector. "VIDEO-3 VDP" or "VIDEO-3 TV" will appear on the display. Then, press the VIDEO-3 VDP/TV button repeatedly until "IPM ON" appears on the display. The IPM indicator will light up on the display and you will be able to use the IPM system.

The amplifier will be automatically switched on approximately five seconds after the TV is turned on and the input selector is set to "VIDEO-3 TV". Provided that the input selector is set to "VIDEO-3 TV", the amplifier will be automatically switched off five minutes after the TV is turned off.

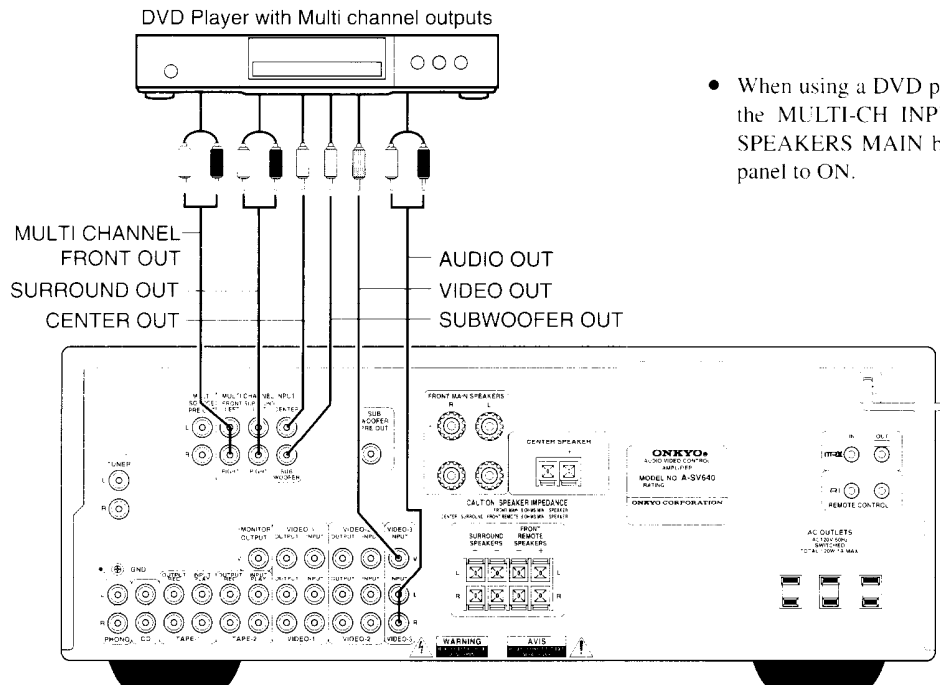


- If a mono TV is used, connect the audio output of the TV to the VIDEO-3 INPUT "L" connector.
- When you power off the TV, "•" flashes on the left side of the A-SV640's display, and five minutes later the A-SV640 also turns off.
- When the IPM system is set to ON, the video signal connected to the VIDEO-3 INPUT is not output from the MONITOR OUTPUT connector.

Warning:

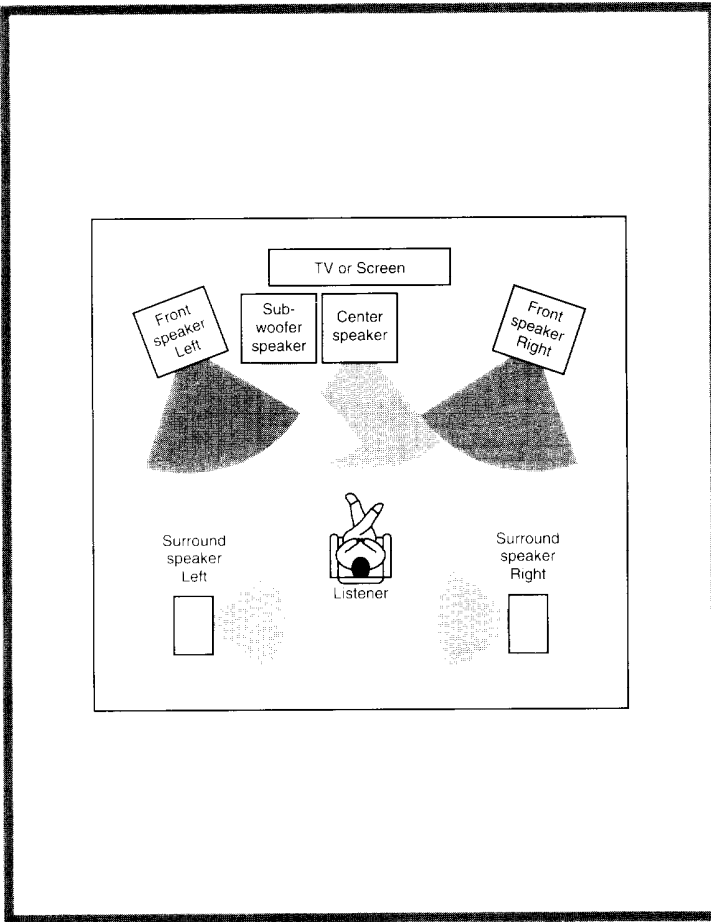
First, make sure that the IPM system works correctly with your TV before using the system.

DVD Player with 5.1 channel output



- When using a DVD player connected to the MULTI-CH INPUT jacks, set the SPEAKERS MAIN button on the front panel to ON.

Making speaker connections



Positioning speakers

Speaker placement plays an important role in the reproduction of Surround sound. The placement of the speakers varies depending on the size of the room and the wall coverings used in the room. The illustration shows an example of a layout for standard speaker placement. Refer to this example when you position the speakers in order to experience the best of Surround sound.

Standard speaker placement

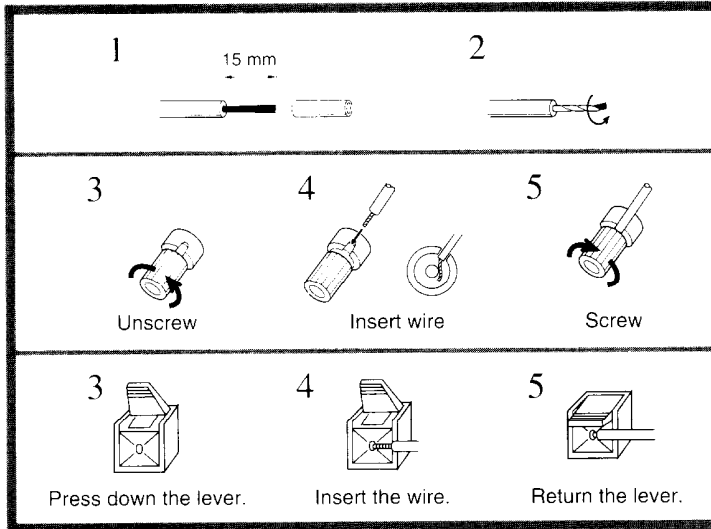
For ideal Surround effects, all speakers should be installed. If a center speaker or subwoofer is not connected, the sound from the unused channel is properly distributed to the connected speakers in order to produce the best Surround sound possible.

Front: The left, right, and center speakers should face the seated listener and be placed at ear level. The center speaker produces a richer sound image by enhancing the perception of the sound's source and movement.

Surround: Place the left and right Surround speakers 1 meter (3 feet) above the listener's ear level and toward the sides of the room, making sure that the listener is within the speakers' dispersion angle. These speakers produce the feel of a moving sound while creating the sensation of being in the middle of the action.

Subwoofer: Install a subwoofer with a built-in power amplifier for powerful bass sounds. The placement of the subwoofer does not affect the final quality of the sound image too much, so you can install it with the room layout in mind.

Refer to the speaker's instruction manual for more details.



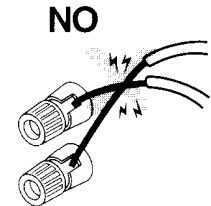
Connecting the speaker cables

When using banana plugs, make sure that you tighten the speaker terminal screws firmly before inserting the banana plugs.

- Note that the speaker terminals on European models are not banana-plug compatible.

NOTE:

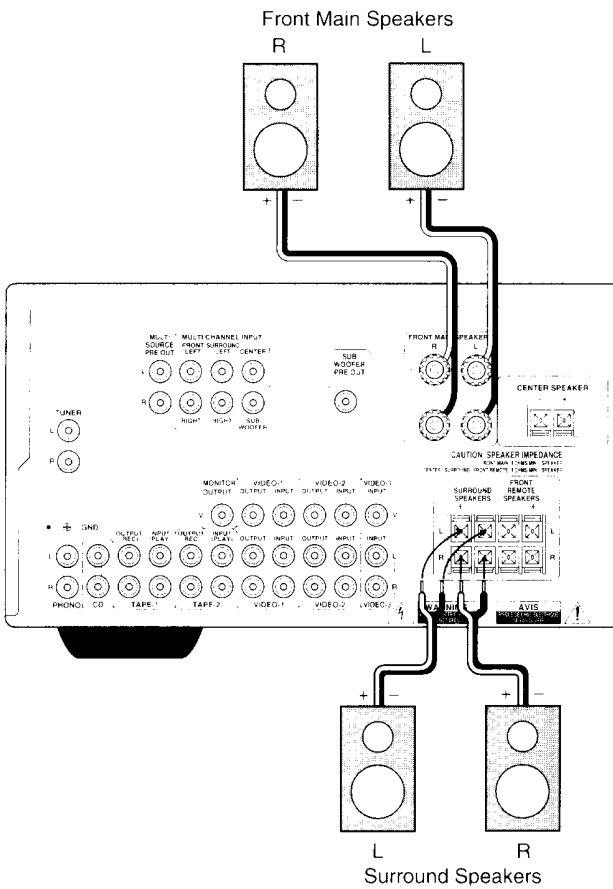
To prevent damage to circuitry, never short-circuit the positive (+) and negative (-) speaker wires.



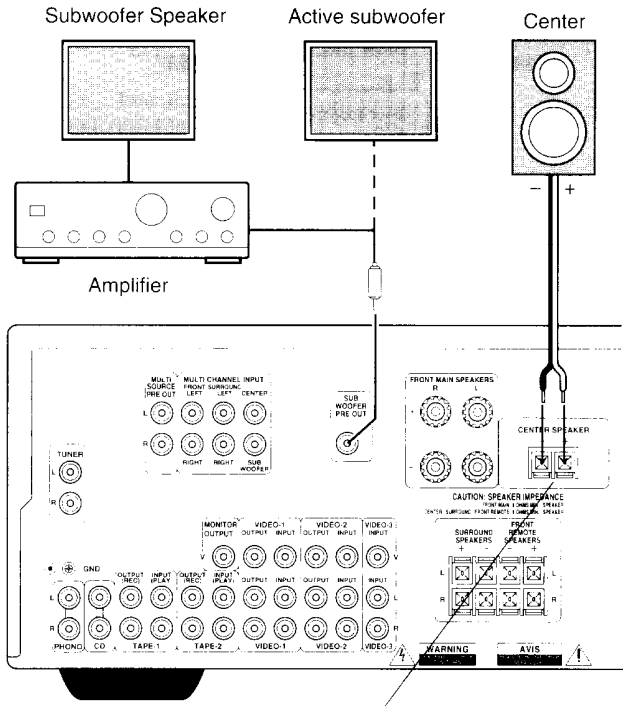
Making speaker connections

Connecting the front and rear (surround) speakers

If you want to use Surround effects, the Rear and Center speakers must be connected. (Surround effects can be heard even if a center speaker is not connected.)

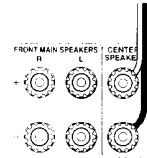


Connecting the center speaker and subwoofer



■ CENTER SPEAKER terminals

The CENTER SPEAKER terminals shown here are for the U.S. and Canadian model. The terminals on other countries' models look the same as the adjacent FRONT MAIN SPEAKERS terminals.



