# **ONKYO**®

**AV Receiver** 

TX-SR605

**AV** Amplifier

TX-SA605 TX-SA8560

# **Instruction Manual**

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

Please retain this manual for future reference.

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#### **WARNING:**

TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPARATUS 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.











The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

#### Important Safety Instructions

- 1. Read these instructions.
- 2. Keep these instructions.
- 3. Heed all warnings.
- 4. Follow all instructions.
- 5. Do not use this apparatus near water.
- 6. Clean only with dry cloth.
- 7. Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
- 8. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
- 9. Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
- 10. Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
- 11. Only use attachments/accessories specified by the manufacturer.
- 12. Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.



PORTABLE CART WARNING

- 13. Unplug this apparatus during lightning storms or when unused for long periods of time.
- 14. Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.

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

Never push objects of any kind into the apparatus through openings as they may touch dangerous voltage points or short-out parts that could result in a fire or electric shock.

The apparatus shall not be exposed to dripping or splashing and no objects filled with liquids, such as vases shall be placed on the apparatus.

Don't put candles or other burning objects on top of this unit.

17. Batteries

Always consider the environmental issues and follow local regulations when disposing of batteries.

18. If you install the apparatus in a built-in installation, such as a bookcase or rack, ensure that there is adequate ventilation.

Leave 20 cm (8") of free space at the top and sides and 10 cm (4") at the rear. The rear edge of the shelf or board above the apparatus shall be set 10 cm (4") away from the rear panel or wall, creating a flue-like gap for warm air to escape.

# **Precautions**

- Recording Copyright—Unless it's for personal use only, recording copyrighted material is illegal without the permission of the copyright holder.
- AC Fuse—The AC fuse inside the unit is not userserviceable. If you cannot turn on the unit, contact your Onkyo dealer.
- 3. Care—Occasionally you should dust the unit all over with a soft cloth. For stubborn stains, use a soft cloth dampened with a weak solution of mild detergent and water. Dry the unit immediately afterwards with a clean cloth. Don't use abrasive cloths, thinners, alcohol, or other chemical solvents, because they may damage the finish or remove the panel lettering.

#### 4. Power

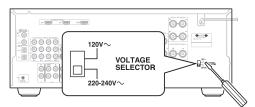
#### WARNING

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

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

The power cord plug is used to disconnect this unit from the AC power source. Make sure that the plug is readily operable (easily accessible) at all times.

Some models have a voltage selector switch for compatibility with power systems around the world. Before you plug in such a model, make sure that the voltage selector is set to the correct voltage for your area.



#### For American model

Pressing the [STANDBY/ON] button to select Standby mode does not fully shutdown the unit. If you do not intend to use the unit for an extended period, remove the power cord from the AC outlet.

5. Never Touch this Unit with Wet Hands—Never handle this unit or its power cord while your hands are wet or damp. If water or any other liquid gets inside this unit, have it checked by your Onkyo dealer.

#### 6. Handling Notes

- If you need to transport this unit, use the original packaging to pack it how it was when you originally bought it.
- Do not leave rubber or plastic items on this unit for a long time, because they may leave marks on the case.
- This unit's top and rear panels may get warm after prolonged use. This is normal.

• If you do not use this unit for a long time, it may not work properly the next time you turn it on, so be sure to use it occasionally.

#### For U.S. models

#### **FCC Information for User**

#### **CAUTION:**

The user changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

#### NOTE:

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.

This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

#### For Canadian Models

**NOTE:** THIS CLASS B DIGITAL APPARATUS COMPLIES WITH CANADIAN ICES-003. For models having a power cord with a polarized plug: **CAUTION:** TO PREVENT ELECTRIC SHOCK, MATCH WIDE BLADE OF PLUG TO WIDE SLOT, FULLY INSERT.

#### Modèle pour les Canadien

**REMARQUE:** CET APPAREIL NUMÉRIQUE DE LA CLASSE B EST CONFORME À LA NORME NMB-003 DU CANADA.

Sur les modèles dont la fiche est polarisée:

ATTENTION: POUR ÉVITER LES CHOCS ÉLECTRIQUES, INTRODUIRE LA LAME LA PLUS LARGE DE LA FICHE DANS LA BORNE CORRESPONDANTE DE LA PRISE ET POUSSER JUSQU'AU FOND.

#### **Precautions**—Continued

#### For British models

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

#### **IMPORTANT**

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

Blue: Neutral Brown: Live

As the colours of the wires in the mains lead of this apparatus may not correspond with the coloured markings identifying the terminals in your plug, proceed as follows:

The wire which is coloured blue must be connected to the terminal which is marked with the letter N or coloured black.

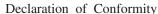
The wire which is coloured brown must be connected to the terminal which is marked with the letter L or coloured red.

#### **IMPORTANT**

The plug is fitted with an appropriate fuse. If the fuse needs to be replaced, the replacement fuse must approved by ASTA or BSI to BS1362 and have the same ampere rating as that indicated on the plug. Check for the ASTA mark or the BSI mark on the body of the fuse.

If the power cord's plug is not suitable for your socket outlets, cut it off and fit a suitable plug. Fit a suitable fuse in the plug.

#### For European Models



We, ONKYO EUROPE ELECTRONICS GmbH LIEGNITZERSTRASSE 6, 82194 GROEBENZELL, GERMANY



declare in own responsibility, that the ONKYO product described in this instruction manual is in compliance with the corresponding technical standards such as EN60065, EN55013, EN55020 and EN61000-3-2, -3-3.

GROEBENZELL, GERMANY



ONKYO EUROPE ELECTRONICS GmbH

# **Supplied Accessories**

Make sure you have the following accessories:



Remote controller & two batteries (AA/R6)



Speaker setup microphone



Indoor FM antenna (TX-SR605 only)



AM loop antenna (TX-SR605 only)



Speaker terminal tool



Speaker cable labels

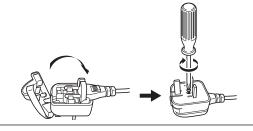




#### Power-plug adapter

Only supplied in certain countries. Use this adapter if your AC outlet does not match with the plug on the AV receiver/AV amplifier's power cord (adapter varies from country to country).

\*How to mount the AC plug:



<sup>\*</sup>In catalogs and on packaging, the letter at the end of the product name indicates the color. Specifications and operations are the same regardless of color.

# **Features**

#### **Amplification**

- 90 watts minimum continuous power per channel, 8 ohm loads, 2 channels driven from 20 Hz to 20 kHz with a maximum total harmonic distortion of 0.08 % (FTC rating)
- · WRAT-Wide Range Amplifier Technology
- Optimum Gain Volume Circuitry

#### **Processing**

- HDMI and Component Video Upconversion
- Dolby<sup>\*1</sup> Digital Plus, Dolby TrueHD
- DTS\*2-HD High Resolution Audio, DTS-HD Master Audio
- · Faroudja DCDi Edge Enhancement
- Neural Surround<sup>\*3</sup> Decoder (North American models only)
- CinemaFILTER\*4
- Non-Scaling Configuration
- · A-Form Listening Mode Memory
- 192 kHz/24-bit D/A Converters
- Powerful and Highly Accurate 32-bit DSP Processing

#### **Connections**

- 2 HDMI<sup>\*5</sup> Inputs and 1 Output (ver. 1.3a)
- 5 Digital Inputs (3 Optical / 2 Coaxial 4 Assignable)
- 5 S-Video Inputs / 2 Output
- Color-Coded Banana Plug Speaker Posts
   (North American models: front L/R, center, surround L/R, and surround back L/R terminal posts only)
- Color-Coded 7.1 Multichannel Inputs
- Subwoofer Pre Out
- Powered Zone 2
- · Bi-Amp Connectable for FL/FR with SBL/SBR

#### Miscellaneous

- SIRIUS Ready\*6 / XM Ready\*7 with XMHD Surround (North American models only)
- 40 SIRIUS/XM/AM/FM Presets (North American models)
- 40 AM/FM Presets (European and Asian models)
- Audyssey\*8 2EQ to Correct Room Acoustic Problems
- Crossover Adjustment (40/50/60/80/100/120/150/200 Hz)
- A/V Sync Control Function (up to 100 ms)
- · New Graphic On-Screen Display
- · Compatible with RI Dock for iPod
- Aluminum Front Panel
- · Preprogrammed RI-Compatible Remote

# \*1. DOLBY

Manufactured under license from Dolby Laboratories. "Dolby", "Pro Logic" and the double-D symbol are registered trademarks of Dolby Laboratories.

#### \*2. **@dts**нр

laster Audio

"DTS" is a registered trademark of DTS, Inc. and "DTS-HD Master Audio" is a trademark of DTS, Inc.



Digital Surround Neo:6° | 96/24

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\*5. HDMI

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\*6. ŞIRIUŞ**%** 

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\*8. AUDYSSEY

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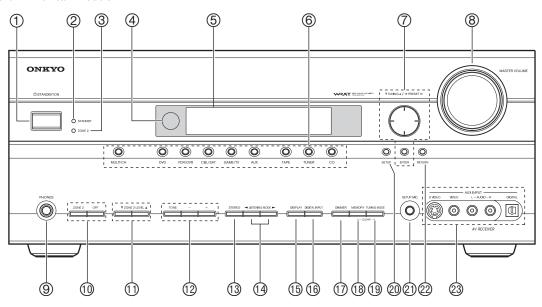
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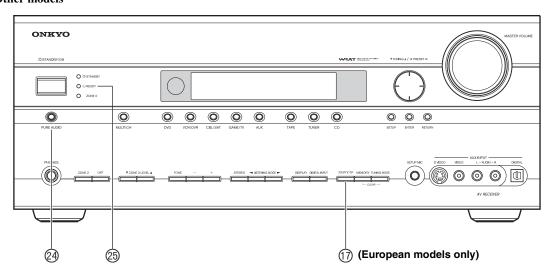
# **Front & Rear Panels**

#### **Front Panel**

#### North American models



#### Other models



The page numbers in parentheses show where you can find the main explanation for each item.

#### ① STANDBY/ON button (40)

This button is used to set the AV receiver/AV amplifier to Standby or On.

#### ② STANDBY indicator (40)

This indicator lights up when the AV receiver/AV amplifier is in Standby mode, and it flashes while a signal is being received from the remote controller.

#### 3 ZONE 2 indicator (88)

This indicator lights up when Zone 2 is selected.

#### ④ Remote control sensor (12)

This sensor receives control signals from the remote controller.

#### ⑤ Display

See "Display" on page 9.

#### 6 Input selector buttons (54)

These buttons are used to select from the following input sources: MULTI CH, DVD, VCR/DVR, CBL/SAT, GAME/TV, AUX, TAPE, TUNER, or CD.

The [MULTI CH] button selects the DVD analog multichannel input.

#### 

When the AM or FM input source is selected, the TUNING [▲] [▼] buttons are used to tune the tuner, and the PRESET [◄] [▶] buttons are used to select radio presets (see page 58) (TX-SR605 only). When the onscreen setup menus are used, they work as arrow buttons and are used to select and set items. The [ENTER] button is also used with the onscreen setup menus.

#### **® MASTER VOLUME control (54)**

This control is used to adjust the volume of the AV receiver/AV amplifier to MIN, 1 through 99, or MAX.

#### 9 PHONES jack (56)

This 1/4-inch phone jack is for connecting a standard pair of stereo headphones for private listening.

#### 10 ZONE 2/OFF buttons (88)

The ZONE 2 button is used to select the input source for Zone 2.

The OFF button is used to turn off the output of Zone 2.

#### ① ZONE 2 LEVEL button (89)

This button is used to set the volume for Zone 2.

#### ① TONE, [-] & [+] buttons (55)

These buttons are used to adjust the bass and treble.

#### (3) STEREO button (61)

This button is used to select the Stereo listening

#### LISTENING MODE [◄] [►] buttons (61)

These buttons are used to select the listening modes.

#### (5) DISPLAY button (55)

This button is used to display various information about the currently selected input source.

#### 16 DIGITAL INPUT button (50, 85)

This button is used to assign the digital inputs and to specify the format of digital input signals.

#### ① DIMMER or RT/PTY/TP button (56, 60)

DIMMER is used to adjust the display brightness.

On the European model, this is the RT/PTY/TP button, and it's for RDS (Radio Data System). See "Using RDS (European models only)" on page 59.

#### (18) MEMORY button (58)

This button is used when storing or deleting radio presets.

#### ① TUNING MODE button (TX-SR605 only) (57)

This button is used to select the Auto or Manual tuning mode.

#### **® SETUP button**

This button is used to access the onscreen setup menus that appear on the connected TV.

#### **② SETUP MIC (41)**

The included speaker setup microphone is connected here for automatic speaker setup.

#### 2 RETURN button

This button is used to return to the previously displayed onscreen setup menu.

#### **3 AUX INPUT**

This input can be used to connect a camcorder, game console, and so on. There are jacks for optical digital audio, S-Video, composite video, and analog audio.

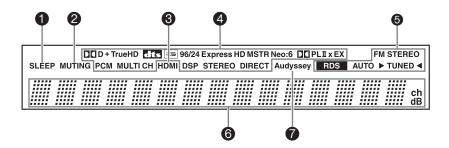
# PURE AUDIO button (61) (not North American models)

Selects the Pure Audio listening mode.

# READY indicator (84) (not North American models)

Enters Ready mode and lights up when the HDMI Power Control is set to Enable and the AV receiver/AV amplifier is on Standby.

#### **Display**



The page numbers in parentheses show where you can find the main explanation for each item.

#### SLEEP indicator (56)

This indicator lights up when the Sleep function has been set.

#### **2** MUTING indicator (56)

This indicator flashes while the AV receiver/AV amplifier is muted.

#### **8** HDMI indicator

This indicator lights up when the HDMI input is used.

#### 4 Listening mode & format indicators

These indicators show the currently selected listening mode and the format of digital input signals.

#### **5** Tuning indicators (TX-SR605 only)

**FM STEREO (57):** This indicator lights up when the AV receiver is tuned to a stereo FM station.

**RDS (European models only) (59):** This indicator lights up when tuned to a radio station that supports RDS (Radio Data System).

**AUTO (57):** This indicator lights up when the Auto Tuning mode is selected, and disappears when the Manual Tuning mode is selected.

**TUNED (57):** This indicator lights up when the AV receiver is tuned into a radio station.

#### **6** Message area

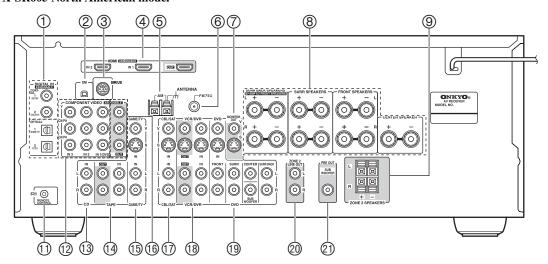
This area of the display shows various information about the currently selected source.

#### Audyssey indicator (41, 74)

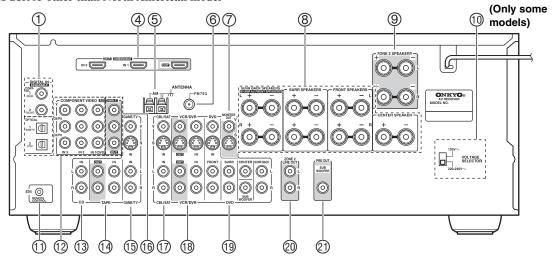
This indicator flashes during automatic speaker setup and stays on when the setup is complete. It also lights up when the Equalizer Settings are set to Audyssey.

#### **Rear Panel**

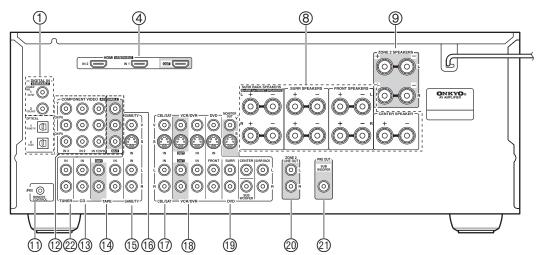
#### TX-SR605 North American model



#### TX-SR605 other than North American model



#### TX-SA605/8560



#### Front & Rear Panels—Continued

The page numbers in parentheses show where you can find the main explanation for each item.

#### ① DIGITAL IN OPTICAL 1, 2 and COAXIAL 1, 2

These optical and coaxial digital audio inputs are for connecting components with optical or coaxial digital audio outputs, such as CD and DVD players.

#### ② XM antenna (North American models only)

This jack is for connecting an XM Minituner and Home Dock, sold separately (see the separate XM instructions).

# ③ SIRIUS antenna (North American models only)

This jack is for connecting a SIRIUS Satellite Radio antenna (see the separate SIRIUS instructions).

#### 4 HDMI IN 1, 2, and OUT

HDMI (High Definition Multimedia Interface) connections carry digital audio and digital video.

The HDMI inputs are for connecting components with HDMI outputs, such as DVD players.

The HDMI output is for connecting a TV or projector with an HDMI input.

#### **⑤** AM ANTENNA (TX-SR605 only) (22)

These push terminals are for connecting an AM antenna.

#### 6 FM ANTENNA (TX-SR605 only) (22)

This jack is for connecting an FM antenna.

#### **MONITOR OUT**

The S-Video or composite video jack should be connected to a video input on your TV or projector.

#### ® FRONT, CENTER, SURR & SURR BACK SPEAKERS (20)

These terminal posts are for connecting your front, center, surround, and surround back speakers.

#### 9 ZONE 2 SPEAKERS (87)

These terminals are for connecting speakers in Zone 2.

#### **10 VOLTAGE SELECTOR (only some models)**

This voltage selector provides compatibility with power systems around the world (see page 3).

#### 1 RI REMOTE CONTROL

This RI (Remote Interactive) jack can be connected to an RI jack on another Onkyo AV component. The AV receiver/AV amplifier's remote controller can then be used to control that component. To use RI, you must make an analog audio connection (RCA) between the AV receiver/AV amplifier and the other AV component, even if they are connected digitally.

#### **10** COMPONENT VIDEO IN 1, 2, 3

These component video inputs can be used to connect AV components with component video outputs, such as DVD players.

#### (13) CD IN

This analog audio input is for connecting a CD player's analog audio output.

#### **19 TAPE IN/OUT**

This analog audio input and output are for connecting a recorder with an analog audio input and output (cassette, Mini Disc, etc.).

#### (15) GAME/TV IN

Here you can connect a game console, TV, etc. Input jacks include S-Video, composite video, and analog audio.

#### **16 COMPONENT VIDEO OUT**

This component video output can be used to connect a TV or projector with a component video input.

#### **17 CBL/SAT IN**

Here you can connect a cable/satellite receiver, settop box, etc. Input jacks include S-Video, composite video, and analog audio.

#### **18 VCR/DVR IN/OUT**

Here you can connect a VCR or DVR (digital video recorder). Input and output jacks include S-Video, composite video, and analog audio.

#### 19 DVD IN

Here you can connect a DVD player. Input jacks include S-Video, composite video, and analog audio. You can connect a DVD player's 2-channel analog audio output or 7.1-channel analog audio output.

#### **② ZONE 2 LINE OUT (87)**

This analog audio output can be connected to a line input on an integrated amplifier in Zone 2.

#### ② PRE OUT SUBWOOFER (19)

The SUBWOOFER jack is for connecting a powered subwoofer.

#### ② TUNER IN (TX-SA605/8560 only) (38)

This analog audio input is for connecting a tuner's analog audio output.

See pages 18-39 for connection information.

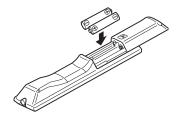
# **Remote Controller**

#### **Installing the Batteries**

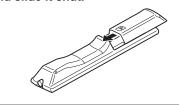
To open the battery compartment, press the small hollow and slide off the cover.



Insert the two supplied batteries (AA/R6) in accordance with the polarity diagram inside the battery compartment.



Put the cover onto the remote controller and slide it shut.

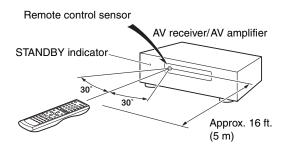


#### Notes:

- If the remote controller doesn't work reliably, try replacing the batteries.
- Don't mix new and old batteries or different types of batteries.
- If you intend not to use the remote controller for a long time, remove the batteries to prevent damage from leakage or corrosion.
- Expired batteries should be removed as soon as possible to prevent damage from leakage or corrosion.

#### **Aiming the Remote Controller**

To use the remote controller, point it at the AV receiver/AV amplifier's remote control sensor, as shown below



#### **Notes:**

- The remote controller may not work reliably if the AV receiver/AV amplifier is subjected to bright light, such as direct sunlight or inverter-type fluorescent lights. Keep this in mind when installing.
- If another remote controller of the same type is used in the same room, or the AV receiver/AV amplifier is installed close to equipment that uses infrared rays, the remote controller may not work reliably.
- Don't put anything, such as a book, on the remote controller, because the buttons may be pressed inadvertently, thereby draining the batteries.
- The remote controller may not work reliably if the AV receiver/AV amplifier is installed in a rack behind colored glass doors. Keep this in mind when installing.
- The remote controller will not work if there's an obstacle between it and the AV receiver/AV amplifier's remote control sensor.

#### **Using the Remote Controller**

The remote controller can be used to control different components including the AV receiver/AV amplifier. The remote controller has a specific operating mode for use with each type of component. Modes are selected by using the six REMOTE MODE buttons.

#### **■** RECEIVER/TAPE Mode

In RECEIVER/TAPE mode, you can control the AV receiver/AV amplifier and an Onkyo cassette recorder connected via RI.



DVD

#### DVD and CD/MD/CDR/DOCK Modes

With these modes, you can control a DVD player and CD Player, MD recorder, CDR, or RI dock. By entering the appropriate remote control code, you can control Onkyo components or components made by other manufacturers (see page 90).

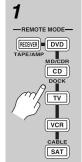


With these modes, you can control a TV, VCR, and satellite or cable receiver. You must enter the appropriate remote control code first (see page 90).









Press one of the REMOTE MODE buttons to select a mode.

# 2 Use the buttons supported by that mode to control the component.

RECEIVER/TAPE mode: see right column

DVD mode:

see page 15

CD/MD/CDR/DOCK mode:

see page 16

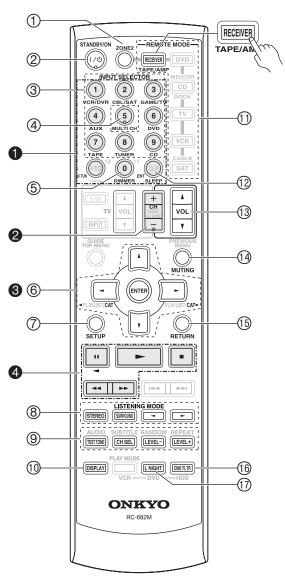
TV, VCR, SAT/CABLE modes: see page 92

#### Note:

Some of the remote controller operations described in this manual may not work as expected with other components.

#### **RECEIVER/TAPE Mode**

RECEIVER/TAPE mode is used to control the AV receiver/AV amplifier. It can also be used to control an Onkyo cassette recorder connected via RI.



Buttons **1**, **2**, **3**, and **4** are used when the TUNER or TAPE input is selected.

#### Remote Controller—Continued

For detailed information, see the pages in parentheses.

#### ① **ZONE 2 button (88)**

Used to select the input source for Zone 2.

#### ② STANDBY/ON button (40)

Sets the AV receiver/AV amplifier to Standby or On.

#### ③ INPUT SELECTOR buttons (54)

Used to select the input sources.

#### **4** MULTI CH button (55)

Selects the multichannel DVD input.

#### **⑤ DIMMER button (56)**

Adjusts the display brightness.

#### ⑥ Arrow [▲]/[▼]/[◄]/[►] and ENTER buttons Used to select and adjust settings.

#### **⑦** SETUP button

Used to access the setup menus.

#### **8 LISTENING MODE buttons (61)**

Used to select the listening modes. These buttons work in all remote controller modes.

#### STEREO button

Selects the Stereo listening mode.

#### **SURROUND** button

Selects the Dolby and DTS listening modes and the Neural Surround listening mode (North American models only).

#### [◀]/[▶] buttons

Used to select the available listening modes.

#### TEST TONE, CH SEL, LEVEL-, and LEVEL+ buttons (69, 73)

Used to adjust the level of each speaker.

#### 10 DISPLAY button (55)

Displays various information about the selected input source.

#### ① REMOTE MODE buttons (13)

Used to select the remote controller modes. When a remote controller button is pressed, the REMOTE MODE button for the currently selected mode lights up.

#### ② SLEEP button (56)

Used with the Sleep function.

#### ① VOL [▲]/[▼] button (54)

Adjusts the volume of the AV receiver/AV amplifier regardless of the currently selected remote controller mode.

#### **MUTING button (56)**

Mutes or unmutes the AV receiver/AV amplifier.

#### (5) RETURN button

Selects the previously displayed setup menu.

#### (69) (CINE FLTR button (69)

Used with the CinemaFILTER function.

#### ① L NIGHT button (69)

Used with the Late Night function.

#### Buttons used when the TUNER input is selected

To select the Tuner (AM/FM: TX-SR605 only) as the input source, press:



# Number, D TUN, and ENT buttons (TX-SR605 only) (57)

Used to select AM and FM radio stations directly.

#### **2** CH +/- button (58)

Used to select radio presets (TX-SR605).

Used to select radio presets for a connected tuner (TX-SA605/8560).

#### Arrow [▲]/[▼]/[◄]/[►] and ENTER buttons (TX-SR605 only)

For AM and FM, the Up and Down  $[\blacktriangle]/[\blacktriangledown]$  buttons are used for tuning.

#### Buttons used when the TAPE input is selected

To select your Cassette deck as the input source, press:



#### Playback buttons

On twin cassette decks, only deck B can be controlled.

#### Play [▶] button

Starts playback.

#### Stop [■] button

Stops playback.

#### Reverse Play [◀] button

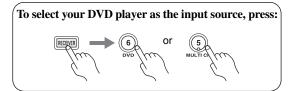
Starts reverse playback.

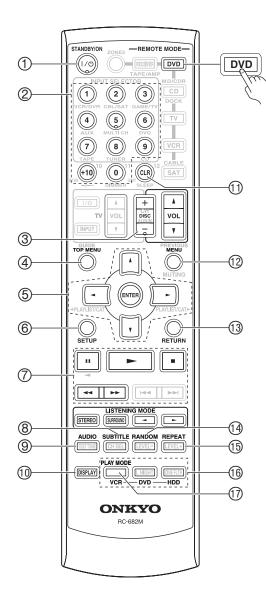
#### Rewind and FF [◄◄]/[▶▶] buttons

The Rewind [◀◀] button starts rewind. The FF [▶▶] button starts fast forward.

#### **DVD Mode**

By default, the remote controller is set to control an Onkyo DVD player.





#### ① STANDBY/ON button

Sets the DVD player to Standby or On.

#### ② Number buttons

Used to enter title, chapter, and track numbers and times for locating specific points.

#### 3 DISC +/- button

Selects discs on a DVD changer.

#### **4** TOP MENU button

Selects a DVD's top menu.

#### ⑤ Arrow [▲]/[▼]/[◆]/[▶] and ENTER buttons

Used to navigate DVD menus and the DVD player's onscreen setup menus.

#### **© SETUP button**

Used to access the DVD player's onscreen setup menus.

#### Playback buttons

From left to right: Pause, Play, Stop, Fast Reverse, Fast Forward, Previous, and Next.

#### **® SUBTITLE button**

Selects subtitles.

#### AUDIO button

Selects foreign language soundtracks and audio formats (e.g., Dolby Digital or DTS).

#### **10 DISPLAY button**

Displays information about the current disc, title, chapter, or track, including elapsed time, remaining time, total time, and so on.

#### ① CLR button

Cancels functions and clears entered numbers.

#### **12** MENU button

Displays a DVD's menu.

#### **13** RETURN button

Exits the DVD player's onscreen setup menus.

#### **4** RANDOM button

Used with the random playback function.

#### 15 REPEAT button

Used with the repeat playback functions.

#### 16 VCR, DVD, and HDD buttons

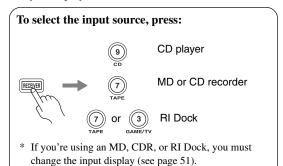
Used to select VCR, HDD (hard disk drive), or DVD playback on a VCR/DVD recorder with a built-in hard disk drive.

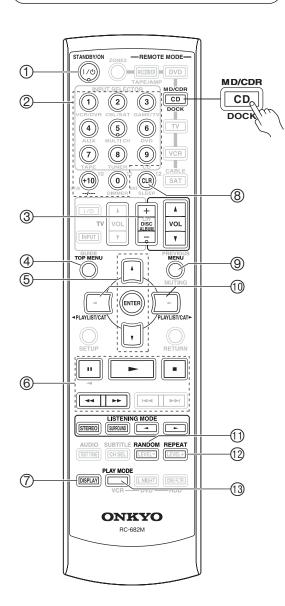
#### **17 PLAY MODE button**

Selects play modes on components with selectable play modes.

#### CD/MD/CDR/DOCK Mode

By default, the remote controller is set to control an Onkyo CD player.





#### ① STANDBY/ON button

Sets the component to Standby or On.

#### ② Number buttons

Used to enter track numbers and times for locating specific points on CD/MD players.

#### 3 DISC/ALBUM +/- button

Selects discs on a CD changer, or the next or previous album on an HDD-compatible component connected to an RI Dock.

#### **4** TOP MENU button

Works as a Mode button when used with a DS-A2 RI Dock.

#### ⑤ Arrow [▲]/[▼] and ENTER buttons

Used to navigate menus on an HDD-compatible component connected to an RI Dock.

#### Playback buttons

From left to right: Pause, Play, Stop, Fast Reverse, Fast Forward, Previous and Next.

#### ⑦ DISPLAY button

Displays information about the current disc or track on a CD player or MD/CD recorder, including elapsed time, remaining time, total time, and so on. On an HDD-compatible component connected to an RI Dock, it turns on the back light for 30 seconds.

#### 8 CLR button

Cancels functions and clears entered numbers on a CD player or MD/CD recorder.

#### 9 MENU button

Used to navigate menus on an HDD-compatible component connected to an RI Dock.

#### PLAYLIST [◄]/[►] buttons

Selects the previous or next playlist on an HDD-compatible component connected to an RI Dock.

#### ① RANDOM button

Used with the random/shuffle playback function.

#### 12 REPEAT button

Used with the repeat playback functions.

#### **13 PLAY MODE button**

Used to select play modes on components with selectable play modes.

Works as a Resume button when used with a DS-A2 RI Dock.

# **About Home Theater**

#### **Enjoying Home Theater**

Thanks to the AV receiver/AV amplifier's superb capabilities, you can enjoy surround sound with a real sense of movement in your own home—just like being in a movie theater or concert hall. With DVDs you can enjoy DTS and Dolby Digital. With analog and digital TV you can enjoy Dolby Pro Logic IIx or Onkyo's own DSP surround listening modes.

#### Front left and right speakers

These output the overall sound. Their role in a home theater is to provide a solid anchor for the sound image. They should be positioned facing the listener at about ear level, and equidistant from the TV. Angle them inward so as to create a triangle, with the listener at the apex.

#### Surround back left and right speakers These speakers are necessary to enjoy Dolby Digital EX, DTS-ES Matrix, and DTS-ES Discrete. They Center speaker enhance the realism of surround This speaker enhances the sound and improve sound localizafront left and right speakers, tion behind the listener. Position making sound movements dis-1/3 ⅓ them behind the listener about 2tinct and providing a full sound 3 feet (60-100 cm) above ear level. image. In movies it's used mainly for dialog. Position it close to your TV facing forward at about ear level, or at the same height as the front Corner left and right speakers. Subwoofer 1/3 wall The subwoofer handles the bass sounds length of the LFE (Low-Frequency Effects) channel. The volume and quality of the bass output from your subwoofer will depend on its position, the shape of your listening room, and your listening posi-

**Tip:** To find the best position for your subwoofer, while playing a movie or some music with good bass, experiment by placing your subwoofer at various positions within the room, and choose the one that provides the most satisfying results.

tion. In general, a good bass sound can

be obtained by installing the subwoofer in

a front corner, or at one-third the width of

the wall, as shown.

Surround left and right speakers

These speakers are used for precise sound positioning and to add realistic ambience.

Position them at the sides of the listener, or slightly behind, about 2–3 feet (60–100 cm) above ear level. Ideally they should be equidistant from the listener.

# Connecting the AV Receiver/AV Amplifier

#### **About AV Connections**

- Before making any AV connections, read the manuals supplied with your other AV components.
- Don't connect the power cord until you've completed and double-checked all AV connections.

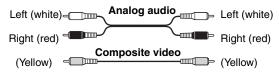
#### **Optical Digital Jacks**

The AV receiver/AV amplifier's optical digital jacks have shutter-type covers that open when an optical plug is inserted and close when it's removed. Push plugs in all the way.

**Caution:** To prevent shutter damage, hold the optical plug straight when inserting and removing.

#### AV Connection Color Coding

RCA-type AV connections are usually color-coded: red, white, and yellow. Use red plugs to connect right-channel audio inputs and outputs (typically labeled "R"). Use white plugs to connect left-channel audio inputs and outputs (typically labeled "L"). And use yellow plugs to connect composite video inputs and outputs.



- Push plugs in all the way to make good connections (loose connections can cause noise or malfunctions).
- To prevent interference, keep audio and video cables away from power cords and speaker cables.



#### AV Cables & Jacks

#### Video

Video			
	Cable	Jack	Description
Component video cable		Pe O	Component video separates the luminance (Y) and color difference signals (PR, PB), providing the best picture quality (some TV manufacturers label their component video sockets slightly differently).
S-Video cable	E[]	s co	S-Video separates the luminance and color signals and provides better picture quality than composite video.
Composite video cable		v ( )	Composite video is commonly used on TVs, VCRs, and other video equipment. Use only dedicated composite video cables.

#### Audio

	Cable	Jack	Description
Optical digital audio cable		OPTICAL	Offers the best sound quality and allows you to enjoy surround sound (e.g., Dolby Digital, DTS). The audio quality is the same as for coaxial.
Coaxial digital audio cable		COAXIAL	Offers the best sound quality and allows you to enjoy surround sound (e.g., Dolby Digital, DTS). The audio quality is the same as for optical.
Analog audio cable (RCA)		L O	This cable carries analog audio. It's the most common connection format for analog audio, and can be found on virtually all AV components.
Multichannel analog audio cable (RCA)			This cable carries multichannel analog audio and it's typically used to connect DVD players with a 7.1-channel analog audio output. Several standard analog audio cables can be used instead of a multichannel cable.

**Note:** The AV receiver/AV amplifier does not support SCART plugs.

#### **Connecting Your Speakers**

#### Speaker Configuration

For the best surround sound experience, you should connect seven speakers and a powered subwoofer.

The following table indicates the channels you should use depending on the number of speakers that you have.

Number of speakers:	2	3	4	5	6	7
Front left	1	1	1	1	1	1
Front right	1	1	1	1	1	1
Center		1		1	1	1
Surround left			1	1	1	1
Surround right			1	1	1	1
Surround back*					1	
Surround back left						1
Surround back right						1

<sup>\*</sup>If you're using only one surround back speaker, connect it to the left (L) SURR BACK SPEAKERS terminals.

No matter how many speakers you use, a powered subwoofer is recommended for a really powerful and solid bass.

To get the best from your surround sound system, you need to set the speaker settings by using the supplied speaker setup microphone (see page 41).

#### Using Dipole Speakers

You can use dipole speakers for the surround left and right and surround back left and right speakers. Dipole speakers output the same sound in two directions.

Dipole speakers typically have an arrow printed on them to indicate how they should be positioned. The surround left and right dipole speakers should be positioned so that their arrows point toward the TV/screen, while the surround back left and right dipole speakers should be positioned so that their arrows point toward each other, as shown.

# 

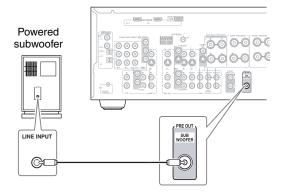
# 

Normal speakers

- 1. Subwoofer
- 2. Front left speaker
- 3. Center speaker
- 4. Front right speaker
- 5. Surround left speaker
- 6. Surround right speaker
- Surround back left speaker
- 8. Surround back right speaker

#### Connecting a Powered Subwoofer

Using a suitable cable, connect the AV receiver/AV amplifier's PRE OUT SUBWOOFER to an input on your powered subwoofer, as shown. If your subwoofer is unpowered and you're using an external amplifier, connect the PRE OUT SUBWOOFER to an input on the amp.



#### Attaching the Speaker Labels

The AV receiver/AV amplifier's positive (+) speaker terminals are color-coded for ease of identification (the negative (–) speaker terminals are all black).

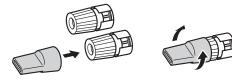
Speaker terminal	Color
Front left, Zone 2 left	White
Front right, Zone 2 right	Red
Center	Green
Surround left	Blue
Surround right	Gray
Surround back left	Brown
Surround back right	Tan

The supplied speaker labels are also color-coded and you should attach them to the positive (+) side of each speaker cable in accordance with the above table. Then all you need to do is to match the color of each label to the corresponding speaker terminal.



#### Using the Speaker Terminal Tool

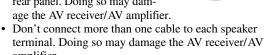
The supplied speaker terminal tool makes it easy to tighten and loosen the speaker terminals. If you are using banana plugs, to ensure optimum sound quality, tighten the speaker terminal before inserting the banana plug. (In Europe, using banana plugs to connect speakers to an audio amplifier is prohibited.)



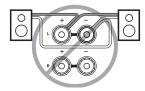
#### Speaker Connection Precautions

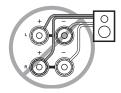
Read the following before connecting your speakers:

- North American models: Only connect speakers with an impedance of 6 ohms or higher. If you use speakers with a lower impedance, and use the amplifier at high volume levels for a long period of time, the built-in protection circuit may be activated.
- Other models: You can connect speakers with an impedance of between 4 and 16 ohms. If the impedance of any of the connected speakers is 4 ohms or more, but less than 6 ohms, be sure to set the minimum speaker impedance to "4 ohms" (see page 51). If you use speakers with a lower impedance, and use the amplifier at high volume levels for a long period of time, the built-in protection circuit may be activated.
- Disconnect the power cord from the wall outlet before making any connections.
- Read the instructions supplied with your speakers.
- Pay close attention to speaker wiring polarity. In other words, connect positive (+) terminals only to positive (+) terminals, and negative (-) terminals only to negative (-) terminals. If you get them the wrong way around, the sound will be out of phase and will sound unnatural.
- Unnecessarily long, or very thin speaker cables may affect the sound quality and should be avoided.
- If you use 4 or 5 speakers, connect each of the two surround speakers to the SURR SPEAKERS terminals. Do not connect them to the SURR BACK SPEAKERS terminals.
- Be careful not to short the positive and negative wires.
   Doing so may damage the AV receiver/AV amplifier.
- Make sure the metal core of the wire does not have contact with the AV receiver/AV amplifier's rear panel. Doing so may damage the AV receiver/AV amplifier



• Don't connect one speaker to several terminals.





#### Connecting the Speaker Cables

7 Strip about 5/8" (15 mm) of insulation from the ends of the speaker cables, and twist the bare wires tightly, as shown.



2 Unscrew the terminal.



Fully insert the bare wires.

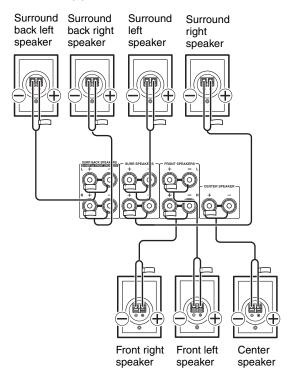


Screw the terminal tight.



The following illustration shows which speaker should be connected to each pair of terminals.

If you're using only one surround back speaker, connect it to the left (L) SURR BACK SPEAKERS terminals.



#### **Bi-amping the Front Speakers**

The FRONT L/R and SURR BACK L/R terminal posts can be used with front speakers and surround back speakers respectively, or bi-amped to provide separate tweeter and woofer feeds for a pair of front speakers that support bi-amping, providing improved bass and treble performance.

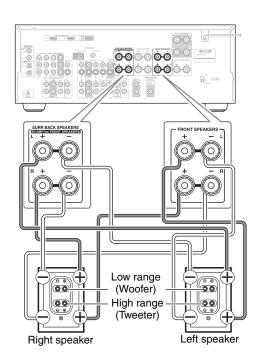
- When bi-amping is used, the AV receiver/AV amplifier is able to drive up to 5.1 speakers in the main room.
- For bi-amping, the FRONT L/R terminal posts connect to the front speakers' tweeter terminals. And the SURR BACK L/R terminal posts connect to the front speakers' woofer terminals.
- Once you've completed the bi-amping connections shown below and turned on the AV receiver/AV amplifier, you must set the Speaker Type setting to Bi-Amp to enable biamping (see page 51).

#### **Important:**

- When making the bi-amping connections, be sure to remove the jumper bars that link the speakers' tweeter (high) and woofer (low) terminals.
- Use only speakers with an impedance of 8 ohms or higher for bi-amping. Failure to do so may seriously damage the AV receiver/AV amplifier.

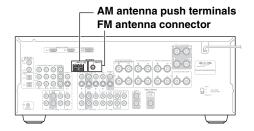
#### Bi-amping Speaker Hookup

- 7 Connect the AV receiver/AV amplifier's FRONT R positive (+) terminal to the right speaker's positive (+) tweeter (high) terminal. And connect the AV receiver/AV amplifier's FRONT R negative (-) terminal to the right speaker's negative (-) tweeter (high) terminal.
- 2 Connect the AV receiver/AV amplifier's SURR BACK R positive (+) terminal to the right speaker's positive (+) woofer (low) terminal. And connect the AV receiver/AV amplifier's SURR BACK R negative (–) terminal to the right speaker's negative (–) woofer (low) terminal.
- Connect the AV receiver/AV amplifier's FRONT L positive (+) terminal to the left speaker's positive (+) tweeter (high) terminal. And connect the AV receiver/AV amplifier's FRONT L negative (-) terminal to the left speaker's negative (-) tweeter (high) terminal.
- 4 Connect the AV receiver/AV amplifier's SURR BACK L positive (+) terminal to the left speaker's positive (+) woofer (low) terminal. And connect the AV receiver/AV amplifier's SURR BACK L negative (–) terminal to the left speaker's negative (–) woofer (low) terminal.



#### Connecting Antenna (TX-SR605 only)

This section explains how to connect the supplied indoor FM antenna and AM loop antenna, and how to connect commercially available outdoor FM and AM antennas. The AV receiver won't pick up any radio signals without any antenna connected, so you must connect the antenna to use the tuner.

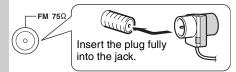


#### Connecting the Indoor FM Antenna

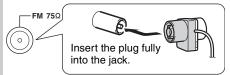
The supplied indoor FM antenna is for indoor use only.

1 Attach the FM antenna, as shown.

■ North American models

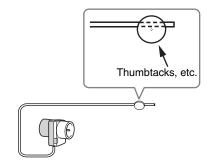


■ Other models



Once your AV receiver is ready for use, you'll need to tune into an FM radio station and adjust the position of the FM antenna to achieve the best possible reception.

2 Use thumbtacks or something similar to fix the FM antenna into position.



**Caution:** Be careful that you don't injure yourself when using thumbtacks.

If you cannot achieve good reception with the supplied indoor FM antenna, try a commercially available outdoor FM antenna instead (see page 23).

#### Connecting the AM Loop Antenna

The supplied indoor AM loop antenna is for indoor use only.

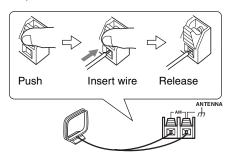
**1** Assemble the AM loop antenna, inserting the tabs into the base, as shown.



Connect both wires of the AM loop antenna to the AM push terminals, as shown.

(The antenna's wires are not polarity sensitive, so they can be connected either way around.)

Make sure that the wires are attached securely and that the push terminals are gripping the bare wires, not the insulation.



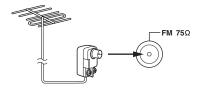
Once your AV receiver is ready for use, you'll need to tune into an AM radio station and adjust the position of the AM antenna to achieve the best possible reception.

Keep the antenna as far away as possible from your AV receiver, TV, speaker cables, and power cords.

If you cannot achieve good reception with the supplied indoor AM loop antenna, try using it with a commercially available outdoor AM antenna (see page 23).

