DENON

AV SURROUND RECEIVER

AVR-2808CI

Owner's Manual

❏ SAFETY PRECAUTIONS

CAUTION

RISK OF ELECTRIC SHOCK
DO NOT OPEN

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.

WARNING:

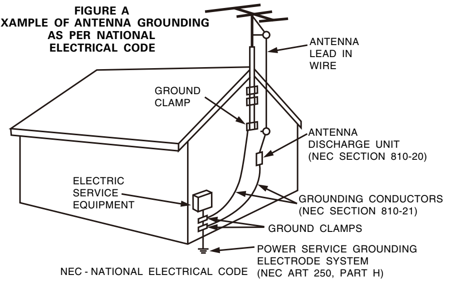
TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.

SAFETY INSTRUCTIONS

1. Read Instructions – All the safety and operating instructions should be read before the product is operated.
2. Retain Instructions – The safety and operating instructions should be retained for future reference.
3. Heed Warnings – All warnings on the product and in the operating instructions should be adhered to.
4. Follow Instructions – All operating and use instructions should be followed.
5. Cleaning – Unplug this product from the wall outlet before cleaning. Do not use liquid cleaners or aerosol cleaners.
6. Attachments – Do not use attachments not recommended by the product manufacturer as they may cause hazards.
7. Water and Moisture – Do not use this product near water – for example, near a bath tub, wash bowl, kitchen sink, or laundry tub; in a wet basement; or near a swimming pool; and the like.
8. Accessories – Do not place this product on an unstable cart, stand, tripod, bracket, or table. The product may fall, causing serious injury to a child or adult, and serious damage to the product. Use only with a cart, stand, tripod, bracket, or table recommended by the manufacturer, or sold with the product. Any mounting of the product should follow the manufacturer’s instructions, and should use a mounting accessory recommended by the manufacturer.
9. A product and cart combination should be moved with care. Quick stops, excessive force, and uneven surfaces may cause the product and cart combination to overturn.

10. Ventilation – Slots and openings in the cabinet are provided for ventilation and to ensure reliable operation of the product and to protect it from overheating, and these openings must not be blocked or covered. The openings should never be blocked by placing the product on a bed, sofa, rug, or other similar surface. This product should not be placed in a built-in installation such as a bookcase or rack unless proper ventilation is provided or the manufacturer’s instructions have been adhered to.
11. Power Sources – This product should be operated only from the type of power source indicated on the marking label. If you are not sure of the type of power supply to your home, consult your product dealer or local power company. For products intended to operate from battery power, or other sources, refer to the operating instructions.
12. Grounding or Polarization – This product may be equipped with a polarized alternating-current line plug (a plug having one blade wider than the other). This plug will fit into the power outlet only one way. This is a safety feature. If you are unable to insert the plug fully into the outlet, try reversing the plug. If the plug should still fail to fit, contact your electrician to replace your obsolete outlet. Do not defeat the safety purpose of the polarized plug.

FIGURE A
EXAMPLE OF ANTENNA GROUNDING AS PER NATIONAL ELECTRICAL CODE


ANTENNA LEAD IN WIRE
GROUND CLAMP
ANTENNA DISCHARGE UNIT (NEC SECTION 810-20)
ELECTRIC SERVICE EQUIPMENT
GROUNDING CONDUCTORS (NEC SECTION 810-21)
GROUND CLAMPS
POWER SERVICE GROUNDING ELECTRODE SYSTEM (NEC ART 250, PART H)
NEC - NATIONAL ELECTRICAL CODE

13. Power-Cord Protection – Power-supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them, paying particular attention to cords at plugs, convenience receptacles, and the point where they exit from the product.
15. Outdoor Antenna Grounding – If an outside antenna or cable system is connected to the product, be sure the antenna or cable system is grounded so as to provide some protection against voltage surges and built-up static charges. Article 810 of the National Electrical Code, ANSI/NFPA 70, provides information with regard to proper grounding of the mast and supporting structure, grounding of the lead-in wire to an antenna discharge unit, size of grounding conductors, location of antenna-discharge unit, connection to grounding electrodes, and requirements for the grounding electrode. See Figure A.
16. Lightning – For added protection for this product during a lightning storm, or when it is left unattended and unused for long periods of time, unplug it from the wall outlet and disconnect the antenna or cable system. This will prevent damage to the product due to lightning and power-line surges.
17. Power Lines – An outside antenna system should not be located in the vicinity of overhead power lines or other electric light or power circuits, or where it can fall into such power lines or circuits. When installing an outside antenna system, extreme care should be taken to keep from touching such power lines or circuits as contact with them might be fatal.
18. Overloading – Do not overload wall outlets, extension cords, or integral convenience receptacles as this can result in a risk of fire or electric shock.
19. Object and Liquid Entry – Never push objects of any kind into this product through openings as they may touch dangerous voltage points or short-out parts that could result in a fire or electric shock. Never spill liquid of any kind on the product.
20. Servicing – Do not attempt to service this product yourself as opening or removing covers may expose you to dangerous voltage or other hazards. Refer all servicing to qualified service personnel.
21. Damage Requiring Service – Unplug this product 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 product,
    c) If the product has been exposed to rain or water,
    d) If the product 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 product to its normal operation,
    e) If the product has been dropped or damaged in any way, and
    f) When the product exhibits a distinct change in performance – this indicates a need for service.
22. Replacement Parts – When replacement parts are required, be sure the service technician has used replacement parts specified by the manufacturer or have the same characteristics as the original part. Unauthorized substitutions may result in fire, electric shock, or other hazards.
23. Safety Check – Upon completion of any service or repairs to this product, ask the service technician to perform safety checks to determine that the product is in proper operating condition.
24. Wall or Ceiling Mounting – The product should be mounted to a wall or ceiling only as recommended by the manufacturer.
25. Heat – The product should be situated away from heat sources such as radiators, heat registers, stoves, or other products (including amplifiers) that produce heat.

FCC INFORMATION (For US customers)

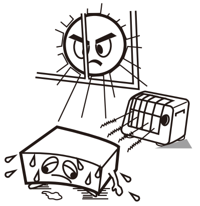
1. **PRODUCT**
   This product complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this product may not cause harmful interference, and (2) this product must accept any interference received, including interference that may cause undesired operation.

2. **IMPORTANT NOTICE: DO NOT MODIFY THIS PRODUCT**
   This product, when installed as indicated in the instructions contained in this manual, meets FCC requirements. Modification not expressly approved by DENON may void your authority, granted by the FCC, to use the product.

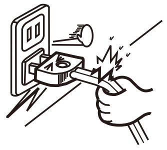
3. **NOTE**
   This product has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.
   This product generates, uses and 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 product does cause harmful interference to radio or television reception, which can be determined by turning the product 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 product into an outlet on a circuit different from that to which the receiver is connected.
   - Consult the local retailer authorized to distribute this type of product or an experienced radio/TV technician for help.

This Class B digital apparatus complies with Canadian ICES-003.
Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.

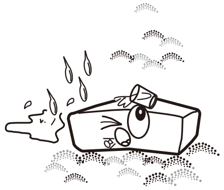
❑ NOTE ON USE / OBSERVATIONS RELATIVES A L’UTILISATION



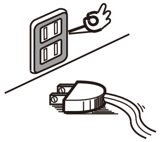
- Avoid high temperatures.
  Allow for sufficient heat dispersion when installed in a rack.
- Eviter des températures élevées.
  Tenir compte d’une dispersion de chaleur suffisante lors de l’installation sur une étagère.



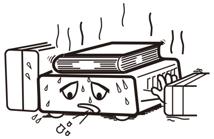
- Handle the power cord carefully.
  Hold the plug when unplugging the cord.
- Manipuler le cordon d’alimentation avec précaution.
  Tenir la prise lors du débranchement du cordon.



- Keep the unit free from moisture, water, and dust.
- Protéger l’appareil contre l’humidité, l’eau et la poussière.

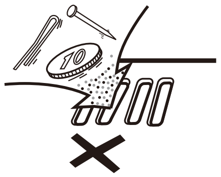


- Unplug the power cord when not using the unit for long periods of time.
- Débrancher le cordon d’alimentation lorsque l’appareil n’est pas utilisé pendant de longues périodes.



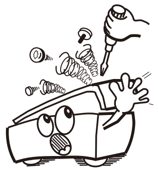
* (For apparatuses with ventilation holes)

- Do not obstruct the ventilation holes.
- Ne pas obstruer les trous d’aération.



- Do not let foreign objects into the unit.
- Ne pas laisser des objets étrangers dans l’appareil.

- Do not let insecticides, benzene, and thinner come in contact with the unit.
- Ne pas mettre en contact des insecticides, du benzène et un diluant avec l’appareil.



- Never disassemble or modify the unit in any way.
- Ne jamais démonter ou modifier l’appareil d’une manière ou d’une autre.

Contents

Getting Started

Connections

Menu Operations

Auto Setup

Manual Setup

Input Setup

Surround Modes

Parameter

Information

Playback

Other Operations and Functions

Remote Control Unit Operations

Amp Assign / Multi-zone Connections and Operations

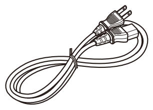
Getting Started

Thank you for purchasing this DENON product. To ensure proper operation, please read these owner's manual carefully before using the product.
After reading them, be sure to keep them for future reference.

Accessories

Check that the following parts are supplied with the product.

① Owner's manual 1
② Warranty (for North America model only) 1
③ Service station list 1
④ Power cord (Cord length: Approx. 7-31/64 ft /1.9 m) 1
⑤ Main remote control (RC-1068) 1
⑥ LR6/AA batteries (for RC-1068) 2
⑦ Sub remote control (RC-1071) 1
⑧ R03/AAA batteries (for RC-1071) 2
⑨ FM indoor antenna 1
⑩ AM loop antenna 1
⑪ Setup microphone (Cord length: Approx. 25 ft / 7.6 m) 1

④


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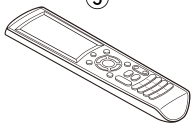

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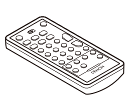

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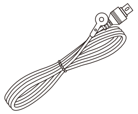
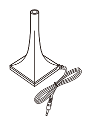


⑩

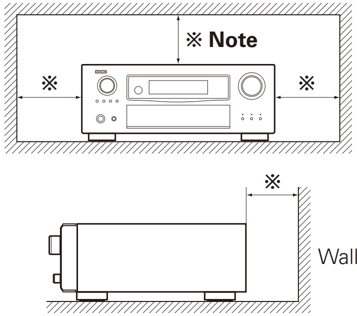
⑪


Cautions on Handling

- **Before turning the power switch on**
  Check once again that all connections are correct and that there are no problems with the connection cables.
- Power is supplied to some of the circuitry even when the unit is set to the standby mode. When traveling or leaving home for long periods of time, be sure to unplug the power cord from the power outlet.
- **About condensation**
  If there is a major difference in temperature between the inside of the unit and the surroundings, condensation (dew) may form on the operating parts inside the unit, causing the unit not to operate properly.
  If this happens, let the unit sit for an hour or two with the power turned off and wait until there is little difference in temperature before using the unit.
- **Cautions on using mobile phones**
  Using a mobile phone near this unit may result in noise. If so, move the mobile phone away from this unit when it is in use.
- **Moving the unit**
  Turn off the power and unplug the power cord from the power outlet.
  Next, disconnect the connection cables to other system units before moving the unit.
- Note that the illustrations in these instructions may differ from the actual unit for explanation purposes.

Cautions on Installation

Note:
For proper heat dispersal, do not install this unit in a confined space, such as a bookcase or similar enclosure.



About the Remote Control Unit

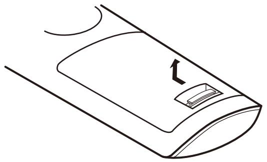
In addition to the AVR-2808CI, the included main remote control unit (RC-1068) can also be used to operate the equipment listed below.

① DENON system components
② Non-DENON system components
  - By setting the preset memory (☞page 51 ~ 53)
  - By using the learn function (☞page 54)

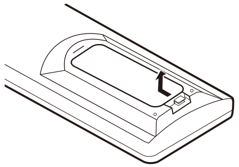
Inserting the Batteries

① Lift the clasp and remove the rear lid.

(RC-1068)

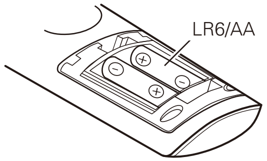


(RC-1071)

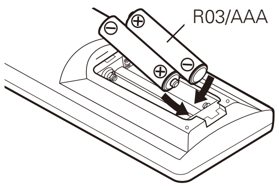


② Load the two batteries properly as indicated by the marks in the battery compartment.

(RC-1068)



(RC-1071)



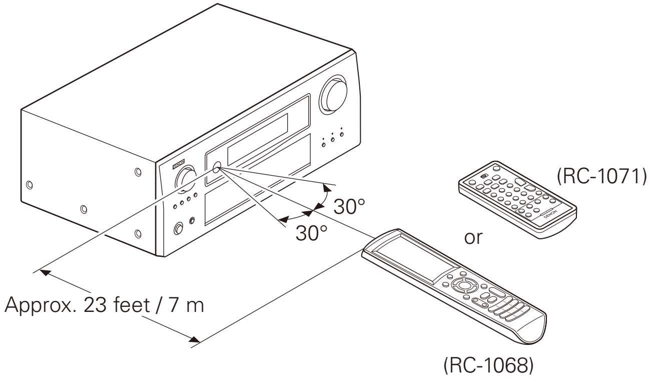
③ Put the rear cover back on.

NOTE

- Replace the batteries with new ones if the set does not operate even when the remote control unit is operated close to the unit.
- The supplied batteries are only for verifying operation.
- When inserting the batteries, be sure to do so in the proper direction, following the "⊕" and "⊖" marks in the battery compartment.
- To prevent damage or leakage of battery fluid:
  - Do not use a new battery together with an old one.
  - Do not use two different types of batteries.
  - Do not attempt to charge dry batteries.
  - Do not short-circuit, disassemble, heat or dispose of batteries in flames.
- If the battery fluid should leak, carefully wipe the fluid off the inside of the battery compartment and insert new batteries.
- Remove the batteries from the remote control unit if it will not be in use for long periods.
- When replacing the batteries, have the new batteries ready and insert them as quickly as possible.

Operating Range of the Remote Control Unit

Point the remote control unit at the remote sensor when operating it.



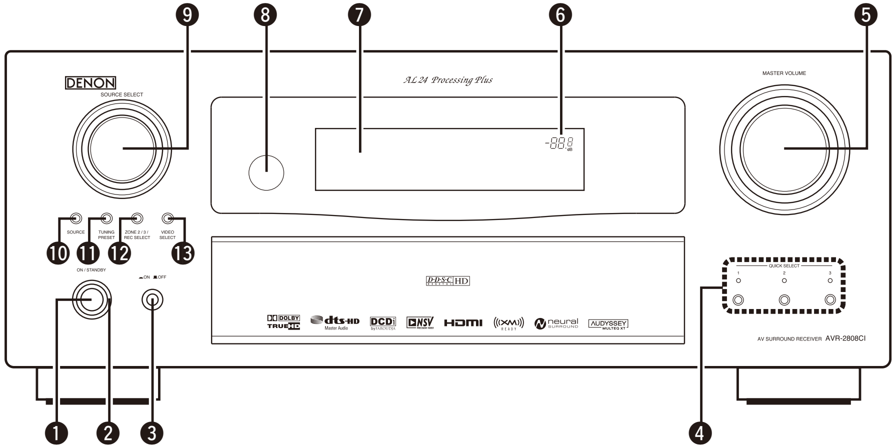
NOTE

The set may function improperly or the remote control unit may not operate if the remote control sensor is exposed to direct sunlight, strong artificial light from an inverter type fluorescent lamp or infrared light.

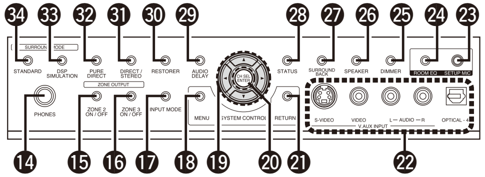
Part Names and Functions

For buttons not explained here, see the page indicated in parentheses ( ).

Front Panel



【With the door open】



① **Power operation button (ON/STANDBY)** .... (43)

② **Power indicator** .... (43)

③ **Power switch (▬ON ■OFF)** .... (43)

④ **QUICK SELECT buttons / indicators** .... (50)

⑤ **MASTER VOLUME control knob** .... (43)

⑥ **Master volume indicator**

⑦ **Display**

⑧ **Remote control sensor** .... (3)

⑨ **SOURCE SELECT knob** .... (43)

⑩ **SOURCE button** .... (43)

⑪ **TUNING PRESET button** .... (44)

⑫ **ZONE2/3 / REC SELECT button** .... (49, 60)

⑬ **VIDEO SELECT button** .... (35)

⑭ **Headphones jack (PHONES)** .... (43)

⑮ **ZONE2 ON/OFF button** .... (60)

⑯ **ZONE3 ON/OFF button** .... (60)

⑰ **INPUT MODE button** .... (34)

⑱ **MENU button** .... (20)

⑲ **Cursor buttons (△▽◁ ▷)** .... (20)

⑳ **CH SEL / ENTER button** .... (20, 50)

㉑ **RETURN button** .... (20)

㉒ **V.AUX INPUT connectors** .... (17)

㉓ **SETUP MIC jack** .... (23)

㉔ **ROOM EQ button** .... (40)

㉕ **DIMMER button** .... (32)

㉖ **SPEAKER button** .... (43)

㉗ **SURROUND BACK button** .... (40)

㉘ **STATUS button** .... (42)

㉙ **AUDIO DELAY button** .... (41)

㉚ **RESTORER button** .... (41)

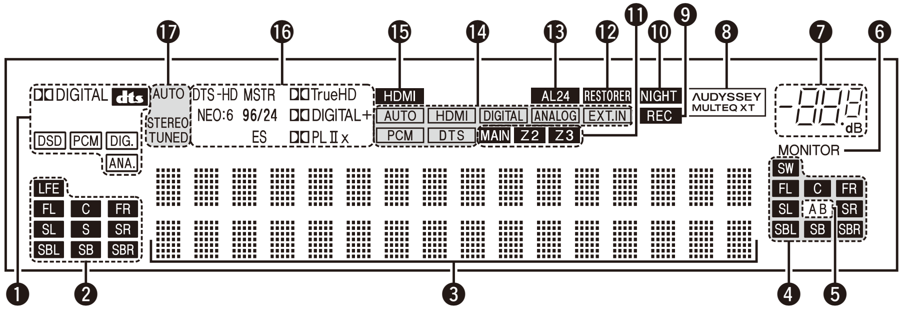
㉛ **DIRECT/STEREO button** .... (37)

㉜ **PURE DIRECT button** .... (38)

㉝ **DSP SIMULATION button** .... (37)

㉞ **STANDARD button** .... (36)

Display



① **Input signal indicators**

② **Input signal channel indicators**
These light when digital signals are input.

③ **Information display**
The input source name, surround mode, setting values and other information are displayed here.

④ **Output signal channel indicators**

⑤ **Front speaker indicator**
These light according to the settings of the front A and B speakers.

⑥ **HDMI monitor indicator**
This lights when an HDMI monitor is detected.

⑦ **Master volume indicator**

⑧ **AUDYSSEY MULTEQ XT indicator**
This lights when the room equalizer is selected.

⑨ **Recording output source indicator**
This lights when the REC OUT mode is selected.

⑩ **NIGHT indicator**
This lights when the night mode is selected.

⑪ **Multi-zone indicators**
These light when the power for the respective zone is turned on.

⑫ **RESTORER indicator**
This lights when the RESTORER mode is selected.

⑬ **AL24 indicator**
This lights when AL24 Processing Plus is activated (☞page 63).

⑭ **Input mode indicators**

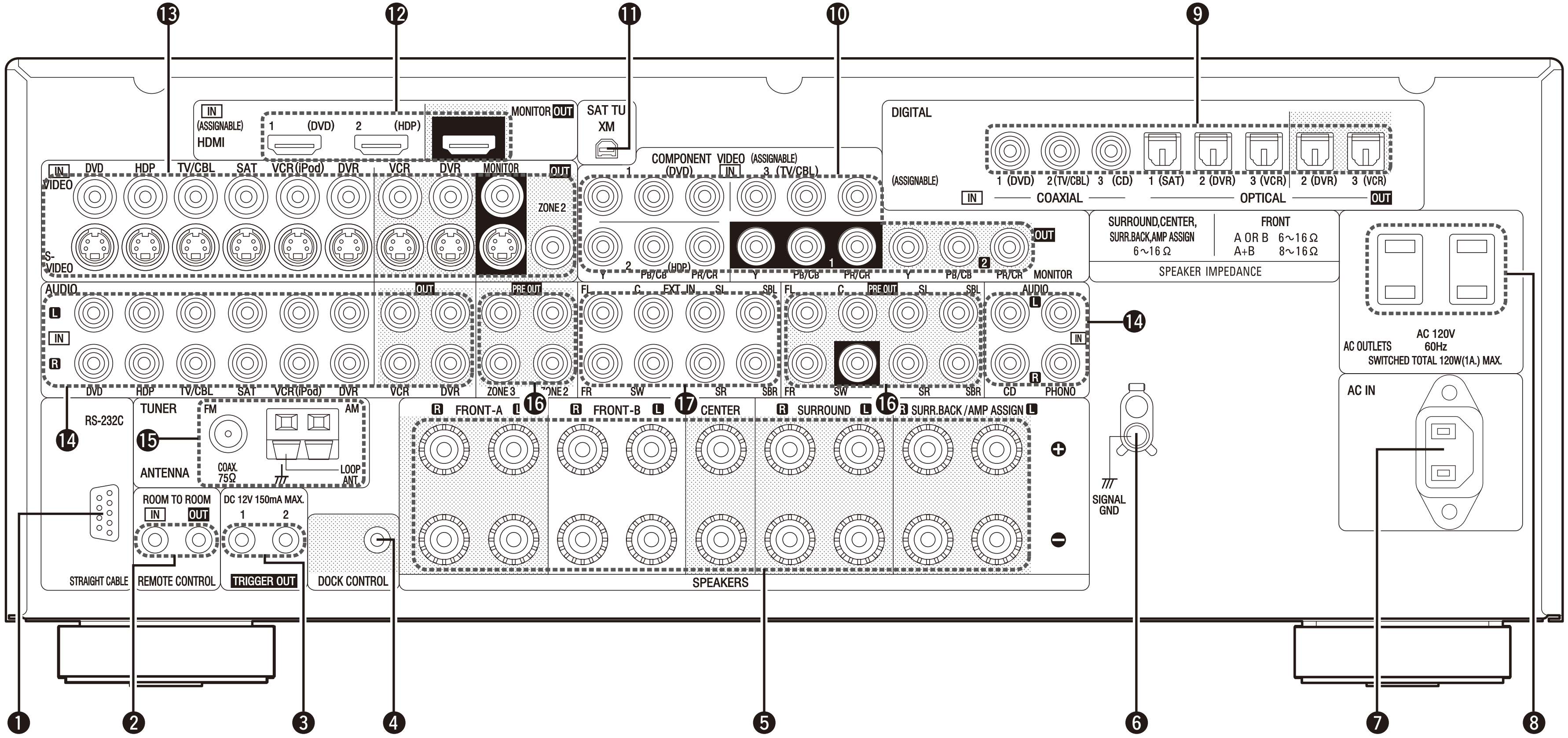
⑮ **HDMI indicator**
This lights when playing using HDMI connections.

⑯ **Decoder indicators**
These light when the respective decoders are operating.

⑰ **Tuner reception mode indicators**
These light according to the reception conditions when the input source is set to "TUNER".

- **AUTO**
This lights when in the auto tuning mode.
- **STEREO**
In the FM mode, this lights when receiving analog stereo broadcasts.
- **TUNED**
This lights when the broadcast is properly tuned in.

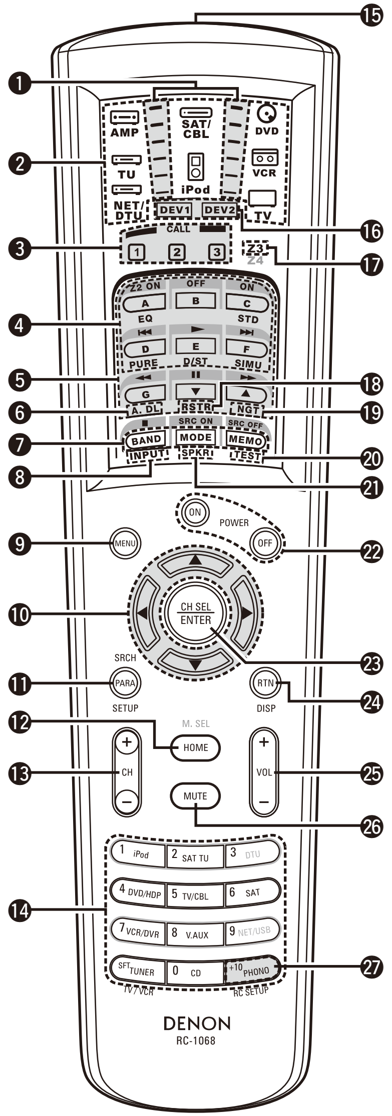
Rear Panel


⓭
⓬
⓫
❿
❾
IN (ASSIGNABLE) HDMI
1 (DVD) 2 (HDP)
MONITOR OUT
SAT TU XM
COMPONENT VIDEO (ASSIGNABLE)
1 (DVD) IN 3 (TV/CBL)
DIGITAL
(ASSIGNABLE)
1 (DVD) 2 (TV/CBL) 3 (CD) 1 (SAT) 2 (DVR) 3 (VCR) 2 (DVR) 3 (VCR)
IN COAXIAL OPTICAL OUT
IN DVD HDP TV/CBL SAT VCR(iPod) DVR VCR DVR MONITOR OUT
VIDEO
S-VIDEO
ZONE 2
Y PB/CB PR/CR
2 (HDP) 1 2 OUT MONITOR
SURROUND,CENTER, SURR.BACK,AMP ASSIGN 6~16Ω
FRONT A OR B 6~16Ω A+B 8~16Ω
SPEAKER IMPEDANCE
AUDIO OUT PRE OUT
FL C EXT. IN SL SBL FL C PRE OUT SL SBL AUDIO
L IN R
DVD HDP TV/CBL SAT VCR(iPod) DVR VCR DVR ZONE 3 ZONE 2 FR SW SR SBR FR SW SR SBR CD PHONO
⓮
⓰
⓱
⓰
AC 120V 60Hz
AC OUTLETS SWITCHED TOTAL 120W(1A.) MAX.
AC IN
RS-232C
TUNER FM AM
⓯
ANTENNA COAX. 75Ω LOOP ANT
R FRONT-A L R FRONT-B L CENTER R SURROUND L R SURR.BACK/AMP ASSIGN L
+
−
SIGNAL GND
ROOM TO ROOM IN OUT
DC 12V 150mA MAX. 1 2
STRAIGHT CABLE REMOTE CONTROL TRIGGER OUT DOCK CONTROL
SPEAKERS
❶
❷
❸
❹
❺
❻
❼
❽

❶ **RS-232C connector**	(19)
❷ **REMOTE CONTROL jacks**	(19)
❸ **TRIGGER OUT jacks**	(19)
❹ **DOCK CONTROL jack**	(14)
❺ **Speaker terminals (SPEAKERS)**	(9)
❻ **SIGNAL GND terminal**	(13)
❼ **AC inlet (AC IN)**	(20)
❽ **AC OUTLETS**	(20)
❾ **Digital audio connectors (OPTICAL / COAXIAL)**	(12, 15)
❿ **COMPONENT VIDEO connectors**	(12)
⓫ **XM connector (SAT TU)**	(18)
⓬ **HDMI connectors**	(11)
⓭ **VIDEO / S-VIDEO connectors**	(12)
⓮ **Analog audio connectors (AUDIO)**	(12)
⓯ **FM/AM antenna terminals (TUNER ANTENNA)**	(18)
⓰ **PRE OUT connectors**	(17, 19)
⓱ **EXT. IN connectors**	(17)

Remote Control Unit

❑ Main remote control unit (RC-1068)



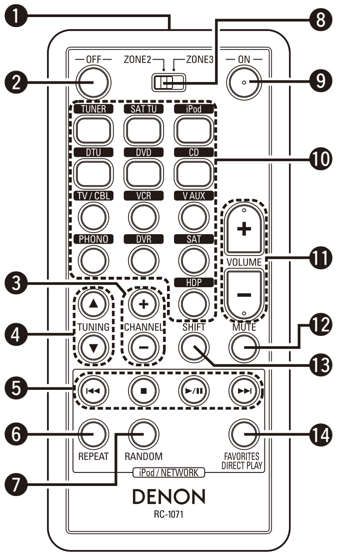
❶ **Signal transmission indicator**	(51)
❷ **Mode select buttons**	(51)
❸ **Quick select / System call buttons**	(50, 55)
❹ **Surround mode buttons**	(36 ~ 38)
❺ **System buttons**	(52, 53)
❻ **Audio delay button (A. DL)**	(41)
❼ **Tuner system buttons**	(44)
❽ **Input mode button (INPUT)**	(34)
❾ **MENU button**	(20)
❿ **Cursor buttons (△▽◁ ▷)**	(20)
⓫ **Parameter / Search button (PARA / SRCH)**	(38, 46, 48)
⓬ **HOME button**	(51)
⓭ **Channel buttons (CH)**	(44)
⓮ **Input source select / Number buttons**	(43, 44)
⓯ **Remote control signal transmitter**	(3)
⓰ **Device select indicators (DEV1 / DEV2)**	(51)
⓱ **ZONE3 select indicators (Z3)**	(51)
⓲ **RESTORER button (RSTR)**	(41)
⓳ **Night button (NGT)**	(41)
⓴ **Test tone button (TEST)**	(27)
㉑ **Front speaker select button (SPKR)**	(43)
㉒ **POWER buttons**	(43)
㉓ **Channel select (CH SEL) / ENTER button**	(20, 50)
㉔ **Return button (RTN)**	(20)
㉕ **Master volume control buttons (VOL)**	(43)
㉖ **Muting button (MUTE)**	(43, 60)
㉗ **Main remote control unit setup button (RC SETUP)**	(51)

The time for which the backlight stays on can be changed (☞page 55 "Setting the Time the Backlight Stays Lit").

NOTE

- The **M. SEL**, **DTU**, **NET/USB** buttons cannot be used.
- The NET/DTU and ZONE2 mode **QUICK SELECT (1 ~ 3)**, **A. DL**, **RSTR**, **NGT**, **INPUT**, **SPKR**, **TEST** and surround mode buttons cannot be used.
- The ZONE4 mode cannot be used.

❑ Sub remote control unit (RC-1071)



❶ **Remote control signal transmitter**	(3)
❷ **Zone power off button (OFF)**	(60)
❸ **CHANNEL buttons**	(56)
❹ **TUNING buttons**	(56)
❺ **System buttons**	(56)
❻ **REPEAT button**	(56)
❼ **RANDOM button**	(56)
❽ **ZONE2/ZONE3 select switch**	(56)
❾ **Zone power on button (ON)**	(60)
❿ **Input source select buttons**	(60)
⓫ **Volume control buttons (VOLUME)**	(60)
⓬ **Muting button (MUTE)**	(60)
⓭ **SHIFT button**	(56)
⓮ **FAVORITES DIRECT PLAY button**	(56)

Connections

Connections for all compatible audio and video signal formats are described in these operating instructions. Please select the types of connections suited for the equipment you are connecting.
With some types of connections, certain settings must be made on the AVR-2808CI. For details, refer to the instructions for the respective connection items below.

NOTE

- Do not plug in the power cord until all connections have been completed.
- When making connections, also refer to the operating instructions of the other components.
- Be sure to connect the left and right channels properly (left with left, right with right).
- Do not bundle power cords together with connection cables. Doing so can result in humming or noise.

Preparations

Cables Used for Connections

Select the cables according to the equipment being connected.

Audio cables

Coaxial digital connections

(Orange)

Coaxial digital (75 Ω/ohms pin-plug) cable

Optical digital connections

Optical cable

Analog connections (stereo)

(White)
(Red)

Stereo pin-plug cable

Analog connections (monaural, for subwoofer)

(Black)

Pin-plug cable

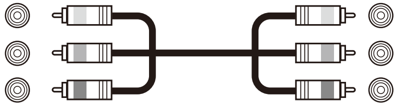
Speaker connections

Speaker cables

Video cables

Component video connections

(Green)
(Blue)
(Red)



(Y)
(PB/CB)
(PR/CR)

Component video cable

S-Video connections

S-Video cable

Video connections

(Yellow)

75 Ω/ohms pin-plug video cable

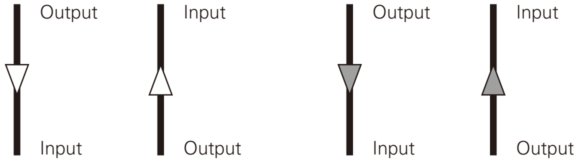
Audio and video cables

HDMI connections

19-pin HDMI cable

Signal direction

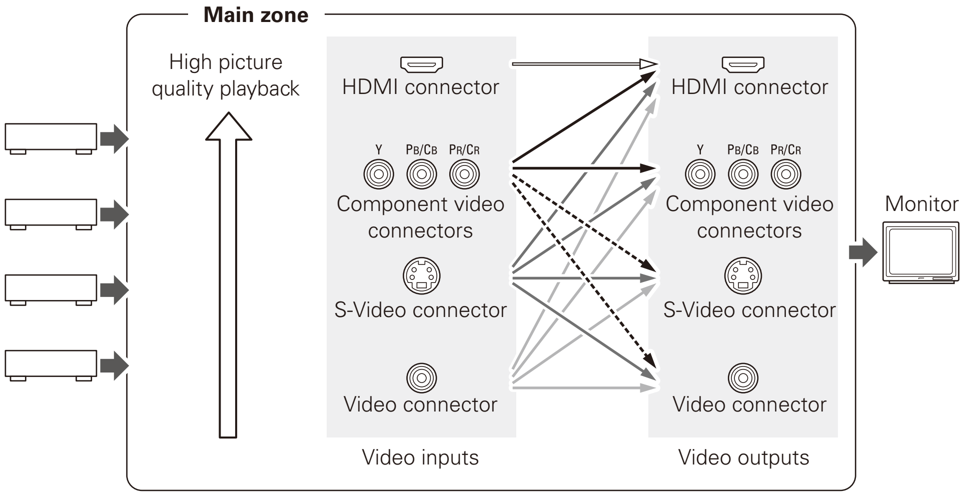
Audio signal:
Video signal:



Video Conversion Function

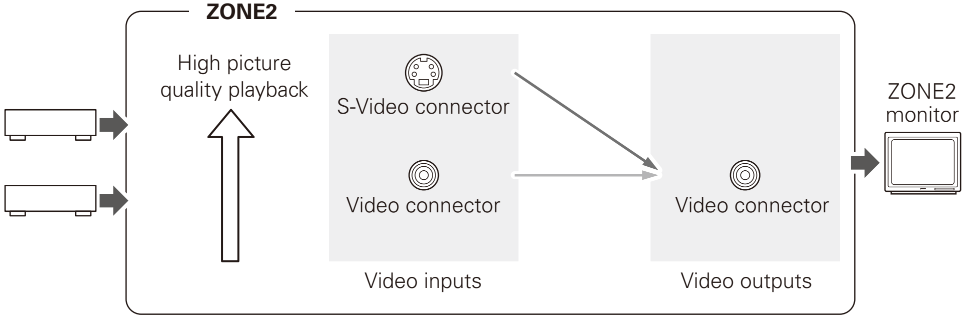
- This function automatically converts various formats of video signals input to the AVR-2808CI into the format used to output the video signals from the AVR-2808CI to a monitor.
- The AVR-2808CI's video input/output circuitry is compatible with the following four types of video signals:
  Digital video signals: HDMI
  Analog video signals: Component video, S-Video and Video

【Flow of video signals inside the AVR-2808CI】



---- : When 480i/576i signals are input in the main zone

【Flow of video signals for ZONE2】



- When not using this function, connect a monitor output with the same type of connector as the video input connector.
- The resolution of the HDMI input-compatible monitor connected to the AVR-2808CI can be checked at menu “Information” – “HDMI Signal Information” – “HDMI Monitor Information” (☞page 42).

NOTE

- HDMI signals cannot be converted into analog signals.
- 1080p component input video signals cannot be output to anything other than component video connectors.
- 480p/576p, 1080i and 720p component video input signals cannot be converted into S-Video or Video format.
- When a non-standard video signal from a game machine or some other source is input, the video conversion function might not operate.

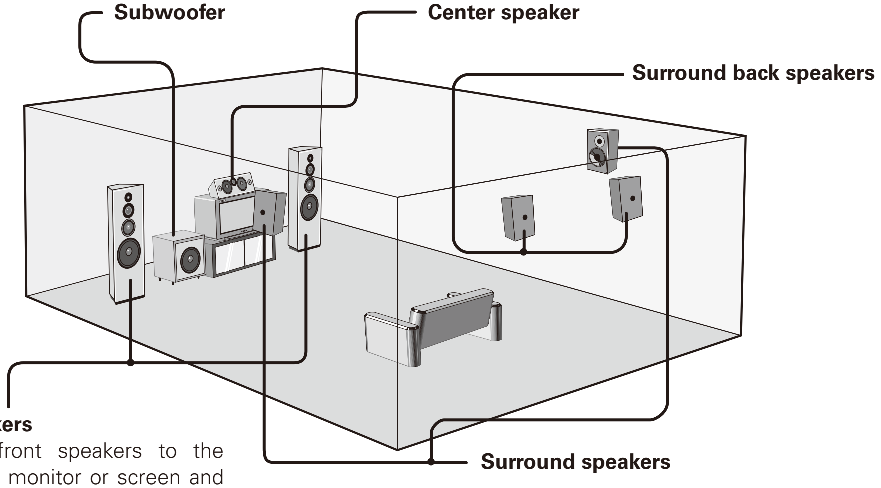
On-Screen Display for Component Video Outputs and HDMI Output

- When viewing HDMI or component video signals via the AVR-2808CI, the on-screen display appears when the **MENU** button or the main remote control unit´s **PARA** button is operated.
- When only HDMI or component video signals are input to the AVR-2808CI, the characters of the on-screen display are not displayed over the picture.

Speaker Connections

Speaker Installation

The illustration below shows a basic example of installation of the amplifier combined with 8 speakers and a monitor.



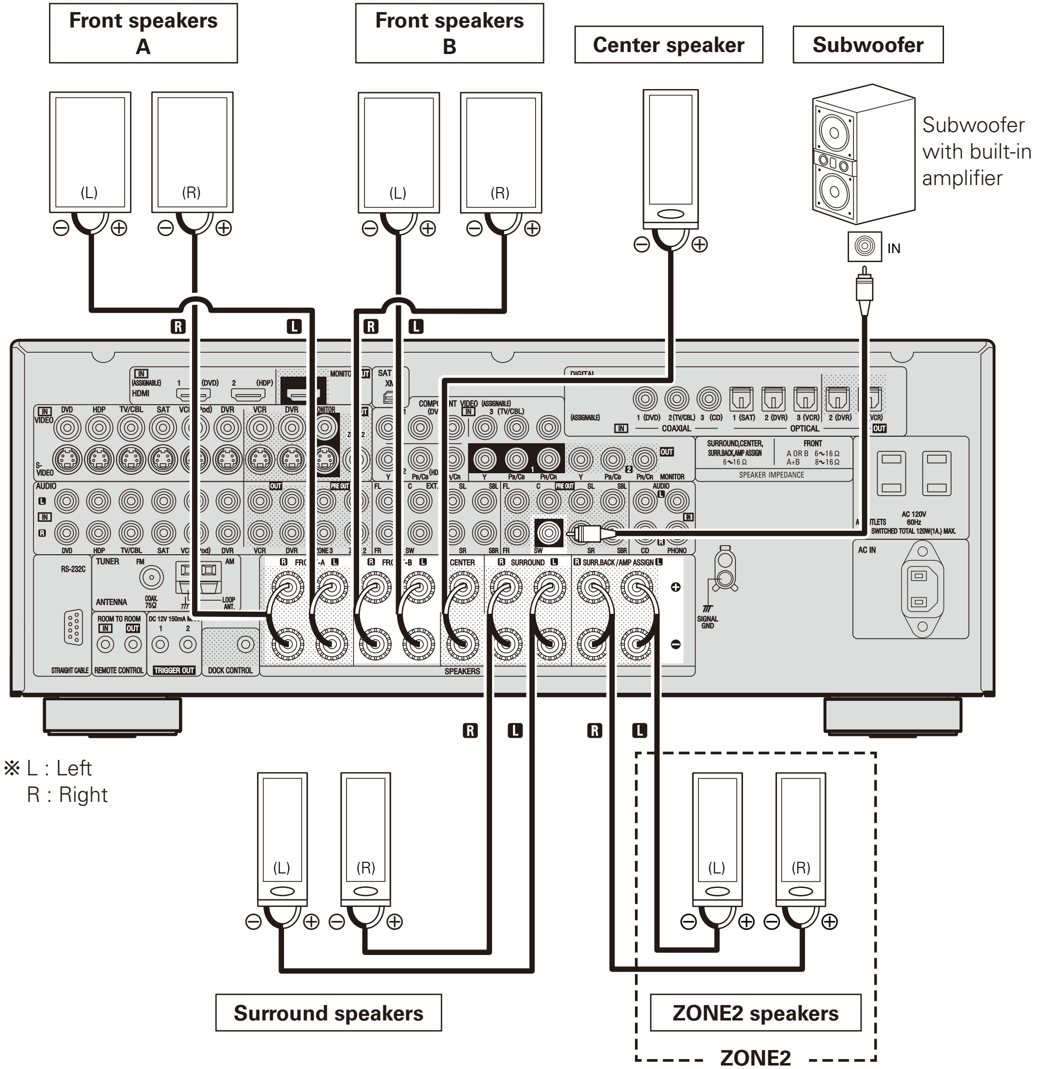
Front speakers
Place the front speakers to the sides of the monitor or screen and as flush with the screen surface as possible.

The table below shows a typical speaker configuration for the AVR-2808CI.

	FRONT		CENTER	SURROUND		SURROUND BACK			SUBWOOFER
	L	R		L	R	L	R	1 only	
7.1-channels (FRONT A+B)	○	○	○	○	○	○	○	–	○
7.1-channels	○	○	○	○	○	○	○	–	○
6.1-channels	○	○	○	○	○	–	–	○	○
5.1-channels	○	○	○	○	○	–	–	–	○
3.1-channels	○	○	○	–	–	–	–	–	○
2.1-channels	○	○	–	–	–	–	–	–	○
2-channels	○	○	–	–	–	–	–	–	–

Speaker Connections

Example: 5.1-channels (FRONT A+B) and ZONE2 use



When using just one surround back speaker, connect it to the left channel (SBL).

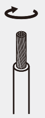
NOTE

By default, the AVR-2808CI's "Amp Assign" setting is set to "ZONE2". To use as the surround back speaker for the main zone, change the "Amp Assign" setting (☞page 31).

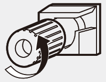
Connecting the Speaker Cables

Carefully check the left (L) and right (R) channels and + (red) and – (black) polarities on the speakers being connected to the AVR-2808CI, and be sure to interconnect the channels and polarities correctly.

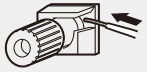
1 Peel off about 0.03 ft/10 mm of sheathing from the tip of the speaker cable, then either twist the core wire tightly or terminate it.



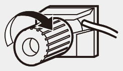
2 Turn the speaker terminal counterclockwise to loosen it.



3 Insert the speaker cable’s core wire to the hilt into the speaker terminal.

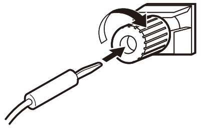


4 Turn the speaker terminal clockwise to tighten it.



When using a banana plug

Tighten the speaker terminal firmly before inserting the banana plug.



NOTE

- Use speakers with an impedance of 6 to 16 Ω/ohms. When using front A and B speakers simultaneously, use speakers with an impedance of 8 to 16 Ω/ohms.
- Connect the speaker cables in such a way that they do not stick out of the speaker terminals. The protection circuit may be activated if the core wires touch the rear panel or if the + and – sides touch each other (☞ “Protection circuit”).
- Never touch the speaker terminals while the power supply is connected. Doing so could result in electric shock.

Protection circuit

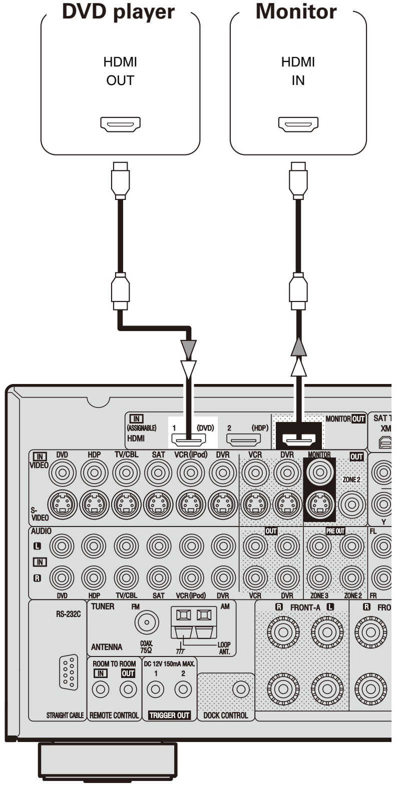
If speakers with an impedance lower than specified (for example 4 Ω/ohms speakers) are used for an extended period of time with the volume turned up high, the temperature may rise, activating the protection circuit.

When the protection circuit is activated, the speaker output is shut off and the power indicator flashes red. If this happens, unplug the power cord, then check the speaker cable and input cable connections. If the set is extremely hot, wait for it to cool off and improve ventilation around it. Once this is done, plug the power cord back in and turn the set's power back on.

If the protection circuit is activated again even though there are no problems in the ventilation around the set nor in the connections, the set may be damaged. Turn the power off, then contact a DENON service center.

Connecting Equipment with HDMI connectors

With HDMI connections, the video and audio signals can be transferred with a single cable.



※ The AVR-2808CI is equipped for HDMI version 1.3a. This version is compatible with other versions, allowing connection to all components equipped with an HDMI connector.

※ The AVR-2808CI is compatible with 30- and 36-bit Deep Color.

Compatible audio format	Details	Discs (examples)
2-channel linear PCM	2ch 32-192 kHz 16/20/24 bits	CD, DVD-Video, DVD-Audio
Multi-channel linear PCM	8ch 32-192 kHz 16/20/24 bits	DVD-Audio
Dolby Digital, DTS	Bitstream	DVD-Video
DSD	2/5.1ch 2.8224 MHz 1 bit	SACD
Dolby Digital Plus, Dolby TrueHD, DTS-HD	Bitstream	HD DVD, Blu-ray Disc

Copyright protection system (HDCP)

In order to play the digital video and audio signals of a DVD-Video or DVD-Audio disc using HDMI/DVI connections, both the connected DVD player and monitor must be equipped for a copyright protection system called "HDCP" (High-bandwidth Digital Content Protection).

HDCP is a copy protection technology consisting of data encoding and mutual identification of the devices.

The AVR-2808CI is HDCP-compatible. For details on the DVD player or monitor you are using, refer to its operating instructions.

- By default, the HDMI audio signals are output from the speakers connected to the AVR-2808CI.
- To output the sound from the TV, make the settings at menu "Manual Setup" – "HDMI Setup" – "HDMI Audio Setup" – "TV" (☞page 27).

NOTE

- Use a CPPM-compatible DVD player to play DVD-Audio discs that are copyright-protected by CPPM.
- The AVR-2808CI cannot be controlled from another device via the HDMI cable.
- The audio signals output from the HDMI connector (sampling frequency, bit rate, etc.) may be restricted by the connected device.
- Video signals are not output properly when using devices that are not HDCP-compatible.
- Video signals are not output if the input video signals do not match the monitor's resolution. In this case, switch the DVD player's resolution to a resolution with which the monitor is compatible.
- If the menu "Manual Setup" – "HDMI Setup" – "HDMI Audio Setup" setting (☞page 27) is set to "AMP", the sound may be interrupted when the monitor's power is turned off.
- Use a cable on which the HDMI logo is indicated (a certified HDMI product) for connection to the HDMI connector. Normal playback may not be possible when using a cable other than one on which the HDMI logo is indicated (a non-HDMI-certified product).
- If the monitor or DVD player does not support deep color, deep color signal transfer is not possible.
- If the monitor or DVD player does not support xvYCC, xvYCC signal transfer is not possible.
- If the monitor does not support "Auto Lipsync Correction" function, this function will not work.