■ Speaker impedance

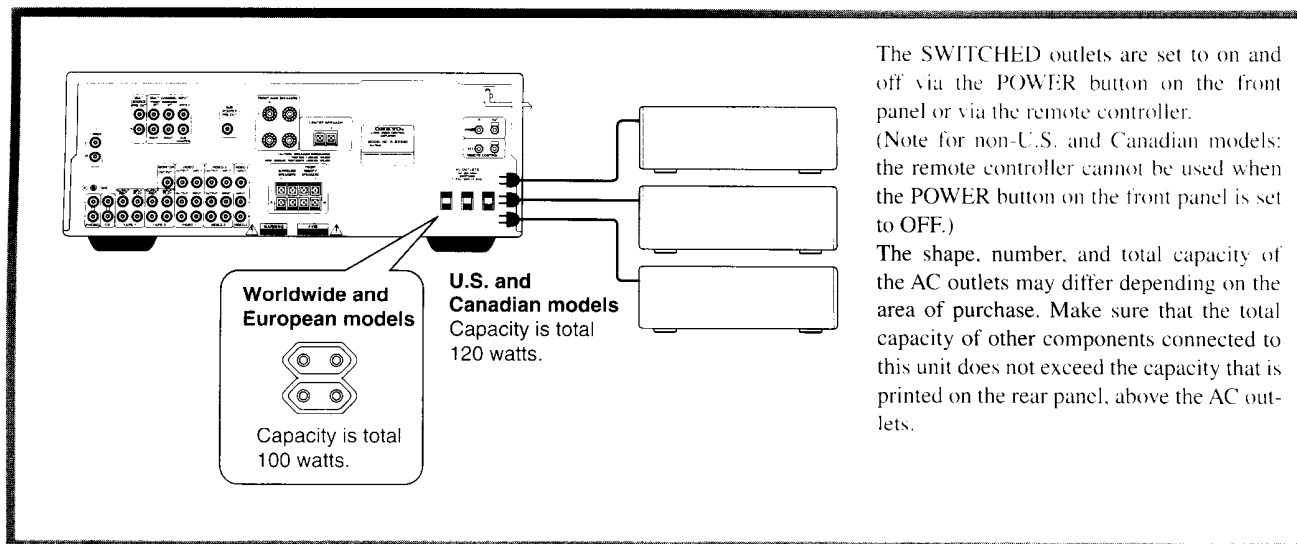
U.S. & Canadian models:

- FRONT MAIN: 8 ohms min./speaker
- CENTER /SURROUND/FRONT REMOTE: 8 ohms min./speaker

Other models:

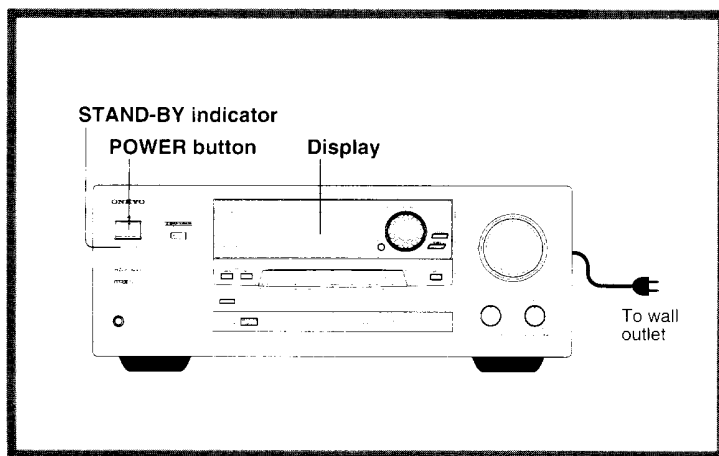
- FRONT MAIN: 6 ohms min./speaker
- CENTER/SURROUND/FRONT REMOTE: 6 ohms min./speaker

AC outlet connections



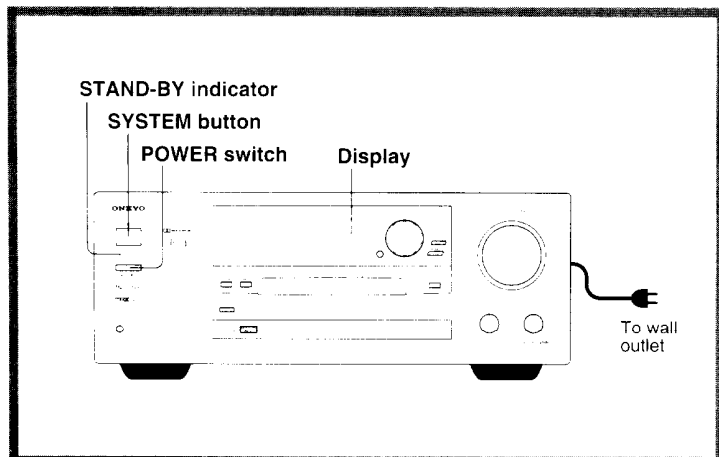
Connecting the power

- Before plugging in the amplifier, confirm that all connections have been made properly.
- Before turning on the power, make sure that the MASTER VOLUME control is fully turned counterclockwise.
- Turning on this amplifier's power may cause a momentary power surge, which might interfere with other electrical equipment, such as computers. If so, use a wall outlet on a different circuit.



U.S. and Canadian models

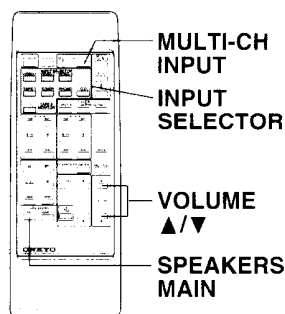
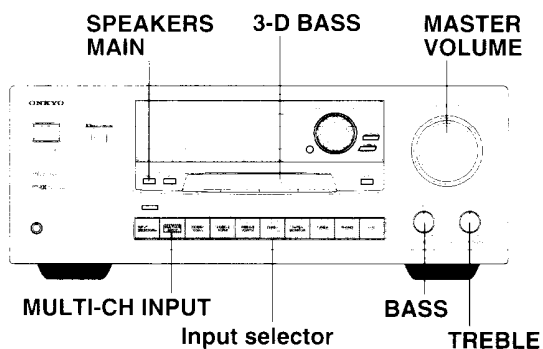
1. Plug the power cord into an AC wall outlet.
The STAND-BY indicator lights up and the amplifier enters Standby mode, ready for operation.
 2. Press the POWER button to turn on the amplifier. The display will light up and the STAND-BY indicator will be turned off.
If you press the POWER button again, the amplifier returns to Standby mode.
- The POWER button on the remote controller is used in the same way as the POWER button on the A-SV640.



Other than U.S. or Canadian model

1. Plug the power cord into an AC wall outlet.
 2. Press the POWER switch to set the amplifier to Standby mode.
The STAND-BY indicator will light up.
 3. Press the SYSTEM button or POWER button on the remote controller to turn on the amplifier. The display will light up and the STAND-BY indicator will be turned off.
If you press the SYSTEM button or POWER button on the remote controller again, the amplifier returns to Standby mode.
- You cannot use the remote controller if the POWER button on the amplifier is set to OFF.

Basic operation



1

SPEAKERS
MAIN REMOTE

— SPEAKERS —
MAIN REMOTE

2

Remote controller

VIDEO-1

INPUT SELECTOR

VIDEO-2

VIDEO-3

TAPE-1

TUNER

PHONO

C.D

TAPE-2 MONITOR

3

MULTI-CH
INPUT

MULTI-CH
INPUT

4

MASTER VOLUME

Remote controller

VOLUME

5

3-D BASS

BASS

TREBLE

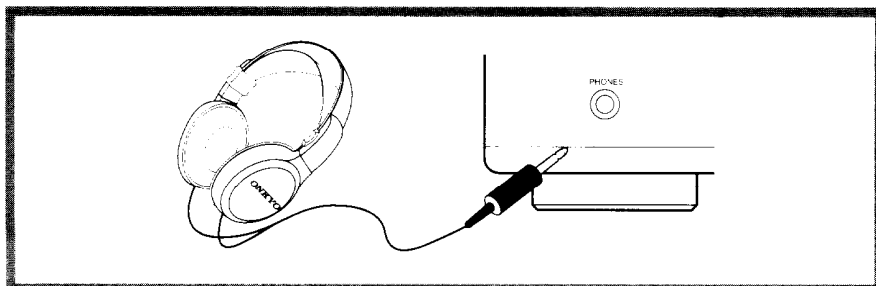
Listening to your favorite source

- 1. Press the MAIN speakers button.**
The MAIN indicator lights up.
- 2. Press the input selector button for the desired source.**
The name of the selected source will appear on the display.
To play the selected source in Surround mode, refer to pages 15 to 20.
 - Press the MULTI-CH INPUT button if you wish to listen to a source connected to the MULTI-CHANNEL INPUT. VIDEO-3 will be automatically selected as an input selector for a video source. See page 20 for more information on MULTI-CH input.
- 3. Start playing the selected input source.**
Follow the operating instructions for the source unit.
- 4. Adjust the volume to an appropriate level using the MASTER VOLUME knob or the VOLUME ▲/▼ buttons on the remote controller.**
- 5. Adjust the tone controls.**

NOTE:

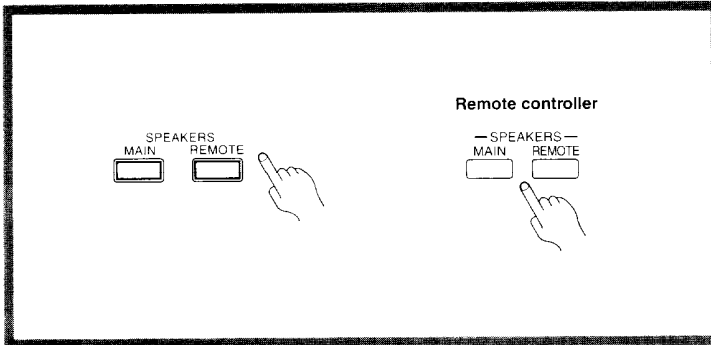
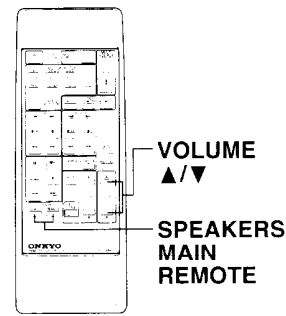
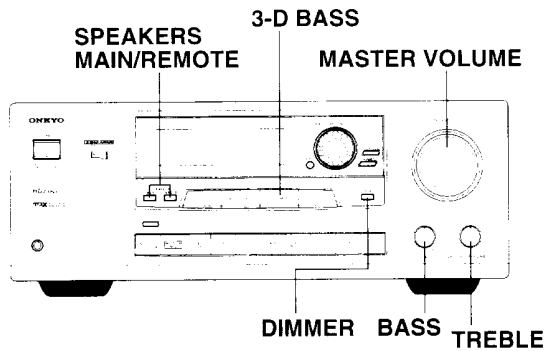
- Make sure that the MUTE indicator is not lit and that the TAPE-2 MONITOR indicator is not lit when a source other than TAPE-2 MONITOR is selected.
- If you have selected the multi channel input, turning TAPE-2 MONITOR on will automatically select VIDEO-3 as an input selector. Also selecting multi source will automatically set the MAIN to VIDEO-3.

Listening with headphones



You can connect stereo headphones with a standard stereo plug to the PHONES jack. The sound heard through the headphones is the same as that heard from the front speakers, although it may sound slightly different when Surround mode is used. (The sound in the headphones may seem a little distant.)

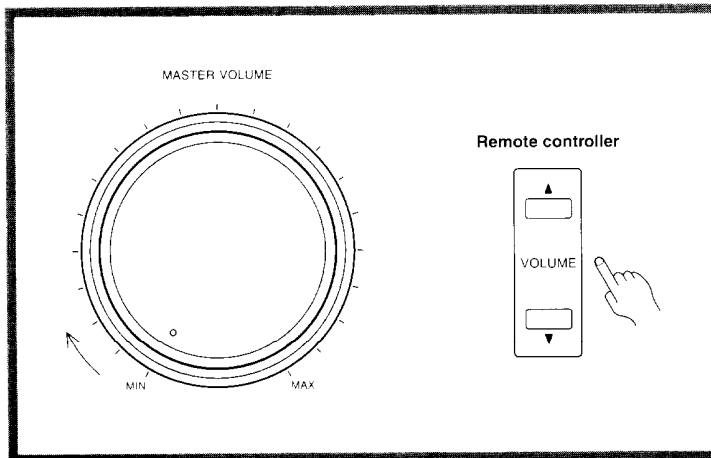
Basic operation



SPEAKERS selector

MAIN: This button turns on or off the speakers connected to the FRONT MAIN SPEAKERS, CENTER SPEAKER, SURROUND SPEAKERS, and SUBWOOFER terminals. When the speakers are turned on, the MAIN indicator lights up.

REMOTE: This button turns on or off the speakers connected to the FRONT REMOTE SPEAKERS terminals. When the speakers are turned on, the REMOTE indicator lights up. Turn on these speakers when using multi source. (See page 26)



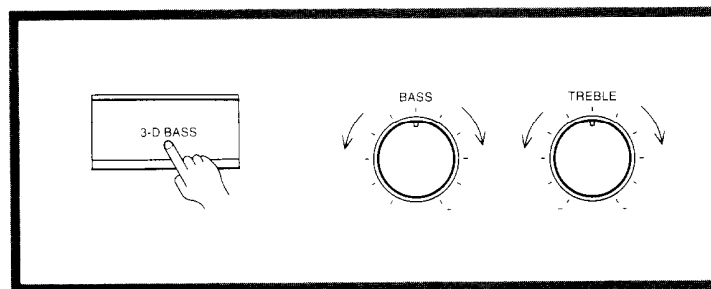
MASTER VOLUME control

The MASTER VOLUME control knob adjusts the volume of the front, center, surround, and subwoofer speakers simultaneously. Turning it clockwise increases the volume. You can also adjust the volume using the remote controller's VOLUME ▲/▼ buttons.

The Master Volume level settings shown on the display are: $-\infty$ dB (minimum), $-58 \sim -1$, 0 , $+1 \sim +20$ dB (maximum).

Depending on the calibration, it may be impossible to set the Master Volume level to +20 dB. Even if the knob is manually turned to its maximum, it will return to its highest possible setting.

The MASTER VOLUME control does not affect the MULTI SOURCE PRE OUT. Use the remote controller to adjust the multi-source level.



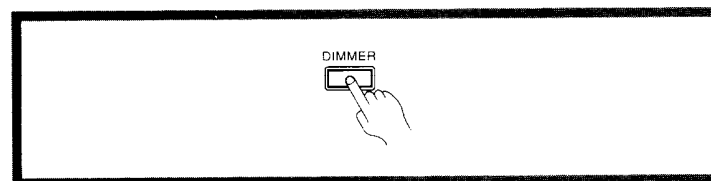
Adjusting the tone

BASS: Adjust to strengthen or weaken bass response.