#### Connecting an Outdoor FM Antenna

If you cannot achieve good reception with the supplied indoor FM antenna, try a commercially available outdoor FM antenna instead.

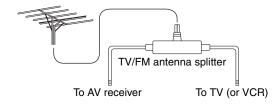


#### Notes:

- Outdoor FM antennas work best outside, but usable results can sometimes be obtained when installed in an attic or loft.
- For best results, install the outdoor FM antenna well away from tall buildings, preferably with a clear line of sight to your local FM transmitter.
- Outdoor antenna should be located away from possible noise sources, such as neon signs, busy roads, etc.
- For safety reasons, outdoor antenna should be situated well away from power lines and other high-voltage equipment.
- Outdoor antenna must be grounded in accordance with local regulations to prevent electrical shock hazards.

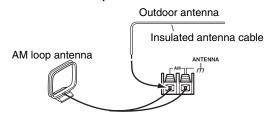
#### ■ Using a TV/FM Antenna Splitter

It's best not to use the same antenna for both FM and TV reception, as this can cause interference problems. If circumstances demand it, use a TV/FM antenna splitter, as shown.



#### Connecting an Outdoor AM Antenna

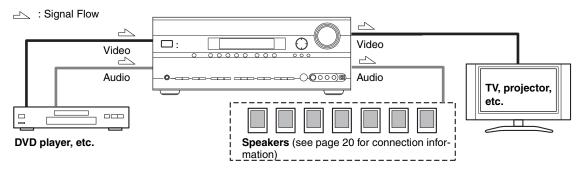
If good reception cannot be achieved using the supplied AM loop antenna, an outdoor AM antenna can be used in addition to the loop antenna, as shown.



Outdoor AM antennas work best when installed outside horizontally, but good results can sometimes be obtained indoors by mounting horizontally above a window. Note that the AM loop antenna should be left connected. Outdoor antenna must be grounded in accordance with local regulations to prevent electrical shock hazards.

#### **Connecting Both Audio & Video**

By connecting both the audio and video outputs of your DVD player and other AV components to the AV receiver/AV amplifier, you can select both the audio and video simultaneously simply by selecting the appropriate input source on the AV receiver/AV amplifier.



#### Which Connections Should I Use?

The AV receiver/AV amplifier supports several connection formats for compatibility with a wide range of AV equipment. The format you choose will depend on the formats supported by your other components. Use the following sections as a guide.

For video components, you must make two connections—one for audio, one for video.

#### Video Connection Formats

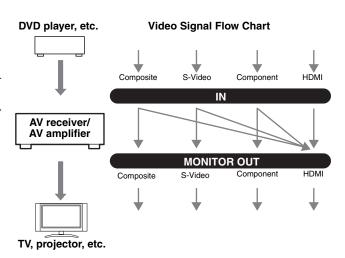
Video equipment can be connected to the AV receiver/AV amplifier by using any one of the following video connection formats:

composite video, S-Video, component video, or HDMI, the latter offering the best picture quality.

The AV receiver/AV amplifier can upconvert and downconvert between video formats, depending on the HDMI Monitor setting, which generally determines whether video signals are upconverted for the component video output or the HDMI output.

#### ■ HDMI Monitor Setting Set to Yes

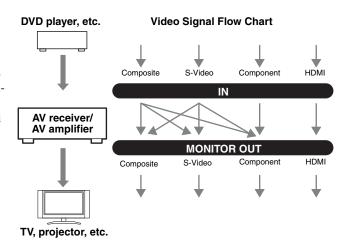
With the HDMI Monitor setting set to Yes (see page 47), video input signals flow through the AV receiver/AV amplifier as shown, with composite video, S-Video, and component video sources all being upconverted for the HDMI output. Use this setting if you connect the AV receiver/AV amplifier's HDMI OUT to your TV. The composite video, S-Video, and component video outputs pass through their respective input signals as they are.



#### ■ HDMI Monitor Setting Set to No

With the HDMI Monitor setting set to No (see page 47), video input signals flow through the AV receiver/AV amplifier as shown, with composite video and S-Video sources being upconverted for the component video output. Use this setting if you connect the AV receiver/AV amplifier's COMPONENT VIDEO OUT to your TV. Composite video is upconverted to S-Video and S-Video is downconverted to composite video. Note that these conversions only apply to the MONITOR OUT V and S outputs, not the VCR/DVR OUT V and S outputs.

The composite video, S-Video, component video, and HDMI outputs pass through their respective input signals as they are.

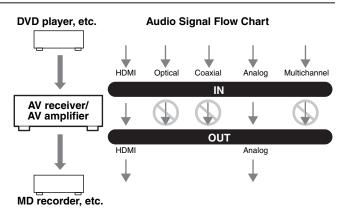


#### Audio Connection Formats

receiver/AV amplifier by using any of the following audio connection formats: analog, optical, coaxial, analog multichannel, or HDMI.

When choosing a connection format, bear in mind that the AV receiver/AV amplifier does not convert digital input signals for analog line outputs and vice versa. For example, audio signals connected to an optical or coaxial digital input are not output by the analog TAPE OUT.

Audio equipment can be connected to the AV



#### **Connecting Your TV or Projector**

#### **Step 1: Video Connection**

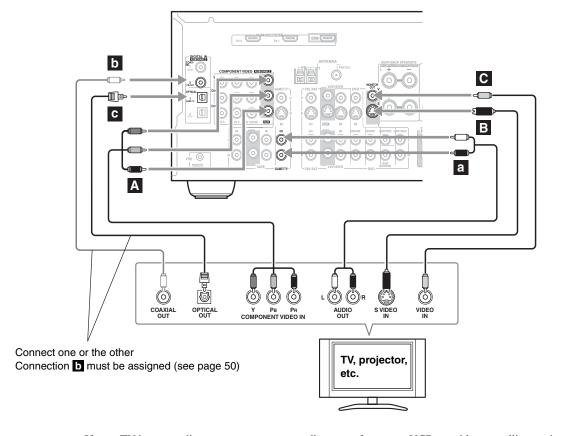
Choose a video connection that matches your TV (A, B, or C), and then make the connection.

#### **Step 2: Audio Connection**

Choose an audio connection that matches your TV (a, b, or c), and then make the connection.

- With connection **a**, you can listen to and record audio from your TV and listen in Zone 2.
- To enjoy Dolby Digital and DTS, use connection **b** or **c**. (For recording, use **a** and **b**, or **a** and **c**.)

Connection	AV receiver/AV amplifier	Signal flow	TV	Picture quality
A	COMPONENT VIDEO OUT	$\Rightarrow$	Component video input	Best
В	MONITOR OUT S	$\Rightarrow$	S-Video input	Better
C	MONITOR OUT V	$\Rightarrow$	Composite video input	Standard
а	GAME/TV IN L/R	<=	Analog audio L/R output	
b	DIGITAL COAXIAL IN 2 (CBL/SAT)	<=	Digital coaxial output	
С	DIGITAL OPTICAL IN 1 (GAME/TV)	<	Digital optical output	





If your TV has no audio outputs, connect an audio output from your VCR or cable or satellite receiver to the AV receiver/AV amplifier and use its tuner to listen to TV programs through the AV receiver/AV amplifier (see pages 29 and 31).

#### Connecting a DVD Player

#### **Step 1: Video Connection**

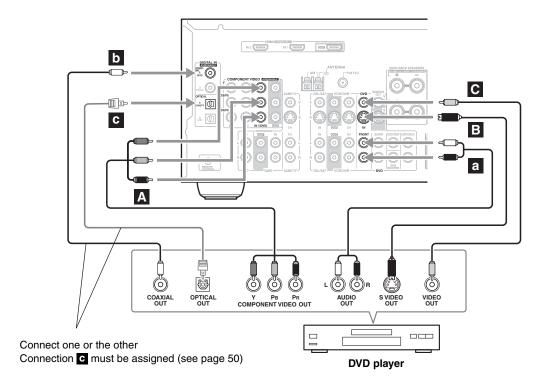
Choose a video connection that matches your DVD player (**A**, **B**, or **C**), and then make the connection. You must connect the AV receiver/AV amplifier to your TV via the same type of connection.

#### **Step 2: Audio Connection**

Choose an audio connection that matches your DVD player (a, b, or c), and then make the connection.

- With connection **a**, you can listen to and record audio from a DVD and listen in Zone 2.
- To enjoy Dolby Digital and DTS, use connection **b** or **c**. (For recording, use **a** and **b**, or **a** and **c**.)
- If your DVD player has main left and right outputs and multichannel left and right outputs, be sure to use the main left and right outputs for connection a.

Connection	AV receiver/AV amplifier	Signal flow	DVD player	Picture quality
A	COMPONENT VIDEO IN 1 (DVD)	<	Component video output	Best
В	DVD IN S	$\Leftarrow$	S-Video output	Better
C	DVD IN V	<	Composite video output	Standard
а	DVD IN FRONT L/R	<=	Analog audio L/R output	
Ь	DIGITAL COAXIAL IN 1 (DVD)	<=	Digital coaxial output	
С	DIGITAL OPTICAL IN 1 (GAME/TV)	<=	Digital optical output	

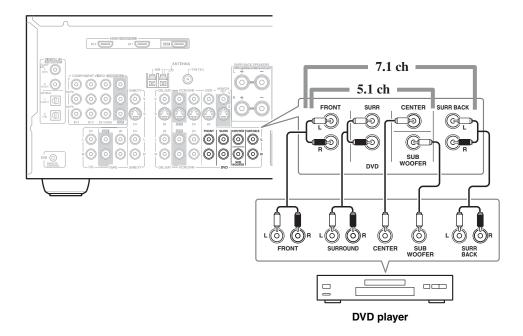


To connect a DVD player or DVD-Audio/SACD-capable player with a multichannel analog audio output, see page 28.

#### Hooking Up the Multichannel DVD Input

If your DVD player supports multichannel audio formats such as DVD-Audio or SACD, and it has a multichannel analog audio output, you can connect it to the AV receiver/AV amplifier's multichannel DVD input.

Use a multichannel analog audio cable, or several normal audio cables, to connect the AV receiver/AV amplifier's DVD IN FRONT L/R, CENTER, SURR L/R, SURR BACK L/R, and SUBWOOFER jacks to the 7.1-channel analog audio output on your DVD player. If your DVD player has a 5.1-channel analog audio output, don't connect anything to the AV receiver/AV amplifier's SURR BACK L/R jacks.



#### Connecting a VCR or DVD Recorder for Playback



With this hookup, you can use your VCR's tuner to listen to your favorite TV programs via the AV receiver/AV amplifier, useful if your TV has no audio outputs.

#### **Step 1: Video Connection**

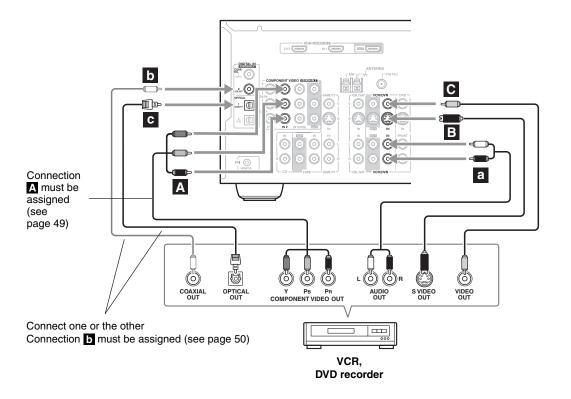
Choose a video connection that matches your VCR or DVD recorder (A, B, or C), and then make the connection. You must connect the AV receiver/AV amplifier to your TV via the same type of connection.

#### **Step 2: Audio Connection**

Choose an audio connection that matches your VCR or DVD recorder (a, b, or c), and then make the connection.

- With connection **a**, you can listen to the VCR or DVD recorder even in Zone 2.
- To enjoy Dolby Digital and DTS, use connection **b** or **c**. (To listen in Zone 2 as well, use **a** and **b**, or **a** and **c**.)

Connection	AV receiver/AV amplifier	Signal flow	VCR or DVD recorder	Picture quality
Α	COMPONENT VIDEO IN 2	<=	Component video output	Best
В	VCR/DVR IN S	<=	S-Video output	Better
C	VCR/DVR IN V	<	Composite video output	Standard
а	VCR/DVR IN L/R	<=	Analog audio L/R output	
b	DIGITAL COAXIAL IN 2 (CBL/SAT)	<	Digital coaxial output	
С	DIGITAL OPTICAL IN 1 (GAME/TV)	<	Digital optical output	



#### Connecting a VCR or DVD Recorder for Recording

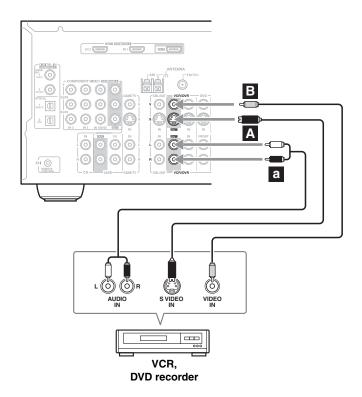
#### **Step 1: Video Connection**

Choose a video connection that matches your VCR or DVD recorder (A) or B), and then make the connection. The video source to be recorded must be connected to the AV receiver/AV amplifier via the same type of connection.

#### **Step 2: Audio Connection**

Make the audio connection a.

Connection	AV receiver/AV amplifier	Signal flow	VCR or DVD recorder	Picture quality
A	VCR/DVR OUT S	$\Rightarrow$	S-Video input	Better
В	VCR/DVR OUT V	$\Rightarrow$	Composite video input	Standard
a	VCR/DVR OUT L/R	$\Rightarrow$	Audio L/R input	



#### **Notes:**

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

#### Connecting a Satellite, Cable, Set-top box, or Other Video Source



With this hookup, you can use your satellite or cable receiver to listen to your favorite TV programs via the AV receiver/AV amplifier, useful if your TV has no audio outputs.

#### **Step 1: Video Connection**

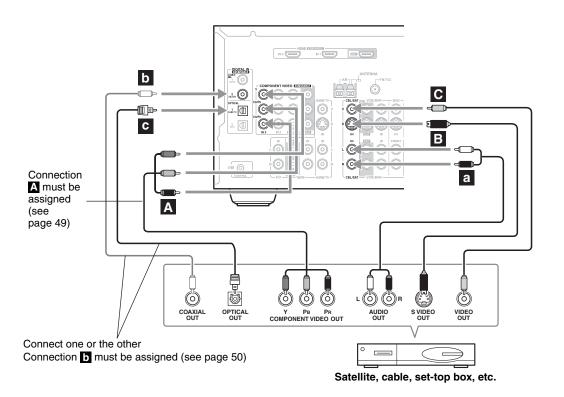
Choose a video connection that matches the video source (A, B, or C), and then make the connection. You must connect the AV receiver/AV amplifier to your TV via the same type of connection.

#### **Step 2: Audio Connection**

Choose an audio connection that matches the video source (a, b, or c), and then make the connection.

- With connection **a**, you can listen to and record audio from the video source and listen in Zone 2.
- To enjoy Dolby Digital and DTS, use connection **b** or **c**. (For recording, use **a** and **b**, or **a** and **c**.)

Connection	AV receiver/AV amplifier	Signal flow	Video source	Picture quality
Α	COMPONENT VIDEO IN 3	<	Component video output	Best
В	CBL/SAT IN S	$\Leftarrow$	S-Video output	Better
C	CBL/SAT IN V	<=	Composite video output	Standard
а	CBL/SAT IN L/R	<=	Analog audio L/R output	
b	DIGITAL COAXIAL IN 2 (CBL/SAT)	<	Digital coaxial output	
С	DIGITAL OPTICAL IN 1 (GAME/TV)	$\Leftarrow$	Digital optical output	



#### **Connecting a Game Console**

#### **Step 1: Video Connection**

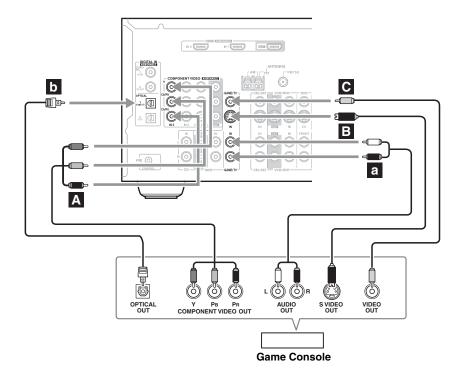
Choose a video connection that matches the game console (A, B, or C), and then make the connection. If you use connection A, you must connect the AV receiver/AV amplifier to your TV with the same type of connection

#### **Step 2: Audio Connection**

Choose an audio connection that matches the DVD player (a, b, or c), and then make the connection.

- With connection **a**, you can listen to and record audio from the game console or listen in Zone 2.
- To enjoy Dolby Digital and DTS, use connection **b**. (To record or listen in Zone 2 as well, use **a** and **b**.)

Connection	AV receiver/AV amplifier	Signal flow	Game console	Picture quality
A	COMPONENT VIDEO IN 3	<=	Component video output	Best
В	GAME/TV IN S	<	S-Video output	Better
C	GAME/TV IN V	<=	Composite video output	Standard
а	GAME/TV IN L/R	<=	Analog audio L/R output	
b	DIGITAL OPTICAL IN 1 (GAME/TV)	<=	Digital optical input	



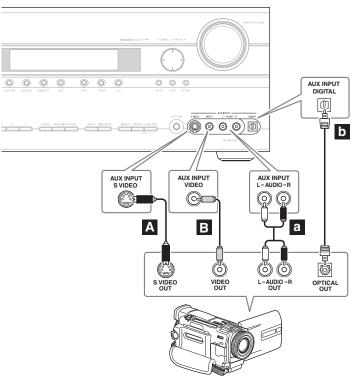
#### **Connecting a Camcorder or Other Device**

#### **Step 1: Video Connection**

Choose a video connection that matches the camcorder (A or B), and then make the connection.

#### **Step 2: Audio Connection**

Choose an audio connection that matches the camcorder (a or b), and then make the connection.



Camcorder, etc.

Connection	AV receiver/AV amplifier	Signal flow	Camcorder or console
A	AUX INPUT S VIDEO	⇐	S-Video output
В	AUX INPUT VIDEO	⇐	Composite video output
а	AUX INPUT L/R	⇐	Analog audio L/R output
b	AUX INPUT DIGITAL	⇐	Digital optical output

#### **Connecting Components with HDMI**

#### About HDMI

Designed to meet the demands of digital TV, HDMI (High Definition Multimedia Interface) is a new digital interface standard for connecting TVs, projectors, DVD players, set-top boxes, and other video components. Until now, several separate video and audio cables have been required to connect AV components. With HDMI, a single cable can carry control signals, digital video, and up to eight channels of digital audio (2-channel PCM, multichannel digital audio, and multichannel PCM).

The HDMI video stream (i.e., video signal) is compatible with DVI (Digital Visual Interface)\*1, so TVs and displays with a DVI input can be connected by using an HDMI-to-DVI adapter cable. (This may not work with some TVs and displays, resulting in no picture.)

The AV receiver/AV amplifier uses HDCP (High-bandwidth Digital Content Protection), so only HDCP-compatible components can display the picture.

The AV receiver/AV amplifier's HDMI interface is based on the following standard: High-Definition Multimedia Interface Specification Informational Version 1.3a

#### Supported Audio Formats

- 2-channel linear PCM (32–192 kHz, 16/20/24 bit)
- Multichannel linear PCM (7.1 ch, 32–192 kHz)
- Bitstream (Dolby Digital, Dolby Digital Plus, Dolby TrueHD, DTS, DTS-HD High Resolution Audio, DTS-HD Master Audio)

Your DVD player must also support HDMI output of the above audio formats.

#### About Copyright Protection

The AV receiver/AV amplifier supports HDCP (High-bandwidth Digital Content Protection)\*2, a copy-protection system for digital video signals. Other devices connected to the AV receiver/AV amplifier via HDMI must also support HDCP.

Commercially available HDMI cables (supplied with some components) should be used to connect the AV receiver/AV amplifier's HDMI OUT to the HDMI input on your TV or projector.

- \*1 DVI (Digital Visual Interface): The digital display interface standard set by the DDWG<sup>\*3</sup> in 1999.
- \*2 HDCP (High-bandwidth Digital Content Protection): The video encryption technology developed by Intel for HDMI/DVI. It's designed to protect video content and requires a HDCP-compatible device to display the encrypted video.
- \*3 DDWG (Digital Display Working Group): Lead by Intel, Compaq, Fujitsu, Hewlett Packard, IBM, NEC, and Silicon Image, this open industry group's objective is to address the industry's requirements for a digital connectivity specification for high-performance PCs and digital displays.

#### Making HDMI Connections

**Step 1:** Use HDMI cables to connect the AV receiver/AV amplifier's HDMI jacks to your HDMI-compatible DVD player, TV, projector, and so on.

**Step 2:** Assign each HDMI IN to an input selector in the HDMI Input Setup (see page 48).

#### ■ Video Signals

Digital video signals received by the HDMI IN jacks are normally output by the HDMI OUT for display on your TV. Composite video, S-Video, and component video sources can be upconverted for the HDMI output. See "Video Connection Formats" on page 24 for more information.

#### ■ Audio Signals

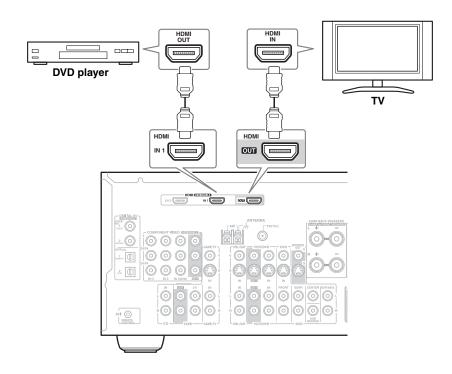
Digital audio signals received by the HDMI IN jacks are output by the speakers and headphones connected to the AV receiver/AV amplifier. Normally, they are not output by the HDMI OUT, unless the HDMI Audio Out setting is set to On (see page 84).

#### Note:

When listening to an HDMI component through the AV receiver/AV amplifier, set the HDMI component so that its video can be seen on the TV screen (on the TV, select the input of the HDMI component connected to the AV receiver/AV amplifier). If the TV power is off or the TV is set to another input source, this may result in no sound from the AV receiver/AV amplifier or the sound may be cut off.



To listen to audio received by the HDMI IN jacks through your TV's speakers, set the HDMI Audio Out setting to On (see page 84), and set your DVD player's HDMI audio output setting to PCM.

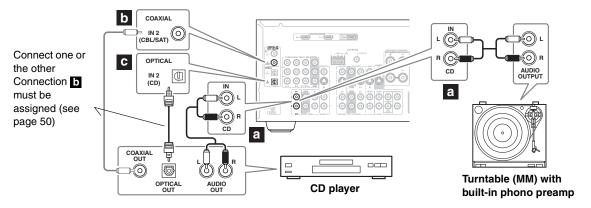


#### **Connecting a CD Player or Turntable**

#### ■ CD Player or Turntable (MM) with Built-in Phono Preamp

#### Step 1:

Choose a connection that matches your CD player (a, b, or c). Use connection a for a turntable with a built-in phono preamp.



- With connection **a**, you can listen to and record audio from the CD player and listen in Zone 2.
- To connect the CD player digitally, use connection **b** or **c**. (For recording, use **a** and **b**, or **a** and **c**.)

Connection	AV receiver/AV amplifier	Signal flow	CD or turntable
а	CD IN L/R	<=	Analog audio L/R output
b	DIGITAL COAXIAL IN 2 (CBL/SAT)	<	Digital coaxial output
C	DIGITAL OPTICAL IN 2 (CD)	$\Leftarrow$	Digital optical output

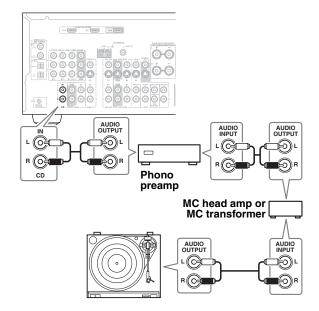
#### ■ Turntable (MM) with no Phono Preamp Built-in

A phono preamp is necessary to connect a turntable that doesn't have a phono preamp built-in.

# AUDIO OUTPUT Phono preamp

#### ■ Turntable with an MC (Moving Coil) Cartridge

An MC head amp and phono preamp are necessary to connect a turntable with an MC (Moving Coil) cartridge.

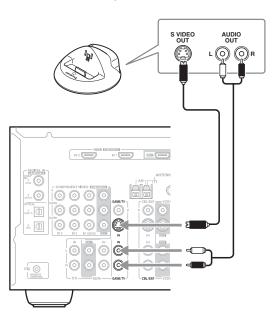


#### **Connecting the AV Receiver/AV Amplifier**—Continued

#### **Connecting an RI Dock**

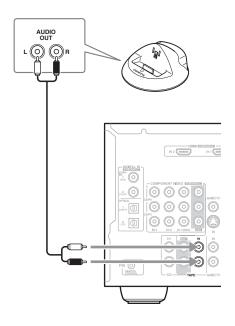
#### ■ RI Dock with video

Connect your RI Dock's analog audio output jacks and S-Video output jack to the AV receiver/AV amplifier's GAME/TV IN L/R jacks and GAME/TV IN S jack. (The example shown below is for connection with the DS-A1.)



#### ■ RI Dock without video

Connect your RI Dock's analog audio output jacks to the AV receiver/AV amplifier's TAPE IN L/R jacks.

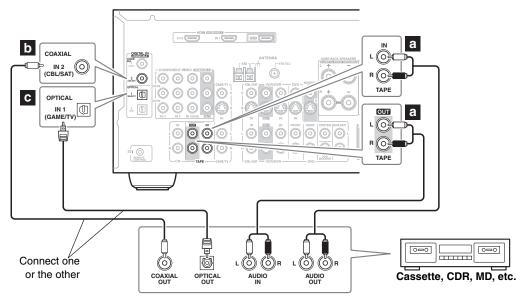


- Connect the Remote Interactive Dock with an RI cable (see page 39).
- Set the Remote Interactive Dock's RI MODE switch to HDD or HDD/DOCK.
- Set the AV receiver/AV amplifier's input display to DOCK (see page 51).
- Refer to the Remote Interactive Dock's instruction manual.

#### Connecting a Cassette, CDR, MiniDisc, or DAT Recorder

#### Step 1:

Choose a connection that matches the recorder (a, b, or c), and then make the connection.



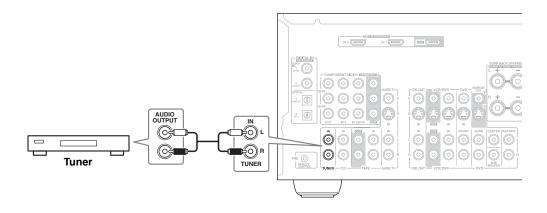
- With connection **a**, you can play and record and listen in Zone 2.
- To connect the recorder digitally for playback, use connections a and b, or a and c.

Connection	AV receiver/AV amplifier	Signal flow	Cassette, CDR, MD, or DAT recorder
а	TAPE IN L/R TAPE OUT L/R	<b>⇐</b> ⇒	Analog audio L/R output Analog audio L/R input
b	DIGITAL COAXIAL IN 2 (CBL/SAT)	⇐	Digital coaxial output
C	DIGITAL OPTICAL IN 1 (GAME/TV)	⇐	Digital optical output

#### Connecting a Tuner (TX-SA605/8560 only)

#### **Audio Connection**

Connect your tuner's analog audio output jacks to the AV amplifier's TUNER L/R IN jacks with an audio cable.



#### Connecting the AV Receiver/AV Amplifier—Continued

#### **Connecting Onkyo RI Components**

- Step 1: Make sure that each Onkyo component is connected to the AV receiver/AV amplifier with an analog audio cable (connection a in the hookup examples) (see pages 26 to 38).
- Step 2: Make the RI connection.
- **Step 3:** If you're using an MD, CDR, or RI Dock, change the input display (see page 51).

With **R**I (Remote Interactive), you can use the following special functions:

#### ■ Auto Power On/Standby

When you start playback on a component connected via  $\square 1$ , if the AV receiver/AV amplifier is on Standby, it will automatically turn on and select that component as the input source. Similarly, when the AV receiver/AV amplifier is set to Standby, all components connected via  $\square 1$  will also go on Standby.

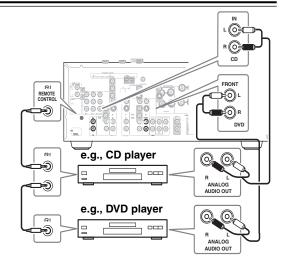
#### **■** Direct Change

When playback is started on a component connected via RI, the AV receiver/AV amplifier automatically selects that component as the input source. If your DVD player is connected to the AV receiver/AV amplifier's multichannel DVD input, you'll need to press the [MULTI CH] button to hear all channels (see page 55), as the Direct Change RI function only selects the FRONT DVD IN jacks.

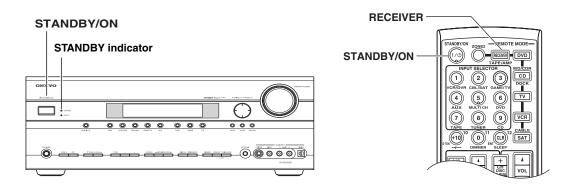
#### ■ Remote Control

You can use the AV receiver/AV amplifier's remote controller to control your other 🔁 I-capable Onkyo components, pointing the remote controller at the AV receiver/AV amplifier's remote control sensor instead of the component. You must enter the appropriate remote control code first (see page 91).

- Use only RI cables for RI connections. RI cables are supplied with Onkyo players (DVD, CD, etc.).
- Some components have two RI jacks. You can connect either one to the AV receiver/AV amplifier. The other jack is for connecting additional RI-capable components.
- Connect only Onkyo components to RI jacks. Connecting other manufacturer's components may cause a malfunction.
- Some components may not support all RI functions. Refer to the manuals supplied with your other Onkyo components.



## Turning On the AV Receiver/AV Amplifier



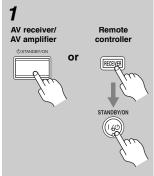
#### **Connecting the Power Cord**

• Connect the AV receiver/AV amplifier's power cord to a suitable wall outlet.

#### Notes:

- Before connecting the power cord, connect all of your speakers and AV components.
- Turning on the AV receiver/AV amplifier may cause a momentary power surge that might interfere with other electrical equipment on the same circuit. If this is a problem, plug the AV receiver/AV amplifier into a different branch circuit.

#### **Turning On and Standby**



#### Press the [STANDBY/ON] button.

Alternatively, press the remote controller's [RECEIVER] button, followed by the [STANDBY/ON] button.

The AV receiver/AV amplifier comes on, the display lights up, and the STANDBY indicator goes off.

To turn the AV receiver/AV amplifier off, press the [STANDBY/ON] button, or press the remote controller's [STANDBY/ON] button. The AV receiver/AV amplifier will enter Standby mode. To prevent any loud surprises when you turn on the AV receiver/AV amplifier, always turn down the volume before you turn it off.

#### Smooth Operation in a Few Easy Steps

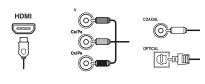
To ensure smooth operation, here's a few easy steps to help you configure the AV receiver/AV amplifier before you use it for the very first time. These settings only need to be made once.

■ Do the automatic speaker setup—this is essential! See "Automatic Speaker Setup (Audyssey 2EQ)" on page 41.



Have you connected a component to an HDMI input, component video input, or digital audio input?

If you have, see "HDMI Input Setup" on page 48, "Component Video Setup" on page 49, or "Digital Input Setup" on page 50 respectively.



Have you connected an Onkyo MD recorder, CD recorder, or RI Dock?

If you have, see "Changing the Input Display" on page 51.



## **First Time Setup**

This section explains the settings that you need to make before using the AV receiver/AV amplifier for the very first time.

#### **Automatic Speaker Setup** (Audyssey 2EQ)

With the supplied speaker setup microphone, the Audyssey 2EQ function can measure the number of speakers connected, their sizes, crossover frequencies, and the distance from each speaker to the listening position and calculate the optimal speaker settings for your listening environment automatically.

Before using this function, connect and position all of your speakers.

#### Measurement Points

To create a listening area in which several people can enjoy home theater simultaneously, the Audyssey 2EQ function takes measurements at three points within the listening area:

#### 1 First measurement point

This is the center point of the listening area, or the listening position if it's just one person.

#### ② Second measurement point

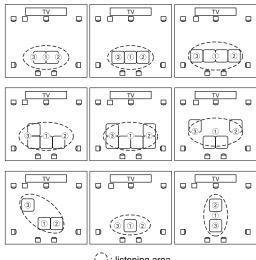
The right side of the listening area.

#### 3 Third measurement point

The left side of the listening area.

The distances between points ① and ② and points ① and 3 must be at least 1 meter.

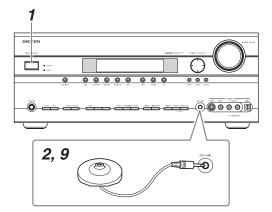
From the examples below, choose the listening area that best matches yours and place the microphone accordingly when prompted.

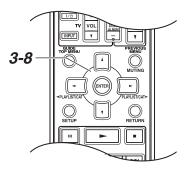


: listening area

: listening position

#### Using Audyssey 2EQ





Note: If any of your speakers is 4 ohms, change the minimum speaker impedance setting before running the automatic speaker setup (see page 51).

#### Notes:

- If the AV receiver/AV amplifier was previously muted, it will be unmuted.
- Automatic speaker setup cannot be performed while a pair of headphones is connected.
- It takes about 10 minutes to complete the automatic speaker setup.

#### Turn on the AV receiver/AV 1 amplifier and the connected TV. On the TV, select the input to which the AV receiver/AV amplifier is connected.

2



Put the speaker setup microphone at measurement point ① (page 41), and connect it to the SETUP MIC jack.



#### **Notes:**

- Make sure the microphone is horizontal
- If there's an obstacle between the microphone and any speaker, the automatic setup will not work correctly. Set up the room as you would when enjoying a DVD.
- Positioning the microphone close to where your ears would normally be will provide better results. You can adjust the height of the microphone by using a tripod or level table.

3



The automatic speaker setup starts.

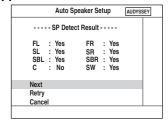


A test tone is output by each speaker in turn, as the Audyssey 2EQ function determines which speakers are connected. This takes a few minutes.

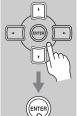
#### Note:

If any extraneous noise is picked up by the microphone, the automatic setup may not work correctly, so don't make any noise. 4

The speaker detect results appear.



"Yes" means that the speaker was detected. "No" means that no speaker was detected.



If you agree with the results, use the Up and Down [▲]/[▼] buttons to select Next, and then press [ENTER].

The options are:

Next:

Proceed to the next step.

Retry:

Return to step 2 and try again.

Cancel:

Cancel the automatic speaker setup.

5

The following screen appears.





Move the speaker setup microphone to measurement point ② (page 41), then press [ENTER].

Audyssey 2EQ performs more measurements. This takes a few minutes.

6

#### The following screen appears.





Move the speaker setup microphone to measurement point ③ (page 41), then press [ENTER].

Audyssey 2EQ performs more measurements. This takes a few minutes.

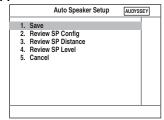
7

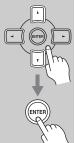
When the measurements are complete, the following screen appears.



8

When the calculations are complete, the following screen appears.





Use the Up and Down  $[\blacktriangle]/[\blacktriangledown]$  buttons to select an option, and then press [ENTER].

The options are:

#### Save:

Save the calculated settings and exit the automatic speaker setup.

#### Review SP Config:

Review the speaker configuration settings (see "Reviewing the Results" on page 45

#### **Review SP Distance**:

Review the speaker distance settings (see "Reviewing the Results" on page 45).

#### **Review SP Level**:

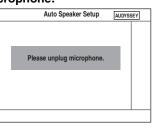
Review the speaker level settings (see "Reviewing the Results" on page 45).

#### Cancel:

Cancel the automatic speaker setup.

9

Disconnect the speaker setup microphone.

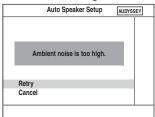


- When the automatic speaker setup is complete, the Equalizer Settings (page 74) will be set to "Audyssey."
- You can cancel the automatic speaker setup at any point in this procedure simply by disconnecting the setup microphone.

#### Error Messages

While the automatic speaker setup is in progress, one of the following error messages may appear:

#### □ Ambient noise is too high



This message appears if the background noise is too loud and the measurements cannot be performed properly.

Remove the source of the noise and try again.

Retry: Return to the measured point immediately

before and start set up again.

Cancel: Cancel the automatic speaker setup.

#### □ Speaker Detect Errors

	Auto S	peaker Set	ир	AUDYSS	EY
	Speaker Detect Error				
SL SBL	: Yes : : : Yes	FR : SR : SBR : SW :			
Retry	el				

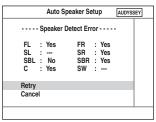
One of the front speakers has not been detected.

FL : Yes FR : Yes SL : SR : No SBL : SBR : C : Yes SW :  Retry Cancel
SL : SR : No SBL : SBR : C : Yes SW :

One of the surround speakers has not been detected.

	Auto Speal	ker Setup	AUDYSSEY
Speaker Detect Error			
FL SL SBL C	:	FR : Yes SR : No SBR : Yes SW :	
Retry Cancel			

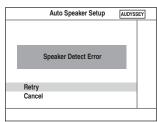
The surround back speakers have been detected but the surround speakers haven't.



The right surround back speaker has been detected but the left surround back speaker hasn't.



There is a problem with a speaker. The speaker may be broken or the subwoofer may be emitting sound that is too high.

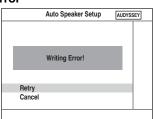


The number of speakers detected on the second or third measurement was different to the number detected on the first measurement.

Make sure speakers that cannot be detected are connected property.

**Retry**: Return to step 2 and try again. **Cancel**: Cancel the automatic speaker setup.

#### □ Write Error



This message appears if saving fails.

Try saving again. If this message appears after 2 or 3 attempts, the AV receiver/AV amplifier is probably malfunctioning. Contact your Onkyo dealer.

**Retry**: Return to step 2 and try again. **Cancel**: Cancel the automatic speaker setup.

#### Reviewing the Results



Use the Up and Down  $[\blacktriangle]/[\blacktriangledown]$  buttons to select the settings that you want to review, and then press [ENTER].

	Auto Speaker Setup	AUDYSS	SEY
Save Review SP ( Review SP I Review SP I Cancel	Distance		

The options are:

#### **Review SP Config:**

Review the speaker configuration settings.

Review	SP Co	onfig	
Subwoofer	:	Yes	
Front	:	Full Band	
Center	:	80Hz	
Surround	:	100Hz	
Surr Back	:	150Hz	
Surr Back Ch	:	2ch	

#### **Review SP Distance**:

Review the speaker distance settings.

Auto S	peaker S	etup AUDYSS	ΕY
Review SP Distance			
Front	:	15.0ft	
Center	:	15.0ft	
Surr Right	:	7.0ft	
Surr Back R	:	7.0ft	
Surr Back L	:	7.0ft	
Surr Left	:	7.0ft	
Subwoofer	:	15.0ft	

#### **Review SP Level:**

Review the speaker level settings.

Auto S	peaker	Setup A	JDYSSEY
Revie	w SP Le	vel	
Left	:	+12.0dB	
Center	:	0.0dB	
Right	:	-12.0dB	
Surr Right	:	+3.0dB	
Surr Back R	:	+4.0dB	
Surr Back L	:	-6.0dB	
Surr Left	:	-3.0dB	
Subwoofer	:	0.0dB	

Press the [RETURN] button to return to the previous menu.

#### Changing the Speaker Settings Manually

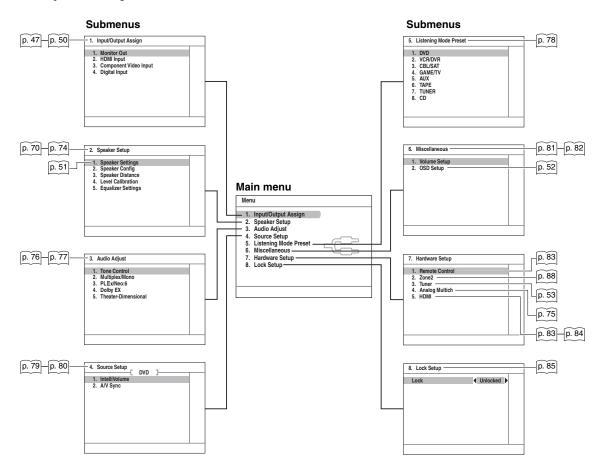
In some situations, the measurements taken by the automatic speaker setup may not provide usable results. If running the speaker setup a second time still doesn't provide usable results, you'll have to set the speaker settings manually (see pages 70–75).

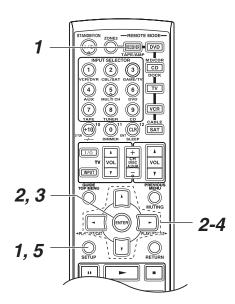
#### Using a Powered Subwoofer

If you're using a powered subwoofer, because it outputs very low-frequency sound and its position is usually low, it may not be detected by the automatic speaker setup. If the subwoofer (SW) appears on the SP Detect Result screen as "No," increase the subwoofer's volume to the half-way point, set it to its highest crossover frequency, and then try running the automatic speaker setup again. Note that if the volume is set too high and the sound distorts, it may not be detected, so use an appropriate volume level. If the subwoofer has a low-pass filter switch, set it to Off or Direct. Refer to your subwoofer's instruction manual for details.

#### **About the Onscreen Setup Menus**

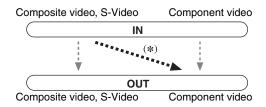
The onscreen setup menus are displayed on the connected TV and provide a convenient way to change the AV receiver/ AV amplifier's settings.



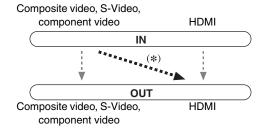


#### **HDMI Monitor**

If you connect your TV to the COMPONENT VIDEO OUT, set the HDMI Monitor setting to No so that the onscreen setup menus are displayed and composite video and S-Video sources are upconverted\* and output by the COMPONENT VIDEO OUT.



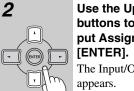
If you connect your TV to the HDMI OUT, set the HDMI Monitor setting to Yes so that the onscreen setup menus are displayed and composite video, S-Video, and component video sources are upconverted\* and output by the HDMI OUT. The onscreen setup menus are displayed on the HDMI OUT only.





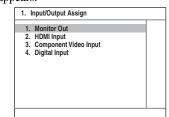
## Press the [RECEIVER] button followed by the [SETUP] button.

The main menu appears onscreen.



Use the Up and Down [▲]/[▼] buttons to select "1. Input/Output Assign," and then press [FNTFR].

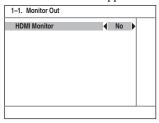
The Input/Output Assign menu appears.

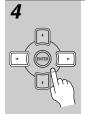




## Use the Up and Down [▲]/[▼] buttons to select "1. Monitor Out," and then press [ENTER].

The Monitor Out menu appears.





## Use the Left and Right [◀]/[▶] buttons to select:

No: Select this if your TV is connected to the COMPONENT VIDEO OUT.

**Yes:** Select this if your TV is connected to the HDMI OUT.



#### Press the [SETUP] button.

The Setup menu closes.

#### Note:

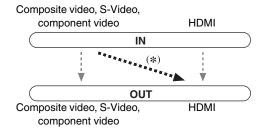
This procedure can also be performed on the AV receiver/AV amplifier by using its [SETUP] button, arrow buttons, and [ENTER] button.

#### **Video Input Setup**

#### **HDMI Input Setup**

If you connect a video component to HDMI IN 1 or 2, you must assign that input to an input selector. For example, if you connect your DVD player to HDMI IN 1, you must assign HDMI IN 1 to the DVD input selector.

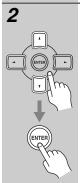
If you've connected your TV to the AV receiver/AV amplifier with an HDMI cable, you can set the AV receiver/AV amplifier so that composite video, S-Video, and component video sources are upconverted\* and output by the HDMI OUT. You can set this for each input selector by selecting the "- - -" option.





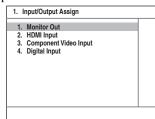
## Press the [RECEIVER] button followed by the [SETUP] button.

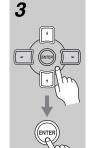
The main menu appears onscreen.