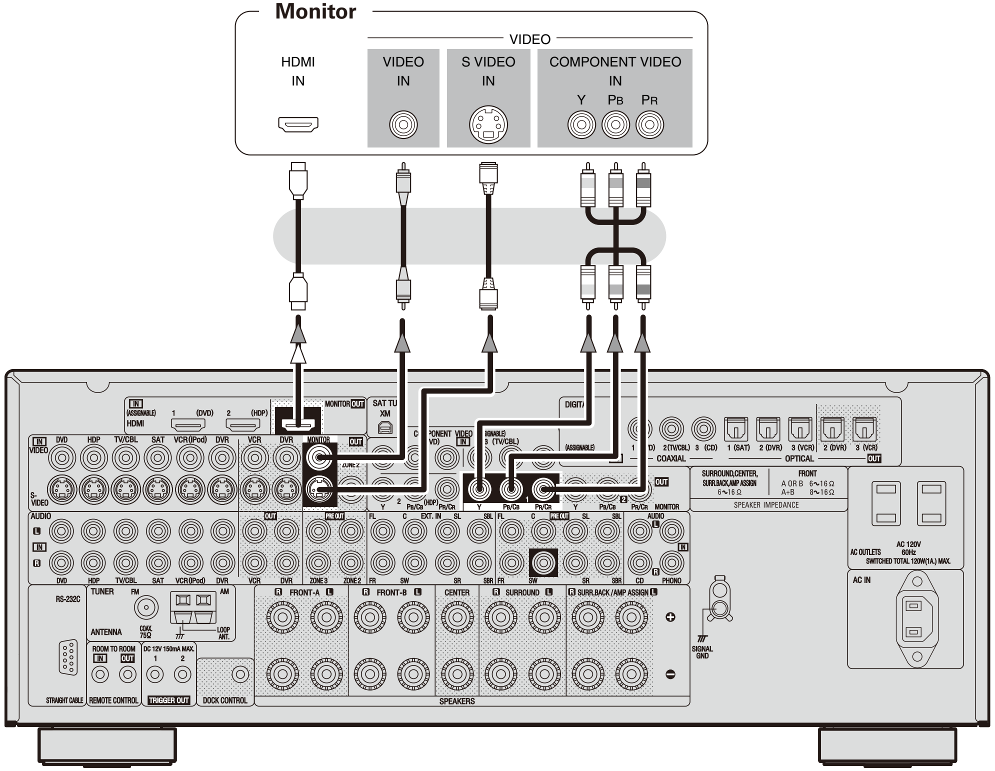
- When the AVR-2808CI and DVD player are connected using an HDMI cable, also connect the AVR-2808CI and monitor using an HDMI cable.
- If the connected monitor or DVD player only has a DVI-D connector, use an HDMI/DVI converter cable. When using a DVI cable, no audio signals are transmitted.
- Use a Deep Color compatible cable for connection to Deep Color compatible devices.

When connecting with an HDMI/DVI converter cable (adapter)

- HDMI video signals are theoretically compatible with the DVI format.
  When connecting to a monitor, etc., equipped with a DVI-D connector, connection is possible using an HDMI/DVI converter cable, but depending on the combination of components in some cases the video signals will not be output.
- When connecting using an HDMI/DVI converter adapter, the video signals may not be output properly due to poor connections with the connected cable, etc.

Connecting the Monitor

- Connect the cables to be used (☞page 8 “Video Conversion Function”).
- With HDMI connections, the video and audio signals can be transferred with a single cable.
- To output the audio signals to the monitor with HDMI connections, set menu “Manual Setup” – “HDMI Setup” – “HDMI Audio Setup” to “TV” (☞page 27).



NOTE

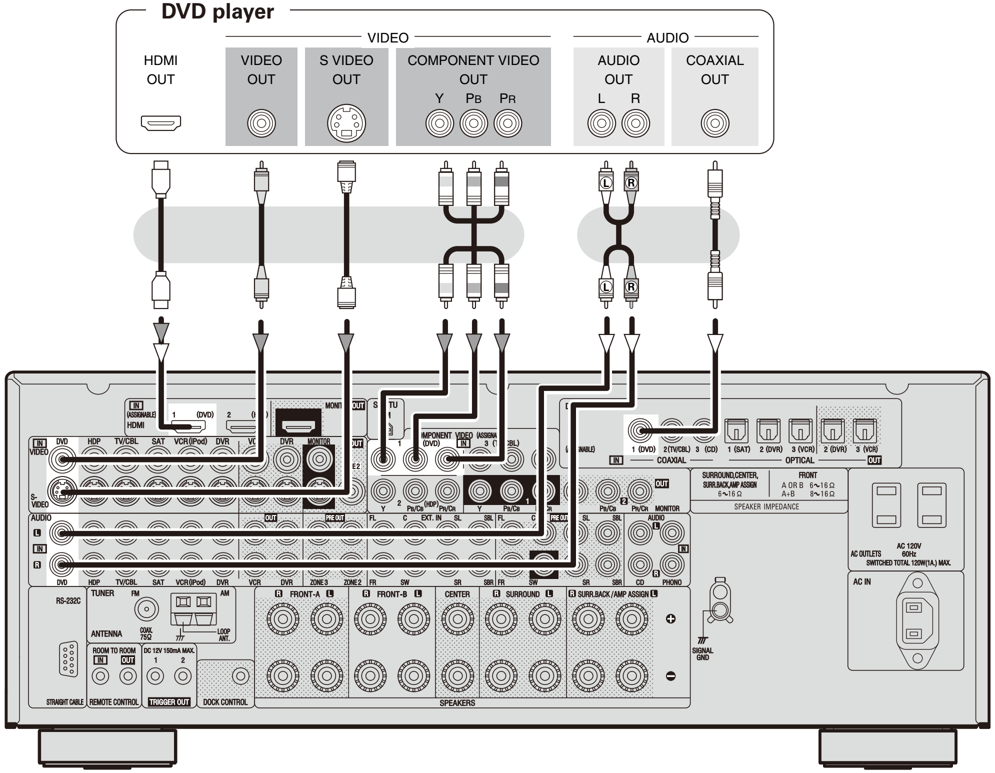
- The component video connectors may be indicated differently on your monitor. For details, see the monitor’s operating instructions.
- The audio signals output from the HDMI connectors are only the HDMI input signals.

Connecting the Playback Components

Carefully check the left (L) and right (R) channels and the inputs and outputs, and be sure to interconnect correctly.

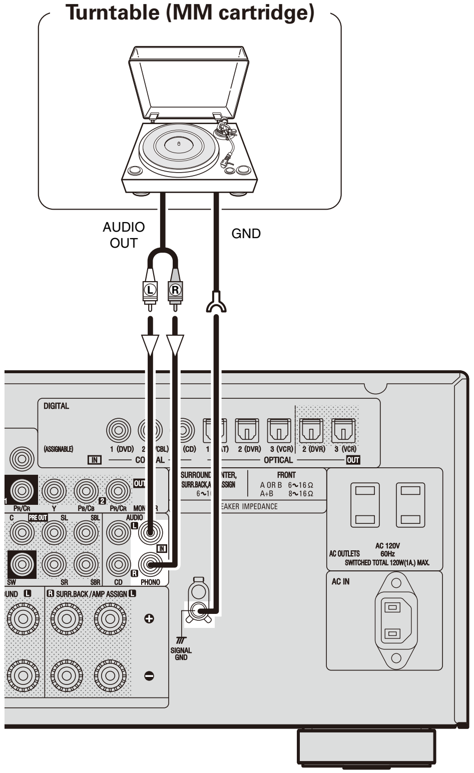
DVD Player

- Connect the cables to be used.
- With HDMI connections, the video and audio signals can be transferred with a single cable.



- Connect an HDP (High-Definition Player) in the same way.
- When using an optical cable for the digital audio connection, make the settings at menu “Input Setup” – “Assign” – “Digital In” (☞page 35).

Record Player



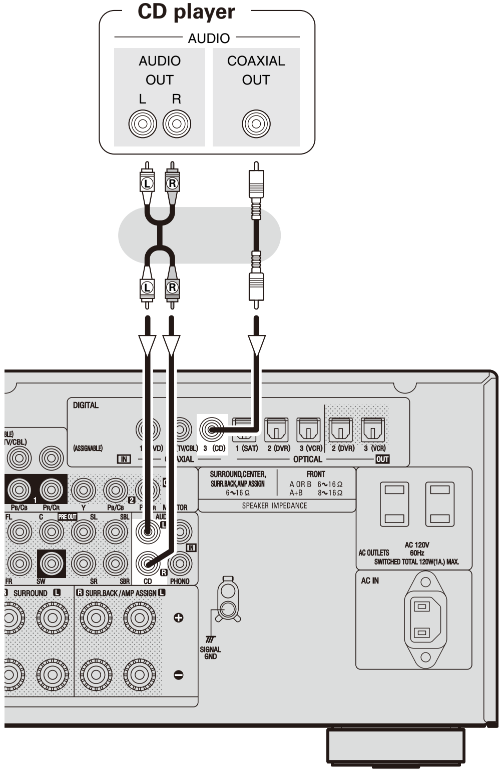
- When connecting a record player with an MC cartridge, use a commercially available MC head amplifier or a step-up transformer.
- Induction humming (a booming sound) may be produced from the speakers if the volume is raised with no record player connected.
- With some record players, noise may be generated when the ground wire is connected. If so, disconnect the ground wire.

NOTE

The AVR-2808CI's SIGNAL GND terminal is meant to reduce noise when a record player is connected. This is not a safety ground terminal.

CD Player

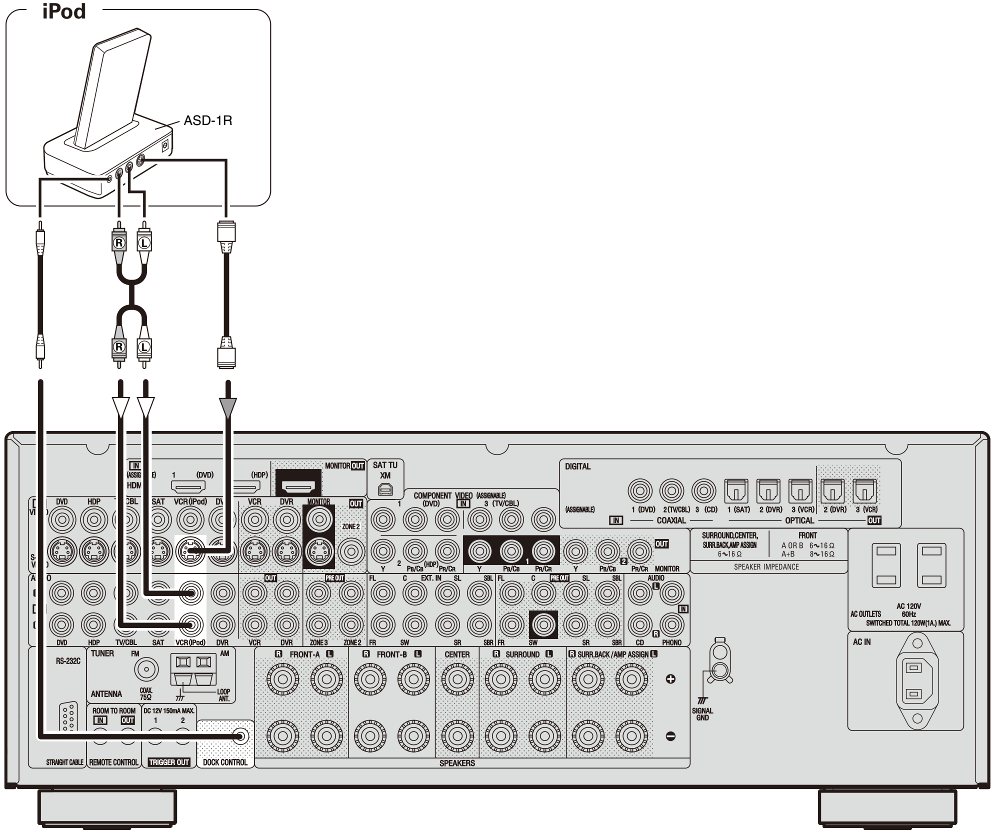
Connect the cables to be used.



When using an optical cable for the digital audio connection, make the settings at menu "Input Setup" – "Assign" – "Digital In" (☞page 35).

iPod®

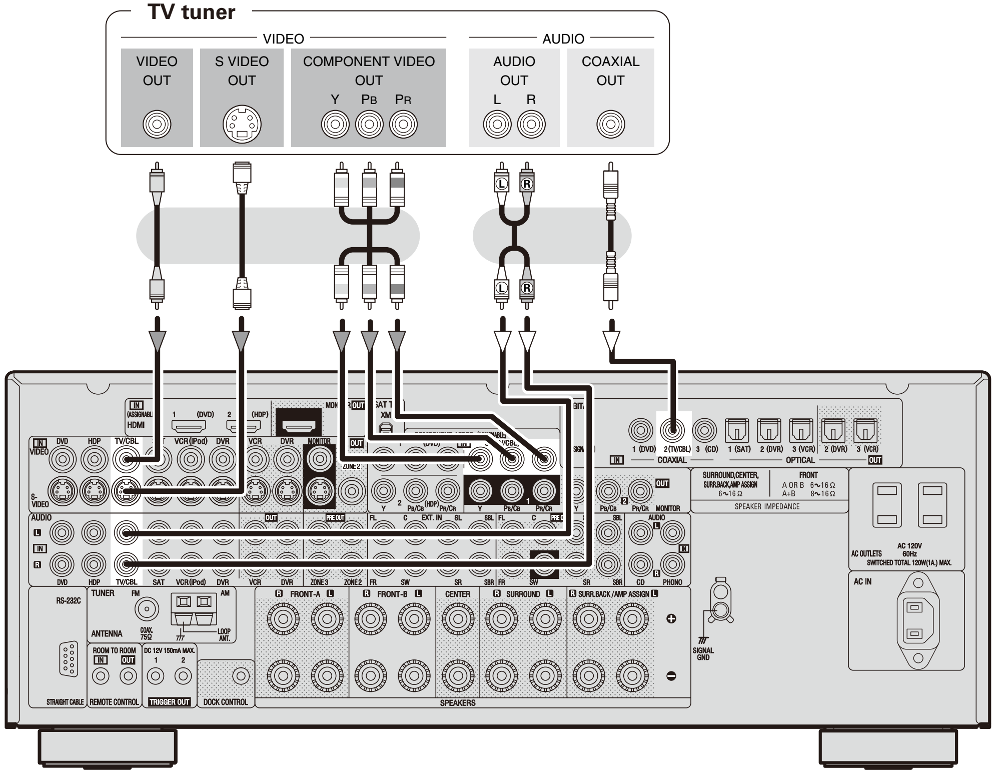
Use a DENON Control Dock for iPod (ASD-1R, sold separately) to connect the iPod to the AVR-2808CI. For instructions on the Control Dock for iPod settings, refer to the Control Dock for iPod's operating instructions.



- With the default settings, the iPod can be used connected to the VCR (iPod) connector.
- To assign the iPod to a connector other than VCR (iPod), make the settings at menu "Input Setup" – "(input source to which iPod dock assigned)" – "Assign" – "iPod dock" (☞page 36).

TV/CABLE Tuner

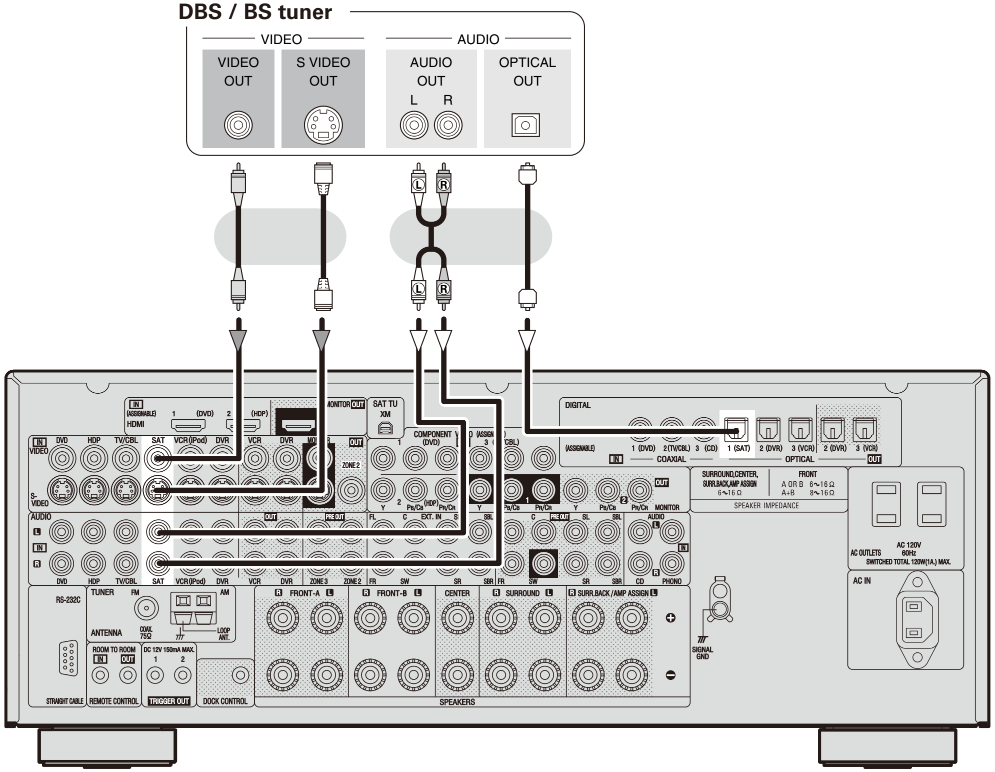
Connect the cables to be used.



When using an optical cable for the digital audio connection, make the settings at menu "Input Setup" – "Assign" – "Digital In" (☞page 35).

Satellite Receiver

Connect the cables to be used.



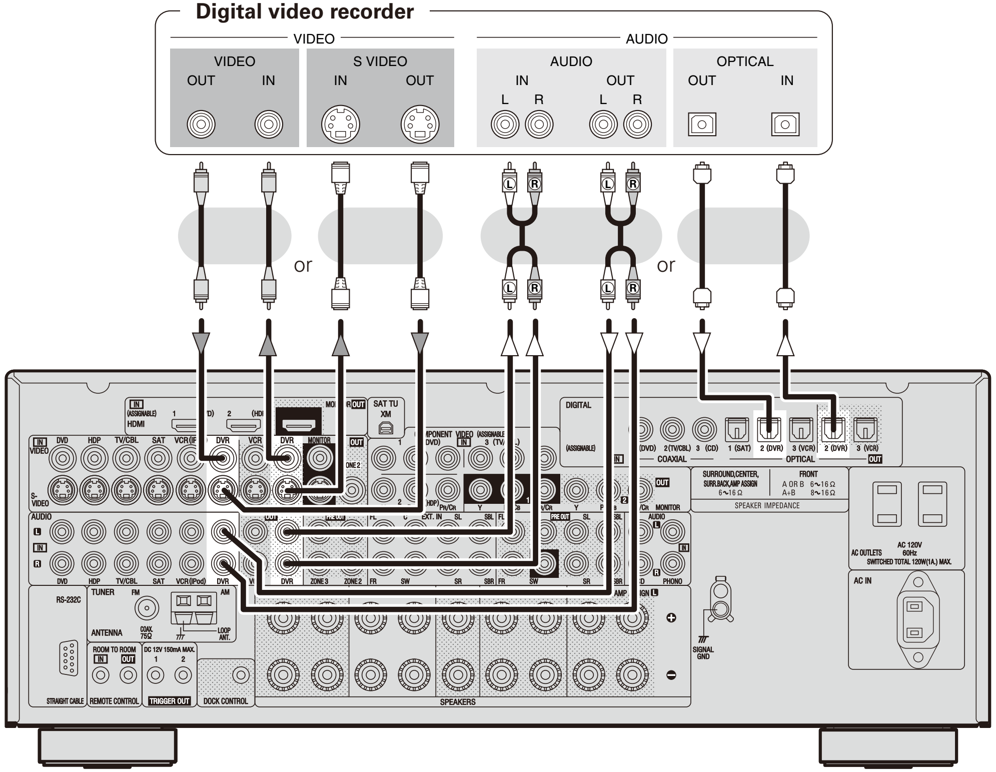
- When using a coaxial digital cable for the digital audio connection, make the settings at menu "Input Setup" – "Assign" – "Digital In" (☞page 35).
- When using a component video cable for the video connection, make the settings at menu "Input Setup" – "Assign" – "Component In" (☞page 36).

Connecting the Recording Components

Carefully check the left (L) and right (R) channels and the inputs and outputs, and be sure to interconnect correctly.

Digital Video Recorder

Connect the cables to be used.



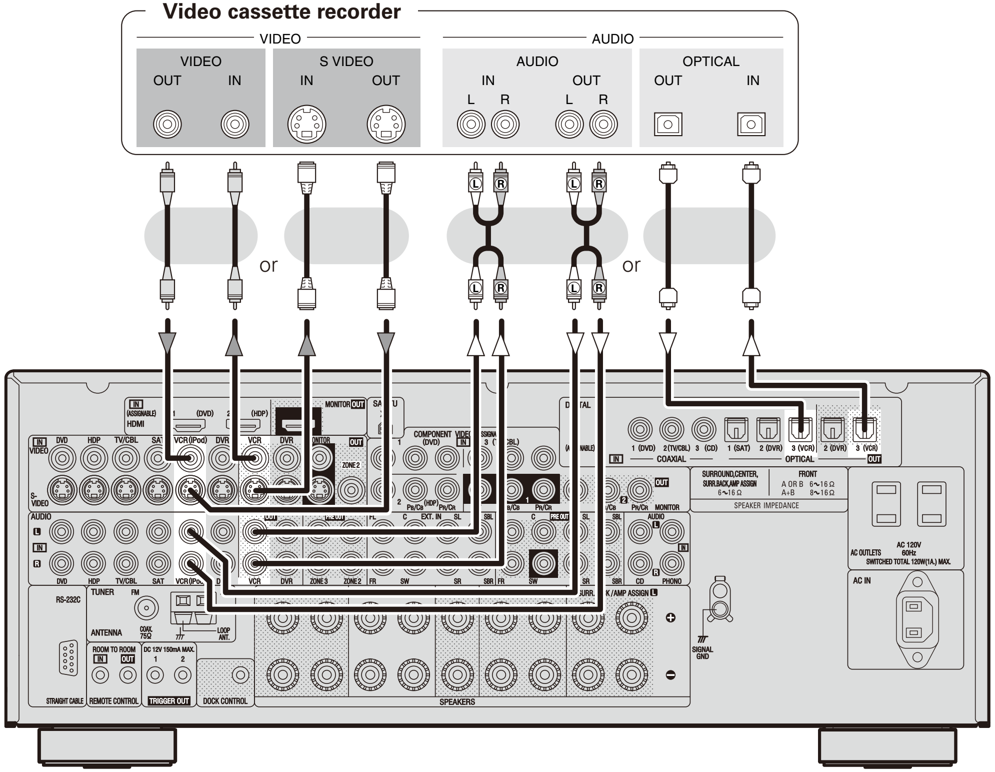
- Make analog connections if you wish to record analog audio signals.
- When recording via the AVR-2808CI, the playback device´s cable must be of the same type as the cable used to connect the AVR-2808CI´s DVR OUT connector.
  Example: TV IN → S-Video cable : DVR OUT → S-Video cable
  TV IN → Video cable : DVR OUT → Video cable
- When using a component video cable for the video connection, make the settings at menu "Input Setup" – "Assign" – "Component In" (☞page 36).

NOTE

Do not connect the output of the component connected to the AVR-2808CI's OPTICAL2 output connector to any input connector other than OPTICAL2.

Video Cassette Recorder

Connect the cables to be used.



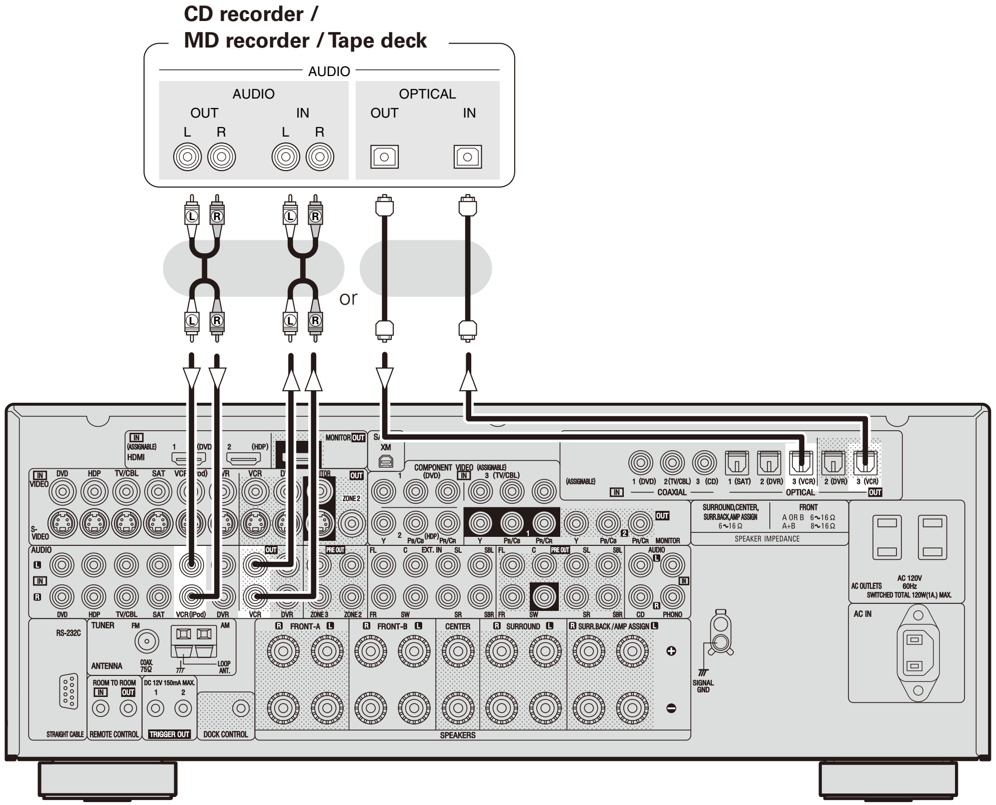
- When recording via the AVR-2808CI, the playback device´s cable must be of the same type as the cable used to connect the AVR-2808CI´s VCR OUT connector.
  Example: TV IN → S-Video cable : VCR OUT → S-Video cable
  TV IN → Video cable : VCR OUT → Video cable
- When using a component video cable for the video connection, make the settings at menu "Input Setup" – "Assign" – "Component In" (☞page 36).

NOTE

Do not connect the output of the component connected to the AVR-2808CI's OPTICAL3 output connector to any input connector other than OPTICAL3.

CD Recorder / MD Recorder / Tape Deck

Make analog connections if you wish to record analog audio signals, or digital connections if you wish to record digital audio signals, depending on the types of connectors on the components being used.



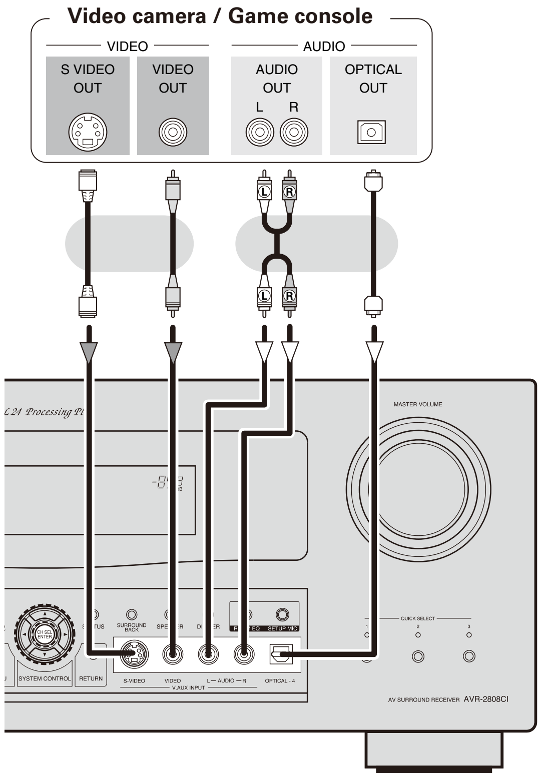
NOTE

Do not connect the output of the component connected to the AVR-2808CI's OPTICAL3 output connector to any input connector other than OPTICAL3.

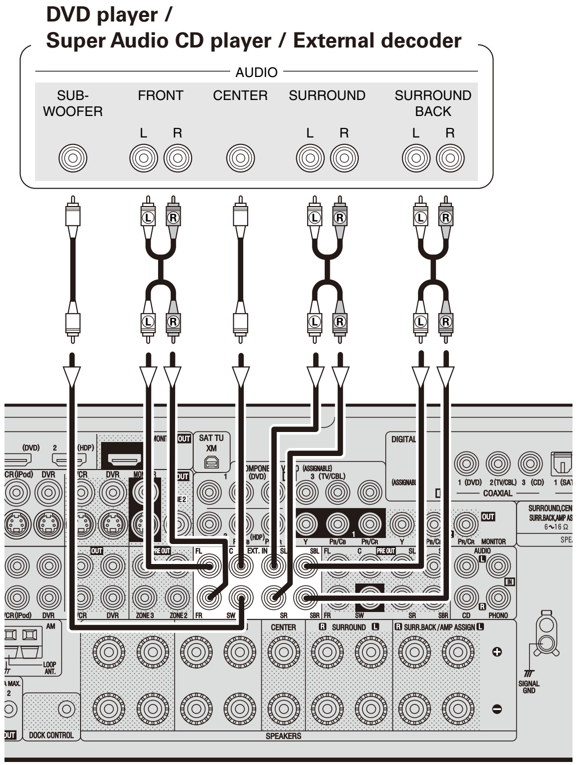
Connections to Other Devices

Carefully check the left (L) and right (R) channels and the inputs and outputs, and be sure to interconnect correctly.

Video Camera / Game Console

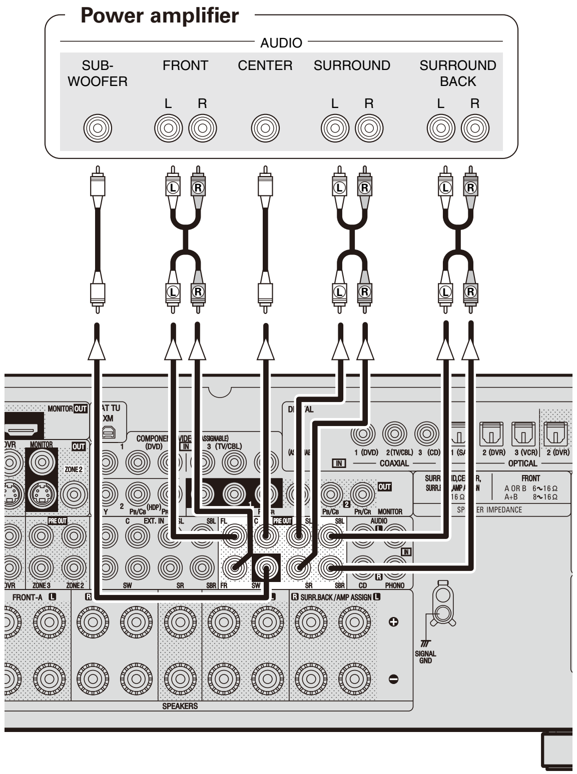


Component with Multi-channel Output connectors



- To play the analog input signals input to the EXT. IN connectors, press the **INPUT MODE** button on the main unit or **INPUT** button on the main remote control unit and select “EXT. IN” or make the settings at menu “Input Setup” – “Input Mode” – “Input Mode” – “EXT. IN” (☞page 34).
- The video signal can be connected in the same way as a DVD player (☞page 12).
- To play copyright-protected discs, connect the AVR-2808CI’s EXT. IN connector with the DVD player’s analog multi-channel output connector.

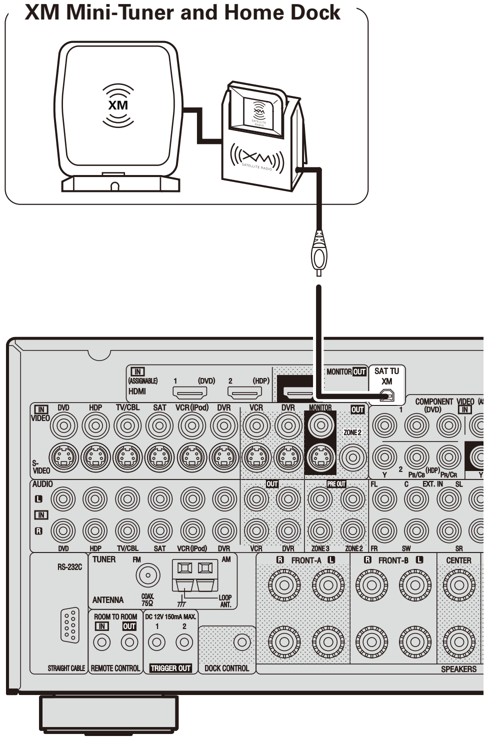
External Power Amplifier



When using just one surround back speaker, connect it to the left channel (SBL).

XM connector

- The AVR-2808CI is an XM Ready® receiver. You can receive XM® Satellite Radio by connecting to the XM Mini-Tuner and Home Dock (includes home antenna, sold separately) and subscribing to the XM service.
- Plug the XM Mini-Tuner and Home Dock into the XM connector on the rear panel.
- Position the Home Dock antenna near a south-facing window to receive the best signal.
  For details, see "Listening to XM Satellite Radio Programs" (☞page 45, 46).
  When making connections, also refer to the operating instructions of the XM Mini-Tuner and Home Dock.



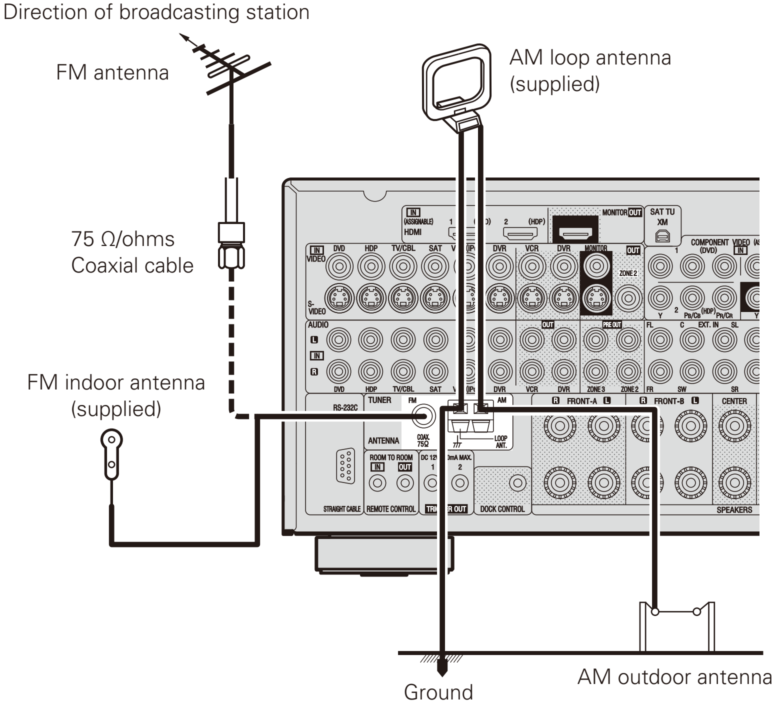
NOTE

Keep the power cord unplugged until the XM Mini-Tuner and Home Dock connection have been completed.

- The XM name and related logo are registered trademarks of XM Satellite Radio Inc. All rights reserved.
- XM Ready is a registered trademark of XM Satellite Radio Inc. All rights reserved.

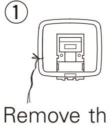
Antenna terminals

An F-type FM antenna cable plug can be connected directly.



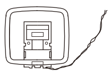
AM loop antenna assembly

①



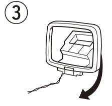
Remove the vinyl tie and take out the connection line.

②



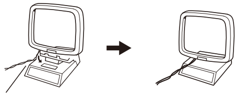
Connect to the AM antenna terminals.

③



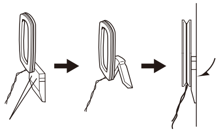
Bend in the reverse direction.

④ a. With the antenna on top of any stable surface.



Mount

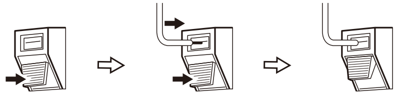
b. With the antenna attached to a wall.



Installation hole Mount on wall, etc.

Connection of AM antennas

1. Push the lever.
2. Insert the conductor.
3. Return the lever.



NOTE

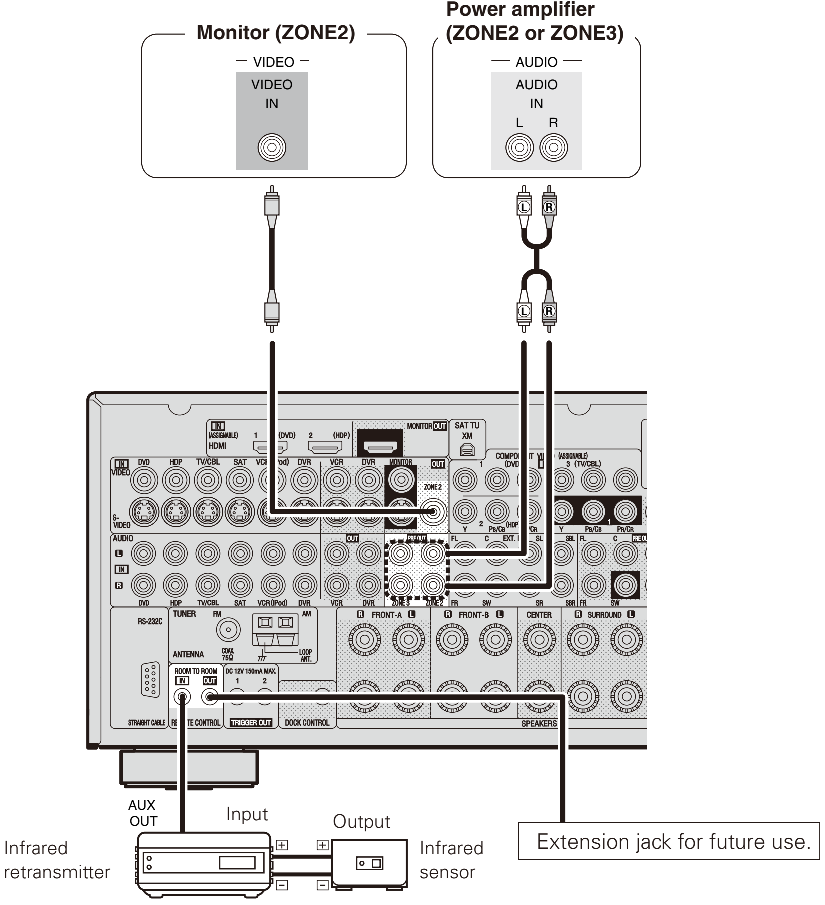
- Do not connect two FM antennas simultaneously.
- Even if an external AM antenna is used, do not disconnect the AM loop antenna.
- Make sure the AM loop antenna lead terminals do not touch metal parts of the panel.

Note to CATV system installer:
This reminder is provided to call the CATV system installer's attention to Article 820-40 of the NEC which provides guidelines for proper grounding and, in particular, specifies that the cable ground shall be connected to the grounding system of the building, as close to the point of cable entry as practical.

Multi-zone

ZONE2 or ZONE3 Pre-out Connections

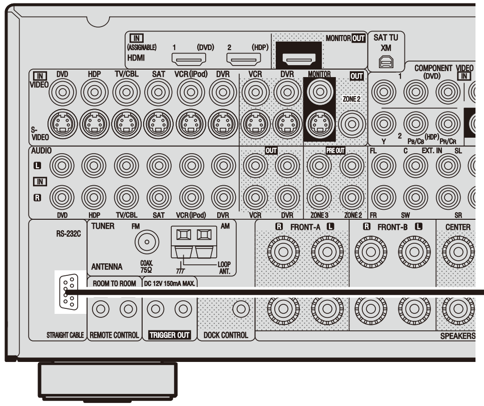
- If another power amplifier or pre-main (integrated) amplifier is connected, the ZONE2 or ZONE3 pre-out (variable or fixed level) connectors can be used to play a different program source in ZONE2 or ZONE3 the same time (☞page 57 ~ 60).
- When using an S-Video cable or a video cable for connection between the AVR-2808CI and an input device, connect to the video connectors.
- The ZONE2 video out is only for ZONE2.



NOTE

- For the audio output, use high quality pin-plug cords so that no induction humming or noise is produced.
- For instructions on installing and operating separately sold devices, refer to the respective devices' operating instructions.
- To conduct multi-zone playback, see "Amp Assign / Multi-zone Connections and Operations" (☞page 57 ~ 60).

External Controller



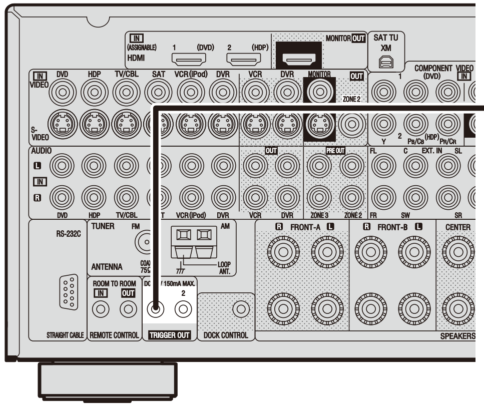
RS-232C connector

This connector is used for an external controller.

※ If you wish to control the AVR-2808CI from an external controller using the RS-232C connector, perform the operation below beforehand.

① Turn om the AVR-2808CI's power.
② Turn off the AVR-2808CI's power from the external controller.
③ Check that the AVR-2808CI is in the standby mode.

- When using in combination with an RF Remote Controller (RC-7000CI, sold separately) or RF Remote Receiver (RC-7001RCI, sold separately) two-way communication with an RF Remote Controller is possible.
  The AVR-2808CI's status information as well as iPod can be browsed watching the RF Remote Controller's display. For details, refer to the operating instructions of the respective devices.
- When used in combination with an RF Remote Controller or RF Remote Receiver, make the settings at menu "Manual Setup" – "Option Setup" – "2Way Remote" – "Used" (☞page 32).



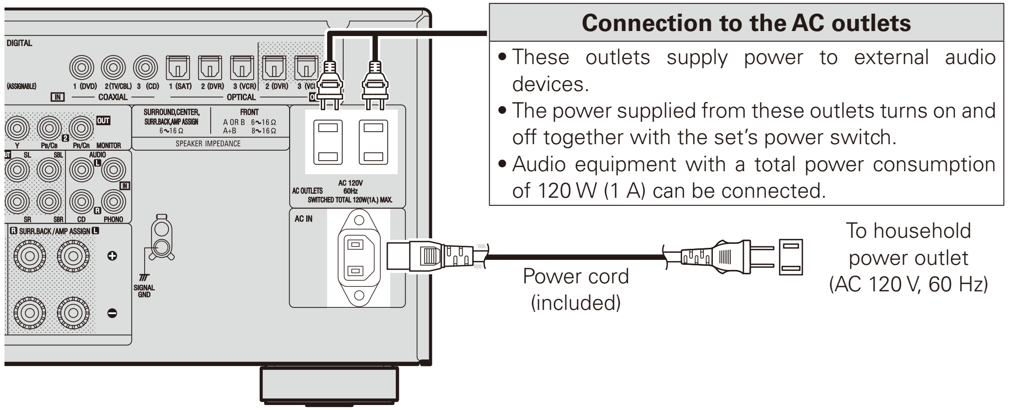
Trigger output jacks

The power of an external device equipped with a trigger input jack can be turned on and off in association with operations on the AVR-2808CI. For details, see menu "Manual Setup" – "Option Setup" – "Trigger Out" (☞page 32).

- Output: DC 12 V 150 mA MAX.
  Check the trigger input conditions of the connected device.

Connecting the Power Cord

Wait until all connections have been completed before connecting the power cord.



Connection to the AC outlets

- These outlets supply power to external audio devices.
- The power supplied from these outlets turns on and off together with the set's power switch.
- Audio equipment with a total power consumption of 120 W (1 A) can be connected.

Power cord
(included)

To household
power outlet
(AC 120 V, 60 Hz)

NOTE

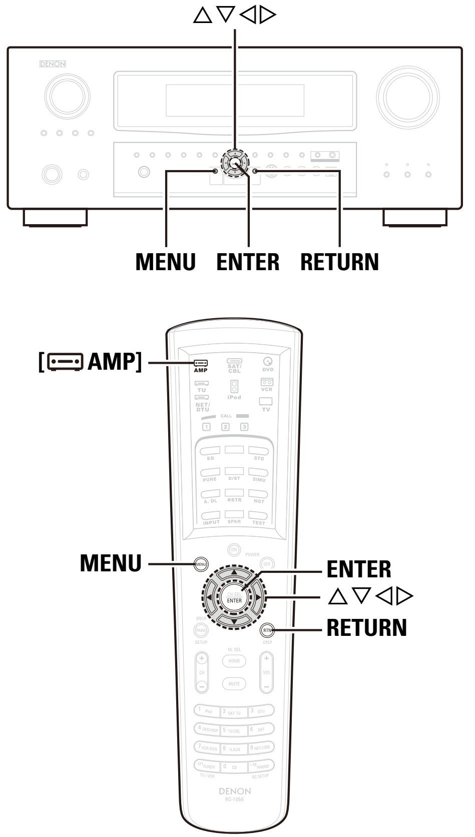
- Insert the AC plugs securely. Incomplete connections could cause noise.
- Only use the AC outlets to plug in audio devices. Do not use them as power supplies for hairdryers or anything other than audio equipment.

Once Connections are Completed

Turning the Power On (☞page 43)

Menu Operations

With the AVR-2808CI, settings and operations for most functions can be performed by operating while looking at the menus displayed on the monitor screen.



About the button names in these explanations

< > : Buttons on the main unit

[ ] : Buttons on the remote control unit

Button name only:

Buttons on the main unit and remote control unit

Operations

The same operation is possible on the main unit or remote control unit.

1 **Press MENU.**

The menu is displayed.

※ To operate from the main remote control unit, be sure to set the remote control unit to the AMP mode.

2 **Press △▽ to select the item you want to set, then press ENTER.**

3 **Press △▽ again to select the item you want to set, then press ENTER.**

4 **To change the setting:**
Press △▽ to select the item you want to change, then press ◁ ▷ to change the setting.

※ To return to the previous item, press **RETURN**.

※ Select "Default Yes", then press ◁ to reset to the default setting.

5 **Press ENTER to enter the setting.**

6 **Press MENU to finish.**

When **MENU** is pressed, the settings made up to that point are entered and the setting menu is cleared.

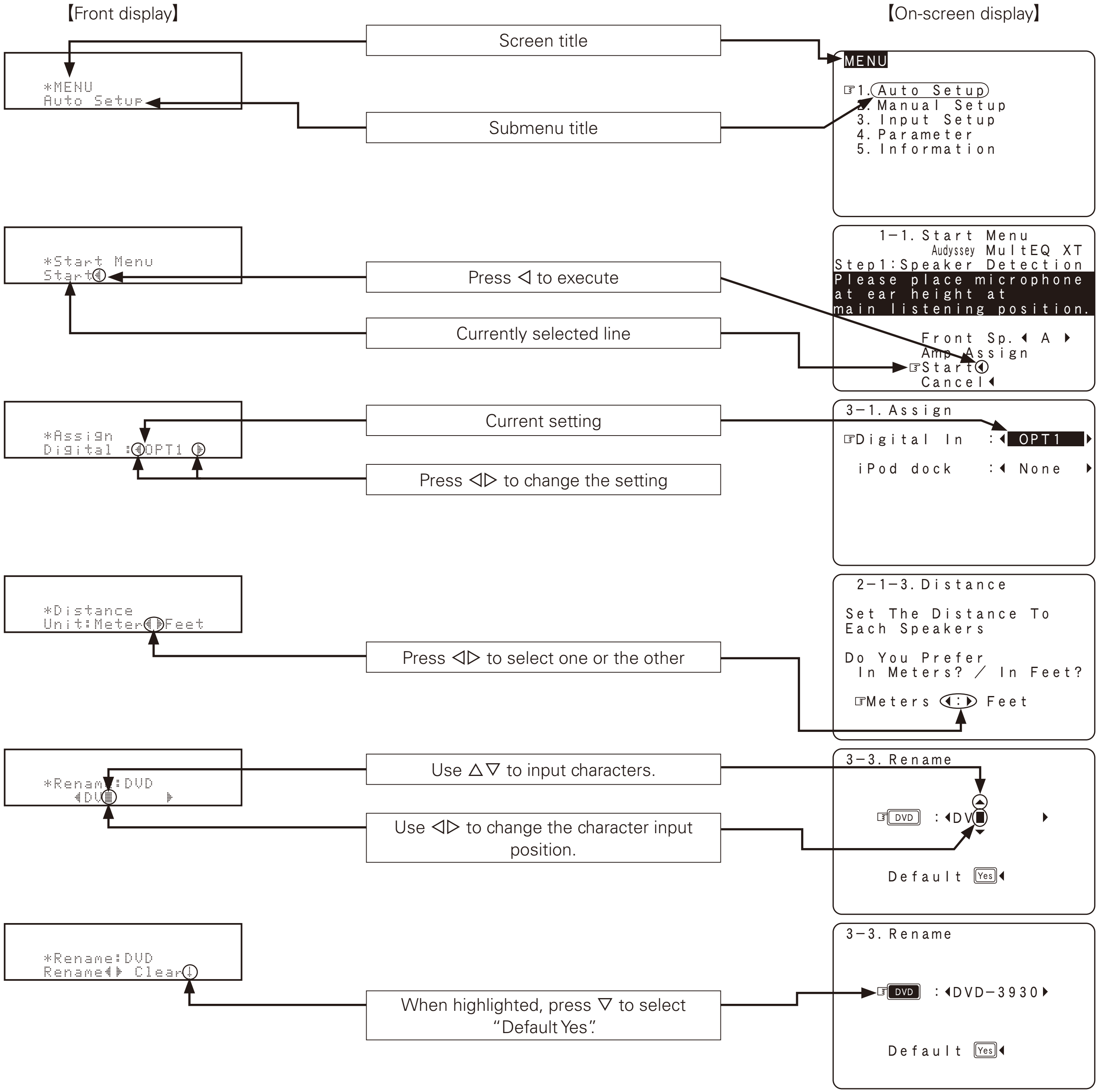
Example of Display of Default Values

In lists of selectable items or adjustable ranges, the item surrounded by a border is the default value.