TREBLE: Adjust to strengthen or weaken treble response.

3-D BASS: This button is used to clearly reproduce ultra low frequency. When this button is pressed, the 3-DB indicator lights up. 3-D BASS can be used with all surround modes.

- The 3-D BASS, BASS, and TREBLE controls only affect the left/right Front and Center speakers.



DIMMER button

Use this button to change the brightness of the display. The brightness changes to bright, normal, or low.

Using Surround mode

The A-SV640 features five Surround modes:

Make your choice of mode depending upon the type of music you are listening to, the media used, and your personal preference.

Dolby Pro Logic: By using video tape and laser discs with the  trade mark, you can decode four channel surround sound.

Hall: This mode simulates the atmosphere of a concert hall. Intended for classical music.

Live: This mode reproduces the feeling of a live performance.

Arena: This mode recreates the feeling of listening to a pop concert in a domed stadium.

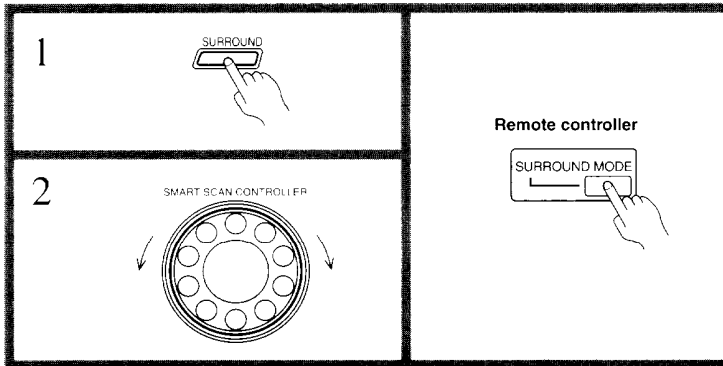
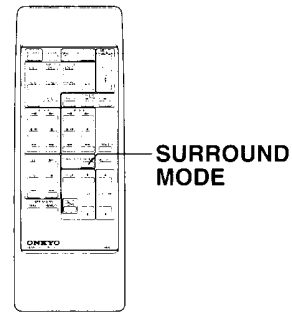
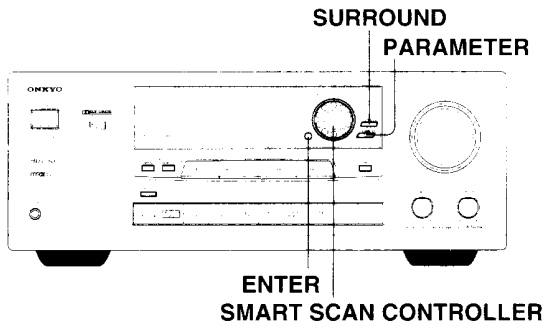
Studio: This mode reproduces the ambience of a recording studio.

Surround off (STEREO): This mode is used when you don't use the Surround mode. All input sound is output from the front speakers directly.

You can set the volume level of the channels for each Surround mode individually. Since the volume level for all channels is set to your settings during the test tone operation, we recommend that you set the volume level for each Surround mode individually after you set each channel's volume level in Dolby Pro Logic mode.

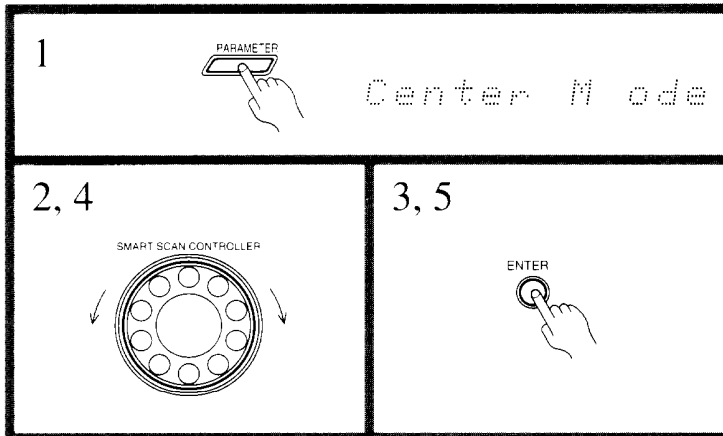
NOTE:

- The A-SV640 memorizes the most recent surround settings. For example, if you selected VIDEO-1 as an input selector and chose "Hall" for Surround mode, selecting VIDEO-1 next time will automatically select "Hall" as a Surround mode.
- When you select MULTI SOURCE in a Surround mode, the Surround mode will automatically turn off.



Selecting a Surround mode

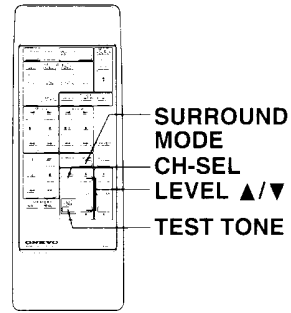
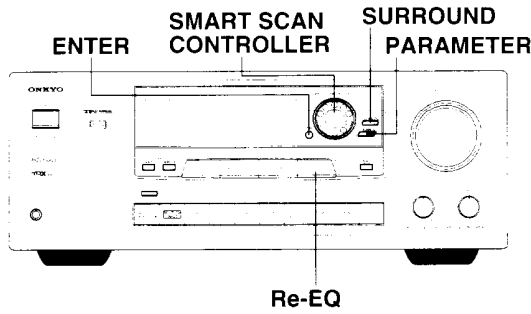
1. Press the **SURROUND** button.
One of the Surround mode indicators will light up.
2. Rotate the **SMART SCAN CONTROLLER** clockwise or counterclockwise to select the desired Surround mode.
Alternatively, press the **SURROUND MODE** button repeatedly on the remote controller.
The names of the various Surround modes will light up on the display sequentially.



Setting a Surround parameter

1. Press the **PARAMETER** button after you have selected a Surround mode.
One of the Surround parameters will scroll on the display. (e.g., Center mode)
2. Rotate the **SMART SCAN CONTROLLER** to select the parameter you wish to edit.
3. Press the **ENTER** button to confirm the selection.
The value of the selected parameter will flash on the display.
4. Rotate the **SMART SCAN CONTROLLER** to select the desired value.
5. Press the **ENTER** button to confirm the entry.

Using Surround mode



Setting the Dolby Pro Logic Surround mode parameters

Follow the procedure described in "Selecting a Surround mode" on page 15 to perform Step 1 below, and refer to "Setting a Surround parameter" on page 15 to set the parameters in Steps 2 - 5 below.

First, select a source encoded with Dolby Surround.

1. **Select Dolby Pro Logic as a Surround mode.**
2. **Select one of the Center modes.**
You can select Wideband, Phantom, or Normal. Refer to the next page for more information on Center mode.
3. **Indicate whether or not you are using a subwoofer.**
Select YES if a subwoofer is connected.
4. **Set the Delay time.**
A setting of 20 msec is usually safe. However, you can set at anywhere in the range of 15 - 30 msec, depending on the listening position in the room. Refer to the next page for more information on Delay time.
5. **Adjust the volume level of the connected speakers.**
Adjust the level so that all the speakers sound at the same level at the listening position.

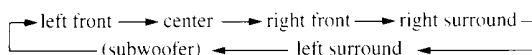
Using the remote controller:

- ① **Press the TEST TONE button on the remote controller.**
The test tone will start at the Front L speaker.
- ② **Press the CH-SEL button while the test tone is heard from the target speaker.**
Repeat the same procedures for all speakers.
- ③ **Use the LEVEL up/down button to change the volume level of the speaker.**
- ④ **Press the TEST TONE button to stop the test tone.**

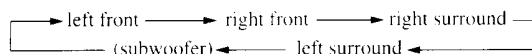
Using the front panel of the unit:

- ① **Press the PARAMETER button, then rotate the SMART SCAN CONTROLLER to select the Test Tone (Test ON) parameter.**
- ② **Press the ENTER button.**
The test tone (pink noise) cycles from speaker to speaker. This cycle sequence varies depending on the Center mode parameter and the Subwoofer parameter settings as described below:

When Center mode is set to NORMAL or WIDEBAND:



When the Center mode is set to PHANTOM:



NOTE:

When the Subwoofer parameter is set to No, the test tone will skip the subwoofer.
The test tone moves from speaker to speaker every few seconds.

- ③ **To change the output level of the speakers, press the ENTER button while the test tone is heard from the target speaker, then rotate the SMART SCAN CONTROLLER clockwise to raise the volume, and counter-clockwise to lower the volume.**
If you do not operate the SMART SCAN CONTROLLER for three seconds, the test tone will move to the next speaker.
- ④ **Press the PARAMETER button to stop the test tone.**

See page 17 for the configuration of the parameters and their relationship with the PARAMETER button, the ENTER button, the SMART SCAN CONTROLLER.

If you wish to set two or more parameters consecutively, omit Steps 1 and 2 of "Setting a Surround parameter" on page 15.

If you do not operate the buttons for five seconds, the parameter setting mode will automatically quit. If you wish to resume parameter setting, press the PARAMETER button again.

Listening to the Dolby Pro Logic Surround sound

If you have already set the Dolby Pro Logic Surround mode parameters, you do not have to set them again here.

1. **Select a source encoded with Dolby Surround.**
Refer to "Selecting a Surround mode" on page 15.
2. **Select Dolby Pro Logic as a Surround mode.**
Refer to "Selecting a Surround mode" on page 15.
3. **Use the MASTER VOLUME to set the volume to the desired listening level.**
4. **Adjust the tone using the BASS and TREBLE knobs.**
The best results are obtained from Dolby Pro Logic Surround when the center and front L and R speakers contain the same amount of mid and high frequencies. As the treble and bass controls do not affect the Center speaker, adjust the tone controls for the Front L and R speakers to match the sound output by the Center speaker. We recommend you use a good quality center speaker.

Cinema Re-Equalization button

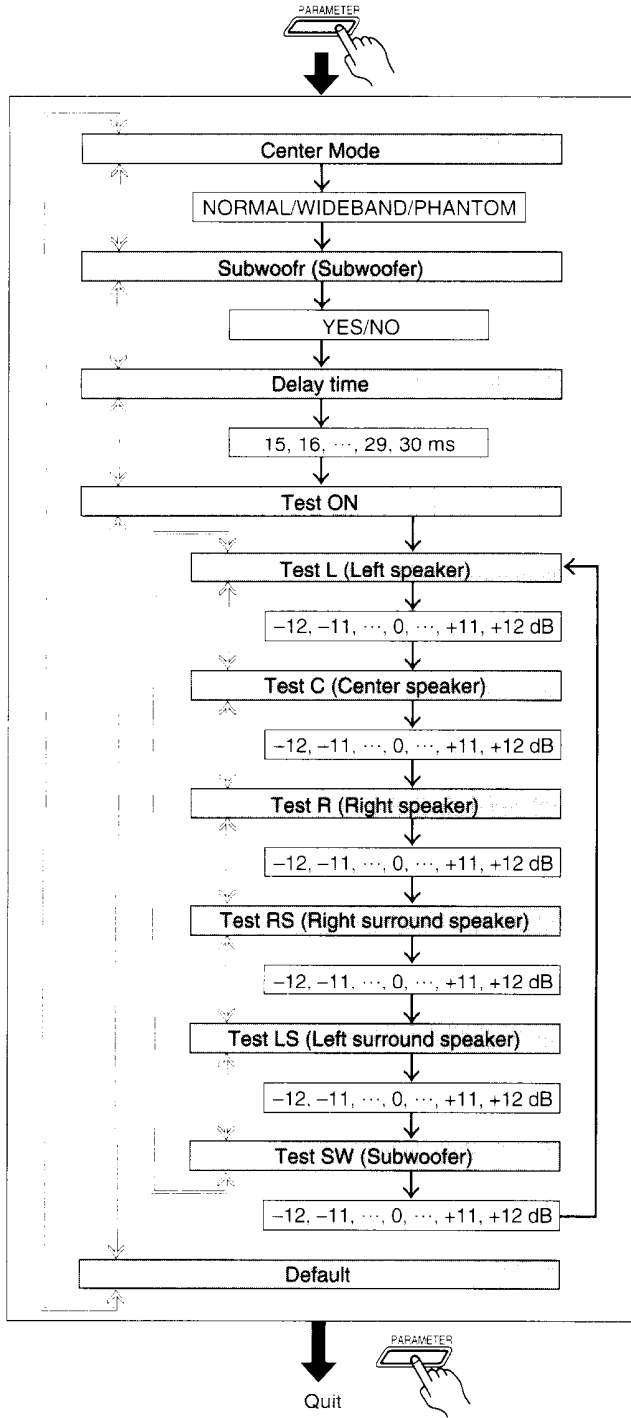
Motion pictures are produced on the assumption that they will be shown at a large cinema. If they are shown in a small room, the high-frequency range sounds will be raised, resulting in an uncomfortable sound. If your system is placed in a small room, set this button to "ON" to reproduce an optimal sound for the home theater system.

The Cinema Re-EQ function is available only for Dolby Pro Logic and Multi channel input.

Using Surround mode

The following shows the relationship between the parameters and the PARAMETER, ENTER buttons, and SMART SCAN CONTROLLER.