## Use the Up and Down [▲]/[▼] buttons to select "1. Input/Output Assign," and then press [ENTER].

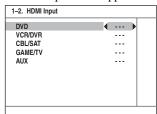
The Input/Output Assign menu appears.





#### Use the Up and Down [▲]/[▼] buttons to select "2. HDMI Input," and then press [ENTER].

The HDMI Input menu appears.





## Use the Up and Down [▲]/[▼] buttons to select an input selector, and use the Left and Right [◄]/[▶] buttons to select:

- **IN 1:** Select if the video component is connected to HDMI IN 1.
- **IN 2:** Select if the video component is connected to HDMI IN 2.
- Output composite video, S-Video, and component video sources from the HDMI OUT. The video output signal from the HDMI OUT is the one configured in "Component Video Setup" (see page 49).



#### Press the [SETUP] button.

The Setup menu closes.

- Each HDMI IN cannot be assigned to more than one input selector.
- For composite video, S-Video, and component video upconversion for the HDMI OUT, the HDMI Monitor setting must be set to Yes (see page 47). See page 24 for more information on video signal flow and upconversion.
- When an HDMI IN is assigned to an input selector as explained here, the digital audio input for that input selector is automatically set to the same HDMI IN.
   See "Digital Input Setup" on page 50.
- This procedure can also be performed on the AV receiver/AV amplifier by using its [SETUP] button, arrow buttons, and [ENTER] button.

#### Component Video Setup

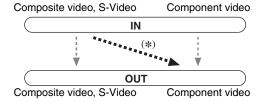
If you connect to a COMPONENT VIDEO IN, you must assign it to an input selector. For example, if you connect your DVD player to COMPONENT IN 3, you should assign it to the DVD input selector.

If you want to output composite and S-Video sources from the COMPONENT VIDEO OUT, select "---," as explained below.

Input selector	VIDEO IN jack
DVD	IN 1
VCR/DVR	
CBL/SAT	
GAME/TV	
AUX	

If you've connected your TV to the AV receiver/AV amplifier with a component video cable, you can set the AV receiver/AV amplifier so that composite video and S-Video sources are upconverted\* and output by the COM-PONENT VIDEO OUT.

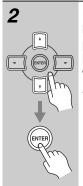
You can set this for each input selector by selecting the "- - -" option.





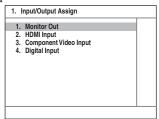
## Press the [RECEIVER] button followed by the [SETUP] button.

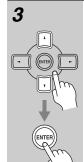
The main menu appears onscreen.



## Use the Up and Down [▲]/[▼] buttons to select "1. Input/Output Assign," and then press [ENTER].

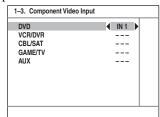
The Input/Output Assign menu appears.





Use the Up and Down [▲]/[▼] buttons to select "3. Component Video Input," and then press [ENTER].

The Component Video Input menu appears.





Use the Up and Down [▲]/[▼] buttons to select an input selector, and then use the Left and Right [◄]/[▶] buttons to select:

- IN 1: Use the video component connected to COMPONENT VIDEO IN 1.
- IN 2: Use the video component connected to COMPONENT VIDEO IN 2.
- IN 3: Use the video component connected to COMPONENT VIDEO IN 3.
- ---: Output composite video and S-Video sources from the COMPONENT VIDEO OUT.



#### Press the [SETUP] button.

The setup menu closes.

- For composite video and S-Video upconversion for the COMPONENT VIDEO OUT, the HDMI Monitor setting must be set to No (see page 47). See page 24 for more information on video signal flow and upconversion.
- This procedure can also be performed on the AV receiver/AV amplifier by using its [SETUP] button, arrow buttons, and [ENTER] button.

#### **Digital Input Setup**

If you connect a component to a digital input jack, you must assign that jack to an input selector. For example, if you connect your CD player to the OPTICAL IN2 jack, you should assign that jack to the CD input selector. By default, the COAXIAL IN1 jack is assigned to the DVD input selector, although this can be changed.

Here are the default assignments.

Input selector	Default assignment
DVD	COAX 1
VCR/DVR	
CBL/SAT	COAX 2
GAME/TV	OPT 1
AUX	FRONT
TAPE	
TUNER (TX-SA605/8560 only)	
CD	OPT 2

When HDMI IN 1 or 2 is assigned to an input selector in the "HDMI Input Setup" on page 48, the input selector assignment on this page is automatically set to HDMI 1 or HDMI 2.



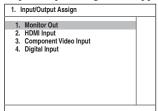
## Press the [RECEIVER] button followed by the [SETUP] button.

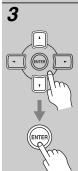
The main menu appears onscreen.



## Use the Up and Down [▲]/[▼] buttons to select "1. Input/Output Assign," and then press [ENTER].

The Input/Output Assign menu appears.





## Use the Up and Down [▲]/[▼] buttons to select "4. Digital Input," and then press [ENTER].

The Digital Input menu appears.

VCR/DVR CBL/SAT GAME/TV AUX	COAX 2 OPT 1
GAME/TV	
	ODT 1
ALIX	OFII
	FRONT
TAPE	
TUNER	
CD	OPT 2



Use the Up and Down [▲]/[▼] buttons to select an input selector, and use the Left and Right [◄]/[▶] buttons to select COAX 1, COAX 2, OPT 1, OPT 2, or - - - (analog).

- An input selector that has been assigned to IN 1 or IN 2 in the "HDMI Input Setup" (see page 48) can be set to HDMI here.
- There are no assignments for TUNER (TX-SR605 only).
- AUX is used only for digital input from the front panel terminals.

#### Examples:

If you connect your DVD player to the OPTICAL IN 1 jack, set "DVD" to "OPT 1."

If you want to listen to audio from the component connected to the OPTICAL IN 2 jack when the VCR/DVR input selector is selected, set "VCR/DVR" to "OPT 2."

If you want to listen to audio from the component connected to the COAX-IAL IN 1 jack when the CBL/SAT input selector is selected, set "CBL/SAT" to "COAX 1."

For input selectors that you don't want to assign a digital input jack, set to "--- (analog)."



#### Press the [SETUP] button.

The Setup menu closes.

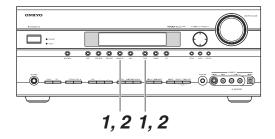


- This procedure can also be performed on the AV receiver/AV amplifier by using its [SETUP] button, arrow buttons, and [ENTER] button.
- This procedure can also be performed on the AV receiver/AV amplifier by using its input selector button and [DIGITAL INPUT] button. First Press the input selector button for the source that you want to assign. Press the [DIGITAL INPUT] button repeatedly to select COAX1, COAX2, OPT1, OPT2, or - (analog).

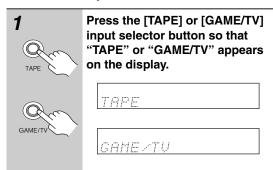
#### **Changing the Input Display**

If you connect an RI-capable Onkyo MiniDisc recorder, CD recorder, or RI Dock to the TAPE IN/OUT or GAME/TV IN jacks, for RI to work properly, you must change this setting.

This setting can only be changed on the AV receiver/AV amplifier.

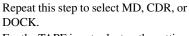


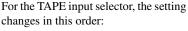
**iPod photo:** If you're using an iPod photo with the DS-A1 Remote Interactive Dock, connect the DS-A1 to the GAME/TV IN jacks.

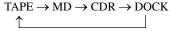




Press and hold down the [TAPE] or [GAME/TV] input selector button (about 3 seconds) to change the setting.







For the GAME/TV input selector, the setting changes in this order:

 $GAME/TV \leftrightarrow DOCK$ 

#### Note:

DOCK can be selected for the TAPE input selector or GAME/TV input selector, but not both at the same time.

#### **Speaker Settings**

If you change these settings, you must run the automatic speaker setup again (see page 41).

If the impedance of any speaker is 4 ohms or more but less than 6, set the minimum speaker impedance to 4 ohms (not North American models).

If you've connected your front speakers to the FRONT and SURR BACK terminal posts for bi-amping, you must change the Speaker Type setting. For hookup information, see "Bi-amping the Front Speakers" on page 21.

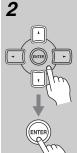
#### Notes:

- When bi-amping is used, the AV receiver/AV amplifier is able to drive up to 5.1 speakers in the main room.
- Before you change these settings, turn down the volume.



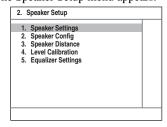
Press the [RECEIVER] button, followed by the [SETUP] button.

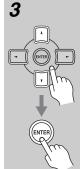
The main menu appears onscreen.



Use the Up and Down [▲]/[▼] buttons to select "2. Speaker Setup," and then press [ENTER].

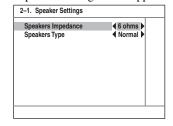
The Speaker Setup menu appears.





Use the Up and Down [▲]/[▼] buttons to select "1. Speaker Settings," and then press [ENTER].

The Speaker Settings menu appears.





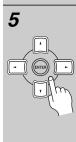
Use the Up and Down [▲]/[▼] buttons to select "Speaker Impedance," and then use the Left and Right [◄]/[▶] buttons to select:

4 ohms: Select if the impedance of any speaker is 4 ohms or more but

less than 6.

**6 ohms:** Select if the impedances of all speakers are between 6 and

16 ohms.



Use the Up and Down [▲]/[▼] buttons to select "Speakers Type," and then use the Left and Right [◀]/[▶] buttons to select:

Normal: Select this if you've connected your front speakers normally.

Bi-Amp: Select this if you've connected your front speakers for bi-amped operation.



Press the [SETUP] button.

The Setup menu closes.

#### Note:

This procedure can also be performed on the AV receiver/AV amplifier by using its [SETUP] button, arrow buttons, and [ENTER] button.

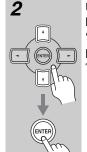
#### **TV Format Setup** (not North American models)

You must specify the TV system used in your area.



Press the [RECEIVER] button followed by the [SETUP] button.

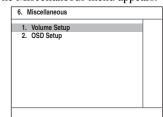
The main menu appears onscreen.



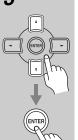
Use the Up and Down [▲]/[▼] buttons to select

"6. Miscellaneous," and then press [ENTER].

The Miscellaneous menu appears.

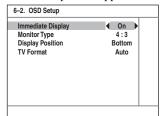


3



Use the Up and Down [▲]/[▼] buttons to select "2. OSD Setup," and then press [ENTER].

The OSD Setup menu appears.



4



Use the Up and Down [▲]/[▼] buttons to select "TV Format," and then use the Left and Right

[◀]/[▶] buttons to select:

**Auto:** Select this to automatically detect the TV system from

**NTSC:** Select if the TV system in

your area is NTSC. **PAL:** Select if the TV system in

your area is PAL.

the video input signals.

5

When you've finished, press the [SETUP] button.

The setup menu closes.

This procedure can also be performed on the AV receiver/AV amplifier by using its [SETUP] button, arrow buttons, and [ENTER] button.

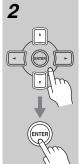
## AM Frequency Step Setup (on some models)

You must specify the AM frequency step used in your area. Note that when this setting is changed, all radio presets are deleted.



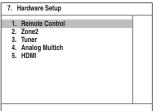
## Press the [RECEIVER] button, followed by the [SETUP] button.

The main menu appears onscreen.



## Use the Up and Down [▲]/[▼] buttons to select "7. Hardware Setup," and then press [ENTER].

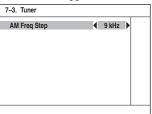
The Hardware Setup menu appears.

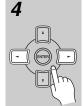




## Use the Up and Down $[\blacktriangle]/[\blacktriangledown]$ buttons to select "3. Tuner," and then press [ENTER].

The Tuner menu appears.





## Use the Left and Right [◄]/[▶] buttons to select:

10 kHz: Select if 10 kHz steps are

used in your area.

**9 kHz:** Select if 9 kHz steps are used

in your area.



#### Press the [SETUP] button.

The Setup menu closes.

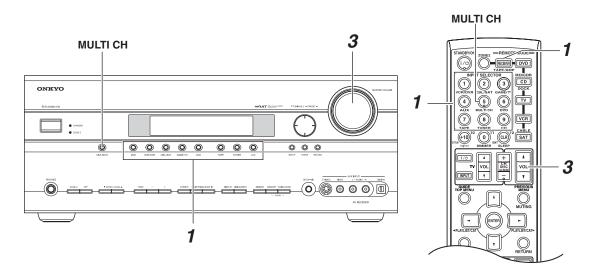
#### Note:

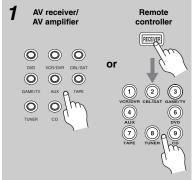
 This procedure can also be performed on the AV receiver/AV amplifier by using its [SETUP] button, arrow buttons, and [ENTER] button.

## **Basic Operations**

#### **Selecting the Input Source**

This section explains how to select the input source (i.e., the AV component that you want to listen to or watch).





Use the AV receiver/AV amplifier's input selector buttons to select the input source.

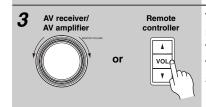
To select the input source with the remote controller, press the [RECEIVER] button, and then use the INPUT SELECTOR buttons.

2

#### Start playback on the source component.

When you select DVD or another video component, on your TV, you'll need to select the video input that's connected to the AV receiver/AV amplifier's COMPONENT VIDEO OUT, HDMI OUT or MONITOR OUT.

On some DVD players, you may need to turn on the digital audio output.



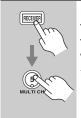
## To adjust the volume, use the MASTER VOLUME control, or the remote controller's [VOL] button.

The volume can be set to MIN, 1 through 99, or MAX.

The AV receiver/AV amplifier is designed for home theater enjoyment. It has a wide volume range, allowing precise adjustment.

#### **Using the Multichannel DVD Input**

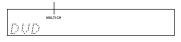
The multichannel DVD input is for connecting a component with a 7.1-channel analog audio output, such as a DVD-Audio or SACD-capable DVD player, or an MPEG decoder. See page 28 for hookup information.



## Press the [RECEIVER] button, followed by the [MULTI CH] button.

The MULTI CH indicator appears on the display.

MULTI CH indicator



Audio from the multichannel DVD input will now be used for the DVD input source.

#### Note:

While the multichannel DVD input is selected, the Speaker Configuration settings on page 70 are ignored, and signals from the multichannel input are fed to the speakers as they are.

#### **Adjusting the Bass & Treble**

You can adjust the bass and treble for the front speakers, except when the Direct or Pure Audio (not North American models) listening mode is selected.



Press the [TONE] button repeatedly to select either Bass or Treble.



Use the TONE [-]/[+] buttons to adjust.

#### ■ Bass

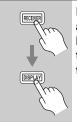
You can boost or cut low-frequency sounds output by the front speakers from -10 dB to +10 dB in 2 dB steps.

#### **■** Treble

You can boost or cut high-frequency sounds output by the front speakers from -10 dB to +10 dB in 2 dB steps.

#### **Displaying Source Information**

You can display various information about the current input source as follows.

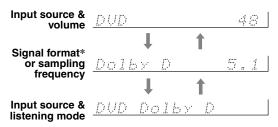


Press the [RECEIVER] button, and then press the [DISPLAY] button repeatedly to cycle through the available information.

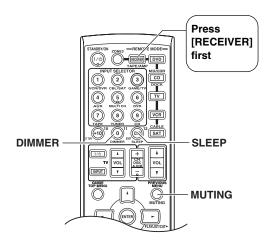
#### Note:

This procedure can also be performed on the AV receiver/AV amplifier by using its [DISPLAY] button.

The following information can typically be displayed for input sources.



\*If the input signal is analog, no format information is displayed. If the input signal is PCM, the sampling frequency is displayed. If the input signal is digital but not PCM, the signal format is displayed. Information is displayed for about three seconds, then the previously displayed information reappears.



#### **Setting the Display Brightness**

You can adjust the brightness of the display.



Press the [RECEIVER] button, and then press the [DIMMER] button repeatedly to select: dim, dimmer, or normal brightness.

Alternatively, you can use the AV receiver's [DIMMER] button (not European models).

#### Muting the AV receiver/AV amplifier

You can temporarily mute the output of the AV receiver/ AV amplifier.



## Press the [RECEIVER] button, and then press the [MUTING] button.

The output is muted and the MUTING indicator flashes on the display, as shown.



To unmute the AV receiver/AV amplifier, press the [MUTING] button again, or adjust the volume.

The Mute function is cancelled when the AV receiver/AV amplifier is set to Standby.

#### **Using the Sleep Timer**

With the sleep timer, you can set the AV receiver/AV amplifier to turn off automatically after a specified period.



#### Press the [RECEIVER] button, and then press the [SLEEP] button repeatedly to select the required sleep time.

The sleep time can be set from 90 to 10 minutes in 10 minute steps.

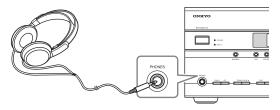
The SLEEP indicator appears on the display when the sleep timer has been set. The specified sleep time appears on the display for about five seconds, then the previous display reappears.

If you need to cancel the sleep timer, press the [SLEEP] button repeatedly until the SLEEP indicator disappears.

To check the time remaining until the AV receiver/AV amplifier sleeps, press the [SLEEP] button. Note that if you press the [SLEEP] button while the sleep time is being displayed, you'll shorten the sleep time by 10 minutes.

#### **Using Headphones**

You can connect a pair of stereo headphones (1/4-inch phone plug) to the AV receiver/AV amplifier's PHONES jack for private listening, as shown.



- Always turn down the volume before connecting your headphones.
- The speakers are turned off while the headphones plug is inserted in the PHONES jack (Zone 2 speakers are not turned off).
- When you connect a pair of headphones, the listening mode is set to Stereo, unless it's already set to Stereo, Mono, Direct, or Pure Audio (not North American models).
- Only the Stereo, Direct, Pure Audio (not North American models), and Mono listening modes can be used with headphones (the listening modes available also depend on the currently selected input source).
- When the multichannel input is used, only the front left and right audio can be heard in the headphones.
- To adjust the headphone level, press the [CH SEL] button on the remote controller, and then press the [LEVEL +]/[LEVEL -] buttons. You can adjust the level between -12 dB and +12 dB.

## Listening to the Radio (TX-SR605 only)

#### **Using the Tuner**

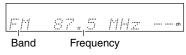
With the built-in tuner you can enjoy AM and FM radio stations. You can store your favorite stations as presets for quick selection.

#### Listening to the Radio



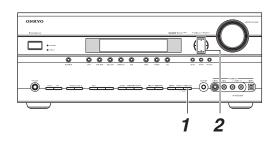
## Use the [TUNER] input selector button to select either AM or FM.

In this example, FM has been selected. Each time you press the [TUNER] button, the input source changes between AM and FM.



(Actual display depends on country)

#### **Tuning into Radio Stations**



#### ■ Auto Tuning Mode



Press the [TUNING MODE] button so that the AUTO indicator appears on the display.



## Press the TUNING Up or Down $[\![ \Delta ]\!]/[\![ \Psi ]\!]$ buttons.

Searching stops when a station is found

When tuned into a station, the TUNED indicator appears. When tuned into a stereo FM station, the FM STEREO indicator appears on the display, as shown.



#### ■ Manual Tuning Mode



Press the [TUNING MODE] button so that the AUTO indicator disappears from the display.

2

## Press and hold the TUNING Up or Down $[\blacktriangle]/[\blacktriangledown]$ buttons.

The frequency stops changing when you release the button.

Press the buttons repeatedly to change the frequency one step at a time.

The North American models change FM frequency in 0.2 MHz steps, 10 kHz steps for AM. For other models it's 0.05 MHz steps for FM and 9 kHz steps for AM. In Manual Tuning mode, FM stations will be in mono.

#### Tuning into weak FM stereo stations

If the signal from a stereo FM station is weak, it may be impossible to get good reception. In this case, switch to Manual Tuning mode and listen to the station in mono.

#### ■ Tuning into Stations by Frequency

You can tune into AM and FM stations directly by entering the appropriate frequency.

1 RECEIRS

## Press the [RECEIVER] button, followed by the [D TUN] button.

FM SILC - MHZ

(Actual display depends on country.) The [RECEIVER] button flashes.

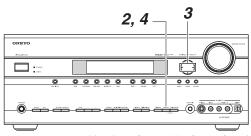
2

## Within 8 seconds, use the number buttons to enter the frequency of the radio station.

For example, to tune to 87.5 (FM), press 8, 7, 5.

**Note**: While the [RECEIVER] button is flashing, the input source cannot be changed by using the remote controller.

#### **Presetting AM/FM Stations**



You can store a combination of up to 40 of your favorite AM/FM radio stations as presets.

Tune into the AM/FM station that you want to store as a preset.

Press the [MEMORY] button.
The preset number flashes.



While the preset number is flashing (about 8 seconds), use the PRESET [◄]/[▶] buttons to select a preset from 1 through 40.

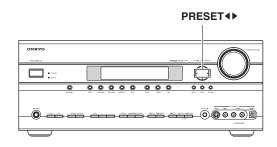


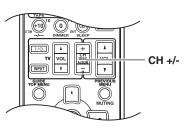
Press the [MEMORY] button again to store the station or channel.

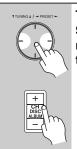
The station or channel is stored and the preset number stops flashing.

Repeat this procedure for all of your favorite AM/FM radio stations.

#### Selecting Presets

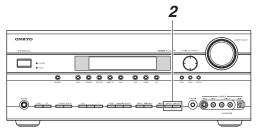






To select a preset, use the PRE-SET [◄]/[▶] buttons, or the remote controller's CH [+/–] button.

#### **Deleting Presets**



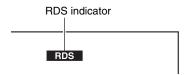
Select the preset that you want to delete.
See the previous section.

While holding down the [MEMORY TUNING MODE] button, press the [TUNING MODE] button.
The preset is deleted and its number disappears from the display.

#### **Using RDS (European models only)**

RDS only works with European models and only in areas where RDS broadcasts are available.

When tuned into an RDS station, the RDS indicator appears.



#### ■ What is RDS?

RDS stands for *Radio Data System* and is a method of transmitting data in FM radio signals. It was developed by the European Broadcasting Union (EBU) and is available in most European countries. Many FM stations use it these days. In addition to displaying text information, RDS can also help you find radio stations by type (e.g., news, sport, rock, etc.).

The AV receiver supports four types of RDS information:

#### **PS (Program Service)**

When tuned to an RDS station that's broadcasting PS information, the station's name will be displayed. Pressing the [DISPLAY] button will display the frequency for 3 seconds.

#### RT (Radio Text)

When tuned to an RDS station that's broadcasting text information, the text will be shown on the display (see page 60).

#### PTY (Program Type)

This allows you to search for RDS radio stations by type (see page 60).

#### TP (Traffic Program)

This allows you to search for RDS radio stations that broadcast traffic information (see page 60).

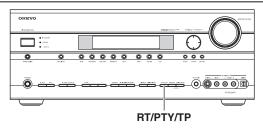
#### **Notes:**

- In some cases, the text characters displayed on the AV receiver may not be identical to those broadcast by the radio station. Also, unexpected characters may be displayed when unsupported characters are received. This is not a malfunction.
- If the signal from an RDS station is weak, RDS data may be displayed intermittently or not at all.

#### RDS Program Types (PTY)

Туре	Display
None	NONE
News reports	NEWS
Current affairs	AFFAIRS
Information	INFO
Sport	SPORT
Education	EDUCATE
Drama	DRAMA
Culture	CULTURE
Science and technology	SCIENCE
Varied	VARIED
Pop music	POP M
Rock music	ROCK M
Middle of the road music	EASY M
Light classics	LIGHT M
Serious classics	CLASSICS
Other music	OTHER M
Weather	WEATHER
Finance	FINANCE
Children's programmes	CHILDREN
Social affairs	SOCIAL
Religion	RELIGION
Phone in	PHONE IN
Travel	TRAVEL
Leisure	LEISURE
Jazz music	JAZZ
Country music	COUNTRY
National music	NATION M
Oldies music	OLDIES
Folk music	FOLK M
Documentary	DOCUMENT
Alarm test	TEST
Alarm	ALARM

#### Displaying Radio Text (RT)



When tuned to an RDS station that's broadcasting text information, the text can be displayed.



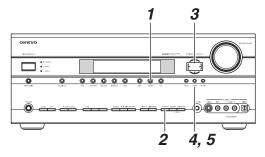
## Press the [RT/PTY/TP] button once.

The RT information scrolls across the display.

#### Notes:

- The message "Waiting" may appear while the AV receiver waits for the RT information.
- If the message "No Text Data" appears on the display, no RT information is available.

#### Finding Stations by Type (PTY)



You can search for radio stations by type.



## Use the [TUNER] input selector button to select FM.



## Press the [RT/PTY/TP] button

The current program type appears on the display.



Use the PRESET  $[ \ \ ]/[ \ \ ]$  buttons to select the type of program you want.

See the table on page 59.



## To start the search, press [ENTER].

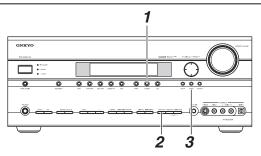
The AV receiver searches until it finds a station of the type you specified, at which point it stops briefly before continuing with the search.



## When a station you want to listen to is found, press [ENTER].

If no stations are found, the message "Not Found" appears.

#### Listening to Traffic News (TP)



You can search for stations that broadcast traffic news.



## Use the [TUNER] input selector button to select FM.



## Press the [RT/PTY/TP] button three times.

If the current radio station is broadcasting TP (Traffic Program), "[TP]" will appear on the display, and traffic news will be heard as and when it's broadcast. If "TP" without square brackets appears, this means that the station is not broadcasting TP.



## To locate a station that is broadcasting TP, press [ENTER].

The AV receiver searches until it finds a station that's broadcasting TP.

If no stations are found, the message "Not Found" appears.

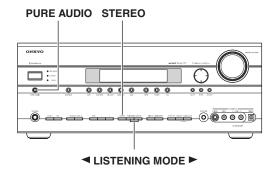
## **Using the Listening Modes**

#### **Selecting Listening Modes**

See "About the Listening Modes" on page 66 for detailed information about the listening modes.

- The Dolby Digital and DTS listening modes can only be selected if your DVD player is connected to the AV receiver/AV amplifier with a digital audio connection (coaxial or optical).
- Listening mode availability depends on the format of the current input signal.

#### Selecting on the AV receiver/AV amplifier



## ■ [PURE AUDIO] button (not North American models)

This button selects the Pure Audio listening mode. When this mode is selected, the AV receiver/AV amplifier's display is turned off and only video signals input through HDMI IN can be output. Pressing this button again will select the previous listening mode.

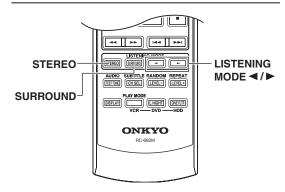
#### ■ [STEREO] button

This button selects the Stereo listening mode.

#### ■ LISTENING MODE [◄]/[▶] buttons

Pressing these buttons repeatedly cycles through all of the listening modes that can be used with the current input source.

#### Selecting with the Remote Controller



#### ■ [SURROUND] button

This button selects the Dolby Digital and DTS listening modes and the Neural Surround\* listening mode (\*North American models only).

#### **■** [STEREO] button

This button selects the Stereo listening mode.

#### ■ LISTENING MODE [◄]/[▶] buttons

Pressing these buttons repeatedly cycles through all of the listening modes that can be used with the current input source.

### **Listening Modes Available for Each Source Format**

#### Analog and PCM Sources

				Multiphonal DOM		
s	ource format	PC	CM	Multichannel PCM (32-192 kHz)		
		32-96 kHz	176.4/192 kHz*1	Multichannel, 1/0, 1+1		
Listenir	Media ng mode	CD, T\	/, radio	DVD		
	udio (not North an models)	<b>~</b>	~	<b>✓</b>		
Direct		<b>V</b>	~	<b>~</b>		
Stereo		<b>V</b>	~			
Multich	annel			V		
Dolby D						
Dolby E	Digital Plus					
DTS, D	TS 96/24					
DTS Dis	screte/Matrix					
DTS-HE Audio	High Resolution					
DTS-HE	Master Audio					
TrueHD						
PLII Mo	vie/PLIIx Movie*2	<b>✓</b>				
PLII Mu	sic/PLIIx Music*2	<b>✓</b>				
PLII Ga	me/PLIIx Game*2	<b>✓</b>				
Dolby D	Digital EX/Dolby EX					
Neo:6						
Neo:6 C	Cinema	~				
Neo:6 N	Music	<b>V</b>				
	Surround (North an models only)	~				
Mono		<b>V</b>				
Onkyo Original DSP*4	Mono Movie <sup>*3</sup> Orchestra <sup>*3</sup> Unplugged <sup>*3</sup> Studio-Mix <sup>*3</sup> TV Logic <sup>*3</sup>	V				
nkyo C	All Ch Stereo Full Mono	V		_		
0	T-D	~				

<sup>\*1.</sup> For PCM 176.4/192 kHz signals input through HDMI IN, only Pure Audio, Direct, and Stereo listening modes can be selected. (HDMI input only)

<sup>\*2.</sup> If there are no surround back speakers, or Powered Zone 2 is being used, Pro logic II is used.

<sup>\*3.</sup> Available only when using surround speakers.

<sup>\*4.</sup> For T-D, Mono Movie, Orchestra, Unplugged, Studio-Mix, and TV Logic, PCM of 64 kHz, 88.2 kHz, and 96 kHz are processed at 32 kHz, 44.1 kHz, and 88.2 kHz respectively.

<sup>:</sup> Requires 6.1/7.1 speakers. Not available while Powered Zone 2 is being used.

<sup>:</sup> Requires 7.1 speakers. Not available while Powered Zone 2 is being used.

#### Dolby Digital, Dolby Digital Plus, and TrueHD Sources

		Dolby D				Dolby Digital Plus				TrueHD*1		
s	ource format	Multio	Itichannel			Multichannel				Multi- channel	2ch	1/0, 1+1
		*/2	except */2	2ch	1/0, 1+1	*/2	except */2	2ch	1/0, 1+1			
Media Listening mode		DVD, DTV, etc.			Blu-ray, HD DVD			Blu-ray, HD DVD				
	idio (not North an models)	~	~	~	~	~	1	~	~	~	~	~
Direct		<b>'</b>	~	/	~	<b>'</b>	~	<b>/</b>	<b>'</b>	~	~	~
Stereo		<b>'</b>	<b>'</b>	<b>/</b>	~	~	~	~	~	~	~	~
Multichannel												
Dolby D		<b>'</b>	<b>'</b>									
Dolby Digital Plus						<b>✓</b> *2	<b>✓</b> *2					
DTS, D1	rs 96/24											
DTS Dis	screte/Matrix											
DTS-HD Audio	High Resolution											
DTS-HD	Master Audio											
TrueHD										~		
PLII Mo	vie/PLIIx Movie <sup>*3</sup>	<b>'</b>		<b>/</b>		<b>V</b>		~				
PLII Mu	sic/PLIIx Music <sup>*3</sup>	<b>'</b>		<b>/</b>		~		~				
PLII Gai	me/PLIIx Game <sup>*3</sup>			>				>				
Dolby Digital EX/Dolby EX		<b>'</b>				~						
Neo:6		<b>'</b>				/						
Neo:6 C	inema			>				>				
Neo:6 N	Neo:6 Music			>				>				
Neural Surround (North American models only)												
Mono		~	~	/	~	~	~	<b>&gt;</b>	~			
Onkyo Original DSP	Mono Movie*4 Orchestra*4 Unplugged*4 Studio-Mix*4 TV Logic*4	~	~	V	~							
Onkyo	All Ch Stereo Full Mono	•	~	>	~	~	~	>	~			
	T-D	~	~	/	<b>'</b>							

<sup>\*1.</sup> During input of a 96 kHz TrueHD signal, the only sound balance or sound quality adjustment that can be made is Tone control. The AV receiver/ AV amplifier does not respond to a 192 kHz TrueHD signal.

<sup>\*2.</sup> If there are no surround back speakers, depending on the input signal, Dolby Digital may be used.

<sup>\*3.</sup> If there are no surround back speakers, or Powered Zone 2 is being used, Pro logic II is used.

<sup>\*4.</sup> Available only when using surround speakers.

<sup>:</sup> Requires 6.1/7.1 speakers. Not available while Powered Zone 2 is being used.

<sup>:</sup> Requires 7.1 speakers. Not available while Powered Zone 2 is being used.

#### DTS and DTS 96/24 Sources

			DTS, DT				
So	urce format	Multichannel		2ch	1/0	DTS Discrete/Matrix	
			except */2	2011	1/0		
Media Listening mode			DVD, C	DVD, CD, etc.			
	dio (not North n models)	~	~	~	~	~	
Direct		~	~	~	~	·	
Stereo		~	~	~	~	~	
Multichannel							
Dolby D							
Dolby Digital Plus							
DTS, DTS 96/24		~	~			~	
DTS Disc	crete/Matrix					<b>✓</b> *1	
DTS-HD Audio	High Resolution						
DTS-HD	Master Audio						
TrueHD							
PLII Mov	ie/PLIIx Movie*2	<b>~</b>		<b>✓</b>			
PLII Mus	ic/PLIIx Music*2	~		~			
PLII Gam	ne/PLIIx Game <sup>*2</sup>			~			
Dolby Digital EX/Dolby EX		~					
Neo:6		<b>V</b>					
Neo:6 Cinema				~			
Neo:6 M	Neo:6 Music			~			
Neural Surround (North American models only)							
Mono		<b>~</b>	~	<b>'</b>	~	~	
nal DSP*	Mono Movie <sup>*3</sup> Orchestra <sup>*3</sup> Unplugged <sup>*3</sup> Studio-Mix <sup>*3</sup> TV Logic <sup>*3</sup>	V	~	V	~	~	
nkyo C	All Ch Stereo Full Mono	~	~	~	~	~	
ō	T-D	~	~	~	~	V	

<sup>\*1.</sup> If there are no surround back speakers, or Powered Zone 2 is being used, DTS is used.

<sup>\*2.</sup> If there are no surround back speakers, or Powered Zone 2 is being used, Pro logic II is used.

<sup>\*3.</sup> Available only when using surround speakers.

<sup>\*4.</sup> For T-D, Mono Movie, Orchestra, Unplugged, Studio-Mix, and TV Logic, DTS 96/24 is processed as DTS.

<sup>:</sup> Requires 6.1/7.1 speakers. Not available while Powered Zone 2 is being used.

<sup>:</sup> Requires 7.1 speakers. Not available while Powered Zone 2 is being used.

#### DTS-HD High Resolution Audio and DTS-HD Master Audio Sources

	DTS	DTS-HD High Resolution Audio				DTS-HD Master Audio <sup>*1</sup>			
Source format	Multi	Multichannel		1/0	Multi-	O-h	1/0		
	*/2	except *2	2ch	1/0	channel	2ch	1/0		
Med Listening mode	ia	Blu-ray,	HD DVD	Blu-ray, HD DVD					
Pure Audio (not North American models)	~	~	<b>'</b>	~	~	•	~		
Direct	~	~	~	~	~	~	~		
Stereo	~	~	~	~	~	~	~		
Multichannel									
Dolby D									
Dolby Digital Plus									
DTS, DTS 96/24									
DTS Discrete/Matrix									
DTS-HD High Resolution Audio	n /	~							
DTS-HD Master Audio					~				
TrueHD									
PLII Movie/PLIIx Movie*2	. ✓*3		<b>✓</b> *3						
PLII Music/PLIIx Music*2	2 ✓*3		<b>✓</b> *3						
PLII Game/PLIIx Game*2	:		<b>✓</b> *3						
Dolby Digital EX/Dolby I	EX ✓*3								
Neo:6	<b>✓</b> *3								
Neo:6 Cinema			<b>✓</b> *3						
Neo:6 Music			<b>✓</b> *3						
Neural Surround (North American models only)									
Mono	<b>✓</b> *3	<b>✓</b> *3	<b>✓</b> *3	<b>✓</b> *3					
Mono Movie <sup>*4</sup> Orchestra <sup>*4</sup> Unplugged <sup>*4</sup> Studio-Mix <sup>*4</sup> TV Logic <sup>*4</sup> All Ch Stereo Full Mono									
All Ch Stereo Full Mono	<b>✓</b> *3	<b>✓</b> *3	<b>✓</b> *3	<b>✓</b> *3					
T-D									

<sup>\*1.</sup> During input of a 96 kHz DTS-HD Master Audio signal, the only sound balance or sound quality adjustment that can be made is Tone control. When input is a 192 kHz DTS-HD Master Audio signal, it should be played at 96 kHz.

<sup>\*2.</sup> If there are no surround back speakers, or Powered Zone 2 is being used, Pro logic II is used.

<sup>\*3.</sup> Depending on the input source (when the input is a 96 kHz signal, for example), it may be processed after DTS playback.

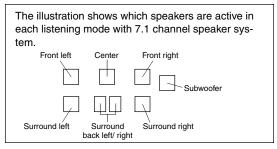
<sup>\*4.</sup> Available only when using surround speakers.

<sup>:</sup> Requires 6.1/7.1 speakers. Not available while Powered Zone 2 is being used.

<sup>:</sup> Requires 7.1 speakers. Not available while Powered Zone 2 is being used.

#### **About the Listening Modes**

The AV receiver/AV amplifier's listening modes can transform your listening room into a movie theater or concert hall, with high fidelity and stunning surround sound.



#### Pure Audio (not North American models)

In this mode, the display and video circuitry are turned off, minimizing possible noise sources for the ultimate in high-fidelity reproduction. (As the video circuitry is turned off, only video signals input through HDMI IN can be output.)

#### **Direct**

In this mode, audio from the input source is output directly with minimal processing, providing high-fidelity reproduction. All of the source's audio channels are output as they are.

## Stereo

Sound is output by the front left and right speakers and subwoofer.

### Mono 📲 🖁 🖷

Use this mode when watching an old movie with a mono soundtrack, or use it with the foreign language soundtracks recorded in the left and right channels of some movies. It can also be used with DVDs or other sources containing multiplexed audio, such as karaoke DVDs.

### Dolby Pro Logic IIx

## Dolby Pro Logic II

**Dolby Pro Logic IIx** expands any 2-channel source for 7.1-channel playback. It provides a very natural and seamless surround-sound experience that fully envelops the listener. As well as music and movies, video games can also benefit from the dramatic spatial effects and vivid imaging. If you're not using any surround back speakers, **Dolby Pro Logic II** will be used instead of Dolby Pro Logic IIx.

#### PLIIx Movie

Use this mode with any stereo or Dolby Surround (Pro Logic) movie (e.g., TV, DVD, VHS).

#### PLIIx Music

Use this mode with any stereo or Dolby Surround (Pro Logic) music source (e.g., CD, radio, cassette, TV, VHS, DVD).

#### PLIIx Game

Use this mode with video games, especially those that bear the Dolby Pro Logic II logo.

## Dolby Digital

Use this mode with DVDs that bear the Dolby Digital logo, and Dolby Digital TV broadcasts. This is the most common digital surround-sound format, and it'll put you right in the middle of the action, just like being in a movie theater or concert hall.

#### 5.1-channel source + Dolby EX

These modes expand 5.1-channel sources for 6.1/7.1-channel playback. They're especially suited to Dolby EX soundtracks that include a matrix-encoded surround back channel. The additional channel adds an extra dimension and provides an enveloping surround sound experience, perfect for rotating and fly-by sound effects.

### Dolby Digital Plus

Developed for use with HDTV, including the new video disc formats Blu-ray and HD DVD, this is the latest multichannel audio format from Dolby. It supports up to 7.1 channels with 48 kHz sampling rate.

### Dolby TrueHD

Designed to take full advantage of the additional storage space offered by the new Blu-ray and HD DVD disc formats, this new Dolby format offers up to 7.1 discrete channels of digital audio with 48/96 kHz, up to 5.1-channels with 192 kHz sampling rate.

For the signals supported by the AV receiver/AV amplifier, see page 63.

### 5.1-channel source + PLIIx Music

These modes use the Pro Logic IIx Music mode to expand 5.1-channel sources for 6.1/7.1-channel playback.

### 5.1-channel source + PLIIx Movie

These modes use the Pro Logic IIx Movie mode to expand 5.1-channel sources for 7.1-channel playback.

### DTS

The DTS digital surround-sound format supports up to 5.1 discrete channels and uses less compression for high-fidelity reproduction. Use it with DVDs and CDs that bear the DTS logo.

## DTS 96/24 ■ ■ ■ ■

This mode is for use with DTS 96/24 sources. This is high-resolution DTS with a 96 kHz sampling rate and 24-bit resolution, providing superior fidelity. Use it with DVDs that bear the DTS 96/24 logo.

## DTS-ES Discrete

This mode is for use with DTS-ES Discrete soundtracks, which use a discrete surround back channel for true 6.1/7.1-channel playback. The seven totally separate audio channels provide better spatial imaging and 360-degree sound localization, perfect for sounds that pan across the surround channels. Use it with DVDs that bear the DTS-ES logo, especially those with a DTS-ES Discrete soundtrack.

#### **Using the Listening Modes—**Continued

### DTS-ES Matrix

This mode is for use with DTS-ES Matrix soundtracks, which use a matrix-encoded back-channel for 6.1/7.1-channel playback. Use it with DVDs that bear the DTS-ES logo, especially those with a DTS-ES Matrix soundtrack.

### DTS Neo:6

This mode expands any 2-channel source for 7.1-channel playback. It uses seven full-bandwidth channels of matrix decoding for matrix-encoded material, providing a very natural and seamless surround sound experience that fully envelops the listener.

#### Neo:6 Cinema

Use this mode with any stereo movie (e.g., TV, DVD, VHS).

#### Neo:6 Music

Use this mode with any stereo music source (e.g., CD, radio, cassette, TV, VHS, DVD).

### 5.1-channel source + Neo:6

This mode uses Neo:6 to expand 5.1-channel sources for 6.1/7.1-channel playback.

#### DTS-HD High Resolution Audio

Developed for use with HDTV, including the new video disc formats Blu-ray and HD DVD, this is the latest multichannel audio format from DTS. It supports up to 7.1 channels with 96 kHz sampling rate.

## DTS-HD Master Audio

Designed to take full advantage of the additional storage space offered by the new Blu-ray and HD DVD disc formats, this new DTS format offers up to 7.1 discrete channels of digital audio with 48/96 kHz, up to 5.1-channels with 192 kHz sampling rate.

For the signals supported by the AV receiver/AV amplifier, see page 65.

## Neural Surround (North American models only)

Neural Surround represents the latest advancement in surround technology developed for music and is adopted by XM Satellite Radio for digital radio broadcast of surround recordings and live events in surround sound. Neural Surround employs psychoacoustic frequency-domain processing, which allows delivery of a more detailed sound stage, with superior channel separation and localization of audio elements. System playback is scalable from 5.1 to 7.1 multichannel surround playback.

#### Onkyo Original DSP Modes

#### Mono Movie ■ ■ ■

This mode is suitable for old movies and other mono sources. The center speaker outputs the sound as it is, while reverb is applied to the sound output by the other speakers, giving presence to even mono material.

### Orchestra

Suitable for classical or operatic music, this mode emphasizes the surround channels in order to widen the stereo image, and simulates the natural reverberation of a large hall.

### Unplugged

Suitable for acoustic instruments, vocals, and jazz, this mode emphasizes the front stereo image, giving the impression of being right in front of the stage.

### Studio-Mix

Suitable for rock or pop music, listening to music in this mode creates a lively sound field with a powerful acoustic image, like being at a club or rock concert.

### TV Logic

This mode adds realistic acoustics to TV shows produced in a TV studio, surround effects to the entire sound, and clarity to voices.

## All Ch Stereo

Ideal for background music, this mode fills the entire listening area with stereo sound from the front, surround, and surround back speakers.

### Full Mono

In this mode, all speakers output the same sound in mono, so the sound you hear is the same regardless of where you are within the listening room.

## T-D (Theater-Dimensional) ☐ ☐ ☐ ☐ or ☐ ☐ ☐ ☐

With this mode you can enjoy a virtual 5.1 surround sound even with only two or three speakers. This works by controlling how sounds reach the listener's left and right ears. Good results may not be possible if there's too much reverb, so we recommend that you use this mode in an environment with little or no natural reverb.

## Recording

This section explains how to record the selected input source to a component with recording capability, and how to record audio and video from different sources.