[Selectable items] A B A + B

Examples of On-screen Display and Front Display

Some typical examples are described below.



【Front display】

【On-screen display】

```
*MENU
Auto Setup
```

Screen title

Submenu title

```
MENU
☞1. Auto Setup
 2. Manual Setup
 3. Input Setup
 4. Parameter
 5. Information
```

```
*Start Menu
Start◀
```

Press ◁ to execute

Currently selected line

```
1-1. Start Menu
Audyssey MultEQ XT
Step1:Speaker Detection
Please place microphone
at ear height at
main listening position.
Front Sp. ◀ A ▶
Amp Assign
☞Start◀
Cancel◀
```

```
*Assign
Digital :◀OPT1 ▶
```

Current setting

Press ◁▷ to change the setting

```
3-1. Assign
☞Digital In  :◀ OPT1  ▶
 iPod dock   :◀ None  ▶
```

```
*Distance
Unit:Meter◀▶Feet
```

Press ◁▷ to select one or the other

```
2-1-3. Distance
Set The Distance To
Each Speakers
Do You Prefer
 In Meters? / In Feet?
☞Meters ◀:▶ Feet
```

```
*Rename:DVD
 ◀DV█     ▶
```

Use △▽ to input characters.

Use ◁▷ to change the character input position.

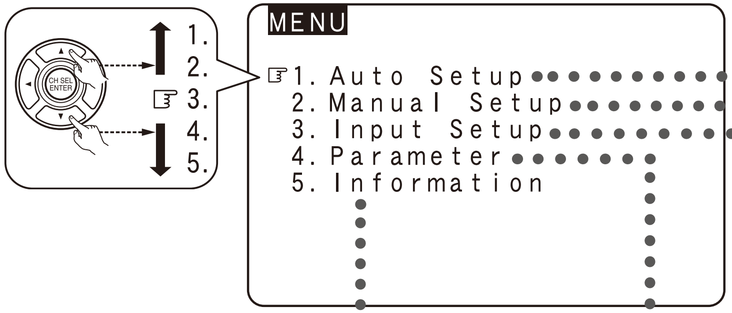
```
3-3. Rename
☞DVD :◀DV█     ▶
Default Yes◀
```

```
*Rename:DVD
Rename◀▶ Clear↓
```

When highlighted, press ▽ to select "Default Yes".

```
3-3. Rename
☞DVD :◀DVD-3930▶
Default Yes◀
```

Menu Map



Auto Setup (☞page 23 ~ 25)

❑ Start Menu
- Step 1: Speaker Detection
- Step 2: Measurement
- Step 3: Calculation
- Step 4: Check
- Step 5: Store

❑ Option
- Room EQ
- Direct Mode Setup
- Mic Select

❑ Parameter Check
- Speaker Configuration Check
- Distance Check
- Channel Level Check
- Crossover Frequency Check
- EQ Check
- Restore

Manual Setup (☞page 26 ~ 33)

❑ Speaker Setup (☞page 26, 27)
- Speaker Configuration
- Subwoofer Setup
- Distance
- Channel Level
- Crossover Frequency

❑ HDMI Setup (☞page 27, 28)
- HDMI Audio Setup
  - · HDMI Audio Out
  - · Auto Lipsync
- HDMI Video Setup
  - · i/p Scaler
  - · Resolution
  - · Progressive Mode
  - · Aspect
  - · Color Space
  - · RGB Range

❑ Audio Setup (☞page 28, 29)
- EXT. IN Subwoofer Level
- 2ch Direct/Stereo
- Dolby Digital Setup
- Auto Surround Mode
- Manual EQ

❑ Zone Setup (☞page 30)
- ZONE2 Setup
  - · Bass
  - · Treble
  - · HPF
  - · Lch Level
  - · Rch Level
  - · Channel
  - · Volume Level
  - · Volume Limit
  - · Power On Level
  - · Mute Level
- ZONE3 Setup
  - · Bass
  - · Treble
  - · HPF
  - · Lch Level
  - · Rch Level
  - · Channel
  - · Volume Level
  - · Volume Limit
  - · Power On Level
  - · Mute Level

❑ Option Setup (☞page 31 ~ 33)
- Amp Assign
- Volume Control
  - · Volume Limit
  - · Power On Level
  - · Mute Level
- Source Delete
- On-Screen Display
  - · Screensaver
  - · Text
  - · Master Volume
  - · Tuner Information
  - · iPod Information
  - · Display Mode
- Quick Select Name
- Trigger Out
- Remote ID Setup
- 2Way Remote
- Display
- Setup Lock

Input Setup (☞page 33 ~ 36)

❑ TUNER (FM/AM)
- Auto Preset
- Preset Skip
- Preset Name
- Input Mode
- Rename
- Other
  - · Video Select
  - · Source Level

❑ PHONO
- Input Mode
- Rename
- Other
  - · Video Select
  - · Source Level

❑ CD, DVD, HDP, TV/CBL, SAT, VCR, DVR, V.AUX
- Assign
- Input Mode
- Rename
- Other
  - · Video Select
  - · Video Convert (Excluding CDs)
  - · Source Level
- iPod

❑ XM
- Preset Skip
- Antenna Aiming
- Input Mode
- Rename
- Other
  - · Video Select
  - · Source Level

Parameter (☞page 38 ~ 41)

❑ Surround Parameter
- MODE
- CINEMA EQ
- D.COMP
- DRC
- LFE
- CENTER IMAGE
- PANORAMA
- DIMENSION
- CENTER WIDTH
- DELAY TIME
- EFFECT
- LEVEL
- ROOM SIZE
- AFDM
- SB CH OUT
- SW ATT
- Subwoofer
- Default

❑ Tone Control
- Tone Defeat
- Bass
- Treble

❑ Room EQ

❑ RESTORER

❑ Night Mode

❑ Audio Delay

Information (☞page 41, 42)

❑ Status
- MAIN ZONE
- ZONE2/3

❑ Audio Input Signal

❑ HDMI Information

❑ Auto Surround Mode

❑ Quick Select

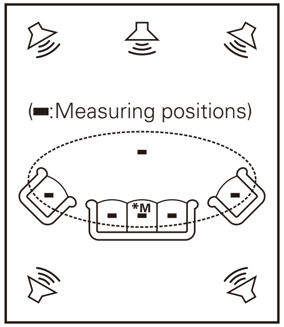
❑ Preset Station

When "Screensaver" is set to "ON," the screensaver is activated if no operation is performed for about 3 minutes.
When the △▽◁▷, **ENTER** or **MENU** button is pressed, the screensaver is canceled and the corresponding operation is performed.

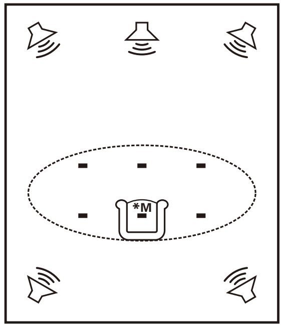
Auto Setup

- Audyssey MultEQ® XT automatically measures the acoustical problems in the listening environment to create the best audio experience for your home theater.
- It optimizes a large listening area where one or more listeners are seated.
  Measurements are performed by placing the calibrated microphone (DM-A405) successively at multiple positions throughout the listening area as shown in **Example** ①. For best results, it is strongly recommended to measure 6 or more positions so that the measurements have the proper spatial weighting.
  Even if the listening environment is small as shown in **Example** ②, measuring at multiple points throughout the listening environment results in more effective correction.

Example ①



Example ②



About the main listening position (*M)

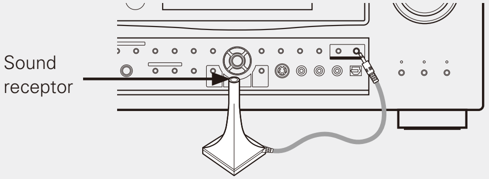
The main listening position refers to the most central position where one would normally sit within the listening environment.
MultEQ XT uses the measurements from this position to calculate speaker distance, level, polarity, and the optimum crossover value for the subwoofer.

To make manual adjustments to the settings, see pages 26, 27.

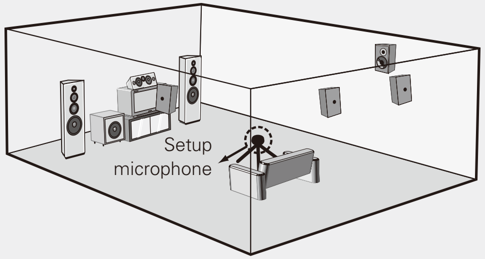
Preparations

1 Connect the included calibrated setup microphone to the SETUP MIC jack on the main unit.

The auto setup screen appears automatically.



2 Place the microphone at ear height on a tripod or stand with the microphone pointing directly up towards the ceiling.



※ It is not recommended to hold it in your hand. Be sure that the path from microphone to the speakers is not blocked by objects. Avoid placing the microphone close to a seat back or wall as sound reflections may give inaccurate results.

When using a subwoofer, make the following settings before starting the auto setup procedure:

- Defeat the volume and crossover controls if possible
- If this is not possible then set
  - Volume: “12 o’clock” position
  - Crossover frequency: “Maximum/Highest Frequency”
  - Low pass filter: “Off”
  - Standby mode: “Off”

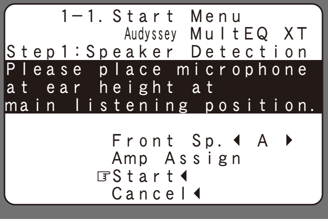
NOTE

- Do not disconnect the setup microphone until the auto setup procedure is completed.
- When using headphones, unplug the headphones before starting the auto setup procedure.

Auto Setup

Optimize settings for speakers in use.

● Menu screen ●



```
    1−1. Start Menu
       Audyssey MultEQ XT
Step1:Speaker Detection
Please place microphone
at ear height at
main listening position.

         Front Sp. ◀ A ▶
         Amp Assign
        ☞Start◀
         Cancel◀
```

1 Start Menu

The settings are performed automatically.

Start

Start Auto Setup.

The Audyssey MultEQ XT Auto Setup process automatically calculates the size, level, distance, bass management crossover frequency, and optimal settings for each speaker and subwoofer. Audyssey MultEQ XT corrects acoustical distortions within the listening area.

Before starting, connect and position all your speakers.

Once started, MultEQ XT will play a series of test tones through each speaker.

✎

If an error message appears during the measurements, check "Error Messages", take the advised action, then start the measurements again (☞page 25).

Front Speaker

The front speaker to be measured can be selected ahead of time here.

[Selectable items]

A	: Output test tone from front speakers A.
B	: Output test tone from front speakers B.
A + B	: Output test tone from front speakers A and B.

Amp Assign

Advanced setting : changes power amplifier assignment.

For details, refer to "Amp Assign" (☞page 31).

Step 1 : Speaker Detection

The speaker connection and polarity are detected at the first measurement position. The following attributes are also determined at this time: "Speaker Size", "Speaker Distance", "Channel Level", "Crossover Frequency".

Once the measurements are completed, the results are displayed.

NOTE

- Loud test tone may be played during Audyssey MultEQ XT Automatic Speaker Setup. This is part of normal operation. If there is background noise in room, these test tones will increase in volume.
- Do not stand between the speakers and setup microphone or allow obstacles in the path while the measurements are being made. This will cause inaccurate readings.
- Quiet the listening environment before beginning measurements and refrain from talking. Turn off air conditioning units or other devices that emit noise if at all possible as measurements may be affected by these sounds.
- Operating the **MASTER VOLUME** knob on the main unit or the **VOL +/–** buttons on the remote control unit during the measurements will cancel the measurements.
- Do not change the speaker connections or subwoofer volume after "Step 1".

Step 2 : Measurement

After completing a measurement position, move the microphone to the next position.

✎

Measure at least 6 positions (main listening position and at least 5 other surrounding positions). For best results it is recommend measuring **6 or more positions** (with a maximum of 8 positions).

Step 3 : Calculation

When "Calculate" is selected at "Step 2", the measurements taken are analyzed automatically to determine how the speaker system interacts with the room.

✎

The time required for this analysis depends on the number of speakers connected. The higher the number of speakers, the longer the time required for analysis.

Step 4 : Check

Once the auto setup procedure is complete, a measuring result check screen appears.

Select any item whose results you want to check to review the results.

✎

Values that are different from the actual distance may be set for speakers with built-in filters (subwoofers, etc.). This is because filters add electrical delay to the signal that should be compensated.

Step 5 : Store

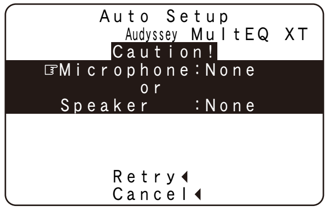
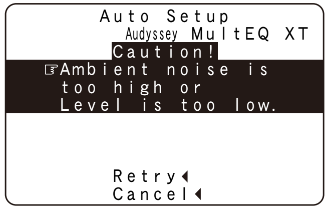
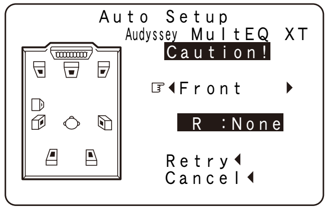
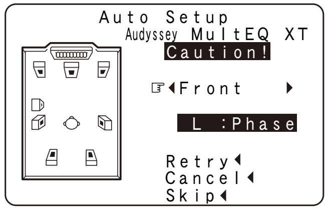
The auto setup measurement results are stored in the AVR-2808CI.

NOTE

Do not turn the power off while the settings are being stored.

Error Messages

If the auto setup procedure could not be completed due to speaker installation, the measuring environment, etc., an error message is displayed. If this happens, check the relevant items, be sure to take the necessary measures, then perform the auto setup procedure over again.

Error messages (examples)	Cause	Measures
 Auto Setup Audyssey MultEQ XT Caution! ☞Microphone:None or Speaker :None Retry◀ Cancel◀	• Included setup microphone is not connected. • Not all speakers could be detected.	• Connect the included setup microphone to the **SETUP MIC** jack on the main unit. • Check the speaker connections.
 Auto Setup Audyssey MultEQ XT Caution! ☞Ambient noise is too high or Level is too low. Retry◀ Cancel◀	• Too much noise in the room for accurate measurements to be made. • Speaker or subwoofer sound is too low for accurate measurements to be made.	• Either turn off any device generating noise or move it away. • Try again when the surroundings are quieter. • Check the speaker installation and the direction in which the speakers are facing. • Adjust the subwoofer's volume.
 Auto Setup Audyssey MultEQ XT Caution! ☞◀Front ▶ R :None Retry◀ Cancel◀	• Displayed speaker could not be detected. · The front L and front R speakers were not properly detected. · Only one channel of the surround speakers was detected. · Sound was output from the R channel when only one surround back speaker was connected. · The surround back speaker was detected, but the surround speaker was not detected.	• Check the connections of the displayed speaker.
 Auto Setup Audyssey MultEQ XT Caution! ☞◀Front ▶ L :Phase Retry◀ Cancel◀ Skip◀	• Displayed speaker connected with the polarities reversed.	• Check the polarities of the displayed speaker. • For some speakers, this error message may be displayed even if the speaker is properly connected. If you are sure that the wiring is correct, select "Skip".

Select "Retry" to make the measurements again.

NOTE Be sure to turn the power off before checking the speaker connections.

2 Option

Select settings for room EQ, mic, etc.

Room EQ

Select room EQ setting method.

[Selectable items]

All : Apply settings to all surround modes.
Assign : Make settings for each surround mode separately.

Direct Mode Setup

Select room EQ use for DIRECT or PURE DIRECT mode.

[Selectable items]

ON : Use room EQ.
OFF : Do not use room EQ.

Mic Select

Select the microphone type if not using supplied mic.
The microphone connected to V.AUX Lch is used.

[Selectable items]

Mic : Supplied mic is being used.
V.AUX L : Other mic connected to V.AUX is used.

Only a professionally certified installer should ever connect a professionally-calibrated microphone to the V.AUX L input on the front panel.

3 Parameter Check

Check auto setup measurement results.
This is displayed after the auto setup procedure is completed.

[Items to be checked]

Speaker Config. Check
Distance Check
Channel Level Check
Crossover Freq. Check
EQ Check

The auto setup results can be reset to what was originally calculated by MultEQ XT when "Restore" is selected.

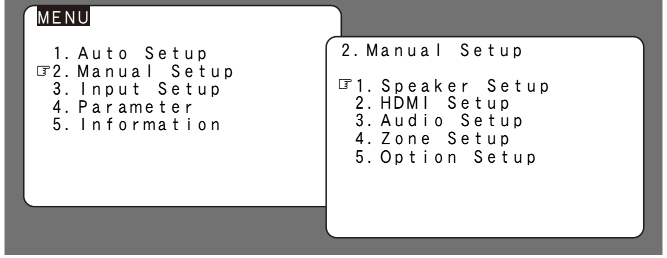
Manual Setup

Make detail settings for various parameters.

Speaker Setup

Use this procedure to set the speakers manually or if you wish to change the settings made with the auto setup procedure.

● **Menu screen** ●



MENU

1. Auto Setup
☞2. Manual Setup
3. Input Setup
4. Parameter
5. Information

2. Manual Setup

☞1. Speaker Setup
2. HDMI Setup
3. Audio Setup
4. Zone Setup
5. Option Setup

1 Speaker Configuration

Select speaker configuration and size.
(bass reproduction capability)

Front Speaker

Select front speaker size.

[Selectable items] **Large** **Small**

Center Speaker

Select center speaker use and size.

[Selectable items] **Large** **Small** **None**

Subwoofer

Select subwoofer use.

[Selectable items] **Yes** **No**

Surround Speaker

Select surround speakers use and size.

[Selectable items] **Large** **Small** **None**

Surround Back Speaker

Select surround back speaker use and size.

[Selectable items] (**Large** **Small** **None**)
(**2spkrs** **1spkr**)

NOTE

By default, the AVR-2808CI's "Amp Assign" setting is set to "ZONE2". To use as the surround back speaker for the main zone, change the "Amp Assign" setting (☞page 31).

Large :Select this when using large speakers with ample low frequency reproduction capabilities.

Small :Select this when using small speakers without ample low frequency reproduction capabilities.

None :Select this when no speaker is connected.

Yes :Select this when a subwoofer is connected.

No :Select this when no subwoofer is connected.

2spkrs **1spkr** :
Select the number of surround back speakers.

✎

- Select "Large" or "Small" not according to the physical size of the speaker but according to the low frequency reproduction capabilities based on the frequency set at "Crossover Frequency" (☞page 27).
- When "Front Speaker" is set to "Small", "Subwoofer" is automatically set to "Yes".
- If "Subwoofer" is set to "No", "Front Speaker" is automatically set to "Large".
- If "Surround Speaker" is set to "None", "Surround Back Speaker" are automatically set to "None".
- When using just one surround back speaker, connect it to the left channel (SBL).

2 Subwoofer Setup

Select low range signal to be reproduced by subwoofer.

[Selectable items]

LFE : Play low range and LFE signal of channels set to "Small".

LFE+Main : Play low range and LFE signal of all channels.

✎

- This can be set when menu "Speaker Configuration" – "Subwoofer" is set to "Yes".
- Play music or a movie source and select the mode offering the strongest bass.
- Select "LFE+Main" if you want the bass signals to always be produced from the subwoofer.

3 Distance

Set distance from listening position to speakers.
Before making the settings, measure the distance from the listening position to the different speakers.

Feet / Meters

Select unit for distance.

Step

Select step. (smallest distance)

[Selectable items]

1ft **0.1ft** : Can be selected when "Feet" is set.

0.1m **0.01m** : Can be selected when "Meters" is set.

Default

Resets the settings to the default values.

Distance measurement

Select the speaker you want to set, then set the distance.
Set the value closest to the measured distance.

[Variable range]

0.0ft ~ 60.0ft : Display when "Feet" is set.
0.00m ~ 18.00m : Display when "Meters" is set.

NOTE

Set the distance between the listening position and the various speakers to no more than 20.0 ft (6.00 meters).

4 Channel Level

Adjust channel levels to obtain equal volume from all speakers.

Test Tone

Select test tone playback method.

[Selectable items]

Auto : Automatically switch speaker from which test tone is output.
Manual : Manually switch speaker from which test tone is output.

Test Tone Start

Output test tone.

[Variable range] **–12dB** ~ **0dB** ~ **+12dB**

Default

Resets the settings to the default values.

Operating from the main remote control unit

Adjusting with the main remote control unit using the test tones is only possible in the "Auto" mode and only effective in the STANDARD mode. The adjusted levels for the different modes are automatically stored in the memory.

[Adjusting using test tones]

① Press the **TEST** button.
Test tones are output from the various speakers.
② Use the ◁ ▷ button to adjust so that the volume is equal for all speakers.
③ When the adjustments are completed, press the **TEST** button again.

- When the menu "Speaker Configuration" – "Surround Back Speaker" setting (☞page 26) is set to "1spkr", the surround back speaker display is set to "Surround Back Sp." .
- Speakers set to "None" in the "Speaker Configuration" settings are not displayed.
- When "Channel Level" is adjusted, the adjusted values are set for all the surround modes. To adjust the channel level separately for the different surround modes, use the operation see page 48.

5 Crossover Frequency

Select crossover frequency from which subwoofer handles low range signal.

[Selectable items]

40Hz **60Hz** **80Hz** **90Hz** **100Hz** **110Hz** **120Hz** **150Hz** **200Hz** **250Hz** :

Only the portion of the bass sound of the various speakers output from the subwoofer that has a frequency below the frequency set here is output.
Set this according to the low frequency reproduction capabilities of the speakers you are using.

Advanced :

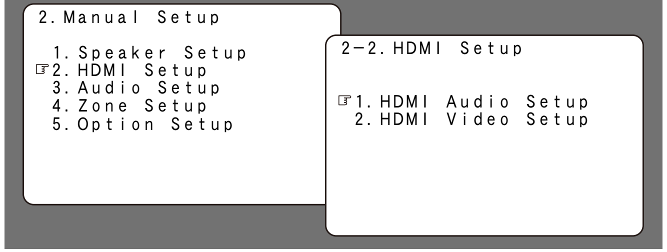
Set the crossover frequency separately for the different speakers.

- The "Crossover Frequency" can be set when there are speakers that have been set to "Small" at menu "Speaker Configuration" or when "Subwoofer" is set to "Yes" (☞page 26).
- If in the "Advanced" settings, "Subwoofer Setup" in the menu is set to "LFE", it is possible to make this setting for speakers set to "Small" at "Speaker Configuration". If set to "LFE+Main", this setting can be made regardless of the speaker size.
- For speakers set to "Small", sound below the crossover frequency is cut from the sound output. The cut bass sound is output from the subwoofer or front speakers.
- Always set the crossover frequency to "80 Hz". When using small speakers, however, we recommend setting the crossover frequency to a higher frequency.

HDMI Setup

Make settings for HDMI video/audio output.

● Menu screen ●



```
2. Manual Setup

  1. Speaker Setup
☞2. HDMI Setup
  3. Audio Setup
  4. Zone Setup
  5. Option Setup
```

```
2-2. HDMI Setup

☞1. HDMI Audio Setup
  2. HDMI Video Setup
```

1 HDMI Audio Setup

Make settings for HDMI audio output.

HDMI Audio Out

Select HDMI audio output device.

[Selectable items]

AMP : Use speakers connected to receiver for audio playback.
TV : Use speakers of monitor for audio playback.

Auto Lipsync

Automatic compensation for timing shift in audio and video output.

[Selectable items]

ON : Use automatic compensation.
OFF : Do not use automatic compensation.

2 HDMI Video Setup

Make settings for HDMI video output.

i/p Scaler

Make settings for i/p scaler function.

[Selectable items]

A to H : Use i/p scaler function for analog video signal.

OFF : Do not use i/p scaler function.

Resolution

Make settings for resolution of HDMI video output signal.

[Selectable items]

Auto : Detect monitor panel resolution and automatically set output resolution.

480p/576p : Output at 480p/576p resolution.

1080i : Output at 1080i resolution.

720p : Output at 720p resolution.

1080p : Output at 1080p resolution.

This can be set when “i/p Scaler” is set to “A to H”.

NOTE

- It is not possible to convert “1080i” signals into “720p” format.
- It is not possible to convert “720p” signals into “1080i” format.

Progressive Mode

Select optimum progressive mode for video material.

[Selectable items]

Auto : Automatically detect video material type.

Video1 : Select mode suitable for video playback.

Video2 : Select mode suitable for video and 30-frame film material playback.

This can be set when “i/p Scaler” is set to “A to H”.

Aspect

This sets the aspect ratio when outputting 480i/576i or 480p/576p input signals from the HDMI output connector.

[Selectable items]

FULL : Output at 16:9 aspect ratio.

NORMAL : Output at 4:3 aspect ratio.

This can be set when “i/p Scaler” is set to “A to H”.

Color Space

Make settings for output color space.

[Selectable items]

YCbCr : Output using YCbCr format.

RGB : Output using RGB format.

When connected to a monitor with a DVI-D connector (HDCP compatible) using an HDMI/DVI converter cable, the signals are output in RGB format, regardless of this setting.

RGB Range

Make settings for RGB output range.

[Selectable items]

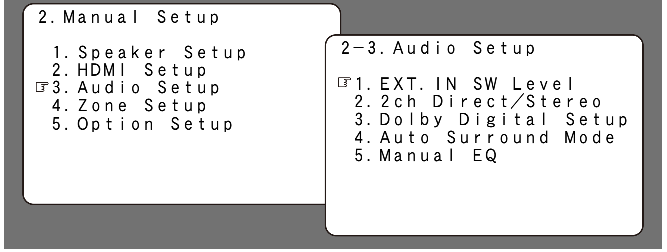
Normal : Use video range from 16 (black) to 235 (white).

Enhanced : Video range from 0 (black) to 255 (white). Use this setting to avoid black washout.

Audio Setup

Make settings for audio playback.

● Menu screen ●



1 EXT. IN Subwoofer Level

Set the subwoofer level for playback.

[Selectable items]

0dB **+5dB** **+10dB** :
Select according to the player in use.

+15dB :
This is the recommended level.

2 2ch Direct/Stereo

Make speaker settings for 2-channel mode playback.

Setting

To change the settings, select “Custom”.

[Selectable items]

Basic : Use the same settings as in “Speaker Setup”.

Custom : Make separate settings for 2-channel mode.

Front

Select front speaker size.

[Selectable items]

Large **Small** : Select front speaker size.

Subwoofer

Select subwoofer use.

[Selectable items]

Yes **No** : Select subwoofer use.

Subwoofer Mode

Select low range signal to be reproduced by subwoofer.

[Selectable items]

LFE **LFE+Main** : Select subwoofer signal.

Crossover

Select crossover frequency from which subwoofer handles low range signal.

[Selectable items]

40Hz **60Hz** **80Hz** **90Hz** **100Hz** **110Hz** **120Hz** **150Hz** **200Hz** **250Hz** : Select crossover frequency.

Distance FL

Set distance from listening position to front left speaker.

[Variable range] **0.0ft ~ 60.0ft**

Distance FR

Set distance from listening position to front right speaker.

[Variable range] **0.0ft ~ 60.0ft**

3 Dolby Digital Setup

Set dynamic range for downmix playback of Dolby Digital sources.

[Selectable items]

ON : Compression is used. Select this if sound from front speakers is distorted.

OFF : Do not use compression. This is the recommended setting.

✎

- Set this to "ON" if the sound from the front speakers seems distorted.
- When not using the center speaker or surround speakers, the playback sound is down-mixed and output from the front speakers.

4 Auto Surround Mode

Make setting for memorizing surround mode setting for each input signal type.

[Selectable items]

ON : Memorize settings. Most recently stored surround mode is automatically selected.

OFF : Do not memorize settings. Surround mode does not change according to input signal.

✎

- The auto surround mode function lets you store in the memory the surround mode last used for playing the four types of input signals listed below.
  ① Analog and PCM 2-channel signals
  ② Dolby Digital and DTS 2-channel signals
  ③ Dolby Digital and DTS multi-channel signals
  ④ Multi-channel signals other than Dolby Digital and DTS (PCM, DSD, etc.)
- When playing in the PURE DIRECT mode, the surround mode does not change even if the input signal is changed.

5 Manual EQ

Adjust tonal quality for each speaker using graphic equalizer.

Base Curve Copy

Copy the Room EQ´s "Audyssey Flat" correction curve.

[Selectable items] **Yes** **No**

✎

"Base Curve Copy" is displayed after the auto setup procedure has been performed.

Adjust CH

Select speaker adjustment method.

[Selectable items]

Each CH : Adjust tonal quality for each speaker separately.

L/R CH : Adjust tonal quality for each L/R speaker pair.

ALL CH : Adjust tonal quality for all speakers together.

Manual EQ

Select the speaker and frequency band and adjust the level.

[Selectable items] **63Hz** **125Hz** **250Hz** **500Hz** **1kHz** **2kHz** **4kHz** **8kHz** **16kHz**

[Variable range] **–20dB** ~ **0dB** ~ **+6dB**

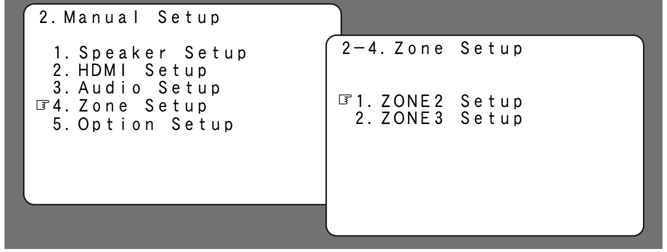
Default

Resets the settings to the default values.

Zone Setup

Make settings for audio playback in a multi-zone system.

● Menu screen ●



```
2.Manual Setup

 1.Speaker Setup
 2.HDMI Setup
 3.Audio Setup
☞4.Zone Setup
 5.Option Setup
```

```
2-4.Zone Setup

☞1.ZONE2 Setup
 2.ZONE3 Setup
```

1 ZONE2 Setup

Make settings for audio playback in a ZONE2 system.

2 ZONE3 Setup

Make settings for audio playback in a ZONE3 system.

Bass

Adjust low frequency range (bass).

[Variable range] **–10dB** ~ **0dB** ~ **+10dB**

Treble

Adjust high frequency range (treble).

[Variable range] **–10dB** ~ **0dB** ~ **+10dB**

HPF

When using speakers that cannot satisfactorily play low frequencies, distortion of the bass sound can be reduced by setting “HPF” to “ON”.

[Selectable items]

OFF	:	The low range is not attenuated.
ON	:	The low range is attenuated.

Lch Level

Adjust the left channel output level.

[Variable range] **–12dB** ~ **0dB** ~ **+12dB**

Rch Level

Adjust the right channel output level.

[Variable range] **–12dB** ~ **0dB** ~ **+12dB**

Channel

Switch between stereo and mono output.

[Selectable items]

Stereo	:	Select stereo output.
Mono	:	Select monaural output.

When menu “Manual Setup” – “Option Setup” – “Amp Assign” (☞page 31) is set to ZONE2/3-MONO”, the “Channel” setting is automatically set to “Mono”.

Volume Level

Adjust the main volume level.

[Selectable items]

VAR	:	Allow volume adjustment by remote control.
–40dB	:	Fix the volume to –40 dB.
0dB	:	Fix the volume to 0 dB.

“VAR” is displayed when a power amplifier is assigned to the ZONE2 output channel at menu “Manual Setup” – “Option Setup” – “Amp Assign” (☞page 31).

Volume Limit

Make a setting for maximum volume.

[Selectable items]

OFF	:	Do not set a maximum volume.
–20dB	:	Set the maximum volume to –20 dB.
–10dB	:	Set the maximum volume to –10 dB.
0dB	:	Set the maximum volume to 0 dB.

Power On Level

Define the volume setting that is active when the power is turned on.

[Selectable items]

Last	:	Use the memorized setting from the last session.
– – –	:	Always use the muting on condition when power is turned on.
–70dB ~ +18dB	:	Set the volume level when the power is turned on in units of 1 dB.

Mute Level

Set the amount of attenuation when muting is on.

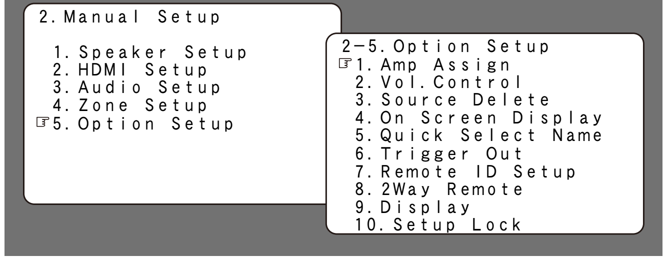
[Selectable items]

Full	:	The sound is cut off entirely.
–40dB	:	The sound is attenuated by 40 dB.
–20dB	:	The sound is attenuated by 20 dB.

Option Setup

Make various other settings.

● Menu screen ●



```
2.Manual Setup

  1.Speaker Setup
  2.HDMI Setup
  3.Audio Setup
  4.Zone Setup
☞5.Option Setup
```

```
2-5.Option Setup
☞1.Amp Assign
  2.Vol.Control
  3.Source Delete
  4.On Screen Display
  5.Quick Select Name
  6.Trigger Out
  7.Remote ID Setup
  8.2Way Remote
  9.Display
  10.Setup Lock
```

1 Amp Assign

Define how the amplifier for the surround back speaker channels is used.

The places where the surround back amplifier are used can be set freely according to the usage environment. This makes it possible to output sound to rooms other than the room (the main zone) where surround playback is performed (multi-zone playback) or play the sound with high quality using the front speakers (bi-amp connections).

[Selectable items]

7.1ch **ZONE2** **ZONE3** **ZONE2/3-MONO** **FrontA Bi-Amp** **FrontB Bi-Amp** **2ch**

For details, see "Amp Assign / Multi-zone Connections and Operations" (☞page 57 ~ 59).

2 Volume Control

Set the main zone volume setting.

Volume Limit

Make a setting for maximum volume.

[Selectable items]

OFF : Do not set a maximum volume.
–20dB : Set the maximum volume to –20 dB.
–10dB : Set the maximum volume to –10 dB.
0dB : Set the maximum volume to 0 dB.

Power On Level

This sets the volume set when the main zone's power is turned on.

[Selectable items]

Last : Use the memorized setting from the last session.
– – – : Always use the muting on condition when power is turned on.
–80dB ~ +18dB : Set the volume level when the power is turned on in units of 1 dB.

Mute Level

This sets the amount of attenuation of the volume when the mute mode is set in the main zone.

[Selectable items]

Full : The sound is cut off entirely.
–40dB : The sound is attenuated by 40 dB.
–20dB : The sound is attenuated by 20 dB.

3 Source Delete

Remove input sources that are not used from the display.

[Selectable items]

ON : Use this source.
Delete : Do not use this source.

NOTE

- Input sources being used in the various zones cannot be deleted.
- Input sources set to "Delete" cannot be selected using the **SOURCE SELECT** knob on the main unit or **SOURCE SELECT** button on the remote control unit.

4 On-Screen Display

Make on-screen display related settings.

Screensaver

Make screensaver settings.
Use the screensaver to prevent burn-in on the monitor screen.
When set to "ON", the screensaver is activated if there is no activity for about 3 minutes.

[Selectable items]

ON : Activate the screensaver if there is no activity for about 3 minutes.
OFF : Turn the screensaver function off.

Text

Input source and mode display.

[Selectable items]

ON : Turn display on.
OFF : Turn display off.

Master Volume

Master volume display during adjustment.

[Selectable items]

ON : Turn display on.
OFF : Turn display off.

Tuner Information

This sets the time the on-screen display is displayed when an operation is performed.

[Selectable items]

Always : Show display continuously.
30sec : Show display for 30 seconds after operation.
10sec : Show display for 10 seconds after operation.
OFF : Turn display off.

iPod Information

This sets the time the on-screen display is displayed when an operation is performed.

[Selectable items]

Always : Show display continuously.
30sec : Show display for 30 seconds after operation.
10sec : Show display for 10 seconds after operation.
OFF : Turn display off.

Display Mode

Select the on-screen display's display mode.

[Selectable items]

Mode1 : If there is no video signal, flickering of the on-screen display is not prevented.
Mode2 : Prevents flickering of the on-screen display when there is no video signal.
Use this mode if the on-screen display does not appear in the Mode 1, as may happen according to the TV being used.

5 Quick Select Name

Change the Quick Select name.
Up to 16 characters can be input.

[Input characters]

A ~ Z **a ~ z** **0 ~ 9** **! # % & ' ( ) * + , - . / : ; = " ? @ [\ ]** (space)

6 Trigger Out

Select the conditions to turn on the trigger out with respect to the zone, input source, surround mode. For details about the trigger out function, see page 19.

Select "Trigger Out 1" or "Trigger Out 2" and make the settings below respectively.

Selecting the Zone

Select the zone for which the trigger out is set.

Setting with Respect to the Input Source

When the input source set to on is selected, the trigger out turns on.

Setting with Respect to the Surround Mode

- When the surround mode set to on is selected, the trigger out turns on.
- Associated with respect to surround modes that are set to "ON".
- This can be set if the "MAIN ZONE" is selected at "Selecting the Zone".
- Associated when an input source for which "Setting with Respect to the Input Source" is set to "ON" is selected.

[Selectable items]

ON : Activate trigger on this mode.
– – – : Do not activate trigger on this mode.

7 Remote ID Setup

Set remote control ID.
Match the ID setting of the remote control unit and the receiver.

[Selectable items]

1 **2** **3** **4** :
Match the ID setting of the remote control and the receiver.

When changing the remote ID, also change the AMP, iPod and TU modes of the main remote control unit at the same time (☞page 54).

8 2Way Remote

Make setting for 2-way remote control unit.

[Selectable items]

Used : Use 2-way remote control.
Not Used : Do not use 2-way remote control.

When using a 2-way remote control unit (RC-7000CI and RC-7001RCI, sold separately), set this to "Used".

9 Display

Adjust display brightness of the receiver.

[Selectable items]

Bright : Normal display brightness.
Dim : Reduced display brightness.
Dark : Very low display brightness.
OFF : Display is off unless controls are operated.

Operating from the main unit

Press the **DIMMER** button.

Bright → Dim → Dark → OFF → Bright

10 Setup Lock

Protect settings from inadvertent change.

[Selectable items]

ON	: Turn protection on.
OFF	: Turn protection off.

- When "Setup Lock" is set to "ON", the settings listed below can no longer be changed. Also, "SETUP LOCKED!" is displayed if you attempt to operate related buttons.
  - · Menu operations
  - · RESTORER
  - · Night Mode
  - · Parameter
  - · Room EQ
  - · Channel Level
  - · Audio Delay
- To cancel the setting, press the **MENU** button to re-display the "Setup Lock" screen, then change the setting to "OFF".

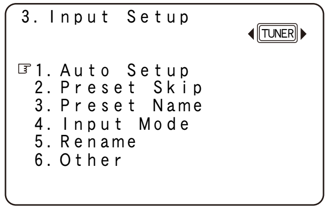
Input Setup

Use this procedure to select the input source and make the settings related to playing input sources.

❑ TUNER (AM/FM)

This menu is for "TUNER".

● Menu screen ●

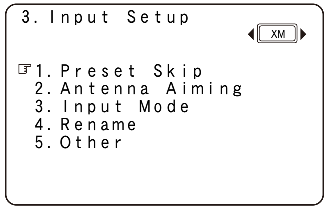


```
3. Input Setup
                     ◀TUNER▶

☞1. Auto Setup
  2. Preset Skip
  3. Preset Name
  4. Input Mode
  5. Rename
  6. Other
```

❑ XM

This menu is for "XM".

● Menu screen ●

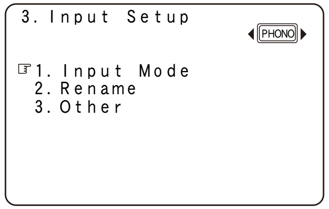


```
3. Input Setup
                     ◀XM▶

☞1. Preset Skip
  2. Antenna Aiming
  3. Input Mode
  4. Rename
  5. Other
```

❑ PHONO

This menu is for "PHONO".

● Menu screen ●

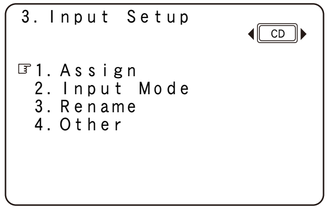


```
3. Input Setup
                     ◀PHONO▶

☞1. Input Mode
  2. Rename
  3. Other
```

❑ CD, DVD, HDP, TV/CBL, SAT, VCR, DVR, V.AUX

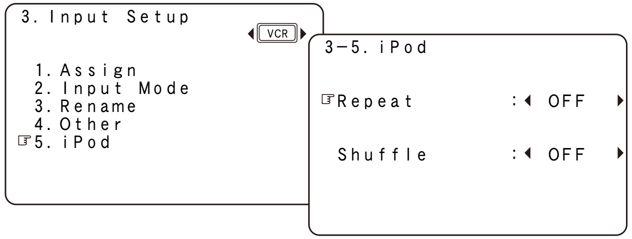
This menu is for "CD", "DVD", "HDP", "TV/CBL", "SAT", "VCR", "DVR", "V.AUX".

● Menu screen ●



```
3. Input Setup
                     ◀CD▶

☞1. Assign
  2. Input Mode
  3. Rename
  4. Other
```

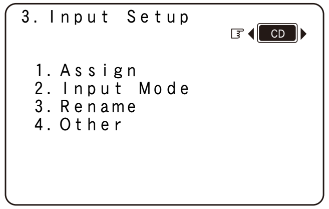
※ The menu settings below can be made for these input sources when "iPod dock" is set to "Assign".



```
3. Input Setup
                     ◀VCR▶

  1. Assign
  2. Input Mode
  3. Rename
  4. Other
☞5. iPod
```

```
3-5. iPod

☞Repeat         :◀ OFF  ▶

  Shuffle       :◀ OFF  ▶
```

Changing the input source within Input Setup



```
3. Input Setup
                  ☞◀CD▶

  1. Assign
  2. Input Mode
  3. Rename
  4. Other
```

The input source currently selected in the main zone is not changed even when the input source within Input Setup is changed.

Settings Related to Playing Input Sources

Auto Preset

Use the auto preset function to program radio stations.

[Input source] **TUNER**

[Selectable items]

Start : Start the auto preset process.

If an FM station cannot be preset automatically, select the desired station by tuning it in manually, then preset it manually.

Preset Skip

Set the preset memories that you do not want to display when tuning.

A ~ G

Select the preset channel(s) you do not want to display.

[Input source] **TUNER** **XM**

[Selectable items]

ON : Display this number.

Skip : Skip this number.

Preset Name

Assign name to a preset memory.
Names containing up to 8 characters can be input.

A1 ~ G8

Select the preset memory number.

[Input source] **TUNER**

[Characters that can be input]

A ~ Z **a ~ z** **0 ~ 9** **! # % & ' ( ) * + , - . / : ; = " ? @ [\ ]** (space)

Input Mode

Make input mode and decode mode settings for this source.
The selectable input modes depend on the input source and "Assign" setting (☞page 35).

Input Mode

Set the input mode for this source.

[Input source] **TUNER** **PHONO**

[Selectable items]

Analog : Play only signals from analog input.

EXT. IN : Play only signals from EXT. IN input.

[Input source] **XM**

[Selectable items]

Auto : Automatically detect input signal and perform playback.

EXT. IN : Play only signals from EXT. IN input.

[Input source] **CD** **DVD** **HDP** **TV/CBL** **SAT** **VCR** **DVR** **V.AUX**

[Selectable items]

Auto : Automatically detect input signal and perform playback.

HDMI : Play only signals from HDMI input. Excluding CD.

Digital : Play only signals from digital input.

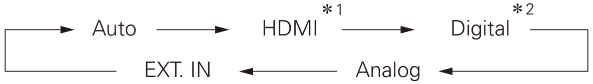
Analog : Play only signals from analog input.

EXT. IN : Play only signals from EXT. IN input.

- When a digital signal is properly input, the "DIG." indicator lights on the display. If the "DIG." indicator does not light, check the digital input connector assignment and the connections.
- The surround mode cannot be set if the input mode is set to "EXT. IN".

Operating from the main unit or main remote control unit

Press the **INPUT MODE** button on the main unit or the **INPUT** button on the main remote control unit.



*1: This can be selected for input sources for which the menu "Assign" setting is set to "HDMI" (☞page 35). Excluding CD.

*2: This can be selected for input sources for which the menu "Assign" setting is set to "Digital" (☞page 35).

Decode Mode

Set the decode mode for this source.

[Input source] **CD** **DVD** **HDP** **TV/CBL** **SAT** **VCR** **DVR** **V.AUX**

[Selectable items]

Auto : Detect type of digital input signal and decode and play automatically.

PCM : Decode and play only PCM input signals.

DTS : Decode and play only DTS input signals.

- This can be selected for input sources for which the menu "Assign" setting is set to "HDMI" or "Digital" (☞page 35).
- Only set "PCM" and "DTS" when playing the respective signals.

Rename

Change the display name for this source.
Names containing up to 8 characters can be input.

[Characters that can be input]

A ~ Z **a ~ z** **0 ~ 9** **! # % & ' ( ) * + , - . / : ; = " ? @ [\ ]** (space)

Assign

Assign input sources to input connectors.

HDMI

Select HDMI connector to assign to this source.

[Input source] **DVD** **HDP** **TV/CBL** **SAT** **VCR** **DVR** **V.AUX**

[Selectable items]

1 : Assign HDMI1 input connector.
2 : Assign HDMI2 input connector.
None : No HDMI input connector assigned.

Input source	DVD	HDP	TV/CBL	SAT	VCR	DVR	V.AUX
Default setting	**HDMI1**	**HDMI2**	None	None	None	None	None

- With HDMI, the video and audio signals are transferred simultaneously. If you want to play the video signal assigned at “HDMI In” together with the audio signal assigned at “Digital In”, set “Input Mode” on the menu to “DIGITAL” (☞page 34).
- When the AVR-2808CI and monitor are connected with an HDMI cable, if the monitor is not compatible with HDMI audio signal playback, only the video signals are output to the monitor.
- The audio signals input from the analog, digital and EXT. IN connectors are not output to the monitor.

Digital In

Select digital input connector to assign to this source.

[Input source] **CD** **DVD** **HDP** **TV/CBL** **SAT** **VCR** **DVR** **V.AUX**

[Selectable items]

COAX1 : Assign COAXIAL 1 input connector.
COAX2 : Assign COAXIAL 2 input connector.
COAX3 : Assign COAXIAL 3 input connector.
OPT1 : Assign OPTICAL 1 input connector.
OPT2 : Assign OPTICAL 2 input connector.
OPT3 : Assign OPTICAL 3 input connector.
OPT4 : Assign OPTICAL 4 input connector.
None : No digital input connector assigned.

Input source	CD	DVD	HDP	TV/CBL	SAT	VCR	DVR	V.AUX
Default setting	**COAX 3**	**COAX 1**	None	**COAX 2**	**OPT 1**	**OPT 3**	**OPT 2**	**OPT 4**

Component In

Select component video input to assign to this source.

[Input source] **DVD** **HDP** **TV/CBL** **SAT** **VCR** **DVR** **V.AUX**

[Selectable items]

1-RCA : Assign component video 1 input connector.
2-RCA : Assign component video 2 input connector.
3-RCA : Assign component video 3 input connector.
None : No component video input connector assigned.

Input source	DVD	HDP	TV/CBL	SAT	VCR	DVR	V.AUX
Default setting	**1-RCA**	**2-RCA**	**3-RCA**	None	None	None	None

iPod dock

Assign Control Dock for iPod to this source.

[Input source] **CD** **DVD** **HDP** **TV/CBL** **SAT** **VCR** **DVR** **V.AUX**

[Selectable items]

Assign : Assign iPod input.
None : Do not assign iPod input.