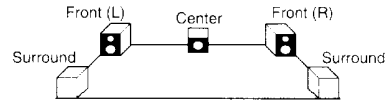
- Dolby**
- ☐ This mark indicates parameters.
 - ☐ Use the SMART SCAN CONTROLLER to select an option.
 - ⬆ Use the SMART SCAN CONTROLLER to go up and down through the parameters.
 - ⬇ Press the ENTER button to go to the next parameter.



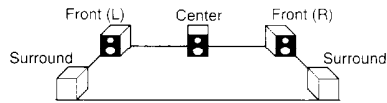
Explanation 1: Center mode

You can select a mode depending on the size of the center speaker.

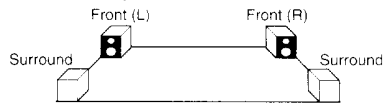
NORMAL: Use this setting for a small enclosure center speaker.



WIDE BAND: Use this setting for a speaker similar to the left and right stereo speakers.

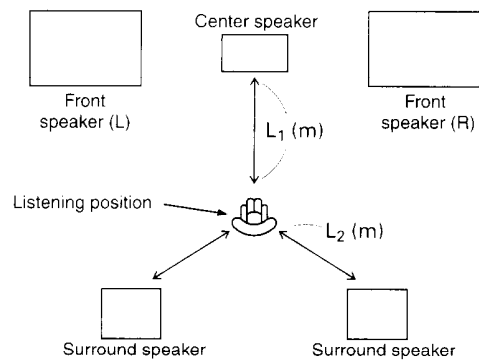


PHANTOM: Use this setting when a center speaker is not present.



Explanation 2: Delay time

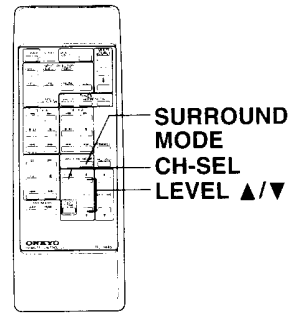
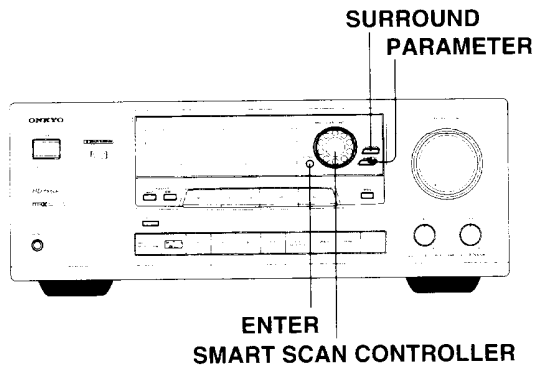
By adjusting the delay time, and carefully adjusting master volume level, center volume level, surround volume level, the apparent acoustic size of your listening room can be enlarged or reduced. Adjustable delay time allows you to tailor the acoustic size of your listening environment to the sonic characteristics of the audio program, because a short delay in the audio signal coming from the surround speakers gives the impression that it had to travel a longer distance to reach the listener, hence a larger room or hall. Dolby Surround delay time is specified at 20 msec. It is recommended that you initially set Dolby Surround delay at 20 msec, but adjustments from 15 to 30 msec are possible.



To calculate the optimum setting for your room, measure the distances L1 and L2 as shown above, then work out the delay times from the following table.

L1-L2 (m)	Delay time (msec)
1	15 to 23
2	16 to 26
3	19 to 29
4	22 to 30
5	25 to 30

Using Surround mode



Setting the Hall, Live, Arena, and Studio parameters

Follow the procedure described in "Selecting a Surround mode" on page 15 to perform Step 1 below, and refer to "Setting a Surround parameter" on page 15 to set the parameters in Steps 2 - 8 below.

1. **Select Hall, Live, Arena, or Studio as a Surround mode.**
2. **Select one of the Center modes.**
You can select Normal, Wideband, or Phantom. Refer to page 17 for more information on Center mode.
3. **Indicate whether or not you are using a subwoofer.**
Select YES if a subwoofer is connected.
4. **Adjust the volume level of the connected speakers.**
Adjust the level so that all the speakers sound at the same level at the listening position.

Using the remote controller:

- ① Press the CH-SEL button to select speakers.
- ② Use the LEVEL up/down button to change the volume level of the speaker.

Using the front panel of the unit:

(Refer to "Setting a Surround parameter" on page 15.)
You can adjust the level for the left speaker, center speaker, right speaker, right surround speaker, left surround speaker, and subwoofer in this order.

NOTE:

These parameter settings are overwritten by the Dolby Pro Logic test tone settings.

5. **Set the size parameter.**
You will set the Hall size parameter in Hall Surround mode or Live Surround mode, the Arena size parameter in Arena Surround mode, and the Studio size parameter in Studio Surround mode. Refer to the next column for more information on this parameter.
6. **Set the Effect Level parameter.**
Refer to the next column for more information on this parameter.
7. **Set the Reverb Level parameter.**
Refer to the next column for more information on this parameter.
8. **Set the Reverb Time parameter.**
Refer to the next column for more information on this parameter.

Explanation 3: Hall size/Arena size/Studio size

These parameters allow you to set the size of the hall/arena/studio. The size can be selected from seven settings between 0.4 and 1.6.

Explanation 4: Effect Level, Reverb Level, and Reverb Time

By adjusting the level of the initial reflections and reverberation of sounds for a recording, it is possible to create the illusion of actually being in a hall without leaving your living room. For each parameter, you can select from seven settings between 0.4 and 1.6.

Effect Level: Adjusts the initial reflection level. Increasing the setting increases the effect sound level.





Reverb Level: Adjusts the level of only the reverb (not the initial reflections). Increasing the setting increases the reverb sound level.

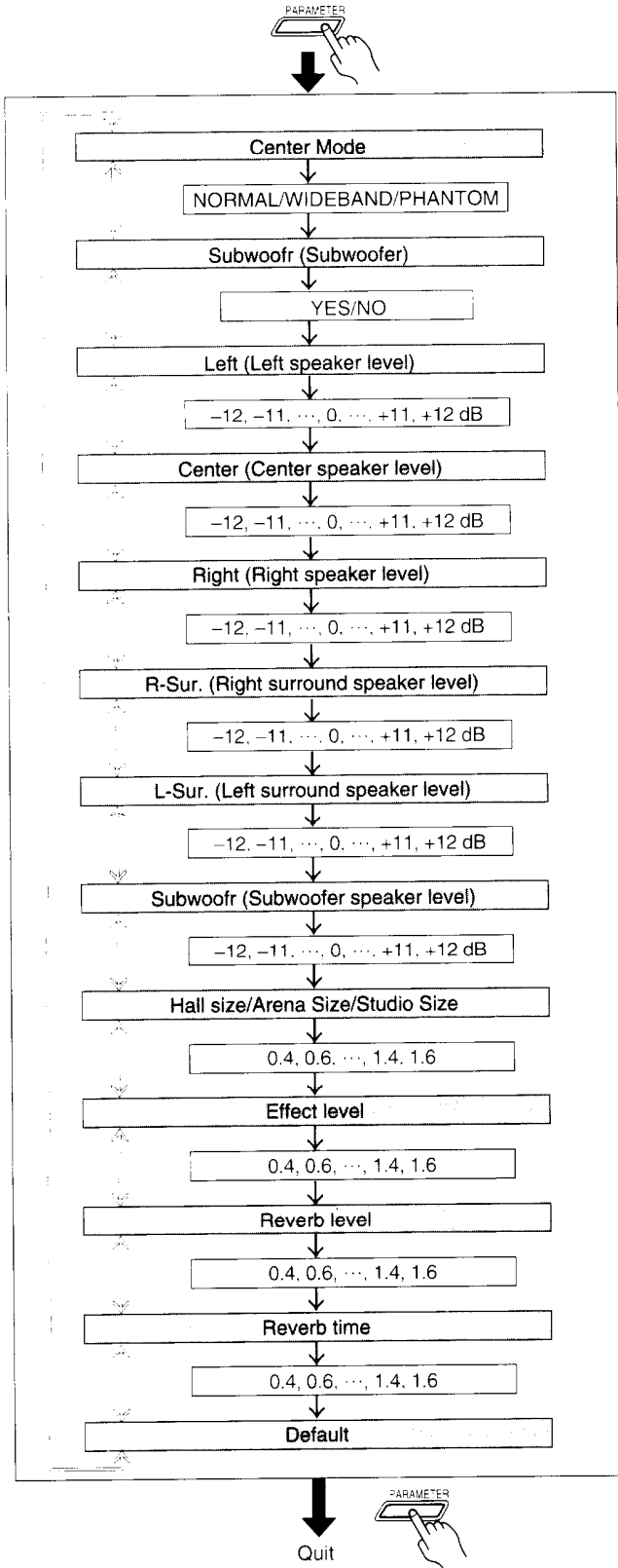
Reverb Time: Adjusts the time taken for the reverberation to decay completely. Increasing the setting lengthens the reverb time.

Using Surround mode

The following shows the relationship between the parameters and the PARAMETER, ENTER buttons, and SMART SCAN CONTROLLER.

Hall, Arena, etc.

-  This mark indicates parameters.
-  Use the SMART SCAN CONTROLLER to select an option.
-  Use the SMART SCAN CONTROLLER to go up and down through the parameters.
-  Press the ENTER button to go to the next parameter.



Surround Off parameters

Follow the procedure described in "Selecting a Surround mode" on page 15 to perform Step 1 below, and refer to "Setting a Surround parameter" on page 15 to set the parameters in Steps 2 - 3 below.

1. **Set the Surround mode to Off (ST).**
2. **Indicate whether or not you are using a subwoofer.**

If you have set the Surround mode's Subwoofer parameter to YES (see page 16), you can still specify whether or not you wish to use the subwoofer when Surround mode is off. Set this parameter to YES if you wish to use the subwoofer in Surround Off mode. If you have set the Surround mode's Subwoofer parameter to NO, this parameter will not appear.

3. **Adjust the speaker volume.**

You can adjust the volume level of each speaker individually. Adjust it while listening to the sound from the listening position.

Using the remote controller:

- ① Press the CH-SEL button to select speakers.
- ② Use the LEVEL up/down button to change volume level of the speaker.

Using the front panel of the unit:

(Refer to "Setting a Surround parameter" on page 15.)





You can adjust the level for the left speaker, right speaker, and Subwoofer in this order.

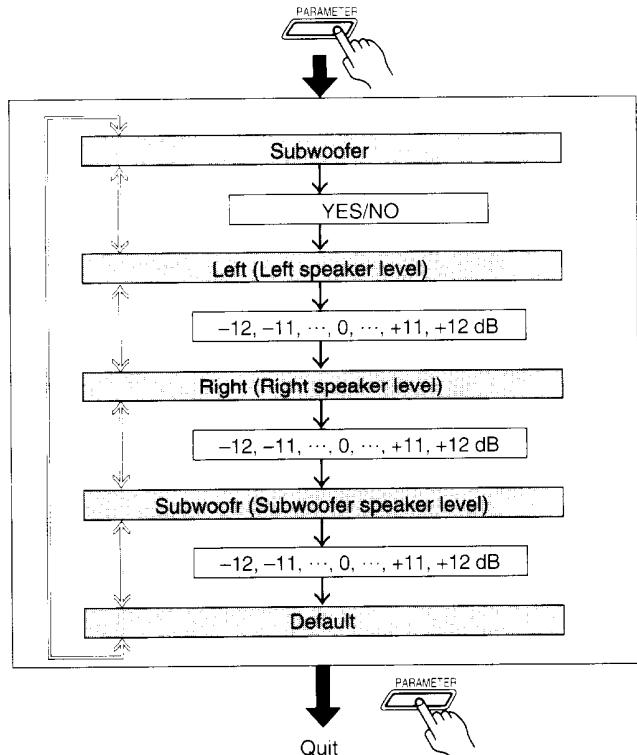
NOTE:

- The Level SW parameter appears only if you have set the Surround Off "Subwoofer" parameter to YES.)
- These parameter settings are overwritten by the Dolby Pro Logic test tone settings.

The following shows the relationship between the parameters and the PARAMETER, ENTER buttons, and SMART SCAN CONTROLLER.

OFF (ST: Stereo)

-  This mark indicates parameters.
-  Use the SMART SCAN CONTROLLER to select an option.
-  Use the SMART SCAN CONTROLLER to go up and down through the parameters.
-  Press the ENTER button to go to the next parameter.



Using Surround mode

When Multi channel input is selected as a source

1. Select Multi-channel input as an Input selector.
You cannot select any Surround mode.
2. Adjust the speaker volume.
You can adjust the volume level of each speaker individually. Adjust them while listening to the sound from the listening position.

Using the remote controller:

- ① Press the CH-SEL button to select speakers.
- ② Use the LEVEL up/down button to change volume level of the speaker.