#### Notes:

- The surround sound and DSP listening modes cannot be recorded.
- Copy-protected DVDs cannot be recorded.
- You cannot record from the DVD analog multichannel input.
- Various restrictions apply to digital recording. Refer to the manuals supplied with your digital recording equipment for more details.
- Digital input signals are output by only the digital outputs, and analog input signals are output by only the analog outputs. There is no internal conversion from digital to analog or vice versa.
- DTS signals will be recorded as noise, so don't attempt analog recording of DTS CDs or LDs.
- While the listening mode is set to Pure Audio, no image is provided because the power is turned off for the video circuit. If you want to make recordings, select other listening mode.

#### AV Recording

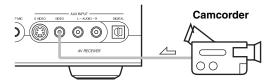
Audio sources can be recorded to a recorder (e.g., cassette deck, CDR, MD) connected to the TAPE OUT jack. Video sources can be recorded to a video recorder (e.g., VCR, DVD recorder) connected to the to VCR/DVR OUT jack. See pages 24 to 39 for hookup information.

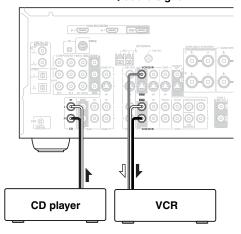
DVD VCR/DVR CBL/SAT  GAME/TV AUX TAPE  TUNER CD	Use the input selector buttons to select the source that you want to record. You can watch the source while recording. The AV receiver/AV amplifier's VOLUME control has no effect on recording.
2	On your recorder, start recording.
	On the source component, start

#### Recording Separate AV Sources

Here you can record audio and video from completely separate sources, allowing you to overdub audio onto your video recordings. This function takes advantage of the fact that when an audio-only input source (i.e., TAPE, TUNER, or CD) is selected, the video input source remains unchanged.

In the following example, audio from the CD player connected to the CD IN, and video from the camcorder connected to the AUX INPUT VIDEO jack are recorded by the VCR connected to the VCR/DVR OUT jacks.



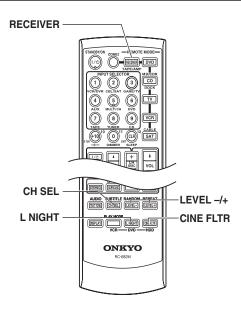


- **1** Prepare the camcorder and CD player for playback.
- **2** Prepare the VCR for recording.
- ? Press the [AUX] input selector button.
- **4** Press the [CD] input selector button.

  This selects the CD player as the audio source, but leaves the camcorder as the video source.
- 5 Start recording on the VCR and start playback on the camcorder and CD player.

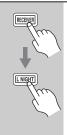
The video from the camcorder and the audio from the CD player are recorded by the VCR.

## **Advanced Operations**



#### Using the Late Night Function (Dolby Digital, Dolby Digital Plus, and Dolby TrueHD only)

With the Late Night function, you can reduce the dynamic range of Dolby Digital, Dolby Digital Plus, and Dolby TrueHD material so that you can still hear quiet parts even when listening at low volume levels—ideal for watching movies late at night when you don't want to disturb anyone.



#### Press the [RECEIVER] button, and then press the [L NIGHT] button repeatedly to select:

#### **Dolby Digital, Dolby Digital Plus:**

**Off:** Late Night function off (default).

**Low:** Small reduction in dynamic range.

**High:** Big reduction in dynamic range.

#### **Dolby TrueHD:**

**Auto:** The Late Night function is set to On or Off automatically (default).

Off: Late Night function off.On: Late Night function on.

#### **Notes:**

- Depending on the design of the contents, there are some materials that will show no effect even when the Late Night mode is operating.
- The Late Night function resets to the default when the AV receiver/AV amplifier is set to Standby.

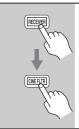
#### **Using the CinemaFILTER**

With the CinemaFILTER, you can soften overly bright movie soundtracks, which are typically mixed for reproduction in a movie theater.

CinemaFILTER can be used with the following listening modes: Dolby Digital, Dolby Digital EX, Dolby Pro Logic IIx Movie, Dolby Pro Logic II Movie, DTS, DTS-ES, DTS Neo:6 Cinema, DTS 96/24, and Neo:6.

#### Note:

The CinemaFILTER may not work when used with certain input sources.

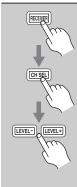


## Press the [RECEIVER] button, and then press the [CINE FLTR] button repeatedly to select:

On: CinemaFILTER on.Off: CinemaFILTER off.

#### **Adjusting Individual Speaker Levels**

You can adjust the level of individual speakers during playback. These adjustments are temporary and will be cancelled when the AV receiver/AV amplifier is set to Standby.



## Press the [RECEIVER] button, use the [CH SEL] button to select each speaker, and use the [LEVEL-] and [LEVEL+] buttons to adjust the volume.

Speakers are selected in the following order: Front Left  $\rightarrow$  Center  $\rightarrow$  Front Right  $\rightarrow$  Surr Right  $\rightarrow$  Surr Back Right  $\rightarrow$  Surr Back Left  $\rightarrow$  Subwoofer.

You can adjust the volume of each speaker from -12 dB to +12 dB (-15 dB to +12 dB for the subwoofer) in 1 dB steps.

The name of the currently selected speaker and its volume appear on the display, as shown.



- You cannot use this function while the AV receiver/ AV amplifier is muted.
- Speakers that are set to No or None in the Speaker Configuration cannot be adjusted.

## Advanced Setup

#### Speaker Setup

Some of the settings in this section are set automatically by the Automatic Speaker Setup function (see page 41). Here you can check the settings made by the Automatic Speaker Setup function, or set them manually, which is useful if you change one of the connected speakers after using the Automatic Speaker Setup function.

#### Speaker Settings

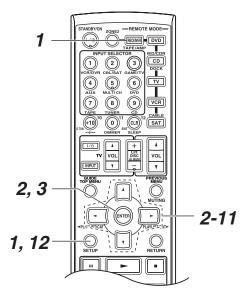
See "Speaker Settings" on page 51.

#### Speaker Configuration

This setting is set automatically by the Automatic Speaker Setup function (see page 41).

With these settings, you can specify which speakers are connected and a crossover frequency for each speaker. The following crossover frequencies can be specified: Full Band, 40 Hz, 50 Hz, 60 Hz, 80 Hz, 100 Hz, 120 Hz, 150 Hz, or 200 Hz.

Specify Full Band for speakers that can output low-frequency bass sounds adequately, for example, speakers with a good sized woofer. For smaller speakers, specify a crossover frequency. Sounds below the crossover frequency will be output by the subwoofer instead of the speaker. Refer to your speaker's manuals to determine the optimum crossover frequencies.



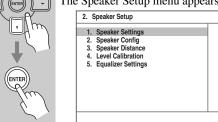
# 1

#### Press the [RECEIVER] button followed by the [SETUP] button.

The main menu appears onscreen.

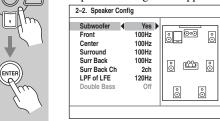
2 Use the Up and Down [▲]/[▼] buttons to select "2. Speaker Setup," and then press [ENTER].

The Speaker Setup menu appears.



3 Use the Up and Down [▲]/[▼] buttons to select "2. Speaker Config," and then press [ENTER].

The Speaker Config menu appears.

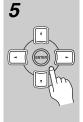


4

Use the Up and Down [▲]/[▼] buttons to select "Subwoofer," and then use the Left and Right [◀]/[▶] buttons to select:

Yes: Select if a subwoofer is connected.

No: Select if no subwoofer is connected.



Use the Up and Down [▲]/[▼] buttons to select "Front," and then use the Left and Right [◄]/ [▶] buttons to select a crossover frequency.

If the Subwoofer setting in step 4 is set to No, this setting is fixed at Full Band.

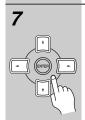


Use the Up and Down [▲]/[▼] buttons to select "Center," and then use the Left and Right [◄]/
[▶] buttons to select a crossover frequency.

If no center speaker is connected, select None.

#### Note:

If the Front setting in step 5 is set to anything other than Full Band, Full Band cannot be selected here.

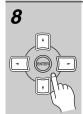


Use the Up and Down [▲]/[▼] buttons to select "Surround," and then use the Left and Right [◄]/[▶] buttons to select a crossover frequency.

If no surround left and right speakers are connected, select None.

#### Note:

If the Front setting in step 5 is set to anything other than Full Band, Full Band cannot be selected here.

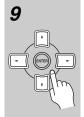


Use the Up and Down [▲]/[▼] buttons to select "Surr Back," and then use the Left and Right [◄]/[▶] buttons to select a crossover frequency.

If no surround back speakers are connected, select None.

#### Notes:

- If the Surround setting in step 7 is set to None, this setting cannot be selected.
- If the Surround setting in step 7 is set to anything other than Full Band, Full Band cannot be selected here.



Use the Up and Down [▲]/[▼] buttons to select "Surr Back Ch," and then use the Left and Right [◄]/[▶] buttons to select:

**1ch:** Select if one surround back speaker is connected.

**2ch:** Select if two (left and right) surround back speakers are connected.

#### Note:

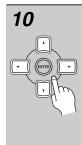
If the Surr Back Setting in step 8 is set to None, this setting cannot be selected.

Continue with step 10 in the right column.

#### Low-Pass Filter for the LFE Channel

This setting is **not** set automatically by the Automatic Speaker Setup function (see page 41).

With this setting, you can specify the cutoff frequency of the LFE channel's low-pass filter (LPF), which can be used to filter out unwanted hum. The LPF only applies to sources that use the LFE channel.



Use the Up and Down [▲]/[▼] buttons to select "LPF of LFE," and then use the Left and Right [◄]/[▶] buttons to select a low-pass filter frequency.

The following low-pass filter frequencies can be selected: 80 Hz, 100 Hz, or 120 Hz (default).

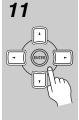
Continue with step 11 below.

#### Double Bass

This setting is **not** set automatically by the Automatic Speaker Setup function (see page 41).

With the Double Bass function, you can boost bass output by feeding bass sounds from the front left and right channels to the subwoofer. This function can be set only if the Subwoofer setting in step 4 is set to Yes, and the Front setting in step 5 is set to Full Band.

In the speaker setup screen, you can choose how bass information is distributed to your speakers only if you have large front left and right speakers AND a subwoofer.



Use the Up and Down [▲]/[▼] buttons to select "Double Bass," and then use the Left and Right

[◀]/[▶] buttons to select:

On: Double Bass function on (default). Front left and right bass also goes to the subwoofer simultaneously.

**Off:** Double Bass function off.



#### Press the [SETUP] button.

The setup menu closes.

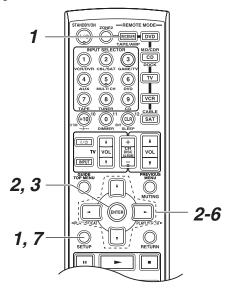
#### Note:

This procedure can also be performed on the AV receiver/AV amplifier by using its [SETUP] button, arrow buttons, and [ENTER] button.

#### Speaker Distance

This setting is set automatically by the Automatic Speaker Setup function (see page 41).

Here you can specify the distance from each speaker to the listening position so that the sound from each speaker arrives at the listener's ears as the sound designer intended.





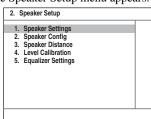
## Press the [RECEIVER] button followed by the [SETUP] button.

The main menu appears onscreen.



## Use the Up and Down [▲]/[▼] buttons to select "2. Speaker Setup," and then press [ENTER].

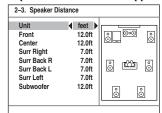
The Speaker Setup menu appears.





## Use the Up and Down [▲]/[▼] buttons to select "3. Speaker Distance," and then press [ENTER].

The Speaker Distance menu appears.



#### Note:

Speakers that you set to No or None on the Speaker Configuration page (page 70) cannot be selected.



## Use the Up and Down [▲]/[▼] buttons to select "Unit," and then use the Left and Right [◄]/[▶] buttons to select:

**feet:** Select if you want to enter distances in feet. Can be set from 1 to 30 feet in 1-foot steps.

meters: Select if you want to enter distances in meters. Can be set from 0.3 to 9 meters in

0.3-meter steps.



## Use the Up and Down $[\blacktriangle]/[\blacktriangledown]$ buttons to select "Front," and then use the Left and Right $[\blacktriangleleft]/[\blacktriangleright]$ buttons to specify the distance.

Specify the distance from the front left speaker to your listening position.

6 Repeat step 5 for all speakers.



#### Press the [SETUP] button.

The setup menu closes.

- The Center and Subwoofer distances can be set up to 5 ft. (1.5 m) more or less than the Front distance. For example, if the Front distance is set to 20 ft. (6 m), the Center and Subwoofer distances can be set between 15 and 25 ft. (4.5 and 7.5 m). The Surr Right, Surr Left, Surr Back R, and Surr Back L distances can be set up to 5 ft. (1.5 m) more or 15 ft. (4.5 m) less than the Front distance. For example, if the Front distance is set to 20 ft. (6 m), the Surr Right, Surr Left, Surr Back R, and Surr Back L distances can be set between 5 and 25 ft. (1.5 and 7.5 m).
- This procedure can also be performed on the AV receiver/AV amplifier by using its [SETUP] button, arrow buttons, and [ENTER] button.

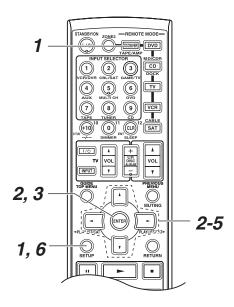
#### Speaker Level Calibration

This setting is set automatically by the Automatic Speaker Setup function (see page 41).

Here you can adjust the level of each speaker with the built-in test tone so that the volume of each speaker is the same at the listening position.

#### Note:

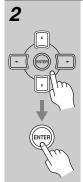
The speakers cannot be calibrated while the output of the AV receiver/AV amplifier is muted or while a pair of headphones is connected.





## Press the [RECEIVER] button followed by the [SETUP] button.

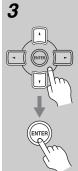
The main menu appears onscreen.



## Use the Up and Down [▲]/[▼] buttons to select "2. Speaker Setup," and then press [ENTER].

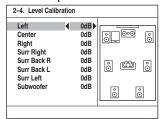
The Speaker Setup menu appears.





# Use the Up and Down $[\blacktriangle]/[\blacktriangledown]$ buttons to select "4. Level Calibration," and then press [ENTER].

The Level Calibration menu appears and the pink noise test tone is output by the front left speaker.



#### Note:

Speakers that you set to No or None on the Speaker Configuration page (page 70) cannot be selected.



Use the Up and Down [▲]/[▼] buttons to select each speaker, and use the Left and Right [◄]/
[▶] buttons to set the volume.

The volume can be adjusted from -12 to +12 dB (-15 dB to +12 dB for the subwoofer) in 1 dB steps.

5

Repeat step 4 until the volume of the test tone from each speaker is the same.



#### Press the [SETUP] button.

The setup menu closes.

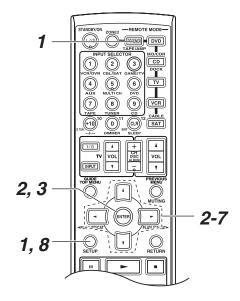
#### Notes:

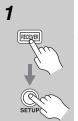
- This procedure can also be performed by using the remote controller. First press the [TEST TONE] button to output the test tone. Use the [LEVEL-] and [LEVEL+] buttons to set the volume, and use the [CH SEL] button to select the speakers.
- This procedure can also be performed on the AV receiver/AV amplifier by using its [SETUP] button, arrow buttons, and [ENTER] button.

#### **Equalizer Setting**

This setting is set automatically by the Automatic Speaker Setup function (see page 41).

Here you can adjust the EQ of individual speakers. To set the volume of individual speakers see page 73.





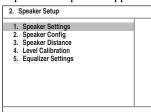
## Press the [RECEIVER] button followed by the [SETUP] button.

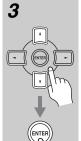
The main menu appears onscreen.



Use the Up and Down [▲]/[▼] buttons to select "2. Speaker Setup," and then press [ENTER].

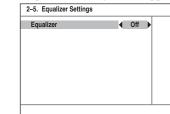
The Speaker Setup menu appears.





# Use the Up and Down [▲]/[▼] buttons to select "5. Equalizer Settings," and then press [ENTER].

The Equalizer Settings menu appears.





## Use the Left and Right [◀]/[▶] buttons to select:

Off: Tone off, response flat.

**Audyssey:** The tone for each speaker is set automatically by the Automatic Speaker Setup function.

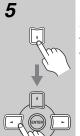
Be sure to select this setting after having performed the Automatic

Speaker Setup.

Manual: You can adjust the EQ of

each speaker manually.

If you select Manual, continue with this procedure. If you select Off or Audyssey, go to step 8.



Use the Down [▼] button to select "Channel," and then use the Left and Right [◄]/[▶] buttons to select a speaker.

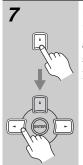
Equalizer Manual Channel	2-5. Equalizer Settings	
80Hz 0dB 250Hz 0dB 800Hz 0dB 2500Hz 0dB	Equalizer	Manual
250Hz 0dB 800Hz 0dB 2500Hz 0dB	Channel	◆ Front
800Hz 0dB 2500Hz 0dB	80Hz	0dB
2500Hz 0dB	250Hz	0dB
	800Hz	0dB
000011-	2500Hz	0dB
8000HZ 00B	8000Hz	0dB



Use the Up and Down [▲]/[▼] buttons to select a frequency, and then use the Left and Right [◄]/[▶] buttons to adjust the level at that frequency.

The volume at each frequency can be adjusted from –6 to +6 dB in 1 dB steps.

**Tip:** Low frequencies (e.g., 80 Hz) affect bass sounds; high frequencies (e.g., 8000 Hz) affect treble sounds.



Use the Up [▲] button to select "Channel," and then use the Left and Right [◄]/[▶] buttons to select another speaker.

Repeat step 6 and 7 for each speaker.



#### Press the [SETUP] button.

The setup menu closes.

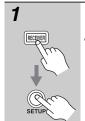
#### Notes:

- When the listening mode is set to Direct or Pure Audio, no effect will be produced.
- Depending on the input source or listening mode, the Equalizer settings may not produce the desired effect.
- This procedure can also be performed on the AV receiver/AV amplifier by using its [SETUP] button, arrow buttons, and [ENTER] button.

#### **Multichannel DVD Input Settings**

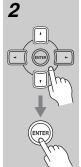
#### Subwoofer Input Sensitivity

Some DVD players output the LFE channel from their subwoofer output at 15 dB higher than normal. You can change the subwoofer sensitivity to match your DVD player. Note that this setting only affects signals connected to the SUBWOOFER input jack of the multichannel DVD input.



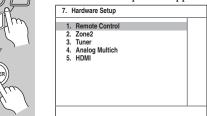
## Press the [RECEIVER] button followed by the [SETUP] button.

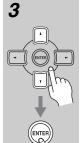
The main menu appears onscreen.



## Use the Up and Down [▲]/[▼] buttons to select "7. Hardware Setup," and then press [ENTER].

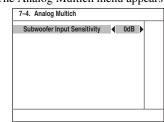
The Hardware Setup menu appears.

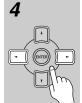




## Use the Up and Down [▲]/[▼] buttons to select "4. Analog Multich," and then press [ENTER].

The Analog Multich menu appears.





## Use the Left and Right [◀]/[▶] buttons to select a value.

You can select 0 dB, 5 dB, 10 dB, or 15 dB

If you find that your subwoofer is too loud, try the 10 dB or 15 dB setting.



#### Press the [SETUP] button.

The setup menu closes.

#### Note:

This procedure can also be performed on the AV receiver/AV amplifier by using its [SETUP] button, arrow buttons, and [ENTER] button.

#### **Audio Adjust Functions**

Here you can set listening mode-related settings and functions.



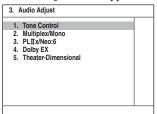
## Press the [RECEIVER] button followed by the [SETUP] button.

The main menu appears onscreen.



## Use the Up and Down [▲]/[▼] buttons to select "3. Audio Adjust," and then press [ENTER].

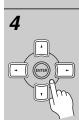
The Audio Adjust menu appears.





## Use the Up and Down [▲]/[▼] buttons to select the functions, and then press [ENTER].

The function menu you selected appears.



Use the Up and Down [▲]/[▼] buttons to select the settings, and use the Left and Right [◄]/
[▶] buttons to set them.

The settings are explained below.



When you've finished, press the [SETUP] button.

The setup menu closes.

#### Note:

This procedure can also be performed on the AV receiver/AV amplifier by using its [SETUP] button, arrow buttons, and [ENTER] button.

The Audio Adjust functions are explained below.

#### Tone Control Settings

You can adjust the bass and treble for the front speakers, except when the Direct or Pure Audio (not North American models) listening mode is selected.

#### **■** Front Bass

You can boost or cut low-frequency sounds output by the front speakers from –10 dB to +10 dB in 2 dB steps.

#### **■** Front Treble

You can boost or cut high-frequency sounds output by the front speakers from -10 dB to +10 dB in 2 dB steps.

#### Input Channel Settings

#### ■ Multiplex Input Ch

This setting determines which channel is output from a stereo multiplex source. Use it to select audio channels or languages with multiplex sources, multilingual TV broadcasts, and so on.

Main: The main channel is output (default).

**Sub:** The sub channel is output.

Main/Sub: Both the main and sub channels are output.

#### **■** Mono Input Ch

This setting specifies the channel to be used for playing any 2-channel digital source such as Dolby Digital, or 2-channel analog/PCM source in the Mono listening mode.

**L+R:** Both the left and right channels are output (default).

L: Only the left channel is output.

**R:** Only the right channel is output.

#### PLIIx/Neo:6 Music Mode Settings

These settings provide for playing any 2-channel digital source such as Dolby Digital, or 2-channel analog/PCM source in the PLIIx Music listening mode.

#### ■ Panorama

With this function, you can broaden the width of the front stereo image when using the Pro Logic II Music or Pro Logic IIx Music listening mode.

On: Panorama function on.

Off: Panorama function off (default).

#### ■ Dimension

With this setting, you can move the sound field forward or backward when using the Pro Logic II Music or Pro Logic IIx Music listening mode. It can be adjusted from –3 to +3 (default is 0). Lower settings move the sound field forward. Higher settings move it backward. If the stereo image feels too wide, or there is too much surround sound, move the sound field forward to improve the balance. Conversely, if the stereo image feels like it is in mono, or there is not enough surround sound, move it backward.

#### **■** Center Width

With this function, you can adjust the width of the sound from the center speaker when using the Pro Logic II Music or Pro Logic IIx Music listening mode. Normally if you are using a center speaker, the center channel sound is output by only the center speaker. (If you are not using a center speaker, the center channel sound will be distributed to the front left and right speakers to create a phantom center.) This setting controls the front left, right, and center mix, allowing you to adjust the weight of the center channel sound. It can be adjusted from 0 to 7 (default is 3).

#### ■ Center Image

The DTS Neo:6 Music listening mode creates 6-channel surround sound from 2-channel (stereo) sources. With this setting, you can specify by how much the front left and right channel output is attenuated in order to create the center channel. It can be adjusted from 0 to 5 (default is 2). This setting is unavailable if no surround speakers are connected.

When set to 0, the front left and right channel output is attenuated by half (–6 dB), giving the impression that the sound is located centrally. This setting works well when the listening position is considerably off center. When set to 5, the front left and right channels are not attenuated, maintaining the original stereo balance.

#### Dolby EX Input Signal Setting

#### ■ Dolby EX

This setting determines how Dolby EX encoded signals are handled. This setting is unavailable if no surround back speakers are connected. This setting is effective with Dolby Digital and Dolby Digital Plus only.

**Auto:** If the source signal contains a Dolby EX flag, the Dolby EX listening mode is used

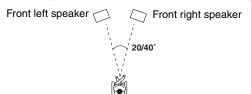
(default).

Manual: You can select any available listening mode.

## T-D (Theater-Dimensional) Listening Setting

#### **■ Listening Angle**

With this setting, you can specify the angle of the front left and right speakers relative to the listening position. Processing for the Theater-Dimensional listening mode is based on this setting. Ideally, the front left and right speakers should be equidistant from the listening position and at an angle close to one of the two available settings.



**Narrow:** Select if the listening angle is 20 degrees. **Wide:** Select if the listening angle is 40 degrees

(default).

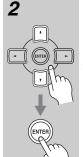
## Assigning Listening Modes to Input Sources

You can assign a default listening mode to each input source that will be selected automatically when you select each input source. For example, you can set the default listening mode to be used with Dolby Digital input signals. You can select other listening modes during playback, but the mode specified here will be resumed once the AV receiver/AV amplifier has been set to Standby.



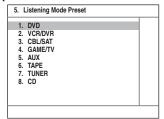
## Press the [RECEIVER] button followed by the [SETUP] button.

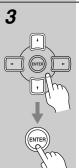
The main menu appears onscreen.



Use the Up and Down [▲]/[▼] buttons to select "5. Listening Mode Preset," and then press [ENTER].

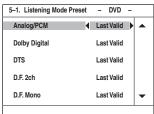
The Listening Mode Preset menu appears.





Use the Up and Down [▲]/[▼] buttons to select the input source that you want to set, and then press [ENTER].

The signal format selection menu appears.



For input selectors that have no digital input jacks, only "Analog" will be available.



Use the Up and Down [▲]/[▼] buttons to select the signal format that you want to set, and then use the Left and Right [◄]/
[▶] buttons to select a listening mode.

Only listening modes that can be used with each input signal format can be selected.

The Last Valid option means that the listening mode selected last will be used.

Analog/PCM: With this setting, you can specify the listening mode to be used when an analog (CD, TV, LD, VHS, MD, turntable, radio, cassette, cable, satellite, etc.) or PCM digital (CD, DVD, etc.) audio signal is played. Dolby Digital: With this setting, you can specify the listening mode to be used when a Dolby Digital format digital audio signal is played (DVD, etc.). DTS: With this setting, you can specify the listening mode to be used when a DTS format digital audio signal is played (DVD, LD, CD, etc.).

**D.F. 2ch:** With this setting, you can specify the listening mode to be used when a 2-channel (2/0) digital audio signal (Dolby Digital, DTS) is played (DVD, etc.).

**D.F. Mono:** With this setting, you can specify the listening mode to be used when a mono digital audio signal is played (DVD, etc.).

**Multich PCM:** Specifies the default listening mode for multichannel PCM sources input via a HDMI IN, such as DVD-Audio.

**192k/176.4k:** Specifies the default listening mode for high resolution 176.4 kHz and 192 kHz digital audio sources such as DVD-Audio.

**Dolby TrueHD:** Specifies the default listening mode for Dolby TrueHD sources, such as Blu-ray or HD DVD (input via HDMI).

**DTS-HD Master Audio:** Specifies the default listening mode for DTS-HD Master Audio sources, such as Blu-ray or HD DVD (input via HDMI).



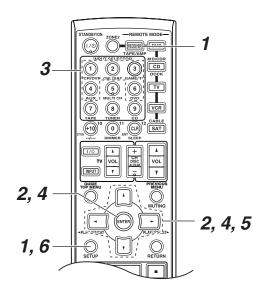
## When you've finished, press the [SETUP] button.

The setup menu closes.

#### Note:

This procedure can also be performed on the AV receiver/AV amplifier by using its [SETUP] button, arrow buttons, and [ENTER] button.

#### **Source Setup**



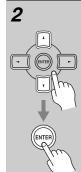
#### IntelliVolume

You can set the input level for each input source. This is useful if some of your AV components are louder or quieter than others. IntelliVolume does not affect Zone 2. While this menu is shown onscreen, you can select each input source and set the levels while listening to and comparing them.



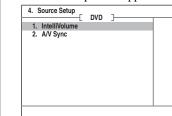
## Press the [RECEIVER] button followed by the [SETUP] button.

The main menu appears onscreen.



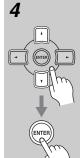
## Use the Up and Down [▲]/[▼] buttons to select "4. Source Setup," and then press [ENTER].

The Source Setup menu appears.





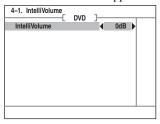
Use the INPUT SELECTOR buttons on the remote controller to select the input source that you want to set.

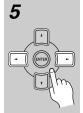


## Use the Up and Down [▲]/[▼] buttons to select

"1. IntelliVolume," and then press [ENTER].

The IntelliVolume menu appears.





If a component is too loud compared to your other components, use the Left [◀] button to adjust the level. If it's too quiet, use the Right [▶] button.

• The level can be set from -12 dB to +12 dB in 1 dB steps.



When you're finished, press the [SETUP] button.

The setup menu closes.

#### Correcting Sound and Picture Sync

When using progressive scanning on your DVD player, you may find that the picture and sound are out of sync. With this setting, you can correct this by delaying the audio signals. You can set it from 0 to 100 milliseconds (msec) in 10 millisecond steps.



## Press the [RECEIVER] button followed by the [SETUP] button.

The main menu appears onscreen.



# Use the Left and Right [◄]/[▶] buttons to adjust the delay from 0 to 100 milliseconds in 10 millisecond steps.

To view the TV picture while setting the delay, press [ENTER].

#### Note:

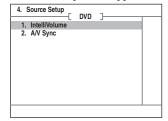
This setting is not available when the Pure Audio listening mode is used, or the Direct listening mode is used with an analog input signal.





Use the Up and Down [▲]/[▼] buttons to select "4. Source Setup," and then press [ENTER].

The Source Setup menu appears.







Use the INPUT SELECTOR buttons on the remote controller to select the input source that you want to correct.

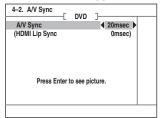
This can be the [DVD], [VCR/DVR], [CBL/SAT], [GAME/TV] or [AUX] input source.

4



Use the Up and Down [▲]/[▼] buttons to select "2. A/V Sync," and then press [ENTER].

The A/V Sync menu appears.



If HDMI Lip Sync is enabled (see page 84), and your TV or display supports HDMI Lip Sync, the HDMI Lip Sync delay time is displayed underneath in parentheses.

#### **Volume Setup/OSD Setup**

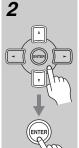
This section explains the items on the Miscellaneous menu.

#### Volume Setup



## Press the [RECEIVER] button followed by the [SETUP] button.

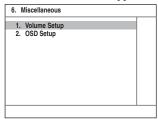
The main menu appears onscreen.

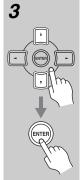


## Use the Up and Down [▲]/[▼] buttons to select "6. Miscellaneous." and then

"6. Miscellaneous," and then press [ENTER].

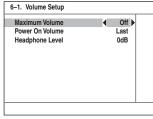
The Miscellaneous menu appears.





## Use the Up and Down [▲]/[▼] buttons to select "1. Volume Setup," and then press [ENTER].

The Volume Setup menu appears.





# Use the Up and Down [▲]/[▼] buttons to select the settings, and use the Left and Right [◄]/ [▶] buttons to set them.

#### **Maximum Volume**

With this preference, you can prevent the volume being set too high by specifying a maximum volume level. The range is from 50 to 99. To specify no maximum volume, select Off.

#### **Power On Volume**

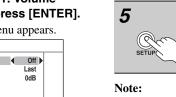
With this preference, you can specify the volume setting to be used each time the AV receiver/AV amplifier is turned on.

The range is MIN, 1-99, MAX. To use the same volume level that was used when the AV receiver/AV amplifier was turned off, select Last.

The "Power On Volume" cannot be set higher than the "Maximum Volume" setting.

#### **Headphone Level**

With this preference, you can specify the headphone volume relative to the main volume. This is useful if there's a volume difference between your speakers and your headphones. The headphones level can be set from –12 dB to +12 dB.



## When you've finished, press the [SETUP] button.

The setup menu closes.

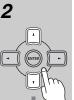
This procedure can also be performed on the AV receiver/AV amplifier by using its [SETUP] button, arrow buttons, and [ENTER] button.

#### OSD Setup



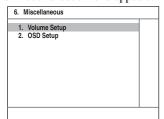
## Press the [RECEIVER] button followed by the [SETUP] button.

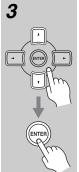
The main menu appears onscreen.



# Use the Up and Down [▲]/[▼] buttons to select "6. Miscellaneous," and then press [ENTER].

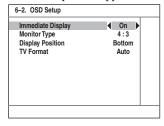
The Miscellaneous menu appears.





## Use the Up and Down [▲]/[▼] buttons to select "2. OSD Setup," and then press [ENTER].

The OSD Setup menu appears.





# Use the Up and Down [▲]/[▼] buttons to select the settings, and use the Left and Right [◄]/ [▶] buttons to set them.

These settings determine how the operation details are displayed.

#### Immediate Display

This preference determines whether operation details are displayed onscreen when an AV receiver/AV amplifier function is adjusted.

On: Displayed (default).

Off: Not displayed.

Even when On is selected, operation details are not output if the input source is connected to a COMPONENT VIDEO IN or HDMI IN.

#### **Monitor Type**

With this preference, you can specify the aspect ratio of your TV so that the operation details are displayed properly.

**4:3:** Select if your TV is 4:3 (default).

**16:9:** Select if your TV is 16:9.

#### **Display Position**

This preference determines where on the screen operation details are displayed.

Bottom: Bottom of the screen

(default).

**Top:** Top of the screen.

### TV Format (not North American models)

See "TV Format Setup (not North American models)" on page 52.



## When you've finished, press the [SETUP] button.

The setup menu closes.

#### Note:

This procedure can also be performed on the AV receiver/AV amplifier by using its [SETUP] button, arrow buttons, and [ENTER] button.

## Changing the AV Receiver/AV Amplifier's ID



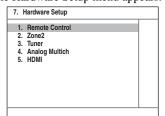
Press the [RECEIVER] button followed by the [SETUP] button.

The main menu appears onscreen.



Use the Up and Down [▲]/[▼] buttons to select "7. Hardware Setup," and then press [ENTER].

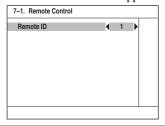
The Hardware Setup menu appears.

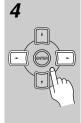




Use the Up and Down [▲]/[▼] buttons to select "1. Remote Control," and then press [ENTER].

The Remote Control menu appears.





Use the Left and Right [◀]/[▶] buttons to select a value.

#### Remote ID

With this setting, you can change the AV receiver/AV amplifier's remote control ID. You may need to change this if the remote controller's control codes overlap with those of another Onkyo component located in the same room. If you change the AV receiver/AV amplifier's remote control ID, be sure to set the same ID on both the AV receiver/AV amplifier and remote controller (see page 86). The default ID for both is 1.

#### Note:

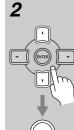
This procedure can also be performed on the AV receiver/AV amplifier by using its [SETUP] button, arrow buttons, and [ENTER] button.

#### **HDMI Setup**



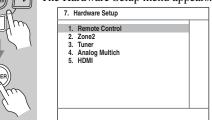
Press the [RECEIVER] button followed by the [SETUP] button.

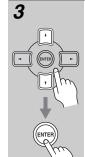
The main menu appears onscreen.



Use the Up and Down [▲]/[▼] buttons to select "7. Hardware Setup," and then press [ENTER].

The Hardware Setup menu appears.

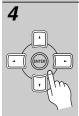




Use the Up and Down [▲]/[▼] buttons to select "5. HDMI," and then press [ENTER].

The HDMI menu appears.





Use the Up and Down [▲]/[▼] buttons to select the settings and use the Left and Right [◄]/[▶] buttons to select them.

The HDMI settings are explained on page 84.

#### **HDMI Audio Out**

This preference determines whether audio received at the HDMI IN is output by the HDMI OUT. You may want to turn this preference on if your TV is connected to the HDMI OUT and you want to listen to the audio from a component that's connected to an HDMI IN, through your TV's speakers. Normally, this should be set to Off.

Off: HDMI audio is not output (default).

On: HDMI audio is output.

#### Notes:

- If On is selected and the signal can be output by the TV, the AV receiver/AV amplifier will output no sound through its speakers.
- When TV Control is enabled, this setting is set to Auto.
- With some TVs and input signals, no sound may be output even when this setting is set to On.

#### Lip Sync

The AV receiver/AV amplifier can be set to automatically correct any delay between the video and the audio, based on the data from the connected monitor.

**Disable:** HDMI lip sync disabled. **Enable:** HDMI lip sync enabled.

#### Notes

- This function works only if your HDMI-compatible TV supports HDMI Lip Sync.
- You can check the amount of delay being applied by the HDMI Lip Sync function on the A/V Sync screen (see page 80).

#### **xvYCC**

If you set the xvYCC color function to Enable while a source and monitor that both support the xvYCC color standard are connected to HDMI, the color quality will be improved.

**Disable:** xvYCC color disabled. **Enable:** xvYCC color enabled.

#### Notes:

- If the color is unnatural when xvYCC color is set to Enable, change the setting to Disable.
- Refer to the connected component's instruction manual for details.

#### Control

This function allows CEC-standard-compatible equipment connected to HDMI and RIHD-compatible equipment to be operated together with the AV receiver/AV amplifier.

**Disable:** HDMI Control disabled. **Enable:** HDMI Control enabled.

#### Notes:

- Set to Disable when a connected piece of equipment is not compatible or it is unclear whether the equipment is compatible or not.
- If movement is unnatural when set to Enable, change the setting to Disable.
- Refer to the connected component's instruction manual for details.

#### **■** Power Control

To link the electrical connection of CEC-standard-compatible equipment and RIHD-compatible equipment by means of HDMI, set to Enable. However, it may not be possible to power link equipment, depending on the settings and compatibility of the connected equipment.

**Disable:** Power Control disabled. **Enable:** Power Control enabled.

#### **Notes:**

- The Power Control setting can be set only when the above Control setting is set to Enable.
- HDMI power control only works with HDMI-compatible components that support it.
- When set to Enable, power consumption will increase. (North American models)
- The AV receiver/AV amplifier enters Ready mode when set to Standby. (not North American models)
- Refer to the connected component's instruction manual for details.

#### **■ TV Control**

Set to Enable when you want to control the AV receiver/ AV amplifier from an RIHD-compatible TV that is connected to HDMI.

**Disable:** TV Control disabled. **Enable:** TV Control enabled.

#### Notes:

- Set to Disable when the TV is not compatible or when it is unclear whether the TV is compatible or not.
- The Power Control setting can be set only when the above Control and Power Control settings are both set to Enable.
- Refer to the connected component's instruction manual for details.

#### Note:

After changing the settings of the Control, Power Control, or TV Control, turn off the power to all connected pieces of equipment and then turn on again. Refer to the User's Manuals for all connected pieces of equipment.

#### **Lock Setup**



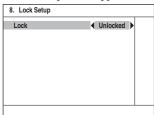
## Press the [RECEIVER] button followed by the [SETUP] button.

The main menu appears onscreen.



Use the Up and Down [▲]/[▼] buttons to select "8. Lock Setup," and then press [ENTER].

The Lock Setup menu appears.



With this preference, you can protect your settings by locking the setup menus.

When the setup menus are locked, you cannot change any setting.

**Locked:** Setup menus locked. **Unlocked:** Setup menus not locked.

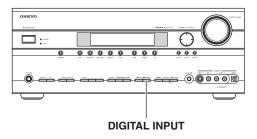
#### **Digital Input Signal Formats**

The digital input signal formats are available only for the input sources that you have assigned a digital input jack; otherwise you will see "Analog" indicated on the screen (see page 50).

Normally, the AV receiver/AV amplifier detects the signal format automatically. However, if you experience either of the following issues when playing PCM or DTS material, you

can manually set the signal format to PCM or DTS:

- If the beginnings of tracks from a PCM source are cut off, try setting the format to PCM.
- If noise is produced when fast forwarding or reversing a DTS CD, try setting the format to DTS.



- Press and hold the AV receiver/AV amplifier's [DIGITAL INPUT] button for about 3 seconds.
- While "Auto" is displayed (about 3 seconds), press the [DIGITAL INPUT] button again to select: PCM, DTS, or Auto.

**DTS or PCM:** The DTS or PCM indicator, depending on which format you have set, flashes, and only signals in that format are output. Digital signals in other formats are ignored.

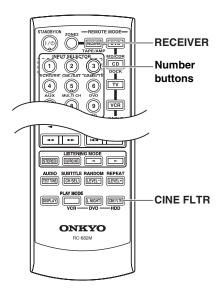
**Auto (default):** The format is detected automatically. If no digital input signal is present, the corresponding analog input is used instead.

#### **Changing the Remote Controller's ID**

If several Onkyo components are used in the same room, the remote controller's control codes may overlap with those of another component. To differentiate the remote controller's control codes, you can change its ID to another number.

#### Note:

If you change the remote controller's ID, be sure to set the same ID on both the remote controller and AV receiver/AV amplifier (see "Changing the AV Receiver/ AV Amplifier's ID" on page 83). The default ID for both is 1.



**1** Hold down the [RECEIVER] and the [CINE FLTR] buttons at the same time.

The [RECEIVER] button lights up.

2 Use the number buttons to enter a remote control ID.

You can enter 1, 2, or 3.

#### **Connecting Zone 2**

With the Zone 2 function, you can enjoy one input source in the main room and a different source in another room.

There are two connection methods: using a receiver/integrated amp in Zone 2 or using only a pair of speakers in Zone 2.

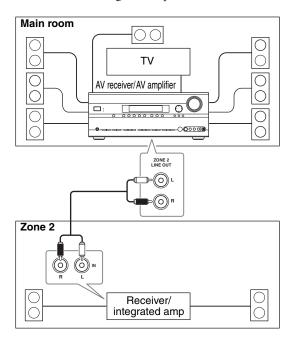
#### Note:

For speaker connections and related cautions, see page 20.

#### Using a Receiver/Integrated Amp in Zone 2

With this connection method, you can use 7.1 surround sound in the main room and play a different AV source in Zone 2. The volume for Zone 2 is set on the receiver/integrated amp.

- Use an RCA audio cable to connect the AV receiver/ AV amplifier's ZONE 2 LINE OUT L/R jacks to an analog audio input on your receiver/integrated amp.
- Connect the Zone 2 speakers to the speaker terminals on the receiver/integrated amp.



#### Using Only Speakers in Zone 2

With this connection method, you can use 5.1 surround sound in the main room and play a different AV source in Zone 2. The volume for Zone 2 is set on the AV receiver/AV amplifier.

- Set the Powered Zone2 setting to "Act" (see page 88).
- Connect your Zone 2 speakers to the AV receiver/AV amplifier's ZONE 2 SPEAKERS terminals.

#### North American models

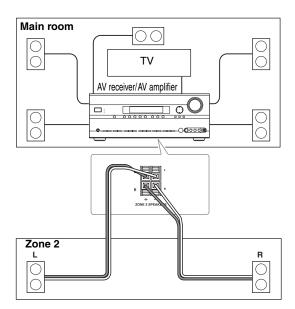
1 Strip 3/8" (10 mm) of insulation from the ends of the speaker cables, and twist the bare wires tightly, as shown.



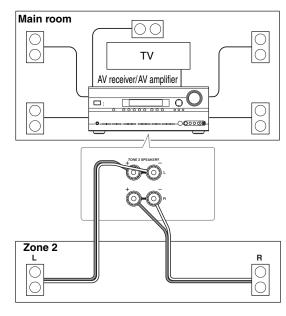
While pressing the lever, insert the wire into the hole, and then release the lever.

Make sure that the terminals are gripping the bare wires, not the insulation.





#### Other models



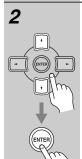
#### **Setting the Powered Zone 2**

To use Zone 2, you must make this setting. It enables the speakers connected to the ZONE 2 SPEAKERS terminals so that they produce sound when Zone 2 is used.



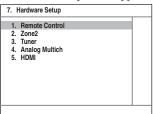
## Press the [RECEIVER] button followed by the [SETUP] button.

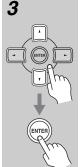
The main menu appears onscreen.



## Use the Up and Down [▲]/[▼] buttons to select "7. Hardware Setup," and then press [ENTER].

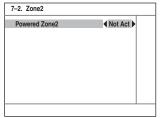
The Hardware Setup menu appears.





## Use the Up and Down [▲]/[▼] buttons to select "2. Zone2," and then press [ENTER].

The Zone2 menu appears.





### Use the Left and Right [◄]/[▶] buttons to select:

**Not Act:** ZONE 2 SPEAKERS terminals deactivated.

Act: ZONE 2 SPEAKERS terminals activated.