- With the default settings, the Control Dock for iPod can be used connected to the VCR (iPod) connector.
- Even if “iPod dock” is set to “Assign”, if the AVR-2808CI is not connected to a Control Dock for iPod, the input source can be used as the normal input source.

iPod

Make settings for “iPod” playback.

[Input source] **CD** **DVD** **HDP** **TV/CBL** **SAT** **VCR** **DVR** **V.AUX**

Repeat

Make settings for repeat mode.

[Selectable items]

All : Repeat all songs.
One : Repeat the current song.
OFF : Cancel repeat mode.

Shuffle

Make settings for shuffle mode.

[Selectable items]

Songs : Shuffle all songs.

Albums : Shuffle songs from current album only.

OFF : Cancel shuffle mode.

This can be selected for input sources for which "Assign" is assigned at the "iPod dock" setting.

Other

Make various other settings.

Video Select

Switch video input source while listening to audio signal.

[Selectable items]

DVD **HDP** **TV/CBL** **SAT** **VCR** **DVR** **V.AUX** :
Select video input source to view.

Source :
The video and audio for the same input source are played.

Operating from the main unit

Press the **VIDEO SELECT** button, then turn the **SOURCE SELECT** knob until the desired picture appears.

※ To cancel, press the main unit's **VIDEO SELECT** button, then turn the main unit's **SOURCE SELECT** knob and select "Source".

NOTE

- It is not possible to select HDMI input signals.
- When playing HDMI video input signals, the analog video signal of another input source cannot be selected for the HDMI video output.
- Input sources for which "Delete" is selected at "Source Delete" cannot be selected.

Video Convert

Automatically convert video input signal to monitor output format.

[Input source] **DVD** **HDP** **TV/CBL** **SAT** **VCR** **DVR** **V.AUX**

[Selectable items]

ON : Enable conversion.

OFF : Disable conversion.

NOTE

When a non-standard video signal from a game machine or some other source is input, the video conversion function might not operate. If this happens, please set the conversion mode to "OFF".

Source Level

Corrects the playback level of the selected input source's audio input.

[Variable range] **–12dB** ~ **0dB** ~ **+12dB**

For input sources for which "HDMI" or "Digital" are set at the menu "Assign" setting, the analog input level and digital input level can be set separately.

Antenna Aiming

Adjust the XM radio reception sensitivity.

[Input source] **XM**

Satellite

Indicate satellite signal strength.

Terrestrial

Indicate terrestrial signal strength.

Display	Condition
▁▂▃▅	Signal strength is strong
▁▂▃	Signal strength is good
▁▂	Signal strength is marginal
▁	Signal strength is weak
	No signal

Surround Modes

Standard Playback

This is the standard mode for enjoying surround sound according to the program source.

Surround Playback of 2-channel Sources

To select these surround modes using the buttons on the main unit and main remote control unit, press the **STANDARD** button. The mode switches each time the button is pressed.

❑ When using a surround back speaker

[Selectable items] **DOLBY PLIIx** **DTS NEO:6** **neural**

❑ When not using a surround back speaker

[Selectable items] **DOLBY PLII** **DTS NEO:6** **neural**

DOLBY PLIIx or DOLBY PLII : The signals are decoded in DOLBY PLIIx or DOLBY PLII for playback.

- **Cinema** : This mode is suited for movie sources.
- **Music** : This mode is suited for music sources.
- **Game** : This mode is suited for games.
- **Pro Logic** : This is the Pro Logic playback mode. This can be selected when playing with a DOLBY PLII decoder. When this mode is selected, "DOLBY PL" is displayed.

DTS NEO:6 : The signals are decoded in DTS NEO:6 for playback.

- **Cinema** : This mode is suited for movie sources.
- **Music** : This mode is suited for music sources.

neural : It is possible to play analog input signals and PCM (2-channel, 48 kHz or less) in the surround mode.
This is the optimum mode for playing sources recorded in XM HD Surround (☞page 63).

Select the “Cinema”, “Music”, “Game” and “Pro Logic” modes at menu “Parameter” – “Surround Parameter” – “MODE” (☞page 38).

Playing Multi-channel Sources (Dolby Digital, DTS, etc.)

[Selectable items]

STANDARD :

This mode is for decoding the input signals according to their format and playing surround sound.

The display when the STANDARD mode is selected depends on the input signal and surround back output playback mode.

Input signal		Display
Dolby Digital Source	DOLBY DIGITAL (other than 2ch) / DOLBY DIGITAL EX	DOLBY DIGITAL
		DOLBY DIGITAL EX
		DOLBY DIGITAL+PLⅡx CINEMA
		DOLBY DIGITAL+PLⅡx MUSIC
	DOLBY DIGITAL Plus	DOLBY DIGITAL +
	DOLBY TrueHD	DOLBY TrueHD
DTS Surround Source	DTS (5.1ch) / DTS-ES Discrete 6.1 / DTS-ES Matrix 6.1 / DTS 96/24	DTS SURROUND
		DTS+PLⅡx CINEMA
		DTS+PLⅡx MUSIC
		DTS+NEO:6
		DTS ES MTRX6.1 (∗1)
		DTS ES DSCRT6.1 (∗2)
		DTS 96/24 (∗3)
	DTS-HD High Resolution Audio	DTS-HD HI RES
	DTS-HD Master Audio	DTS-HD MSTR
DVD-Audio, SACD	PCM (multi ch) / DSD (multi ch)	MULTI CH IN
		MULTI IN+PLⅡx CINEMA
		MULTI IN+PLⅡx MUSIC
		MULTI CH IN 7.1

∗1 : This is displayed when the input signal is “DTS-ES Matrix 6.1” and the AVR-2808CI’s “AFDM” setting is set to “ON”.

∗2 : This is displayed when the input signal is “DTS-ES Discrete 6.1”.

∗3 : This is displayed when the input signal is “DTS 96/24”.

For details, see page 66.

DSP Simulation Playback

The desired mode according to the program source and viewing situation can be selected from among 10 DENON original surround modes.

The surround parameters can be adjusted (☞page 64, 65) to achieve an even more realistic, powerful sound field.

[Selectable items]

7CH STEREO	This mode is for enjoying stereo sound from all speakers.
WIDE SCREEN	This mode is for enjoying the atmosphere of viewing a movie on a large screen.
SUPER STADIUM	This mode is suited for viewing sports programs.
ROCK ARENA	This mode is for enjoying the atmosphere of a live concert in an arena.
JAZZ CLUB	This mode is for enjoying the atmosphere of a live concert in a jazz club.
CLASSIC CONCERT	This mode is for appreciating classical concert programs.
MONO MOVIE ∗	This mode is for playing monaural movie sources with surround sound.
VIDEO GAME	This mode is suited for achieving surround sound with video games.
MATRIX	This mode lets you add a sense of expansion to stereo music sources.
VIRTUAL	This mode is for enjoying surround effects using only the front speakers or headphones.

∗ : When playing sources recorded in monaural in the MONO MOVIE mode, the sound will be off balance with a single channel (left or right), so input to both channels.

- To select these surround modes using the buttons on the main remote control unit, press the **SIMU** button. The mode switches each time the button is pressed.
- Depending on the program source being played, it may not be possible to achieve a satisfactory surround effect. In this case, try other modes to achieve a sound field suited to your tastes.

Stereo Playback

[Selectable items]

STEREO :

This is the mode for playing in stereo. The tone can be adjusted. Sound is output from the front left and right speakers and subwoofer.

Direct Playback

[Selectable items]

DIRECT :

In this mode the signals bypass the tone adjustment circuitry for high quality sound.

The sound is output to the same channels as the input signal.

The display when the DIRECT mode is selected depends on the input signal.

For multi-channel sources, the display depends on the surround back output’s play mode.

Input signal	Display
Analog signal / PCM (2ch) / Dolby Digital source / DTS source / Other 2-channel digital signals	DIRECT
DSD (2ch)	DSD DIRECT (∗)
PCM (multi ch)	MULTI CH DIRECT
	M DIRECT + PLⅡx CINEMA
	M DIRECT + PLⅡx MUSIC
	M DIRECT 7.1
DSD (multi ch)	DSD MULTI DIRECT (∗)

∗ : When DSD signals are converted to PCM signals as set by the audio parameters and speaker settings, “DIRECT” or “MULTI CH DIRECT” is displayed.

For details, see page 67.

Playback in the PURE DIRECT Mode

This is the mode that recreates the original sound most faithfully, providing extremely high quality sound.

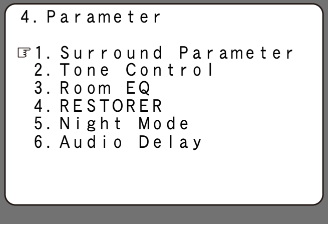
Press the PURE DIRECT button.

- When in the PURE DIRECT mode, the menu screen is not displayed and the display on the main unit is turned off.
- If the HDMI input connector is selected, video outputs are output in the PURE DIRECT mode.
- The channel level and surround parameters in the PURE DIRECT mode are the same as in the DIRECT mode.

Parameter

Parameters can be called out directly by pressing the **PARA** button on the main remote control unit.

● Menu screen ●



```
4. Parameter

☞1. Surround Parameter
  2. Tone Control
  3. Room EQ
  4. RESTORER
  5. Night Mode
  6. Audio Delay
```

1 Surround Parameter

Adjust surround sound parameters.
The adjustable parameters differ for the different surround modes (☞page 64, 65).

MODE

Select the mode according to the playback source.

❑ In the DOLBY PLIIx mode

[Selectable items] **PLIIx CINEMA** **PLIIx MUSIC** **PLIIx GAME**

❑ In the DOLBY PLII mode

[Selectable items] **PLII CINEMA** **PLII MUSIC** **PLII GAME** **DOLBY PL**

❑ In the DTS NEO:6 mode

[Selectable items] **CINEMA** **MUSIC**

CINEMA : Surround sound mode optimized for movie sources.
MUSIC : Surround sound mode optimized for music sources.
GAME : Surround sound mode optimized for games.
PL : Dolby Pro Logic playback mode.

The MUSIC mode is also effective for movie sources including a lot of stereo music.

CINEMA EQ

Soften the treble range of movie soundtracks for better understanding.

[Selectable items]

ON : CINEMA EQ is used.
OFF : CINEMA EQ is not used.

D.COMP

Compress dynamic range (difference between loud and soft sounds).

[Selectable items]

OFF : Turn dynamic range compression off.
LOW : Low setting.
MID : Middle setting.
HIGH : High setting.

When playing DTS sources, this is only displayed for compatible software.

DRC

Compress dynamic range (difference between loud and soft sounds).

[Selectable items]

AUTO : Automatic dynamic range compression on/off control according to source.
LOW : Low setting.
MID : Middle setting.
HIGH : High setting.
OFF : Dynamic range compression always off.

This can be set in the Dolby TrueHD mode.

LFE

Adjust the low-frequency effects level (LFE).

[Variable range] **–10dB** ~ **0dB**

For proper playback of the different program sources, we recommend setting to the values below.

- Dolby Digital sources: "0 dB"
- DTS movie sources: "0 dB"
- DTS music sources: "–10 dB"

CENTER IMAGE

Assign center channel signal to front left and right channels for wider sound.

[Variable range] **0.0** ~ **0.3** ~ **1.0**

PANORAMA

Assign front L/R signal also to surround channels, for wider sound.
If the surround effect seems weak, set "PANORAMA" to "ON".

[Selectable items] **ON** **OFF**

DIMENSION

Shift sound image center to front or rear, to adjust playback balance.

[Variable range] **0** ~ **3** ~ **6**

CENTER WIDTH

Assign center channel signal to front left and right channels for wider sound.

[Variable range] **0** ~ **3** ~ **7**

DELAY TIME

Adjust delay time to control sound stage size.

[Variable range] **0 ms** ~ **30 ms** ~ **300 ms**

EFFECT

Switch effect signal for multi-surround speakers on and off.
When "EFFECT" is set to "ON", a surround effect with a strong sense of expansion is achieved.

[Selectable items] **ON** **OFF**

LEVEL

Adjust effect signal level.

[Variable range] **1** ~ **10** ~ **15**

Set to a lower level if the positioning and sense of phase of the surround signals seems unnatural.

ROOM SIZE

Determine size of acoustic environment.

[Selectable items]

small	: Simulate acoustics of a small room.
med. s	
medium	↕
med. l	
large	: Simulate acoustics of a large room.

NOTE

"ROOM SIZE" does not indicate the size of the room in which sources are played.

AFDM (Auto Flag Detect Mode)

Auto-select surround mode by source.
This function only works for software containing a special identification signal.
If the software being played is recorded in Dolby Digital EX or DTS-ES, it is played in 6.1-channels. If not, it is played in 5.1-channels.

[Selectable items] **ON** **OFF**

Example : Playing Dolby Digital software (with EX flag)

- When "AFDM" is set to "ON", the surround mode is automatically set to the DOLBY D + PLIIx C mode.
- To play in the DOLBY DIGITAL EX mode, set "AFDM" to "OFF" and "SB CH OUT" to "MTRX ON".

Some Dolby Digital EX sources do not include EX flags. If the playback mode does not switch automatically even when "AFDM" is set to "ON", set "SB CH OUT" to "MTRX ON" or "PLIIx CINEMA".

SB CH OUT (for Multi-channel sources)

Select playback mode for surround back channels.

[Selectable items]

OFF	:	No signal is played from the surround back channels.
NON MTRX	:	The same signals as those of the surround channels are output from the surround back channels.
MTRX ON	:	The surround channel signals undergo digital matrix processing and are output from the surround back channels.
PLIIx CINEMA	∗1 :	Decoded in Dolby Pro Logic IIx Cinema mode, surround back signal played.
PLIIx MUSIC	∗2 :	Decoded in Dolby Pro Logic IIx Music mode, surround back signal played.
ES MTRX	∗3 :	DTS signal played with digital matrix processing.
ES DSCRT	∗4 :	Signal included in DTS-ES Discrete 6.1-channel sources played.
DSCRT ON	:	Mode for discrete playback of surround back signals included in 7.1-channel digital discrete audio signals (DVD, etc.).

∗1: This can be selected when" Surround Back" is set to" 2spkrs" at the menu" Manual Setup" –" Speaker Setup" –" Speaker Configuration" setting (☞page 26).

∗2: This can be selected when "Surround Back" is set to "2spkrs" or "1spkr" at the menu "Manual Setup" – "Speaker Setup" – "Speaker Configuration" setting.

∗3: This can be selected when playing DTS sources.

∗4: This can be selected when playing DTS sources including a discrete 6.1-channel signal identification signal.

SB CH OUT (for 2-channel sources)

Determine whether to use surround back speakers.

[Selectable items]

ON : The surround back channel signal is played.
OFF : The surround back channel signal is not played.

This operation can be performed directly pressing the **SURROUND BACK** button on the main unit.

SW ATT (Subwoofer Attenuate)

Attenuate subwoofer level when using EXT. IN mode.

[Selectable items]

ON : The input from the subwoofer channel is attenuated.
OFF : The input from the subwoofer channel is not attenuated. Usually use in this mode.

Set this to "ON" if the subwoofer channel level seems too high when playing Super Audio CD.

Subwoofer

Turn subwoofer output on and off.

[Selectable items]

ON : The subwoofer is used.
OFF : The subwoofer is not used.

Default

Resets the settings to the default values.

2 Tone Control

Adjust the tonal quality of the sound.

Tone Defeat

Turn tone adjustments off.

[Selectable items]

ON : Playback without tone adjustment.
OFF : Allow tone adjustment (treble, bass).

The tone cannot be adjusted when in the DIRECT mode.

Bass

Adjust low frequency range (bass).

[Variable range] **–6dB ~ +6dB**

Treble

Adjust high frequency range (treble).

[Variable range] **–6dB ~ +6dB**

"Bass" and "Treble" can be set when "Tone Defeat" is set to "OFF".

3 Room EQ

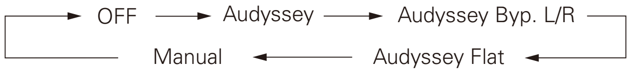
Select room equalizer for current environment.

[Selectable items]

Audyssey : Optimize frequency response of all speakers.
Audyssey Byp. L/R : Optimize frequency response of speakers except front L and R speakers.
Audyssey Flat : Optimize frequency response of all speakers to flat response.
Manual : Apply frequency response set with "Manual EQ" (☞page 29).
OFF : Turn equalizer off.

Operating from the main unit or main remote control unit

Press the **ROOM EQ** button on the main unit or the **EQ** button on the main remote control.



When "Audyssey" is selected, "AUDYSSEY MULTEQ XT" lights.

When "Audyssey Byp. L/R" or "Audyssey Flat" is selected, or when the auto setup measuring results have changed, "AUDYSSEY MULTEQ XT" lights.

- "Audyssey", "Audyssey Byp. L/R" and "Audyssey Flat" can be selected after the auto setup procedure has been performed.
- If the settings of the speakers for which "None" has been determined at "Auto Setup" are changed, "Audyssey", "Audyssey Byp. L/R" and "Audyssey Flat" cannot be selected and measurements have to be taken again to include the newly-added speakers.
- When using headphones, "Room EQ" is always set to "OFF".

4 RESTORER

This function restores compressed audio signals to how they were before compression and corrects the sense of volume of the bass to obtain richer playback sound.

[Selectable items]

OFF :

Do not use RESTORER.

Mode1 (RESTORER 64):

Optimized mode for compressed sources with very weak highs.

Mode2 (RESTORER 96):

Apply suitable bass and treble boost for all compressed sources.

Mode3 (RESTORER HQ):

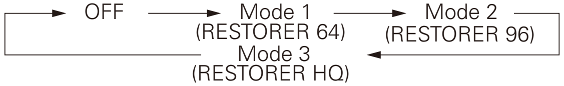
Optimized mode for compressed sources with normal highs.

The default setting for "iPod" is "Mode3". All others are set to "OFF".

Operating from the main unit or main remote control unit

During playback, press the **RESTORER** button on the main unit or the **RSTR** button on the main remote control unit.

When set to something other than "OFF", "RESTORER" is displayed.



About the RESTORER function

- Such compressed audio formats as MP3, WMA (Windows Media Audio) and MPEG-4 AAC reduce the amount of data by eliminating signal components that are hard for the human ear to hear. The RESTORER function generates the signals eliminated upon compression, restoring the sound to conditions near those of the original sound before compression. It also corrects the sense of volume of the bass to obtain richer sound with compressed audio signals.
- This is displayed on the menu and can be set when the input source is selected to "XM", or analog signals (including AM/FM signals) or PCM signals (fs = 44.1/48 kHz) are input.

5 Night Mode

Optimized setting for late-night listening.

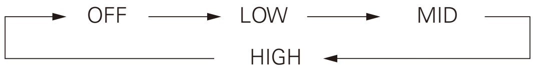
[Selectable items]

OFF	: Turn night mode off.
LOW	: Low setting.
MID	: Middle setting.
HIGH	: High setting.

Operating from the main remote control unit

Press the **NGT** button.

The "NIGHT" indicator lights when "LOW", "MID" or "HIGH" is selected.



6 Audio Delay

Compensate for mismatched timing between video and audio.

Delay audio.

This sets the delay time for audio signals.

[Variable range] **0 ms** ~ **200 ms**

If you wish to adjust the "Audio Delay" while playing HDMI or component video signals, press △ to set "OSD" to "OFF". This way the audio delay can be adjusted while watching the picture. (Press △ again to switch to the on-screen display.)

Operating from the main unit or main remote control unit

※ When set using the procedure below, the on-screen display is not displayed. Adjust while watching the display.

① Press the **AUDIO DELAY** button on the main unit or the **A. DL** button on the main remote control unit.

② Use the ◁ ▷ button to set.

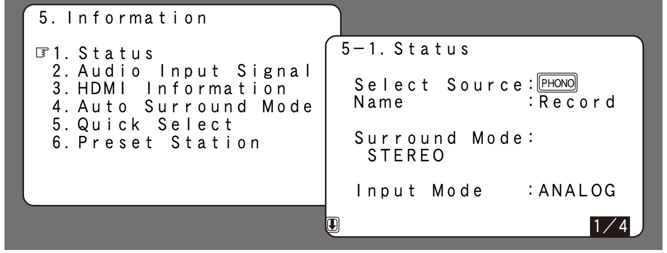
- This cannot be adjusted when playing in the EXT. IN, DIRECT or STEREO mode (with "Front Speaker" set to "Large", "Tone Defeat" to "ON" and "Room EQ" to "OFF".)
- The adjustment range is 0 to 100 ms when the Auto Lipsync Correction function is activated.

Information

Status

Shows information about current settings.

● **Menu screen** ●



```
5. Information

☞1. Status
 2. Audio Input Signal
 3. HDMI Information
 4. Auto Surround Mode
 5. Quick Select
 6. Preset Station
```

```
5-1. Status

 Select Source:PHONO
 Name         :Record

 Surround Mode:
  STEREO

 Input Mode   :ANALOG
                     1/4
```

1 Main zone

Shows information about settings for main zone.

The items displayed differ according to the input source.

[Items to be checked]

Select Source **Name** **Surround Mode** **Input Mode** **Rec Select** **Video Select** **Source Level** **Room EQ** **Night Mode** **RESTORER** etc.

2 ZONE2 / ZONE3

Shows information about settings for multi-zone.

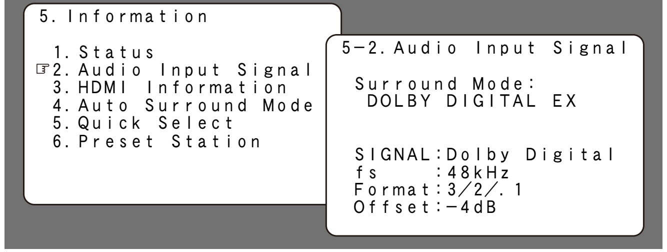
[Items to be checked]

Power **Select Source** **Volume Level**

Audio Input Signal

Shows information about audio input signals.

● Menu screen ●



```
5. Information

  1. Status
☞2. Audio Input Signal
  3. HDMI Information
  4. Auto Surround Mode
  5. Quick Select
  6. Preset Station
```

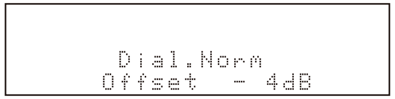
```
5-2. Audio Input Signal

 Surround Mode:
  DOLBY DIGITAL EX

 SIGNAL:Dolby Digital
 fs    :48kHz
 Format:3/2/.1
 Offset:-4dB
```

[Items to be checked]

Surround Mode	: The currently set surround mode is displayed.
SIGNAL	: The input signal type is displayed.
fs	: The input signal's sampling frequency is displayed.
Format	: The number of channels in the input signal (front, surround, LFE) is displayed.
Offset	: The dialogue normalization correction value is displayed.
Flag	: "MATRIX" is displayed if the input signal has undergone matrix processing, "DISCRETE" if the input signal has undergone discrete processing.

Dialogue normalization function

This is automatically activated when playing Dolby Digital sources. This function automatically corrects the standard signal level for individual program sources.
The correction value can be checked using the **STATUS** button on the main unit.



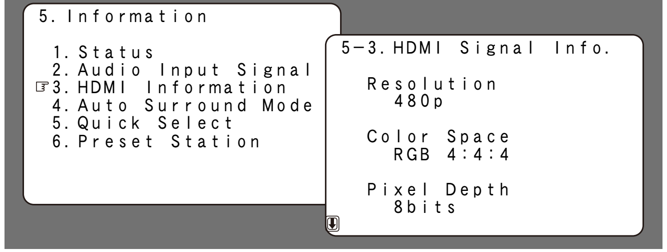
```
Dial.Norm
Offset  - 4dB
```

The figure is the correction value when the standard level is corrected.

HDMI Information

Shows information about HDMI input signal and monitor.

● Menu screen ●



```
5. Information

  1. Status
  2. Audio Input Signal
☞3. HDMI Information
  4. Auto Surround Mode
  5. Quick Select
  6. Preset Station
```

```
5-3. HDMI Signal Info.

  Resolution
    480p

  Color Space
    RGB 4:4:4

  Pixel Depth
    8bits
```

1 HDMI Signal Information

The HDMI input signal information is displayed.

[Items to be checked]

Resolution **Color Space** **Pixel Depth**

2 HDMI Monitor Information

The HDMI monitor information is displayed.

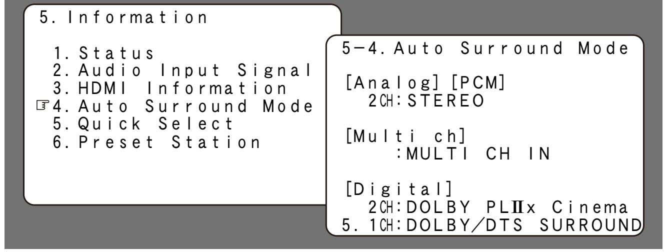
[Items to be checked]

Interface **Support Resolution**

Auto Surround Mode

Shows information about auto surround mode settings.
The surround mode for which the last memory function was used for the different input signal types is displayed.

● Menu screen ●



```
5. Information

  1. Status
  2. Audio Input Signal
  3. HDMI Information
☞4. Auto Surround Mode
  5. Quick Select
  6. Preset Station
```

```
5-4. Auto Surround Mode

[Analog][PCM]
  2CH:STEREO

[Multi ch]
     :MULTI CH IN

[Digital]
  2CH:DOLBY PLIIx Cinema
5.1CH:DOLBY/DTS SURROUND
```

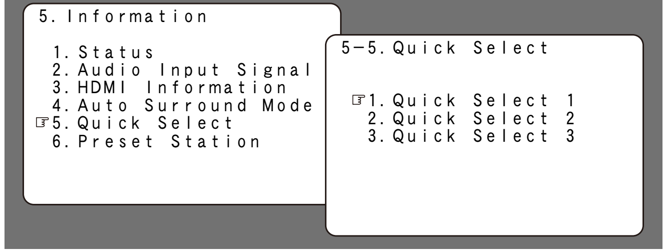
[Items to be checked]

Analog/PCM 2CH **Multi ch** **Digital 2CH** **Digital 5.1CH**

Quick Select

Shows information about quick select settings.

● Menu screen ●



```
5. Information

  1. Status
  2. Audio Input Signal
  3. HDMI Information
  4. Auto Surround Mode
☞5. Quick Select
  6. Preset Station
```

```
5-5. Quick Select

 ☞1. Quick Select 1
   2. Quick Select 2
   3. Quick Select 3
```

[Items to be checked]

Name **Input Source** **Input Mode** **Volume Level**

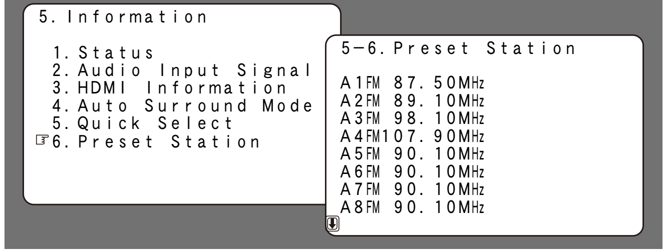
Analog/PCM 2CH **Multi ch** **Digital 2CH** **Digital 5.1CH**

For instructions on storing settings at Quick Select 1 to 3, see page 50.

Preset Station

Shows information about preset stations.

● Menu screen ●



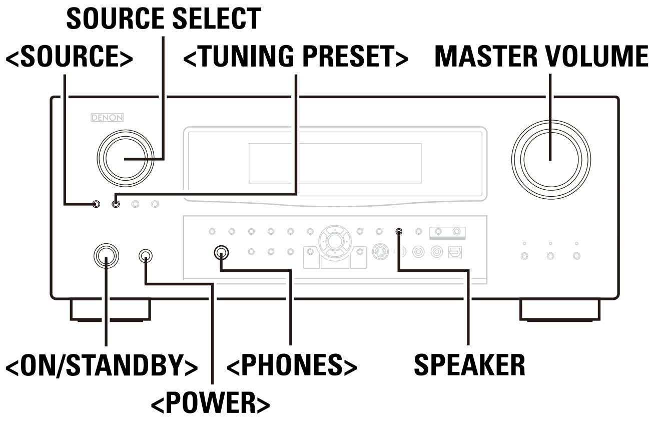
```
5. Information

  1. Status
  2. Audio Input Signal
  3. HDMI Information
  4. Auto Surround Mode
  5. Quick Select
☞6. Preset Station
```

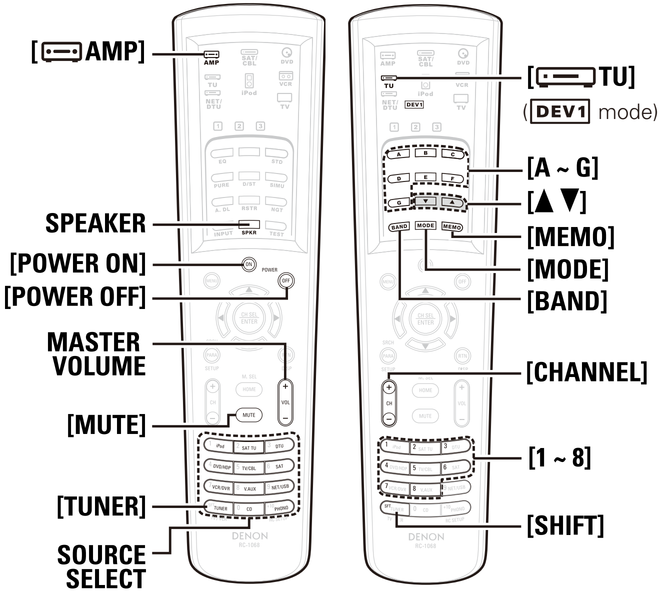
```
5-6. Preset Station

A1FM 87.50MHz
A2FM 89.10MHz
A3FM 98.10MHz
A4FM107.90MHz
A5FM 90.10MHz
A6FM 90.10MHz
A7FM 90.10MHz
A8FM 90.10MHz
```

[Input source] **TUNER** **XM**

[Items to be checked] **A1 ~ G8**

When the **STATUS** button on the main unit is pressed, the set's status can be checked on the display.





About the button names in these explanations

< > : Buttons on the main unit
[ ] : Buttons on the remote control unit

Button name only:
Buttons on the main unit and remote control unit

Playback

Preparations

Turning the Power On

1 **Press <POWER>.**
The power indicator lights red and the power is set to the standby mode.

2 **Press <ON/STANDBY> or [POWER ON].**
The power indicator flashes green and the power turns on.

To operate the AVR-2808CI using the main remote control unit, set the remote control unit to the AMP mode (☞page 51 "Remote Control Unit Operations").

Turning the Power Off

①Press **<ON/STANDBY>** or **[POWER OFF]**.
The power is set to the standby mode.
②Press **<POWER>**.
The power indicator turns off, and so does the power.

NOTE

Power continues to be supplied to some of the circuitry even when the power is in the standby mode. When leaving home for long periods of time or when traveling, either press **<POWER>** to turn off the power, or unplug the power cord from the power outlet.

Selecting the input source

Operation on the main unit

Turn <SOURCE SELECT>.

If "Rec Select" or "Video Select" is selected for the input source, press **<SOURCE>** before turning **<SOURCE SELECT>**.

Operation on the main remote control unit

Press [SOURCE SELECT].
The desired input source can be selected directly.

To operate the AVR-2808CI using the main remote control unit, set the remote control unit to the AMP mode (☞page 51 "Remote Control Unit Operations").

Operations During Playback

Adjusting the Master Volume

Either turn <MASTER VOLUME> or press [MASTER VOLUME].

Turning Off the Sound Temporarily (Muting)

Press [MUTE].

To cancel, press **[MUTE]** again. Muting can also be canceled by adjusting the master volume.

Listening with Headphones

Plug the headphones into <PHONES>.
The sound from the speakers and pre-out connectors is automatically cut.

NOTE

Be careful not to set the volume too high when using headphones.

Switching the front speakers

Press SPEAKER.

→ Front A → Front B
Front A+B ←

Playing Video and Audio Equipment

Basic Operation

1 Prepare the equipment.

①Load the DVD, CD or other software in the player.
(☞See the operating instructions of the respective devices.)
②To play a video device, switch the monitor input.
(☞See the monitor's operating instructions.)

2 To operate using the main remote control unit, set the remote control unit to the AMP mode.

(☞page 51 "Remote Control Unit Operations")

3 Use SOURCE SELECT to select the input source.

4 Start playback.

(☞See the operating instructions of the respective devices.)

Listening to FM/AM Broadcasts

Basic Operation

1 Either turn <SOURCE SELECT> or press [TUNER] (AMP mode) to select "TUNER".

2 To operate using the main remote control unit, set the remote control unit to the TUNER (DEV1) mode.

(☞page 51 "Remote Control Unit Operations")

3 Press [BAND] to select "FM" or "AM".

4 Tune in the desired broadcast station.

①**To tune in automatically (Auto Tuning)**
Press **[MODE]** to light the "AUTO" indicator on the display, then use **[▲▼]** to select the station you want to hear.

②**To tune in manually (Manual Tuning)**
Press **[MODE]** to turn off the display's "AUTO" indicator, then use **[▲▼]** to select the station you want to hear.

- It is also possible to switch to "FM" or "AM" in step 1 by pressing **[TUNER]**.
- If the desired station cannot be tuned in with auto tuning, tune it in manually.
- When tuning in stations manually, press and hold **[▲▼]** to change frequencies continuously.
- The time for which the menus are displayed can be set at menu "Manual Setup" – "Option Setup" – "On-Screen Display" (☞page 31, 32).

Presetting Radio Stations (Preset Memory)

Your favorite broadcast stations can be preset so that you can tune them in easily. Up to 56 stations can be preset.

1 Tune in the broadcast station you want to preset.

2 Press [MEMO].

3 Press [A ~ G] to select the block in which the station is to be preset, then press [CHANNEL] or [1 ~ 8] to select the preset number.

※ The memory block can also be selected by pressing **[SHIFT]**.

4 Press [MEMO] again to complete the setting.

- To preset other stations, repeat steps 1 to 4.
- Stations can be preset automatically at menu "Input Setup" – "Auto Preset" (☞page 34).

NOTE

Preset stations are erased by overwriting them.

Listening to Preset Stations

Operation on the Main Unit

Press <TUNING PRESET>, then turn <SOURCE SELECT> to select the preset radio station.

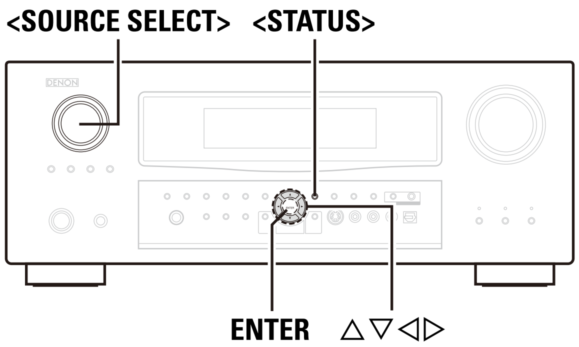
Operation on the Main Remote Control Unit

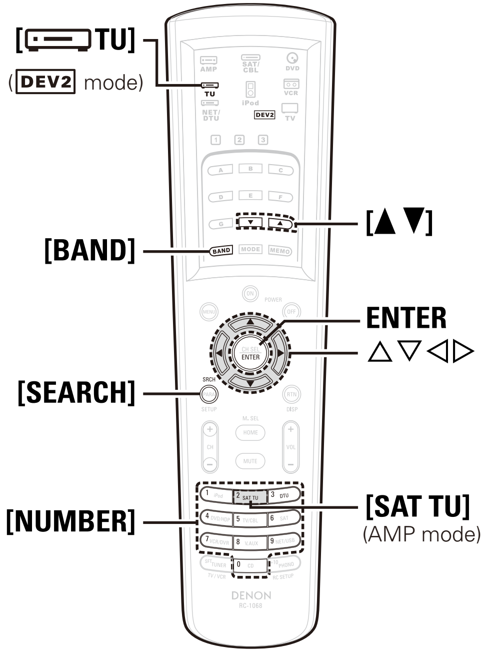
1 Press [A ~ G] to select the memory block.

2 Press [CHANNEL] or [1 ~ 8] to select the desired preset channel.

❑ Default settings

Auto tuner presets	
A1 ~ A8	87.5 / 89.1 / 98.1 / 107.9 / 90.1 / 90.1 / 90.1 / 90.1 MHz
B1 ~ B8	520 / 600 / 1000 / 1400 / 1500 / 1710 kHz, 90.1 / 90.1 MHz
C1 ~ C8	90.1 MHz
D1 ~ D8	90.1 MHz
E1 ~ E8	90.1 MHz
F1 ~ F8	90.1 MHz
G1 ~ G8	90.1 MHz





About the button names in these explanations

< > : Buttons on the main unit
[ ] : Buttons on the remote control unit

Button name only:
Buttons on the main unit and remote control unit

Listening to XM Satellite Radio Programs

ABOUT XM RADIO

XM Radio offers an extraordinary variety of commercial-free music, plus the best in premier sports, news, talk radio, stand-up comedy, children's and entertainment programming. 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. For U.S. customers, information about XM Radio is available online at www.xmradio.com. For Canadian customers, information about XM Canada is online at www.xmradio.ca.

XM READY® LEGAL

XM monthly service subscription sold separately. XM Mini-Tuner and Home Dock required (each sold separately) to receive XM service. Installation costs and other fees and taxes, including a one-time activation fee may apply. 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-GETXMSR (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.

XM READY® SUBSCRIPTIONS

Once you have installed the XM Mini-Tuner Dock, inserted the XM Mini-Tuner, connected the XM Dock to your XM Ready® home audio system, and installed the antenna, you are ready to subscribe and begin receiving XM programming. There are three places to find your eight character XM Radio ID: On the XM Mini-Tuner, on the XM Mini-Tuner package, and on XM Channel 0. Record the Radio ID in the following eight squares for reference.

☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐

Note: The XM Radio ID does not use the letters "I", "O", "S" or "F". Activate your XM Satellite Radio service in the U.S. online at http://activate.xmradio.com or call 1-800-XM-RADIO (1-800-967-2346). Activate your XM Satellite Radio service in Canada online at https://activate.xmradio.ca or call 1-877-GET-XMSR (1-877-438-9677). You will need a major credit card. XM will send a signal from the satellites to activate the full channel lineup. Activation normally takes 10 to 15 minutes, but during peak busy periods you may need to keep your XM Ready home audio system on for up to an hour. When you can access the full lineup on your XM Ready home audio system you are done.

Basic Operation

1 **Either turn <SOURCE SELECT> or press [SAT TU] (AMP mode) to select "XM".**

2 **To operate using the main remote control unit, set the remote control unit to the TUNER (DEV2) mode.**
(☞page 51 "Remote Control Unit Operations")

3 **Use [▲▼] to select the station.**
When the station is tuned in, the name of the track and artist are displayed.

✎

- The channel switches continuously when **[▲▼]** is pressed and held.
- XM Radio stations can be preset using the same procedure as for FM/AM stations (☞page 44 "Presetting Radio Stations (Preset Memory)" and "Listening to Preset Stations").
- The artist name, track name, category and reception level can be checked by pressing **<STATUS>**.
- The time for which the menus are displayed can be set at menu "Manual Setup" – "Option Setup" – "On-Screen Display" – "TUNER Information" (☞page 31, 32).

Checking the XM Signal Strength and Radio ID

1 **Either turn <SOURCE SELECT> or press [SAT TU] (AMP mode) to select "XM".**

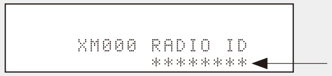
2 **Press <STATUS> until "SIGNAL" appears on the display.**
The display will switch as shown below, depending on the reception conditions.

Display	Status
GOOD	Signal strength is good
MARGINAL	Signal strength is marginal
WEAK	Signal strength is weak
NO	No signal

3 **Adjust the position of the antenna until "SIGNAL: GOOD" is shown on the display.**

4 **Press <STATUS> until the station you want to check (example: "XM001") is displayed.**

5 **Press [▲▼] and select channel 0 (XM000).**
The radio ID is shown on the display.



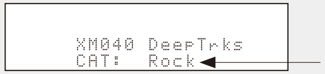
```
XM000 RADIO ID
      ********
```

Radio ID

The strength of both the XM satellite and terrestrial signals can be checked at menu "Input Setup" – "Antenna Aiming" (☞page 36).

Searching Categories

1 **Press ◁ ▷.**



```
XM040 DeepTrks
CAT:  Rock
```

Channel category

2 **Use ◁ ▷ to select the category, then use △▽ to select the desired station.**

Accessing XM Radio Stations Directly

1 **Press [SEARCH].**

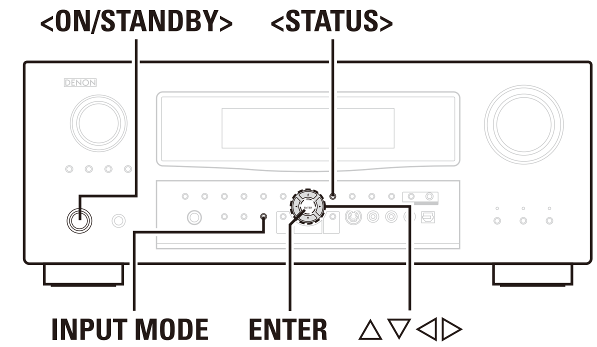
2 **Press [NUMBER] then input the station's channel.**

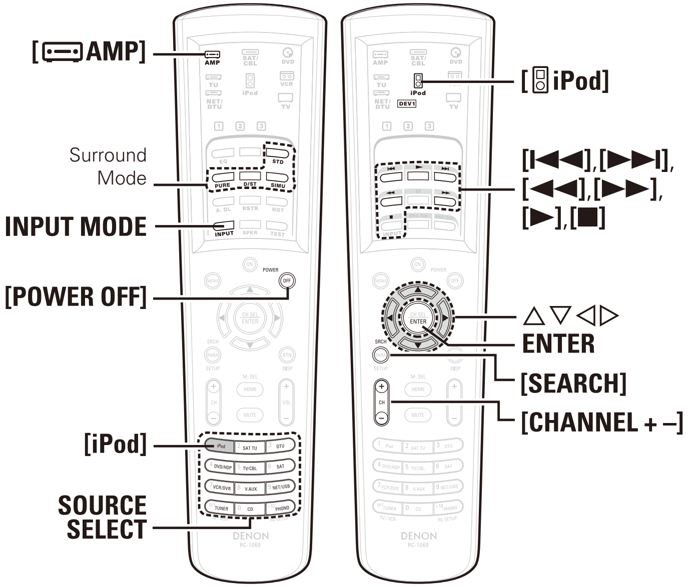
Example: Accessing station "XM123":
[1] → **[2]** → **[3]**

※ If no button is pressed within several seconds, the station automatically switches to the one whose number has been input.

3 **Press ENTER to set that station.**
Reception switches to the selected station.

- "LOADING" is displayed while stations or data are being received.
- "UPDATING" is displayed while the encoding code is being updated.
- "XM - - -" is displayed if the selected channel cannot be used.





About the button names in these explanations

< > : Buttons on the main unit

[ ] : Buttons on the remote control unit

Button name only:

Buttons on the main unit and remote control unit

iPod® Playback

The music on an iPod can be played by using the Control Dock for iPod (ASD-1R, sold separately).

The operation can also be performed using the buttons on the main unit or remote control unit while watching the menus.

iPod is a trademark of Apple Inc., registered in the U.S. and other countries.

※ The iPod may only be used to copy or play contents that are not copyrighted or contents for which copying or playback is legally permitted for your private use as an individual. Be sure to comply with applicable copyright legislation.

Basic Operation

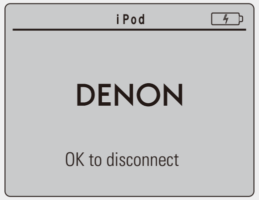
1 Make the necessary preparations.

①Set the iPod in the DENON Control Dock for iPod.
(☞See the Control Dock for iPod's operating instructions.)

②Assign the Control Dock for iPod's input.

MENU : **"Input Setup" – "Assign" – "iPod dock"**
(☞page 36)

2 Either turn <SOURCE SELECT> or press [iPod] (AMP mode) to select the input source assigned in step 1-② above.


iPod

DENON

OK to disconnect

(iPod screen)

※If the screens above are not displayed, the iPod may not be properly connected. Try connecting again.

3 To operate using the main remote control unit, set the remote control unit to the iPod mode.
(☞page 51 "Remote Control Unit Operations")

- With the default settings, the iPod can be used connected to the VCR (iPod) connector.
- Use the RESTORER mode to expand the low and high frequency components of compressed audio files and achieve a richer sound. The default setting is "Mode3".
- Press **<ON/STANDBY>** or **[POWER OFF]** and set the AVR-2808CI's power to the standby mode before disconnecting the iPod. Also switch the input source to one to which the menu "iPod dock" is not assigned before disconnecting the iPod.

NOTE

- Depending on the type of iPod and the software version, some functions may not operate.
- DENON will accept no responsibility whatsoever for any loss of iPod data.

Listening to Music

1 Use △▽ to select the menu, then press ENTER or ▷ to select the music file to be played.

2 Press ENTER or ▷.
Playback starts.

Stopping playback temporarily

During playback, press **ENTER** or **[▶]**.
Press again to resume playback.

Fast-forwarding or fast-reversing

During playback, either press and hold △ (to fast-reverse) or ▽ (to fast-forward), or press **[◀◀]** or **[▶▶]**.

To cue to the beginning of a track

During playback, either press △ (to cue to the previous track) or ▽ (to cue to the next track), or press **[I◀◀]** or **[▶▶I]**.

To stop

During playback, either press and hold **ENTER** or press **[■]**.

Playing repeatedly

Press **[CHANNEL –]**.

[Selectable items] All One Off

MENU : **"Input Setup" – "iPod" – "Repeat"** (☞page 35)

Shuffling playback

Press **[CHANNEL +]**.

[Selectable items] Albums Songs **OFF**

MENU : **"Input Setup" – "iPod" – "Shuffle"** (☞page 36)

Searching up or down pages

Press **[SEARCH]**, then press ◁ (down) or ▷ (up).
To cancel, press △▽ or **[SEARCH]**.

To switch between the Browse and Remote modes

Either press and hold **[SEARCH].**

- The title name, artist name and album name can be checked by pressing **<STATUS>** during playback.
- On the AVR-2808CI, folder and file names can be displayed as titles. Any characters that cannot be displayed are replaced with " . (period)".
- The time for which the menus are displayed can be set at menu "Manual Setup" – "Option Setup" – "On-Screen Display" – "iPod Information" (☞page 32).

Viewing Still Pictures or Videos on the iPod

Photo and video data on the iPod can be viewed on the monitor. Only for iPod equipped with slideshow or video functions. (When using an ASD-1R)

1 Press and hold [SEARCH] to set the Remote mode.
"Remote iPod" is displayed on the AVR-2808CI's display.

2 Watching the iPod's screen, use △▽ to select "Photos" or "Video".

3 Press ENTER until the image you want to view is displayed.

"TV Out" at the iPod's "Slideshow Settings" or "Video Settings" must be set to "On" in order to display the iPod's photo data or videos on the monitor. For details, see the iPod's operating instructions.

Other Operations and Functions

Other Operations

Playing Super Audio CD

1 Assign the HDMI input connector at the "HDMI In" setting (☞page 35).

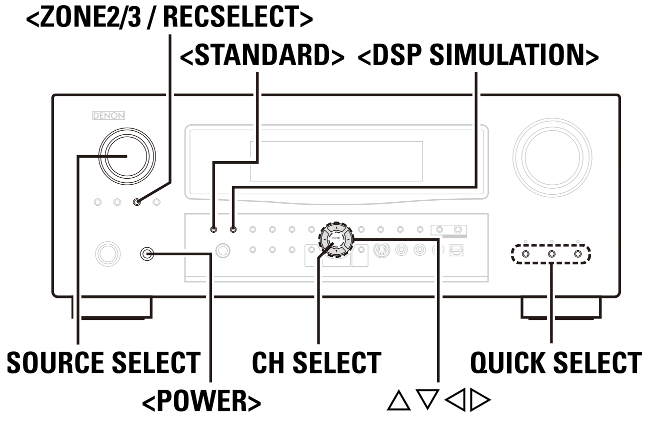
2 Either turn <SOURCE SELECT> or press [SOURCE SELECT] to select the input source assigned in step 1.
The "HDMI" indicator lights on the display.

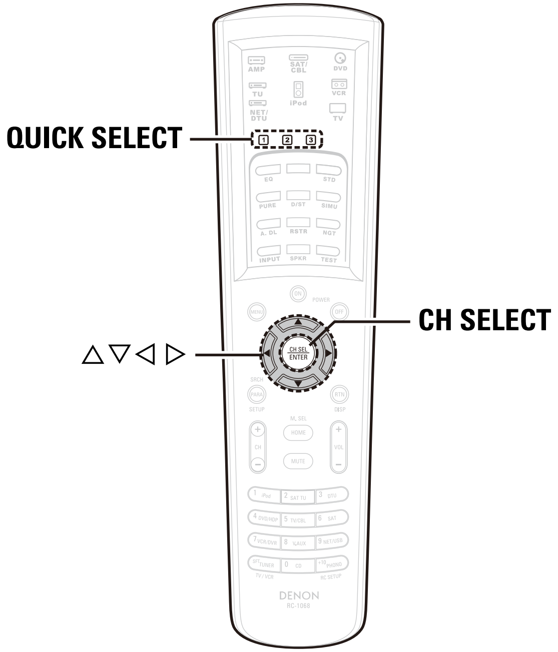
3 Use INPUT MODE to select "Auto" (☞page 34).
Select the input mode according to the program source to be played.