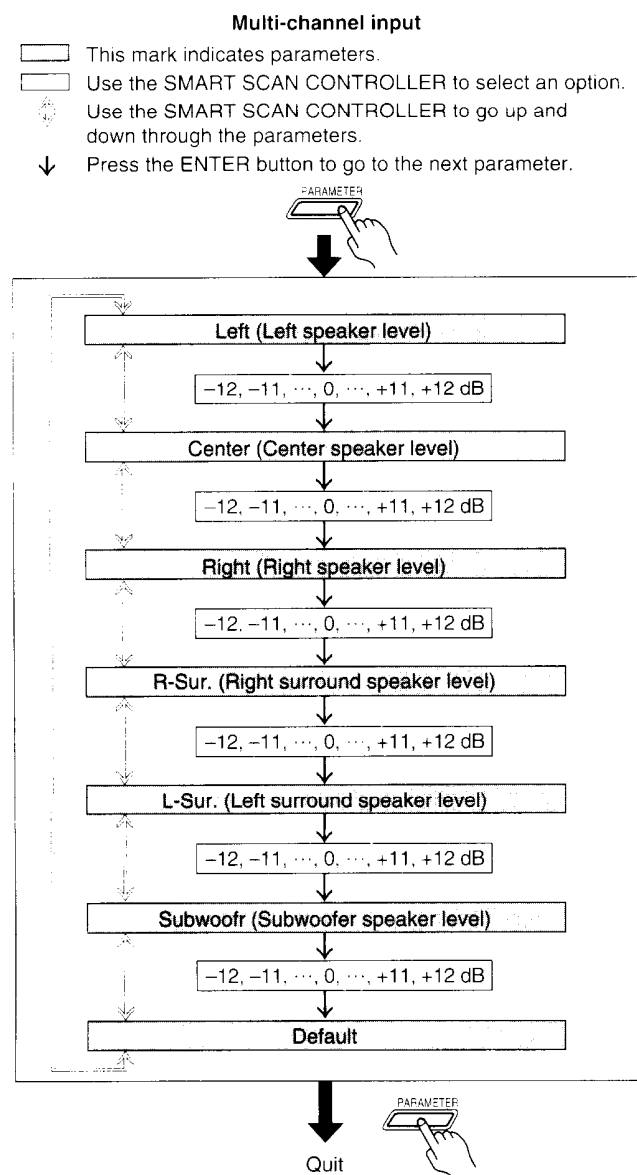
Using the front panel of the unit:

(Refer to "Setting a Surround parameter" on page 15.)
You can adjust the level for the left speaker, center speaker, right speaker, right surround speaker, left surround speaker, and subwoofer in this order.

NOTE:

These parameter settings are overwritten by the Dolby Pro Logic test tone settings.

The following shows the relationship between the parameters and the PARAMETER, ENTER buttons, and SMART SCAN CONTROLLER.



Resetting the parameters to their default settings

1. Select a Surround mode.
2. Press the PARAMETER button.
3. Rotate the SMART SCAN CONTROLLER to select "Default".
4. Press the ENTER button.
5. Rotate the SMART SCAN CONTROLLER to select "YES".
6. Press the ENTER button.
All parameters for the selected Surround mode will be set to their default settings.

Dolby Pro Logic

Parameter	Default values
Center mode	NORMAL
Subwoofer	YES
Delay time	20 ms
Test tone level (each channel)	0 dB

Hall, Live, Arena, Studio

Parameter	Default values
Center mode	Same as the Dolby Pro Logic mode settings
Subwoofer	Same as the Dolby Pro Logic mode settings
Left, Center, Right, R-Sur., L-Sur., Subwoofer	Same as the Dolby Pro Logic mode settings
Hall size (Arena size/Studio size)	1.0
Effect Level	1.0
Reverb Level	1.0
Reverb time	1.0

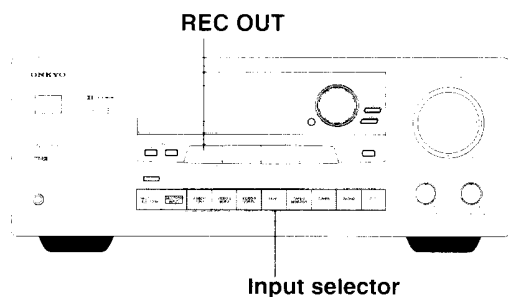
Surround off

Parameter	Default values
Subwoofer	NO
Left, Right, Subwoofer	Same as the Dolby Pro Logic mode settings

Multi-ch input

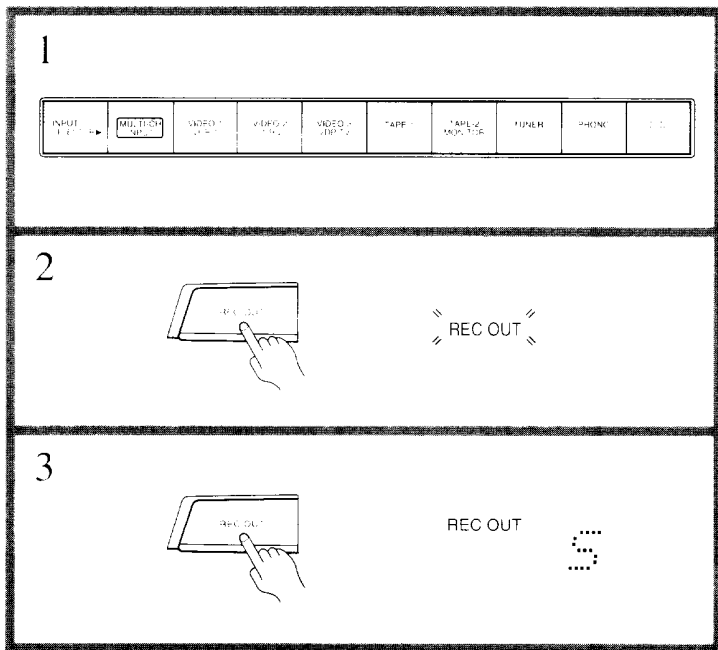
Parameter	Default values
Left, Center, Right, R-Sur., L-Sur., Subwoofer	Same as the Dolby Pro Logic mode settings

Recording a source



You can use the A-SV640 to record either the source you are currently listening to or watching, or a different source. Check that the components are connected to the A-SV640 as shown in "Audio equipment connections" and "Video equipment connections" on pages 7 to 9. If the Multi-Room System equipment is connected, make sure that the MR OFF indicator is lit while recording.

Listening to or watching a source while recording it

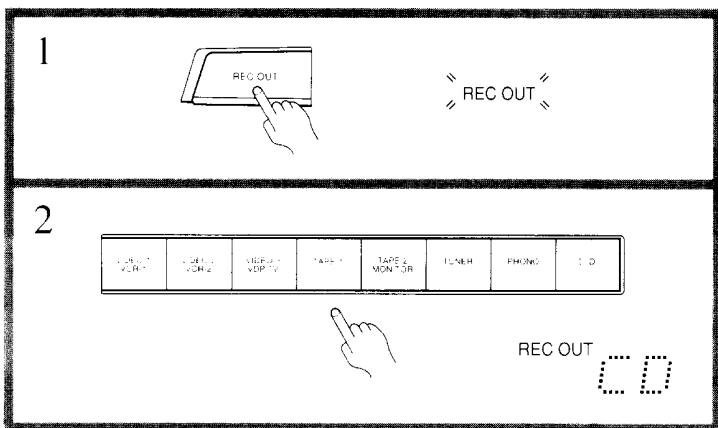


1. Press an input selector button to select the desired source.
2. Press the REC OUT button.
The REC OUT indicator will flash for eight seconds.
3. Press the REC OUT button again while the REC OUT indicator is flashing.
The "S" (source) will be shown in the right corner of the display.
4. Start recording on the recording component, then start playing the selected source.

NOTE:

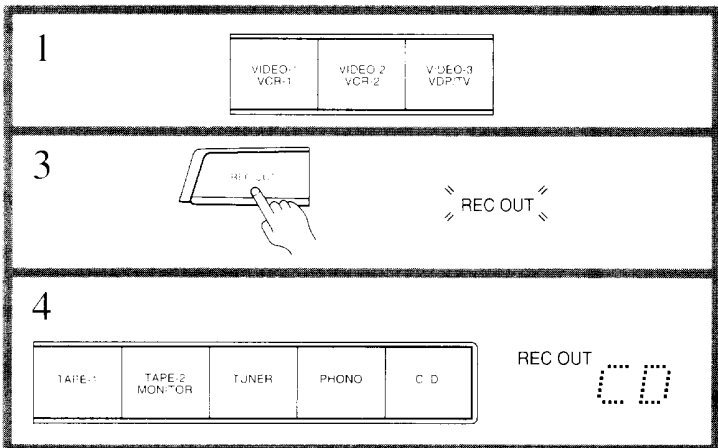
- If you have selected MULTI-CH INPUT in Step 1, the REC OUT will output VIDEO-3 signal.
- Do not adjust any controls on the A-SV640 after starting the recording operation.
- Pressing an input selector button while recording will change the source being recorded.
- When the TAPE-2 MONITOR indicator is lit, only the TAPE-2 source can be recorded. Even if a different input selector button is pressed, the TAPE-2 MONITOR indicator will remain lit.

Listening to or watching a source while recording to another



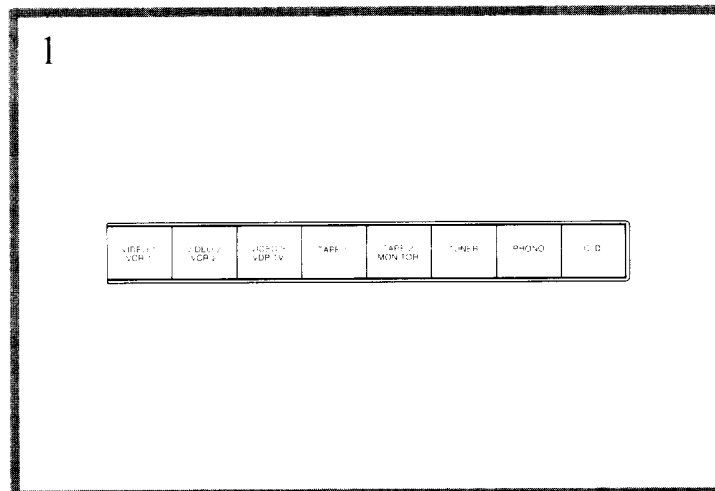
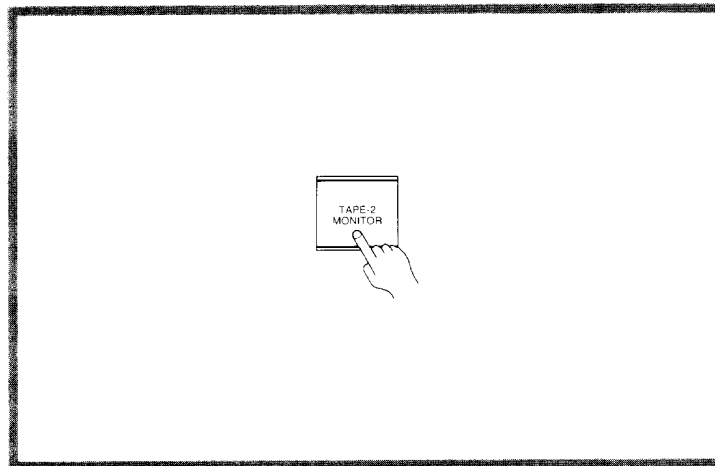
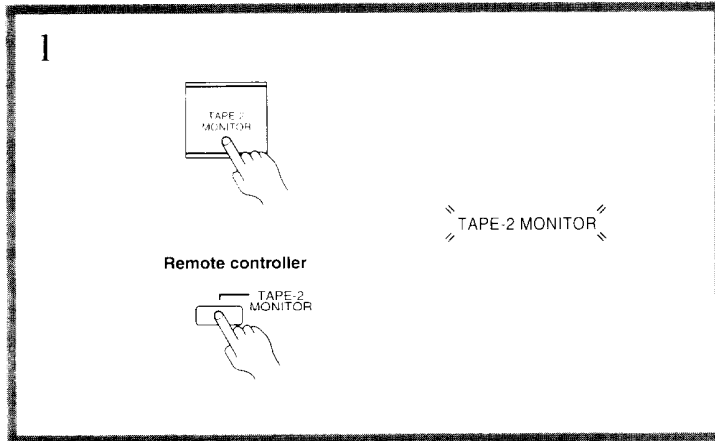
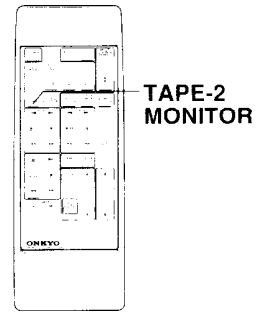
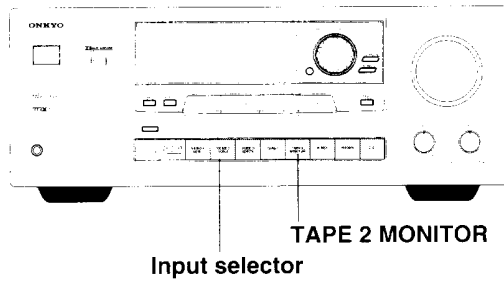
1. While listening to or watching a source, press the REC OUT button.
2. Press an input selector button (other than MULTI-CH INPUT) for the source to be recorded, while the REC OUT indicator is flashing. (For example CD)
 - The abbreviation for the selected source name appears on the source display.
VIDEO-1 (V1), VIDEO-1 (V2), VIDEO-3 (V3), TAPE-1 (T1), TAPE-2 (T2), TUNER (TU), PHONO (PH), CD (CD)
 - At this time, pressing the MULTI-CH INPUT will change the current source to MULTI-CH INPUT.
3. Start recording on the tape deck or VCR, and start the source selected in step 2.