When Zone 2 is activated and turned on (see below), the speakers connected to the ZONE 2 SPEAKERS terminals output sound, but the speakers connected to the SURR BACK SPEAKERS terminals do not (when Zone 2 is activated but not used, the surround back speakers work as normal).



#### Press the [SETUP] button.

The setup menu closes.

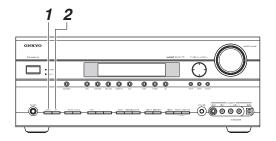
#### Note:

This procedure can also be performed on the AV receiver/AV amplifier by using its [SETUP] button, arrow buttons, and [ENTER] button.

#### **Using Zone 2**

This section explains how to turn Zone 2 on and off, how to select an input source for Zone 2, and how to adjust the volume for Zone 2.

## Controlling Zone 2 from the AV receiver/AV amplifier





To turn on Zone 2 and select an input source, press the [ZONE 2] button repeatedly.

Alternatively, press the [ZONE 2] button followed by an input selector button within 8 seconds.

Zone 2 turns on and ZONE 2 indicator lights up.

To select AM or FM press the [TUNER] input selector button repeatedly (TX-SR605 only).

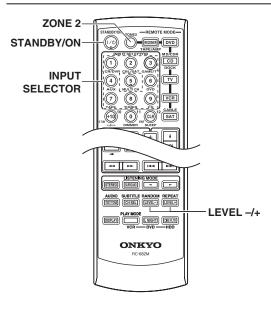
To select the same source as that of the main room, press the [ZONE 2] button repeatedly until "Z2 Sel: Source" appears.

2



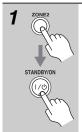
To turn off Zone 2, press the ZONE 2 [OFF] button.

## Controlling Zone 2 with the Remote Controller



#### Note:

• To control Zone 2, you must press the remote controller's [ZONE 2] button first.



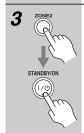
Press the [ZONE 2] button, then point the remote controller at the AV receiver/AV amplifier and press the [STANDBY/ON] button.

Zone 2 turns on and ZONE 2 indicator lights up.



To select an input source for Zone 2, press the [ZONE 2] button, followed by an INPUT SELECTOR button.

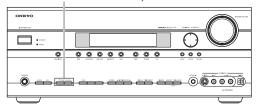
To select AM or FM press the [TUNER] INPUT SELECTOR button repeatedly.

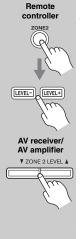


To turn off Zone 2, press the [ZONE 2] button, followed by the [STANDBY/ON] button.

#### Adjusting the Volume for Zone 2

#### ZONE 2 LEVEL ▲,▼





On the remote controller, press the [ZONE 2] button, and then use the [LEVEL-] and [LEVEL+] buttons.

On the AV receiver/AV amplifier, use the ZONE 2 LEVEL [▲]/[▼] buttons.

If your Zone 2 speakers are connected to an amp in Zone 2, use its volume control to adjust the volume.

#### To Mute Zone 2:

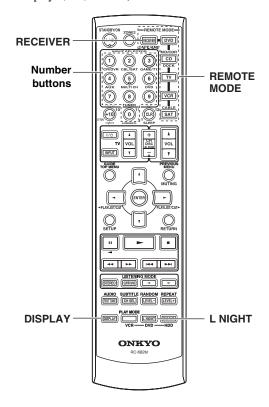
Press the remote controller's [ZONE 2] button, followed by the [MUTING] button. To unmute Zone 2, press the remote controller's [ZONE 2] button again, followed by the [MUTING] button, or adjust the volume for Zone 2.

#### Notes:

- Only analog input sources are output by the ZONE 2 LINE OUT and ZONE 2 SPEAKERS terminals. Digital input sources are not output. If no sound is heard when an input source is selected, check if it's connected to an analog input.
- While Zone 2 is being used, listening modes that need surround back speakers (i.e., Dolby Digital EX and DTS-ES) are unavailable.
- While Zone 2 is on, RI functions will not work.
- You can't select different radio stations for Zone 2 and the main room. For example, if you have an FM station for the main room, that station will also be used in Zone 2.

### **Controlling Other Components**

You can use the AV receiver/AV amplifier's remote controller (RC-682M) to control your other AV components, including those made by other manufacturers. This section explains how to enter the necessary remote control code for the component that you want to control (e.g., DVD player, TV, or VCR).



#### **Entering Remote Control Codes**

To control another component, you must first enter the appropriate remote control code to a REMOTE MODE button. You'll need to enter a code for each component that you want to control.

Look up the appropriate remote control code in the separate Remote Control Codes list.

The codes are organized by category

(e.g., DVD player, TV, etc.).

RECEIRS DVD
TAPE/AMP MD/CDR
CD
VCR
VCR
CABLE
SAT

While holding down the REMOTE MODE button that you want to set, press the [DISPLAY] button for 3 seconds.

The REMOTE MODE button lights up.

Within 30 seconds, use the number buttons to enter the 4-digit remote control code.

The REMOTE MODE button flashes twice.

Press the REMOTE MODE button again to select the remote controller mode, point the remote controller at the component, and check the operation.

If the remote controller doesn't work as expected, and several remote codes are listed, try each one in turn and use the one that works best.

#### Notes:

- A remote control code cannot be entered for the [RECEIVER] REMOTE MODE button.
- The remote control codes provided are correct at the time of printing, but are subject to change.

## Remote Control Codes for Onkyo Components Connected via RI

Onkyo components that are connected via **P1** are controlled by pointing the remote controller at the AV receiver/AV amplifier, not the component. This allows you to control components that are out of view, in a rack, for example.

Make sure the Onkyo component is connected with an rall cable and an analog audio cable (RCA).

See page 39 for details.

Enter the appropriate remote control code for the [DVD] or [CD] REMOTE MODE button.

[DVD] REMOTE MODE button

**1612:** Onkyo DVD player with **□** 

[CD/MD/CDR/DOCK] REMOTE MODE button

1327: Onkyo CD player with RI

1808: Onkyo MD recorder with □1

1322: Onkyo CD recorder with RI

1993: Onkyo RI Dock with RI

See the previous page for how to enter remote control codes.

Press the [DVD] or [CD] REMOTE MODE button, point the remote controller at the AV receiver/AV amplifier, and operate the component.

If you want to control an Onkyo component by pointing the remote controller directly at it, or you want to control an Onkyo component that's not connected via RI, use the following remote control codes:

[DVD] REMOTE MODE button

**0627:** Onkyo DVD player without **□** (default)

[CD/MD/CDR/DOCK] REMOTE MODE button

**1817:** Onkyo CD player without □ (default) **0868:** Onkyo MD recorder without □ I

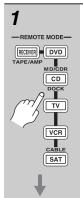
1323: Onkyo CD recorder without ☐1
2990: Onkyo RI Dock without ☐1

#### Note:

If you connect an PI-capable Onkyo MD recorder, CD recorder, or RI Dock to the TAPE IN/OUT or GAME/ TV jacks, for remote operation to work properly, you must set the input display to MD, CDR, or DOCK (see page 51).

#### **Resetting REMOTE MODE Buttons**

You can reset a REMOTE MODE button to its default remote control code.



While holding down the REMOTE MODE button that you want to reset, press the [L NIGHT] button for 3 seconds.

The REMOTE MODE button lights up.



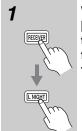
## Press the REMOTE MODE button again.

The REMOTE MODE button flashes twice, indicating that it's been reset.

The [DVD] and [CD] REMOTE MODE buttons are preprogrammed with remote control codes for controlling Onkyo DVD players and CD players respectively. When these buttons are reset, the preprogrammed code is restored.

#### Resetting the Remote Controller

You can reset the remote controller to its default settings.



While holding down the [RECEIVER] REMOTE MODE button, press the [L NIGHT] button for 3 seconds.

The [RECEIVER] button lights up.



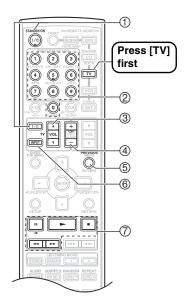
## Press the [RECEIVER] REMOTE MODE button again.

The [RECEIVER] button flashes twice, indicating that it's been reset.

#### **Controlling Other Components**—Continued

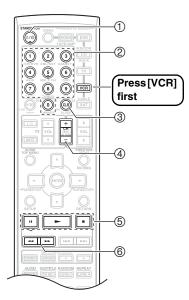
To control another component, point the remote controller at it and use the buttons explained below. (You must select the appropriate remote control mode first.) With some AV components, certain buttons may not work as expected, and some may not work at all.

#### ■ Controlling a TV



- ① **[STANDBY/ON], TV [ ]**/()]\* Sets the TV to Standby or On.
- ② Number buttons
  Enter numbers.
- ③ **TV VOL** [▲]/[▼]\*
  Adjusts the TV's volume.
- ④ [CH +/-] Selects channels on the TV.
- ⑤ [PREVIOUS]
  Selects the previous channel.
- ⑤ [TV INPUT]\* Selects the TV's VCR input.
- $\bigcirc$  [11], [ $\blacktriangleright$ ], [ $\blacksquare$ ], [ $\blacktriangleleft$ ], [ $\blacktriangleright$ ] Operates the VCR.
- \* Buttons marked with an asterisk (\*) are exclusively for controlling a TV and can be used at anytime regardless of the current remote controller mode.

#### ■ Controlling a VCR

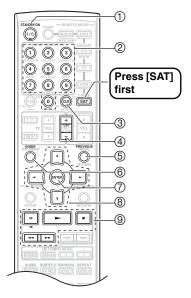


① [STANDBY/ON]
Sets the VCP to Standh

Sets the VCR to Standby or On.

- ② **Number buttons** Select channels.
- ③ [CLR]
  Cancels functions.
- ④ [CH +/-] Selects channels on the VCR.
- ⑤ [11], [▶], [■]
  Pause, Play, Stop.
- ⑥ [◄], [▶▶]Rewind and Fast forward.

### ■ Controlling a Satellite or Cable Receiver



① [STANDBY/ON]

Sets the satellite/cable receiver to Standby or On.

- ② Number buttons Enter numbers.
- ③ [CLR]
  Cancels functions.
- [CH +/-]
   Selects satellite/cable channels.
- ⑤ [PREVIOUS]
  Selects the previous channel.
- **[GUIDE]**Displays the program guide.
- (7) **[ENTER]**Confirms the selection.
- 9 [**11**], [ $\blacktriangleright$ ], [ $\blacksquare$ ], [ $\blacktriangleleft$ ], [ $\blacktriangleright \blacktriangleright$ ] Operates the VCR.

### **Specifications**

#### Amplifier Section

Rated Output Power (FTC)

All channels: 90 watts minimum continuous power

per channel, 8 ohm loads, 2 channels driven from 20 Hz to 20 kHz, with a maximum total harmonic distortion of

0.08%

105/110 watts minimum continuous power per channel, 8 ohm loads, 2 channels driven at 1 kHz, with a maximum total harmonic distortion of

0.7/0.9%

110 watts minimum continuous power per channel, 6 ohm loads, 2 channels driven at 1 kHz with a maximum total

harmonic distortion of 0.1%

Rated Output Power (IEC)

7 ch  $\times$  140 W at 6 ohms, 1 kHz, 1 ch

driven Maximum Output Power (JEITA)

7 ch  $\times$  175 W at 6 ohms, 1 kHz, 1 ch

Dynamic Power 210 W + 210 W (3 Ω, Front)

> 180 W + 180 W (4 Ω, Front) 110 W + 110 W (8 Ω, Front)

THD (Total Harmonic Distortion)

0.08% (Power Rated) 0.08% (1 kHz, 1 W)

60 (Front, 1 kHz, 8 Ω) Damping Factor

Input Sensitivity and Impedance

200 mV/47 kΩ (LINE)

Output Level and Impedance

200 mV/470 Ω (REC OUT)

Frequency Response 5 Hz - 100 kHz/+1 dB - 3 dB (Direct mode)

Tone Control ±10 dB, 50 Hz (BASS) ±10 dB, 20 kHz (TREBLE) Signal to Noise Ratio 100 dB (LINE, IHF-A)

Speaker Impedance North American:  $6 \Omega - 16 \Omega$ 

Others:  $4 \Omega$  - or  $6 \Omega$  -  $16 \Omega$ 

#### Video Section

Input Sensitivity/Output Level and Impedance

1 Vp-p/75  $\Omega$  (Component and S-Video Y)  $0.7 \text{ Vp-p/75} \Omega \text{ (Component Pb/Cb, Pr/Cr)}$ 

0.28 Vp-p/75 Ω (S-Video C) 1 Vp-p/75 Ω (Composite)

Component Video Frequency Response

5 Hz - 50 MHz - 3 dB

#### Tuner Section (TX-SR605 only)

FM Tuning Frequency Range

North American: 87.5 MHz - 107.9 MHz

Others: 87.5 MHz - 108.0 MHz

AM Tuning Frequency Range

North American: 530 kHz - 1710 kHz European: 522 kHz - 1611 kHz Others: 522/530 kHz - 1611/1710 kHz

Preset Channel

#### General

North American: AC 120 V, 60 Hz Power Supply

European: AC 230 V, 50 Hz

Others: AC 120/220 - 240 V, 50/60 Hz

AC 220 V, 50/60 Hz

Power Consumption North American: 6.5 A

Others: 630 W

Dimensions (W  $\times$  H  $\times$  D)

 $435 \times 174 \times 377 \text{ mm}$ 

17-1/8" × 6-7/8" × 14-13/16"

Weight North American: 11.4 kg (25.1 lbs.)

Australian: 11.6 kg (25.6 lbs.) Others: 11.5 kg (25.4 lbs.)

■ Video Inputs

**HDMI** IN1, IN2 Component IN1, IN2, IN3

S-Video DVD, VCR/DVR, CBL/SAT, GAME/TV,

AUX

Composite DVD, VCR/DVR, CBL/SAT, GAME/TV,

AUX

■ Video Outputs

**HDMI** OUT Component OUT

S-Video MONITOR OUT, VCR/DVR MONITOR OUT, VCR/DVR Composite

Audio Inputs

Digital Inputs Optical: 3 (1 on Front Panel)

Coaxial: 2

Analog Inputs DVD (MULTICHANNEL), VCR/DVR,

CBL/SAT, GAME/TV, AUX, TAPE, CD

Multichannel Inputs

Audio Outputs

TAPE, VCR/DVR, ZONE2 Analog Outputs

Subwoofer Pre Output

Speaker Outputs L, R, C, SL, SR, SBL, SBR,

ZONE2 (L/R)

Phones

Specifications and features are subject to change without notice.

### **Troubleshooting**

If you have any trouble using the AV receiver/AV amplifier, look for a solution in this section. If you can't resolve the issue yourself, contact your Onkyo dealer.

If you can't resolve the issue yourself, try resetting the AV receiver/AV amplifier before contacting your Onkyo dealer.

To reset the AV receiver/AV amplifier to its factory defaults, turn it on and, while holding down the [VCR/DVR] button, press the [STANDBY/ON] button. "Clear" will appear on the display and the AV receiver/AV amplifier will enter Standby mode.







Note that resetting the AV receiver/AV amplifier will delete your radio presets and custom settings.

#### **Power**

#### Can't turn on the AV receiver/AV amplifier

- Make sure that the power cord is properly plugged into the wall outlet.
- Unplug the power cord from the wall outlet, wait five seconds or more, then plug it in again.

## The AV receiver/AV amplifier turns off as soon as it's turned on

The amp protection circuit has been activated.
 Remove the power cord from the wall outlet immediately and contact your Onkyo dealer.

#### **Audio**

#### There's no sound, or it's very quiet

- Make sure that the digital input source is selected properly (page 50). Press the [DIGITAL INPUT] button repeatedly.
- Make sure that all audio connecting plugs are pushed in all the way (page 18).
- Make sure that the inputs and outputs of all components are connected properly (page 18).
- Make sure that the polarity of the speaker cables is correct, and that the bare wires are in contact with the metal part of each speaker terminal (page 20).
- Make sure that the input source is properly selected (page 54).
- Make sure that the speaker cables are not shorting.
- Check the volume. It can be set to MIN, 1 through 99, or MAX (page 54). The AV receiver/AV amplifier is designed for home theater enjoyment. It has a wide volume range, allowing precise adjustment.
- If the MUTING indicator is shown on the display, press the remote controller's [MUTING] button to unmute the AV receiver/AV amplifier (page 56).

- While a pair of headphones is connected to the PHONES jack, no sound is output by the speakers (page 56).
- If there's no sound from a DVD player connected to an HDMI IN, check the DVD player's output settings, and be sure to select a supported audio format.
- Check the digital audio output setting on the connected device. On some game consoles, such as those that support DVD, the default setting is off.
- With some DVD-Video discs, you need to select an audio output format from a menu.
- If your turntable doesn't have a built-in phono
  preamp, you must connect one between it and the AV
  receiver/AV amplifier. If your turntable uses an MC
  cartridge, you must connect an MC head amp, or an
  MC transformer and phono equalizer.
- Make sure that none of the connecting cables are bent, twisted, or damaged.
- Not all listening modes use all speakers (page 66).
- Specify the speaker distances (page 72) and adjust the individual speaker levels (page 73).
- Make sure that the speaker setup microphone is not still connected.
- The input signal format is set to PCM or DTS. Set it to Auto (page 85).

#### Only the center speaker produces sound

- If you use the Pro Logic IIx Movie, Pro Logic IIx
   Music, or Pro Logic IIx Game listening mode with a
   mono source, such as an AM radio station or mono TV
   program, the sound is concentrated in the center
   speaker.
- Make sure the speakers are configured correctly (page 70).

#### The surround speakers produce no sound

- When the Stereo or Mono listening mode is selected, the surround speakers produce no sound (page 66).
- Depending on the source and current listening mode, not much sound may be produced by the surround speakers. Try selecting another listening mode.
- Make sure the speakers are configured correctly (page 70).

#### The center speaker produces no sound

- When the Mono or Stereo listening mode is selected, the center speaker produces no sound (page 66).
- Make sure the speakers are configured correctly (page 70).

#### Troubleshooting—Continued

#### The surround back speakers produce no sound

- The surround back speakers are not used with all listening modes. Select another listening mode (page 66).
- Not much sound may be produced by the surround back speakers with some sources.
- Make sure the speakers are configured correctly (page 70).

#### The subwoofer produces no sound

- When you play source material that contains no information in the LFE channel, the subwoofer produces no sound.
- Make sure the speakers are configured correctly (page 70).

#### There's no sound with a certain signal format

- Check the digital audio output setting on the connected device. On some game consoles, such as those that support DVD, the default setting is off.
- With some DVD-Video discs, you need to select an audio output format from a menu.
- Depending on the input signal, some listening modes cannot be selected (pages 62-65).

## Can't select the DTS-ES Discrete/Matrix listening modes

- These modes cannot be selected when no surround back speakers are connected, or the Zone 2 speakers are being used.
- You can not always select all of the listening modes, depending on the number of the speaker connected (pages 62-65).

#### Can't get 6.1/7.1 playback

- If no surround back speakers are connected, or the Zone 2 speakers are being used, 6.1/7.1 playback is not possible.
- You can not always select all of the listening modes, depending on the number of the speakers connected (pages 62-65).

#### The volume cannot be set to 99

 When the levels of all speakers have been calibrated (page 73), the maximum volume setting may change.

#### Noise can be heard

- Using cable ties to bundle audio cables with power cords, speaker cables, and so on may degrade the audio performance, so don't do it.
- An audio cable may be picking up interference. Try repositioning your cables.

#### The Late Night function doesn't work

 Make sure the source material is Dolby Digital, Dolby Digital Plus, and Dolby TrueHD (page 69).

## The DVD analog multichannel input doesn't work

- Check the DVD analog multichannel input connections (page 28).
- To select the DVD analog multichannel input, press the [MULTI CH] input selector button.
- Check the audio output settings on your DVD player.

#### About DTS signals

- When DTS program material ends and the DTS bitstream stops, the AV receiver/AV amplifier remains in DTS listening mode and the DTS indicator remains on. This is to prevent noise when you use the pause, fast forward, or fast reverse function on your player. If you switch your player from DTS to PCM, because the AV receiver/AV amplifier does not switch formats immediately, you may not hear any sound, in which case you should stop your player for about three seconds, and then resume playback.
- With some CD and LD players, you won't be able to playback DTS material properly even though your player is connected to a digital input on the AV receiver/AV amplifier. This is usually because the DTS bitstream has been processed (e.g., output level, sampling rate, or frequency response changed) and the AV receiver/AV amplifier doesn't recognize it as a genuine DTS signal. In such cases, you may hear noise.
- When playing DTS program material, using the pause, fast forward, or fast reverse function on your player may produce a short audible noise. This is not a malfunction.

## The beginning of audio received by an HDMI IN can't be heard

 Since it takes longer to identify the format of an HDMI signal than it does for other digital audio signals, audio output may not start immediately.

#### Video

#### There's no picture

- Make sure that all video connecting plugs are pushed in all the way (page 18).
- Make sure that each video component is properly connected.
- If your TV is connected to the HDMI OUT, set the HDMI Monitor setting to Yes (page 47), and select "--" in the "HDMI Input Setup" on page 48 to watch composite video, S-Video, and component video sources.
- If your TV is connected to the COMPONENT VIDEO OUT, set the HDMI Monitor setting to No (page 47), and select "- - -" in the "Component Video Setup" on page 49 to watch composite video and S-Video sources.

#### **Troubleshooting**—Continued

- If the video source is connected to a component video input, your TV must be connected to the COMPO-NENT VIDEO OUT or HDMI OUT (page 25).
- If the video source is connected to an HDMI input, your TV must be connected to the HDMI OUT (page 25).
- While the Pure Audio listening mode (not North American models) is selected, the video circuitry is turned off and only video signals input through HDMI IN can be output.
- On your TV, make sure that the video input to which the AV receiver/AV amplifier is connected is selected.

## There's no picture from a source connected to an HDMI IN

 If the message "Resolution Error" appears on the AV receiver/AV amplifier's display, this indicates that the TV or display does not support the current video resolution and you need to select another resolution on your DVD player.

#### The onscreen menus don't appear

- The onscreen menus may do not appear on a TV that's connected to the HDMI OUT. When the HDMI Monitor Out is set to No (page 47), the onscreen menus are output at a resolution of 480i. If the onscreen menus do not appear, set the HDMI Monitor Out to Yes (page 47).
- Make sure that the video settings are correct (page 48).
- On your TV, make sure that the video input to which the AV receiver/AV amplifier is connected is selected.

#### The immediate display does not appear

- The immediate display appears on a device connected to the COMPONENT VIDEO OUT, when the Component Video Setup (page 49) is set to "---."
- If both of the HDMI Video Setup (page 48) and the Component Video Setup (page 49) are set to "---," the immediate display is output to a device connected to the HDMI OUT.

#### Tuner (TX-SR605 only)

## Reception is noisy, FM stereo reception is noisy, or the FM STEREO indicator doesn't appear

- Relocate your antenna.
- Move the AV receiver away from your TV or computer.
- Listen to the station in mono (page 57).
- When listening to an AM station, operating the remote controller may cause noise.
- Passing cars and airplanes can cause interference.
- · Concrete walls weaken radio signals.
- If nothing improves the reception, install an outdoor antenna.

#### **Remote Controller**

#### The remote controller doesn't work

- Make sure that the batteries are installed with the correct polarity (page 12).
- Install new batteries. Don't mix different types of batteries, or old and new batteries (page 12).
- Make sure that the remote controller is not too far away from the AV receiver/AV amplifier, and that there's no obstruction between the remote controller and the AV receiver/AV amplifier's remote control sensor (page 12).
- Make sure that the AV receiver/AV amplifier is not subjected to direct sunshine or inverter-type fluorescent lights. Relocate if necessary.
- If the AV receiver/AV amplifier is installed in a rack or cabinet with colored-glass doors, the remote controller may not work reliably when the doors are closed.
- Make sure you've selected the correct remote controller mode (pages 13-16).
- When using the remote controller to control other manufacturers' AV components, some buttons may not work as expected.
- Make sure you've entered the correct remote control code.
- Make sure to set the same ID on both the AV receiver/ AV amplifier and remote controller (pages 83 and 86).

#### Can't control other components

- If it's an Onkyo component, make sure that the RI cable and analog audio cable are connected properly.
   Connecting only an RI cable won't work (page 39).
- Make sure you've selected the correct remote controller mode (pages 13-16).
- If you've connected an RI-capable Onkyo MD recorder, CD recorder, RI Dock to the TAPE IN/
  OUT jacks, or an RI Dock to the GAME/TV IN jacks, for the remote controller to work properly, you must set the display to MD, CDR, or DOCK (pages 51 and 91).
- To control another manufacturer's component, point the remote controller at that component.
- To control an Onkyo component that's connected via RI, point the remote controller at the AV receiver/AV amplifier. Be sure to enter the appropriate remote con-trol code first (page 91).
- To control an Onkyo component that's not connected via (RI), or another manufacturer's component, point the remote controller at the component. Be sure to enter the appropriate remote control code first (page 90).

#### Recording

#### Can't record

- On your recorder, make sure the correct input is selected (e.g., digital or analog).
- When the Pure Audio listening mode (not North American models) is selected, recording is not possible because no video signals are output. Select another listening mode.

#### Zone 2

#### There's no sound

 Only components connected to analog inputs can be played in Zone 2.

#### Others

#### The sound changes when I connect my headphones

 When a pair of headphones is connected, the listening mode is set to Stereo, unless it's already set to Stereo, Mono, Direct, or Pure Audio (not North American models).

#### The speaker volume cannot be set as required

 When the Automatic Speaker Setup function is used, or the volume is adjusted on the onscreen setup menus, the maximum possible volume setting may change.

#### The speaker distance cannot be set as required

• In some cases, corrected values suitable for home theater use may be set automatically.

#### The display doesn't work

 The display is turned off when the Pure Audio (not North American models) listening mode is selected.

## How do I change the language of a multiplex source

 Use the "Multiplex" setting on the "Audio Adjust" menu to select Main or Sub (page 76).

#### The RI functions don't work

• To use  $\square$ 1, you must make an  $\square$ 1 connection and an analog audio connection (RCA) between the component and AV receiver/AV amplifier, even if they are connected digitally (page 39).

## The functions Auto Power On/Standby and Direct Change don't work for components connected via RI

• These functions don't work when Zone 2 is turned on.

## When performing "Automatic Speaker Setup," the measurement fails showing the message "Ambient noise is too high."

• This can be caused by any malfunction in your speaker unit. Check if the unit produces normal sounds.

### The following settings can be made for the component video, S-Video, and composite video inputs

You must use the buttons on the unit to make these settings.

- While holding down the input selector button for the input source that you want to set, press the [SETUP] button.
- Use the Left and Right [◄]/[▶] buttons to change the setting.
- 3. Press the [SETUP] button when you've finished.

#### Video Attenuation

This setting can be made for the DVD, VCR/DVR, CBL/SAT, GAME/TV, or AUX input. If you have a games console connected to the component video, S-Video, or composite video input, and the picture isn't very clear, you can attenuate the gain.

Video ATT:0: (default).

Video ATT:2: Gain is reduced by 2 dB.

The AV receiver/AV amplifier contains a microcomputer for signal processing and control functions. In very rare situations, severe interference, noise from an external source, or static electricity may cause it to lockup. In the unlikely event that this happens, unplug the power cord from the wall outlet, wait at least five seconds, and then plug it back in again.

Onkyo is not responsible for damages (such as CD rental fees) due to unsuccessful recordings caused by the unit's malfunction. Before you record important data, make sure that the material will be recorded correctly.

Before disconnecting the power cord from the wall outlet, set the AV receiver/AV amplifier to Standby.

## **MEMO**

## **MEMO**

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Y0703-1



# **QUICK SETUP**

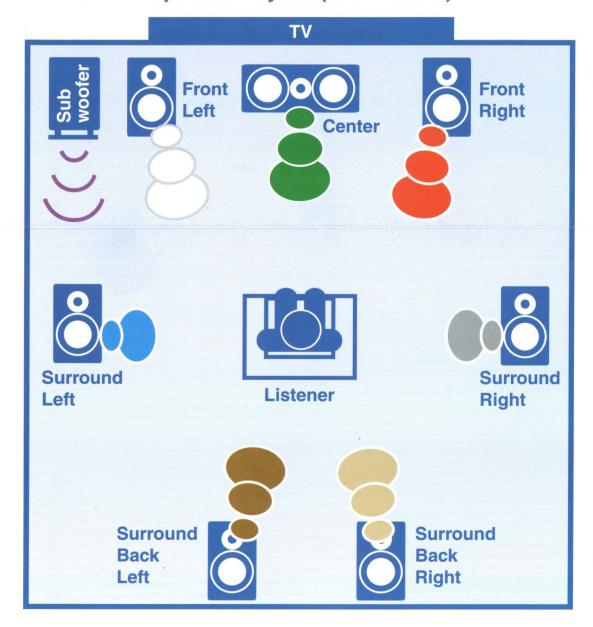


Model: TX-SR605/TX-SA605/TX-SA8560

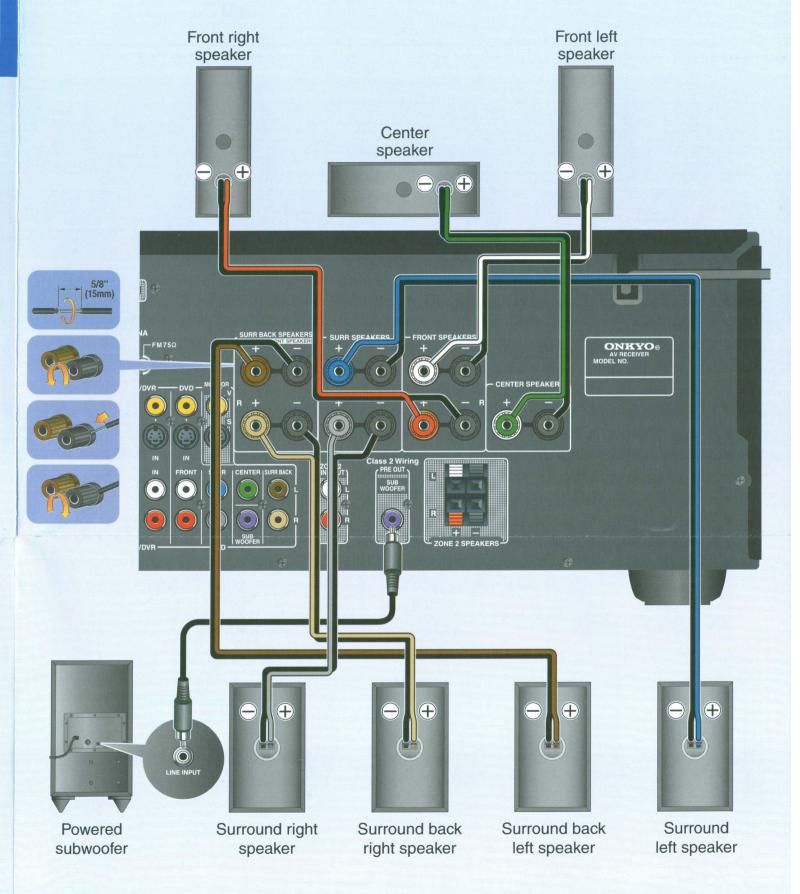
Thank you for purchasing this product.

This quick setup sheet shows the typical hookup method for connecting speakers and AV components (DVD player, TV, cable/satellite receiver). For more detailed hookup information and operating instructions, please see the Instruction Manual.

### Speaker Layout (Main Room)



## Speaker Hookup



See the other side of this sheet for the AV component hookup.



### See the other side of this sheet for the Speaker hookup.





With an HDMI cable you can send both audio and video with a single cable, making connecting simple and keeping wires neat.

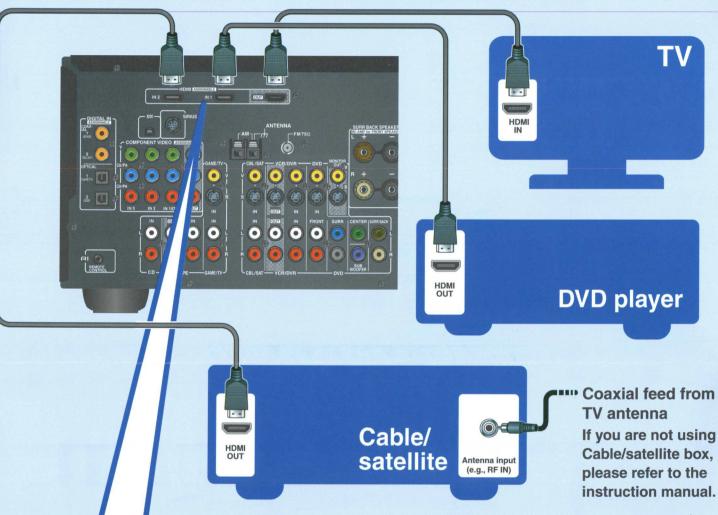
**AV Component Hookup** 

If you have an HDMI-compatible TV and players, you can connect them to the AV receiver with HDMI cables. Digital audio signals received at HDMI IN 1 or 2 are output by the speakers and headphones connected to the AV receiver.





If your TV or player doesn't support HDMI, use the analog or digital connections shown below.

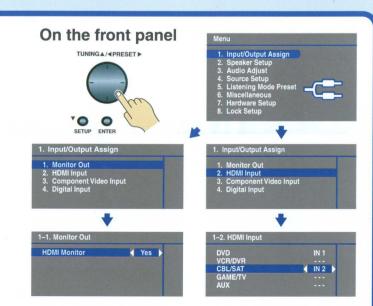


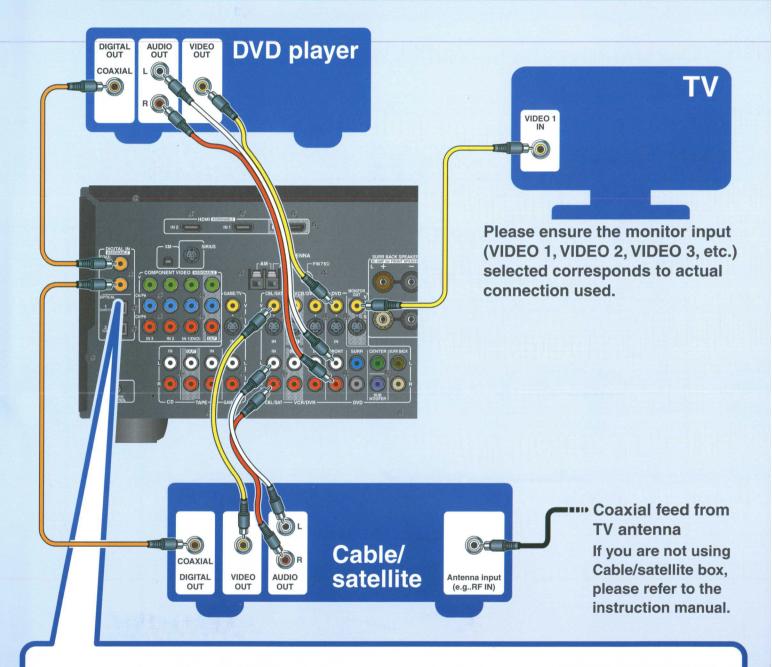
### **Setting the Monitor Out**

When the TV is connected to an HDMI input, the HDMI Monitor setting on the AV receiver/AV amplifier must be set to "Yes."

### **Assigning the HDMI Input**

If you connect a video component to an HDMI input, you must assign that HDMI Input to an input selector in Setup. If you make the same connections as shown here, you must assign the "DVD" setting to "IN1," and assign the "CBL/SAT" setting to "IN2."





### **Assigning the Digital Input**

If there's no sound, press the [DIGITAL INPUT] button repeatedly until sound is heard. The digital input is now properly assigned.

If you connect your DVD player to the AV receiver's COAXIAL 1 DIGITAL IN, and your cable/satellite receiver to the COAXIAL 2 DIGITAL IN, as shown, it's not necessary to assign the digital input.

### On the front panel

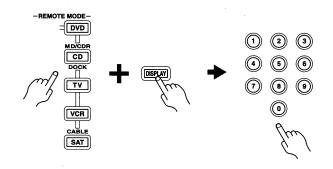


### **Remote Control Codes**

1. While holding down the REMOTE MODE button that you want to set, press the [DISPLAY] button for 3 seconds.

On Integra products, button names are capitalized. For example, "Remote Mode" button and "Display" button.

2. Use the number buttons to enter the 4-digit remote control code.



#### Codes de télécommande

- Maintenez le bouton REMOTE MODE à initialiser enfoncé et appuyez sur le bouton [DISPLAY] durant 3 secondes.
- 2. Entrez les 4 chiffres du code de télécommande avec les boutons numériques.

#### Codici del telecomando

- Mentre tenete premuto il pulsante REMOTE MODE che volete impostare, premete il pulsante [DISPLAY] per 3 secondi.
- Utilizzate i pulsanti numerici per inserire il codice di telecomando a 4 cifre.

#### Afstandsbedieningscodes

- 1. Houd de REMOTE MODE toets ingedrukt die u wilt instellen en druk dan de [DISPLAY] toets 3 seconden in.
- 2. Met de cijfertoetsen de 4-cijferige afstandsbedieningscode in.

#### 遙控代碼

- 1. 按下您希望設置的遙控鍵,同時按下 [DISPLAY] 鍵保持 3 秒鐘。
- 2. 使用數字鍵輸入 4 位數字的遙控代碼。

#### Códigos de control remoto

- 1. Manteniendo pulsado el botón REMOTE MODE que desee ajustar, pulse el botón [DISPLAY] durante 3 segundos.
- 2. Utilice los botones de número para introducir el código de 4 dígitos para control remoto.

#### **Fernbedienungscodes**

- Halten Sie die änderungsbedürftige REMOTE MODE-Taste gedrückt, während Sie die [DISPLAY]-Taste 3 Sekunden lang betätigen.
- 2. Geben Sie mit den Zifferntasten den 4-stelligen Fernbedienungscode ein.

#### Fjärrstyrningskoder

- Tryck in och håll lämplig lägesväljare (REMOTE MODE) intryckt och tryck samtidigt in knappen [DISPLAY] i tre sekunder.
- 2. In den 4-siffriga fjärrstyrningskoden med hjälp av sifferknapparna.