4 Select the surround mode (☞page 36 ~ 38).
We recommend playing in the DIRECT mode.

5 Start playing the Super Audio CD.
The "DSD" indicator lights on the display.
For operating instructions, refer to the respective equipment's operating instructions.

- When playing DSD signals in the DIRECT or PURE DIRECT mode, the DSD signals are converted as such into analog signals. When playing in other surround modes, the DSD signals are first converted into PCM format, then into analog signals.
- "DSD DIRECT" is shown on the display when playing DSD 2-channel signals in the DIRECT mode. "DSD MULTI DIRECT" is shown on the display when playing DSD multi-channel signals in the DIRECT mode.





About the button names in these explanations

< > : Buttons on the main unit
[ ] : Buttons on the remote control unit

Button name only:

Buttons on the main unit and remote control unit

Recording on an External Device (REC OUT mode)

You can listen to one program source while recording a different program source.

1 Press <ZONE2/3 / REC SELECT>.

"ZONE2 SOURCE" is shown on the display.

ZONE2 SOURCE ◄► ZONE2 TUNER ◄► ···· ◄► ZONE2 XM
↕ ↕
RECOUT XM ◄► ······ ◄► RECOUT TUNER ◄► RECOUT SOURCE

2 Turn <SOURCE SELECT> until "RECOUT SOURCE" is displayed.

The "REC" indicator lights.

3 Turn <SOURCE SELECT> to choose the input source to be recorded.

4 Play the program source.

For operating instructions, refer to the respective equipment's operating instructions.
To record FM or AM broadcasts, select the broadcast (☞page 44).

5 Start recording.

For operating instructions, refer to the respective equipment's operating instructions.

- To cancel, press **<ZONE2/3 / REC SELECT>**, then turn **<SOURCE SELECT>** until "ZONE2 SOURCE" is displayed.
- Make a test recording before starting the actual recording.
- Signals are only output to the analog REC OUT connectors when the digital signals input to the digital input connectors (OPTICAL/ COAXIAL) are PCM (2-channel) signals.
- Digital audio signals input to the HDMI connectors are not output to the REC OUT connectors, so connect using the OPTICAL or COAXIAL connectors.
- Sources selected with the REC OUT mode are output from ZONE2 as well.
- In the REC OUT mode, the remote control unit's ZONE2 mode buttons cannot be operated.
- The "XM" digital audio output signals are not output from the OPTICAL2 or OPTICAL3 output connectors.

NOTE

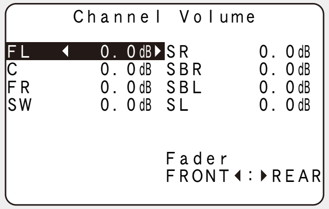
- Recordings you make are for your personal enjoyment and should not be used for other purposes without permission of the copyright holder.
- Input sources for which "Delete" is selected at "Source Delete" cannot be selected.

Convenient Functions

Channel Level

You can adjust the channel level either according to the playback sources or to suit your taste, as described below.

1 **Press CH SELECT.**



```
        Channel Volume

FL   ◀    0.0dB▶SR        0.0dB
C         0.0dB SBR       0.0dB
FR        0.0dB SBL       0.0dB
SW        0.0dB SL        0.0dB

                Fader
                FRONT◀:▶REAR
```

2 **Use △▽ or CH SELECT to select the speaker.**
The speaker that can be set switches each time one of the buttons is pressed.

3 **Use ◁ ▷ to adjust the volume.**

※ "OFF" can be set by pressing ◁ when the subwoofer's volume is set to –12 dB.

Fader Function

This function lets you adjust (fade) the sound from all the front or rear speakers at once.

1 **Press CH SELECT.**

2 **Press △▽ or CH SELECT to select "Fader".**

3 **Use ◁ ▷ to adjust the volume of the speakers.**
(◁: front, ▷: rear)

- The fader function does not affect the subwoofer.
- The fader can be adjusted until the volume of the speaker adjusted to the lowest value is –12 dB.

Quick Select Function

With this function, the currently playing input source, input mode, surround mode, room EQ settings and volume can be stored in the memory.

1 **Set the input source, input mode, surround mode, room EQ settings and volume to the conditions you want to store.**

2 **Press and hold the desired QUICK SELECT.**
Keep pressing the button until the quick select indicator lights.

[Quick Select Defaults]

	Input Source	Volume
Quick Select 1	DVD	–40 dB
Quick Select 2	TV/CBL	–40 dB
Quick Select 3	VCR	–40 dB

- To call out the settings, press **QUICK SELECT** at which the desired settings were stored.
- The Quick Select name can be changed (☞page 32).

NOTE

Input sources stored with the quick select function cannot be selected if they have been deleted at menu "Manual Setup" – "Option Setup" – "Source Delete" (☞page 31). In this case, store them again.

Personal Memory Plus Function

This function sets the settings (input mode, surround mode, etc.) last selected for the individual input sources.
When you switch to an input source, the settings are automatically set to the ones that were set the last time that input source was used.

The surround parameters, tone control, room EQ settings and the volumes of the different speakers are stored for the individual surround modes.

Last Function Memory

This stores the settings as they were directly before the standby mode was set.
When the power is turned back on, the settings are restored to as they were directly before the standby mode was set.

Backup Memory

The various settings are backed up for about 1 week, even if the power is turned off or the power cord is disconnected.

Resetting the Microprocessor

Perform this procedure if the display is abnormal or if operations cannot be performed.
When the microprocessor is reset, all the settings are reset to their default values.

1 **Turn off the power using <POWER>.**

2 **Press <POWER> while simultaneously pressing <STANDARD> and <DSP SIMULATION>.**

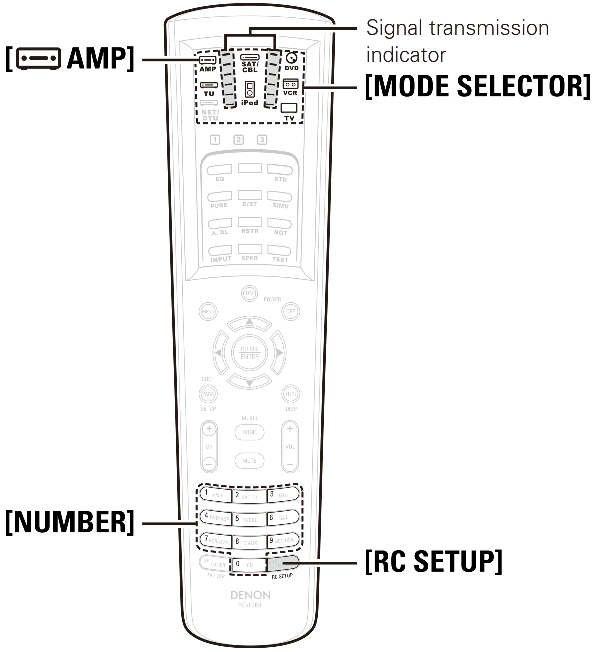
3 **Once the display starts flashing at intervals of about 1 second, release the two buttons.**

If in step 3 the display does not flash at intervals of about 1 second, start over from step 1.

Remote Control Unit Operations

Main Remote Control Unit

- On the main remote control unit, the display switches according to the device being operated and the mode.
- In modes other than iPod, the mode switches between "**DEV1**" and "**DEV2**" each time the **[MODE SELECTOR]** is pressed.
- In the AMP, TUNER and iPod modes, when the remote ID is set, the AVR-2808CI can be used independently even in an environment containing multiple DENON amplifiers.



Depending on the model and year of manufacture of your equipment, some buttons may not operate.

NOTE

The device mode ("**DEV1**" or "**DEV2**") cannot be changed while the setting is being made.

Operating DENON Audio Components

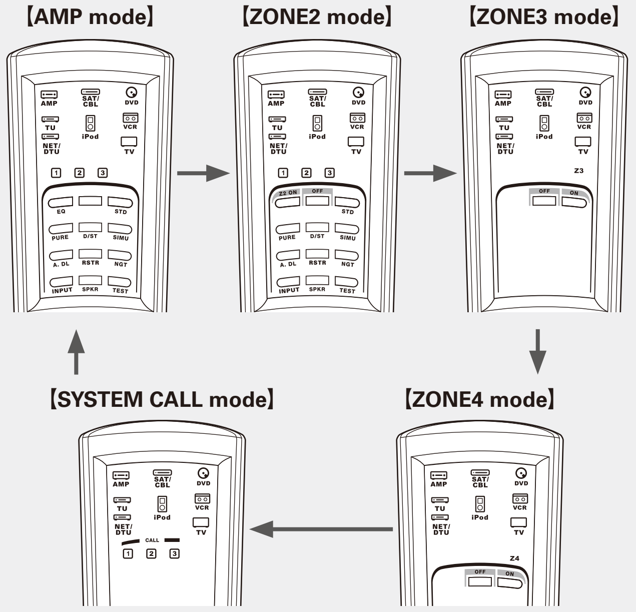
1 Press [MODE SELECTOR] for the component to be operated.

The indicator for the component to be operated flashes.

AMP : AMP / ZONE2 / ZONE3 / ZONE4 / SYSTEM CALL
TU : TUNER (FM/AM) / XM
NET/DTU : NET/USB / DIGITAL TUNER
SAT/CBL : Satellite Receiver / Cable TV
iPod : iPod
DVD : DVD player (Recorder) / CD player (Recorder)
VCR : VCR / TAPE
TV : TV

※ The NET/DTU (**DEV1** and **DEV2**) mode is not used on the AVR-2808CI, so use the learn function to store the signals (☞page 54).

※ The mode switches each time **[AMP]** is pressed.



※ The AVR-2808CI cannot be used in the ZONE4 mode.

2 Operate the component.

※ For details, refer to the component's operating instructions.

[HOME] is used to return to the AMP mode (AMP, ZONE2, ZONE3, ZONE4 or SYSTEM CALL) when in any mode other than AMP.

Presetting

The included main remote control unit can be preset to operate devices of various brands.

1 Press [MODE SELECTOR] for the device you want to preset.

2 Press and hold in [RC SETUP] for at least 3 seconds.

The signal transmission indicator flashes twice.

3 Press [NUMBER] and input the 5-digit number of the brand of the component to be preset. The numbers are shown in the Preset Code Table (☞End of this manual).

When the code is registered, the signal transmission indicator flashes twice.

When the preset code is transmitted, the mode indicator for the component to which that code belongs flashes.

※ The input mode is canceled if no button is operated for 10 seconds.

Some brands have more than one preset code. If the component does not operate, try inputting a different code.

Operating Preset Components

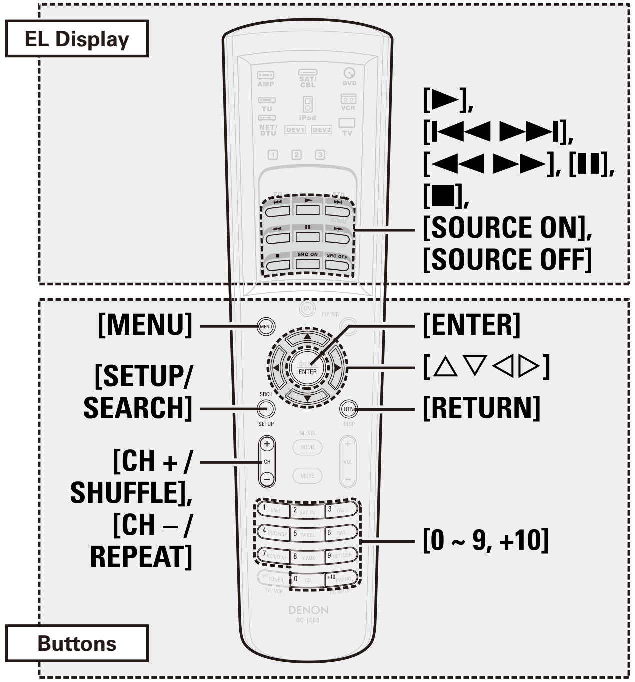
1 Press [MODE SELECTOR] for the component to be operated.

The mode indicator of the device to be operated flashes.

2 Operate the component.

※ For details, refer to the component's operating instructions.

Functions of Buttons by Component



	EL Display						
MODE SELECTOR	**DVD**				**VCR**		**iPod**
Device Mode	**DEV1**		**DEV2**		**DEV1**	**DEV2**	**DEV1**
Device operated	**DVD** (Default setting)	**DVD Recorder**	**CD** (Default setting)	**CD Recorder**	**VCR**	**TAPE**	**iPod**
▶	Playback	Playback	Playback	Playback	Playback	Playback	Playback/Pause
|◀◀ ▶▶|	Auto search (cue)	Auto search (cue)	Auto search (cue)	Auto search (cue)	Auto search (cue)	Auto search (cue)	Auto search (cue)
◀◀ ▶▶	Manual search (fast-reverse/ fast-forward)	Manual search (fast-reverse/ fast-forward)	Manual search (fast-reverse/ fast-forward)	Manual search (fast-reverse/ fast-forward)	Manual search (fast-reverse/ fast-forward)	Manual search (fast-reverse/ fast-forward)	Manual search (fast-reverse/ fast-forward)
❚❚	Pause	Pause	Pause	Pause	Pause	Pause	–
■	Stop	Stop	Stop	Stop	Stop	Stop	Stop
SOURCE ON	Power on	Power on	–	–	Power on	–	–
SOURCE OFF	Power off	Power off	–	–	Power off	–	–
	Buttons						
MENU	Menu/guide	Menu/guide	–	–	Menu/guide	–	Menu
△ ▽ ◁ ▷	Cursor	Cursor	–	–	Cursor	–	Cursor
ENTER	Enter setting	Enter setting	–	–	Enter setting	–	Enter
SETUP/SEARCH	Set up	Set up	–	–	Set up	–	Page forward screen / Browse/ Remote mode switching (Press and hold)
RETURN	Return	Return	–	–	Cancel	–	Return
CH + / SHUFFLE	–	–	–	–	Switch channels	–	1-track/album shuffle play
CH - / REPEAT	–	–	–	–	Switch channels	–	1-track/All-track repeat play
0 ~ 9, +10	Select track	Select track	Select track	Select track	–	–	–
Special Remarks	①, ②		①		①	①	–

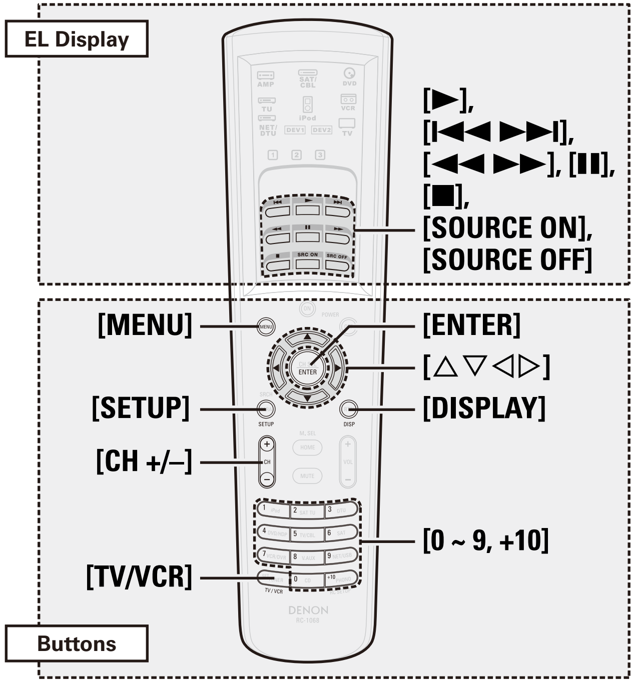
[Special Remarks]

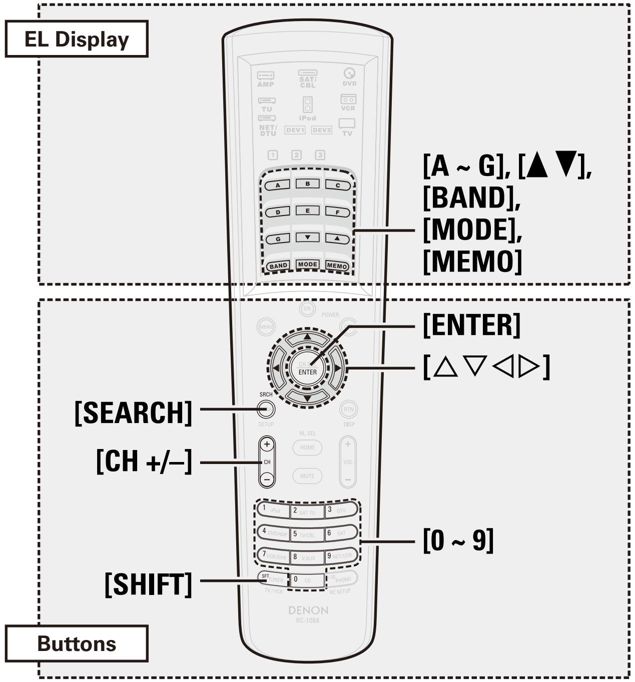
① Only one component can be preset for each mode. If a new code is preset, the previous code is automatically cleared.

② The names of the functions for the DVD remote control buttons differ from brand to brand. Check beforehand.

NOTE

- Preset a DVD player or DVD recorder for the DVD (DEV1) mode. Preset a CD player or CD recorder for the DVD (DEV2) mode.
- Preset a VCR for the VCR (DEV1) mode. Preset a tape deck for the VCR (DEV2) mode.





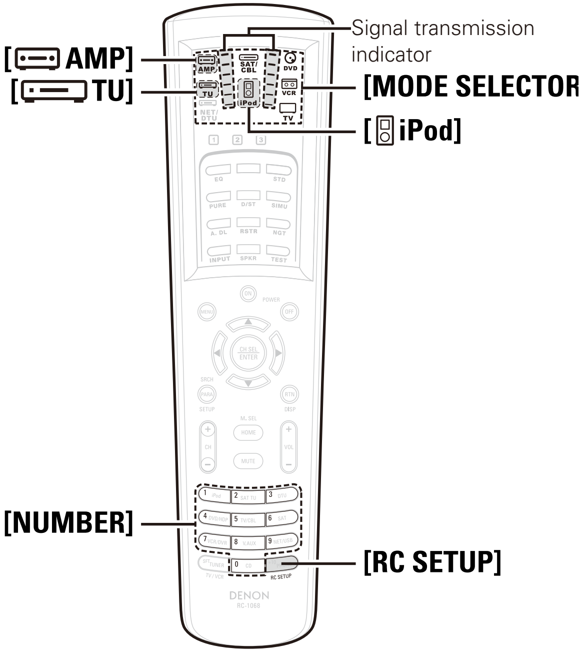
	EL Display			
MODE SELECTOR	**TV**		**Satellite Receiver / Cable TV**	
Device Mode	**DEV1**	**DEV2**	**DEV1**	**DEV2**
Device operated	**TV (HITACHI)**	**TV (SONY)**	**SAT**	**SAT**
▶	Punch through	Punch through	Punch through	Punch through
I◀◀ ▶▶I				
◀◀ ▶▶				
II				
■				
SOURCE ON	Power on	Power on	Power on	Power on
SOURCE OFF	Power off	Power off	Power off	Power off
	Buttons			
MENU	Menu/guide	Menu/guide	Menu/guide	Menu/guide
△ ▽ ◁ ▷	Cursor	Cursor	Cursor	Cursor
ENTER	Enter setting	Enter setting	Enter setting	Enter setting
SETUP	Set up	Set up	Set up	Set up
DISPLAY	Display	Display	Display	Display
CH + / –	Switch channels	Switch channels	Switch channels	Switch channels
0 ~ 9, +10	Channel selection	Channel selection	Channel selection	Channel selection
TV/VCR	Switch inputs	Switch inputs	–	–
Special Remarks	①, ③	①, ③	①, ③	①, ③

〔Special Remarks〕

① Only one component can be preset for each mode. If a new code is preset, the previous code is automatically cleared.

③ The CD, VCR or DVD buttons (one only set) can be assigned to the monitor, satellite receiver and cable TV (☞page 55 "Punch Through Function").

	EL Display	
MODE SELECTOR	**TU**	
Device Mode	**DEV1**	**DEV2**
Device operated	**Analog tuner**	**XM**
A ~ G	Preset memory block selection	Preset memory block selection
▲ ▼	Tuning + / –	Channel selection
BAND	AM/FM switching	–
MODE	Switch search modes	–
MEMO	Preset memory registration	Preset memory registration
	Buttons	
△ ▽ ◁ ▷	–	Category search
ENTER	–	–
SEARCH	–	Direct search
CH + / –	Preset channel selection	Preset channel selection
0 ~ 9	Preset channel selection (1 ~ 8)	Preset channel selection (1 ~ 8) / Direct channel search (0 ~ 9)
SHIFT	Switch memory block	Switch memory block



Setting the Remote ID

When using multiple DENON AV receivers in the same room, make this setting so that only the desired AV receiver operates.

1 **Press [AMP] to set the main remote control unit to the AMP mode.**

2 **Press and hold in [RC SETUP] for at least 3 seconds.**
The signal transmission indicator flashes twice.

3 **Refer to the table at the right, and use [NUMBER] to input the 5-digit number corresponding to the remote ID to be changed.**
The signal transmission indicator flashes twice.

4 **Press [TU] or [iPod] to select the mode to be set.**

5 **Repeat steps 2 to 4 to set the remote IDs for all modes.**

MODE SELECTOR Remote ID	AMP (MAIN)	TUNER		iPod
		DEV1 (Analog TUNER)	DEV2 (XM)	
1 (Default)	81001	52863	52864	72815
2	82001	52795	52812	72816
3	83001	52800	52813	72817
4	84001	52805	52814	72818

NOTE

- When changing a setting, be sure to set the same remote ID as the AVR-2808CI's (☞page 32).
- When changing the AMP mode's remote ID, also change the "TUNER" and "iPod" remote ID at the same time.
- Set the remote ID of an analog tuner for TUNER (DEV1), the XM remote ID for "DEV2".

Learning Function

If your AV devices are of a brand other than DENON or if they cannot be operated with the preset memory function, their remote control signals can be transfered to stored in the AVR-2808CI's main remote control unit.

1 **Press [MODE SELECTOR] for the device you want to set.**

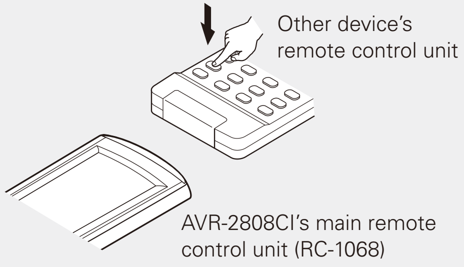
2 **Press and hold in [RC SETUP] for at least 3 seconds.**
The signal transmission indicator flashes twice.

3 **Press [9], [7] and [5], in that order.**
The signal transmission indicator flashes twice and the learning mode is set.

4 **Press the button to be set.**
The main remote control unit's display turns off.

※ If a button that cannot be learned is pressed, the signal transmission indicator lights but the signal is not learned.

5 **Point the main remote control units directly at each other and press and hold the button on the other device's remote control unit that you want to learn.**
Once learning is completed normally, the display lights and the signal transmission indicator flashes twice.


Other device's remote control unit
AVR-2808CI's main remote control unit (RC-1068)

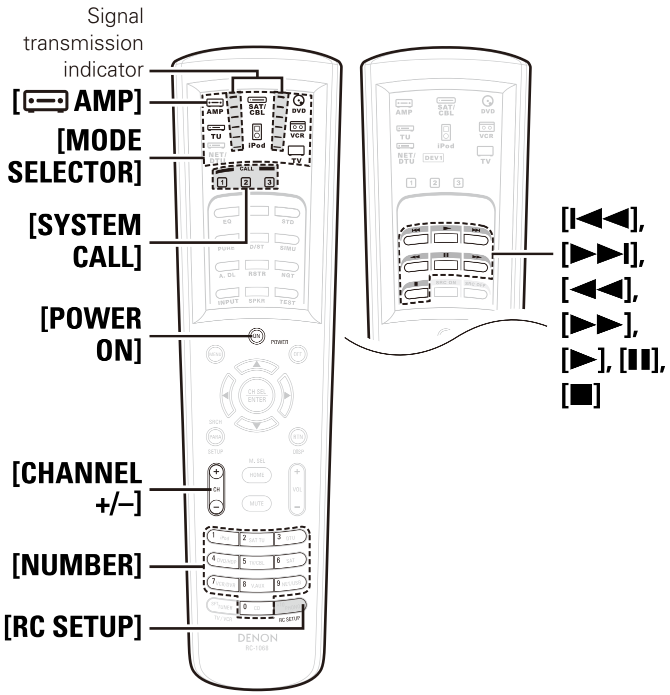
※ If you want to learn other buttons, repeat steps 4 and 5.
※ The mode can be switched by pressing **[MODE SELECTOR]**.
※ The signal transmission indicator lights once for a long time if learning was not possible

6 **Press and hold in [RC SETUP] for at least 3 seconds.**
The signal transmission indicator flashes twice and the setting is completed.

- With some remote control units, the signals cannot be learned or the device will not operate properly even when the signals have been learned. In this case, use the device's own remote control unit.
- Learned buttons have priority over the preset memory. If you no longer need the learned setting, reset the learning function (☞page 56).

NOTE

- **[HOME]** cannot be learned.
- Do not learn any remote control signals at **[RC SETUP]**.
- The AMP, ZONE2, ZONE3, ZONE4 and SYSTEM CALL modes cannot be learned.



System Call Function

This function lets you register a series of operations at a single button.

For example, the amplifier can be turned on, the input source selected, the monitor's power turned on, the source device's power turned on and the play mode set all by pressing a single button.

Up to 32 signals each can be registered at **[SYSTEM CALL]** (**1**, **2** or **3**).

Registering

1 **Press [MODE SELECTOR] for the device you want to register.**

2 **Press and hold in [RC SETUP] for at least 3 seconds.**
The signal transmission indicator flashes twice.

3 **Press [9], [7] and [8], in that order.**
The signal transmission indicator flashes twice and the system call registration mode is set.

4 **Press [SYSTEM CALL] (1, 2 or 3) at which you want to register the signals.**

5 **Press the buttons you want to register in the same sequence as the operations you want to perform.**
The signal transmission indicator lights when a button is pressed.
Example : Press **[POWER ON].**
↓
Press **[MODE SELECTOR]** – **[DVD]**.
↓
Press **[▶].**

※ The mode can be switched by pressing **[MODE SELECTOR]**.
※ Perform the registration procedure for all the buttons you want to register.

6 **Press and hold in [RC SETUP] for at least 3 seconds.**
The signal transmission indicator flashes twice and the setting is completed.

Calling out

1 **Press [AMP], to select "SYSTEM CALL".**

2 **Press [SYSTEM CALL] (1, 2 or 3) at which the signals were registered.**
The registered signals are transmitted in the registered sequence.

Punch Through Function

CD, DVD or VCR mode buttons can be stored at unused TV or SAT/CBL mode buttons.
For example, when DVD mode buttons are assigned to the TV mode, the DVD mode operations can be performed while in the TV mode.

1 **Press [MODE SELECTOR] for the device you want to punch through (CD, DVD or VCR).**

2 **Press and hold in [RC SETUP] for at least 3 seconds.**
The signal transmission indicator flashes twice.

3 **Press [9], [8] and [4], in that order.**
The signal transmission indicator flashes twice and the punch through setting mode is set.

4 **Press the button you want to punch through (▶, ■, ◀◀, ▶▶, I◀◀, ▶▶I or II).**

5 **Press [MODE SELECTOR] for the device you want to punch through (TV or SAT/CBL).**

6 **Press and hold in [RC SETUP] for at least 3 seconds.**
The signal transmission indicator flashes twice and the setting is completed.

Setting the Time the Backlight Stays Lit

1 **Press and hold in [RC SETUP] for at least 3 seconds.**
The signal transmission indicator flashes twice.

2 **Press [9], [7] and [3], in that order.**
The signal transmission indicator flashes twice and the backlight on time setting mode is set.

3 **Set the light on time.**
The signal transmission indicator flashes twice.
[Settable times] : **[1]** : 5 sec.
[2] : 10 sec. (Default)
[3] : 15 sec.
[4] : 20 sec.
[5] : 25 sec.

Adjusting the Backlight's Brightness

The display's brightness can be adjusted in 5 steps.
(Default: Step 3)

1 **Press [RC SETUP] for at least 3 seconds.**
The signal transmission indicator flashes twice.

2 **Press [CHANNEL +] or [CHANNEL –].**
The display gets one step brighter when **[+]** is pressed.
The display gets one step darker when **[–]** is pressed.

3 **Press [RC SETUP] to complete the setting.**

Resetting the Main Remote Control Unit

Learning Function

[Resetting button by button]

1 **Press [MODE SELECTOR] for the device you want to reset.**

2 **Press and hold in [RC SETUP] for at least 3 seconds.**
The signal transmission indicator flashes twice.

3 **Press [9], [7] and [6], in that order.**
The signal transmission indicator flashes twice.

4 **Press the button you want to reset twice.**
The signal transmission indicator flashes twice.

[Resetting by device mode]

1 **Press [MODE SELECTOR] for the device you want to reset.**

2 **Press and hold in [RC SETUP] for at least 3 seconds.**
The signal transmission indicator flashes twice.

3 **Press [9], [7] and [6], in that order.**
The signal transmission indicator flashes twice.

4 **Press [MODE SELECTOR] for the device you want to reset twice.**
The signal transmission indicator flashes twice.

System call function

1 **Press and hold in [RC SETUP] for at least 3 seconds.**
The signal transmission indicator flashes twice.

2 **Press [9], [7] and [8], in that order.**
The signal transmission indicator flashes twice.

3 **Press [SYSTEM CALL] (1, 2 or 3) you want to reset.**

4 **Press and hold in [RC SETUP] for at least 3 seconds.**
The signal transmission indicator flashes twice.

Punch-through function

1 **Press [MODE SELECTOR] for the device you want to reset (TV or SAT/CBL).**

2 **Press and hold in [RC SETUP] for at least 3 seconds.**
The signal transmission indicator flashes twice.

3 **Press [9], [8] and [4], in that order.**
The signal transmission indicator flashes twice.

4 **Press and hold in [RC SETUP] for at least 3 seconds.**
The signal transmission indicator flashes twice.

All settings

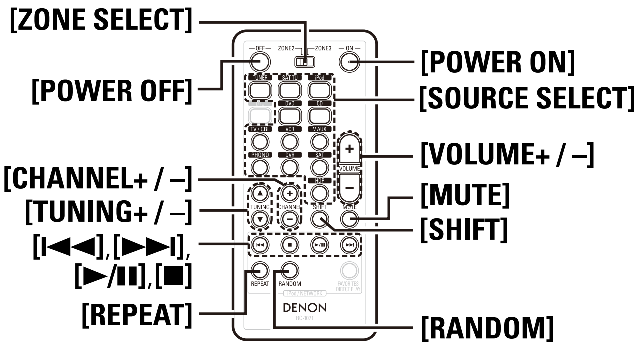
1 **Press and hold in [RC SETUP] for at least 3 seconds.**
The signal transmission indicator flashes twice.

2 **Press [9], [8] and [1], in that order.**
The signal transmission indicator flashes 4 times.
All the settings are restored to their defaults.

Sub Remote Control Unit

The sub remote control unit (RC-1071) included with the AVR-2808CI can be used as the exclusive multi-zone remote control unit.

※ The following describes operation for the selected zone. (Use **[ZONE SELECT]** to switch zones.)
- Turning the multi-zone power on and off
- Selecting the input source to be played
- Adjusting and temporarily muting the multi-zone volume
- Listening to the tuner



ZONE SELECT	Switching the zone to be operated
POWER OFF	Power off
POWER ON	Power on
SOURCE SELECT	Switching the input zone
VOLUME + / -	Volume control
CHANNEL + / -	Channel + / –
TUNING + / -	Tuning + / –
MUTE	Muting
SHIFT	Switching the memory block
|◀◀ ▶▶|	Auto search (cue)
■	Stop
▶/II	Play / Pause
REPEAT	1-track / All -track repeat play
RANDOM	1-track / album shuffle play

※ When using a Control Dock for iPod (ASD-1R), **[FAVORITES DIRECT PLAY]** cannot be used.

Amp Assign / Multi-zone Connections and Operations

The AVR-2808CI is compatible with the following types of playback:

- **Multi-zone playback (ZONE2 & ZONE3)**
- **Bi-amp playback (front speakers)**

NOTE

- For bi-amp playback, use speakers compatible with that type of connection.
- When conducting bi-amp playback, remove the short-circuiting boards (or wires) from the speaker terminals.

Multi-zone Settings with the Amp Assign Function

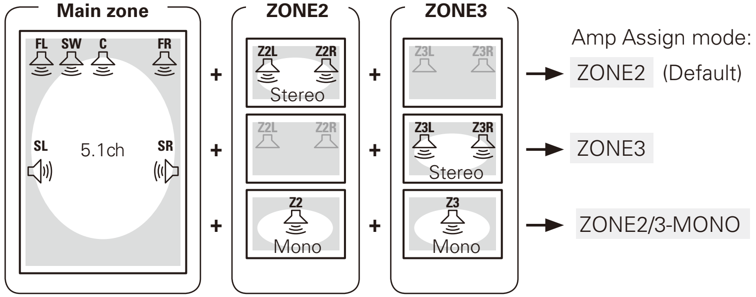
The amp assign function lets you assign the amplifiers for the different channels built into the AVR-2808CI to the speaker outputs for the different zones.
Select the desired playback environment from among "Setting 1" to "Setting 4", then set the corresponding "Amp Assign" mode at menu "Manual Setup" – "Option Setup" – "Amp Assign" (☞page 31).
Connect the speakers as described at "Amp Assign mode settings and speakers connected to the various speaker terminals".

"Setting 3" is possible to switch the Amp Assign mode between the 5.1-channel mode and 2-channel mode without changing the speaker connections.

Setting 1 :

●Multi-zone playback

- 5.1-channel playback + ZONE2 or ZONE3 stereo playback
- 5.1-channel playback + ZONE2 + ZONE3 monaural playback



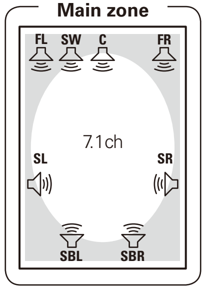
"STEREO" or "MONO" depends on the setting at menu "Manual Setup" – "(select the zone)" – "Zone Setup" – "Channel" (☞page 30).

❑ Amp Assign mode setting and speakers connected to the various speaker terminals

Speaker terminal / Amp Assign mode	FRONT		CENTER	SURR		SURR. BACK / AMP ASSIGN	
	R	L		R	L	R	L
ZONE2	FR	FL	C	SR	SL	Z2R	Z2L
ZONE3						Z3R	Z3L
ZONE2/3-MONO						Z3 (MONO)	Z2 (MONO)

Setting 2 :

●7.1-channel playback



Amp Assign mode: 7.1ch

❑ Amp Assign mode setting and speakers connected to the various speaker terminals

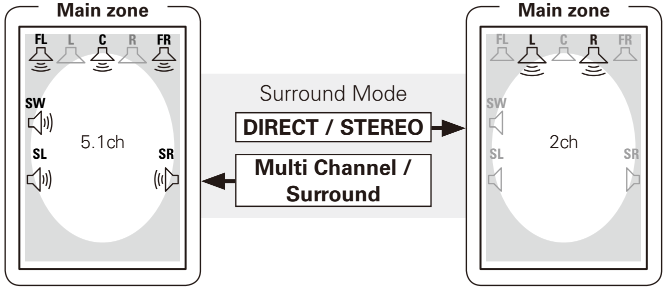
Speaker terminal	FRONT		CENTER	SURR		SURR. BACK / AMP ASSIGN	
Amp Assign mode	R	L		R	L	R	L
7.1ch	FR	FL	C	SR	SL	SBR	SBL

Setting 3 : With this setting it is possible to switch between the following two playback modes.

●5.1-channel playback

●2-channel playback

Switching ················Surround Mode switching



Amp Assign mode: 2ch

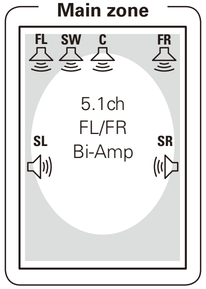
❑ Amp Assign mode setting and speakers connected to the various speaker terminals

Speaker terminal	FRONT		CENTER	SURR		SURR. BACK / AMP ASSIGN	
Amp Assign mode	R	L		R	L	R	L
2ch	FR	FL	C	SR	SL	FR	FL

Setting 4 :

●Making bi-amp connections for the FL and FR channels in the main zone and conducting 5.1-channel playback

(switching with other modes not possible)



Amp Assign mode:

→ Front A Bi-Amp

→ Front B Bi-Amp

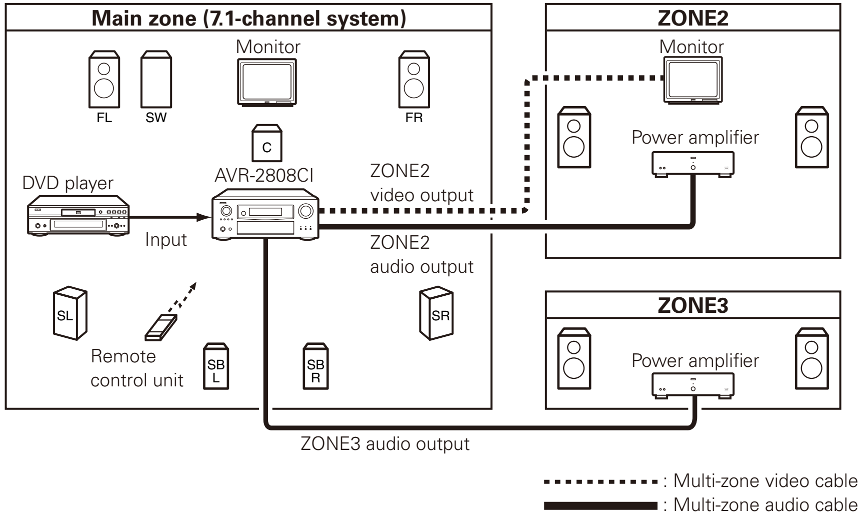
❑ Amp Assign mode setting and speakers connected to the various speaker terminals

Speaker terminal / Amp Assign mode	FRONT-A		FRONT-B		CENTER	SURR		SURR. BACK / AMP ASSIGN	
	R	L	R	L		R	L	R	L
Front A Bi-Amp	FR-A	FL-A	FR-B	FL-B	C	SR	SL	FR FL-A/FR-A Bi-Amp connection	FL
Front B Bi-Amp								FR FL-B/FR-B Bi-Amp connection	FL

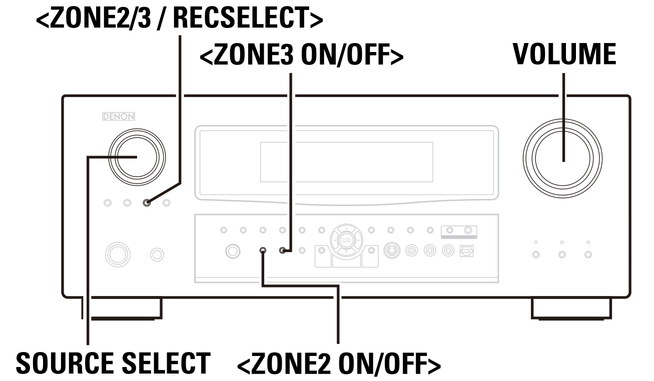
Multi-zone Settings and Operations with Zone Pre-out Output

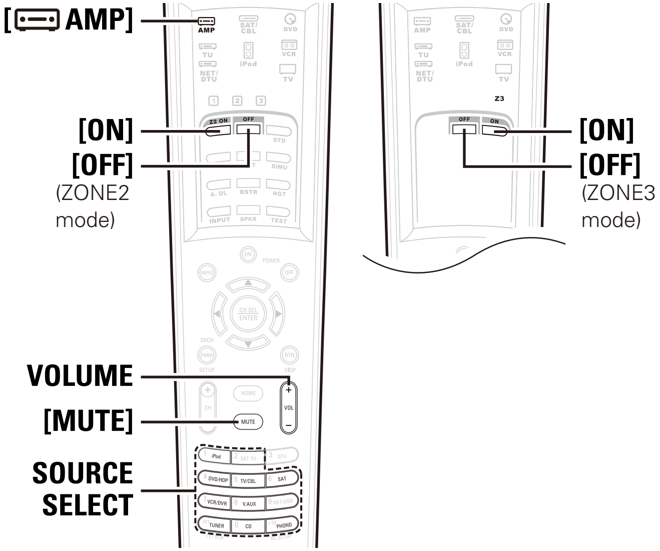
Prepare power amplifiers for ZONE2 and ZONE3.

	Connectors for audio output	Audio signals	Connectors for video output
ZONE2	ZONE2 PRE OUT	Stereo	ZONE2 VIDEO OUT
ZONE3	ZONE3 PRE OUT	Stereo	–

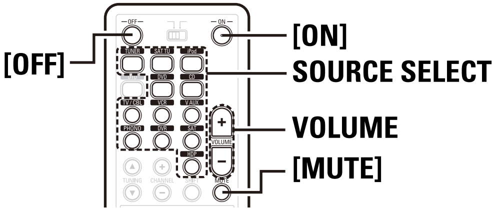


- When only using one speaker for ZONE2 or ZONE3, set to “Mono”. In this case, the ZONE2 (ZONE3) monaural output is output from the ZONE2 (ZONE3) pre-out L and R connectors, so connect as desired.
- Separate power amplifiers are needed for ZONE2 and ZONE3.





(Main remote control unit)



(Sub remote control unit)

About the button names in these explanations

< > : Buttons on the main unit

[ ] : Buttons on the remote control unit

Button name only:

Buttons on the main unit and remote control unit

Multi-zone Operations

Turning the Power On and Off

【Operation on the main unit】

Press **<ZONE2 ON/OFF>** or **<ZONE3 ON/OFF>** for the zone to be operated. When the power turns on, the multi-zone indicator (Z2 or Z3) lights on the display.

【Operation on the remote control unit】

In the zone mode you want to operate, press **[ON]** or **[OFF]**.

Selecting the Input Source

【Operation on the main unit】

① Press **<ZONE2/3 / REC SELECT>** and select the zone to be adjusted.

② Turn **<SOURCE SELECT>**.

【Operation on the remote control unit】

In the zone mode you want to operate, press **[SOURCE SELECT]**.

Adjusting the Volume

【Operation on the main unit】

① Press **<ZONE2/3 / REC SELECT>** and select the zone to be adjusted.

② Turn **<VOLUME>** to adjust.

【Operation on the remote control unit】

In the zone mode whose volume you want to adjust, press **[VOLUME]**.

[Variable range] – – – **–70dB** ~ **–40dB** ~ **+18dB**

The volume can be adjusted when menu “Manual Setup” – “Zone Setup” – “(select the zone)” – “Volume Level” is set to “VAR”. The volume can be increased up to the value set at menu “Manual Setup” – “Zone Setup” – “(select the zone)” – “Volume Limit” (☞page 30).

Turning off the Sound Temporarily

In the zone mode for which you want to mute the sound, press **[MUTE]**.

The sound is reduced to the level set at menu “Manual Setup” – “Zone Setup” – “(select the zone)” – “Mute Level” (☞page 30).

To cancel, either adjust the volume or press **[MUTE]** again.

The setting is canceled when the zone’s power is turned off.

The source selected for ZONE2 is also output from the recording output connectors.

NOTE

- When the input source to which the digital input connectors (OPTICAL/COAXIAL) are assigned is selected in ZONE2 or ZONE3, playback is only possible if the digital signal being input is in PCM (2-channel) format.
- Digital audio signals input from the HDMI connectors cannot be played in multi-zone.
- When certain digital signals are being input, noise may be output from the ZONE2 and ZONE3 audio output connectors.

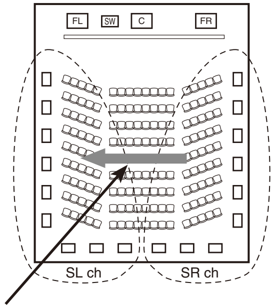
Other Information

About Speaker Installation

Surround back speakers

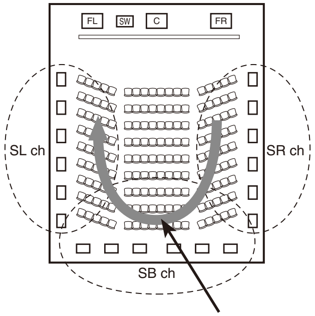
Sound positioning directly to the rear can be achieved easily by adding a surround back speaker to a 5.1-channel system.
In addition, the acoustic image extending between the sides and the rear is narrowed, thus greatly improving the expression of the surround signals for sounds moving from the sides to the back and from the front to the point directly behind the listening position.

Change of positioning and acoustic image with 5.1-channel systems



Movement of acoustic image from SR to SL

Change of positioning and acoustic image with 6.1-channel systems



Movement of acoustic image from SR to SB to SL

In addition to sources recorded in 6.1-channels, the surround effect of conventional 2- to 5.1-channel sources can also be enhanced.

Number of surround back speakers

We recommend using 2 speakers.
When using dipolar speakers in particular, be sure to use 2 speakers.

Placement of the surround left and right channels when using surround back speakers

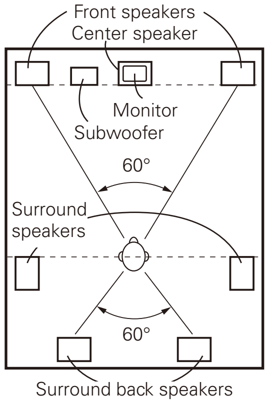
We recommend installing the speakers for the surround "L" and "R" channels a bit forward.

Examples of speaker layouts

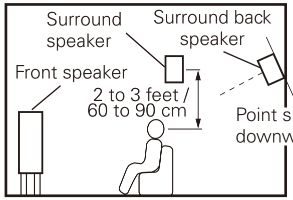
Below we introduce examples of speaker layouts. Refer to these to arrange your speakers according to their type and how you want to use them.

【1】Using surround back speaker(s)

① **When mainly playing movies**
Recommended when your surround speakers are single or 2-way speakers.



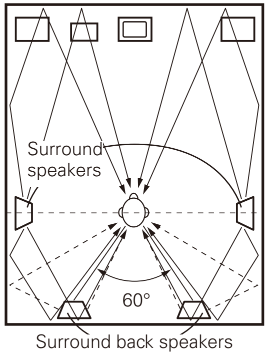
[As seen from above]



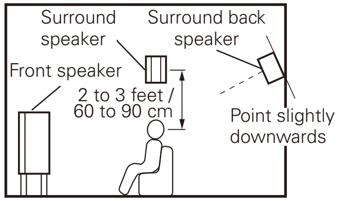
[As seen from the side]

② **Setting for primarily watching movies using diffusion type speakers for the surround speakers**
For the greatest sense of surround sound envelopment, diffuse radiation speakers such as bipolar types, or dipolar types, provide a wider dispersion than is possible to obtain from a direct radiating speaker (monopolar). Place these speakers at either side of the prime listening position, mounted above ear level.

Path of the surround sound from the speakers to the listening position

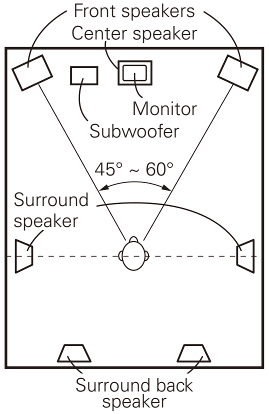


[As seen from above]

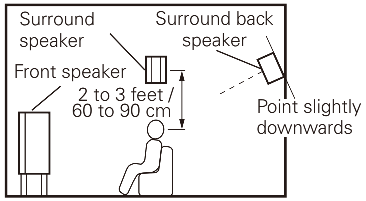


[As seen from the side]

③ **When playing movies and music**

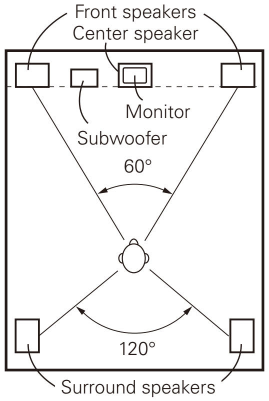


[As seen from above]

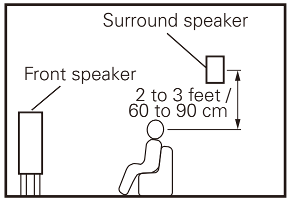


[As seen from the side]

[2] When not using surround back speakers



[As seen from above]



[As seen from the side]

Surround

The AVR-2808CI is equipped with a digital signal processing circuit that lets you play program sources in the surround mode to achieve the same sense of presence as in a movie theater.