Mixing video and audio for VCR recording



1. To record different video and audio sources to a destination VCR, first, select the video source using the input selector buttons.
2. Press the REC/PAUSE button on the destination VCR.
3. Press the REC OUT button.
The REC OUT indicators flashes for eight seconds.
4. While the REC OUT indicator is flashing, select the audio source using the input selector buttons (other than MULTI-CH INPUT).
The selected music source is indicated on the display. For example, "CD".
5. Start recording on the destination VCR, and then start playback on the video and audio sources.
The video and audio sources are recorded by the destination VCR.

Using TAPE-2 MONITOR



Playing back using TAPE-2 MONITOR

Using the receiver or remote controller:

1. Press the TAPE-2 MONITOR button.
The TAPE-2 MONITOR indicator lights up on the display.
 2. Follow the operating instructions for the TAPE-2 tape deck to start playback.
- If you have selected the MULTI-CHANNEL INPUT, turning TAPE-2 MONITOR on will automatically select VIDEO-3 as an input.
 - If you are not using the component connected to the TAPE-2 connectors, make sure that the TAPE-2 MONITOR indicator is off. Otherwise you won't be able to listen to other sources.

Using a graphic equalizer

1. Connect the graphic equalizer to the TAPE-2 connectors on the rear panel of the A-SV640.
2. If a second tape deck is used, connect it to the tape deck connectors on the graphic equalizer.
3. Press the TAPE-2 MONITOR button.
The TAPE-2 MONITOR indicator lights up on the display.
4. Follow the operating instructions for the graphic equalizer.
To record an equalized signal, use the tape deck connected to the equalizer.

CAUTION:

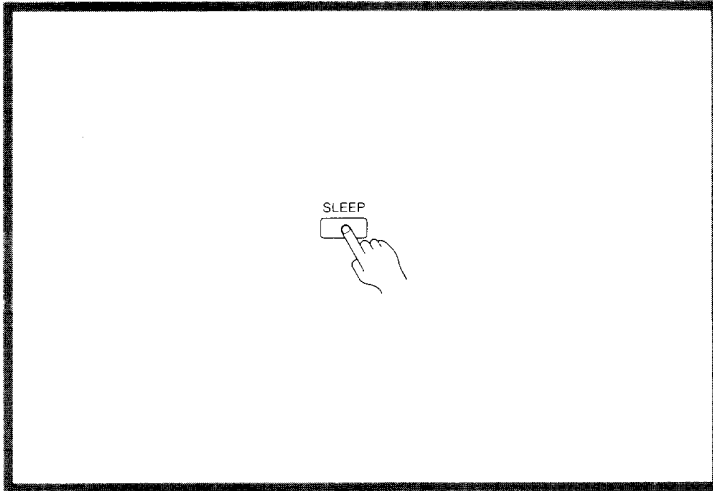
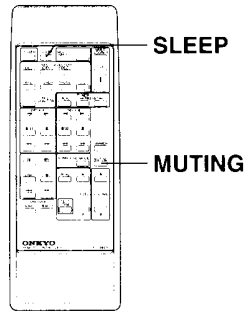
- Do not select a Surround mode when using the equalizer. Otherwise, it will result in distortion and possible damage to the Surround decoder circuitry.

Recording using TAPE-2 MONITOR

Using the receiver:

1. Press an input selector button to select the source to be recorded.
 2. Start recording using the TAPE-2 tape deck, then start playing the selected source.
Refer to the tape deck owner's manual for more details.
- If the TAPE-2 MONITOR indicator in the display is not lit, you will hear the sound from the source.
 - If a 3-head tape deck connected to the TAPE-2 connectors is used for recording, press the TAPE-2 MONITOR button to turn on the TAPE-2 MONITOR indicator and listen to the sound that was just recorded.
 - Set the recording level with the controls on the recording tape deck.

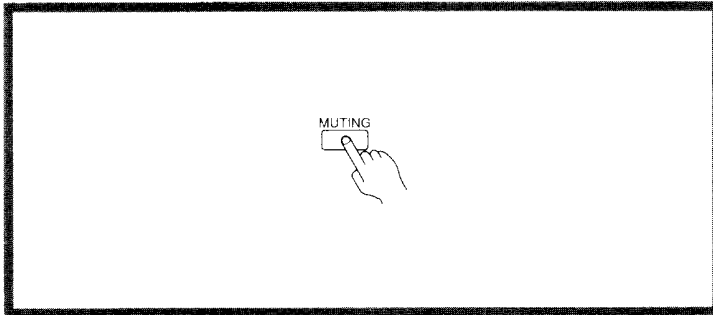
Other useful functions



Sleep timer function (Remote controller only)

Press to set the power-off timer. The sleep timer is a function that turns off the power to the system after a certain period of time. When this button is pressed, "90 MIN" is displayed for five seconds, and the power will go off 90 minutes later. Each time the button is pressed within five seconds, the timer setting changes in 10 minutes increments (e.g. 80, 70, 60 ...). While the sleep timer is operating, the SLEEP indicator is lit. If you press the sleep button during this time, the amount of time remaining on the timer is displayed, and if you press the button during that display, 10 minutes will be subtracted from that time.

If you press the button when the panel display indicates 10 minutes or less, the sleep timer will be cancelled, and the power will not be turned off.



Muting the sound (Remote controller only)

This button temporarily switches off the sound from the speakers or headphones by operating this unit's audio muting circuits. The MUTING indicator will flash. Pressing the button again or using the POWER button on the remote control to turn the power on will turn off the audio muting.

Audio muting using this button does not affect the sound of the multi-source (Remote speakers).

Press the SPEAKERS REMOTE to mute the sound of the multi-source.

Setting up the multi-room remote system

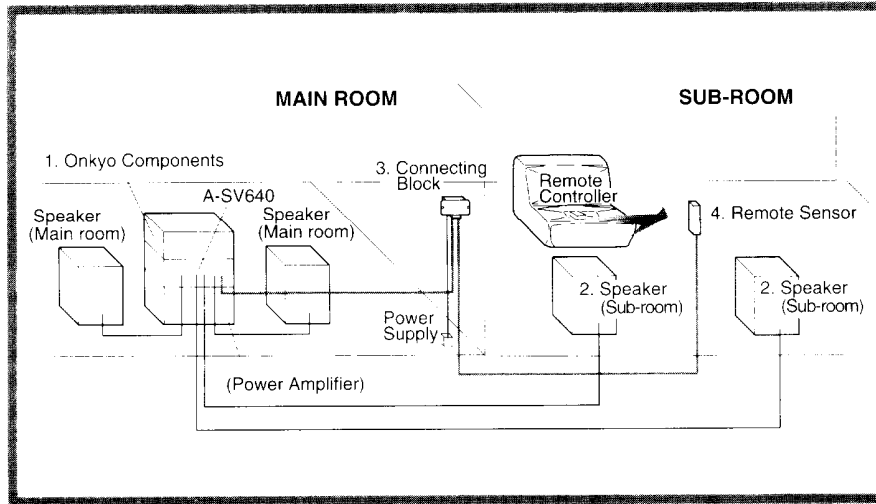
Using the optional Multi-Room System equipment as well as a power amplifier and connecting components as shown in the following diagrams will enable you to control them from the main room (where the system is located) as well as from another room (sub-room).

U.S. and Canadian models (Xantech Multiple-Room systems)

Do not plug in the power cord until all connections have been made.

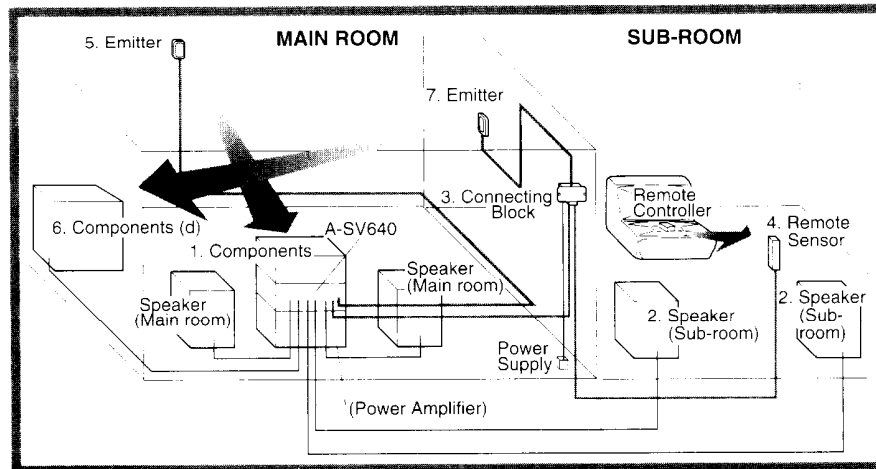
Make connections as shown in the Connection Diagram below. Make sure all components are correctly connected.

■ Connecting components equipped with Onkyo RI connectors



1. Set up the Onkyo RI components.
2. Connect the sub-room speaker cables to the FRONT REMOTE SPEAKERS terminal on the A-SV640.
 - You can use a power amplifier to enjoy powerful sound in the sub-room. Follow Steps 2-1 and 2-2 to set it up.
- 2-1. Connect the A-SV640 to the power amplifier.
- 2-2. Connect the sub-room speaker cables to the speaker terminal on the power amplifier.
3. Install the Connecting Block in the main room, then connect it to the A-SV640.
4. Install the Remote Sensor in the sub-room, then connect it to the Connecting Block in the main room.

■ Connecting components not equipped with Onkyo RI connectors

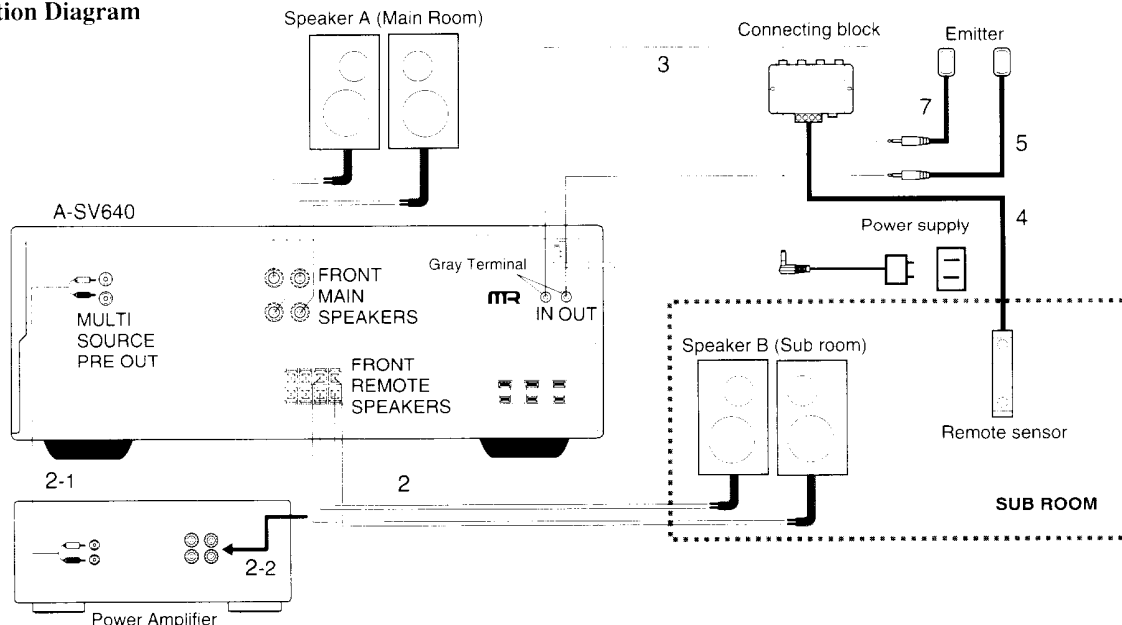


1. Connect the components to the A-SV640. Make the connections described above in steps 2 through 4.
5. Install the Emitter so that its sensor is directed toward the components, then connect it to the A-SV640.

To operate components positioned out of range of the emitter:

6. Connect these components to the A-SV640.
7. Install another Emitter so that its sensor is directed toward these components, then connect it to the Connecting Block.

Connection Diagram



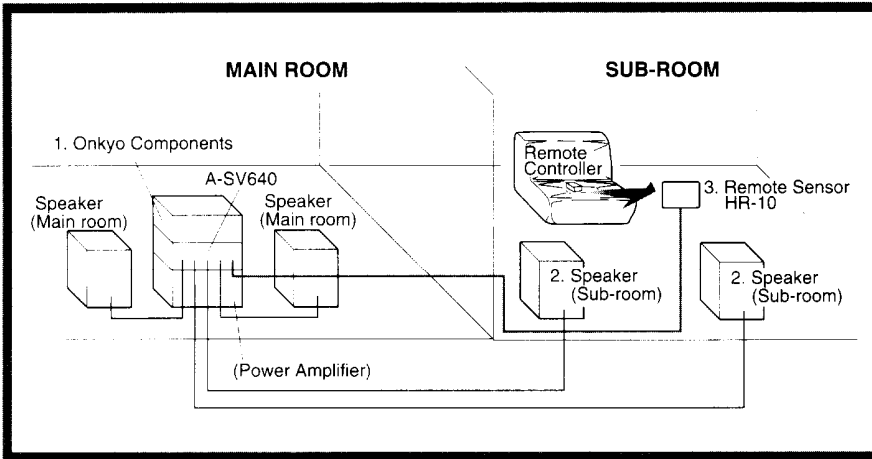
Setting up the multi-room remote system

Models other than U.S. and Canadian models (Onkyo Multi-Room systems)

Do not plug in the power cord until all connections have been made.