#### 遥控代码

- 2. 使用数字键输入 4 位数字的遥控代码。



## DVD Codes DVD

DVD Player	
Acoustic Solutions	0713, 0730
Aiwa	0641
Akai	0695, 0770, 0899, 1115
Akura	0898
Alba	0539, 0672, 0717
Alco	0790
Allegro	0869
Altacom	1224
Amphion Media Works	0872
Amstrad	0713
AMW	0872
Apex Digital	0672, 0717, 0755, 0794, 0796, 0797, 0830, 1004, 1020, 1056, 1061
Arrgo	1023
Audiovox	0790
BBK	1224
Blaupunkt	0717
Blue Parade	0571
Broksonic	0695
Bush	0713
Byd:sign	0872
C-Tech	1152
Cat	0789
Celestial	1020
Centrex	
	0672, 1004 0627, 1061
Changhong	
Cinea	0831
CineVision	0869
Citizen	0695
Clatronic	0788
Clayton	0713
Coby	0852, 1351
Craig	0831
CyberHome	0714, 0816, 0874, 1023, 1024, 1117, 1129
Daewoo	0770, 0784, 0869, 1172
Dansai	0770
Daytek	0872
Decca	0770
Denon	0490, 0634, 1282, 1406, 1634
Denver	0898
Diamond	0768
Dick Smith Electronics	1152
Digitrex	0672, 1056
Disney	0675, 1270
DSE	1152
DVD2000	0521
eBench	1152
ECC	0730
Elta	1115
Emerson	0591, 0675, 0821, 1268

DVD Player	
Enterprise	0591
ESA	0821, 1268
Ferguson	0898
Fisher	0670
Funai	
*	0675, 1268 1158
Gateway GE	
GE	0522, 0717, 0815
Go Video	0741, 0744, 0783, 0869, 1044, 1075,
GO VIGEO	1158
GoldStar	0741
Goodmans	0790, 1004
Gradiente	0651
Greenhill	0717
	0539, 0695
Grundig	
H & B	0841, 0850, 1233, 1421
Harman/Kardon	0582, 0702
HiMAX	0843
TIIVIAA	
Hitachi	0573, 0664, 0695, 1247, 1664
Hiteker	0672
Hyundai	0850, 1228
iLo	1348
Initial	0717
Insignia	1268
Integra	0627
IRT	0783
JBL	0702
JMB	0695
JSI	1423
JVC	0558, 0623, 0867,
	1164
jWin	1051
Kawasaki	0790
Kenwood	0490, 0534
Kiss	0841
KLH	0717, 0790, 1020
Koss	0651, 1423
Kreisen	1421
Lasonic	0798
Leiker	0872
LG	0591, 0741, 0801,
Lu	0869
Limit	0768
LiteOn	1058, 1158
Loewe	0511, 0741
Logix	0783
Lunatron	0741
Magnayov	0503, 0539, 0646,
Magnavox	0675, 0821, 1268
Marantz	0539, 1627
Matsui	0672
Medion	1270
Memorex	0695, 0831, 1270
MiCO	0723, 0751
Microsoft	0522
Minato	0752
Mintek	0717, 0839
Mirror	0752
Mitsubishi	0521, 1403, 1521
Mustek	0730
NAD	0741
11/10	10/71

DVD Player	
NEC	0785, 0869, 1404
Nesa	0717
Nevir	0831
NexxTech	1402
Nintaus	1051
Norcent	0872
Nu-Tec	1228
Olidata	0672
Oliuaia	0503, 0612, 0627,
Onkyo	0792, 1417, 1418,
Orikyo	1612, 1627
Орро	1224
Oritron	0651
Pacific	0831
Palsonic	
raisonic	0672, 0852
Panasonic .	0490, 0703, 1010, 1011, 1282, 1362,
ranasonic .	1462, 1490, 1762
peeKTon	1224
Philco	0790
1 111100	0503, 0539, 0585,
	0646, 0675, 0854,
Philips	1158, 1260, 1267,
	1340, 1354
Pioneer	0525, 0571, 0631
Polaroid	1020, 1061
Polk Audio	
	0539
Portland	0770
Presidian	0675
Proscan	0522
Qwestar	0651
DO4	0522, 0571, 0717,
RCA	0790, 0822, 1022,
Dodatas	1132
Redstar	0898
Reoc	0752
Rio	0869
Roadstar	1051
Rotel	0623
Rowa	1004
Sampo	0752
_	0490, 0573, 0744,
Samsung	0820, 0899, 1044,
	1075
Sansui	0695
Santosh	1115
Sanyo	0670, 0695
Schneider	0783
Schwaiger	0752
Semp	0503
Sensory Science	1158
Cham	0630, 0675, 0752,
Sharp	1256
Sharper Image	1117
Sherwood	0770
Shinco	0717
Shinsonic	0533, 0839
SilverCrest	1152
Singer	0751
Sistemas	0672
Skyworth	0898
Sliding	
	1115
Slim Art	0784
SM Electronic	0730

DVD Player	
Sonic Blue	0869
Sony	0533, 0864, 1033, 1069, 1070, 1431, 1533
Sunstech	0831
Superscan	0821
SVA	0717
Sylvania	0675, 0821, 1268
Symphonic	0675, 0821
Tatung	0770
Teac	0571, 0717, 0759, 0790
Technics	0490, 0703
Technosonic	0730
Tevion	1227
Theta Digital	0571
Thomson	0522, 0551
Toshiba	0503, 0695, 1045, 1154
TRANS-continents	0831
Tredex	0843
Universum	0591
Urban Concepts	0503
US Logic	0839
Venturer	0790
Viewmaster	1224
Vtrek	1228
Wilson	1233
Xbox	0522
XMS	0770
Yamada	0872, 1004, 1056, 1158
Yamaha	0490, 0539, 0545, 1282
Zenith	0503, 0591, 0741, 0869
Zeus	0784

<b>DVD Recorder</b>	
Apex Digital	1056
CyberHome	1129
Denon	0490
Digitrex	1056
Emerson	0675
Funai	0675
Gateway	1158
Go Video	0741, 1158
H & B	1421
Hitachi	1664
iLo	1348
JVC	1164
Kreisen	1421
LG	0741
LiteOn	1158
Loewe	0741
Magnavox	0646, 0675
Mitsubishi	1403
NEC	1404
Panasonic	0490, 1010, 1011
Philips	0646, 1158
Pioneer	0631
RCA	0522
Samsung	0490

<b>DVD Recorder</b>	
Sensory Science	1158
Sharp	0630, 0675
Sony	1033, 1069, 1070, 1431
Sylvania	0675
Tevion	1227
Thomson	0551
Yamada	1056, 1158
Zenith	0741

TV/DVD Combination			
Akai	0695		
Apex Digital	0830		
Broksonic	0695		
Bush	0713		
Citizen	0695		
Emerson	0675, 1268		
ESA	1268		
Funai	1268		
Grundig	0695		
Hitachi	1247		
Insignia	1268		
Magnavox	1268		
Panasonic	1490		
Philips	0854, 1260		
RCA	1022		
Samsung	0899		
Sansui	0695		
Sliding	1115		
Sylvania	0675, 1268		
Toshiba	0695		



CD Player	
Acoustic Research	0420
Aiwa	0157
Arcam	0157
Audio Research	0157
Audiolab	0157
Audiomeca	0157
Audioton	0157
Burmester	0420
Bush	0388
Cairn	0157
California Audio	0137
Labs	0029, 0303
Carver	0157
CCE	0157
CDC	0420
Copland	0393
Cyrus	0157
Denon	0003, 0034, 0626,
DKK	0766, 0873
DKK	0000
DMX Electronics	0157
Garrard	0393, 0420
Genexxa	0032
Grundig	0157
Harman/Kardon	0157, 0173
Hitachi	0032
Inkel	0180
Integra	0101
JVC	0072, 1294
	007 =, 1=0 .
	0028, 0036, 0037,
Kenwood	
Kenwood	0028, 0036, 0037, 0190, 0626, 0681, 0826
Kenwood	0028, 0036, 0037, 0190, 0626, 0681,
Kenwood	0028, 0036, 0037, 0190, 0626, 0681, 0826
Kenwood	0028, 0036, 0037, 0190, 0626, 0681, 0826 1711
Kenwood  KLH  Krell	0028, 0036, 0037, 0190, 0626, 0681, 0826 1711 0157
KLH Krell Linn Magnavox	0028, 0036, 0037, 0190, 0626, 0681, 0826 1711 0157
Kenwood  KLH  Krell Linn	0028, 0036, 0037, 0190, 0626, 0681, 0826 1711 0157 0157 0038, 0157
KLH Krell Linn Magnavox	0028, 0036, 0037, 0190, 0626, 0681, 0826 1711 0157 0157 0038, 0157 0029, 0038, 0157,
Kenwood  KLH Krell Linn Magnavox Marantz	0028, 0036, 0037, 0190, 0626, 0681, 0826 1711 0157 0157 0038, 0157 0029, 0038, 0157, 0180, 0435, 0626
Kenwood  KLH Krell Linn Magnavox Marantz Matsui	0028, 0036, 0037, 0190, 0626, 0681, 0826 1711 0157 0157 0038, 0157 0029, 0038, 0157, 0180, 0435, 0626 0157
Kenwood  KLH Krell Linn Magnavox Marantz Matsui MCS	0028, 0036, 0037, 0190, 0626, 0681, 0826 1711 0157 0157 0038, 0157 0029, 0038, 0157, 0180, 0435, 0626 0157 0029
Kenwood  KLH Krell Linn Magnavox Marantz Matsui MCS Memorex Meridian	0028, 0036, 0037, 0190, 0626, 0681, 0826 1711 0157 0157 0038, 0157 0029, 0038, 0157, 0180, 0435, 0626 0157 0029 0180
Kenwood  KLH Krell Linn Magnavox Marantz Matsui MCS Memorex	0028, 0036, 0037, 0190, 0626, 0681, 0826 1711 0157 0157 0038, 0157 0029, 0038, 0157, 0180, 0435, 0626 0157 0029 0180 0157
Kenwood  KLH Krell Linn Magnavox Marantz  Matsui MCS Memorex Meridian Micromega	0028, 0036, 0037, 0190, 0626, 0681, 0826 1711 0157 0157 0038, 0157 0029, 0038, 0157, 0180, 0435, 0626 0157 0029 0180 0157 0157 0000
Kenwood  KLH Krell Linn Magnavox Marantz  Matsui MCS Memorex Meridian Micromega Miro	0028, 0036, 0037, 0190, 0626, 0681, 0826 1711 0157 0157 0038, 0157 0029, 0038, 0157, 0180, 0435, 0626 0157 0029 0180 0157 0157 0000 0157
Kenwood  KLH Krell Linn Magnavox Marantz  Matsui MCS Memorex Meridian Micromega Miro Mission MTC	0028, 0036, 0037, 0190, 0626, 0681, 0826 1711 0157 0157 0038, 0157 0029, 0038, 0157, 0180, 0435, 0626 0157 0029 0180 0157 0157 0000 0157 0000 0157 0420
Kenwood  KLH Krell Linn Magnavox Marantz Matsui MCS Memorex Meridian Micromega Miro Mission MTC Musical Fidelity	0028, 0036, 0037, 0190, 0626, 0681, 0826 1711 0157 0157 0038, 0157 0029, 0038, 0157, 0180, 0435, 0626 0157 0029 0180 0157 0157 0000 0157 0157 0000 0157 0420 0393
Kenwood  KLH Krell Linn Magnavox Marantz  Matsui MCS Memorex Meridian Micromega Miro Mission MTC Musical Fidelity Myryad	0028, 0036, 0037, 0190, 0626, 0681, 0826 1711 0157 0157 0038, 0157 0029, 0038, 0157, 0180, 0435, 0626 0157 0029 0180 0157 0157 0000 0157 0420 0393 0157
Kenwood  KLH Krell Linn Magnavox Marantz  Matsui MCS Memorex Meridian Micromega Miro Mission MTC Musical Fidelity Myryad NAD	0028, 0036, 0037, 0190, 0626, 0681, 0826 1711 0157 0157 0038, 0157 0029, 0038, 0157, 0180, 0435, 0626 0157 0029 0180 0157 0157 0000 0157 0420 0393 0157 0000, 0721
Kenwood  KLH Krell Linn Magnavox Marantz  Matsui MCS Memorex Meridian Micromega Miro Mission MTC Musical Fidelity Myryad NAD Naim	0028, 0036, 0037, 0190, 0626, 0681, 0826 1711 0157 0157 0038, 0157 0029, 0038, 0157, 0180, 0435, 0626 0157 0029 0180 0157 0157 0000 0157 0420 0393 0157 0000, 0721
Kenwood  KLH Krell Linn Magnavox Marantz  Matsui MCS Memorex Meridian Micromega Miro Mission MTC Musical Fidelity Myryad NAD	0028, 0036, 0037, 0190, 0626, 0681, 0826 1711 0157 0157 0038, 0157 0029, 0038, 0157, 0180, 0435, 0626 0157 0029 0180 0157 0000 0157 0420 0393 0157 0000, 0721 0157 0157
Kenwood  KLH Krell Linn Magnavox Marantz  Matsui MCS Memorex Meridian Micromega Miro Mission MTC Musical Fidelity Myryad NAD Naim	0028, 0036, 0037, 0190, 0626, 0681, 0826 1711 0157 0157 0038, 0157 0029, 0038, 0157, 0180, 0435, 0626 0157 0029 0180 0157 0157 0000 0157 0420 0393 0157 0000, 0721 0157 0157 0101, 0102, 0138,
Kenwood  KLH Krell Linn Magnavox Marantz Matsui MCS Memorex Meridian Micromega Miro Mission MTC Musical Fidelity Myryad NAD Naim NSM	0028, 0036, 0037, 0190, 0626, 0681, 0826 1711 0157 0157 0038, 0157 0029, 0038, 0157, 0180, 0435, 0626 0157 0029 0180 0157 00157 0000 0157 0420 0393 0157 0000, 0721 0157 0157 0101, 0102, 0138, 0381, 0868, 1322,
Kenwood  KLH Krell Linn Magnavox Marantz  Matsui MCS Memorex Meridian Micromega Miro Mission MTC Musical Fidelity Myryad NAD Naim	0028, 0036, 0037, 0190, 0626, 0681, 0826 1711 0157 0157 0038, 0157 0029, 0038, 0157, 0180, 0435, 0626 0157 0029 0180 0157 0000 0157 0420 0393 0157 0000, 0721 0157 0157 0101, 0102, 0138, 0381, 0868, 1322, 1323, 1327, 1808,
Kenwood  KLH Krell Linn Magnavox Marantz Matsui MCS Memorex Meridian Micromega Miro Mission MTC Musical Fidelity Myryad NAD Naim NSM	0028, 0036, 0037, 0190, 0626, 0681, 0826 1711 0157 0157 0038, 0157 0029, 0038, 0157, 0180, 0435, 0626 0157 0029 0180 0157 0157 0000 0157 0420 0393 0157 0000, 0721 0157 0157 0101, 0102, 0138, 0381, 0868, 1322,
Kenwood  KLH Krell Linn Magnavox Marantz Matsui MCS Memorex Meridian Micromega Miro Mission MTC Musical Fidelity Myryad NAD Naim NSM	0028, 0036, 0037, 0190, 0626, 0681, 0826 1711 0157 0157 0038, 0157 0029, 0038, 0157, 0180, 0435, 0626 0157 0029 0180 0157 0000 0157 0420 0393 0157 0000, 0721 0157 0157 0101, 0102, 0138, 0381, 0868, 1322, 1323, 1327, 1808, 1817, 1818, 1819,
Kenwood  KLH Krell Linn Magnavox Marantz Matsui MCS Memorex Meridian Micromega Miro Mission MTC Musical Fidelity Myryad NAD Naim NSM	0028, 0036, 0037, 0190, 0626, 0681, 0826 1711 0157 0157 0038, 0157 0029, 0038, 0157, 0180, 0435, 0626 0157 0029 0180 0157 0057 0000 0157 0420 0393 0157 0000, 0721 0157 0101, 0102, 0138, 0381, 0868, 1322, 1323, 1327, 1808, 1817, 1818, 1819, 1820, 1821, 1824,

## CD/MD/CDR/DOCK Codes —Continued

OD Discour	
CD Player	
Panasonic	0029, 0303, 0388, 0752
Parasound	0420
Philips	0157, 0274, 0626
Pioneer	0032, 0468, 1062, 1087
Polk Audio	0157
Proton	0157
QED	0157
Quad	0157
Quasar	0029
RCA	0032, 0053, 0420, 0468, 1062
Realistic	0180, 0420
Revox	0157
Roksan	0435
Rotel	0157, 0420
Royal	0420
SAE	0157
Sansui	0157
Sanyo	0087
SAST	0157
Sharp	0034, 0037, 0180, 0861
Sherwood	0180
Silsonic	0036, 0888
Simaudio	0157
Sonic Frontiers	0157
Sony	0000, 0100, 0185, 0490, 1364
TAG McLaren	0157
Tandy	0032
Tascam	0420
Teac	0180, 0378, 0393, 0420, 0435
Technics	0029, 0303
Thomson	0053
Thorens	0157
Universum	0053, 0157
Victor	0072
Wards	0053, 0157
Yamaha	0036, 0490, 0888, 1292
Zonda	0157

CD Recorder	
Denon	0626, 0766
JVC	0072, 1294
Kenwood	0626
Marantz	0626
Onkyo	1322, 1323, 1824,
	1825
Philips	0626
Pioneer	1062, 1087
RCA	0053, 0420
Sony	0000, 0100, 1364
Teac	0420
Yamaha	0888, 1292

MD Recorder	
Denon	0873
Kenwood	0681, 0826
Onkyo	0868, 1808, 1820, 1821
Sharp	0861
Sony	0185, 0490
Yamaha	0490, 0888

Onkyo RI Dock	
Onkyo	1993, 2990, 2994, 2995

TV Codes	v ·	
TV	TV	
888	0264	
Acura	0009	
Addison	0092, 0108, 0653, 1150	
Admiral	0093, 0463	
Advent	0761, 0783, 0815,	
	0817, 0842	
Aiko Aiwa	0092 1916	
Alwa	0009, 0030, 0208,	
Akai	0264, 0361, 0602, 0672, 0702, 0753, 0812, 1935	
Akura	0264	
Alba	0009, 0037, 0371	
Albatron	0700, 0843	
Alfide	0672	
America Action	0180	
Amstrad	0009, 0037, 0171, 0371, 0433	
Anam	0009, 0161, 0180,	
	0250, 0700	
Anam National	0161, 0250, 0650	
Anhua	0051	
Anitech	0009	
AOC	0009, 0030, 0060, 0092, 0093, 0108, 0178, 0180, 0451, 0474, 1150	
Aolinpike	0264	
Apex Digital	0748, 0765, 0767, 0879, 1217	
Audinac	0180	
Audiosonic	0037, 0109	
Audiovox	0092, 0180, 0451, 0623, 0802, 0875	
Aventura	0171	
Awa	0009	
Baihe	0009, 0264	
Baile	0001, 0009, 0661	
Baird	0343	
Baohuashi	0264	
Baosheng	0009, 0817	
Barco	0556	
Basic Line	0009	
Baur	0037, 0361, 0512	
Baysonic	0180	
Beaumark	0178	
Beijing	0001, 0009, 0208, 0226, 0264, 0661, 0812, 0817	
Beko	0714	
Bell & Howell	0154	
BenQ	1032	
Beon	0037	
Blaupunkt	0195	
Blue Sky	0556, 1037, 1254, 1314	
BPL	0208, 0896	
Bradford	0180	
Brandt	0109, 0335	
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- Challette

TV	
TV Brokeonic	0226 0462 4025
Broksonic	0236, 0463, 1935
Bush	0009, 0037, 0371, 0698, 1037
C-Tech	0896
Caihong	0009, 0817
Cailing	0748
Candle	0030, 0056, 0186
Carnivale	0030
Carver	0054, 0170
Cascade	0009
Cathay	0037
CCE	0037
Celebrity	0000
Celera	0765
Celestial	0767
Centrex	0780
Centurion	0037
CGE	0074
	0001, 0009, 0051,
Changcheng	0264, 0661, 0817
Changfei .	0009, 0817
Changfeng	0264, 0753, 0817
Changhai	0009, 0817
ga.	0009, 0156, 0264,
Changhong	0508, 0765, 0767,
0 0	0783, 0817, 1156
Chengdu	0009, 0817
Ching Tai	0009, 0092, 0474
	0000, 0009, 0092,
Chun Yun	0161, 0180, 0474,
	0700, 0843, 1150
Chunfeng	0009, 0264
Chung Hsin	0053, 0108, 0180,
	0474, 1150
Chunsun	0009, 0817
Cimline	0009
Cinema	0672
Cineral	0092, 0451
Citizen	0030, 0056, 0060,
	0092, 0186, 1935
Clarion	0180
Clarivox	0037
Commercial	0047, 1447
Solutions	0077, 1777
Concerto	0056
Conrac	0808
	0009, 0145, 0156,
Conrowa	0264, 0698, 0753,
	1156
Contec	0009, 0180
Craig	0161, 0180
Crosley	0054, 0074
Crown	0009, 0037, 0180,
Crown Mustans	0418, 0672
Crown Mustang	0672
	0030, 0047, 0054,
Curtis Mathes	0056, 0060, 0093, 0145, 0154, 0166,
Cartio High 165	0451, 0702, 1147,
	1347
CXC	0180
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TV	
	0009, 0030, 0037,
	0056, 0092, 0108,
	0154, 0170, 0178,
Daewoo	0180, 0451, 0474,
	0623, 0634, 0661,
	0672, 0700, 0880,
	1150, 1661
Dansai	0037
Dayton	0009
Dayu	0661
De Graaf	0208
Decca	0037
Dell	1080, 1178
Denon	0145, 0511
Denver	0587
Dick Smith	0698
Electronics	
Digatron	0037
Digital Life	0780
Digitor	0037, 0698
Digix	0880
Dixi	0009, 0037
Dongda	0009
Donghai	0009
DSE	0698
Dumont	
Dumont	0017
Durabrand	0171, 0178, 0180,
	0463, 1034
ECE	0037
Electroband	0000
Electrograph	1755
Electrohome	0463
Elektra	0017, 1661
Elin	0037
Elta	0009
	0154, 0171, 0178,
Emerson	0180, 0236, 0361,
	0463, 0623
Envision	0030, 0813
Erres	0037
ESA	0171, 0812
Ether	0009, 0030, 0161
Etron	0009
Feilang	0009
Feilu	0009, 0817
Feiyan	0264
Feiyue	0009, 0817
F	0037, 0109, 0335,
Ferguson	0343, 0560
Fidelity	0361
Finlandia	0208, 0346
Finlux	0037, 0346
Firstar	
Firstline	0009, 0236
	0009
Fisher	0154, 0208
Flint	0455
Formenti	0037
Fortress	0093
Frontech	0264
Fujitsu	0186, 0683, 0809, 0853, 1181
Fujitsu General	0186
Fujitsu Siemens	1163

TV	
Funai	0171, 0180, 0264, 0342
Furi	0145, 0264, 0817
Futuretech	0180
Ganxin	0817
Gateway	1755, 1756
datonay	0030, 0047, 0051,
	0092, 0178, 0180,
GE	0451, 0560, 1347,
	1447, 1454
GEC	0037
Geloso	0009
General	0186
Gibralter	0017, 0030
Gintai	0474, 1150
Go Video	0886
do video	
GoldStar	0001, 0030, 0037, 0056, 0109, 0154,
Golusiai	0178, 1150, 1378
Goodmans	0037, 0343, 0360, 0371, 0634
Gradiente	
Graetz	0053, 0056, 0170
	0361, 0714
Granada	0037, 0208
Grandin	0610, 0865, 0880
O	0037, 0195, 0556,
Grundig	0587, 0672, 0706,
0	1935
Grunpy	0180
Haier	0037, 0508, 0587,
I I alla a const	0698, 0896, 1034
Haihong	0009
Haiyan	0264, 0817
Hallmark	0178
Hankook	0030, 0056, 0178,
	0180
Hanseatic	0037, 0361, 0556, 0661, 0808
Harman/Kardon	0054
Harvard	0180
Harwa	0773
Havermy	0093
HCM	0009
Helios	0865
Hello Kitty	0451
Himitsu	0180
Hinari	0009, 0037
Hisawa	0455
Hisense	0009, 0145, 0156, 0508, 0556, 0748,
111001100	0753, 0780, 1156
	0009, 0030, 0056,
	0092, 0109, 0145,
Hitachi	0156, 0178, 0186,
	0225, 0474, 0508,
	1037, 1145, 1150,
	1156, 1245, 1256,
	1378
Hitec	0698
Hoeher	0865
Hongmei	0009, 0093, 0264,
	0817
Hongyan	0264, 0817
Hua Tun	0009, 1150
Huafa	0009, 0145

#### TV Codes—Continued

TV	
Huanghaimei	0009
Huanghe	0009, 0817
Huanglong	0009
Huangshan	0009, 0264, 0817
Huanyu	0264, 0817
Huaqiang	0264
Huari	0145, 0264
Huodateji	0051
Hypson	0037, 0264
Hyundai	0849, 0865
ICE	0264, 0371
Imperial	0074, 0418
Imperial Crown	0001, 0009, 0264, 0661
Indiana	0037
Infinity	0054
Innova	0037
Insignia	0171
Inteq	0017
Interfunk	0037, 0361, 0512
Intervision	0037, 0264
IRT	0451, 0698, 1661
ITS	0371
ITT	0361
JBL	0054
JCB	0000
•	0009, 0051, 0092,
Jean	0156, 0236, 0474
Jensen	0761, 0815, 0817
Jiahua	0051
JiaLiCai	0009, 0264
Jinfeng	0051, 0208, 0226, 0817
Jinque	0009, 0264, 0817
Jinta	0009, 0264
Jinxing	0009, 0037, 0054, 0145, 0156, 0264,
lubus	0556, 0698, 0817
Juhua	0264, 0817
JVC	0053, 0160, 0371, 0463, 0508, 0606, 0653, 0683, 0731, 1172, 1253
Kaige	0009, 0264, 0817
Kaisui	0009
Kanghua	0896
Kangli	0001, 0009, 0264, 0661, 0817
Kangyi	0009, 0264
Karcher	0610
Kathrein	0556
KEC	0180
Kendo	0037
Kenwood	0030
Khind	0706, 0896
Kioto	0054, 0556, 0706
KLH	0765, 0767
KLL	0037
Kolin	0053, 0108, 0150, 0180, 0474, 1150, 1331

Kongque	TV	
Konka         0037, 0587, 0817           Korpel         0037           Kost         1262, 1483           Koyoda         0009           KTV         0030, 0180           Kuaile         0009, 0264           Kulun         0051, 0208, 0226, 0264, 0661, 0817           L&S Electronic         0808           Leyco         0037, 0264           Logo         001, 0030, 0037, 0056, 0060, 0108, 0178, 0442, 0474, 0644, 0700, 0714, 0644, 0700, 0714, 0656, 1178, 1265, 1378           Liesenk & Tter         0037           Lihua         0817           Local India TV         0009, 0208, 0264, 0371, 0602           Local Malaysia TV         0698           Loewe         0136, 0512, 0633, 0790           Logik         0001, 1217           Longjiang         0264, 0817           Luxnan         0056           Luxor         0361           LXI         0047, 0054, 0154, 0154, 0156, 0178           M & S         0054           M Electronic         0030, 0037, 0109, 0346, 0480           Magnavox         0706, 0780, 0802, 1254, 1454           Mark         0037           Mastro         0053, 0698, 0706, 0780, 0802, 1254, 1454           Mack         0698		0000 0264 0917
Korpel         0037           Kost         1262, 1483           Koyoda         0009           KTV         0030, 0180           Kuaile         0009, 0264           Kulun         0051, 0208, 0226, 0264, 0661, 0817           L&S Electronic         0808           Leyco         0037, 0264           Leyco         0037, 0264           Logo         0001, 0030, 0037, 0056, 0060, 0108, 0178, 0442, 0474, 0644, 0700, 0714, 0856, 1178, 1265, 1378           Liseenk & Tter         0037           Lihua         0817           Local India TV         0009, 0208, 0264, 0371, 0602           Local Malaysia TV         0698           Loewe         0136, 0512, 0633, 0790           Logik         0001, 1217           Longjiang         0264, 0817           Luxor         0361           LXI         0047, 0054, 0154, 0154, 0154, 0156, 0178           M & S         0054           M Electronic         0030, 0037, 0109, 0346, 0480           Magnavox         0706, 0780, 0802, 1254, 1454           Mark         0037           Mastro         0053, 0698, 0706, 0780, 0802, 1254, 1454           Mark         0037           Mastro         0053, 0698, 0706, 0750, 00		
Kost         1262, 1483           Koyoda         0009           KTV         0030, 0180           Kuaile         0009, 0264           Kulun         00051, 0208, 0226, 0264, 0661, 0817           Lesco         0037, 0264           Leyco         0037, 0264           Leyco         0001, 0030, 0037, 0056, 0060, 0108, 0178, 0442, 0474, 0644, 0700, 0714, 0856, 1178, 1265, 1378           Liesenk & Tter         0037           Lihua         0817           Local India TV         0009, 0208, 0264, 0371, 0602           Local Malaysia TV         0698           Lowe         0136, 0512, 0633, 0790           Logik         0001, 1217           Longjiang         0264, 0817           Luxor         0361           LXI         0047, 0054, 0154, 0154, 0156, 0178           M & S         0054           M Electronic         0009, 0037, 0109, 0346, 0480           Magnavox         0706, 0780, 0802, 1254, 1454           Manesth         0264           Marantz         0030, 0054, 0186, 0706, 0780, 0802, 1254, 1454           Mark         0037           Mastro         0053, 0698, 0706, 0760, 0760, 0780, 0802, 076, 0780, 0803, 0809, 0706, 0780, 0809, 0706, 0780, 0809, 0706, 0780, 0809, 0706, 0780, 0809, 0706, 0780, 0809, 0706		
Koyoda         0009           KTV         0030, 0180           Kuaile         0009, 0264           Kulun         0009           Kunlun         0051, 0208, 0226, 0264, 0661, 0817           L&S Electronic         0808           Leyco         0037, 0264           0001, 0030, 0037, 0056, 0060, 0108, 0178, 0442, 0474, 0644, 0700, 0714, 0856, 1178, 1265, 1378           Liesenk & Tter         0037           Lihua         0817           Local India TV         0099, 0208, 0264, 0371, 0602           Local Malaysia TV         0698           Loewe         0136, 0512, 0633, 0790           Logik         0001, 1217           Longjiang         0264, 0817           Luxor         0361           LXI         0047, 0054, 0154, 0154, 0156, 0178           M & S         0054           M Electronic         0030, 0054, 0186, 0480           Magnavox         0706, 0780, 0802, 1254, 1454           Manesth         0264           Marantz         0030, 0037, 0054, 00556, 0704, 0855           Mark         0037           Mastro         0053, 0698, 0706, 0780, 0057, 0206, 0371, 0443           Matsushita         0161, 0250, 0650           Maxent         1755	· · · · · · · · · · · · · · · · · · ·	
KTV         0030, 0180           Kuaile         0009, 0264           Kulun         0009           Kunlun         0051, 0208, 0226, 0264, 0661, 0817           LeS Electronic         0808           Leyco         0037, 0264           0001, 0030, 0037, 0056, 0060, 0108, 0178, 0442, 0474, 0644, 0700, 0714, 0856, 1178, 1265, 1378           Liesenk & Tter         0037           Lihua         0817           Local India TV         0009, 0208, 0264, 0371, 0602           Local Malaysia TV         0698           Loewe         0136, 0512, 0633, 0790           Logik         0001, 1217           Longjiang         0264, 0817           Luxnan         0056           Luxor         0361           LXI         0047, 0054, 0154, 0154, 0156, 0178           M & S         0054           M Electronic         0009, 0037, 0109, 0346, 0480           Magnavox         0706, 0780, 0802, 1254, 1454           Manesth         0264           Marantz         0030, 0037, 0054, 0802, 1254, 1454           Mark         0037           Mastro         0030, 0037, 0054, 0802, 1254, 1454           Mastro         0055, 0704, 0855           Meck         0698      <		
Kuaile         0009           Kulun         0009           Kunlun         0051, 0208, 0226, 0264, 0661, 0817           L&S Electronic         0808           Leyco         0037, 0264           0001, 0030, 0037, 0056, 0060, 0108, 0178, 0442, 0474, 0644, 0700, 0714, 0856, 1178, 1265, 1378           Liesenk & Tter         0037           Lihua         0817           Local India TV         0009, 0208, 0264, 0371, 0602           Local Malaysia TV         0698           Loewe         0136, 0512, 0633, 0790           Logik         0001, 1217           Longjiang         0264, 0817           Luxor         0361           LXI         0047, 0054, 0154, 0154, 0156, 0178           M & S         0054           M Electronic         0009, 0037, 0109, 0346, 0480           Magnavox         0706, 0780, 0802, 1254, 1454           Manesth         0264           Marantz         0030, 0037, 0054, 0802, 1254, 1454           Mark         0037           Mastro         0053, 0698, 0706, 0706, 0780, 0802, 1037, 0208, 0371, 0443           Matsui         0009, 0035, 0037, 0054, 0805           Meck         0698           Medion         0888, 0880, 1037, 1248           Mega		
Kulun         0009           Kunlun         0051, 0208, 0226, 0264, 0661, 0817           L&S Electronic         0808           Leyco         0037, 0264           0001, 0030, 0037, 0056, 0060, 0108, 0178, 0442, 0474, 0644, 0700, 0714, 0856, 1178, 1265, 1378           Liesenk & Tter         0037           Lihua         0817           Local India TV         0009, 0208, 0264, 0371, 0602           Local Malaysia TV         0698           Loewe         0136, 0512, 0633, 0790           Logik         0001, 1217           Longjiang         0264, 0817           Luxor         0361           LXI         0047, 0054, 0154, 0154, 0156, 0178           M & S         0054           M Electronic         0030, 0037, 0109, 0346, 0480           Magnavox         0706, 0780, 0802, 1254, 1454           Manesth         0264           Marantz         0030, 0037, 0054, 0365           Mark         0037           Mastro         0053, 0698, 0706, 0780           Mastro         0053, 0698, 0706, 0780           Maxent         1755           Meck         0698           Medion         0808, 0880, 1037, 1248           Megapower         0700		
Kunlun         0051, 0208, 0226, 0264, 0661, 0817           L&S Electronic         0808           Leyco         0037, 0264           0001, 0030, 0037, 0056, 0060, 0108, 0178, 0442, 0474, 0644, 0700, 0714, 0856, 1178, 1265, 1378           Liesenk & Tter         0037           Lihua         0817           Local India TV         0009, 0208, 0264, 0371, 0602           Loewe         0136, 0512, 0633, 0790           Logik         0001, 1217           Longjiang         0264, 0817           Luxor         0361           LXI         0047, 0054, 0154, 0156, 0178           M & S         0054           M Electronic         0009, 0037, 0109, 0346, 0480           Magnavox         0706, 0780, 0802, 1254, 1454           Manesth         0264           Marantz         0030, 0037, 0054, 0556, 0704, 0855           Mark         0037           Mastro         0053, 0698, 0706, 0780           Masui         0009, 0035, 0037, 0043           Medion         0808, 0880, 1037, 1248           Medion         0808, 0880, 1037, 1248           Medion         045, 0178           Medion         0463, 1037           Medie         0264, 0817           Memorex         00		
Name	Kulun	
L&S Electronic         0808           Leyco         0037, 0264           0001, 0030, 0037, 0056, 0060, 0108, 0178, 0442, 0474, 0644, 0700, 0714, 0856, 1178, 1265, 1378           Liesenk & Tter         0037           Lihua         0817           Local India TV         0009, 0208, 0264, 0371, 0602           Local Malaysia TV         0698           Loewe         0136, 0512, 0633, 0790           Logik         0001, 1217           Longjiang         0264, 0817           Luxor         0361           LXI         0047, 0054, 0154, 0154, 0156, 0178           M & S         0054           M Electronic         0009, 0037, 0109, 0346, 0480           Magnavox         0706, 0780, 0802, 1254, 1454           Manesth         0264           Marantz         0030, 0037, 0054, 0855           Mark         0037           Mastro         0053, 0698, 0706, 0780           Matsui         0009, 0035, 0037, 0204, 0855           Meck         0698           Mediator         0037           Meck         0698           Mediator         0037           Median         0145, 0178           Megapower         0700           Megatron         <	Kunlun	
Leyco 0037, 0264  0001, 0030, 0037, 0056, 0060, 0108, 0178, 0442, 0474, 0644, 0700, 0714, 0856, 1178, 1265, 1378  Liesenk & Tter 0037  Lihua 0817  Local India TV 0099, 0208, 0264, 0371, 0602  Loewe 0136, 0512, 0633, 0790  Logik 0001, 1217  Longjiang 0264, 0817  Luxman 0056  Luxor 0361  LXI 0047, 0054, 0154, 0156, 0178  M & S 0054  M Electronic 0009, 0037, 0109, 0346, 0480  Magnavox 0706, 0780, 0802, 1254, 1454  Manesth 0264  Marantz 0037  Mastro 0030, 0037, 0054, 0556, 0704, 0855  Mark 0037  Mastro 0706, 0780, 0037, 0054, 0780  Matsui 0009, 0037, 0054, 0780  Matsui 0009, 0037, 0054, 0780  Matsui 0009, 0037, 0050  Matsui 0009, 0037, 0050  Maxent 1755  Meck 0698  Mediator 0037  Medion 180, 0808, 0880, 1037, 1248  Megapower 0700  Megatron 0145, 0178  Meile 0264, 0817  Memorex 0009, 0150, 0154, 0178, 0463, 1037  Mercury 0001  Mermaid 0037  Metronic 0625  Metz 0388, 0447, 0746  MGA 0030, 0150, 0178  Micromaxx 0808  Microstar 0808	I & C Electronia	
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Liesenk & Tter         0037           Lihua         0817           Local India TV         0009, 0208, 0264, 0371, 0602           Local Malaysia TV         0698           Loewe         0136, 0512, 0633, 0790           Logik         0001, 1217           Longjiang         0264, 0817           Luxman         0056           Luxor         0361           LXI         0047, 0054, 0154, 0154, 0156, 0178           M & S         0054           M Electronic         0009, 0037, 0109, 0346, 0480           Magnavox         0706, 0780, 0802, 1254, 1454           Manesth         0264           Marantz         0030, 0037, 0054, 0186, 0706, 0780, 0802, 1254, 1454           Mark         0037           Mastro         0053, 0698, 0706, 0706, 0780           Matsui         0003, 0037, 0054, 0855           Matsui         0009, 0035, 0037, 0208, 0371, 0443           Matsushita         0161, 0250, 0650           Maxent         1755           Meck         0698           Mediator         0037           Medion         0808, 0880, 1037, 1248           Megapower         0700           Megatron         0145, 0178           Meile<		0856, 1178, 1265,
Lihua         0817           Local India TV         0009, 0208, 0264, 0371, 0602           Local Malaysia TV         0698           Loewe         0136, 0512, 0633, 0790           Logik         0001, 1217           Longjiang         0264, 0817           Luxman         0056           Luxor         0361           LXI         0047, 0054, 0154, 0154, 0156, 0178           M & S         0054           M Electronic         0009, 0037, 0109, 0346, 0480           Magnavox         0706, 0784, 0186, 0706, 0780, 0802, 1254, 1454           Manesth         0264           Marantz         0030, 0037, 0054, 0056, 0704, 0855           Mark         0037           Mastro         0053, 0698, 0706, 0780           Matsui         0009, 0035, 0037, 0208, 0371, 0443           Matsui         0009, 0035, 0037, 0208, 0371, 0443           Matsushita         0161, 0250, 0650           Maxent         1755           Meck         0698           Mediator         0037           Medion         0808, 0880, 1037, 1248           Megapower         0700           Megatron         0145, 0178           Meile         0264, 0817           Mem		1378
Local India TV         0009, 0208, 0264, 0371, 0602           Local Malaysia TV         0698           Loewe         0136, 0512, 0633, 0790           Logik         0001, 1217           Longjiang         0264, 0817           Luxman         0056           Luxor         0361           LXI         0047, 0054, 0154, 0156, 0178           M & S         0054           M Electronic         0009, 0037, 0109, 0346, 0480           Magnavox         0706, 0780, 0802, 1254, 1454           Manesth         0264           Marantz         0030, 0037, 0054, 0855           Mark         0037           Mastro         0053, 0698, 0706, 0780           Matsui         0009, 0035, 0037, 0208, 0371, 0443           Matsui         0161, 0250, 0650           Maxent         1755           Meck         0698           Mediator         0037           Median         0145, 0178           Meile         0264, 0817           Memorex         0700           Megapower         0700           Megatron         0145, 0178           Meile         0264, 0817           Memorex         0178, 0463, 1037	Liesenk & Tter	0037
Local India I V         0371, 0602           Local Malaysia TV         0698           Loewe         0136, 0512, 0633, 0790           Logik         0001, 1217           Longjiang         0264, 0817           Luxor         0361           LXI         0047, 0054, 0154, 0156, 0178           M & S         0054           M Electronic         0009, 0037, 0109, 0346, 0480           Magnavox         0706, 0780, 0802, 1254, 1454           Manesth         0264           Marantz         0030, 0037, 0054, 0855           Mark         0037           Mastro         0053, 0698, 0706, 0780           Matsui         0009, 0035, 0037, 0208, 0371, 0443           Matsui         0161, 0250, 0650           Maxent         1755           Meck         0698           Mediator         0037           Medion         0808, 0880, 1037, 1248           Megapower         0700           Megatron         0145, 0178           Meile         0264, 0817           Memorex         0178, 0463, 1037           Mercury         0001           Mermaid         0037           Metz         0388, 0447, 0746 <td< td=""><td>Lihua</td><td>0817</td></td<>	Lihua	0817
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Loewe         0136, 0512, 0633, 0790           Logik         0001, 1217           Longjiang         0264, 0817           Luxman         0056           Luxor         0361           LXI         0047, 0054, 0154, 0156, 0178           M & S         0054           M Electronic         0009, 0037, 0109, 0346, 0480           Magnavox         0706, 0780, 0802, 1254, 1454           Manesth         0264           Marantz         0030, 0037, 0054, 0855           Mark         0037           Mastro         0053, 0698, 0706, 0780           Matsui         0009, 0035, 0037, 0208, 0371, 0443           Matsushita         0161, 0250, 0650           Maxent         1755           Meck         0698           Mediator         0037           Medion         0808, 0880, 1037, 1248           Megapower         0700           Megatron         0145, 0178           Meile         0264, 0817           Memorex         0009, 0150, 0154, 0178, 0463, 1037           Mercury         0001           Mermaid         0037           Metz         0388, 0447, 0746           MGA         0030, 0150, 0178		
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Longjiang         0264, 0817           Luxman         0056           Luxor         0361           LXI         0047, 0054, 0154, 0156, 0178           M & S         0054           M Electronic         0009, 0037, 0109, 0346, 0480           Magnavox         0706, 0780, 0802, 1254, 1454           Manesth         0264           Marantz         0030, 0037, 0054, 0855           Mark         0037           Mastro         0053, 0698, 0706, 0780           Matsui         0009, 0035, 0037, 0208, 0371, 0443           Matsushita         0161, 0250, 0650           Maxent         1755           Meck         0698           Mediator         0037           Medion         0808, 0880, 1037, 1248           Megapower         0700           Megatron         0145, 0178           Meile         0264, 0817           Memorex         0178, 0463, 1037           Mercury         0001           Mermaid         0037           Metz         0388, 0447, 0746           MGA         0030, 0150, 0178           Micromaxx         0808           Microstar         0808		
Luxman         0056           Luxor         0361           LXI         0047, 0054, 0154, 0156, 0178           M & S         0054           M Electronic         0009, 0037, 0109, 0346, 0480           Magnavox         0706, 0780, 0802, 1254, 1454           Manesth         0264           Marantz         0030, 0037, 0054, 0855           Mark         0037           Mastro         0053, 0698, 0706, 0780           Matsui         0009, 0035, 0037, 0208, 0371, 0443           Matsushita         0161, 0250, 0650           Maxent         1755           Meck         0698           Mediator         0037           Medion         0808, 0880, 1037, 1248           Megapower         0700           Megatron         0145, 0178           Meile         0264, 0817           Memorex         0009, 0150, 0154, 0178, 0463, 1037           Mercury         0001           Mermaid         0037           Metz         0388, 0447, 0746           MGA         0030, 0150, 0178           Micromaxx         0808           Microstar         0808		
Luxor         0361           LXI         0047, 0054, 0154, 0156, 0178           M & S         0054           M Electronic         0009, 0037, 0109, 0346, 0480           Magnavox         0706, 0780, 0802, 1254, 1454           Manesth         0264           Marantz         0030, 0037, 0054, 0855           Mark         0037           Mastro         0053, 0698, 0706, 0780           Matsui         0009, 0035, 0037, 0208, 0371, 0443           Matsushita         0161, 0250, 0650           Maxent         1755           Meck         0698           Mediator         0037           Medion         0808, 0880, 1037, 1248           Megapower         0700           Megatron         0145, 0178           Meile         0264, 0817           Memorex         0009, 0150, 0154, 0178, 0463, 1037           Mercury         0001           Mermaid         0037           Metz         0388, 0447, 0746           MGA         0030, 0150, 0178           Micromaxx         0808           Microstar         0808		
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LXI         0156, 0178           M & S         0054           M Electronic         0009, 0037, 0109, 0346, 0480           Magnavox         0030, 0054, 0186, 0706, 0780, 0802, 1254, 1454           Manesth         0264           Marantz         0030, 0037, 0054, 0556, 0704, 0855           Mark         0037           Mastro         0053, 0698, 0706, 0780           Matsui         0009, 0035, 0037, 0208, 0371, 0443           Matsushita         0161, 0250, 0650           Maxent         1755           Meck         0698           Mediator         0037           Medion         0808, 0880, 1037, 1248           Megapower         0700           Megatron         0145, 0178           Meile         0264, 0817           Memorex         0178, 0463, 1037           Mercury         0001           Mermaid         0037           Metz         0388, 0447, 0746           MGA         0030, 0150, 0178           Micromaxx         0808           Microstar         0808	Luxor	
M & S         0054           M Electronic         0009, 0037, 0109, 0346, 0480           Magnavox         0030, 0054, 0186, 0706, 0780, 0802, 1254, 1454           Manesth         0264           Marantz         0030, 0037, 0054, 0556, 0704, 0855           Mark         0037           Mastro         0053, 0698, 0706, 0780           Matsui         0009, 0035, 0037, 0208, 0371, 0443           Matsushita         0161, 0250, 0650           Maxent         1755           Meck         0698           Mediator         0037           Medion         0808, 0880, 1037, 1248           Megapower         0700           Megatron         0145, 0178           Meile         0264, 0817           Memorex         0009, 0150, 0154, 0178, 0463, 1037           Mercury         0001           Mermaid         0037           Metz         0388, 0447, 0746           MGA         0030, 0150, 0178           Micromaxx         0808           Microstar         0808	LXI	
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Melectronic         0346, 0480           0030, 0054, 0186, 0706, 0780, 0802, 1254, 1454           Manesth         0264           Marantz         0030, 0037, 0054, 0855           Mark         0037           Mastro         0053, 0698, 0706, 0780           Matsui         0009, 0035, 0037, 0208, 0371, 0443           Matsushita         0161, 0250, 0650           Maxent         1755           Meck         0698           Mediator         0037           Megapower         0700           Megatron         0145, 0178           Meile         0264, 0817           Memorex         0009, 0150, 0154, 0178, 0463, 1037           Mercury         0001           Mermaid         0037           Metz         0388, 0447, 0746           MGA         0030, 0150, 0178           Micromaxx         0808           Microstar         0808	M&S	
Magnavox         0030, 0054, 0186, 0706, 0780, 0802, 1254, 1454           Manesth         0264           Marantz         0030, 0037, 0054, 0556, 0704, 0855           Mark         0037           Mastro         0053, 0698, 0706, 0780           Matsui         0009, 0035, 0037, 0208, 0371, 0443           Matsushita         0161, 0250, 0650           Maxent         1755           Meck         0698           Mediator         0037           Medion         0808, 0880, 1037, 1248           Megapower         0700           Megatron         0145, 0178           Meile         0264, 0817           Memorex         0009, 0150, 0154, 0178, 0463, 1037           Mercury         0001           Mermaid         0037           Metronic         0625           Metz         0388, 0447, 0746           MGA         0030, 0150, 0178           Micromaxx         0808           Microstar         0808	M Electronic	
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Manesth         0264           Marantz         0030, 0037, 0054, 0556, 0704, 0855           Mark         0037           Mastro         0053, 0698, 0706, 0780           Matsui         0009, 0035, 0037, 0208, 0371, 0443           Matsushita         0161, 0250, 0650           Maxent         1755           Meck         0698           Mediator         0037           Medion         0808, 0880, 1037, 1248           Megapower         0700           Megatron         0145, 0178           Meile         0264, 0817           Memorex         0009, 0150, 0154, 0178, 0463, 1037           Mercury         0001           Mermaid         0037           Metronic         0625           Metz         0388, 0447, 0746           MGA         0030, 0150, 0178           Micromaxx         0808           Microstar         0808	Magnavox	
Mark         0556, 0704, 0855           Mark         0037           Mastro         0053, 0698, 0706, 0780           Matsui         0009, 0035, 0037, 0208, 0371, 0443           Matsushita         0161, 0250, 0650           Maxent         1755           Meck         0698           Mediator         0037           Medion         0808, 0880, 1037, 1248           Megapower         0700           Megatron         0145, 0178           Meile         0264, 0817           Memorex         0009, 0150, 0154, 0178, 0463, 1037           Mercury         0001           Mermaid         0037           Metronic         0625           Metz         0388, 0447, 0746           MGA         0030, 0150, 0178           Micromaxx         0808           Microstar         0808	Manesth	
Mark         0556, 0704, 0855           Mark         0037           Mastro         0053, 0698, 0706, 0780           Matsui         0009, 0035, 0037, 0208, 0371, 0443           Matsushita         0161, 0250, 0650           Maxent         1755           Meck         0698           Mediator         0037           Medion         0808, 0880, 1037, 1248           Megapower         0700           Megatron         0145, 0178           Meile         0264, 0817           Memorex         0009, 0150, 0154, 0178, 0463, 1037           Mercury         0001           Mermaid         0037           Metronic         0625           Metz         0388, 0447, 0746           MGA         0030, 0150, 0178           Micromaxx         0808           Microstar         0808		0030, 0037, 0054,
Mastro         0053, 0698, 0706, 0780           Matsui         0009, 0035, 0037, 0208, 0371, 0443           Matsushita         0161, 0250, 0650           Maxent         1755           Meck         0698           Mediator         0037           Medion         0808, 0880, 1037, 1248           Megapower         0700           Megatron         0145, 0178           Meile         0264, 0817           Memorex         0178, 0463, 1037           Mercury         0001           Mermaid         0037           Metronic         0625           Metz         0388, 0447, 0746           MGA         0030, 0150, 0178           Micromaxx         0808           Microstar         0808	Marantz	
Masuro         0780           Matsui         0009, 0035, 0037, 0208, 0371, 0443           Matsushita         0161, 0250, 0650           Maxent         1755           Meck         0698           Mediator         0037           Medion         0808, 0880, 1037, 1248           Megapower         0700           Megatron         0145, 0178           Meile         0264, 0817           Memorex         0009, 0150, 0154, 0178, 0463, 1037           Mercury         0001           Mermaid         0037           Metronic         0625           Metz         0388, 0447, 0746           MGA         0030, 0150, 0178           Micromaxx         0808           Microstar         0808	Mark	0037
Matsui 0780  Matsui 0009, 0035, 0037, 0208, 0371, 0443  Matsushita 0161, 0250, 0650  Maxent 1755  Meck 0698  Mediator 0037  Medion 0808, 0880, 1037, 1248  Megapower 0700  Megatron 0145, 0178  Meile 0264, 0817  Memorex 0009, 0150, 0154, 0178, 0463, 1037  Mercury 0001  Mermaid 0037  Metronic 0625  Metz 0388, 0447, 0746  MGA 0030, 0150, 0178  Micromaxx 0808  Microstar 0808	Mostro	0053, 0698, 0706,
Matsul         0208, 0371, 0443           Matsushita         0161, 0250, 0650           Maxent         1755           Meck         0698           Mediator         0037           Medion         0808, 0880, 1037, 1248           Megapower         0700           Megatron         0145, 0178           Meile         0264, 0817           Memorex         0009, 0150, 0154, 0178, 0463, 1037           Mercury         0001           Mermaid         0037           Metronic         0625           Metz         0388, 0447, 0746           MGA         0030, 0150, 0178           Micromaxx         0808           Microstar         0808	ividStr0	
Matsushita 0161, 0250, 0650  Maxent 1755  Meck 0698  Mediator 0037  Medion 0808, 0880, 1037, 1248  Megapower 0700  Megatron 0145, 0178  Meile 0264, 0817  Memorex 0009, 0150, 0154, 0178, 0463, 1037  Mercury 0001  Mermaid 0037  Metronic 0625  Metz 0388, 0447, 0746  MGA 0030, 0150, 0178  Micromaxx 0808  Microstar 0808	Matsui	
Maxent         1755           Meck         0698           Mediator         0037           Medion         0808, 0880, 1037, 1248           Megapower         0700           Megatron         0145, 0178           Meile         0264, 0817           Memorex         0009, 0150, 0154, 0178, 0463, 1037           Mercury         0001           Mermaid         0037           Metronic         0625           Metz         0388, 0447, 0746           MGA         0030, 0150, 0178           Micromaxx         0808           Microstar         0808		
Meck         0698           Mediator         0037           Medion         0808, 0880, 1037, 1248           Megapower         0700           Megatron         0145, 0178           Meile         0264, 0817           Memorex         0009, 0150, 0154, 0178, 0463, 1037           Mercury         0001           Mermaid         0037           Metronic         0625           Metz         0388, 0447, 0746           MGA         0030, 0150, 0178           Micromaxx         0808           Microstar         0808	Matsushita	0161, 0250, 0650
Mediator         0037           Medion         0808, 0880, 1037, 1248           Megapower         0700           Megatron         0145, 0178           Meile         0264, 0817           Memorex         0009, 0150, 0154, 0178, 0463, 1037           Mercury         0001           Mermaid         0037           Metronic         0625           Metz         0388, 0447, 0746           MGA         0030, 0150, 0178           Micromaxx         0808           Microstar         0808		1755
Medion         0808, 0880, 1037, 1248           Megapower         0700           Megatron         0145, 0178           Meile         0264, 0817           Memorex         0009, 0150, 0154, 0178, 0463, 1037           Mercury         0001           Mermaid         0037           Metronic         0625           Metz         0388, 0447, 0746           MGA         0030, 0150, 0178           Micromaxx         0808           Microstar         0808		
Medion         1248           Megapower         0700           Megatron         0145, 0178           Meile         0264, 0817           Memorex         0009, 0150, 0154, 0178, 0463, 1037           Mercury         0001           Mermaid         0037           Metronic         0625           Metz         0388, 0447, 0746           MGA         0030, 0150, 0178           Micromaxx         0808           Microstar         0808	Mediator	0037
Megapower         0700           Megatron         0145, 0178           Meile         0264, 0817           Memorex         0009, 0150, 0154, 0178, 0463, 1037           Mercury         0001           Mermaid         0037           Metronic         0625           Metz         0388, 0447, 0746           MGA         0030, 0150, 0178           Micromaxx         0808           Microstar         0808	Medion	
Megatron         0145, 0178           Meile         0264, 0817           Memorex         0009, 0150, 0154, 0178, 0463, 1037           Mercury         0001           Mermaid         0037           Metronic         0625           Metz         0388, 0447, 0746           MGA         0030, 0150, 0178           Micromaxx         0808           Microstar         0808		
Meile         0264, 0817           Memorex         0009, 0150, 0154, 0178, 0463, 1037           Mercury         0001           Mermaid         0037           Metronic         0625           Metz         0388, 0447, 0746           MGA         0030, 0150, 0178           Micromaxx         0808           Microstar         0808		
Memorex         0009, 0150, 0154, 0178, 0463, 1037           Mercury         0001           Mermaid         0037           Metronic         0625           Metz         0388, 0447, 0746           MGA         0030, 0150, 0178           Micromaxx         0808           Microstar         0808		
Meritorex         0178, 0463, 1037           Mercury         0001           Mermaid         0037           Metronic         0625           Metz         0388, 0447, 0746           MGA         0030, 0150, 0178           Micromaxx         0808           Microstar         0808	Meile	
Mercury 0001  Mermaid 0037  Metronic 0625  Metz 0388, 0447, 0746  MGA 0030, 0150, 0178  Micromaxx 0808  Microstar 0808	Memorex	0009, 0150, 0154,
Mermaid         0037           Metronic         0625           Metz         0388, 0447, 0746           MGA         0030, 0150, 0178           Micromaxx         0808           Microstar         0808		
Metronic         0625           Metz         0388, 0447, 0746           MGA         0030, 0150, 0178           Micromaxx         0808           Microstar         0808		<del> </del>
Metz         0388, 0447, 0746           MGA         0030, 0150, 0178           Micromaxx         0808           Microstar         0808		
MGA         0030, 0150, 0178           Micromaxx         0808           Microstar         0808		
Micromaxx 0808 Microstar 0808		
Microstar 0808		<del></del>
Midland 0017, 0047, 0051		
	Midland	0017, 0047, 0051