Dolby Surround

Dolby Digital

Dolby Digital is a multichannel digital signal format developed by Dolby Laboratories.
A total of 5.1-channels are played: 3 front channels (“FL” , “FR” and “C”), 2 surround channels (“SL” and “SR”) and the “LFE” channel for low frequencies.
Because of this, there is no crosstalk between channels and a realistic sound field with a “three-dimensional” feeling (sense of distance, movement and positioning) is achieved.
A real, overpowering sense of presence is achieved when playing movie sources in AV rooms as well.

Dolby Digital Plus

Dolby Digital Plus is an improved Dolby Digital signal format that is compatible with up to 7.1-channels of discrete digital sound and also improves sound quality thanks to extra data bit rate performance. It is upwardly compatible with conventional Dolby Digital, so it offers greater flexibility in response to the source signal and the conditions of the playback equipment.

Dolby TrueHD

Dolby TrueHD is a high definition audio technology developed by Dolby Laboratories, using lossless coding technology to faithfully reproduce the sound of the studio master.
This format is compatible with a maximum sampling frequency of 96 kHz and up to 7.1-channels, so it is used for applications particularly prioritizing sound quality.

Dolby Pro Logic Ⅱ

Dolby Pro Logic Ⅱ is a matrix decoding technology developed by Dolby Laboratories.
Regular music such as that on CDs is encoded into 5-channels to achieve an excellent surround effect.
The surround channel signals are converted into stereo and full band signals (with a frequency response of 20 Hz to 20 kHz or greater) to create a “three-dimensional” sound image offering a rich sense of presence for all stereo sources.

Dolby Pro Logic Ⅱx

Dolby Pro Logic Ⅱx is a further improved version of the Dolby Pro Logic Ⅱ matrix decoding technology.
Audio signals recorded in 2-channels are decoded to achieve a natural sound with up to 7.1-channels.
There are 3 modes: “Music” suited for playing music, “Cinema” suited for playing movies, and “Game” which is optimized for playing games.

※ Sources recorded in Dolby Surround

Sources recorded in Dolby Surround are indicated with the following logo marks.
Dolby Surround support mark : DOLBY SURROUND

DTS Surround

DTS Digital Surround

DTS Digital Surround is the standard digital surround format of DTS, Inc., compatible with a sampling frequency of 44.1 or 48 kHz and up to 5.1-channels of digital discrete surround sound.

DTS-HD High Resolution Audio

DTS-HD High Resolution Audio is an improved version of the conventional DTS, DTS-ES and DTS 96/24 signals formats, compatible with sampling frequencies of 96 or 48 kHz and up to 7.1-channels of discrete digital sound. High data bit rate performance provides high quality sound. This format is fully compatible with conventional products, including conventional DTS digital surround 5.1-channel data.

DTS-HD Master Audio

DTS-HD Master Audio is DTS, Inc’s lossless audio format compatible with up to 96 kHz/7.1-channels. The lossless audio coding technology faithfully reproduces the sound of the studio master. It is fully compatible with conventional products, including conventional DTS digital surround 5.1-channel data.

DTS-ES™ Discrete 6.1

DTS-ES™ Discrete 6.1 is a 6.1-channel discrete digital audio format adding a surround back (SB) channel to the DTS digital surround sound. Decoding of conventional 5.1-channel audio signals is also possible according to the decoder.

DTS-ES™ Matrix 6.1

DTS-ES™ Matrix 6.1 is a 6.1-channel discrete digital audio format inserting a surround back (SB) channel to the DTS digital surround sound through matrix encoding. Decoding of conventional 5.1-channel audio signals is also possible according to the decoder.

DTS NEO:6™ Surround

DTS NEO:6™ is a matrix decoding technology for achieving 6.1-channel surround playback with 2-channel sources. It includes “DTS NEO:6 CINEMA” suited for playing movies and “DTS NEO:6 MUSIC” suited for playing music.

DTS 96/24

DTS 96/24 is a digital audio format enabling high sound quality playback in 5.1-channels with a sampling frequency of 96 kHz and 24 bit quantization on DVD-Video.

Manufactured under license under U.S. Patent #'s: 5,451,942; 5,956,674; 5,974,380; 5,978,762; 6,226,616; 6,487,535 & other U.S. and worldwide patents issued & pending. DTS is a registered trademark and the DTS logos, Symbol, DTS-HD and DTS-HD Master Audio are trademarks of DTS, Inc.© 1996-2007 DTS, Inc. All Rights Reserved.

Neural Surround

Neural Surround™, a breakthrough in audio technology, will bring the excitement of surround music to more of America's listening audience. It provides the rich envelopment and discrete image detail of surround sound in a format 100 % compatible with stereo. With superior spectral resolution and channel separation, Neural Surround™ draws the brain's attention to sonic details in musical instruments, vocals, and ambience that are typically masked by other playback systems. This allows the listener to fully experience the richness and subtleties in recorded performance as never before. As the chosen format for XM Satellite Radio's new XM HD surround programming, Neural Surround will help deliver more surround music to more listeners than any other broadcast format. XM Satellite Radio will be the first radio company to broadcast surround sound on the radio 24 hours a day and will offer three channels fully dedicated to Neural Surround™ music. This alone will amount to more than 25,000 hours of Neural Surround™ music each year.

neural
SURROUND

This product is manufactured under license from Neural Audio Corporation.
D&M Holdings Inc. hereby grants the user a non-exclusive, nontransferable, limited license right exercisable to use the NA SURROUND Technology and other US and World Wide Patents Pending technology.
"Neural" and "Neural Audio" and "Neural Surround" are trademarks of Neural Audio Corporation. All Rights Reserved.

Audyssey MultEQ® XT

Audyssey MultEQ® XT is the first technology to properly measure sound information throughout a listening area, then combine this information to accurately represent the acoustical problems in the room. Based on these measurements, MultEQ XT calculates an equalization solution that corrects for both time and frequency response problems in every seat.
Audyssey MultEQ XT not only corrects frequency response problem in a large listening area, it also performs a fully automated surround system setup.
For a detailed description, see page 23.

AUDYSSEY
MULTEQ XT

Audyssey MultEQ® XT is a trademark of Audyssey Laboratories. It is licensed under US and National Patent Applications 20030235318 and 10/700,220. Additional U.S. and Foreign Patents pending. MultEQ XT and the Audyssey MultEQ XT logo are trademarks of Audyssey Laboratories, Inc. All rights reserved.

AL24 Processing Plus

AL24 Processing for All Channels
DENON has further developed its proprietary AL24 Processing, an analog waveform reproduction technology, to support the 192-kHz sampling frequency of DVD-Audio. AL24 Processing Plus, thoroughly suppresses quantization noise associated with D/A conversion of LPCM signals to reproduce the low-level signals with optimum clarity that will bring out all the delicate nuances of the music.
Equipped foe not only front left and right channels but also for the surround left and right, center and subwoofer channels.

HDMI (High-Definition Multimedia Interface)

HDMI is a digital interface standard for next generation TVs based on DVI (Digital Visual Interface) standards and optimized for use in consumer equipment.
Non-compressed digital video and multi-channel audio signals are transmitted with a single connection.
HDMI is also compatible with HDCP (High-bandwidth Digital Contents Protection), a technology for protecting copyrights that encrypts digital video signals in the same was as with DVI.

Deep Color

Eliminates on-screen color banding, for smooth tonal transitions and subtle gradations between colors.
Enables increased contrast ratio.
Can represent many times more shades of gray between black and white.
At 30-bit pixel depth, a four times improvement would be the minimum, and the typical improvement would be eight times or more.

xvYCC

Next-generation "xvYCC" color space supports 1.8 times as many colors as existing HDTV signals.
Lets HDTVs display colors more accurately.
Enables displays with natural, vivid colors.

Lip Sync

Because consumer electronics devices are using increasingly complex digital signal processing to enhance the clarity and detail of the content, synchronization of video and audio in user devices has become a greater challenge and could potentially require complex end-user adjustments. HDMI 1.3 incorporates an automatic video/audio synching capability that allows devices to perform this synchronization automatically with total accuracy.

"HDMI", "HDMI logo" and "High-Definition Multimedia Interface" are trademarks or registered trademarks of HDMI Licensing LLC.

Surround Modes and Parameters

Surround mode	Signals and adjustability in the different modes									
	Channel output					Parameter (default values are shown in parentheses)				
	Front L/R	Center	Surround L/R	Surround Back L/R	Subwoofer	D. COMP *1	LFE *2	AFDM *1	SB CH OUT	CINEMA EQ.
PURE DIRECT, DIRECT	○	×	×	×	◎	○ (OFF)	○ (0 dB)	×	×	×
DSD DIRECT	○	×	×	×	×	×	×	×	×	×
DSD MULTI DIRECT	○	◎	◎	◎	◎	×	○ (0 dB)	×	○	×
MULTI CH DIRECT	○	◎	◎	◎	◎	×	○ (0 dB)	○ (ON)	○	×
STEREO	○	×	×	×	◎	○ (OFF)	○ (0 dB)	×	×	×
EXT. IN	○	◎	◎	◎	◎	×	×	×	×	×
MULTI CH IN	○	◎	◎	◎	◎	×	○ (0 dB)	○ (ON)	○	×
WIDE SCREEN	○	◎	◎	◎	◎	○ (OFF)	○ (0 dB)	×	○	○ (OFF)
DOLBY PRO LOGIC IIx	○	◎	◎	◎	◎	○ (OFF)	×	×	○	○ (NOTE1)
DOLBY PRO LOGIC II	○	◎	◎	×	◎	○ (OFF)	×	×	○	○ (NOTE2)
DTS NEO:6	○	◎	◎	◎	◎	○ (OFF)	×	×	○	○ (NOTE1)
DOLBY DIGITAL	○	◎	◎	◎	◎	○ (OFF)	○ (0 dB)	○ (ON)	○	○ (OFF)
DTS SURROUND	○	◎	◎	◎	◎	○ (OFF)	○ (0 dB)	○ (ON)	○	○ (OFF)
neural	○	◎	◎	◎	◎	×	×	×	○	×
7CH STEREO	○	◎	◎	◎	◎	○ (OFF)	○ (0 dB)	×	○	×
SUPER STADIUM	○	◎	◎	◎	◎	○ (OFF)	○ (0 dB)	×	○	×
ROCK ARENA	○	◎	◎	◎	◎	○ (OFF)	○ (0 dB)	×	○	×
JAZZ CLUB	○	◎	◎	◎	◎	○ (OFF)	○ (0 dB)	×	○	×
CLASSIC CONCERT	○	◎	◎	◎	◎	○ (OFF)	○ (0 dB)	×	○	×
MONO MOVIE	○	◎	◎	◎	◎	○ (OFF)	○ (0 dB)	×	○	×
VIDEO GAME	○	◎	◎	◎	◎	○ (OFF)	○ (0 dB)	×	○	×
MATRIX	○	◎	◎	◎	◎	○ (OFF)	○ (0 dB)	×	○	×
VIRTUAL	○	×	×	×	◎	○ (OFF)	○ (0 dB)	×	×	×

○ : Signal / Adjustable
× : No signal / Not adjustable
◎ : Turned on or off by speaker configuration setting
NOTE1 : This parameter is availabe when the menu "Parameter" – "Surround Parameter" – "MODE" is set to "CINEMA" (☞page 38).
NOTE2 : This parameter is availabe when the menu "Parameter" – "Surround Parameter" – "MODE" is set to "CINEMA" or "PL" (☞page 38).

NOTE:

*1 : When playing Dolby Digital and DTS signals.
*2 : When playing Dolby Digital, DTS, DVD-Audio and Super Audio CD.

Surround mode	Signals and adjustability in the different modes													
	Parameter (default values are shown in parentheses)													
	MODE	ROOM SIZE	LEVEL	DELAY TIME	Subwoofer	PRO LOGIC II/IIx MUSIC mode only			NEO:6 MUSIC mode only	EXT. IN only	Tone Control	Night Mode	Room EQ	RESTORER
						PANORAMA	DIMENSION	CENTER WIDTH	CENTER IMAGE	SUBWOOFER ATT.				
PURE DIRECT, DIRECT	×	×	×	×	○	×	×	×	×	×	×	○ (OFF)	○ (NOTE5)	○
DSD DIRECT	×	×	×	×	○	×	×	×	×	×	×	×	×	×
DSD MULTI DIRECT	×	×	×	×	×	×	×	×	×	×	×	×	×	×
MULTI CH DIRECT	×	×	×	×	×	×	×	×	×	×	×	○ (OFF)	○ (NOTE5)	×
STEREO	×	×	×	×	×	×	×	×	×	×	○ (0 dB)	○ (OFF)	○ (OFF)	○
EXT. IN	×	×	×	×	×	×	×	×	×	○	×	×	×	×
MULTI CH IN	×	×	×	×	×	×	×	×	×	×	○ (0 dB)	○ (OFF)	○ (OFF)	×
WIDE SCREEN	×	×	○ (ON, 10)	×	×	×	×	×	×	×	○ (0 dB)	○ (OFF)	○ (OFF)	○
DOLBY PRO LOGIC IIx	○ (CINEMA)	×	×	×	×	○ (OFF)	○ (3)	○ (3)	×	×	○ (0 dB)	○ (OFF)	○ (OFF)	○
DOLBY PRO LOGIC II	○ (CINEMA)	×	×	×	×	○ (OFF)	○ (3)	○ (3)	×	×	○ (0 dB)	○ (OFF)	○ (OFF)	○
DTS NEO:6	○ (CINEMA)	×	×	×	×	×	×	×	○ (0.3)	×	○ (0 dB)	○ (OFF)	○ (OFF)	○
DOLBY DIGITAL	×	×	×	×	×	×	×	×	×	×	○ (0 dB)	○ (OFF)	○ (OFF)	×
DTS SURROUND	×	×	×	×	×	×	×	×	×	×	○ (0 dB)	○ (OFF)	○ (OFF)	×
neural	×	×	×	×	×	×	×	×	×	×	○ (0 dB)	○ (OFF)	○ (OFF)	○
7CH STEREO	×	×	×	×	×	×	×	×	×	×	○ (0 dB)	○ (OFF)	○ (OFF)	○
SUPER STADIUM	×	○ (medium)	○ (10)	×	×	×	×	×	×	×	○ (NOTE3)	○ (OFF)	○ (OFF)	○
ROCK ARENA	×	○ (medium)	○ (10)	×	×	×	×	×	×	×	○ (NOTE4)	○ (OFF)	○ (OFF)	○
JAZZ CLUB	×	○ (medium)	○ (10)	×	×	×	×	×	×	×	○ (0 dB)	○ (OFF)	○ (OFF)	○
CLASSIC CONCERT	×	○ (medium)	○ (10)	×	×	×	×	×	×	×	○ (0 dB)	○ (OFF)	○ (OFF)	○
MONO MOVIE	×	○ (medium)	○ (10)	×	×	×	×	×	×	×	○ (0 dB)	○ (OFF)	○ (OFF)	○
VIDEO GAME	×	○ (medium)	○ (10)	×	×	×	×	×	×	×	○ (0 dB)	○ (OFF)	○ (OFF)	○
MATRIX	×	×	×	○ (30 ms)	×	×	×	×	×	×	○ (0 dB)	○ (OFF)	○ (OFF)	○
VIRTUAL	×	×	×	×	×	×	×	×	×	×	○ (0 dB)	○ (OFF)	○ (OFF)	○

○ : Signal / Adjustable
× : No signal / Not adjustable
NOTE3 : BASS +6 dB, TREBLE 0 dB
NOTE4 : BASS +6 dB, TREBLE +4 dB
NOTE5 : Can be used according to the “Direct Mode” setting.

Differences in Surround Mode Names Depending on the Input Signals

Button	Note	Input signals														
				DTS				DOLBY DIGITAL					DVD-AUDIO		Super Audio CD	
Surround mode		ANALOG	LINEAR PCM	DTS ES DSCRT (With Flag)	DTS ES MTRX (With Flag)	DTS (5.1ch)	DTS 96/24	DOLBY DIGITAL EX (With Flag)	DOLBY DIGITAL EX (With no Flag)	DOLBY DIGITAL (5.1/5/4ch)	DOLBY DIGITAL (4/3ch)	DOLBY DIGITAL (2ch)	DVD-Audio (multi ch)	DVD-Audio (2ch)	DSD (multi ch)	DSD (2ch)
STANDARD																
DTS SURROUND																
DTS ES DSCRT6.1	*1	×	×	● ◎	×	×	×	×	×	×	×	×	×	×	×	×
DTS ES MTRX6.1	*1	×	×	×	● ◎	×	×	×	×	×	×	×	×	×	×	×
DTS SURROUND		×	×	○	○	●	×	×	×	×	×	×	×	×	×	×
DTS 96/24		×	×	×	×	×	●	×	×	×	×	×	×	×	×	×
DTS + PLIIx CINEMA	*2	×	×	○	○	○	○	×	×	×	×	×	×	×	×	×
DTS + PLIIx MUSIC	*1	×	×	○	○	○	○	×	×	×	×	×	×	×	×	×
DTS + NEO:6	*1	×	×	×	○	○	○	×	×	×	×	×	×	×	×	×
DTS NEO:6 CINEMA		○	○	×	×	×	×	×	×	×	×	○	×	○	×	○
DTS NEO:6 MUSIC		○	○	×	×	×	×	×	×	×	×	○	×	○	×	○
DOLBY SURROUND																
DOLBY DIGITAL EX	*1	×	×	×	×	×	×	○	○	○	○	×	×	×	×	×
DOLBY DIGITAL		×	×	×	×	×	×	○	●	●	●	×	×	×	×	×
DOLBY DIGITAL + PLIIx CINEMA	*2	×	×	×	×	×	×	● ◎	○	○	○	×	×	×	×	×
DOLBY DIGITAL + PLIIx MUSIC	*1	×	×	×	×	×	×	○	○	○	○	×	×	×	×	×
DOLBY PRO LOGIC IIx CINEMA		○	○	×	×	×	×	×	×	×	×	●	×	○	×	○
DOLBY PRO LOGIC IIx MUSIC		○	○	×	×	×	×	×	×	×	×	○	×	○	×	○
DOLBY PRO LOGIC IIx GAME		○	○	×	×	×	×	×	×	×	×	○	×	○	×	○
DOLBY PRO LOGIC II CINEMA		○	○	×	×	×	×	×	×	×	×	○	×	○	×	○
DOLBY PRO LOGIC II MUSIC		○	○	×	×	×	×	×	×	×	×	○	×	○	×	○
DOLBY PRO LOGIC II GAME		○	○	×	×	×	×	×	×	×	×	○	×	○	×	○
DOLBY PRO LOGIC		○	○	×	×	×	×	×	×	×	×	○	×	○	×	○
neural		○	○	×	×	×	×	×	×	×	×	×	×	○	×	×
MULTI CH IN																
MULTI CH IN		×	×	×	×	×	×	×	×	×	×	×	●	×	●	×
MULTI IN + PLIIx CINEMA	*2	×	×	×	×	×	×	×	×	×	×	×	○	×	○	×
MULTI IN + PLIIx MUSIC	*1	×	×	×	×	×	×	×	×	×	×	×	○	×	○	×
MULTI CH IN 7.1		×	×	×	×	×	×	×	×	×	×	×	● ◎ (7.1)	×	×	×

NOTE:
*1: This mode is not available when the surround back speaker setup is set to "None".
*2: This mode is not available when the surround back speaker setup is set to "1spkr" or "None".
● : Mode selectable in initial status
◎ : Mode fixed when "AFDM" is "ON"
○ : Selectable mode
× : Non-selectable mode

Button		Note	Input signals														
					DTS				DOLBY DIGITAL					DVD-AUDIO		Super Audio CD	
Surround mode			ANALOG	LINEAR PCM	DTS ES DSCRT (With Flag)	DTS ES MTRX (With Flag)	DTS (5.1ch)	DTS 96/24	DOLBY DIGITAL EX (With Flag)	DOLBY DIGITAL EX (With no Flag)	DOLBY DIGITAL (5.1/5/4ch)	DOLBY DIGITAL (4/3ch)	DOLBY DIGITAL (2ch)	DVD-Audio (multi ch)	DVD-Audio (2ch)	DSD (multi ch)	DSD (2ch)
DIRECT																	
	DIRECT		○	○	○	○	○	○	○	○	○	○	○	×	○	×	○
	DSD DIRECT		×	×	×	×	×	×	×	×	×	×	×	×	×	×	○
	DSD MULTI DIRECT		×	×	×	×	×	×	×	×	×	×	×	×	×	○	×
	MULTI CH DIRECT		×	×	×	×	×	×	×	×	×	×	×	○	×	○	×
	M DIRECT + PLIIx CINEMA	*2	×	×	×	×	×	×	×	×	×	×	×	○	×	○	×
	M DIRECT + PLIIx MUSIC	*1	×	×	×	×	×	×	×	×	×	×	×	○	×	○	×
	M DIRECT 7.1		×	×	×	×	×	×	×	×	×	×	×	○	×	×	×
PURE DIRECT																	
	PURE DIRECT		○	○	○	○	○	○	○	○	○	○	○	×	○	×	○
	DSD PURE DIRECT		×	×	×	×	×	×	×	×	×	×	×	×	×	×	○
	DSD MULTI PURE		×	×	×	×	×	×	×	×	×	×	×	×	×	○	×
	MULTI CH PURE DIRECT		×	×	×	×	×	×	×	×	×	×	×	○	×	○	×
	M PURE D + PLIIx CINEMA	*2	×	×	×	×	×	×	×	×	×	×	×	○	×	○	×
	M PURE D + PLIIx MUSIC	*1	×	×	×	×	×	×	×	×	×	×	×	○	×	○	×
	M CH PURE DIRECT 7.1		×	×	×	×	×	×	×	×	×	×	×	○	×	×	×
DSP SIMULATION																	
	7CH STEREO	*3	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
	WIDE SCREEN		○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
	SUPER STADIUM		○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
	ROCK ARENA		○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
	JAZZ CLUB		○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
	CLASSIC CONCERT		○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
	MONO MOVIE		○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
	VIDEO GAME		○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
	MATRIX		○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
	VIRTUAL		○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
STEREO																	
	STEREO		●	●	○	○	○	○	○	○	○	○	○	○	●	○	●

NOTE :

*1: This mode is not available when the surround back speaker setup is set to “None”.
*2: This mode is not available when the surround back speaker setup is set to “1spkr” or “None”.
*3: If the surround back speaker setup is set to “None”, then “5CH STEREO” is displayed.
● : Mode selectable in initial status
○ : Selectable mode
× : Non-selectable mode

Relationship Between Video Signals and Monitor Output

Video convert	Input signals				MONITOR OUT			
	HDMI	COMPONENT	S-VIDEO	VIDEO	HDMI	COMPONENT	S-VIDEO	VIDEO
ON	×	×	×	×	×	×	×	×
	×	×	×	○	VIDEO	VIDEO	VIDEO	VIDEO
	×	×	○	×	S-VIDEO	S-VIDEO	S-VIDEO	S-VIDEO
	×	×	○	○	S-VIDEO	S-VIDEO	S-VIDEO	S-VIDEO
	×	○ (1080p)	×	×	×	COMPONENT	×	×
	×	○ (480p ~ 720p)	×	×	COMPONENT	COMPONENT	×	×
	×	○ (480i / 576i)	×	×	COMPONENT	COMPONENT	COMPONENT	COMPONENT
	×	○ (1080p)	×	○	VIDEO	COMPONENT*1	VIDEO	VIDEO
	×	○ (480p ~ 720p)	×	○	COMPONENT*1	COMPONENT*1	×	VIDEO
	×	○ (480i / 576i)	×	○	COMPONENT*1	COMPONENT*1	COMPONENT	VIDEO
	×	○ (1080p)	○	×	S-VIDEO	COMPONENT*2	S-VIDEO	S-VIDEO
	×	○ (480p ~ 720p)	○	×	COMPONENT*2	COMPONENT*2	S-VIDEO	S-VIDEO
	×	○ (480i / 576i)	○	×	COMPONENT*2	COMPONENT*2	S-VIDEO	S-VIDEO
	×	○ (1080p)	○	○	S-VIDEO	COMPONENT*2	S-VIDEO	S-VIDEO
	×	○ (480p ~ 720p)	○	○	COMPONENT*2	COMPONENT*2	S-VIDEO	S-VIDEO
	×	○ (480i / 576i)	○	○	COMPONENT*2	COMPONENT*2	S-VIDEO	S-VIDEO
	○	×	×	×	HDMI	×	×	×
	○	×	×	○	HDMI*1	VIDEO	VIDEO	VIDEO
	○	×	○	×	HDMI*2	S-VIDEO	S-VIDEO	S-VIDEO
	○	×	○	○	HDMI*2	S-VIDEO	S-VIDEO	S-VIDEO
	○	○ (Other than 480i / 576i)	×	×	HDMI	COMPONENT	×	×
	○	○ (480i / 576i)	×	×	HDMI	COMPONENT	COMPONENT	COMPONENT
	○	○ (1080p)	×	○	HDMI*1	COMPONENT*1	VIDEO	VIDEO
	○	○ (480p ~ 720p)	×	○	HDMI*1	COMPONENT*1	×	VIDEO
	○	○ (480i / 576i)	×	○	HDMI*1	COMPONENT*1	COMPONENT	VIDEO
	○	○ (Other than 480i / 576i)	○	×	HDMI*2	COMPONENT*2	S-VIDEO	S-VIDEO
	○	○ (480i / 576i)	○	×	HDMI*2	COMPONENT*2	S-VIDEO	S-VIDEO
	○	○ (Other than 480i / 576i)	○	○	HDMI*2	COMPONENT*2	S-VIDEO	S-VIDEO
	○	○ (480i / 576i)	○	○	HDMI*2	COMPONENT*2	S-VIDEO	S-VIDEO

○ : Signal input
× : No signal
480p ~ 720p: 480p / 576p / 1080i / 720p

× : Not output
*1 : On-screen display superimposed on video signal and output.
*2 : On-screen display superimposed on S-Video signal and output.

COMPONENT or HDMI :
On-screen display only displayed for **MENU** button and the main remote control unit’s **PARA** button.

- The main zone video conversion function is compatible with the following format: NTSC, PAL, SECAM, NTSC4.43, PAL-N, PAL-M and PAL-60.
- When SECAM signals of video input are up-converted, the signals are output in PAL format from the S-Video connector.
- When the input signal is a component 1080i or 720p signal, the signal upconverted to HDMI is output with that resolution or 1080p.
- When the input signal is a video, S-Video or component 480i, 480p, 576i or 576p signals, the signal up-converted to HDMI is output according to the setting made at “Resolution” under “HDMI Setup” – “HDMI Video Setup” (☞page 28).
- Signals up-converted to HDMI are output to the HDMI monitor with the resolution at which they are input.

Video convert	S-VIDEO MONITOR OUT	Input signals				MONITOR OUT			
		HDMI	COMPONENT	S-VIDEO	VIDEO	HDMI	COMPONENT	S-VIDEO	VIDEO
OFF	—	×	×	×	×	×	×	×	×
	—	×	×	×	○	×	×	×	VIDEO
	—	×	×	○	×	×	×	S-VIDEO	×
	Used	×	×	○	○	×	×	S-VIDEO	VIDEO*2
	Not used	×	×	○	○	×	×	—	VIDEO
	—	×	○	×	×	×	COMPONENT	×	×
	—	×	○	×	○	×	COMPONENT*1	×	VIDEO
	—	×	○	○	×	×	COMPONENT*2	S-VIDEO	×
	Used	×	○	○	○	×	COMPONENT*2	S-VIDEO	VIDEO*2
	Not used	×	○	○	○	×	COMPONENT*1	—	VIDEO
	—	○	×	×	×	HDMI	×	×	×
	—	○	×	×	○	HDMI	×	×	VIDEO
	—	○	×	○	×	HDMI	×	S-VIDEO	×
	Used	○	×	○	○	HDMI	×	S-VIDEO	VIDEO*2
	Not used	○	×	○	○	HDMI	×	—	VIDEO
	—	○	○	×	×	HDMI	COMPONENT	×	×
	—	○	○	×	○	HDMI	COMPONENT*1	×	VIDEO
	—	○	○	○	×	HDMI	COMPONENT*2	S-VIDEO	×
	Used	○	○	○	○	HDMI	COMPONENT*2	S-VIDEO	VIDEO*2
	Not used	○	○	○	○	HDMI	COMPONENT*1	—	VIDEO

○ : Signal input
× : No signal

× : Not output
*1 : On-screen display superimposed on video signal and output.
*2 : On-screen display superimposed on S-Video signal and output.

COMPONENT or HDMI :
On-screen display only displayed for **MENU** button and the main remote control unit's **PARA** button.

❑ ZONE2 monitor out

Input		Monitor out
S-VIDEO	VIDEO	VIDEO
×	×	×
×	○	○ (VIDEO)
○	×	○ (S-VIDEO)
○	○	○ (S-VIDEO)

○ : Signal present
× : No signal

○ : Output present
× : No output

Troubleshooting

If a problem should arise, first check the following:

1. Are the connections correct?
2. Is the set being operated as described in the owner's manual?
3. Are the other components operating properly?

If this unit does not operate properly, check the items listed in the table below. Should the problem persist, there may be a malfunction.
In this case, disconnect the power immediately and contact your store of purchase.

[General]

Symptom	Cause	Countermeasure	Page
Power does not turn on, or turns off directly after it was turned on.	• Connection of the power cord is faulty.	• Check that the power plugs are securely inserted into the AVR-2808CI's AC inlets and the wall power outlet.	20
No sound is produced from speakers.	• Connection with the input devices or connection of the speaker cables is faulty.	• Check the connections.	9
	• Device you want to play and set input source do not match.	• Select an appropriate input source.	43
	• Master volume is turned too low.	• Adjust the master volume to an appropriate level.	43
	• Mute mode is set.	• Cancel the mute mode.	43
	• Headphones are connected.	• Disconnect the headphones.	43
	• No digital signals are being input.	• Select an input source for which the digital input setting has been made.	35
	• The connectors to which the digital inputs are assigned and the settable input modes do not match.	• Set the input mode.	34
Display is off.	• The "Dimmer" setting is set to "OFF".	• Set to something other than "OFF".	32
	• The PURE DIRECT mode is set.	• Set a surround mode other than the PURE DIRECT mode.	38
"DOLBY DIGITAL" indicator does not appear on display.	• DVD player's digital audio output setting is not proper.	• Check the DVD player's audio output setting. For details, read the DVD player's operating instructions.	–
Power turns off suddenly and power indicator flashes red.	• Protection circuit activated due to rise of internal temperature.	• Turn off the power, wait for the set to fully cool down, then turn the power back on.	10
		• Place the set in a well-ventilated place.	10
	• Core wires of two speakers are touching each other or a core wire is sticking out of the terminal and touching the set's rear panel, activating the protection circuit.	• First unplug the power cord, then twist the core wires tightly or terminate the speaker cables, then reconnect.	10
	• Speakers with an impedance other than specified are being used.	• Use speakers with the specified impedance.	10
	• Set is damaged.	• Turn off the power and contact a DENON service center.	–

[Remote Control Unit]

Symptom	Cause	Countermeasure	Page
Set does not work properly when remote control unit operated.	• Batteries are worn.	• Replace with new batteries.	3
	• You are operating outside of the specified range.	• Operate within the specified range.	3
	• Obstacle between main unit and remote control unit.	• Remove the obstacle.	3
	• The batteries are not inserted in the proper direction, as indicated by the polarity marks in the battery compartment.	• Insert the batteries in the proper direction, following the polarity marks in the battery compartment.	3
	• The set's remote control sensor is exposed to strong light (direct sunlight, inverter type fluorescent bulb light, etc.).	• Move the set to a place in which the remote control sensor will not be exposed to strong light.	3
	• The remote ID of the main unit and remote control unit do not match.	• Set the same remote IDs for the main unit and remote control unit.	54

[Audio]

Symptom	Cause	Countermeasure	Page
No sound is produced from center speaker.	• Monaural source (monitor, AM station, etc.) being played in STANDARD mode.	• The mode is set to something other than "STANDARD".	37
No sound is produced from surround speakers.	• The surround mode is set to "STEREO", "DIRECT" or "PURE DIRECT".	• Set to a surround playback mode.	36, 37
No sound is produced from surround back speaker.	• The surround back speaker's power amplifier is assigned to a different channel. • Surround back speaker setting is set to "None". • Surround mode not set to a mode for 6.1- or 7.1-channel playback.	• Check the setting and change it as necessary. • Set to something other than "None". • Select a surround playback mode.	31 26 36, 37
No sound is produced from subwoofer.	• Subwoofer's power not turned on. • The "Subwoofer" setting at "Speaker configuration" is set to "No". • The subwoofer is not properly connected. • The subwoofer's volume is turned off.	• Turn on the subwoofer's power. • Set to "Yes". • Check the connections. • Adjust the subwoofer's volume to an appropriate level.	– 26 9 50
No test tones are produced when main remote control unit's **TEST TONE** button is pressed.	• Surround mode not set to "STANDARD".	• Set to the STANDARD mode.	37
DTS sound is not output.	• DVD player's audio output setting is not set to bitstream. • DVD player is not compatible with DTS sound playback. • The AVR-2808CI's "Decode Mode" setting is set to "PCM".	• Set the DVD player. For details, refer to the DVD player's operating instructions. • Use a DTS-compatible player. • Set to the "Auto" or "DTS" mode.	– – 34
HDMI audio signals are not output from speakers.	• The "Manual Setup" – "HDMI Setup" – "HDMI Audio Setup" – "HDMI Audio Out" setting is set to "TV".	• Set to "AMP".	27
No sound is output from the monitor connected with HDMI connections.	• The "Manual Setup" – "HDMI Setup" – "HDMI Audio Setup" – "HDMI Audio Out" setting is set to "AMP".	• Set to "TV".	27

[Video]

Symptom	Cause	Countermeasure	Page
No picture appears.	• The connections between the AVR-2808CI and monitor are faulty. • The monitor's input setting is wrong. • PURE DIRECT mode is set. • The player is connected using the component input connectors, the monitor is connected using the video (yellow) or S-Video output connectors.	• Check the connections. • Set properly. • Cancel the PURE DIRECT mode. • High definition (1080i/720p) and progressive (480p/576p) video signals are not down-converted. Set the player to interlace (480i/576i) signals.	11 ~ 20 – 38 –
No picture appears with HDMI connections.	• The connections to the HDMI connectors are faulty. • HDMI input setting is improper. • The monitor is not compatible with copyright protection (HDCP). • The HDMI format of the player and monitor do not match.	• Check the connections. • Check the HDMI input setting. • Connect a monitor that is compatible with copyright protection (HDCP). • Match the HDMI format of the player and monitor.	11 35 11 11
Picture cannot be recorded.	• Input source does not match recorder's video connection connector (video or S-Video).	• The video conversion function does not work for the REC OUT connectors. Match the input source and recorder connections.	15
DVDs cannot be copied on a VCR.	–	• This is not a malfunction. Most movie software includes copy prevention signals and cannot be copied.	–

【iPod】

Symptom	Cause	Countermeasure	Page
iPod cannot be played.	• The input source assigned to "iPod dock" is not selected.	• Switch to the input source assigned at "iPod dock".	36
	• Cable is not properly connected.	• Reconnect.	14
	• Control Dock for iPod's AC adapter is not connected to power outlet.	• Plug the Control Dock for iPod's AC adapter into a power outlet.	–

【XM Satellite Radio】

Symptom	Cause	Countermeasure	Page
"CHECK ANTENNA" is displayed in the XM mode.	• AVR-2808CI's XM connector and the XM Mini-Tuner and Home Dock is not properly connected.	• Check that the connections are correct.	18
"NO SIGNAL" is displayed in the XM mode.	• The signal cannot be received.	• Reposition your XM Mini-Tuner and Home Dock antenna.	46
"OFF AIR" is displayed in the XM mode.	• The selected channel is not currently broadcasting.	• Select another channel.	45, 46
Receiving only XM channels 0 and 1.	• The XM Tuner is not activated.	• Contact XM Radio.	45

Specifications

❑ Audio section

• Power amplifier

Rated output:	Front (A, B): 110 W + 110 W (8 Ω/ohms, 20 Hz ~ 20 kHz with 0.05 % T.H.D.) 140 W + 140 W (6 Ω/ohms, 1 kHz with 0.7 % T.H.D.) Center: 110 W (8 Ω/ohms, 20 Hz ~ 20 kHz with 0.05 % T.H.D.) 140 W (6 Ω/ohms, 1 kHz with 0.7 % T.H.D.) Surround: 110 W + 110 W (8 Ω/ohms, 20 Hz ~ 20 kHz with 0.05 % T.H.D.) 140 W + 140 W (6 Ω/ohms, 1 kHz with 0.7 % T.H.D.) Surround Back: 110 W + 110 W (8 Ω/ohms, 20 Hz ~ 20 kHz with 0.05 % T.H.D.) 140 W + 140 W (6 Ω/ohms, 1 kHz with 0.7 % T.H.D.)
Dynamic power:	120 W x 2ch (8 Ω/ohms) 170 W x 2ch (4 Ω/ohms)
Output terminals:	Front: A or B 6 ~ 16 Ω/ohms A + B 8 ~ 16 Ω/ohms Center, Surround, Surr. Back: 6 ~ 16 Ω/ohms

• Analog

Input sensitivity / Input impedance:	200 mV / 47 kΩ/kohms
Frequency response:	10 Hz ~ 100 kHz — +1, –3 dB (DIRECT mode)
S/N:	102 dB (IHF-A weighted) (DIRECT mode)
Distortion:	0.005 % (20 Hz ~ 20 kHz) (DIRECT mode)
Rated output:	1.2 V

• Digital

D/A output:	Rated output — 2 V (at 0 dB playback) Total harmonic distortion — 0.008 % (1 kHz, at 0 dB) S/N ratio — 102 dB Dynamic range — 96 dB
Digital input:	Format — Digital audio interface

• Phono equalizer (PHONO input — REC OUT)

Input sensitivity:	2.5 mV
RIAA deviation:	±1 dB (20 Hz to 20 kHz)
S/N:	74 dB (A weighting, with 5 mV input)
Rated output:	150 mV
Distortion factor:	0.03 % (1 kHz, 3 V)

❑ Video section

• Standard video terminals

Input / output level and impedance:	1 Vp-p, 75 Ω/ohms
Frequency response:	5 Hz ~ 10 MHz — +0, –3 dB (when video convert set to “OFF”)

• S-Video terminals

Input / output level and impedance:	Y (brightness) signal — 1 Vp-p, 75 Ω/ohms C (color) signal — 0.286 Vp-p, 75 Ω/ohms
Frequency response:	5 Hz ~ 10 MHz — +0, –3 dB (when video convert set to “OFF”)

• Color component video terminal

Input / output level and impedance:	Y (brightness) signal — 1 Vp-p, 75 Ω/ohms PB / CB signal — 0.7 Vp-p, 75 Ω/ohms PR / CR signal — 0.7 Vp-p, 75 Ω/ohms
Frequency response:	5 Hz ~ 100 MHz — +0, –3 dB (when video convert set to “OFF”)

❑ Tuner section

	[FM]	[AM]
	(note: μV at 75 Ω/ohms, 0 dBf = 1 x 10^{-15} W)	
Receiving Range:	87.5 MHz ~ 107.9 MHz	520 kHz ~ 1710 kHz
Usable Sensitivity:	1.0 μV (11.2 dBf)	18 μV
50 dB Quieting Sensitivity:	MONO 1.6 μV (15.3 dBf) STEREO 23 μV (38.5 dBf)	
S/N (IHF-A):	MONO 77 dB STEREO 72 dB	
Total harmonic Distortion (at 1 kHz):	MONO 0.15 % STEREO 0.3 %	

❑ General

Power supply:	AC 120 V, 60 Hz
Power consumption:	6.0 A 0.3 W (Standby)
Maximum external dimensions:	434 (W) x 171 (H) x 420 (D) mm (17-3/32” x 6-47/64” x 16-17/32”)
Weight:	12.8 kg (28 lbs 3.5 oz)

❑ Main remote control unit (RC-1068)

Batteries:	LR6/AA Type (two batteries)
Maximum external dimensions:	63 (W) x 238 (H) x 31 (D) mm (2-31/64” x 9-3/8” x 1-7/32”)
Weight:	190 g (Approx 6.7 oz) (including batteries)

❑ Sub remote control unit (RC-1071)

Batteries:	R03/AAA Type (two batteries)
Maximum external dimensions:	54 (W) x 115 (H) x 23 (D) mm (2-1/8” x 4-17/32” x 29/32”)
Weight:	80 g (Approx 2.8 oz) (including batteries)

∗ For purposes of improvement, specifications and design are subject to change without notice.

Denon Amp

D	Denon	81001, 82001, 83001, 84001

Denon Tuner

D	Denon (Analog)	52863, 52795, 52800, 52805
	Denon (XM Radio)	52864, 52812, 52813, 52814

Denon iPod

D	Denon	72815, 72816, 72817, 72818

Cable

A	A-Mark	00008, 00144
	ABC	00237, 00003, 00008
	Accuphase	00003
	Acorn	00237
	Action	00237
	Active	00237
	ADB	01230
	Aichi Denshi	01512
	Americast	00899
	Amstrad	01222
	Archer	00237
	Auna	01230
	Austar	00276
B	BCC	00276
	Bell South	00899
	Bestlink	00303
	Birmingham Cable Communications	00276
	British Telecom	00003
C	Cable & Wireless	01068
	Century	00008
	Coship	01462
D	Daehan	00778
	Daeryung	01877, 00877, 00477, 00008
	Digeo	01187
	Director	00476
	DX Antenna	01500
E	Emerson	00303
	Encon	00008
F	Fosgate	00276
	Foxtel	01222
	France Telecom	00817
	Freebox	01482
	Fujitsu	01497
G	Galaxi	00008
	GE	00237, 00144
	Gehua	00476
	General Instrument	00476, 00810, 00276, 00003
	Gibralter	00003
	GNI	01466
	GoldStar	00144
H	Hitachi	00003, 00008
	Hongtian Jiangsu	01462
	Hwalin	00303
I	Insight	00476, 00810
J	Jerrold	00476, 00810, 00276, 00003
	Jiuzhou	01445
K	KNC	00008
L	LG	00144
M	Macab	00817
	Madritel	01230
	Maspro	01510
	Matav	01082
	Memorex	00000
	Mitsubishi	00003
	Motorola	01376, 00476, 00810, 00276, 01187
	MS	00303
N	NEC	01496
	Noos	00817
	Nova Vision	00008
	Novaplex	00008
	NTL	00276, 00003, 01060, 01068
O	Oak	00303
	Ono	01068
	Optus	00276, 01060
P	Pace	01877, 00877, 00237, 00008, 01060, 01068, 01577
	Panasonic	00000, 00008, 00144, 01488
	Paragon	00000, 00008, 00525
	Penney	00000
	Philips	01305, 00317, 00817
	Pioneer	01877, 00877, 00144, 00533, 01500
	Pulsar	00000
	PVP Stereo Visual Matrix	00003
Q	Quasar	00000
R	RadioShack	00303
	Regal	00276
	Runco	00000
S	Sagem	00817
	Salora	00000
	Samsung	00003, 00000, 00144, 00778, 00840, 01060, 01666
	Scientific Atlanta	01877, 00877, 00477, 00237, 00003, 00000, 00008, 01510
	Skyworth	01464
	Sony	01006, 01460
	Sprucer	00144
	Starcom	00003
	StarHub	00276
	Sumitomo	01500, 01504
	Supercable	00276
T	Taihan	00778
	TCL	01445
	Telewest	01068
	Time Warner cable	01877
	TongKook	00840
	Torx	00003
	Toshiba	00000, 01509
	Trans PX	00276, 00303
	TS	00003, 00303
U	United Cable	00276, 00003
	US Electronics	00276, 00003, 00008
V	Videoway	00000
	Visiopass	00817
Z	Zenith	00000, 00525, 00899

Cable/PVR Combination ※1

A	Americast	00899
D	Digeo	01187
F	Freebox	01482
G	General Instrument	00810
J	Jerrold	00810
M	Motorola	01376, 00810, 01187
P	Pace	01877, 00237
	Pioneer	01877, 00877
S	Scientific Atlanta	01877, 00877
	Sony	01006
	Supercable	00276
T	Time Warner cable	01877
Z	Zenith	00899

CD Player

A	Acoustic Research	40420
	Advantage	40032
	Aiwa	40157
	Arcam	40157
	Audio Research	40157
	Audiolab	40157
	Audiomeca	40157
	Audioton	40157
	AVI	40157
B	Balanced Audio Technology	40157
	Burmester	40420
	Bush	40388
C	Cairn	40157
	California Audio Labs	40029, 40303
	Cambridge	40157
	Cambridge Audio	40157
	Cambridge Soundworks	40157
	Carver	40157, 40179
	CDC	40420
	CEC	40420
	Copland	40393
	Curtis Mathes	40032
	Cyrus	40157
D	Denon	40873, 40003, 40766, **[42867]** *, 42868
	DKK	40000
	DMX Electronics	40157
	Dual	40003
	Dynaco	40157
	Dynamic Bass	40179
F	Fisher	40000, 40179
G	Garrard	40393, 40420
	Genexxa	40000, 40032, 40037, 40179
	Goldmund	40157
	Grundig	40157
H	Hafler	40173
	Harman/Kardon	40100, 40157, 40173
	Hitachi	40032
I	Inkel	40157
	Integra	40101
J	Jerrold	40003
	JVC	40032, 40072
K	Kenwood	40681, 40000, 40029, 40157, 40028, 40037, 40036, 40190
	KLH	41318
	Krell	40157
L	Linn	40157
	Loewe	40157
	Luxman	40393
	LXI	40179
M	Magnavox	40157
	Marantz	40029, 40157
	Matsui	40157
	MCS	40029
	Memorex	40000, 40032, 40179, 40420, 40468
	Meridian	40157
	Micromega	40157
	Miro	40000
	Mission	40157
	Modulaire	40000, 40032, 40087, 40179, 40420, 40468
	MTC	40420
	Musical Fidelity	40393
	Myryad	40157
N	NAD	40000, 40721
	Naim	40157
	NSM	40157
O	Onkyo	40868, 40101
	Optimus	40000, 40032, 40037, 40087, 40179, 40393, 40420, 40468
	Orion	40393
P	Panasonic	40029, 40303, 40388, 40752
	Parasound	40420
	Penney	40029
	Philips	40157
	Pioneer	40032, 40101, 40468
	Polk Audio	40157
	Proceed	40420
	Proton	40157
Q	QED	40157
	Quad	40157
	Quasar	40029
R	Radiola	40157
	RadioShack	40000, 40032, 40179, 40420, 40468
	RCA	40032, 40053, 40179, 40420, 40468
	Realistic	40000, 40032, 40087, 40179, 40420, 40468
	Restek	40157
	Revox	40157
	Roksan	40420
	Rotel	40157, 40420
	Royal	40420
S	SAE	40157
	Saisho	40000
	Sansui	40000, 40157
	Sanyo	40000, 40087, 40179
	SAST	40157
	Sears	40179
	Sharp	40037
	Siemens	40157
	Silsonic	40036
	Simaudio	40157
	Sonic Frontiers	40157
	Sony	40490, 40000, 40100, 41364, 40185
	Sugden	40157
	Sylvania	40157
T	TAG McLaren	40157
	Tandy	40032
	Tascam	40393, 40420
	Teac	40490, 40393, 40420
	Technics	40029, 40303
	Techwood	40303

	Thomson	40053
	Thorens	40157
	Thule Audio	40157
	Tokai	40420
U	Universum	40157, 40053
V	Victor	40072
W	Wadia	40393
	Wards	40000, 40032, 40157, 40053, 40087, 40179
Y	Yamaha	40490, 40868, 40032, 40036
	Yorx	40000

CD Recorder

D	Denon	40766, 42868
J	JVC	40072
R	RCA	40053, 40420
S	Sony	40000, 40100, 41364
T	Teac	40420
	Thomson	40053

Tape Deck

A	Aiwa	20029, 20197, 20200, 21315
	Akai	20283, 20439
	Arcam	20076
	Audiolab	20029
C	Carver	20029
D	Denon	20076, 20371, 21311, **[22471]** *
F	Fisher	20074
G	Garrard	20308, 20309, 20375, 20439
	Genexxa	20439
	GoldStar	20375
	Grundig	20029, 20375
H	Harman/Kardon	20182, 20029, 21314
I	Inkel	20070, 20071, 20337
J	JVC	20244, 20273, 20274, 20303, 20304, 20310, 21309
K	Kenwood	20070, 20071, 20092, 20233, 20234, 21364
L	LG	20375
	Luxman	20308, 20309
M	Magnavox	20029
	Marantz	20029, 20009
	Memorex	20099
	Mitsubishi	20283, 20439
	Myryad	20029
O	Onkyo	20135, 20136, 20282
	Optimus	20027, 20220, 20337, 20439
	Orion	20308, 20309
P	Palladium	20375
	Panasonic	20229
	Philips	20029, 20229
	Phonotrend	20337
	Pioneer	20027, 20220, 20099, 20109, 21306, 21312
	Polk Audio	20029
R	Radiola	20029
	RCA	20027, 20220
	Revox	20029
S	Sansui	20029, 20009
	Sanyo	20074
	Sharp	20231, 20371
	Sherwood	20337
	Sonic	20375
	Sony	20243, 20170, 20291, 20234, 21313
T	TaeKwang	20439
	Tandberg	20109
	Teac	20280, 20283, 20289, 20308, 20309
	Technics	20229
	Technovox	20229
	Thorens	20029
U	Universum	20375, 20439
V	Victor	20244, 20273, 20274
W	Wards	20027, 20029
	Wharfedale	20439
Y	Yamaha	20097, 20094