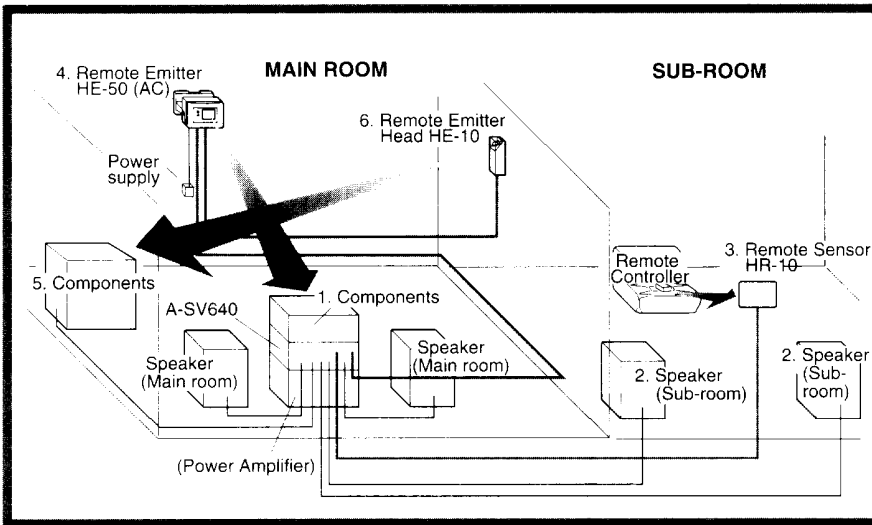
Make connections as shown in the Connection Diagram below. Make sure all components are correctly connected.

■ Connecting components equipped with Onkyo **RI** connectors



1. Set up the Onkyo **RI** components.
2. Connect the sub-room speaker cables to the FRONT REMOTE SPEAKERS terminals on the A-SV640.
 - You can use a power amplifier to enjoy powerful sound in the sub-room. Follow Steps 2-1 and 2-2 below to set it up.
- 2-1. Connect the A-SV640 to the power amplifier.
- 2-2. Connect the sub-room speaker cables to the speaker terminals on the power amplifier.
3. Install Remote Sensor HR-10 in the sub-room, then connect it to the A-SV640.

■ Connecting components not equipped with Onkyo **RI** connectors

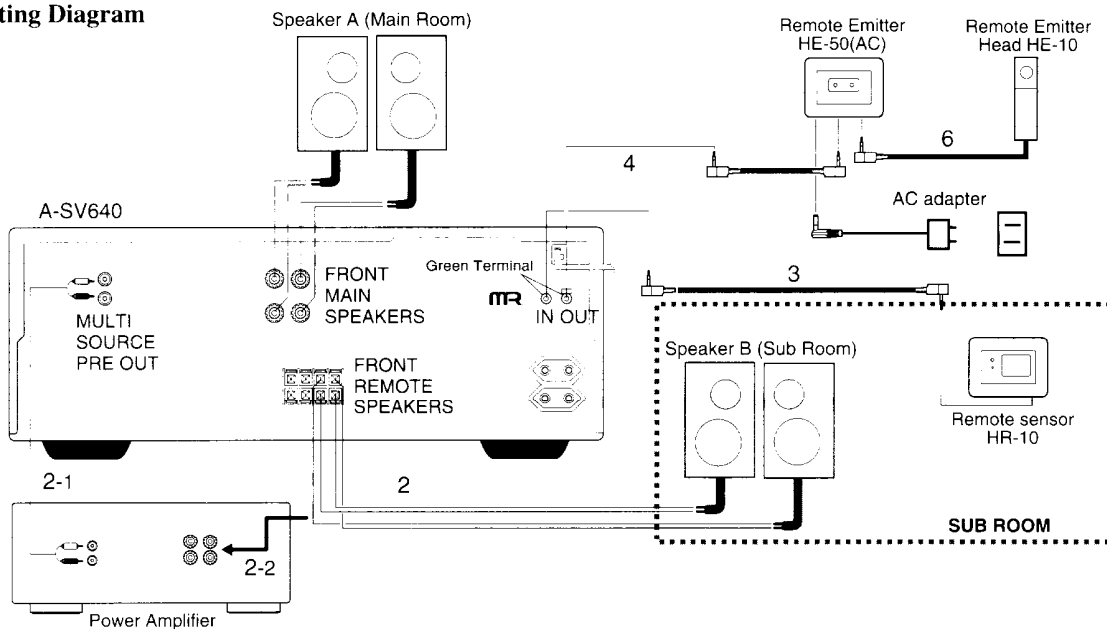


1. Connect the components to the A-SV640. Make the connections described above in steps 2 through 3.
4. Install the Remote Emitter HE-50 (AC) so that its sensor is directed toward these components, then connect it to the A-SV640. (Connect the AC adapter to the Remote Emitter.)

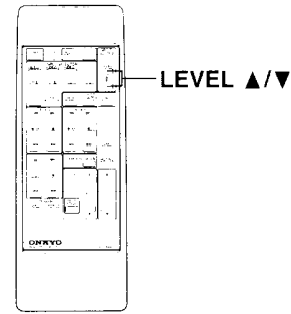
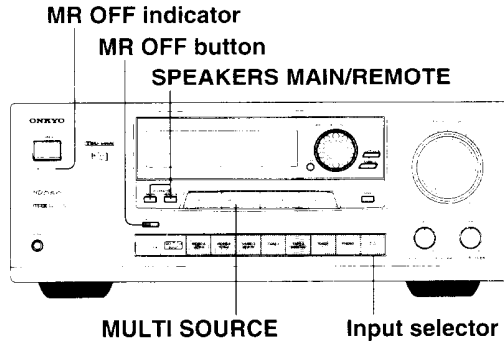
To operate components positioned out of range of the emitter:

5. Connect these components to the A-SV640.
6. Install Remote Emitter Head HE-10 so that its sensor is directed toward these components, then connect it to the HE-50 (AC).

Connecting Diagram



Listening to devices connected to the A-SV640 from another room



1

2

3

4

5

6

Listening from another room

Please refer to page 24 and page 25 for connection details. On the RC-343M remote controller, first set the A/B-SUB ROOM/LEARN switch to B-SUB ROOM.

In the Main Room:

1. Press the MR OFF button on the A-SV640 to turn off the MR OFF indicator.
If the MR OFF indicator is lit, the multi-room system cannot be used from the sub-room.
2. Press the MULTI SOURCE button.
MULTI SOURCE indicator will flash for eight seconds.
3. Press the appropriate INPUT SELECTOR button while the MULTI SOURCE indicator is lit and start operating it.
The MULTI-SOURCE indicator lights up and the display indicates the input source.
 - If you press an input selector button while the indicator is off, the main room source will change.
 - You cannot select MULT-CH INPUT.
4. Set the Multi source level to minimum (between -78 and -76 dB).
Use the MULTI SOURCE LEVEL up/down buttons on the remote controller.
5. Press the SPEAKERS REMOTE button to turn the REMOTE indicator on.

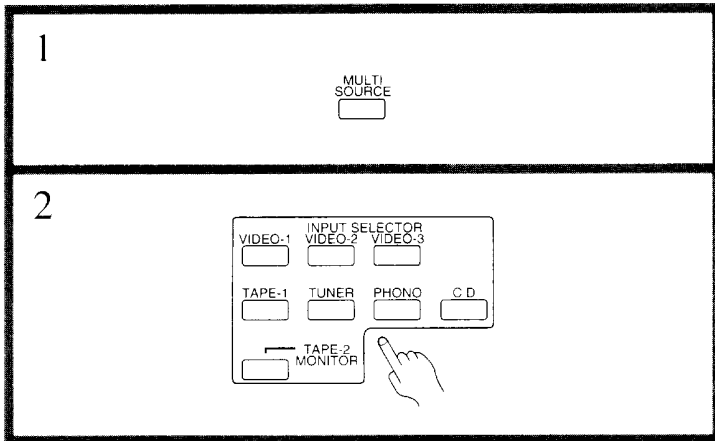
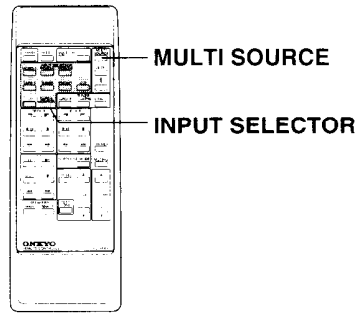
In the sub-room:

- Direct the remote controller toward the Remote Sensor (Onkyo multi-room system).
6. Adjust the volume to the desired level.
Use the MULTI SOURCE LEVEL up/down buttons on the remote controller.
 - Press the SPEAKERS REMOTE button to lower the volume temporarily in the sub-room.

NOTE:

- Before turning off the remote (sub-room), please lower volume level to prevent high volume output for the next application or use.
- We recommend that you turn off SPEAKERS MAIN to save electricity if you are not using the A-SV640 in the main room.
- You cannot select Multi-ch in the sub-room.
- If someone in the main room changes Surround mode while you are listening in the sub-room, the sub-room sound will be muted.

Listening to devices connected to the A-SV640 from another room



Switching the sub-room source

You can switch the sub-room source.

1. Press the **MULTI SOURCE** button.
2. Use the **input selector** buttons to select your desired source within eight seconds. Otherwise, the main room source will change.

If you cannot control the component using the remote controller from the sub-room, check the following:

- Use the controls on the A-SV640 in the main room to make sure they work properly. Then, use the remote controller to check to see if the component is working properly. If it is not, refer to page 6.
- If you are operating a component that does not bear Onkyo's **RI** terminal, check to see if the emitter is directed toward that component.
- Check to see if the components are correctly connected.
- Check to see if the MR OFF indicator on the A-SV640 is turned off.

Troubleshooting guide

If a problem occurs, adjust the controls on the A-SV640 front panel to confirm that the remote controller is not malfunctioning nor has worn out batteries.

Trouble	Cause	Remedy
Power, then immediately no power.	<ul style="list-style-type: none"> The amplifier protection circuitry has been activated. 	<ul style="list-style-type: none"> Contact your Onkyo Service Center.
No power.	<ul style="list-style-type: none"> Power cord is disconnected. There is external noise in the computer circuits of this unit. AC fuse blown. 	<ul style="list-style-type: none"> Connect power cord. Turn the power button off and then on again or remove the AC plug from the outlet and then plug it again. Contact your Onkyo Service Center.
Power but no sound.	<ul style="list-style-type: none"> The TAPE-2 MONITOR indicator is lit. The MUTING indicator is lit. The connections are bad or incorrect. 	<ul style="list-style-type: none"> Press the TAPE-2 MONITOR button. Press the MUTING button on the remote controller. Check the input leads, speaker leads, pin plugs, etc.
No sound or very minimal sound from the center speaker.	<ul style="list-style-type: none"> The speaker wires are disconnected. Surround mode is set to HALL, LIVE, ARENA, STUDIO, or OFF. The Center Speaker Setup is set to PHANTOM. 	<ul style="list-style-type: none"> Check the connection between the amplifier and the speaker. When HALL, LIVE, ARENA, or STUDIO is selected for the Surround mode, only the effect sound will be output from the center speaker. The sound level will be less compared to the sound level when the DOLBY PRO LOGIC is selected. Set the Center Speaker Setup to NORMAL or WIDEBAND.
Hum or low-frequency noise.	<ul style="list-style-type: none"> Poor or no input ground. Poor or no phono motor ground. The input and output cables are positioned incorrectly. 	<ul style="list-style-type: none"> Check the outer conductor of the input plugs. Check for a proper ground connection. Adjust the placement of the cable to reduce hum.
Howling when the volume is turned up.	<ul style="list-style-type: none"> The turntable and speakers are too close to each other. 	<ul style="list-style-type: none"> Move them further away from each other.
Rough or scratchy sound; high range is not clear.	<ul style="list-style-type: none"> The pick-up stylus is worn. The stylus tip is dirty. The treble level is too high. 	<ul style="list-style-type: none"> Replace it. Clean it. Decrease the treble.
Multi-Room Remote System does not operate.	<ul style="list-style-type: none"> The connections are incorrect. The MR OFF indicator is lit. The remote controller is not aimed at the sensor. The path between the remote controller and the sensor is blocked. 	<ul style="list-style-type: none"> Check the connections. Press the MR OFF button. (The MR OFF indicator should go off.) Aim the remote controller at the A-SV640 remote control sensor. Remove the object blocking the path to the sensor.
When VIDEO-3 and MULTI-CH are selected, no video screen appears.	<ul style="list-style-type: none"> The connections are bad or incorrect. IPM is turned ON. 	<ul style="list-style-type: none"> Check the input leads, speaker leads, pin plugs, etc. Make sure you select VIDEO-3 and turn IPM off (See page 9).
Front panel controls function but remote controller does not.	<ul style="list-style-type: none"> There are no batteries in remote controller. The batteries are worn out. 	<ul style="list-style-type: none"> Insert batteries. Replace batteries.
Also refer to the respective owner's manual of the other components, e.g. video disc player, video cassette recorder, or TV/monitor.		