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	0030, 0056, 0093,
	0108, 0150, 0154,
Mitsubishi	0178, 0180, 0236,
······oublorii	0250, 0474, 0512,
	0817, 0836, 1150, 1171, 1182, 1250
Monivision	0700, 0843
Motorola	0093
Wotoroia	
MTC	0030, 0056, 0060, 0512
Mudan	0009, 0051, 0208, 0226, 0264, 0817
Multitech	0009, 0180
Murphy	0474
Myryad	0556
NAD	0156, 0178, 0361, 0866
Nanbao	0009, 0264
Nansheng	0264, 0817
	0051, 0208, 0226,
National	0508
	0009, 0030, 0051,
	0053, 0056, 0154,
NEO	0156, 0170, 0178,
NEC	0186, 0264, 0455,
•	0474, 0508, 0704, 0817, 1150, 1378,
	1456, 1704
Neckermann	0037, 0556
NEI	0037, 0330
Neovia	0865
Netsat	0037
NetTV	1755
14511 V	0009, 0092, 0093,
Newave	0161, 0178, 1150
Nikkai	0035, 0037, 0264
Nikko	0030, 0092, 0178
Noblex	0154
Nokia	0361, 0480, 0606
Norcent	0748, 0824
Nordmende	0109, 0343, 0560
NTC	0109, 0343, 0360
Oceanic	0361
Olevia	1144, 1240, 1331
Onida	0053, 1253
Onwa	0180, 0433
Optimus	0154, 0166, 0250, 0650
Optonica	0093
Orion	0037, 0236, 0443, 0463, 0474, 0880,
	1463
Osaki	0264, 0474
Otto Versand	0037, 0343, 0512, 0556
Palladium	0418
Palsonic	0773
Panama	0264
	0037, 0051, 0054,
Panasonic	0161, 0208, 0226, 0250, 0508, 0650, 0896, 1168, 1175,
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TV	
Panda	0009, 0051, 0208, 0226, 0264, 0508, 0698, 0706, 0780, 0817
Pausa	0009
Penney	0030, 0047, 0051, 0060, 0156, 0178, 1347, 1378
Philco	0030, 0037, 0054, 0056, 0074, 0145, 0178, 0180, 0186, 0463, 0474, 1661
Philips	0000, 0030, 0037, 0051, 0054, 0056, 0092, 0108, 0178, 0186, 0474, 0556, 0690, 1454, 1483
Phonola	0037
Pilot	0030, 0706
Pioneer	0109, 0166, 0679, 0760, 0866
Polaroid	0765, 0865, 1262, 1276, 1314, 1341, 1498
Portland	0092
Prima	0761, 0783, 0815, 0817
Princeton	0700
Prism Profex	0051
Proscan	0009, 0361
Protech	0009, 0037, 0264, 0418
Proton	0001, 0009, 0030, 0056, 0178, 0474, 0644
Proview	1498
Pulsar	0017
Pye	0037
Qingdao	0051, 0208, 0226, 0264, 0817
Quasar	0051, 0250, 0650
Quelle	0037, 0074, 0361, 0512
R-Line	0037
Radiola	0037
RadioShack	0030, 0047, 0056,
	0154, 0178, 0180
	0060, 0030, 0047,
RCA	0178, 0618, 0679,
11071	1047, 1147, 1247, 1347, 1454,
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	0030, 0056, 0154,
Realistic	0178, 0180
Rediffusion	0361
Relisys	0865
Reoc Revox	0714
Rex	0264
Roadstar	0009, 0264, 0418
Rowa	0009, 0037, 0698, 0712, 0748, 0817
Runco	0017, 0030
Ruyi	0817

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Saba	0109, 0335, 0343
Sagem	0610
Saige	0009, 0817
Saisho	0009, 0264
Salora	0361
	0009, 0030, 0092,
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Sampo	0178, 0474, 0650,
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	0009, 0030, 0037,
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Samsung	0264, 0474, 0556,
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Sanjian	0264
Sansei	0451
Sansui	0463, 0706, 1935
Carioui	0088, 0145, 0154,
	0156, 0180, 0208,
Sanyo	0264, 0376, 0424,
Curiyo	0474, 0508, 1150,
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Sanyuan	0009, 0093, 0817
SBR	0037
Sceptre	1217
Schaub Lorenz	0361
Schneider	
Scotch	0037, 0371, 0394
Scott	0178, 0180, 0236
Sears	0047, 0054, 0056,
Sears	0154, 0156, 0171,  0178
SEG	
Semivox	0264, 1037, 1163 0180
Semp	0156, 1356
Sentra	0035
Shancha	0264, 0817
Shanghai	0009, 0208, 0226,
	0264, 0817
Shaofeng	0145, 0817
	0009, 0030, 0093,
Sharp	0256, 0474, 0650,
	0787, 0818, 1165, 1193
Shen Ying	0009, 0092, 0474
Shencai	
OHEHOAI	0009, 0145, 0264
Sheng Chia	0009, 0093, 0236, 0474, 1150
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Shenyang	0009, 0264, 0753,
Sherwood	0009
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Simpson	0186
SKY	0037
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O	0009, 0037, 0264,
Skyworth	0698, 0748, 0753,
Olisia	0817
Sliding	0865, 0880
Songba	0009

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Sonitron	0208
Sonoko	0009, 0037
Sonolor	0208
Sontec	0037
	0000, 0650, 1100,
Sony	1167, 1300, 1505, 1651
Soundesign	0178, 0180, 0186
Soundwave	0037, 0418
Sowa	0051, 0060, 0092, 0156, 0178, 0226,
0	0474, 1150
Squareview	0171
SSS	0180
Standard	0009
Starlite	0180
Studio Experience	0843
Sunkai	0865
Superscan	0093, 0864
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Guauniu	
SVA	0587, 0748, 0865, 0870, 0871
Swisstec	0880
Sylvania	0030, 0054, 0171, 1314
Symphonic	0171, 0180
- 7	0000, 0060, 0092,
Synco	0093, 0178, 0451, 0474
Syntax	1144, 1240, 1331
Sysline	0037
T+A	0447
Tacico	0009, 0092, 0178,
Tai Yi	0474, 1150
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Taishan	0009, 0817
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Tatung	0009, 0037, 0051, 0054, 0060, 0154, 0156, 0474, 1150, 1156, 1254, 1756
TCL	0698, 0706
TCM	0808
	0009, 0037, 0264,
Teac	0418, 0455, 0698, 0706, 0712, 1037, 1755
Technics	0051, 0250, 0650
Technisson	0714
Techview	0847
Techwood	0051, 0056, 1163
TCCTTWOOG	0009, 0051, 0092,
Teco	0009, 0051, 0092, 0093, 0178, 0264, 0474, 0653
Teknika	0054, 0056, 0060, 0092, 0150, 0180, 0186
Teleavia	0343
	0056, 0074, 0109,
Telefunken	0335, 0343, 0625, 0702, 0896
Teletech	0009

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Teleton	0186
Tera	0030, 0092, 0474
Tevion	0767
Texla	0780
	0109, 0343, 0560,
Thomson	0625, 1447
T1	0035, 0037, 0074,
Thorn	0343, 0361, 0512
Thorn-Ferguson	0343
Tiane	0093, 0817
TMK	0056, 0178
TNCi	0017
Tobo	0009, 0264, 0748
Tongguang	0264
Tongtel	0780
Tophouse	0180
	0009, 0035, 0060,
	0093, 0145, 0154,
	0156, 0161, 0264,
	0508, 0509, 0618,
Toshiba	0644, 0650, 0845,
	1150, 1156, 1169,
	1173, 1256, 1265, 1356, 1456, 1508,
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TRANS-continents	0865
Transonic	0587, 0698, 0712
- Transcrito	0009, 0030, 0092.
Tuntex	0474
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Universum	0346, 0474
V7 Videoseven	1755
Vector Research	0030
Vestel	0037
\ /: -1	0053, 0160, 0250,
Victor	0376, 0650, 0653
Videocon	0037, 0508
Vidikron	0054
Vidtech	0178
Vieweenie	0857, 0864, 0885,
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Vizio	0864, 0885, 1756
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Wards	0030, 0054, 0056,
	0178, 0866, 1156
Warumaia	0661
Watson	0037
Waycon	0156
Weipai	0009
Westinghouse	0885, 0889, 1282
White	0037, 0186, 0463,
Westinghouse	0623
Xenius	0661
Xiahua	0009, 0264, 0698,
	0773, 0817
Xianghai	0009
Xiangyang	0264
Xiangyu	0009
Xihu	0264, 0817
Xingfu	0009
Xinghai	0264

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Xoro	1217
Yamaha	0030
Yapshe	0250
Yingge	0009
Yoko	0037, 0264
Yonggu	0009
Youlanasi	0817
Yousida	0009
Yuhang	0009
Zenith	0017, 0092, 0178, 0463, 1265
ZhuHai	0009
Zonda	0698

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Akai	1935
Broksonic	1935
Bush	0698, 1037
Citizen	1935
Denver	0587
Grundig	1935
Sansui	1935
Toshiba	1935
Transonic	0587

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VCR	
ABS	1972
Admiral	0048, 0209
Adventura	0000
Aiko	0278
Aiwa	0000, 0037, 0348, 0742, 1291
Akai	0041, 0315
Alba	0209, 0278, 0315
Alienware	1972
America Action	0278
American High	0035
Amstrad	0000
Anam	0037, 0162, 0226, 0240, 0278, 1037
Anam National	0162, 0226, 1562
ASA	0037, 0081
Asha	0240
Asuka	0037
Audiovox	0037, 0278
Awa	0043
Baird	0000, 0041, 0104
Basic Line	0278
Beaumark	0240
Bell & Howell	0104
Blaupunkt	0162, 0226
Brandt	0320
Brandt Electronique	0041
Broksonic	0121, 0184, 0209, 0348, 1479
Bush	0209, 0278
Calix	0037
Canon	0035
Carver	0081
CCE	0278
CGE	0000
Changhong	0048, 0081
Cineral	0278
Citizen	0037, 0278, 1278
Craig	0037, 0047, 0240
Crown	0278
Curtis Mathes	0035, 0041, 0060,
	0162, 1035
Cybernex	0240
CyberPower	1972
Cyrus	0081
Daewoo	0045, 0104, 0278, 0642, 1278
De Graaf	0042
Decca	0000, 0081
Dell	1972
Denon	0042
Dick Smith Electronics	0642
Digitor	0642
DirecTV	0739
DSE	0642
Dual	0041
Dumont Durabrand	0000, 0081, 0104 0038, 0039

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Dynatech	0000
Elbe	0038
Electrohome	0037
Electrophonic	0037
Emerex	0032
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F	0043, 0045, 0121,
Emerson	0184, 0209, 0240,
	0278, 1278, 1479
ESC	0240, 0278
Ferguson	0041, 0320
Fidelity	0000
Finlandia	0081, 0104
Tillariala	0000, 0042, 0081,
Finlux	0104
	0037, 0043, 0045,
Firstline	0209
Fisher	
Fisher	0047, 0104
Fuji	0033, 0035
Fujitsu	0000, 0045
Funai	0000
Garrard	0000
Gateway	1972
	0035, 0060, 0226,
GE	0240, 0807, 1035,
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General	0045
Go Video	0614
GO VIGOO	0037, 0038, 0209,
GoldStar	0225, 0226, 1237
Coodmono	0223, 0220, 1237
Goodmans	0000, 0037, 0278
Gradiente	0000
Graetz	0041, 0104, 0240
Granada	0081, 0104
Grandin	0000, 0037
Grundig	0081, 0226, 0347
Hanseatic	0037
Haojie	0240
Harley Davidson	0000
Harman/Kardon	0038, 0081
Hewlett Packard	1972
HI-Q	0047
Hinari	0240
l like ab.	0000, 0037, 0041,
Hitachi	0042, 0089, 0240,
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Howard	1972
Computers	
HP	1972
Hughes Network	0042, 0739
Systems	
Humax	0739
Hush	1972
iBUYPOWER	1972
Imperial	0000
Interfunk	0081
ITT	0041, 0104, 0240
ITV	0037, 0278
Jensen	0041
JVC	0041, 0045, 0067, 1279
KEC	0037, 0278
Kendo	0209

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Kenwood	0038, 0041, 0067
Kioto	0348
Kodak	0035, 0037
Kolin	0041, 0043
Lenco	0278
1.0	0037, 0038, 0042,
LG	0045, 0209, 1037
Linksys	1972
Lloyd's	0000
Loewe	0037, 0081, 1562
Logik	0240
Luxor	0043, 0048, 0104
LXI	0037
M Electronic	0000, 0038
Magnasonic	1278
Magnavox	0000, 0035, 0039,
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Magnin	0240
Manesth	0045
Marantz	0035, 0081
Marta	0037
Matsui	0209, 0348
Matsushita	0035, 0162, 0226,
Madia Cantan DO	1162
Media Center PC	1972
Medion	0348
MEI	0035
	0000, 0035, 0037, 0039, 0047, 0048,
Memorex	0104, 0162, 0209,
	0240, 0348, 1037,
•	1048, 1162, 1237
Metronic	0081
Metz	0037, 0162, 0347,
	0836, 1562
MGA	0043, 0240
MGN Technology	0240
Microsoft	1972
Mind	1972
Minolta	0042
Mitsubishi	0041, 0043, 0067,
	0081, 0807, 1343
Motorola	0035, 0048
MTC	0000, 0240
Multitech	0000
Murphy	0000
Myryad	0081
NAD	0104
National	0226
NEC	0035, 0037, 0038,
INLO	0041, 0048, 0067, 0104, 1287
Neckermann	0081
Newave	0037
Nikko	0037
Niveus Media	1972
Noblex	0240
Nokia	0041, 0104, 0240
Nordmende	0041, 0104, 0240
Northgate	1972
Oceanic	0000, 0041
Okano	0315, 0348
Olympus	
Onkyo	0035, 0226
Cittyo	VLEE

VCR	
Optimus	0037, 0048, 0104, 0162, 1048, 1062, 1162
Orion	0121, 0184, 0209, 0348, 1479
Osaki	0000, 0037
Otto Versand	0081
Palladium	0037, 0041
Panasonic	0035, 0162, 0225, 0226, 0614, 0616, 0836, 1035, 1062, 1162, 1244, 1293, 1562
Pathe Marconi	0041
Penney	0035, 0037, 0038, 0042, 0240, 1035, 1237
Pentax	0042
Perdio	0000
Philco	0000, 0035, 0038, 0209, 0226
Philips	0000, 0035, 0081, 0226, 0618, 0739
Phonola	0081
Pilot	0037
Pioneer	0042, 0067, 0081
Polk Audio	0081
Profitronic	0240
Proline	0000
Proscan	0060, 1060
Pulsar	0039
Pye	0081
Qisheng	0060
Quasar	0035, 0162, 1035, 1162
Quelle	0081
Radiola	0081
RadioShack	0000, 1037
Radix	0037
Randex	0037
RCA	0000, 0035, 0042, 0060, 0149, 0226, 0240, 0807, 0880, 1035, 1060
Realistic	0000, 0035, 0037, 0047, 0048, 0104
Reoc	0348
ReplayTV	0614, 0616
Rex	0041
Ricavision	1972
Roadstar	0037, 0240, 0278
Runco	0039
Saba	0041, 0320
Saisho	0209 .
Salora	0043
Sampo	0037, 0048
Samsung	0045, 0240, 0739, 1014
Sanky	0039, 0048
Sansui	0000, 0041, 0067, 0209, 1479
Sanyo	0047, 0104, 0240, 1330
SBR	0081
Schaub Lorenz	0000, 0041, 0104

#### VCR Codes—Continued

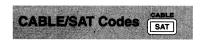
VCR	
Schneider	0000, 0081
Scott	0043, 0045, 0121, 0184
Sears	0000, 0035, 0037, 0042, 0047, 0104, 1237
SEG	0240
SEI	0081
Seleco	0041
Semp	0045
Sharp	0048, 0209, 0807, 1048, 1285
Shinco	0000
Shintom	0104
Shogun	0240
Siemens	0037, 0081, 0104
Silva	0037
Singer	0045
Sinudyne	0081
Sonic Blue	0614, 0616
Sontec	0037
Sony	0000, 0032, 0033, 0035, 0636, 1232, 1295, 1296, 1447, 1448, 1636, 1972
Stack 9	1972
STS	0042
Sunkai	
	0348
Sunstar	0000
Suntronic	0000
Sylvania	0000, 0035, 0043, 0081, 1781
Symphonic	0000
Systemax	1972
Tagar Systems	1972
Tandy	0000, 0104
Tashiko	0000, 0037
Tatung	0000, 0041, 0045, 0067, 0081
Teac	0000, 0041, 0278, 0642
Technics	0035, 0162, 0226
_	0035, 0037, 0038,
Teco	0041, 0048
Teknika	0000, 0035, 0037
Teleavia	0041
Telefunken	0041, 0320
Tensai	0000
Thomas	0000
Thomson	0041, 0060, 0067,
Thorn	0320
1110111	_ <del>-</del>
Tivo	0618, 0636, 0739, 1996
TMK	0240
Toshiba	0041, 0042, 0043, 0045, 0067, 0081, 0828, 0845, 1008, 1145, 1290, 1972, 1996
Totevision	0037, 0240
Touch	1972
	1.0.2

VCR	***************************************
Uher	0240
Unitech	0240
Universum	0000, 0037, 0081, 0240
Vector	0045
Vector Research	0038
Victor	0041, 0067
Video Concepts	0045
Videomagic	0037
Videosonic	0240
Viewsonic	1972
Villain	0000
Voodoo	1972
Wards	0000, 0035, 0042, 0047, 0048, 0060, 0081, 0149, 0240
White Westinghouse	0209
XR-1000	0000, 0035
Yamaha	0038, 0041
Yoko	0240
Zenith	0000, 0033, 0039, 0209, 1479
ZT Group	1972
DBS/PVR Comi	oination
Hughes Network Systems	0739
Philips	0739
Samsung	0739
PVR	
ABS	1972
Alienware	1972
CyberPower	1972
Dell	1972
DirecTV	0739
Gateway	1972
Go Video	0614
Hewlett Packard	1972
Howard	1072

	ination
Hughes Network	0739
Systems	0739
Philips	0739
Samsung	0739
PVR	
ABS	1972
Alienware	1972
CyberPower	1972
Dell	1972
DirecTV	0739
Gateway	1972
Go Video	0614
Hewlett Packard	1972
Howard	1070
Computers	1972
HP	1972
Hughes Network	0739
Systems	0739
Humax	0739
Hush	1972
iBUYPOWER	1972
JVC	1279
Linksys	1972
Media Center PC	1972
Microsoft	1972
Mind	1972
Niveus Media	1972
Northgate	1972
Panasonic	0614, 0616, 1244
Philips	0618, 0739
RCA	0880
ReplayTV	0614, 0616
Samsung	0739
Sonic Blue	0614, 0616
Comi	0636, 1447, 1448,
Sony	1636, 1972

PVR	
Stack 9	1972
Systemax	1972
Tagar Systems	1972
Tivo	0618, 0636, 0739
Toshiba	0828, 1008, 1972, 1996
Touch	1972
Viewsonic	1972
Voodoo	1972
ZT Group	1972

TV/VCR Combination		
Aiwa	0000, 0742	
America Action	0278	
Audiovox	0278	
Broksonic	1479	
Citizen	1278	
Curtis Mathes	1035	
Daewoo	1278	
Emerson	1278, 1479	
Funai	0000	
GE	0240, 0807, 1035, 1060	
GoldStar	1237	
Harley Davidson	0000	
Hitachi	0000	
LG .	1037	
Lloyd's	0000	
Magnasonic	1278	
Magnavox	0000, 1781	
Magnin	0240	
Memorex	0162, 1037, 1162, 1237	
MGA	0240	
Mitsubishi	0043, 0807	
Optimus	0162, 1162	
Orion	1479	
Panasonic	0162, 1035, 1162 0240, 1035, 1237	
Penney	0240, 1035, 1237	
Quasar	0162, 1035, 1162	
RadioShack	0000, 1037	
RCA	0240, 0807, 1035, 1060	
Samsung	1014	
Sansui	0000, 1479	
Sanyo	0240, 1330	
Sears	0000, 1237	
Sharp	0807	
Sony	0000, 1232, 1295, 1296	
Sylvania	1781	
Symphonic	0000	
Teac	0000	
Thomas	0000	
Toshiba	0845, 1145	
Zenith	0000, 1479	



Cable Converter	
ABC	0003, 0008
Americast	0899
Amstrad	1222
Bell South	0899
Birmingham Cable	0276
Communications	0270
British Telecom	0003
Cable & Wireless	1068
Daeryung	0008, 0477, 0877, 1877
Digeo	1187
Director	0476
DX Antenna	1500
Freebox	1482
Fujitsu	1497
Gehua	0476
Genua	0003, 0276, 0476,
General Instrument	0810
GoldStar	0144
Hamlin	0009
Jerrold	0003, 0276, 0476,
	0810
Kabel Deutschland	1981
KNC	0008
LG	0144
Memorex	0000
Motorola	0276, 0476, 0810,
	1187, 1376
NEC	1496
Noos	0817
NTL	0003, 1060, 1068
Ono	1068
Pace	0008, 0237, 1060,
	1068, 1577, 1877
Panasonic	0000, 0008, 0107,
	1488
Paragon	0000
Philips	0317, 1305
Pioneer	0144, 0533, 0877,
	1021, 1500, 1877
Pulsar	0000
PVP Stereo Visual	0003
Matrix	0000
Quasar	0000
Regal	0279
Runco	0000
Sagem	0817
Samsung	0000, 0144, 1666
Scientific Atlanta	0008, 0477, 0877, 1877
Sony	1006, 1460
Starcom	0003
StarHub	0276
Sumitomo	1500
Supercable	0276
Telewest	1068
Torx	0003
Toshiba	0000, 1509
Trans PX	0276
TS	
-13	0003

Cable Converter	
United Cable	0003
Zenith	0000, 0525, 0899

Cable/PVR Combination	
Americast	0899
Digeo	1187
Freebox	1482
General Instrument	0810
Jerrold	0810
Motorola	0810, 1187, 1376
Pace	0237, 1877
Pioneer	0877, 1877
Scientific Atlanta	0877, 1877
Sony	1006
Supercable	0276
Zenith	0899

Zenitn	0899
Satellite Receiv	/er
@sat	1300
@Sky	1334
ADB	1367
Aiwa	1514
Alba	1284
AlphaStar	0772
Amstrad	0338, 0847, 1113
Astratec	1743
Astro	0173
Atsat	1300
AtSky	1334
Austar	0642
Black Diamond	1284
Blaupunkt	0173
British Sky	0847, 1175
Broadcasting	·
Bush	1284, 1672
Canal Digital	0853
Canal Satellite	0853
Canal+	0853
Century	0856
CGV	1413
Chaparral	0216
CNS	1367
Comag	1412
Crossdigital	1457
Crossdigital	1109 0200
Cyrus D-box	0723
Daewoo	1743
Digifusion	1645
Digiturk	1076
Digitark	0099, 0247, 0392,
	0566, 0639, 0724,
	0749, 0819, 1076,
DirecTV	1108, 1109, 1142,
	1377, 1392, 1414,
	1442, 1609, 1639,
Dish Natural	1640, 1749, 1856
Dish Network System	0775, 1005, 1170,
Gysteili	1505, 1775 0775, 1005, 1505,
Dishpro	1775, 1005, 1505,
DNT	0200
Dream Multimedia	1237
Juni mattimodia	1.20

Ostallita Danaia	
Satellite Receive	<b></b>
DSTV	1433
DX Antenna	1530
Echostar	0775, 0853, 1005, 1170, 1505, 1775
Expressvu	0775, 1775
Ferguson	1291
Foxtel	0879, 1356
Funai	0338
Galaxis	1111
GbSAT	1214
GE	0566
General Instrument	
GOI	0775, 1775
Gold Box	0853
Goodmans	
Gradiente	1246, 1284
-	0856, 0887
Grundig	0173, 0847, 1291
Hirschmann	0173
Hisense	1535
Hitachi	0819, 1250, 1284, 1525
HTS	
	0775, 1775 0749, 1142, 1442,
Hughes Network Systems	1749, 1142, 1442, 1749
Cystems	1176, 1427, 1675,
Humax	1743, 1808
iLo	1535
Indovision	0887
Innova	0099
ISkyB	0887
IORYD	0492, 0775, 1170,
JVC	1531, 1775
	0173, 0200, 1416,
Kathrein	1561, 1567
Kreis'elmeyer	0173
Lenoxx	1611
LG	1226, 1414
Magnavox	0722, 0724
Marantz	0200
Maspro	1530
Matsui	1284
Maximum	1334
MediaSat	0853
Medion	1232, 1626
Memorex	0724
Metronic	1334
Mitsubishi	0749
Motorola	0869
Multichoice	0642, 0879, 1433
Myryad	0200
NEC	1270, 1519
Netgem	1322
Netsat	
Neuf TV	0099, 0887 1322
Next Level	
Nokia	0869
	0723, 1023, 1223
Nordmende	1611
OctalTV	1505
Opentel	1232, 1412
Orbitech	1100
Pace	0847, 0887, 1175,
Panasat	1323, 1423
ı anasat	0879

## CABLE/SAT Codes —Continued

Satellite Receive	er
Panasonic	0247, 0701, 0847, 1304, 1404, 1526
Paysat	0724
Philips	0099, 0200, 0722, 0724, 0749, 0853, 0856, 0887, 1076, 1114, 1142, 1442, 1672, 1749
Pioneer	0329, 0853, 1308
Proscan	0392, 0566
Proton	1535
QNS	1367, 1404
Radiola	0200
RadioShack	0869
Radix	1113
RCA	0143, 0566, 0855, 1291, 1392
Rebox	1214
Sagem	0820, 1114, 1690
Samsung	1108, 1109, 1276, 1377, 1442, 1458, 1570, 1609
Sanyo	1219
Sat Control	1300
SAT+	1409
Schwaiger	1111
SEG	1626
Sharp	1517
Siemens	0173
SKY	0099, 0847, 0856, 0887, 1175, 1856
Sky Brazil	0856, 0887
Skymaster	1409, 1611
Skyplus	1334, 1412
SM Electronic	1409
Sony	0639, 0847, 1524, 1558, 1639, 1640
Star	0887
Star Choice	0869
Strong	0879, 1300, 1409, 1626
Supernova	0887
Teac	1227, 1251, 1322
TechniSat	1100, 1195, 1197
Technotrend	1429
Techwood	1284
Tele System Electronic	1409
Telestar	1100, 1334
Televisa	0887
Tevion	1409
Thomson	0853, 1046, 1291
Tiny	1672
Tivo	1142, 1442
Topfield	1206, 1208
Toshiba	0749, 0790, 1285, 1516, 1530, 1749
TPS	0820
UEC	0879

Satellite Receive	Satellite Receiver	
UltimateTV	1392, 1640	
Uniden	0722, 0724, 1521	
Universum	0173	
US Digital	1535	
USDTV	1535	
Ventana	0200	
Victor	0492	
ViewSat	1232	
Visiosat	1413, 1457	
Voom	0869	
Wavelength	1413	
Wisi	0173	
Xsat	1323	
Yes	0887	
Zehnder	1232, 1251, 1334, 1412, 1413	
Zenith	0856, 1856	

DBS/PVR Comb	ination	
@sat	1300	
Atsat	1300	
British Sky	1175	
Broadcasting	1173	
Comag	1412	
Digifusion	1645	
Digiturk	1076	
DirecTV	0099, 0392, 0639, 1076, 1142, 1377, 1392, 1442, 1640	
Dish Network System	0775, 1505	
Dishpro	0775, 1505	
Dream Multimedia	1237	
Echostar	0775, 1170, 1505	
Expressvu	0775	
Foxtel	1356	
GbSAT	1214	
Hughes Network Systems	1142, 1442	
Humax	1176, 1427, 1675, 1808	
JVC	1170	
Kathrein	1561	
Maximum	1334	
Motorola	0869	
Opentel	1412	
Pace	1423	
Panasonic	1304	
Philips	0099, 1142, 1442	
Proscan	0392	
RCA	1392	
Rebox	1214	
Samsung	1442	
SKY	1175	
Skyplus	1412	
Sony	0639, 1640	
Star Choice	0869	
Strong	1300	
Topfield	1206	
Zehnder	1412	

107960 10701-1 681



### ONKYO®

## **Using SIRIUS Satellite Radio**

## Listening to SIRIUS Satellite Radio® (North American Models Only)

Important SIRIUS Satellite Radio Information SIRIUS is available in the US for subscribers with addresses in the continental US and is available in Canada for subscribers with a Canadian address. To Get SIRIUS Satellite Radio a subscription and compatible tuner and antenna are required and sold separately. Visit sirius.com for the most complete and up-to-date channel lineup and information. "SIRIUS" and the SIRIUS dog logo and related marks are trademarks of SIRIUS Satellite Radio Inc.

#### Note:

Hardware and required basic monthly subscription sold separately. Installation costs and other fees and taxes, including a one-time activation fee may apply. Subscription fee is consumer only. All fees and programming subject to change.

#### What is SIRIUS Satellite Radio?

Simply The Best Radio on Radio<sup>TM</sup> with all your favorite entertainment including 100% commercial-free music, plus superior sports coverage, uncensored talk and comedy, world-class entertainment, news, weather and more for your car, home or office. For more information visit sirius.com or siriuscanada.ca

#### A warning against reverse engineering:

It is prohibited to copy, decompile, disassemble, reverse engineer, or manipulate any technology incorporated in receivers compatible with the SIRIUS Satellite Radio system.

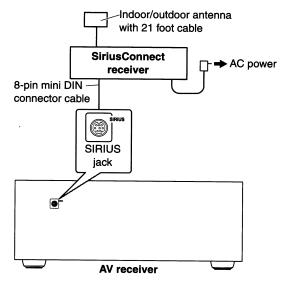
"SIRIUS" and the SIRIUS dog logo are registered trademarks of SIRIUS Satellite Radio Inc.



### Setting Up the SiriusConnect™ Home Tuner

The optional SiriusConnect Home tuner kit includes everything for easy home installation, including the SiriusConnect receiver, indoor/outdoor antenna with 21-foot cable, 8-pin mini DIN connector cable, and an AC power adapter. See the SiriusConnect Home tuner's instructions for more information.

Use the 8-pin mini DIN connector cable to connect the SiriusConnect receiver to the SIRIUS jack on the rear of the AV receiver.



To use the included antenna indoors, you must place it at a north-, west-, or east-facing window, depending on where you live. If this isn't possible, you'll need to install it outside, away from any overhead obstructions.

#### Positioning the Antenna

For a consistent satellite signal, the antenna must be positioned correctly. Use the following map to determine which area you are in and position the antenna accordingly.

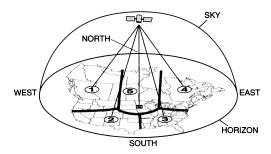
Area 1: Point the antenna toward the sky in the *east*, *northeast*, or *southeast*, either through a window or outside.

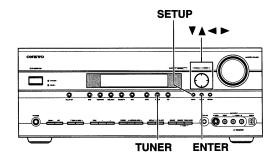
**Area 2:** Point the antenna toward the sky in the *north* or *northeast*, either through a window or outside.

**Area 3:** Point the antenna toward the sky in the *north* or *northwest*, either through a window or outside.

**Area 4:** Point the antenna toward the sky in the *west*, *northwest*, or *southwest*, either through a window or outside.

**Area 5:** Put the antenna outside and point it *straight up*. The antenna cannot be used indoors.





#### Setting the Satellite Radio Mode



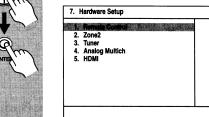
On the AV receiver, press the [SETUP] button.

The main menu appears onscreen.



Use the Up and Down [▲]/[▼] buttons to select "7. Hardware Setup," and then press [ENTER].

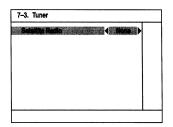
The Hardware Setup menu appears.





Use the Up and Down [▲]/[▼] buttons to select "3. Tuner," and then press [ENTER].

The Tuner menu appears.





Use the [◄]/[▶] buttons to select "SIRIUS."

Pressing the  $[\blacktriangleleft]/[\blacktriangleright]$  buttons cycles through the following SAT options: None  $\rightarrow$  XM  $\rightarrow$  SIRIUS.

**None:** Select if you're not using satellite radio.

**XM**: Select to use XM satellite

radio.

SIRIUS: Select to use SIRIUS Satel-

lite Radio.



Press the [SETUP] button.

The setup menu closes.

#### Selecting SIRIUS Satellite Radio



## Press the [TUNER] input selector button repeatedly to select "SIRIUS."

If "CHECK SR TUNER" appears on the display, make sure the SiriusConnect receiver is connected properly. If "ANTENNA ERROR" appears, make sure the antenna is connected properly.

#### Signing Up for SIRIUS Satellite Radio

Before you can use SIRIUS Satellite Radio, you must first sign up for an account. You'll need a major credit card and your *SIRIUS Satellite Radio ID*, which you can get from the AV receiver, as explained below, or from the SiriusConnect Home tuner package.



## Use the TUNING Up and Down [▲]/[▼] buttons to select channel 0.

Your SIRIUS Satellite Radio ID number is displayed. Write it below.

ID

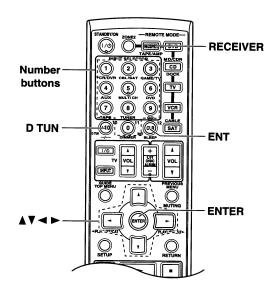
2

To sign up, go to: http://activate.siriusradio.com Or call: 1-888-539-SIRIUS (7474)

#### Note:

Another way to check your ID is to press the [SETUP] button. Use the Up and Down [▲]/[▼] buttons to select "4. Source Setup," and then press [ENTER]. Use the Up and Down [▲]/[▼] buttons to select "3. SAT Radio," and then press [ENTER]. Use the Up and Down [▲]/[▼] buttons to select "SiriusID," and then press [ENTER].

Press the [SETUP] button when you've finished.



#### Selecting SIRIUS Satellite Radio Channels

There are three ways to select SIRIUS Satellite Radio channels:

- Channel Search mode: select any channel.
- Category Search mode: select channels by category.
- Direct tuning: enter channel number.

#### **■** Channel Search Mode



Press the [RECEIVER] button, followed by the [ENTER] button to select "Channel Search" mode.

ChannelSearch



Use the Up and Down [▲]/[▼] buttons to select a channel.

U5U Hot Jamz
Channel number Channel name

You can also use the Left and Right [◀]/[▶] buttons to select a category.

#### **■** Category Search Mode



Press the [RECEIVER] button, followed by the [ENTER] button to select "Category Search" mode.

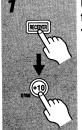
| |CategorySearch



Use the Left and Right [◄]/[▶] buttons to select a category, and use the Up and Down [▲]/[▼] buttons to select a channel in that category.

#### **■** Direct Tuning

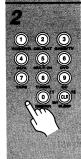
You can select a SIRIUS Satellite Radio channel directly by entering its number.



Press the [RECEIVER] button, followed by the [D TUN] button.

The [RECEIVER] button flashes.





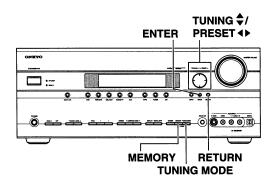
Within 8 seconds, use the number buttons to enter the channel number.

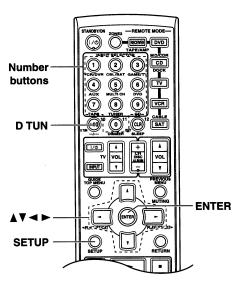
The channel is selected. For example, to select channel #20, press 0, 2, 0, or 2, 0, [ENT].

Note: While the [RECEIVER] button is flashing, the input source cannot be changed by using the remote controller.

#### Notes:

- If you select an unavailable channel, "INVALID CHANNEL" appears on the display.
- If you select a channel that you are not subscribed to, "CALL SIRIUS" appears on the display.
- If you select a channel that is locked, you'll need to enter your 4-digit PIN number to listen to that channel. See "Parental Lock" on page 5 for more information.





Selecting SIRIUS Satellite Radio Channels from the Front Panel:



Press the [TUNING MODE] button to select "Channel Search" or "Category Search" mode.



Use the PRESET [◄]/[▶] buttons repeatedly to select a category.

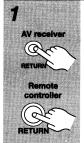


Use the TUNING Up and Down [▲]/[▼] buttons to select a channel.

In Channel Search mode, you can select any channel.

In Category Search mode, you can only select channels from the currently selected category.

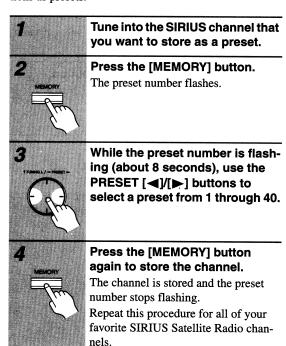
#### **Selecting the Previous Channel:**



To listen to the previously selected SIRIUS Satellite Radio channel, press the [RETURN] button.

#### Presetting SIRIUS Channels

You can store a combination of up to 40 of your favorite SIRIUS Satellite Radio channels and AM/FM radio stations as presets.