HDTV Tuner ※1

A	ABS	01272
	Accurian	01653
	Alienware	01272
C	CyberPower	01272
D	D-Link	01554
	Dgtec	01363
E	Epson	01563
G	Gateway	01272
H	Hewlett Packard	01272, 01267
	Howard Computers	01272
	HP	01272, 01267
	Hush	01272
I	iBUYPOWER	01272
L	LG	01415
	Linksys	01272, 01365
M	Media Center PC	01272
	Microsoft	01272, 01805
	Mind	01272
	Motorola	01363
N	Niveus Media	01272
	Northgate	01272
P	Packard Bell	01272
	Panasonic	01120
	Pioneer	01010
R	Ricavision	01272
S	Samsung	01190, 01490
	Sensory Science	01126
	Sharp	01010
	SMC	01456
	Sony	01272, 01324, 01364
	Stack 9	01272
	Sylvania	01563
	Systemax	01272
T	Tagar Systems	01272
	Toshiba	01272
	Touch	01272
V	Viewsonic	01272, 01329
	Vizio	01126
	Voodoo	01272
X	Xbox	01805
Z	ZT Group	01272

Satellite Receiver

A	@sat	01300
	@Sky	01334
	A-Mark	00345
	ABsat	00123, 00713
	ADB	00642, 01259, 01367, 01418, 01473, 01491
	AGS	00710
	Aiwa	01514
	Akai	00200
	Alba	00455, 00713, 01284, 01659, 01811
	Allsat	00200, 01043
	Alltech	00713
	Allvision	01232, 01334, 01412
	AlphaStar	00772
	Amitronica	00713
	Amstrad	00345, 00713, 00795, 00847, 00863, 00882, 01113, 01175, 01693, 01801
	Anglo	00713
	Ankaro	00713
	AntSat	01083
	Apollo	00455
	Arcon	01043, 01075
	Armstrong	00200
	Arnion	01300
	Asat	00200
	ASCI	01334
	ASLF	00713
	AssCom	00853
	Astacom	00710
	Aston	00142
	Astra	00713
	Astratec	01743
	Astro	00173, 00658, 01099, 01100, 01113
	Atlantic Telephone	01333
	Atsat	01300
	AtSky	01334
	Audioline	01672
	Aurora	00642, 00879, 01333, 01433
	Austar	00497, 00642, 00863, 00879, 01176, 01259
	Axiel	00710
	Axil	01457, 01659
	Axis	01111
B	B@ytronic	01412
	Beko	00455
	Bell ExpressVu	00775
	Big Sat	01457
	Black Diamond	01284
	Blaupunkt	00173
	Blue Sky	00713
	Boca	00713, 01232, 01366
	Boston	00710, 01251
	Brainwave	00658, 01672
	British Sky Broadcasting	00847, 01175, 01662, 01847
	Broco	00713
	BskyB	00847, 01175, 01662
	BT	00710, 01296
	Bubu Sat	00713
	Bush	01284, 01645, 01672, 01743, 01811
C	Canal	00853
	Canal Digital	00853, 01622
	Canal Satellite	00853, 01339, 01853
	Canal+	00853
	Centrex	01457
	CGV	01413, 01567
	Chaparral	00216
	Cherokee	00123, 00710
	Chess	00713, 01085, 01334, 01626
	Chili	01718
	CityCom	00299, 00394, 00818, 01075, 01176, 01232
	Classic	01672
	Clatronic	01413
	CNS	01367
	Comag	01232, 01366, 01412, 01413
	Condor	01700
	Conia	01695
	Contec	00394
	Continental Edison	01695
	Coship	01457
	Crossdigital	01109
	Crown	01284
	Cryptovision	00455, 00795
	Cyfra+	01076
	Cyrus	00200
D	D-box	00723, 00873, 01114
	Daewoo	00713, 01111, 01296, 01743
	Delfa	00863
	Deltasat	01075
	Dgtec	01542, 01631, 01242
	Digenius	00299
	Digiality	01685
	Digifusion	01645, 01743
	DigiLogic	01284
	DigiQuest	00863, 01300, 01457, 01473
	DigiSat	01232
	Digisky	01457
	DigitAll World	01227
	Digiturk	01076
	Digiwave	01631
	Dijam	01296
	DiPro	01367, 01543
	DirecTV	01377, 00392, 00566, 00639, 01639, 01142, 00247, 00749, 01749, 00724, 00819, 01856, 01076, 01108, 00099, 01109, 01414, 01442, 01609, 01392, 01640
	Discovery	00710
	Dish Network System	01505, 01005, 00775, 01775
	Dishpro	01505, 01005, 00775, 01775
	Distratel	01283, 01704
	DMT	01075
	DNT	00200
	Dream Multimedia	01237
	DSE	01375
	DSTV	00642, 00879, 01433
	Durabrand	01284
	DX Antenna	01530
E	Echostar	01505, 01005, 00775, 00455, 00610, 00713, 00853, 00871, 01086, 01200, 01323, 01409, 01418, 01473, 01775
	Einhell	00713
	Elap	00713, 01567
	Elsat	00713
	Elta	00200, 01659
	Emme Esse	00871
	Energy Sistem	01631
	Engel	00713, 01251
	EP Sat	00455
	Esat	00879
	Eurieult	00882

	Eurocrypt	00455
	EuroLine	01251
	Europa	00863
	Europhon	00299
	Eurosky	00262, 00299
	Eurostar	00818
	Eutelsat	00713
	Expressvu	00775, 01775
F	Fenner	00713
	Ferguson	00455, 01291, 01743
	Finlandia	00455
	Finlux	00455
	Flair Mate	00713
	FMD	01251, 01413, 01457
	Force	01101
	Fortec Star	01083
	Foxtel	00455, 00497, 00795, 00879, 01162, 01176, 01356
	Fracapro Planet	00871
	Fracarro	00125, 00871
	France Telecom	00871
	Freesat	00882
	FTE	00863
	FTEmaximal	00713, 00863
	Fuba	00173, 00262, 00299, 00394, 01214, 01251, 01801
	Fugionkyo	00125
	Funai	01377
G	Galaxis	00853, 00863, 01101, 01111, 01557
	Gardiner	00818
	Garnet	01075
	GbSAT	01214
	GE	00392, 00566
	Gecco	01412
	General Instrument	00869
	General Satellite	01176
	GF Good Friends	01043
	GF Star	01043
	Globo	01251, 01334, 01412, 01429, 01626
	GOD Digital	00200
	GOI	00775, 01775
	Gold Box	00853
	Gold Vision	01631
	Golden Interstar	01283
	GoldStar	00394
	Goodmans	00455, 01284, 01291
	Gradiente	00887
	Granada	00455
	Grundig	00173, 00345, 00847, 00853, 00879, 01291
H	Handan	01622
	Hanseatic	01099, 01100
	Hauppauge	01672
	HB	01214, 01801
	HDT	01159
	Hills	01232
	Hirschmann	00125, 00173, 00299, 00710, 00882, 01085, 01111, 01232, 01412
	Hisense	01535
	Hitachi	00749, 00819, 00455, 01250, 01284, 01518, 01523, 01525
	Homecast	01214, 01680, 01700
	Hornet	01300
	Houston	00775
	HTS	00775, 01775
	Hughes Network Systems	01142, 00749, 01749, 01442
	Humax	00863, 01176, 01225, 01406, 01427, 01675, 01743, 01790, 01915
	Huth	01075
	Hyundai	01075, 01159
I	iCan	01367
	ID Digital	01176
	ILLUSION sat	01557, 01631
	iLo	01535
	Imperial	01334, 01429, 01672
	Indovision	00887
	Ingelen	00882
	Innova	00099
	Interstar	01214
	InVideo	00871
	ISkyB	00887
	Italtel	00871
	ITT Nokia	00455, 00723, 00873
J	Jadeworld	00642
	Jaeger	01334
	Jerrold	00869
	Jiuzhou	01450
	JOK	00710
	JVC	00775, 01507, 01531, 01775
K	K-SAT	00713
	Kamm	00713
	Kaon	01300
	KaTelco	01111
	Kathrein	00123, 00173, 00200, 00249, 00394, 00442, 00480, 00504, 00658, 00713, 00818, 01221, 01416, 01561, 01567
	Kennex	00125
	Kenwood	00853
	Klap	00710
	Kocmoc TB	01333
	Koscom	01043
	Kosmos	00442, 01333
	Kreiling	00249, 00658
	Kreiselmeyer	00173
	Kross	01695
L	L&S Electronic	01043, 01334
	Labgear	01296
	LaSAT	00173, 00299
	Lava	01631
	Legend	01718
	Legrand	01718
	Lemon	01334
	Lenco	00713
	Lenoxx	01611
	LG	01075, 01414
	Lifesat	00299, 00713, 01043
	Lodos	01284
	Logik	01284
	Logix	01075
	Lorenzen	00299
	Luxor	00345, 00873
M	M Electronic	00818
	M vision	01557
	Magnavox	00724, 00722
	Manata	00710, 00713
	Manhattan	00455, 00710, 01083
	Marantz	00200
	Maspro	00173, 00713, 01530
	Master's	00394
	Matsui	00173, 00710, 01284, 01743
	Maximum	01075, 01334, 01685
	McIntosh	00869
	MDS	01225
	Mediabox	00853
	Mediacom	01206
	MediaSa	00853
	Medion	00299, 00713, 01043, 01075, 01232, 01334, 01412, 01626
	Medison	00713
	Mega	00200
	Memorex	00724
	Metronic	00713, 00818, 01283, 01334, 01375, 01704
	Metz	00173
	MiCO	01811
	Micro	00713
	Micro Elektronic	00713
	Micro Technology	00713
	Micromaxx	00299
	Microstar	01075
	Microtec	00713
	Mitsubishi	00749, 00455
	Morgan's	00200, 00713, 01232, 01412
	Motorola	00869, 00856, 01473
	MTEC	01214
	Muller	01695
	Multibroadcast	00642, 00879
	Multichoice	00642, 00879, 01333, 01433, 01559, 01560
	Mx Onda	01659
	Myryad	00200
	Mysat	00713
	MySky	01693, 01848, 01850
N	NEC	01519
	NEOTION	01334
	Netgem	01322
	Netsat	00099, 00887
	Neuf TV	01322
	Neuhaus	00713
	Neuling	01232
	Neusat	00713
	Nevir	01659
	Next Level	00869
	Nikko	00200, 00713, 00723
	Noda Electronic	01704
	Nokia	00455, 00723, 00751, 00853, 00873, 01023, 01223, 01723
	Nordmende	00455, 01611
O	OctalTV	01505
	Okano	00442
	Omega	00887
	Opentel	01232, 01412
	Optex	00394, 00713, 01043, 01283, 01611
	Optimus	00724
	Optus	00879
	Orbis	01232, 01334, 01412
	Orbitech	01099, 01100
	Origo	00497
	OSAT	00345
P	P/Sat	01232
	Pace	00200, 00329, 00455, 00497, 00795, 00847, 00853, 00887, 01175, 01323, 01356, 01423, 01693, 01717, 01848, 01850
	Pacific	01284, 01375
	Packard Bell	01111
	Packsat	00710
	Palcom	00299, 01409
	Panarex	01159
	Panasat	00615, 00879, 01333, 01433
	Panasonic	00247, 00701, 00455, 00847, 01304, 01404, 01508, 01526, 01527
	Panda	00173, 00455
	Pansat	01159
	Patriot	00710
	Paysat	00724
	peeKTon	01457
	Philips	01142, 00749, 01749, 00775, 00724, 00819, 01076, 00722, 00099, 00710, 00455, 00818, 00200, 00847, 00853, 00173, 01114, 00133, 01442, 01543, 01672
	Phonotrend	00863, 01200
	Pilotime	01339
	Pino	01334
	Pioneer	01142, 00329, 00853, 01308, 01442
	Planet	00871
	Plasmatic	00442
	PMB	00713, 01611
	Polytron	00394
	Portland	01296
	Preisner	00262, 01101, 01113, 01366
	Premier	00723, 00853, 00873, 01429
	Prima	00795
	Primacom	01111
	Primestar	00869
	Profile	00710
	Promax	00455
	Proscan	00392, 00566
	Proton	01535
Q	QNS	01367, 01402, 01404
	Quadral	00710
	Quelle	00299
R	Radiola	00200
	RadioShack	00566, 00775, 00869
	Radix	00394, 00882, 01113, 01317
	RCA	00392, 00566, 01142, 00775, 00855, 00143, 01291, 01392, 01442
	Rebox	01214
	Regal	01251
	RFT	00200
	Roadstar	00713, 00853
	Rollmaster	01413
	Rover	00713
	Rownsonic	01567
S	SAB	01251
	Saba	00710, 00820
	Sabre	00455
	Sagem	00820, 01114, 01253, 01307, 01690
	Samsung	01377, 01142, 01276, 01108, 01109, 00853, 00863, 01206, 01442, 01458, 01570, 01609, 01700, 01916
	Sat Control	01300
	Sat Team	00713
	SAT+	01409
	Satec	00713
	Satelco	01232
	Satplus	01100

	Satstation	01083
	Schaub Lorenz	01214
	Schneider	00710, 01206, 01251
	Schwaiger	00394, 00504, 00863, 01075, 01083, 01111, 01317, 01334, 01412, 01457
	SCS	00299
	Sedea Electronique	00125, 01206, 01283, 01626
	SEG	01075, 01087, 01251, 01626
	Seleco	00871
	Septimo	01375
	Serd	01412
	Serino	00610
	Servimat	01611
	ServiSat	00713, 01251
	Sharp	01517
	Siemens	00173, 01334, 01429
	Silva	00299
	Skantin	00713
	SKR	00713
	SKY	00856, 00099, 00847, 00887, 01014, 01175, 01662, 01693, 01847, 01848, 01850
	SKY Italia	00853, 01693, 01847, 01848
	Sky Television	01014
	Sky XL	01251, 01412
	Sky+	01175
	Skymaster	00713, 01075, 01085, 01200, 01334, 01409, 01567, 01611
	Skymax	00200
	Skyplus	01232, 01334, 01412
	SkySat	00713
	Skyvision	01334
	SL	00299, 01672
	SM Electronic	00713, 01200, 01409
	Smart	00713, 00882, 01101, 01113, 01232, 01404, 01413
	Sony	00639, 01639, 00455, 00847, 00853, 01524, 01558, 01640
	Star	00887
	Star Choice	00869
	Star Trak	00772, 00869
	Starland	00713
	Starlite	00200
	Stream	01847, 01848
	Strong	00125, 00713, 00820, 00853, 00879, 01159, 01284, 01300, 01409, 01626
	Sunkai	00123
	Sunny	01300
	Sunsat	00713
	Sunstar	00642
	Supernova	00887
	SVA	01455
	Systec	01334
T	Tantec	00455
	Tarbs	01225
	Tatung	00455
	TBoston	01659
	Teac	01225, 01227, 01251, 01322
	Tecatel	01200
	TechniSat	00262, 00455, 00863, 01099, 01100, 01195, 01197, 01322
	Technomate	01283, 01610
	Technosonic	01672
	Technotrend	01429
	Techwood	01284, 01626
	Tele System Electronic	01251, 01409, 01611, 01801
	Teleciel	01043
	TeleClub	01367
	Telefunken	00710
	Teleka	00262, 00442
	Telestar	01099, 01100, 01251, 01334, 01610, 01626
	Telesystem	01801
	Televes	00455, 01214, 01300, 01334
	Televisa	00887
	Telewire	01232
	Tevion	00713, 01409, 01622, 01672
	Thomson	00392, 00566, 00455, 00710, 00713, 00820, 00847, 00853, 01046, 01175, 01291, 01534, 01543, 01662
	Thorn	00455
	Tiny	01672
	Tioko	00394
	Tivo	01142, 01442
	Tokai	00200
	Tonna	00455, 00713, 01611
	Topfield	01206, 01208, 01545, 01783
	Toshiba	00749, 01749, 00790, 00819, 00455, 01285, 01501, 01516, 01530
	TPS	00820, 01253, 01307
	Triax	00200, 00713, 00853, 01113, 01227, 01251, 01291, 01296, 01626
	Trio	01075
	TT-micro	01429
	Turnsat	00713
	Twinner	00713, 01611
U	UEC	00879, 01162, 01333, 01356
	UltimateTV	01392, 01640
	Uniden	00724, 00722
	Unisat	00200
	United	01251
	Universum	00173, 00299, 01087, 01099, 01251
	US Digital	01535
	USDTV	01535
V	Variosat	00173
	Ventana	00200
	Vestel	01251
	VH Sat	00299
	Viasat	01682
	ViewSat	01232
	Visionic	00125, 01283
	VisionNet	01557
	Visiosat	00142, 00710, 00713, 01413, 01457, 01718
	Viva	00856
	Vivid	01162
	Voom	00869
	VTech	00818
W	Wavelength	01232, 01413
	Wewa	00455
	Wharfedale	01284
	Winbox	01801
	Wintel	00299
	Wisi	00173, 00299, 00455
	Worldsat	00123, 00710, 01214, 01251, 01543
X	Xcom	00123
	XMS	01075
	Xsat	00123, 00713, 00847, 01214, 01323
	Xtreme	01300
Y	Yakumo	01413
	Yamada	01718
	Yes	00887
Z	Zehnder	00394, 00504, 00818, 01075, 01232, 01251, 01334, 01412, 01413
	Zenith	00856, 01856
	Zeta Technology	00200
	Zodiac	01801

Satellite Receiver/ PVR Combination ※1, ※3

※1

A	@sat	01300
	Allvision	01412
	Amstrad	01175
	Atsat	01300
B	B@ytronic	01412
	British Sky Broadcasting	01175
	BskyB	01175, 01662
	Bush	01645
C	Canal Satellite	01339
	Comag	01412
D	Digifusion	01645
	DigiQuest	01300
	Digiturk	01076
	DirecTV	01377, 00392, 00639, 01142, 01076, 00099, 01392, 01442, 01640
	Dish Network System	01505, 00775
	Dishpro	01505, 00775
	DMT	01075
	Dream Multimedia	01237
E	Echostar	01505, 00775, 00610
	Expressvu	00775
F	Foxtel	01356
G	GbSAT	01214
	Gecco	01412
	Globo	01412
H	HDT	01159
	Hirschmann	01412
	Homecast	01680
	Hughes Network Systems	01142, 01442
	Humax	01176, 01427, 01675
	Huth	01075
	Hyundai	01075, 01159
K	Kaon	01300
	Kathrein	00249, 00658, 01221, 01561
L	LG	01075
M	Maximum	01334
	Mediacom	01206
	Medion	01412
	Microstar	01075
	Morgan’s	01412
	Motorola	00869
	MTEC	01214
	Multichoice	01333, 01559, 01560
	MySky	01693, 01848, 01850
N	NEOTION	01334
	Nokia	01023
O	Opentel	01412
	Orbis	01412
P	Pace	01175, 01356, 01423, 01850
	Panasonic	01304
	Philips	01142, 00099, 01442
	Pilotime	01339
	Proscan	00392
R	Radix	01317
	RCA	01392
	Rebox	01214
S	Sagem	01253, 01307
	Samsung	01206, 01442, 01570, 01609
	Sat Control	01300
	Schneider	01206
	Schwaiger	01075, 01412
	Sedea Electronique	01206
	Serd	01412
	SKY	01175, 01693, 01848, 01850
	SKY Italia	01848
	Sky XL	01412
	Skymaster	01075
	Skyplus	01412
	Sony	00639, 01640
	Star Choice	00869
	Strong	01300
	Sunny	01300
T	TechniSat	01195, 01197
	Thomson	01175, 01534, 01662
	Topfield	01206, 01545, 01783
	TPS	01253, 01307
X	Xtreme	01300
Z	Zehnder	01075, 01412

※3

H	Hughes Network Systems	20739
P	Philips	20739
S	Samsung	20739

Television

1	888	10264
A	A-Mark	10047, 10054, 10009
	A.R. Systems	10037, 10352, 10374, 10455, 10556
	Accent	10009, 10037
	Accuscan	10047
	Accuscreen	10001
	Acoustic Research	11269
	Action	10030, 10650
	Acura	10009
	Addison	10092, 10108, 10653
	ADL	11217
	Admiral	10047, 10054, 10017, 10051, 10093, 10463, 10180, 10163, 10264, 10418
	Advent	10761, 10783, 10815, 10817, 10842, 10876, 11933
	Adventuri	10000
	Adyson	10217
	AEG	11163, 11556
	Agashi	10217, 10264
	Agna	10150
	Aiko	10092, 10009, 10035, 10037, 10217, 10264, 10361, 10371, 10433
	Aim	10706, 10037, 10455, 10805
	Aiwa	10264, 10701, 11904, 11911
	Akai	10000, 10060, 10812, 10702, 10178, 10030, 10145, 10602, 10606, 10631, 10648, 10672, 10714, 10715, 11207, 11537, 11675, 11676, 11903, 10556, 10548, 10480, 10433, 10371, 10361, 10264, 10218, 10217, 10208, 10163, 10037, 10035, 10009

Akashi	10009, 10860
Akiba	10037, 10218, 10455
Akira	10418
Akito	10037
Akura	10171, 10009, 10037, 10163, 10218, 10264, 10668, 10714, 11037, 11498, 11556, 11982
Alaron	10170
Alba	10009, 10036, 10037, 10073, 10163, 10218, 10352, 10370, 10371, 10418, 10443, 10487, 10668, 10714, 11037
Albatron	10700, 10843
Alfide	10672
All-Tel	10865, 11269
Alleron	10030, 10170
Allorgan	10217
Allstar	10037
Ambassador	10150
America Action	10180
American High	10000, 10060
Amplivision	10217, 10370
Amstrad	10000, 10171, 10009, 10011, 10037, 10163, 10218, 10264, 10362, 10371, 10433, 10648, 11037, 11982
Amtron	10000, 10180
Anam	10250, 10180, 10009, 10037, 10700, 10861
Anam National	10250, 10037, 10650
Andersson	11149, 11163
Anglo	10009, 10264
Anhua	10051
Anitech	10009, 10037, 10264
Ansonic	10009, 10037, 10163, 10370, 10374, 10668
AOC	10451, 10093, 10180, 10060, 10178, 10030, 10092, 10009, 10108
Aolinpike	10264
Apex Digital	10156, 10748, 10879, 10765, 10767, 11217, 11943
AR	10352, 10556
Arc En Ciel	10109
Arcam	10217
Ardem	10037, 10714
Aristocrat	10163
Aristona	10037, 10556
ART	11037
Arthur Martin	10163
ASA	10070
Asberg	10037
Asora	10009
Astra	10037
Asuka	10217, 10218, 10264
ATD	10698
Atlantic	10001, 10037
Atori	10009
Auchan	10163
Audinac	10180
Audiosonic	10009, 10037, 10109, 10217, 10218, 10264, 10370, 10374, 10486, 10714, 10715, 10820
Audioton	10217, 10264, 10370, 10486
Audiovox	10451, 10180, 10092, 10623, 10802, 10875, 11937, 11951, 11952
Audioworld	10698
Aumark	10060
Autovox	10217
Aventura	10171
AVP	10000
Awa	10451, 10009, 10011, 10036, 10108, 10217, 10264, 10374, 10606
Axion	11937, 11958
Axxent	10009

B

Baier	10876
Baihe	10009, 10264
Baile	10001, 10009, 10374, 10661
Baird	10037, 10073, 10109, 10208, 10217, 10343, 11196
Bang & Olufsen	10565
Baohuashi	10264
Baosheng	10009, 10817
Barco	10163, 10556
Basic Line	10009, 10037, 10163, 10217, 10218, 10374, 10455, 10556, 10668, 11037, 11163
Bastide	10217
Bauer	10805
Baur	10037, 10195, 10361, 10455, 10512
Baysonic	10180
Bazin	10217
Beaumark	10017, 10178, 10030
Beijing	10812, 10001, 10009, 10208, 10226, 10264, 10374, 10661, 10817, 10821
Beko	10037, 10195, 10370, 10418, 10486, 10606, 10714, 10715, 10808, 11037
Belcor	10030
Bell & Howell	10054, 10017, 10154, 10093
Belson	10698, 11191
Belstar	11037
BenQ	11032, 11756
Beon	10037, 10163, 10218, 10418
Berthen	10668
Best	10370
Bestar	10037, 10370, 10374
Bestar-Daewoo	10374
Binatone	10217
Black Diamond	10614, 10820, 10821, 11037, 11163, 11909
Blackway	10218
Blaupunkt	10036, 10170, 10195, 10200, 10327, 10455
Blue Sky	10037, 10218, 10455, 10487, 10499, 10556, 10668, 10714, 10715, 11037, 11191, 11363
Boots	10009, 10217
BPL	10037, 10208
Bradford	10180
Brandt	10109, 10287, 10335, 10560, 10625, 10714
Brinkmann	10037, 10418, 10486, 10668
Brionvega	10037, 10362
Britannia	10217
Brockwood	10178, 10030
Broksonic	10236, 10463, 10180, 11911, 11938
Brother	10264
BSR	10163
BTC	10218
Bush	11900, 11556, 11037, 10778, 10714, 10698, 10668, 10661, 10614, 10556, 10487, 10374, 10371, 10361, 10335, 10264, 10218, 10217, 10208, 10163, 10037, 10036, 10009

C

Caihong	10009, 10817
Cailing	10748
Candle	10030
Canton	10218
Capehart	10017, 10178, 10030, 10092, 10036
Capetronic	10030
Capsonic	10264
Carad	10610, 10668, 11037
Carena	10037, 10455
Carnivale	10030
Carrefour	10036, 10037, 10070
Carver	10054, 10170
Cascade	10009, 10037
Casio	10037
Cathay	10037, 10218
CCE	10037, 10217
Celebrity	10000
Celera	10765
Celestial	10767, 10819, 10820, 10821
Centrex	10780
Centrum	11037
Centurion	10037
CGE	10074, 10163, 10370, 10418
Changcheng	10051, 10001, 10009, 10264, 10374, 10661, 10817
Changfei	10009, 10374, 10817
Changfeng	10264, 10817
Changhai	10009, 10817
Changhong	10156, 10765, 10009, 10264, 10508, 10767, 10783, 10817, 10819, 10820, 10821, 11008, 11156
Chengdu	10009, 10817
Ching Tai	10092, 10009
Chun Yun	10000, 10180, 10092, 10009, 10700, 10843
Chunfeng	10009, 10264
Chung Hsin	10180, 10053, 10036, 10108
Chunsun	10009, 10817
Cimline	10009, 10218
Cinema	10672
Cineral	10451, 10092
Cinex	10648, 11556
Citek	10047
Citizen	10054, 10000, 10451, 10463, 10180, 10060, 10030, 10171, 10092, 10001, 10035
City	10009
Clarion	10180
Clarivox	10037, 10070, 10418
Classic	10030, 10092, 10499
Clatronic	10009, 10037, 10217, 10218, 10264, 10370, 10371, 10714
Clayton	11037
CMS Hightec	10217
Colortyme	10047, 10054, 10017, 10060, 10178, 10030
Commercial Solutions	11447, 10047
Concorde	10009
Condor	10009, 10037, 10264, 10370, 10418
Conia	10820, 10821, 11498
Conic	10178
Conrac	10808
Conrowa	10156, 10145, 10009, 10264, 10698, 11156, 11170
Contec	10180, 10009, 10036, 10037
Continental Edison	10109, 10287, 10487
Cosmel	10009, 10037
Craig	10180, 10171
Crosley	10054, 10000, 10180, 10030, 10171, 10074, 10163, 10370
Crown	10093, 10180, 10053, 10009, 10037, 10208, 10370, 10418, 10486, 10487, 10606, 10672, 10712, 10714, 10715, 11037
Crown Mustang	10672
CS Electronics	10218
CTX	11756
Curtis Mathes	10047, 10054, 10154, 10000, 10051, 10451, 10093, 10180, 10060, 10702, 10178, 10030, 10145, 10166, 10037, 10035, 11147, 11347
CXC	10180
Cybertron	10218
Cytronix	11298

D

D-Vision	10037, 10556, 11982
Daewoo	10154, 10451, 10180, 10178, 10030, 10092, 11661, 10634, 10661, 10672, 10700, 10860, 10865, 10876, 10880, 11755, 11756, 11909, 10623, 10556, 10499, 10374, 10264, 10218, 10217, 10170, 10109, 10108, 10037, 10036, 10009
Dainichi	10218
Dansai	10009, 10035, 10036, 10037, 10208, 10217
Dantax	10370, 10486, 10714, 10715
Datsura	10208
Dawa	10009, 10037
Daytek	10672, 11207
Dayton	10092, 10009, 11207
Daytron	10180, 10178, 10030, 10092, 10009, 10036, 10037, 10374
Dayu	10374, 10661
De Graaf	10163, 10208, 10548
Decca	10037, 10217
Degraff	10163, 10208
Deitron	10374
Dell	11080, 11178
Denko	10264
Denon	10145, 10511
Denver	10037, 10587
Desmet	10009, 10037
Diamant	10037
Diamond	10706, 10009, 10371, 10672, 10698, 10820, 10860
Digatron	10037
Digiline	10037, 10668
Digital Life	10872
Digitex	10820
Digitor	10037
Digix Media	10880
Dixi	10009, 10037, 10217
DL	10587, 10780, 10872
Domeos	10668
Domland	10394
Dongda	10009
Donghai	10009
Dream Vision	11164, 11704
DSE	10698, 10820, 11556
DTS	10009
Dual	10037, 10217, 10343, 10352, 10394, 11037, 11137
Dual Tec	10217
Dumont	10017, 10180, 10178, 10070, 10217
Durabrand	10463, 10180, 10178, 10171, 11034, 11463
Dux	10037
Dwin	10093
Dynatech	10217
Dynatron	10037

E	Easy Living	11248
	Eaton	10060
	Ecco	10773
	ECE	10037
	Edison-Minerva	10487
	Elbe	10037, 10217, 10218, 10362, 10610
	Elcit	10163
	Electroband	10000
	Electrograph	11755
	Electrohome	10154, 10000, 10463, 10150, 10178, 10030, 10073
	Elekta	10009, 10264
	Elfunk	11037, 11208
	ELG	10037
	Elin	10009, 10037, 10361, 10548
	Elite	10037, 10218
	Elta	10009, 10264
	Emerald	10178
	Emerson	10047, 10017, 10154, 10451, 10236, 10463, 10180, 10150, 10178, 10171, 11944, 11911, 11909, 10714, 10668, 10623, 10486, 10036, 10371, 10370, 10361, 10037, 10195, 10170, 10070, 10073
	Envision	10030, 10813
	Enzer	10860
	Erae	11371
	Erres	10037
	ESA	10812, 10171, 11944
	ESC	10037, 10217
	Ether	10030, 10009
	Etron	10001, 10009, 10163, 10820
	Eurofeel	10217, 10264
	Euroman	10037, 10217, 10264, 10370
	Europa	10037
	Europhon	10037, 10109, 10217
	Evesham Technology	11248
	Evolution	11756
	Expert	10163
	Exquisit	10037
F	Feilang	10009
	Feilu	10009, 10817
	Feiyan	10264
	Feiyue	10009, 10817
	Fenner	10009, 10374
	Fer0	10335
	Ferguson	10053, 10037, 10073, 10109, 10195, 10287, 10335, 10343, 10443, 10548, 10560, 10625, 11037
	Fidelity	10171, 10037, 10163, 10217, 10264, 10361, 10371, 10512
	Filsai	10217
	Finlandia	10163, 10208, 10346, 10361, 10548
	Finlux	10037, 10070, 10163, 10217, 10346, 10480, 10556, 10631, 10714, 10715, 10808, 11556
	Firstar	10236, 10009
	Firstline	10009, 10037, 10208, 10217, 10361, 10374, 10556, 10668, 10714, 10808, 11037, 11191, 11363, 11371
	Fisher	10047, 10054, 10154, 10000, 10036, 10208, 10217, 10361, 10370
	Flint	10037, 10218, 10264, 10455, 10610
	Force	11149
	Formenti	10037, 10163
	Fortress	10093
	Fraba	10037, 10370
	Friac	10009, 10037, 10370, 10499, 10610
	Frontech	10009, 10163, 10217, 10264
	Fujimaro	10865, 11498
	Fujitsu	10009, 10217, 10352, 10683, 10809, 10853
	Fujitsu General	10009, 10217, 10683
	Fujitsu Siemens	10808, 10809, 11163, 11298
	Funai	10000, 10180, 10171, 10264, 10668, 11271, 11904
	Furi	10145, 10264, 10817
	Furichi	10860
	Futronic	10264, 10860
	Futuretech	10180
G	Galaxi	10037
	Galaxis	10037, 10370
	Ganxin	10817
	Gateway	11755, 11756
	GBC	10009, 10163, 10218, 10374
	GE	11447, 10047, 11454, 10000, 10051, 10451, 10093, 10180, 10060, 10178, 10030, 10092, 11922, 11917, 11347, 11147, 10625, 10560, 10335, 10035
	GEC	10037, 10163, 10217, 10361
	Geloso	10009, 10163, 10374
	Gemini	10047
	General	10109, 10287
	General Technic	10009
	Genesis	10009, 10037
	Genexxa	10009, 10037, 10163, 10218
	Gericom	10808, 10865, 10880, 11217, 11298
	Gevalt	11371
	Giant	10009, 10217
	Gibralter	10017, 10000, 10030
	Go Video	10060, 10886
	Go Vision	11937
	Goldfunk	10668
	GoldStar	10047, 10054, 10154, 10178, 10030, 10715, 10714, 10606, 10455, 10361, 10217, 10163, 10109, 10073, 10037, 10036, 10009, 10001
	Gooding	10487
	Goodmans	10000, 11909, 11900, 11163, 11037, 10880, 10808, 10714, 10668, 10661, 10634, 10625, 10587, 10560, 10556, 10499, 10487, 10480, 10374, 10371, 10343, 10335, 10264, 10218, 10217, 10037, 10036, 10035, 10011, 10009
	Gorenje	10370
	GPM	10218
	Gradiente	10053, 10037, 10170
	Graetz	10163, 10361, 10371, 10487, 10714, 11163
	Gran Prix	10648
	Granada	10036, 10037, 10108, 10163, 10208, 10217, 10226, 10343, 10548, 10560
	Grandin	10009, 10037, 10163, 10218, 10374, 10455, 10610, 10668, 10714, 10715, 10865, 10880, 11037, 11191
	Gronic	10217
	Grundig	10706, 10009, 10036, 10037, 10070, 10163, 10195, 10443, 10487, 10556, 10587, 10672, 10683, 11371
	Grundy	10180, 10195
	Grunkel	11163
	Grunpy	10180
H	H & B	10808
	Haaz	10706
	Haier	11034, 10037, 10508, 10587, 10698, 11017
	Haihong	10009
	Haiyan	10264, 10817
	Halifax	10217, 10264
	Hallmark	10236, 10180, 10178
	Hampton	10217
	Hanimex	10218
	Hankook	10180, 10178, 10030
	Hanseatic	10009, 10037, 10217, 10361, 10370, 10394, 10499, 10556, 10634, 10661, 10714, 10808
	Hantarex	10009, 10037, 10865
	Hantor	10037
	Harley Davidson	10000, 10180, 10060, 10178, 10030, 11904
	Harman/Kardon	10054
	Harsper	10865
	Harvard	10180
	Harwa	10773, 11196, 11269
	Harwood	10009, 10037, 10487
	Hauppauge	10037
	Havermy	10093
	HCM	10009, 10037, 10217, 10218, 10264, 10418
	Heathkit	10017
	Helios	10865
	Hello Kitty	10451
	Hema	10009, 10217
	Hewlett Packard	11494, 11502
	Hifivox	10109
	Highline	10037, 10264
	Hikona	10218
	Hikone	10218
	Hinari	10009, 10036, 10037, 10163, 10208, 10218, 10264, 10352, 10443
	Hisawa	10218, 10455, 10610, 10714
	Hisense	10156, 10748, 10145, 10009, 10208, 10508, 10556, 10780, 10821, 10860, 11022, 11156, 11170, 11208, 11363
	Hitachi	10047, 10054, 10017, 10000, 11256, 10156, 10051, 10150, 10178, 10030, 11145, 10145, 10092, 10744, 10877, 10634, 11037, 11137, 11149, 11156, 11170, 11225, 11576, 11904, 11960, 10578, 10548, 10508, 10499, 10481, 10480, 10343, 10217, 10163, 10109, 10108, 10037, 10036, 10035, 10009
	Hitachi Fujian	10150, 10108, 10860
	Hitec	10698
	Hitsu	10009, 10218, 10455, 10610
	Hoeher	10714, 10865, 11163, 11556
	Home Electronics	10606
	Hongmei	10093, 10009, 10264, 10817
	Hongyan	10264, 10817
	Hornyphon	10037
	Hoshai	10218, 10455
	HP	11494, 11502
	Hua Tun	10009
	Huafa	10145, 10009
	Huanghaimei	10009
	Huanghe	10009, 10817
	Huanglong	10009
	Huangshan	10009, 10264, 10817
	Huanyu	10217, 10264, 10374, 10817
	Huaqiang	10264
	Huari	10145, 10264
	Hugoson	11217
	Huodateji	10051
	Hygashi	10217
	Hyper	10009, 10217
	Hypersonic	10361
	Hypson	10037, 10217, 10264, 10455, 10486, 10556, 10668, 10714, 10715, 11037
	Hyundai	10849, 10860, 10865, 10876, 11556
I	Iberia	10037
	ICE	10037, 10217, 10218, 10264, 10371
	ICeS	10218
	Iiyama	10877, 11217
	Ima	10236, 10180, 10178
	Imperial	10037, 10074, 10370, 10418
	Imperial Crown	10001, 10009, 10264, 10374, 10661
	Indiana	10037
	Infinity	10054
	InFocus	11164
	Ingelen	10163, 10487, 10610, 10714
	Ingersol	10009
	Inno Hit	10009, 10217, 10218, 11163
	Innova	10037
	Innowert	10865, 11298
	Inotech	10773, 10820
	Insignia	10171, 11517
	Inteq	10017, 10145
	Interbuy	10009, 10037, 10264
	Interfunk	10037, 10109, 10163, 10200, 10327, 10361, 10512
	Internal	10037, 11909
	Intervision	10009, 10037, 10217, 10218, 10264, 10394, 10455, 10486, 10487
	Irradio	10009, 10037, 10218, 10371
	Isukai	10037, 10218, 10455
	ITC	10217
	ITS	10037, 10218, 10264, 10371
	ITT	10163, 10208, 10346, 10361, 10480, 10548, 10610
	ITT Nokia	10070, 10163, 10195, 10208, 10346, 10361, 10480, 10548, 10606, 10610
	ITV	10037, 10264, 10374
	IX	10877
J	JBL	10054
	JCB	10000
	JDV	11982
	Jean	10156, 10051, 10236, 10092, 10009, 10036
	JEC	10035
	Jensen	10761, 10815, 10817, 11933
	Jiahua	10051
	JiaLiCai	10009, 10264
	JIL	10030
	Jinfeng	10051, 10208, 10226, 10817
	Jinque	10009, 10264, 10817
	Jinta	10009, 10264
	Jinxing	10054, 10156, 10145, 10009, 10037, 10264, 10556, 10698, 10817, 10821, 11011
	JMB	10443, 10499, 10556, 10634
	JNC	10876
	Jocel	10712
	Johnson	10455
	Jubilee	10556
	Juhua	10264, 10817
	Jutan	10030

	JVC	10054, 10093, 10463, 10053, 10030, 10070, 10036, 10218, 10371, 10418, 10508, 10606, 10650, 10653, 10683, 10731, 11253, 11923
K	Kaige	10009, 10264, 10817
	Kaisui	10009, 10037, 10217, 10218, 10455
	Kambrook	10217
	Kamp	10017, 10180, 10217
	Kangli	10001, 10009, 10264, 10374, 10661, 10817
	Kangyi	10009, 10264
	Kapsch	10163, 10361
	Karcher	10264, 10370, 10606, 10610, 10714, 10778, 11556
	Kathrein	10556
	Kawa	10371
	Kawasho	10030
	KB Aristocrat	10163
	KDS	11498
	KEC	10180, 10060
	Kendo	10037, 10362, 10370, 10610, 10648, 11037
	Kennedy	10163
	Kennex	10668, 11037
	Kenwood	10180, 10030
	Khind	10706
	KIC	10217
	Kiota	10001, 10371, 10455
	Kioto	10706, 10556
	Kiton	10037, 10668
	KLH	10156, 10180, 10765, 10767, 11962
	KLL	10037
	Kloss	10030
	Kneissel	10037, 10362, 10370, 10374, 10499, 10556, 10610
	Kolin	10180, 10150, 10053, 10036, 10108, 11331
	Kolster	10037, 10218
	Kongque	10009, 10264, 10817
	Konichi	10009
	Konig	10037
	Konka	10180, 10037, 10218, 10371, 10418, 10587, 10641, 10714, 10817, 11084
	Kontakt	10487
	Korpel	10037
	Korting	10370
	Kosmos	10037
	Koyoda	10009
	Kreisen	10876
	KTV	10463, 10180, 10030, 10217
	Kuaile	10009, 10264
	Kulun	10009
	Kunlun	10051, 10208, 10226, 10264, 10374, 10661, 10817
	Kyoshu	10418
	Kyoto	10163, 10217
L	L&S Electronic	10714, 10808, 10865
	Lark	10154
	LaSAT	10486
	Lavis	11037
	Leader	10009
	Lecson	10037
	Legend	10009
	Lenco	10037, 10374, 10587
	Lenoir	10009
	Lexsor	11196
	Leyco	10037, 10264
	LG	10054, 11265, 10060, 10178, 10030, 11758, 11637, 11191, 11178, 10856, 10715, 10714, 10700, 10698, 10556, 10370, 10361, 10217, 10163, 10109, 10108, 10037, 10009, 10001
	Liesenk & Tter	10037
	Liesenkotter	10037, 10327
	Lifetec	10009, 10037, 10218, 10374, 10668, 10683, 10714, 11037, 11137
	Lihua	10817
	Lloyd’s	10236, 10180, 10030, 10001, 10009, 11904
	Local India TV	10009, 10208, 10602
	Local Malaysia TV	10698
	Lodos	11037
	Loewe	10037, 10370, 10512, 10633, 10790
	Logik	10236, 10180, 10060, 10001, 10009, 10011, 10371, 10698, 10773, 10880, 11037, 11217
	Logix	10668
	Longjiang	10264, 10817
	Luker	11982
	Luma	10009, 10163, 10362, 10374, 11037
	Lumatron	10037, 10073, 10163, 10217, 10264, 10361, 10556
	Lux May	10009, 10037
	Luxor	10163, 10208, 10217, 10346, 10361, 10480, 10548, 10631, 11037, 11163
	LXI	10047, 10054, 10017, 10154, 10000, 10156, 10051, 10093, 10060, 10053, 10178, 10030, 10171, 10166, 10037, 10036, 10035, 10001, 10208
M	M Electronic	10009, 10037, 10109, 10163, 10195, 10217, 10287, 10343, 10346, 10374, 10480, 10512, 10634, 10661, 10714
	Madison	10037
	MAG	11498
	Magnadyne	10054, 10163
	Magnafon	10073
	Magnasonic	10054, 10000, 10156, 10093, 10030, 10092, 10109
	Magnavox	10047, 11454, 10054, 10154, 10000, 10250, 10051, 10180, 10060, 10030, 10171, 10092, 10706, 11944, 11904, 11755, 11254, 10802, 10780, 10011, 10035, 10037, 10036
	Magnum	10037, 10648, 10714, 10715
	Majestic	10017
	Mandor	10264
	Manesth	10035, 10037, 10217, 10264
	Manhattan	10037, 10668, 10778, 10876, 11037, 11267
	Marantz	11454, 10054, 10030, 10037, 10556, 10704, 10855
	Mark	10009, 10037, 10217, 10374, 10714, 10715
	Master’s	10499
	Mastro	10053, 10706, 10698, 10780
	Masuda	10009, 10037, 10217, 10218, 10264, 10371
	Matsui	11037, 10744, 10714, 10556, 10487, 10455, 10443, 10433, 10371, 10352, 10335, 10217, 10208, 10195, 10163, 10037, 10036, 10035, 10011, 10009
	Matsushita	10250, 10051, 10650
	Maxdorf	10773
	Maxent	11755, 11756
	Maxim	11556, 11982
	MCE	10009
	Meck	10698
	Mediator	10037, 10556
	Medion	10037, 10512, 10556, 10668, 10698, 10714, 10808, 10880, 11037, 11137, 11248, 11900
	Megapower	10700
	Megas	10610
	Megatron	10047, 10178, 10145, 10009
	MEI	11037
	Meile	10264, 10817
	Memorex	10154, 10250, 10463, 10180, 10150, 10060, 10178, 10030, 10009, 10035, 10037, 10195, 10877, 11037, 11911
	Memphis	10009
	Mercury	10060, 10001, 10009, 10037
	Mermaid	10037
	Metronic	10625
	Metz	10037, 10195, 10367, 10388, 10447, 10587, 10668, 10746, 11163
	MGA	10150, 10178, 10030, 10218, 10374
	MGN Technology	10178
	Micro Genius	10150
	Micromaxx	10037, 10668, 10714, 10808, 11037
	Microstar	10808
	MicroTEK	10820, 10860
	Midland	10047, 10017, 10051
	Mikomi	11037, 11149
	Minato	10037, 10556
	Minerva	10070, 10108, 10195, 10487
	Minoka	10037
	Mirror	11900
	Mitsubishi	10154, 10250, 10093, 10236, 10180, 11250, 10150, 10178, 10030, 11917, 11037, 10836, 10817, 10556, 10512, 10195, 10108, 10037, 10036, 10011
	Mivar	10217
	Monaco	10009
	Monivision	10700, 10843
	Morgan’s	10037
	Motorola	10054, 10051, 10093, 10150
	MTC	10180, 10060, 10030, 10092, 10011, 10370, 10512
	MTlogic	10714
	Mudan	10051, 10009, 10208, 10226, 10264, 10817
	Multitec	10037, 10486, 10668, 11037, 11556
	Multitech	10180, 10009, 10037, 10217, 10264, 10370, 10486
	Murphy	10163
	Musikland	10218
	Mx Onda	11498
	Myryad	10556
N	NAD	10156, 10178, 10166, 10037, 10361, 10866, 11156
	Naiko	10037, 10606, 11982
	Nakimura	10037, 10374
	Nanbao	10009, 10264
	Nansheng	10264, 10817
	Narita	11982
	NAT	10226
	National	10051, 10208, 10226, 10508
	NEC	10047, 10154, 10156, 10051, 10053, 10178, 10030, 11704, 11270, 11170, 10817, 10704, 10661, 10653, 10508, 10499, 10455, 10374, 10264, 10217, 10170, 10036, 10011, 10009
	Neckermann	10037, 10200, 10327, 10370, 10418, 10556
	NEI	10037, 10163, 10371
	Neovia	10865, 10876, 11371
	Netsat	10037
	NetTV	11755
	Neufunk	10009, 10037, 10218, 10556, 10610, 10714
	New Tech	10009, 10037, 10217, 10343, 10556
	New World	10218
	Newave	10093, 10178, 10092, 10009
	Nikkai	10009, 10035, 10036, 10037, 10163, 10217, 10218, 10264
	Nikkei	10714
	Nikko	10178, 10030, 10092
	Nikkodo	10178, 10030, 10092
	Nishi	10030
	Nobliko	10070
	Nogamatic	10109
	Nokia	10163, 10208, 10346, 10361, 10374, 10480, 10548, 10606, 10610, 10631
	Norcent	10748, 10824
	Nordic	10217
	Nordmende	10037, 10109, 10195, 10287, 10343, 10560, 10714
	Normerel	10037
	Novatronic	10037, 10374
	NTC	10092
	Nu-Tec	10455, 10698, 10820
	Nyon	10000
O	Oceanic	10163, 10208, 10361, 10548
	Odeon	10264
	Okano	10009, 10037, 10264, 10370
	Olevia	11144, 11240, 11331, 11610
	Omega	10264
	Omni	10748, 10698, 10780, 10872
	Onida	10053, 11253
	Onimax	10714
	Onwa	10180, 10218, 10371, 10433, 10602
	Opera	10037
	Optimus	10154, 10250, 10093, 10180, 10150, 10178, 10030, 10166, 10650
	Optoma	10887
	Optonica	10093
	Orbit	10037
	Orcom	11504
	Orion	10017, 10236, 10463, 10180, 10178, 11463, 10011, 10037, 10264, 10443, 10556, 10714, 10880, 11196, 11911
	Orline	10037, 10218
	Ormond	10668, 11037
	Osaki	10037, 10217, 10218, 10264, 10374, 10556
	Osio	10037
	Oso	10218
	Osume	10036, 10037, 10218
	Otic	11498
	Otto Versand	10093, 10036, 10037, 10109, 10195, 10217, 10226, 10343, 10361, 10512, 10556
P	Pace	10092
	Pacific	10037, 10443, 10556, 10714, 11037, 11137
	Palladium	10037, 10163, 10200, 10217, 10327, 10370, 10418, 10556, 10714, 11137
	Palsonic	10001, 10037, 10217, 10218, 10264, 10418, 10698, 10773, 10778, 11196, 11269, 11904
	Panama	10009, 10037, 10217, 10264
	Panashiba	10001