Specifications

AMPLIFIER SECTION

Power Output

U.S. & Canadian models:

Stereo mode

Front L/R channels: **120 watts per channel, min. RMS at 8 ohms, both channels driven from 20 Hz to 20 kHz with no more than 0.08% total harmonic distortion.**

Surround mode

Front L/R and Center channels: **100 watts per channel, min. RMS at 8 ohms, three channels driven from 20 Hz to 20 kHz with no more than 0.08% total harmonic distortion.**

Surround L/R channels: **30 watts per channel, min. RMS at 8 ohms, both channels driven from 20 Hz to 20 kHz with no more than 0.3% total harmonic distortion.**

(Rear only driven)

Remote mode

30 watts per channel, min. RMS at 8 ohms, both channels driven from 20 Hz to 20 kHz with no more than 0.08% total harmonic distortion.

Other area models:

Stereo mode

Front L/R channels: 2 × 100 watts at 6 ohms, 1 kHz (DIN)

Surround mode

Front L/R and Center channels: 3 × 95 watts at 6 ohms, 1 kHz (DIN)

Surround L/R channels: 2 × 35 watts at 6 ohms, 1 kHz (DIN)

(Rear only driven)

Remote mode

2 × 35 watts at 6 ohms, 1 kHz (DIN)

IM Distortion: 0.08% at rated power (Front)

Damping Factor: 60 at 8 ohms (Front)

Input Sensitivity/Impedance

PHONO: 2.5 mV/50 kohms

CD/TAPE 1, 2/VIDEO-1, 2, 3: 200 mV/50 kohms

MULTICHANNEL INPUT

(FRONT L/R, SUR-

ROUND L/R, CENTER): 200 mV/50 kohms

MULTICHANNEL INPUT

(SUBWOOFER): 36 mV/50 kohms

Output Level/Impedance

REC OUT: 200 mV/2.2 kohms

PRE OUT: 1 V/ 470 ohms

Phono Overload: 120 mV RMS at 1 kHz, 0.5% T.H.D.

Frequency Response: 20 Hz to 30 kHz, ±1 dB (Surround OFF)

RIAA Deviation: 20 Hz to 20 kHz, ±0.8 dB

Tone Control

Bass: ±10 dB at 50 Hz

Treble: ±10 dB at 10 kHz

Signal-to-Noise Ratio

(Surround OFF)

Phono: 80 dB (IHF A, 5 mV input)

CD/Tape: 100 dB (IHF A)

Muting: --∞ dB

VIDEO SECTION

Input Sensitivity and Impedance

Video (Composite): 1 V_{p-p}/75 ohms

Output Level and Impedance

Video (Composite): 1 V_{p-p}/75 ohms

GENERAL

Power Supply

AC 120 V, 60 Hz
AC 220 V, 60 Hz
AC 230 V, 50 Hz
AC 220-230 V and 120 V switchable,
50/60 Hz

Power Consumption

U.S. & Canadian models: 3.6 A

Other area models: 400 W

Dimensions (W × H × D): 435 × 175 × 390 mm

17-1/8" × 6-7/8" × 15-3/8"

Weight:

U.S. & Canadian models: 11.9 kg, 26.2 lbs.

Other area models: 12.5 kg, 27.6 lbs.

REMOTE CONTROLLER RC-344S

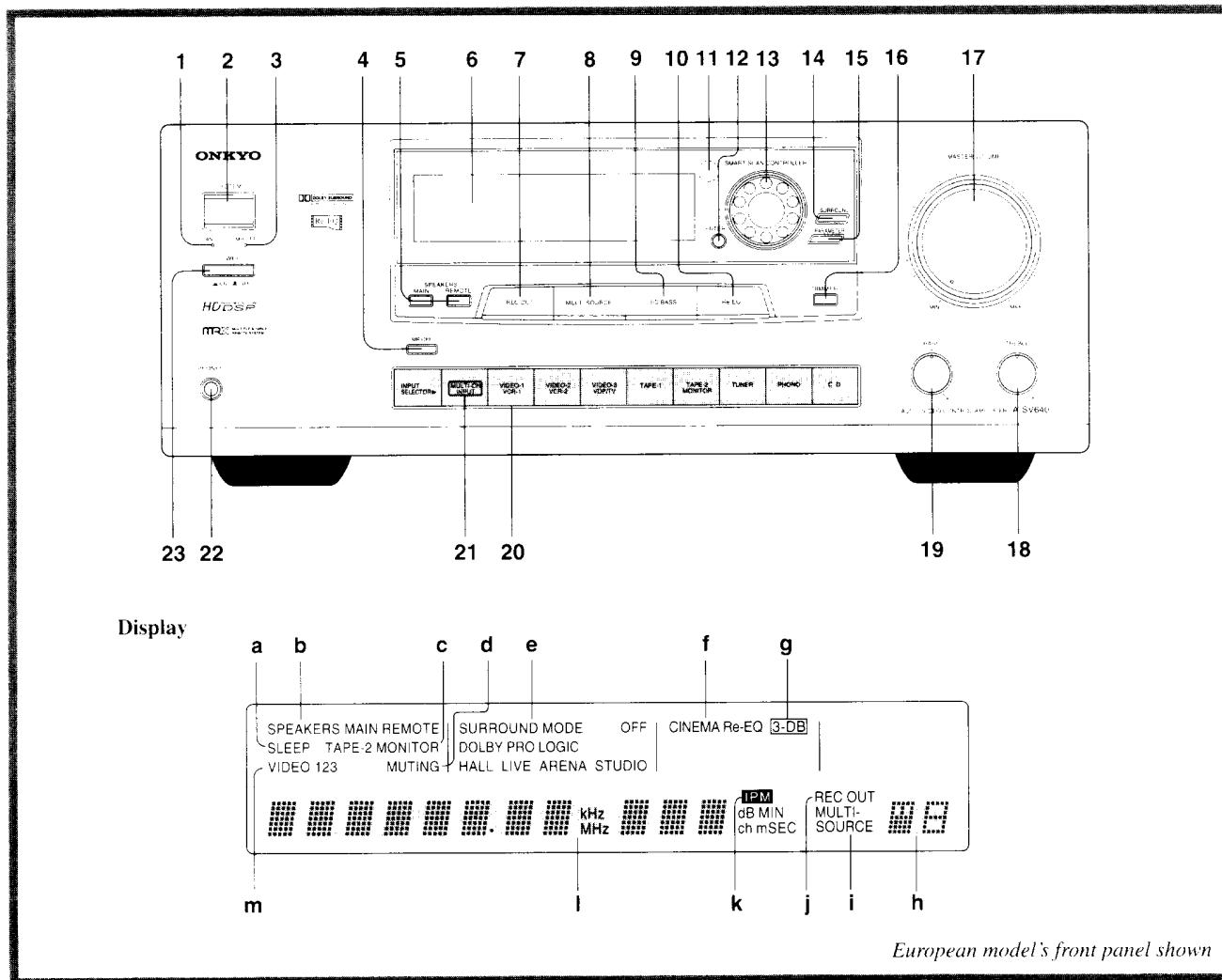
Transmitter: Infrared

Signal range: Approx. 5 meters, 16 ft.

Power supply: Two "AA" batteries (1.5 V × 2)

Specifications and features are subject to change without notice.

Control positions and names



European model's front panel shown

Front panel

For more information about buttons or knobs, refer to the pages listed in the brackets ([]) below.

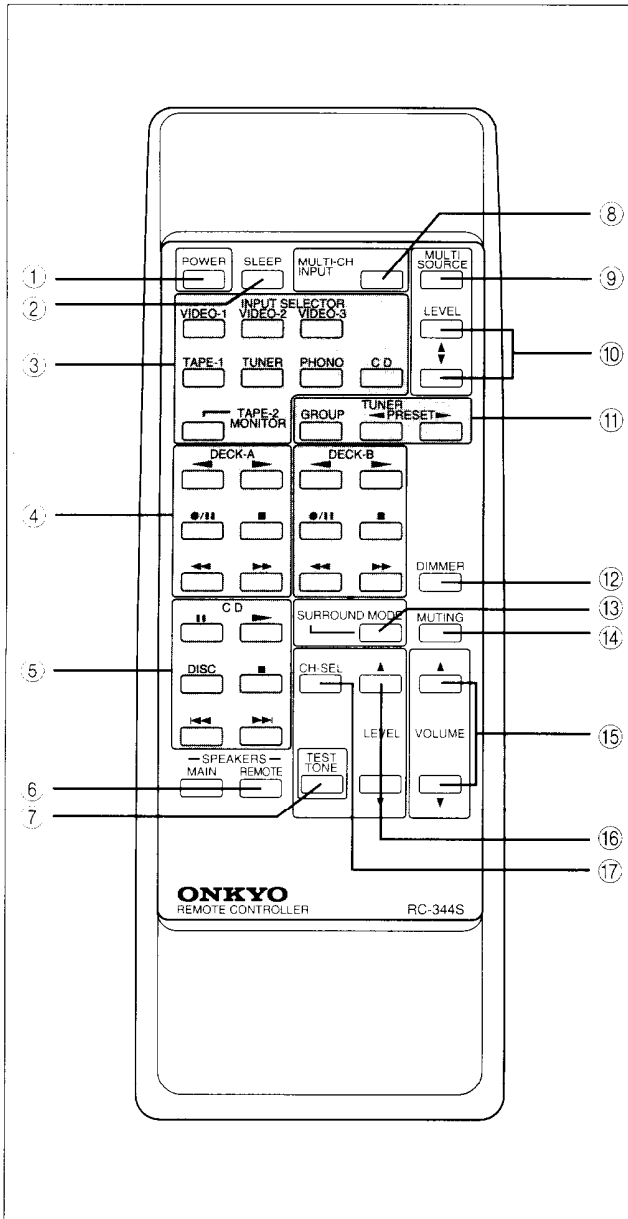
1. STAND-BY indicator [12]
2. POWER (or SYSTEM) button [12]
3. MR OFF indicator [26]
4. MR OFF button (Multi-Room Remote System ON/OFF) [26]
5. SPEAKERS MAIN/REMOTE selector buttons [13, 14, 26]
6. Display (Please refer to the "Display" illustration.)
7. REC OUT button [21]
8. MULTI SOURCE button [26]
9. 3-D BASS button [14]
10. Re-EQ button [16]
11. Remote control sensor [6]
12. ENTER button [15]
13. SMART SCAN CONTROLLER jog dial [15]
14. SURROUND button [15~20]
15. PARAMETER button [15~20]
16. DIMMER button [14]
17. MASTER VOLUME control knob [15]
18. TREBLE control knob [14]
19. BASS control knob [14]
20. Input selector buttons [13, 21, 22, 26]
21. MULTI CHANNEL INPUT button [13, 20]
22. PHONES jack [13]
23. POWER switch [12] (Other than U.S. and Canadian models only)

Display

If a protective film on the surface of the display makes it difficult to read the display, remove the protective film.

- a. Sleep indicator
- b. Speakers MAIN/REMOTE selector indicator
- c. Tape-2 Monitor indicator
- d. Audio Muting indicator
- e. Surround mode indicators
- f. Cinema Re-Equalizer indicator
- g. 3-D Bass indicator
- h. Source display (For Record out/ Multi-source out)
- i. Multi-Source indicator
- j. Record Out indicator
- k. Intelligent Power Management indicator
- l. Multi-function display
- m. Video-1 to Video-3 input selector display

Remote controller RC-344S



- ① **Power button (POWER)** [12]
- ② **Sleep button (SLEEP)** [23]
- ③ **Input selector buttons [13, 22, 27]**
(Video 1 to 3, PHONO, CD, TUNER, TAPE-1, TAPE-2 MONITOR)
- ④ **Tape operation buttons (DECK-A, DECK-B)**
These buttons control ONKYO double cassette tape decks that can be remotely controlled. Use the DECK-B buttons to control single cassette tape decks that bear the **RI** terminal. (Refer to page 7 for **RI** connection.)
- ⑤ **CD operation buttons**
These buttons are used to operate an ONKYO CD player that bears the **RI** terminal. (Refer to page 7 for **RI** connection.)
- ⑥ **Speaker selector buttons (SPEAKERS MAIN/REMOTE)** [13, 14, 26]
- ⑦ **Test tone button (TEST)** [16]
- ⑧ **Multi channel input button [13, 20]**
- ⑨ **Multi source button (MULTI SOURCE)** [26]
- ⑩ **Multi source level up/down button (LEVEL ▲/▼)** [16, 18~20]
- ⑪ **Tuner operation buttons (TUNER)**
These buttons control ONKYO tuners that bear the **RI** terminal. (Refer to page 7 for **RI** operation.)
- ⑫ **DIMMER button (DIMMER)** [14]
This button can be used to change the brightness of the display. The brightness changes in three steps: bright, normal, low.
- ⑬ **Surround mode button (SURROUND MODE)** [15, 16, 18, 19]
- ⑭ **Audio muting button (MUTING)** [23]
- ⑮ **Volume buttons (VOLUME ▲/▼)** [13, 14, 26]
To adjust the volume of the Front Main, Center or Rear (Surround) speakers.
- ⑯ **Level up/down button (LEVEL ▲/▼)** [16, 18~20]
- ⑰ **Channel selector button (CH-SEL)** [16, 18~20]

NOTE:

This remote controller does not have a learning function.

ONKYO CORPORATION

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