#### **■** Selecting Presets

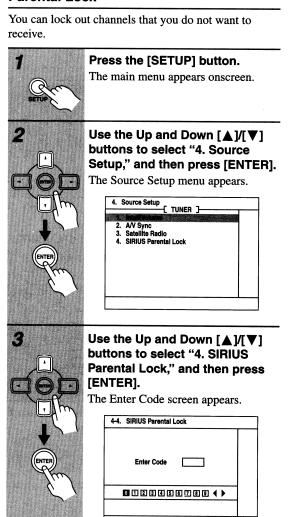


To select a preset, use the PRE-SET [◄]/[▶] buttons, or the remote controller's CH [+/–] button.

#### **■** Deleting Presets

1	Select the preset that you want to delete. See the previous section.
MEMORY TUNING MODE	While holding down the [MEM-ORY] button, press the [TUNING MODE] button. The preset is deleted and its number disappears from the display.

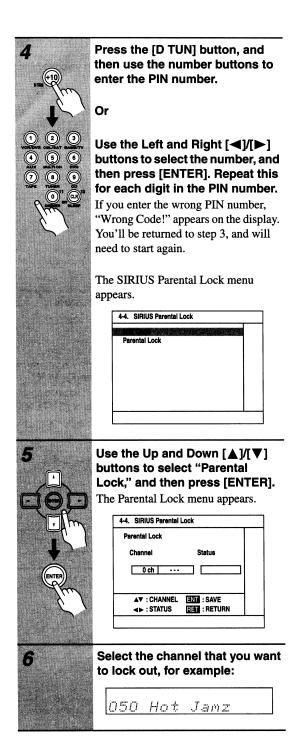
#### Parental Lock

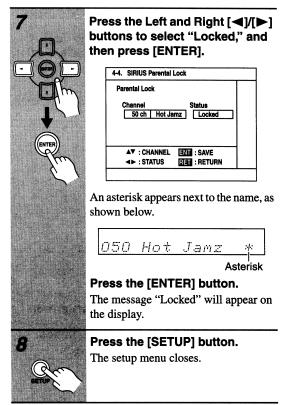


"Enter: <0>" appears on the display.

< () >

Enter





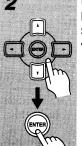
To unlock a previously locked channel, select the locked channel (see step 6), press the Left and Right [◄]/[▶] buttons so that the asterisk disappears (see step 7), and then press [ENTER]. The message "Unlocked" will appear on the display.

#### Changing the PIN Number



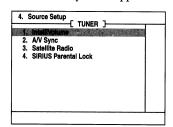
#### Press the [SETUP] button.

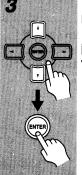
The main menu appears onscreen.



## Use the Up and Down [▲]/[▼] buttons to select "4. Source Setup," and then press [ENTER].

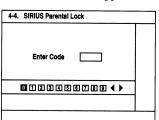
The Source Setup menu appears.





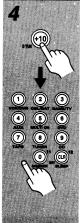
## Use the Up and Down [▲]/[▼] buttons to select "4. SIRIUS Parental Lock," and then press [ENTER].

The Enter Code screen appears.



"Enter: <0>" appears on the display.

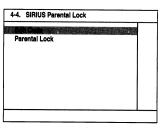
Enter : <0>

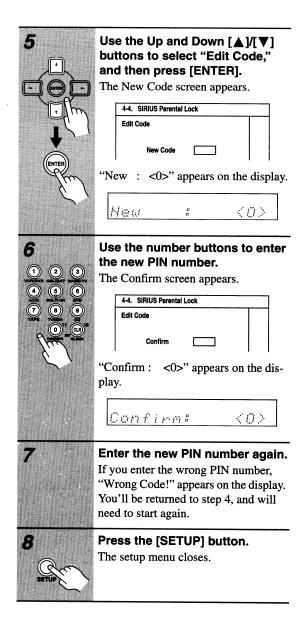


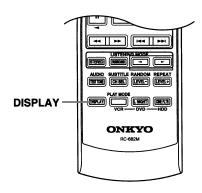
## Press the [D TUN] button, and then use the number buttons to enter the PIN number.

If you enter the wrong PIN number, "Wrong Code!" appears on the display. You'll be returned to step 3, and will need to start again.

The SIRIUS Parental Lock menu appears.





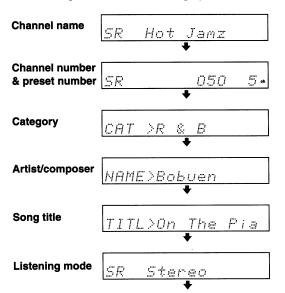


### Displaying SIRIUS Satellite Radio Information



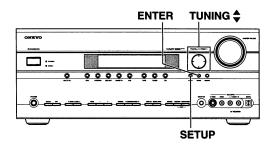
Press the [DISPLAY] button repeatedly to cycle through the available information.

The following information can be displayed:



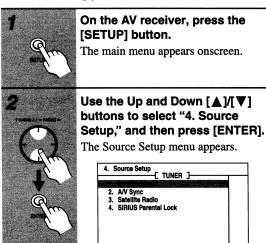
#### Note:

• If the category, artist/composer, or song title is not available, "- - -" will be displayed instead.



### Positioning the SiriusConnect Home antenna

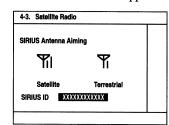
You can check the strength of the SIRIUS Satellite Radio signal and adjust the position of the SiriusConnect Home antenna accordingly.





## Use the Up and Down [▲]/[▼] buttons to select "3. Satellite Radio," and then press [ENTER].

The Satellite Radio menu appears.



#### Adjust the position of the Sirius-Connect Home antenna so that the SAT/TER signal strength bar is as long as possible.

Terrestrial (TER) signals are only available in certain areas.

So long as the signal strength is good, you can enjoy SIRIUS Satellite Radio by using either satellite or terrestrial reception.

#### SIRIUS Satellite Radio Messages

The following messages may appear while using SIR-IUS Satellite Radio.

□ ACQUIRING

#### *ACQUIRING*

The SiriusConnect receiver is acquiring the signal or no signal is present. Make sure the SiriusConnect Home tuner is connected properly and that there are no obstacles close by.

□ ANTENNA ERROR

#### ANTENNA ERROR

Make sure the SiriusConnect Home tuner is connected properly.

☐ SUB UPDATED

#### SUB UPDATED

Displayed while your subscription is being updated. No operations can be performed until this message has cleared.

☐ UPDATING XXX%

#### UPDATING XXX%

Displayed while the channel map is being updated. Wait until the updating is complete.

□ UPDATING

#### | |UPDATING

Displayed while the SiriusConnect receiver's firmware is being updated.

☐ INVALID CHANNEL

#### | |INVALID CHANNEL

Displayed if you select an unavailable channel.

☐ CALL SIRIUS

### CALL SIRIUS

Displayed when you select a channel to which you are not subscribed. Call SIRIUS if you want to subscribe.

☐ CHECK SR TUNER

### CHECK SR TUNER

Displayed if the SiriusConnect receiver is not connected. Make sure the SiriusConnect receiver is connected properly, and make sure its AC adapter is plugged in.

## Using XM Satellite Radio

## Listening to XM Satellite Radio<sup>®</sup> (North American Models Only)

#### **Important XM Radio Information**

XM Satellite Radio offers an extraordinary variety of commercial-free music, plus the best in sports, news, talk and entertainment. XM is broadcast in superior digital audio from coast to coast. From rock to reggae, from classical to hip hop, XM has something for every music fan. XM's dedication to playing the richest selection of music is matched by its passion for live sporting events, talk radio, up-to-the-minute news, stand-up comedy, children's programming, and much more. For U.S. customers, information about XM Satellite Radio is available online at www.xmradio.com. For Canadian customers, information about XM Canada is online at www.xmradio.ca.

#### Note:

Hardware and required monthly subscription sold separately. Other fees and taxes, including a one-time activation fee may apply. Subscription fee is consumer only. All fees and programming subject to change. Channels with frequent explicit language are indicated with an XL. Channel blocking is available for XM radio receivers by

calling 1-800-XMRADIO (US residents) and 1-877-GET-XMSR (Canadian residents).

For a full listing of the XM commercial-free channels and advertising-supported channels, visit lineup.xmradio.com (US residents) or xmradio.ca (Canadian residents).

Subscriptions subject to Customer Agreement available at xmradio.com (US residents) and xmradio.ca (Canadian residents). Only available in the 48 contiguous United States and Canada. ©2007 XM Satellite Radio Inc. All rights reserved. All other trademarks are the property of their respective owners.

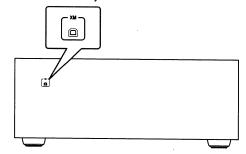
#### A warning against reverse engineering:

It is prohibited to, and you agree that you will not, copy, decompile, disassemble, reverse engineer, hack, manipulate, or otherwise access and/or make available any technology incorporated in receivers compatible with the XM Satellite Radio system. Furthermore, the AMBE® voice compression software included in this product is protected by intellectual property rights including patent rights, copyrights, and trade secrets of Digital Voice Systems, Inc. The software is licensed solely for use within this product. The user of this or any other software contained in an XM Radio is explicitly prohibited from attempting to copy, decompile, reverse engineer, hack, manipulate or disassemble the object code, or in any other way convert the object code into human-readable form.

### Connecting the XM Mini-Tuner and Home Dock

To receive XM Satellite Radio, you need an XM Mini-Tuner and Home Dock, which includes a home antenna. These are sold separately. For connection information, refer to the instruction manual supplied with the XM Mini-Tuner and Home Dock

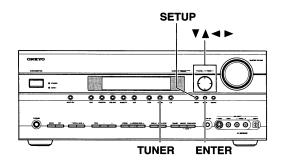
XM Mini-Tuner jack





V0703-





#### Setting the Satellite Radio Mode

Before you can listen to XM Satellite Radio, you must set the Satellite Radio mode to XM.



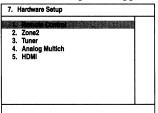
### On the AV receiver, press the [SETUP] button.

The main menu appears onscreen.



## Use the Up and Down [▲]/[▼] buttons to select "7. Hardware Setup," and then press [ENTER].

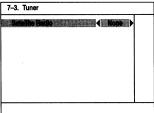
The Hardware Setup menu appears.





## Use the Up and Down [▲]/[▼] buttons to select "3. Tuner," and then press [ENTER].

The Tuner menu appears.





### Use the [◀]/[▶] buttons to select "XM."

Pressing the  $[\blacktriangleleft]/[\blacktriangleright]$  buttons cycles through the following SAT options: None  $\rightarrow$  XM  $\rightarrow$  SIRIUS.

None: Select if you're not using Satellite Radio.

XM: Select to use XM Satellite

Radio.

SIRIUS: Select to use SIRIUS Satel-

lite Radio.



#### Press the [SETUP] button.

The setup menu closes.

#### Selecting XM Satellite Radio



### Press the [TUNER] input selector button repeatedly to select XM.

If "CHECK XM TUNER" appears on the display, make sure the XM Mini-Tuner is connected properly.

#### Signing Up for XM Satellite Radio

Once you have installed the XM Mini-Tuner and Home Dock, you are ready to subscribe to XM Satellite Radio. You'll need a major credit card and your XM Radio ID. There are three places you can find your 8-character XM Radio ID:

- 1. On the XM Mini-Tuner
- 2. On the XM Mini-Tuner packaging
- 3. On XM Channel 0, as explained below



## Use the TUNING Up and Down [▲]/[▼] buttons to select RADIO

Your XM Radio ID number is displayed. Write it below for reference.

ID

2

To sign up, go to: http://activate.xmradio.com

Or call: 1-800-967-2346 For XM Canada, go to: http://xmradio.ca Or call: 1-877-438-9677

#### **Notes:**

- RADIO ID cannot be selected in Category Search mode. You must select Channel Search mode (see page 3).
- The following letters are not used in XM Satellite Radio IDs: I, O, S, F.
- XM Satellite Radio will transmit a special signal to your AV receiver to activate the full channel lineup. Activation normally takes between 10 and 15 minutes, but during busy peak periods, you may need to leave the AV receiver turned on for up to an hour.

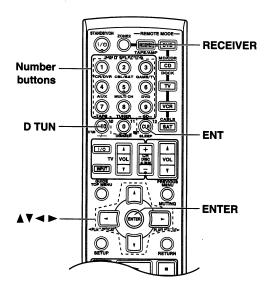
#### Selecting XM Radio Channels

There are three ways to select XM radio channels:

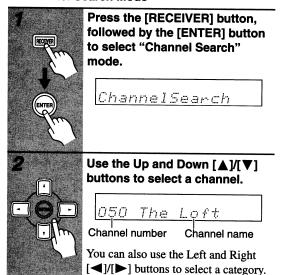
- Channel Search mode: select any channel.
- Category Search mode: select channels by category.
- Direct tuning: enter channel number.

#### Note:

You cannot select Channel Search or Category Search mode while the Tuning Arrow ► ◀ indicators are flashing, as tuning is in progress.



#### ■ Channel Search Mode



#### ■ Category Search Mode



Press the [RECEIVER] button, followed by the [ENTER] button to select "Category Search" mode.

CategorySearch



Use the Left and Right [◀]/[▶] buttons to select a category, and use the Up and Down [▲]/[▼] buttons to select a channel in that category.

#### ■ Direct Tuning

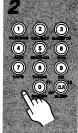
You can select an XM radio channel directly by entering its number.



Press the [RECEIVER] button, followed by the [D TUN] button.

The [RECEIVER] button flashes.

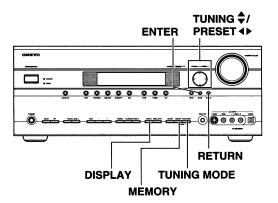


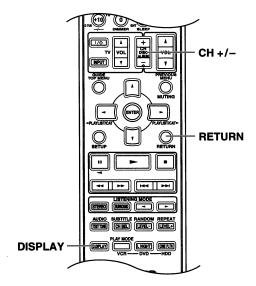


Within 8 seconds, use the number buttons to enter the channel number.

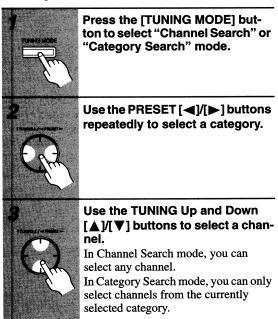
The channel is selected. For example, to select channel #20, press 0, 2, 0, or 2, 0, [ENT].

**Note**: While the [RECEIVER] button is flashing, the input source cannot be changed by using the remote controller.

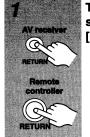




**Selecting XM Channels from the Front Panel:** 



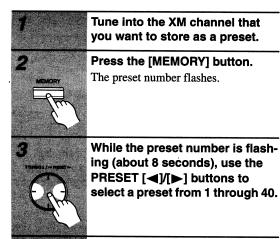
#### **Selecting the Previous Channel:**



To listen to the previously selected XM channel, press the [RETURN] button.

#### Presetting XM Channels

You can store a combination of up to 40 of your favorite XM channels and AM/FM radio stations as presets.



### Press the [MEMORY] button again to store the channel.

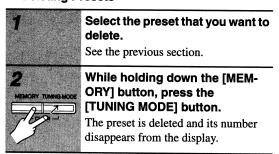
The channel is stored and the preset number stops flashing. Repeat this procedure for all of your favorite XM channels.

#### **■** Selecting Presets



To select a preset, use the PRE-SET [◄]/[▶] buttons, or the remote controller's CH [+/–] button.

#### **■** Deleting Presets

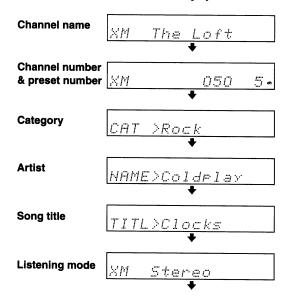


#### Displaying XM Radio Information



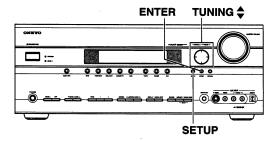
Press the [DISPLAY] button repeatedly to cycle through the available information.

The following information can be displayed:



#### Note:

• If the category, artist, or song title is not available, "---" will be displayed instead.



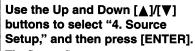
#### Positioning the XM Mini-Tuner System

You can check the signal strength of the XM radio signal and adjust the position of the XM Mini-Tuner System accordingly.

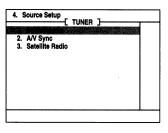


On the AV receiver, press the [SETUP] button.

The main menu appears onscreen.



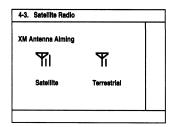
The Source Setup menu appears.





Use the Up and Down [▲]/[▼] buttons to select "3. Satellite Radio," and then press [ENTER].

The Satellite Radio menu appears.



Adjust the position of the XM Mini-Tuner Antenna so that the SAT/TER signal strength bar is as long as possible.

The best signal is achieved when the antenna is pointing to the southern sky through an unobstructed window.

Terrestrial (TER) signals are only available in certain areas.

So long as the signal strength is good, you can enjoy XM Radio by using either satellite or terrestrial reception.

#### XM Radio Messages

The following messages may appear while using XM radio.

#### ☐ CHECK ANTENNA

#### CHECK ANTENNA

The XM antenna is not properly connected to the Mini-Tuner Dock. Check the connection. Check the antenna cable for damage.

#### ☐ UPDATING

#### UPDATING

XM is updating your Mini-Tuner with the latest encryption code. Simply wait a few seconds until the update is done. OR, You may be attempting to tune to a channel that is blocked or that you cannot receive with your subscription package. To receive that channel, contact XM Satellite Radio.

#### □ NO SIGNAL

#### NO SIGNAL

The XM Mini-Tuner can not receive the satellite signal. Check the XM antenna for obstructions to the southern sky. Check the antenna positioning with the Antenna Aiming feature.

#### ☐ LOADING

#### LOADING

The AV receiver is tuning or decoding audio or text data. Please wait. If this occurs often, check the XM antenna position with the Antenna Aiming feature.

#### OFF AIR



The XM channel you selected is not currently broadcasting. Select another channel.

#### ☐ UPGRADE XM TUNER

### UPGRADE XMTUNER

The connected XM CNP-1000 is incompatible. The AV receiver features advanced technology that is designed for use with the XM Mini-Tuner. Contact XM Listener Care and ask about upgrading your XM CNP-1000 to an XM Mini-Tuner. Have the AV receiver's model name and CNP-1000 XM ID number ready beforehand, and explain that the AV receiver is displaying the message "Upgrade XM Tuner." If you already have an XM Mini-Tuner connected and you see this message, turn off the AV receiver, make sure the XM Mini-Tuner is properly seated in the Mini-Tuner Dock, and then turn the AV receiver back on again. If the message reappears,

contact XM Listener Care and explain the issue that you're experiencing and the corrective actions you've tried.

#### ☐ CHECK XM TUNER

#### CHECK XM TUNER

The AV receiver is having difficulty communicating with the XM Mini-Tuner module. Make sure the XM Mini-Tuner is properly seated in the Mini-Tuner Dock. And make sure the Mini-Tuner Dock cable is properly connected to the AV receiver and is not damaged. If the issue persists, contact XM Listener Care. Have the AV receiver's model name ready beforehand, and explain the issue that you're experiencing and the corrective actions you've tried.

#### ☐ Unavailable Channel

XM	

You may be attempting to select a channel that is unavailable or has changed to a different channel number. Check xmradio.com for the latest channel listing.

#### XM Listener Care phone number:

US: 1-800-967-2346 Canada: 1-877-438-9677

#### English

#### ■ Important Note Regarding Video Playback

This unit can upconvert composite video and S-Video sources for display on a TV connected to the component video output. However, if the picture quality of the source is poor, the upconversion may make the picture worse or disappear altogether. In this case, try the following options:

- 1. If the video source is connected to a composite video input on this unit, connect your TV to a composite video output on this unit. If the video source is connected to an S-Video input on this unit, connect your TV to an S-Video output on this unit.
- 2. On the main menu, select "Input/Output Assign," and then select "Component Video Input." Select the input to which the video component is connected, and then set it to "---".
- 3. On the main menu, select "Miscellaneous," and then select "OSD Setup." Select the "Immediate Display" setting, and set it to "Off".
- \* The exact procedure depends on the model.

#### ■ Important Note Regarding HD DVD and Blu-ray Disc Playback

With some HD DVD and Blu-ray discs, a noise may be heard during playback. This may occur when the audio format changes during playback. It is not a malfunction.

#### Français

#### Remarque importante concernant la lecture vidéo

Cet appareil peut convertir des sources vidéo composites et et S-Video pour les afficher sur un téléviseur branché à la sortie vidéo composant. Cependant, si la qualité d'image de la source n'est pas bonne, la conversion peut l'empirer, voire faire disparaître l'image. Dans ce cas, essayez les options suivantes:

- 1. Si la source vidéo est branchée à une entrée vidéo composite sur cet appareil, branchez le téléviseur à une sortie vidéo composite de cet appareil. Si la source vidéo est branchée à une entrée S-Video sur cet appareil, branchez le téléviseur à une sortie vidéo S-Video de cet appareil.
- 2. Dans le menu principal, sélectionnez "Input/Output Assign" puis sélectionnez "Component Video Input". Sélectionnez l'entrée à laquelle l'appareil vidéo est branché puis réglez-la sur "---".
- 3. Dans le menu principal, sélectionnez "Miscellaneous" puis sélectionnez "OSD Setup". Sélectionnez le paramètre "Immediate Display" puis réglez-le sur "Off".
- \* La procédure exacte varie selon le modèle.

#### ■ Note importante concernant la lecture de disques HD DVD et Blu-ray

Avec certains disques HD DVD et Blu-ray, un bruit peut être audible durant la lecture. Cela peut se produire lorsque le format audio change en cours de lecture. Il ne s'agit pas d'un dysfonctionnement.

#### Español

#### Nota importante acerca de la reproducción de vídeo

Esta unidad puede convertir a una frecuencia superior fuentes de vídeo compuesto y S-Video para visualizarlas en un televisor conectado a la salida de vídeo componente. Sin embargo, si la calidad de imagen de la fuente es baja, la conversión a una frecuencia superior puede empeorar la imagen, la cual podría incluso desaparecer. En este caso, pruebe las siguientes opciones:

- 1. Si la fuente de vídeo está conectada a una entrada de vídeo compuesto de esta unidad, conecte el televisor a una salida de vídeo compuesto de esta unidad. Si la fuente de vídeo está conectada a una entrada S-Video de esta unidad, conecte el televisor a una salida S-Video de esta unidad.
- 2. En el menú principal, seleccione "Input/Output Assign" y, luego, seleccione "Component Video Input". Seleccione la entrada a la que está conectado el componente de vídeo y, luego, ajústela a "---".
- 3. En el menú principal, seleccione "Miscellaneous" y, luego, seleccione "OSD Setup". Seleccione el ajuste "Immediate Display" y ajústelo a "Off".
- \* El procedimiento exacto depende del modelo.

#### ■ Nota importante acerca de la reproducción de discos HD DVD y Blu-ray

Con algunos discos HD DVD y Blu-ray, es posible que se oigan interferencias durante la reproducción. Esto puede producirse cuando el formato de audio cambia durante la reproducción. No se trata de un funcionamiento incorrecto.

### Connecting to EZ Sync compatible TV made by Panasonic

### The following types of linked operations will be possible:

- When you switch your TV to "Standby," the AV receiver will also go into "Standby."
- Using the Operation Menu on your TV, you can select whether to hear the audio through the AV receiver or the TV and you can switch between the two. When the AV receiver is selected, its power will automatically turn on.
  - \* Audio from DVD-Audio and SACD cannot be played through your TV speakers. Set the sound output from a DVD player, etc., to PCM 2ch.
- You can use your TV remote control to adjust the AV receiver sound volume.

#### Setting the AV receiver

Following "Connecting Your TV or Projector" in the Instruction Manual (page 26), carry out connection COIGITAL OPTICAL IN 1).

Following the procedure for HDMI Monitor setting in the Instruction Manual (page 47), set to "Yes" and set the HDMI Input setup to conform to the connected device.

Following the explanation for the HDMI setup in the Instruction Manual (page 84), set as follows:

- Control: Enable
- Power Control: Enable
- TV Control: Enable

#### Setting your TV or DVD recorder

Your TV and/or DVD recorder must also be set. Follow the Instruction Manual for each device to ensure that its setting is correct. After setting each device, verify that the HDMI cable is connected. Then perform the following operations:

- 1. Turn on the power to all connected devices.
- 2. Turn the power button on your TV off and then on again.
- 3. Push the Input selector button on your TV and select the input to which the AV receiver is connected.
- 4. Press the Input selector buttons for the AV receiver in order and confirm that the video from the device connected to the AV receiver is showing on the TV.

When HDMI Audio Out is set to "On" (page 84) or the TV Control is set to "Enable" and the audio is playing through the TV speakers (page 84), if the volume is adjusted on the AV receiver, the audio will begin to play through the speakers connected to the AV receiver. If you want to turn off the audio from the AV receiver, repeat the set up operation, and the set up for the TV, or turn down the volume to its lowest level.

### Raccordement à un téléviseur panasonic compatible EZ Sync

### Les types d'opération de liaison suivants seront possibles :

- Lorsque vous mettrez le téléviseur en mode de « Veille », l'ampli-tuner AV entrera aussi en mode de « Veille ».
- Au moyen du menu d'opération sur le téléviseur, vous pouvez sélectionner l'écoute du son via l'ampli-tuner AV ou via le téléviseur, et vous pouvez permuter entre les deux. Lorsque l'ampli-tuner AV est sélectionné, il se met automatiquement sous tension
  - \*La lecture audio des disques DVD-Audio et SACD n'est pas possible par les enceintes du téléviseur. Réglez la sortie du son sur PCM 2 canaux depuis un lecteur DVD, etc.
- Vous pouvez utiliser la télécommande du téléviseur pour régler le volume du son de l'ampli-tuner AV.

#### Réglage de l'ampli-tuner AV

En suivant les instructions de « Branchement d'un téléviseur ou d'un projecteur » dans le mode d'emploi (page 26), effectuez la connexion c (DIGITAL OPTICAL IN 1).

En suivant la procédure de réglage pour HDMI Monitor dans le mode d'emploi (page 47), réglez sur « Yes » et configurez HDMI Input en fonction de l'appareil connecté.

En vous reportant à l'explication fournie pour la configuration HDMI dans le mode d'emploi (page 84), réglez comme suit :

- Control : Enable
- Power Control : Enable
- TV Control : Enable

#### Réglage d'un téléviseur ou d'un projecteur

Il faut aussi régler le téléviseur et/ou l'enregistreur DVD. Suivez les indications du mode d'emploi pour chaque appareil, pour vous assurer que son réglage est correct. Après le réglage de chaque appareil, vérifiez que le câble HDMI est connecté. Procédez ensuite comme suit :

- 1. Mettez sous tension tous les appareils connectés.
- 2. Mettez le téléviseur hors tension puis à nouveau sous tension.
- 3. Appuyez sur le sélecteur d'entrée sur le téléviseur et sélectionnez l'entrée à laquelle l'ampli-tuner AV est connecté.
- 4. Appuyez sur les sélecteurs d'entrée de l'amplituner AV dans l'ordre, et assurez-vous que le contenu vidéo de l'appareil connecté à l'amplituner AV s'affiche sur le téléviseur.

Lorsque HDMI Audio Out est réglé sur « On » (page 84) ou que TV Control est réglé sur « Enable » et que la lecture audio s'effectue par les enceintes du téléviseur (page 84), la lecture audio s'effectuera par les enceintes connectées à l'ampli-tuner AV si vous réglez le volume sur ce dernier. Pour couper l'audio de l'ampli-tuner AV, recommencez la procédure de configuration et reconfigurez le téléviseur, ou baissez le volume jusqu'au niveau minimum.

Y0704-1





### Serán posibles los siguientes tipos de operaciones enlazadas:

- Al encender el televisor y ponerlo en el modo de espera ("Standby"), el receptor AV también se pondrá en el modo de espera.
- Por medio del menú de operaciones del televisor, se puede seleccionar oír el sonido a través del receptor AV o del televisor, y se puede cambiar de uno a otro. Si se selecciona el receptor AV, este aparato se encenderá automáticamente.
  - \*El sonido de DVD-Audio y SACD no se puede reproducir por los altavoces del televisor. Ajuste la salida del sonido desde un reproductor de DVD, etc., en PCM 2c.
- Se puede usar el mando a distancia del televisor para ajustar el volumen de sonido del receptor AV.

#### Ajustar el receptor AV

Siguiendo las instrucciones de la sección "Conectar el televisor o el proyector" en el manual de usuario (página 26), lleve a cabo la conexión (DIGITAL OPTICAL IN 1).

Siguiendo el procedimiento para la configuración de HDMI Monitor en el manual de usuario (página 47), ajústelo en "Yes" y ajuste la configuración de HDMI Input conforme al dispositivo conectado.

Siguiendo la explicación en torno a la configuración de HDMI en el manual de usuario (página 84), realice los siguientes ajustes:

• Control: Enable

Power Control: EnableTV Control: Enable

#### Ajustar el televisor o el proyector

El televisor y el grabador de DVD también se tienen que ajustar. Siga el manual de usuario de cada dispositivo para asegurarse de que su configuración es la correcta. Tras configurar cada dispositivo, verifique que el cable HDMI está conectado. A continuación efectúe las siguientes operaciones:

- 1. Encienda todos los dispositivos conectados.
- 2. Pulse el botón de alimentación del televisor para apagarlo y púlselo de nuevo para encenderlo.
- Pulse el botón selector de entrada del televisor y seleccione la entrada a la que está conectado el receptor AV.
- 4. Pulse los botones de selector de entrada del receptor AV en orden y compruebe que el vídeo procedente del dispositivo conectado al receptor AV es el que se visualiza por el televisor.

Cuando HDMI Audio Out está ajustado en "On" (página 84) o TV Control está ajustado en "Enable" y el sonido sale por los altavoces del televisor (página 84), si se ajusta el volumen en el receptor AV, el sonido empezará a salir por los altavoces conectados al receptor AV. Si desea apagar el sonido del receptor AV, repita la operación de configuración así como la configuración del televisor, o baje el volumen hasta su nivel más bajo.



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#### **Decades**

	- 970	
4	112 Of	'40s Pop Hits/Big Band

the Tie '50s Pop Hits

'60s Pop Hits

'70s Pop Hits

ELECTION OF THE PARTY OF THE PA '80s Pop Hits

the 90s '90s Pop Hits

#### Country

10	AMBRICA	Classic Country
10	( do dife and A hall do)	Classic Country

Americana

Willie Nelson's Traditional Country WILLIE'S

Bluegrass

**Village 16 New Country Hits** 

'80s & '90s Country

#### Pop & Hits

20,20

Love Songs/Lite Pop

المحالا Adult Contemporary

**Flight** Modern Adult Hits

CINEMAGIC

Show Tunos or to re International Hits

**Contemporary Hits** 

#### Christian

mëssage Christian Pop & Rock

SPIRIT

#### enLighten Southern Gospel

#### Rock

Deep Classic Rock

EONE OYARD

2011/11/ Heavy Metal XL

XOOU Indie/College/Unsigned

Fred Classic Alternative

MICAGE

**Early Classic Rock** 

New Alternative

Squizz New Hard Rock XI

Blemedu Later Classic Rock

the Loft

THE VERGE **Emerging Artists** 

Punk/Hardcore/Ska XI

Con 1 '90s Alternative

#### **Hip-Hop & Urban**

Classic Soul

GEOOVE

Snoop Dogg's Classic Hip-Hop/Rap XL ereme.

Adult R&B Hits

RENW New Uncut Hip-Hop XI

City Urhan/R&R/Mix Shows 67 Hip-Hop/Crossover Hits the heat

#### Jazz & Blues

Traditional lazz Smooth/Contemporary Jazz

72 Modern Jazz

Frank's Dlane

bluesville

#### Lifestyle

HEARMUSIC

New Age

Edectic/Free Form XMHD

audio visions **Oscape Beautiful Music** 

#### Dance

House/Progressive

Dance Hits

SYSTEM Electronica/Trance

Disco/Classic Dance

Na Chill Smooth Electronic

#### Latin

**FUEGO** 

Latin Pop Hits SP

A ROPPIA Regional Mexican SP

raliente Tropical SP

### World

New & Emerging Music FR the Cint

Pop Hits FR

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ECLASSICS Traditional Classical

VOX Opera/Classical Vocals

XIN Pops Classical Favorites XMHD

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Headline News CNN Headline News

MEWS ABC News & Talk

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CNRC

129 Bloomberg Bloomberg Radio BBC **BBC World Service** C-SPAN C-SPAN Radio 133 X MPUBLIC

244 Canada News & Information

176-189

190

194-196

197-199

205-209

245 Quoi de News & Information FR

MLB Home Plate™ 24/7 MLB™ News & Talk

14 Major League Baseball® Play-by-Play Channels

Play-by-Play en Español SP

ACC Football/Basketball

Pac-10 Football/Basketball

Big Ten Football/Basketball

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NHL Hockey Play-by-Play

24/7 Hockey Talk & Play-by-Play

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SPORTPLUS Men's Lifestyle & Sports Talk FR

#### AWARD-WINNING KIDS & FAMILY CHANNELS

Radio Disney

ESPECIALLY FOR WOMEN

Women's Talk & Lifestyle 156 COPRAH Oprah & Friends

#### -STAR TALK & ENTERTAINMENT

E! Entertainment

Books & Drama **Old Time Radio** 

162

TALKRADIO Live Talk Programming

Conservative Talk

Progressive Talk 168 FOX News Talk the 169

116 xmkids Children

African-American Talk Family 170 **Christian Talk** 

Open Road Truckers' Channel Concerts/Festivals/ Special Features & Events 200 **Maritimes** 

#### SUPERSTAR COMEDY

150 Uncensored Comedy XL

151 LAUGH VS Comedy Uncensored Comedy XL 154 تنور عنوانية National Lampoon Radio 202 VIEUS

The Opie & Anthony Show/ The Ron & Fez Show XL

#### REGIONAL TALK, NEWS & MUSIC

Today's Country cm Variety/Adult Hits cm

Sunny Soft Pop Oldies cm 161  $(W \cdot S \cdot I \cdot X)$ 

Nashville Country cm Talk & Information

#### 173 WLW INSTANT TRAFFIC, WEATHER & ALERTS Traffic =

210 Boston, MA 211 New York, NY 212 Philadelphia, PA

214 Washington, DC

215 Pittsburgh, PA

216 Detroit, MI 217 Chicago, IL 218 St. Louis, MO 213 Baltimore, MD

220 Seattle, WA

221 San Francisco, CA

219 Minneapolis/St. Paul, MN

222 Los Angeles, CA 223 San Diego, CA

228 Tampa/St. Petersburg, FL 224 Phoenix A7 230 Miami/Ft, Lauderdale, FL 225 Dallas/Fort Worth, TX 247 **XM Emergency Alert** 

226 Houston, TX 227 Atlanta GA

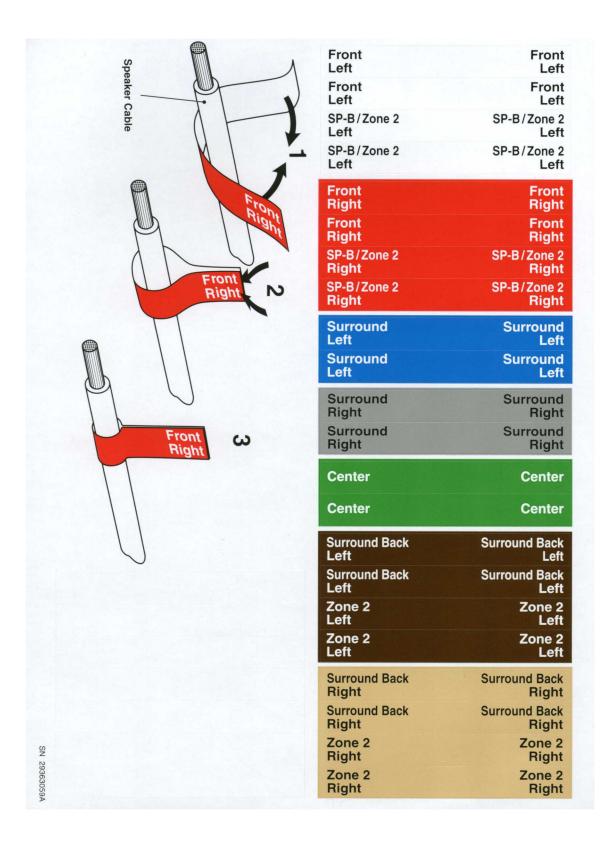
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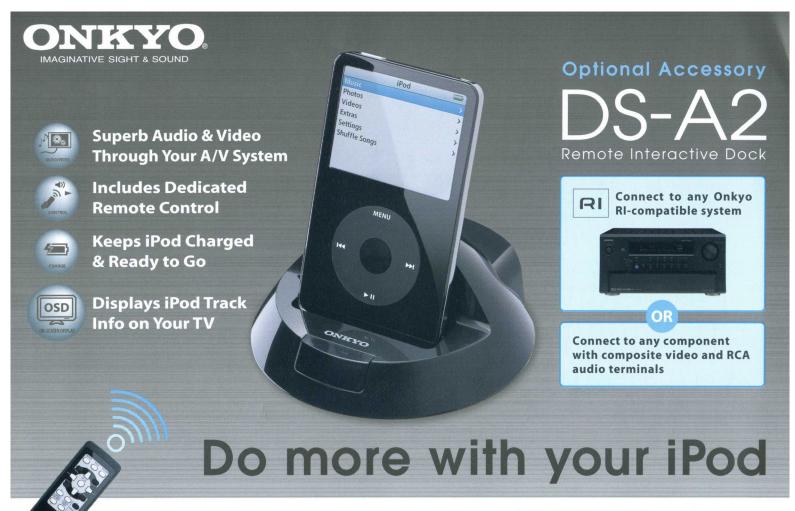
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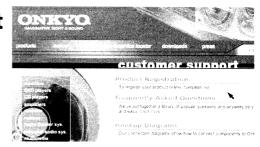






### **Online Customer Support**

www.onkyousa.com can assist you anytime with Frequently Asked Questions, Hookup Diagrams, and Service Information



### We offer Product Support 7 days per week

Onkyo has extended its product support hours to a seven-day schedule. For questions, assistance, or comments, please call us or visit on our website at:

Phone: 1-800-229-1687

Web address: www.onkyousa.com/support

#### **Hours of Operation:**

Mon - Fri 9:00am - 8 pm (Eastern Standard Time) Sat - Sun 10:00am - 4 pm (Eastern Standard Time)

#### **OBTAINING WARRANTY SERVICE**

To obtain warranty service, take or ship your Onkyo product to an Onkyo authorized independent service center, together with a note describing your complaint and your copy of the dated purchase receipt. If you choose to ship your Onkyo product to an Onkyo authorized independent service center, all shipping arrangements must be made by you and all shipping charges and insurance must be fully prepaid. Onkyo product should be shipped in its entirety and in its original carton. Onkyo will pay all return shipping charges for Onkyo products that have been serviced under this warranty. To locate an authorized independent service center, you can contact Onkyo's customer service department or check the dealer and service locator at our web site: www.onkyousa.com

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Age

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Phone Number

☐ Under 20 ☐ 21-30 ☐ 31-40 ☐ 41-60 ☐ 61 +

State

#### **Product REGISTRATION CARD**

**Thank you** for purchasing this Onkyo product. In order to protect your investment and to ensure that you receive information on new products, future updates or new releases, please register your product.

Please remember to keep your receipt of your purchase for warranty and the other part of this card for future reference.

Middle Initial

Apt/Suite Number

Gender

☐ Male ☐ Female

Zip

Model Number	Serial Number (10 Digit)	
How did you learn abou	ut this product?	
☐ Magazine ☐ Interne	et	
What factors influenced	d your purchase decision?	
☐ Features ☐ Sound ☐	Quality Design Price Recommendation Other	
What other Audio/Video	equipment did you purchase with this products?	
☐ Flat TV ☐ Other TV	□ DVD Player □ HD Recorder □ Satellite Tuner	
□ VCR □ CD Player/l	Recorder  Portable Player  Other	
What other Audio/Video	equipment are you planning to buy in next 12 months?	
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□ VCR □ CD Plaver/l	Recorder Portable Player Other	

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### **REGISTRATION DEPARTMENT**

**ONKYO USA CORPORATION** 

18 PARK WAY UPPER SADDLE RIVER, NJ 07458 USA





### **Onkyo USA Limited Warranty**

Please retain your original bill of sale. You will need to present it should you require service under this warranty.

Onkyo USA corporation (hereinafter referred to as Onkyo) hereby warrants all Onkyo Products sold by Onkyo or Onkyo Authorized Dealer in the United States of America in accordance with the following terms and conditions:

#### **WARRANTY PERIOD:**

Receivers and Amplifiers

Speakers

CD, DVD Players & Tape Decks

CD, DVD Receiver Combos

Mini Systems

Audio/Video Accessories

TV Stand with built in speakers

2 years Parts & Labor
2 years Parts & Labor
2 years Parts & Labor
1 year Parts & Labor
1 year Parts & Labor

#### **SCOPE OF WARRANTY:**

From the date of original purchase and for respective periods specified above, Onkyo agrees to repair at its sole expense, all Onkyo products purchased directly from Onkyo or an Onkyo Authorized Dealer in the United States of America, which are defective in material and/or workmanship.

**EXCLUSIONS:** This Warranty does not apply with respect to the following:

- 1. Defects or damage caused by accident, fire, flood, lightning or other acts of nature.
- Defects or damage caused by abuse, misuse, negligence or failure to observe the instructions contained in the manual furnished at the time of original purchase.
- Damage caused during shipment or handling.
- 4. Products purchased from anyone other than Onkyo or an Onkyo authorized dealer. If you are uncertain as to whether a dealer is authorized, please contact Onkyo's Customer Service Department or check the Dealer and Service Locator at our web site: http://www.onkyousa.com
- 5. Products that have had their serial numbers altered or removed.
- 6. Products purchased in 'AS IS' condition.
- 7. Products that have been altered or repaired by anyone other than Onkyo or an Onkyo authorized service center in a manner that has affected their performance, stability or reliability.
- 8. Accessories attached to or to be used with Onkyo products, such as antennas, cables, etc.
- 9. Packing materials, batteries, antennas & cosmetic items.
- 10. Parts which have prescribed useful lives dependent upon the degree of their use, such as stylus, cassette heads, idler wheels, etc.
- 11. Installation & removal of Onkyo products.
- 12. Maintenance, cleaning or periodic check-ups.
- 13. Adjustments or alteration required for compatibility with conditions pertaining to foreign countries.
- 14. Products used continuously or for commercial applications. Onkyo products are intended for consumers' use and are not designed for continuous or commercial use. In the event that the products concerned have been used commercially or continuously, the warranty period is limited to 90 days from the date of purchase. This exclusion does not apply to the Onkyo Pro product line.

#### **LIMITATIONS:**

Onkyo makes this warranty subject to the following limitations:

- 1. This warranty is valid only within the territory of the United States of America. To be covered by this warranty the Onkyo product concerned must have been originally purchased from Onkyo or an Onkyo authorized dealer in the United States of America or in the District of Colombia. Onkyo products used outside of the USA are not covered by this warranty. This warranty extends to the original purchaser and cannot be transferred to anyone.
- 2. ONKYO SHALL HAVE NO LIABILITY WHATSOEVER FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES. THE RESPONSIBILITY OF ONKYO UNDER THIS WARRANTY SHALL BE LIMITED TO THE REPAIR OF DEFECTIVE ONKYO PRODUCTS BY ONKYO OR ITS AUTHORIZED SERVICE CENTERS.
- 3. This warranty is valid only with respect to repairs effected by Onkyo or an Onkyo Authorized independent Service Station.
- 4. ALL WARRANTIES OTHER THAN THE EXPRESS WARRANTY HEREIN CONTAINED INCLUDING BUT NOT LIMITED TO ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE ARE LIMITED IN DURATION TO THE APPLICABLE WARRANTY PERIOD SET FORTH ABOVE.
- 5. Warranty repairs do not extend the original warranty period.

Some states do not allow limitations on how long an implied warranty lasts and some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitations or exclusion may not apply to you. This warranty gives you specific legal rights and you may also have other rights that vary from state to state.

Model	
Serial No	
Customer's Name	
Dealer's Name	
Date of Purchase _	

#### **ONKYO USA CORPORATION**

18 Park Way

Upper Saddle River, NJ 07458 USA

Phone: Fax: 201-785-2600 201-785-2650