Panasonic	10054, 10000, 10156, 10250, 10051, 10236, 10030, 11947, 11946, 11941, 11480, 11310, 11291, 11271, 10853, 10650, 10548, 10508, 10367, 10361, 10226, 10208, 10163, 10108, 10037, 10035
Panavision	10037
Panda	10051, 10706, 10009, 10208, 10226, 10264, 10508, 10698, 10780, 10817, 10821
Pathe Cinema	10163
Pathe Marconi	10109
Pausa	10009
Paxonic	10060, 10030
PCE	10156, 10060
Penney	10047, 10000, 10156, 10250, 10051, 10060, 10178, 10030, 10035, 10036, 10037, 10070, 10108, 11347
Perdio	10037, 10163
Perfekt	10037
Petters	11523
Philco	10054, 10451, 10463, 10180, 10178, 10030, 10145, 11661, 10037, 10074, 10163, 10370, 10418
Philharmonic	10217
Philips	11454, 10054, 10017, 10000, 10051, 10178, 10030, 10171, 10092, 11961, 11756, 11254, 10690, 10556, 10512, 10374, 10361, 10343, 10200, 10108, 10037, 10009
Phocus	10714
Phoenix	10037, 10163, 10370, 10486
Phonola	10037, 10556
Pilot	10051, 10060, 10178, 10030, 10706, 10011
Pioneer	10166, 10011, 10037, 10109, 10163, 10170, 10287, 10361, 10370, 10486, 10512, 10679, 10760, 10866, 11260
Pionier	10370, 10486, 11556
Plantron	10009, 10037, 10264
Playsonic	10037, 10217, 10714, 10715
Polaroid	10765, 10865, 11276, 11316, 11341, 11498, 11523
Poppy	10009
Portland	10451, 10092, 10374
Powerpoint	10037, 10487, 10698
Prandoni-Prince	10361
Precision	10236, 10180, 10217
Premier	10009, 10264
President	10860
Prima	10761, 10009, 10264, 10783, 10815, 10817, 11269, 11933
Princeton	10700
Prinston	11037
Prinz	10361
Prism	10250, 10051
Profex	10009, 10163, 10361
Profi	10009
Profilo	11556
Profitronic	10037
Proline	10037, 10073, 10625, 10634, 11037
Proscan	11447, 10047, 11347, 11922
Prosco	10156
Prosonic	10037, 10217, 10370, 10371, 10374, 10668, 10714
Protec	10009, 10037, 10217, 10264
Protech	10009, 10037, 10217, 10264, 10418, 10486, 10668, 11037
Proton	10178, 10030, 10001, 10009
Proview	11498
ProVision	10037, 10556, 10714, 11037
Pulsar	10017, 10092
Pulser	10178, 10092
Pvision	10876, 11191
Pye	10037, 10374, 10556
Pymi	10009

Q

Qingdao	10051, 10208, 10226, 10264, 10817
Quadral	10051, 10218
Quartz	10150, 10178
Quasar	10250, 10051, 10009, 10035, 10650, 10865
Quelle	10011, 10037, 10070, 10074, 10109, 10195, 10200, 10327, 10361, 10512, 10668, 11037
Questa	10036
Questar	10036

R

R-Line	10037
Rabbit	10047
Radialva	10163, 10218
Radiola	10037, 10217, 10556
Radiomarelli	10037
RadioShack	10047, 10154, 10180, 10150, 10178, 10030, 10037, 11904
Radiotone	10009, 10037, 10264, 10370, 10418, 10648, 10668, 11037
Rank	10070
Rank Arena	10036, 10602
RBM	10070
RCA	11447, 10047, 11454, 10054, 10000, 10051, 10093, 10178, 10030, 10092, 11958, 11953, 11948, 11922, 11917, 11547, 11347, 11247, 11147, 11047, 10679, 10625, 10560, 10090
Realistic	10047, 10154, 10180, 10150, 10178, 10030
Recor	10037, 10418
Rectiligne	10037
Rediffusion	10036, 10163, 10346, 10361, 10548
Redstar	10037
Reflex	10037, 10668, 11037
Relisys	10865, 10876, 10877, 11207, 11298
Remotec	10250, 10093, 10145, 10171, 10037
Reoc	10714
Revox	10037
Rex	10163, 10264
RFT	10037, 10264
Rinex	10773
Roadstar	10009, 10037, 10218, 10264, 10418, 10668, 10714, 11037, 11900
Rolson	11371
Rover	10036, 10877
Rowa	10748, 10009, 10037, 10264, 10587, 10698, 10712, 10817
Royal Lux	10335, 10370
Runco	10017, 10060, 10030
Ruyi	10817

S

Saba	10250, 10109, 10163, 10287, 10335, 10343, 10361, 10498, 10548, 10560, 10625, 10714
Sagem	10455, 10610, 10618
Saige	10009, 10817
Saisho	10009, 10011, 10163, 10217, 10264
Saivod	10037, 10668, 10712, 11037, 11163, 11556, 11982
Sakai	10163
Sakyno	10455
Salora	10163, 10208, 10361, 10480, 10548, 10631
Salsa	10335
Sampo	10047, 10154, 10093, 10178, 10030, 10171, 10092, 10009, 10036, 10650, 10700, 11755, 11756
Samsung	10047, 10054, 10017, 10154, 10156, 10093, 10060, 10812, 10702, 10178, 10030, 10092, 10814, 10766, 10718, 10618, 10587, 10817, 10821, 11060, 11249, 11312, 11903, 11959, 10556, 10371, 10370, 10362, 10264, 10226, 10217, 10208, 10163, 10090, 10037, 10036, 10035, 10009
Sandra	10217
Sanjian	10264
Sanky	10060, 10030
Sansui	10463, 10060, 10030, 10706, 10037, 10371, 10455, 10602, 10714, 10861, 11371, 11537, 11904, 11911
Santon	10009
Sanyo	10047, 10054, 10154, 10000, 10156, 10463, 10180, 10145, 10171, 11755, 11208, 10704, 10508, 10370, 10264, 10217, 10208, 10170, 10163, 10108, 10088, 10037, 10036, 10011, 10009
Sanyong	10037
Sanyuan	10093, 10009, 10817
Saville	10060
SBR	10037, 10556
Sceptre	11217
Schaub Lorenz	10361, 10374, 10486, 10548, 10606, 10714, 11191
Schneider	11982, 11904, 11137, 11037, 10714, 10668, 10648, 10556, 10394, 10371, 10361, 10352, 10343, 10218, 10217, 10163, 10070, 10037
Scotch	10178
Scotland	10163
Scott	10236, 10180, 10178, 10030
Sears	10047, 10054, 10017, 10154, 10000, 10156, 10051, 10093, 10060, 10053, 10178, 10030, 10171, 10166, 10035, 10036, 10037, 10001, 10208, 11904
Seaway	10634
Seelver	11037
SEG	10009, 10036, 10037, 10217, 10218, 10264, 10362, 10487, 10668, 11037, 11163
SEI	10037, 10163
Sei-Sinudyne	10037
Seleco	10163, 10264, 10346, 10362, 10371
Semivox	10180
Semp	10156
Sencora	10009
Sentra	10035
Serino	10093, 10455, 10610
Shancha	10264, 10817
Shanghai	10009, 10208, 10226, 10264, 10817
Shaofeng	10145, 10817
Sharp	10054, 10093, 10180, 10053, 10030, 10009, 10036, 10200, 10650, 10653, 10668, 11193, 11393, 11917
Shen Ying	10092, 10009
Shencai	10145, 10009, 10264
Sheng Chia	10093, 10236, 10009
Shenyang	10009, 10264, 10817
Sherwood	10009
Shintoshi	10037
Shivaki	10178, 10037, 10374, 10443, 10556
Show	10009, 10418
Siarem	10163
Siemens	10145, 10037, 10195, 10200, 10327
Siera	10037, 10556
Siesta	10370
Signature	10047, 10093, 10030
Silva	10037, 10361, 10648
Silva Schneider	10037, 11556
Silvano	10587
Silver	10036, 10361, 10455, 10715
SilverCrest	11037
Simpson	10178, 10030, 10011
Singer	10060, 10092, 10009, 10037, 10335, 10371, 10433, 11537
Sinotec	10773
Sinudyne	10037, 10163, 10361
Skantic	10163
SKY	10037, 10880, 11504
Sky Brazil	10880
Sky-North	10037
Skygiant	10180
Skyworth	10748, 10009, 10037, 10264, 10698, 10805, 10817, 11115
Sliding	10865, 10880
SLX	10668
Smaragd	10487
Soemtron	10865, 11298
Solar Drape	10000
Solavox	10037, 10163, 10361, 10548
Sole	10813
Sonawa	10218
Songba	10009
Soniko	10037
Sonitron	10208, 10217, 10370
Sonneclair	10037
Sonoko	10009, 10037, 10217, 10264
Sonolor	10163, 10208, 10361, 10548
Sontec	10009, 10037, 10370
Sony	10017, 10154, 11100, 10000, 10150, 10053, 10011, 10036, 10037, 10074, 10353, 10650, 11505, 11651, 11751, 11904
Sound & Vision	10218, 10374
Soundesign	10180, 10178
Soundwave	10037, 10418, 10715
Sova	11952
Sowa	10156, 10051, 10060, 10178, 10092, 10036, 10226
Soyea	10773
Spectra	10009
Spectravision	10156, 10178
Spectroniq	11498
Squareview	10171
SR2000	10154, 10171
Ssangyong	10009
SSS	10180
Staksonic	10009
Standard	10009, 10037, 10217, 10218, 10374, 11037
Standard Components	10009, 10218
Starlite	10236, 10180, 10009, 10037, 10163, 10264
Stenway	10218
Stern	10163, 10264
Stevison	11982
Strato	10009, 10037, 10264

	Strong	11149, 11163
	Studio Experience	10843
	Stylandia	10217
	Sunkai	10218, 10455, 10487, 10610, 10865
	Sunstar	10009, 10037, 10264, 10371
	Sunwatt	10455
	Sunwood	10037
	Superla	10217
	Superscan	10093, 10864, 11944
	Supersonic	10009, 10208, 10455, 10805
	SuperTech	10009, 10037, 10218, 10556
	Supra	10178, 10009, 10374
	Supreme	10000
	Susumu	10218, 10287, 10335
	Sutron	10009
	SV2000	10054
	SVA	10748, 10587, 10865, 10870, 10871, 10872
	Svasa	10455
	Swisstec	10880, 11504
	Sydney	10217
	Sylvania	10047, 10054, 10154, 10000, 10051, 10178, 10030, 10171, 10092, 10036, 10037, 10876, 11271, 11904, 11944
	Symphonic	10000, 10180, 10178, 10171, 11904, 11944
	Synco	10000, 10451, 10093, 10060, 10178, 10092, 10036
	Syntax	11144, 11240, 11331
	Sysline	10037
T	T+A	10447
	Tacico	10178, 10092, 10009
	Tai Yi	10009
	Taishan	10009, 10374, 10817
	Tandberg	10109, 10361, 10367
	Tandy	10093, 10163, 10217, 10218
	Targa	11371
	Tashiko	10092, 10036, 10163, 10170, 10217, 10650
	Tatung	10054, 10154, 10000, 10156, 10051, 10060, 10037, 10036, 10011, 10009, 10217, 11156, 11191, 11248, 11254, 11371, 11556, 11756
	TCL	10706, 10698, 11027, 11537
	TCM	10714, 10808
	Teac	10154, 10178, 10171, 10706, 11755, 11149, 11037, 10714, 10712, 10698, 10668, 10512, 10455, 10418, 10264, 10217, 10170, 10037, 10009
	Tec	10009, 10037, 10163, 10217, 10335
	Tech Line	10037, 10668, 11163
	Techica	10218
	Technica	11982
	Technics	10054, 10250, 10051, 10226, 10556, 10650
	TechniSat	10556, 11267
	Technisson	10714
	Technosonic	10499, 10556
	Technovox	10030, 10217
	Techview	10847
	Techwood	10250, 10051, 10060, 11163
	Tecnimagen	10556
	Teco	10051, 10093, 10178, 10092, 10009, 10036, 10218, 10264, 10653, 11040
	Tedelex	10009, 10208, 10217, 10418, 10606, 10698, 11537
	Teiron	10009
	Tek	10820
	Teknika	10054, 10463, 10180, 10150, 10060, 10178, 10092
	Tele System Electronic	10876
	Teleavia	10287, 10343
	Telecolor	10017
	Telecor	10037, 10163, 10217, 10218, 10394
	Telefunken	10702, 11504, 10821, 10820, 10819, 10714, 10712, 10698, 10625, 10587, 10560, 10498, 10486, 10346, 10343, 10335, 10287, 10109, 10074, 10073, 10037
	Telefusion	10037
	Telegazi	10037, 10163, 10218, 10264
	Telemeister	10037
	Telesonic	10037
	Telestar	10009, 10037, 10556
	Teletech	10009, 10037, 10668, 11037
	Teleton	10036, 10217
	Televideon	10163
	Teleview	10037
	Tempest	10009, 10264, 10455
	Tennessee	10037
	Tensai	10009, 10037, 10217, 10218, 10371, 10374, 10715, 11037
	Tenson	10009
	Tera	10030, 10092
	Tevion	10037, 10556, 10648, 10668, 10714, 10808, 11037, 11137, 11248, 11298, 11498, 11556
	Texet	10009, 10217, 10218, 10374
	Texla	10780
	ThemeScene	10887
	Thomas	10047, 10178, 10001, 11904
	Thomson	11447, 10047, 10037, 10109, 10287, 10335, 10343, 10560, 10625
	Thorn	10035, 10036, 10037, 10073, 10074, 10109, 10163, 10264, 10335, 10343, 10361, 10499, 10512
	Thorn-Ferguson	10073, 10335, 10343, 10499
	Tiane	10093, 10817
	Tiny	11269
	TMK	10236, 10180, 10178
	TML	11756
	TNCi	10017
	Tobishi	10218
	Tobo	10748, 10009, 10264
	Tocom	10156
	Tokai	10009, 10037, 10163, 10217, 10374, 10668, 11037
	Tokaido	11037
	Tokyo	10035
	Tomashi	10218
	Tongguang	10264
	Tongtel	10587, 10780
	Topline	10668, 11037
	Toshiba	10154, 11256, 10156, 10150, 11265, 10060, 11145, 10145, 10166, 11037, 11156, 11163, 11164, 11356, 11508, 11556, 11656, 11704, 11945, 11971, 10845, 10821, 10718, 10650, 10618, 10508, 10264, 10217, 10195, 10109, 10070, 10036, 10035, 10011, 10009
	Totevision	10051
	Towada	10217
	Toyoda	10009, 10264, 10371
	Toyomenka	10178
	Trakton	10217, 10264
	Trans Continens	10037, 10217, 10668, 11037
	TRANS-continents	10556, 10865
	Transonic	10009, 10037, 10264, 10418, 10455, 10512, 10587, 10698, 10712, 10780
	Triad	10218, 10556
	Trident	10217
	Trio	11498
	Tristar	10218, 10264
	Triumph	10037, 10346, 10556
	Truetone	10250, 10051
	Tuntex	10030, 10092, 10009
	TVS	10463
	TVTEXT 95	10556
U	Uher	10037, 10370, 10374, 10418, 10480, 10486
	Ultra	10092
	Ultravox	10037, 10163, 10374
	Unic Line	10037, 10455
	United	10037, 10587, 10714, 10715, 11037, 11982
	Universal	10047, 10037
	Universum	11163, 11037, 10668, 10631, 10618, 10512, 10480, 10418, 10370, 10362, 10361, 10346, 10327, 10264, 10217, 10200, 10195, 10170, 10109, 10074, 10070, 10037, 10036, 10011, 10009
	Univox	10037, 10163
V	V	10864, 10885, 11755, 11756
	V2max	10865
	V7 Videoseven	10880, 11217, 11755
	Vector Research	10030
	Vestel	10037, 10217, 10668, 11037, 11163
	Vexa	10009, 10037
	Victor	10250, 10053, 10036, 10650, 10653
	Videocon	10508
	Videologic	10218
	Videologique	10217, 10218
	Videomac	10009
	VideoSystem	10037
	Videotechnic	10217, 10374
	Videoton	10163
	Vidikron	10054
	Vidtech	10178, 10036
	Viewpia	10876
	Viewsonic	10857, 10864, 10885, 11330, 11578, 11627, 11755
	Viking	10060
	Viore	11207
	Vision	10037, 10217, 10264
	Vizio	10864, 10885, 11755, 11756, 11758
	Vortec	10037
	Voxson	10178, 10037, 10163, 10418
W	Waltham	10037, 10109, 10217, 10418, 10443, 10668, 11037
	Wards	10047, 10054, 10017, 10154, 10000, 10156, 10051, 10093, 10236, 10180, 10060, 10178, 10030, 10166, 11347, 11156, 11147, 10866, 10195, 10001, 10037, 10035
	Warumaia	10374, 10661
	Watson	10009, 10037, 10163, 10218, 10394, 10668, 10714, 11037
	Watt Radio	10163
	Waycon	10156
	Wega	10036, 10037
	Wegavox	10009
	Weipai	10009
	Welltech	10714
	Weltblick	10217
	Welton	10178
	Weltstar	11037
	Westinghouse	10000, 10451, 10885, 10889, 11282, 11577
	Wharfedale	10037, 10556, 10860, 11556
	White Westinghouse	10451, 10236, 10463, 10037, 10623, 10889, 11909
	Windsor	10668, 11037
	Windy Sam	10556
	Wintel	10714
	World	10451, 10236, 10463, 10180
	World-of-Vision	10865, 10877, 10880, 11217, 11298
	Worldview	10455
X	X-View	11191
	Xenius	10634, 10661
	Xiahua	10009, 10264, 10698, 10773, 10817
	Xianghai	10009
	Xiangyang	10264
	Xiangyu	10009
	Xihu	10264, 10817
	Xingfu	10009
	Xinghai	10264
	XLogic	10698, 10860
	Xoceco	11064
	Xoro	11196, 11217
	XR-1000	10154, 10180, 10171
	Xrypton	10037
Y	Yamaha	10030, 10650, 11576
	Yamishi	10037, 10217, 10218, 10455
	Yapshe	10250
	Yingge	10009
	Yokan	10037
	Yoko	10009, 10037, 10217, 10218, 10264, 10370
	Yonggu	10009
	Yorx	10030, 10218
	Youlanasi	10817
	Yousida	10009
	Yuhang	10009
Z	Zanussi	10163, 10217, 10264
	Zenith	10047, 10017, 10000, 10093, 10463, 11265, 10812, 10178, 10030, 11145, 10145, 10171, 10092, 10037, 11904, 11909, 11911
	ZhuHai	10009, 10374

TV/DVD Combination ※2, ※4

※2

A	Advent	11933
	Akai	11675
	Akura	11982
	Alba	11037
	Amstrad	11982
	Apex Digital	11943
	Audiovox	11937, 11951, 11952
	Axion	11937, 11958
B	Black Diamond	11037
	Bush	10698, 11037, 11900
C	Centrum	11037
	Crown	11037
D	D-Vision	11982
	Denver	10587

E	Elfunk	11037
F	Ferguson	11037
	Finlux	11556
G	Goodmans	10587, 11037, 11900
H	Hitachi	11960
J	JDV	11982
	Jensen	11933
K	KLH	11962
L	Lenco	10587
	Logik	11037
	Luker	11982
	Luxor	11037
M	Matsui	11037
	Maxim	11982
	Medion	11900
	Mirror	11900
N	Naiko	11982
	Narita	11982
P	Panasonic	11941
	Philips	11454, 10556, 11961
	Powerpoint	10698
	Prima	11933
R	RCA	11948, 11958
	Roadstar	11900
S	Saivod	11982
	Samsung	11903
	Schneider	11982
	SEG	11037
	Sova	11952
	Stevison	11982
	Sylvania	10171
T	Teac	10698
	Technica	11982
	Telefunken	10698
	Thomson	10625
	Transonic	10587
U	United	10587, 11037, 11982
V	Vestel	11037

※4

A	Akai	30695
	Akura	31367
	Alba	30695, 30884
	Amstrad	31367
	Apex Digital	30830
B	Black Diamond	30713, 30884
	Broksonic	30695
	Bush	30713, 30884
C	Centrum	30713
	Citizen	30695
	Crown	30713
D	D-Vision	31367
	DMTech	31271
E	Elfunk	30713, 30884
	Emerson	30675, 31268
	ESA	31268
F	Ferguson	30695, 30713, 30884
	Funai	31268
G	Goodmans	30713
	Grandin	30713
	Grundig	30539, 30695
H	Hitachi	31247
I	Insignia	31268
J	JDV	31367
	JNC	31271
K	Konka	31192
L	Logik	30713, 30884
	Luker	31367
	Luxor	30713
M	Magnavox	31268
	Matsui	30713, 30884
	Maxim	31367
N	Naiko	31367
	Narita	31367
	Neovia	31271
O	Orion	30695
P	Pacific	30695
	Panasonic	31490
	Philips	30539, 30854, 31260
R	RCA	31022
S	Saivod	31367
	Samsung	30899
	Sansui	30695
	Schneider	31367
	SEG	30713, 30884
	Sliding	31115
	Stevison	31367
	Sylvania	30630, 30675, 31268
T	Technica	31367
	Thomson	30551
	Toshiba	30695
U	United	30713, 30884, 31367
	Universum	30713
V	Vestel	30884

TV/VCR Combination ※2, ※3, ※4

※2

A	Aiwa	11904, 11911
	America Action	10180
	Amstrad	10171
	Audiovox	10180
B	Beko	10486
	Black Diamond	11909
	Broksonic	10463, 11911
	Bush	11556
C	Curtis Mathes	10051
D	Daewoo	11909
E	Emerson	10236, 10463, 11909, 11911
F	Ferguson	10073, 10625
	Fidelity	10171
	Funai	11904
G	GE	10047, 10051, 10093, 11917, 11922
	GoldStar	10037
	Goodmans	10374, 11909
	Grundig	10037, 10195, 10556
H	Harley Davidson	11904
	Hinari	10036
	Hitachi	11904
I	Internal	11909
J	JVC	11923
L	LG	10178
	Lloyd's	11904
M	Magnavox	10054, 11904
	Memorex	10250
	Mitsubishi	10093, 10556, 11917
O	Orion	10463, 11911
P	Palsonic	11904
	Panasonic	10250, 10051
	Penney	10051
	Philips	10037, 10556
Q	Quasar	10250, 10051
R	Radiola	10556
	RadioShack	11904
	RCA	10047, 10051, 10093, 11917, 11922
S	Saba	10625
	Samsung	11959
	Sansui	10463, 11904, 11911
	Schneider	10037, 10556, 11904
	Sears	11904
	Sharp	10093, 11917
	Siemens	10037
	Sony	10000, 11505, 11904
	Sylvania	10054
	Symphonic	11904
T	Teac	10178, 10171
	Technics	10556
	Thomas	11904
	Thomson	10625
	Toshiba	11971
W	White Westinghouse	11909
Z	Zenith	11904, 11909, 11911

※3

A	Aiwa	20000, 20352, 20479, 20742, 21137
	Akai	20352
	Alba	20352
	America Action	20278
	Amstrad	20000
	Audiovox	20278
B	Beko	20104
	Bestar	20278
	Blue Sky	20278, 20352, 20742
	BPL	20046
	Broksonic	20002, 20479, 21479
	Bush	20352, 20742
C	Citizen	20278, 21278
	Curtis Mathes	20035, 21035
D	Daewoo	20278, 20637, 21278
	Dantax	20352
E	Emerson	20002, 20278, 20479, 20637, 21278, 21479
F	Ferguson	20000, 20278
	Fidelity	20000
	Firstline	20278
	Funai	20000
G	GE	20060, 20035, 20048, 20240, 20807, 21035, 21060
	GoldStar	20037, 20480, 21237
	Goodmans	20278, 20352, 20637
	Grandin	20278, 20742
	Grundig	20081, 20347, 20352, 20742
H	Hanimex	20352
	Harley Davidson	20000
	Hinari	20352
	Hitachi	20000
	Hypson	20037
I	Internal	20278, 20637
J	JBL	20278
	JMB	20352
K	Kambrook	20037
	Kneissel	20278, 20352
L	LG	20037, 20480, 21237
	Lloyd's	20000
	Loewe	20037
M	Magnasonic	20278, 21278
	Magnavox	20081, 20000, 21781
	Magnin	20240
	Matsui	20352, 20742
	Medion	20352
	Memorex	20162, 20037, 21162, 21237, 21262
	MGA	20240
	Mitsubishi	20048, 20081, 20043, 20807
O	Optimus	20162, 21162, 21262
	Orion	20002, 20352, 20479, 20742, 21479
P	Pace	20352
	Pacific	20742
	Palsonic	20000
	Panasonic	20035, 20162, 21035, 21162, 21262
	Penney	20035, 20037, 20240, 21035, 21237
	Philips	20081
	Portland	20637
Q	Quasar	20035, 20162, 21035, 21162
R	Radiola	20081
	RadioShack	20000
	RCA	20060, 20035, 20048, 20240, 20807, 21035, 21060
S	Saba	20320
	Samsung	20240, 20432, 21014
	Sansui	20000, 20479, 21479
	Sanyo	20240
	Saville	20352
	Schneider	20081, 20000
	Sears	20037, 20000, 21237
	SEG	20637
	Sharp	20037, 20048, 20807
	Shivaki	20037
	Siemens	20081
	Sinudyne	20352
	Sony	20032, 20000, 21232
	Supra	20348
	Sylvania	20081, 21781
	Symphonic	20000
T	Tatung	20352
	Teac	20037, 20000, 20637, 20642
	Technics	20081
	Technosonic	20352
	Telefunken	20278
	Thomas	20000
	Thomson	20278
	Toshiba	20352, 20432, 20845, 21145
U	United	20742
W	White Westinghouse	20278, 20637
Z	Zenith	20000, 20479, 20637, 21479

※4

T	Thomson	30551

TV/VCR/DVD Combination ※2, ※3, ※4

※2

A	Akai	11903
B	Broksonic	11938
E	Emerson	11944
	ESA	11944
M	Magnavox	11944
P	Panasonic	11946, 11947
R	RCA	11953

S	Sharp	11917
	Sylvania	11944
	Symphonic	11944
T	Toshiba	11945

※3

S	Sharp	20807

※4

A	Akai	30899
E	Emerson	30821
	ESA	30821
M	Magnavox	30821
P	Panasonic	31362, 31462
R	RCA	31132
S	Sharp	30630
	Superscan	30821
	Sylvania	30821
	Symphonic	30821
T	Toshiba	31045

VCR

A	A-Mark	20037, 20240, 20000, 20278, 20046
	ABS	21972
	Admiral	20060, 20048, 20039, 20047, 20104, 20121, 20209, 20479
	Adventura	20037, 20240, 20000
	Aiko	20278
	Aim	20278, 20348, 20642
	Aiwa	20037, 20032, 20000, 20209, 20041, 20348, 20352, 20479, 20742, 21137
	Akai	20037, 20240, 20041, 20106, 20315, 20348, 20352, 20642
	Akura	20041
	Alba	20081, 20000, 20209, 20278, 20315, 20348, 20352
	Alienware	21972
	Allegro	20039, 21137
	Allorgan	20240
	Allstar	20081
	America Action	20278
	American High	20035, 20081
	Amoisonic	20479
	Amstrad	20000, 20278
	Anam	20162, 20037, 20240, 20278, 20226, 20480
	Anam National	20162, 20226, 21162, 21562
	Ansonic	20000
	Aristona	20081
	ASA	20037, 20081
	Asha	20240
	Astra	20035, 20240
	Asuka	20037, 20081, 20000, 20038
	Audiolab	20081
	Audiosonic	20278
	Audiovox	20037, 20278, 20038
	Avis	20000
	AVP	20000, 20352
	Awa	20037, 20043, 20278, 20642
B	Baird	20000, 20104, 20041, 20278, 20046, 20106
	Basic Line	20104, 20278, 20046
	Beaumark	20240
	Beko	20104
	Bell & Howell	20035, 20048, 20039, 20000, 20104, 20046, 20479
	Bestar	20278
	Black Diamond	20642
	Black Panther	20278
	Blaupunkt	20162, 20081, 20226
	Blue Sky	20037, 20209, 20278, 20348, 20352, 20480, 20642, 20742, 21137
	BPL	20046
	Brandt	20041, 20320
	Brandt Electronique	20041
	Brinkmann	20209, 20348
	Broksonic	20184, 20121, 20209, 20002, 20348, 20479, 21479
	Bush	20081, 20000, 20209, 20278, 20315, 20348, 20352, 20642, 20742
C	Calix	20037
	Candle	20037, 20038
	Canon	20035
	Capehart	20002
	Carena	20081, 20209
	Carrefour	20045
	Carrera	20240
	Carver	20035, 20081
	Casio	20000
	Cathay	20278
	CCE	20278
	CGE	20000, 20041
	Changhong	20048, 20081
	Cimline	20209
	Cineral	20278
	CineVision	21137
	Citizen	20035, 20037, 20240, 20000, 20209, 20278, 20479, 21278
	Classic	20037
	Clatronic	20000, 21593
	Colortyme	20060, 20035, 20045, 20278
	Colt	20000
	Combitech	20352
	Condor	20278
	Craig	20037, 20047, 20240
	Criterion	20000
	Crosley	20035, 20081, 20000
	Crown	20037, 20278, 20480
	Curtis Mathes	20060, 20035, 20162, 20240, 20000, 20041, 20278, 20432, 21035
	Cybernex	20240
	CyberPower	21972
	Cyrus	20081
D	Daewoo	20037, 20045, 20104, 20209, 20278, 20046, 20352, 20637, 20642, 21137, 21278
	Dansai	20278
	Dantax	20352
	Daytron	20037, 20278
	De Graaf	20048, 20081, 20042, 20104, 20046
	Decca	20081, 20000, 20067, 20209, 20041, 20352
	Degraff	20048, 20081, 20042, 20104
	Deitron	20278
	Dell	21972
	Denon	20081, 20042
	Derwent	20041
	Diamant	20037
	Diamond	20348
	Digitor	20642
	DirecTV	20739
	Domland	20209
	DSE	20642
	Dual	20081, 20000, 20041, 20278, 20348
	Dumont	20081, 20000, 20104
	Durabrand	20039, 20038, 20642
	Dynatech	20240, 20000
E	Elbe	20278, 20038
	Electrohome	20060, 20037, 20240, 20000, 20043, 20209
	Electrophonic	20037
	Elin	20240
	Elta	20278
	Emerald	20184, 20121
	Emerex	20032
	Emerson	20035, 20037, 20184, 20039, 20240, 20045, 20000, 20121, 20043, 20209, 20002, 20278, 20348, 20479, 20637, 21278, 21479, 21593
	ESA	21137
	ESC	20240, 20278
	EuroLine	21593
F	Ferguson	20000, 20041, 20278, 20320, 20348
	Fidelity	20240, 20000, 20352, 20432
	Finlandia	20037, 20048, 20081, 20000, 20042, 20104, 20043, 20046, 20106, 20226
	Finlux	20081, 20000, 20042, 20104
	Firstline	20037, 20045, 20042, 20043, 20209, 20278, 20348, 20480, 21137
	Fisher	20039, 20047, 20000, 20104, 20046
	Flint	20209, 20348
	Fuji	20035, 20033
	Fujitsu	20037, 20045, 20000
	Fujitsu General	20037
	Funai	20037, 20000, 20278, 21593
G	Galaxi	20000
	Galaxis	20278
	Garrard	20000
	Gateway	21972
	GE	20060, 20035, 20048, 20240, 20000, 20226, 20320, 20807, 21035, 21060
	GEC	20081
	Gemini	20060
	General	20045
	General Technic	20348
	Genexxa	20037, 20000, 20104, 20278
	Go Video	20240, 20432, 20614, 21137
	GoldStar	20035, 20037, 20039, 20000, 20209, 20278, 20038, 20225, 20226, 20480, 21137, 21237
	Goodmans	20037, 20081, 20240, 20000, 20209, 20278, 20348, 20352, 20637, 20642, 20742
	GPX	20037
	Gradiente	20000
	Graetz	20240, 20104, 20041
	Granada	20035, 20037, 20048, 20081, 20240, 20000, 20042, 20104, 20046, 20226
	Grandin	20037, 20000, 20209, 20278, 20742
	Grundig	20081, 20226, 20320, 20347, 20348, 20352, 20742
H	Haaz	20348
	Hanimex	20352
	Hanseatic	20037, 20081, 20209, 20038
	Haojie	20240
	Harley Davidson	20000
	Harman/Kardon	20081, 20038
	Headquarter	20046
	Hewlett Packard	21972
	HI-Q	20035, 20047, 20000
	Hinari	20240, 20209, 20041, 20278, 20352
	Hisawa	20209, 2035
	Hischito	20045
	Hitachi	20035, 20037, 20081, 20240, 20045, 20000, 20042, 20041, 20046, 20089
	Hoeher	20278, 20642
	Hornyphon	20081
	Howard Computers	21972
	HP	21972
	Hughes Network Systems	20042, 20739
	Humax	20739
	Hush	21972
	Hypson	20037, 20000, 20209, 20278, 20352, 20480
	Hytek	20047, 20000
I	iBUYPOWER	21972
	Imperial	20000
	Ingersol	20240, 20209
	Interbuy	20037
	Interfunk	20081, 20104
	Internal	20278, 20637
	International	20037, 20278, 20642
	Intervision	20037, 20000, 20209, 20278, 20348
	Irradio	20037, 20081, 21137
	ITT	20240, 20104, 20041, 20046, 20106
	ITT Nokia	20240, 20104, 20041, 20106
	ITV	20037, 20278
J	Janeil	20240
	JBL	20278
	Jensen	20067, 20041
	JMB	20209, 20348, 20352, 20742
	Joyce	20000
	JVC	20184, 20081, 20045, 20067, 20041, 21162
K	Kambrook	20037
	Karcher	20081, 20278, 20642
	KEC	20037, 20278
	Kendo	20037, 20209, 20278, 20106, 20315, 20348, 20642
	Kenwood	20067, 20041, 20038, 20046
	KIC	20000
	Kimari	20047
	Kneissel	20037, 20209, 20278, 20348, 20352
	Kodak	20035, 20037
	Kolin	20043, 20041
	Kolster	20209
	KTV	20000
	Kuba	20047
	Kuba Electronic	20047
L	Lenco	20278
	LG	20037, 20240, 20045, 20000, 20042, 20209, 20278, 20038, 20225, 20480, 21137, 21237
	Lifetec	20209, 20348
	Linksys	21972
	Lloyd’s	20240, 20000, 20038
	Loewe	21062, 20162, 20037, 20081, 21262, 21562
	Logik	20240, 20000, 20209, 20106
	Lumatron	20278, 21137
	Lunatron	21137

	Luxor	20048, 20047, 20104, 20043, 20046, 20106, 20315
	LXI	20037, 20000, 20042, 20067
M	M Electronic	20037, 20240, 20000, 20038
	Magnadyne	20081
	Magnasonic	20037, 20240, 20000, 20278, 21278
	Magnavox	20035, 20037, 20048, 20039, 20081, 20240, 20000, 20226, 20618, 20642, 21593, 21781
	Magnin	20240
	Magnum	20642
	Manesth	20081, 20045, 20209
	Marantz	20035, 20081, 20209, 20038
	Mark	20000, 20278
	Marta	20037
	Mastec	20642
	Master's	20278
	Matsui	20037, 20240, 20209, 20278, 20348, 20352, 20742
	Matsushita	20035, 20162, 20081, 20226, 21162
	Media Center PC	21972
	Mediator	20081
	Medion	20209, 20348, 20352, 20642
	MEI	20035
	Memorex	20035, 20162, 20037, 20048, 20039, 20047, 20240, 20000, 20104, 20209, 20278, 20046, 20348, 20479, 21162, 21237, 21262
	Metronic	20081
	Metz	21062, 20162, 20037, 20081, 20226, 20347, 20836, 21162, 21262, 21562
	MGA	20060, 20240, 20043
	MGN Technology	20240
	Micormay	20348
	Micromaxx	20209
	Microsoft	21972
	Midland	20240
	Migros	20000
	Mind	21972
	Minolta	20042
	Mitsubishi	20060, 20048, 20047, 20081, 20000, 20042, 20067, 20043, 20041, 20480, 20642, 20807
	Motorola	20035, 20048
	MTC	20240, 20000
	MTX	20000
	Multitec	20037
	Multitech	20039, 20000
	Murphy	20000
	Myryad	20081
N	NAD	20240, 20104
	Naiko	20348, 20642
	NAP	20039
	National	20226
	Nebula Electronics	20033
	NEC	20035, 20037, 20048, 20104, 20067, 20041, 20278, 20038, 21137
	Neckermann	20081, 20041
	Nesco	20000
	Neufunk	20209
	Newave	20037
	Nikkai	20278
	Nikko	20037, 20278
	Nikkodo	20037, 20278
	Nishi	20240
	Niveus Media	21972
	Noblex	20240
	Nokia	20048, 20081, 20240, 20042, 20104, 20041, 20278, 20046, 20106, 20315
	Nordmende	20067, 20041, 20320
	Northgate	21972
	Nu-Tec	20209
O	Oceanic	20048, 20081, 20000, 20104, 20041, 20046, 20106
	Okano	20209, 20278, 20315, 20348
	Olympus	20035, 20162, 20104, 20226
	Onimax	20642
	Onkyo	20222
	Optimus	21062, 20035, 20162, 20037, 20048, 20047, 20240, 20000, 20104, 20432, 21162, 21262
	Orion	20184, 20240, 20000, 20104, 20121, 20209, 20002, 20278, 20348, 20352, 20479, 20742, 21479
	Orson	20000
	Osaki	20037, 20000
	Otake	20209
	Otto Versand	20081
P	Pace	20352
	Pacific	20000, 20348, 20642, 20742
	Packard Bell	21972
	Palladium	20037, 20209, 20041, 20348
	Palsonic	20000, 20642
	Panama	20035
	Panasonic	21062, 20035, 20162, 20000, 20225, 20226, 20614, 20616, 20836, 21035, 21162, 21262, 21562
	Pathe Cinema	20043
	Pathe Marconi	20041
	Penney	20035, 20162, 20037, 20047, 20081, 20240, 20000, 20042, 20067, 20038, 21035, 21237
	Pentax	20042
	Perdio	20000, 20209
	Philco	20035, 20081, 20000, 20209, 20038, 20226, 20479
	Philips	20035, 20162, 20048, 20081, 20045, 20000, 20209, 20226, 20616, 20618, 20739, 21081, 21181
	Phoenix	20278
	Phonola	20081
	Pilot	20037
	Pioneer	20162, 20081, 20042, 20067
	Polk Audio	20081
	Portland	20278, 20637
	Presidian	21593
	Prinz	20000
	Profitronic	20081, 20240
	Proline	20000, 20278, 20320, 20642
	Proscan	20060, 21060
	Prosco	20278
	Prosonic	20209, 20278
	Protec	20000
	Protech	20081
	ProVision	20278
	Pulsar	20039, 20240, 20278
	Pulser	20240
	Pye	20081, 20000
Q	Qisheng	20060
	Quarter	20046
	Quartz	20035, 20047, 20046
	Quasar	20035, 20162, 20002, 20278, 20226, 21035, 21162
	Quelle	20081
R	Radialva	20037, 20048, 20081
	Radiola	20081
	Radionette	20037, 21137
	RadioShack	20035, 20162, 20037, 20048, 20047, 20240, 20000, 20104, 20046, 21162
	Radix	20037
	Randex	20037
	Rank	20041
	Rank Arena	20041
	RCA	20060, 20035, 20048, 20240, 20045, 20000, 20042, 20106, 20226, 20320, 20807, 20880, 21035, 21060
	Realistic	20035, 20162, 20037, 20048, 20047, 20240, 20000, 20104, 20121, 20278, 20046, 21162
	Reoc	20348
	ReplayTV	20614, 20616
	Rex	20041
	Ricavision	21972
	Rio	21137
	Roadstar	20037, 20081, 20240, 20278, 20038, 20742
	Runco	20039
S	Saba	20041, 20278, 20320
	Saisho	20209, 20348
	Salora	20104, 20043, 20046, 20106
	Sampo	20037, 20048
	Samsung	20060, 20240, 20045, 20000, 20038, 20432, 20739, 21014
	Samtron	20240
	Sanky	20048, 20039
	Sansei	20048
	Sansui	20240, 20000, 20067, 20209, 20041, 20002, 20106, 20348, 20479, 21479
	Sanyo	20048, 20047, 20240, 20000, 20104, 20067, 20209, 20046, 20348, 20479, 21137
	Saville	20240, 20278, 20352
	SBR	20081
	ScanSonic	20240
	Schaub Lorenz	20000, 20104, 20041, 20106, 20315, 20348
	Schneider	20037, 20081, 20240, 20000, 20042, 20278, 20348, 20352, 20642, 21137
	Scott	20184, 20045, 20121, 20043
	Sears	20060, 20035, 20162, 20037, 20048, 20039, 20047, 20033, 20045, 20000, 20042, 20104, 20067, 20043, 20209, 20041, 21237, 20046
	Seaway	20278
	SEG	20081, 20240, 20278, 20637, 20642
	SEI	20081
	Sei-Sinudyne	20081
	Seleco	20037, 20041
	Semp	20045
	Sentra	20278
	Sharp	20037, 20048, 20047, 20032, 20000, 20209, 20807
	Shinco	20000
	Shintom	20039, 20240, 20000, 20104
	Shivaki	20037
	Shogun	20240
	Siemens	20037, 20081, 20104, 20046, 20320, 20347
	Siera	20081
	Signature	20060, 20035, 20037, 20048, 20000, 20046, 20479
	Silva	20037
	Silver	20278
	SilverCrest	20642
	Singer	20037, 20240, 20045, 20348
	Sinudyne	20081, 20209, 20352
	Smaragd	20348
	Sonic Blue	20614, 20616, 21137
	Sonographe	20046
	Sonolor	20048, 20046
	Sontec	20037, 20278
	Sonwa	20642
	Sony	20035, 20048, 20047, 20032, 20033, 20000, 20067, 20046, 20106, 20226, 20636, 21232, 21972
	Soundmaster	20000
	Soundwave	20037, 20209, 20348
	Stack 9	21972
	Standard	20278
	Stern	20278
	STS	20042
	Sunkai	20209, 20278, 20348
	Sunstar	20000
	Suntronic	20000
	Supra	20037, 20278, 20348
	Susumu	20037
	SV2000	20000
	SVA	20000
	Sylvania	20035, 20081, 20000, 20043, 21593, 21781
	Symphonic	20240, 20000, 20002, 21593
	Systemax	21972
T	T+A	20162
	Tagar Systems	21972
	Taisho	20209
	Tandberg	20278
	Tandy	20000, 20104
	Tashiko	20037, 20048, 20081, 20240, 20000
	Tatung	20048, 20081, 20045, 20000, 20067, 20043, 20209, 20041, 20348, 20352
	Tchibo	20348
	TCM	20348
	Teac	20037, 20000, 20067, 20041, 20278, 20637, 20642, 21593
	Technics	20035, 20162, 20037, 20081, 20000, 20226, 21162
	TechniSat	20348
	Technosonic	20352
	Teco	20035, 20037, 20048, 20041, 20038
	Tedelex	20037, 20209, 20348, 20642
	Teknika	20035, 20037, 20000
	Teleavia	20041
	Telecorder	20240
	Telefunken	20209, 20041, 20278, 20320, 20642
	Telerent	20226
	Telestar	20037
	Teletech	20000, 20278
	Tensai	20037, 20000, 20278
	Tevion	20209, 20348, 20479, 20642
	Texet	20278
	Thomas	20000, 20002
	Thomson	20060, 20067, 20041, 20278, 20320
	Thorn	20037, 20104, 20041, 20320
	Tisonic	20278
	Tivo	20618, 20636, 20739, 21996
	TMK	20240, 20000

	TNIX	20037
	Tocom	20240
	Tokai	20037, 20104, 20041
	Topline	20348
	Toshiba	20081, 20240, 20045, 20000, 20042, 20067, 20043, 20209, 20041, 20352, 20432, 20742, 20845, 21008, 21145, 21972, 21996
	Tosonic	20278
	Totevision	20037, 20240
	Touch	21972
	Toyoda	20278
	Tradex	20081
	Triad	20278
	Trix	20037
U	Uher	20240
	Ultra	20045, 20278
	Ultravox	20278
	Unitech	20240
	United	20348, 20742, 21593
	Universum	20037, 20081, 20240, 20000, 20104, 20209, 20106, 20348, 21137
V	Vector	20045
	Vector Research	20184, 20038
	Victor	20067, 20041
	Video Concepts	20045
	Video Technic	20000
	Videomagic	20037
	Videosonic	20240, 20000
	Viewsonic	21972
	Villain	20000
	Voodoo	21972
W	Wards	20060, 20035, 20037, 20048, 20039, 20047, 20081, 20033, 20240, 20045, 20000, 20042, 20043, 20041, 20038, 20046, 20479
	Watson	20081, 20352, 20642
	Weltblick	20037
	Wharfedale	20642
	White Westinghouse	20000, 20209, 20278, 20479, 20637
	World	20209, 20002, 20348, 20479
X	XR-1000	20035, 20240, 20000
Y	Yamaha	20041, 20038
	Yamishi	20278
	Yoko	20037, 20240
Z	Zenith	20037, 20039, 20033, 20000, 20209, 20041, 20278, 20479, 20637, 21137, 21479
	ZT Group	21972
	ZX	20209, 20348, 20352

PVR ※3

A	ABS	21972
	Alienware	21972
C	CyberPower	21972
D	Dell	21972
	DirecTV	20739
G	Gateway	21972
	Go Video	20614
H	Hewlett Packard	21972
	Howard Computers	21972
	HP	21972
	Hughes Network Systems	20739
	Humax	20739
	Hush	21972
I	iBUYPOWER	21972
L	Linksys	21972
M	Media Center PC	21972
	Microsoft	21972
	Mind	21972
N	Niveus Media	21972
	Northgate	21972
P	Panasonic	20614, 20616
	Philips	20618, 20739
R	RCA	20880
	ReplayTV	20614, 20616
S	Samsung	20739
	Sonic Blue	20614, 20616
	Sony	20636, 21972
	Stack 9	21972
	Systemax	21972
T	Tagar Systems	21972
	Tivo	20618, 20636, 20739
	Toshiba	21008, 21972, 21996
	Touch	21972
V	Viewsonic	21972
	Voodoo	21972
Z	ZT Group	21972

DVD Player

1	3D LAB	30503, 30539
	4Kus	31158
A	A-Trend	30714
	Acoustic Solutions	30713, 30730, 31228
	AEG	30770, 30788, 30790, 31923
	AFK	31051, 31152, 31923
	Aim	30672, 30699, 30833
	Airis	30672, 31005, 31224, 31250, 31321, 31345
	Aiwa	30533, 30641
	Akai	30690, 30695, 30705, 30770, 30788, 30790, 30884, 30898, 30899, 31115, 31205, 31233, 31695
	Akashi	30838
	AKI	31005
	Akira	30699, 31321
	Akura	30898, 31051, 31140, 31233, 31367
	Alba	30672, 30539, 30717, 30695, 30699, 30713, 30730, 30783, 30884, 31140, 31530, 31695
	Alco	30790
	Alize	31151
	All-Tel	31451
	Allegro	30869
	Altacom	31224
	Amitech	30784, 30770, 30850
	Amoi	30852
	Amphion Media Works	30872
	Amstrad	30713, 30770, 31151, 31367
	AMW	30872
	Anam	31913
	Ansonic	30759, 30774, 30831
	Apex Digital	30533, 30672, 30717, 30755, 30794, 30796, 30797, 30830, 31004, 31020, 31056, 31061
	Aristona	30539, 30646
	Arrgo	31023
	ASCOMTEC	31923
	Asono	31224
	Aspire Digital	31168
	Atacom	31224
	Audiosonic	30690, 31923
	Audiovox	30717, 30790
	Audioworld	30790
	Autovox	30713
	Auvio	30843
	Awa	30730, 30872
	Axion	30730
B	Base	31451
	Basic Line	30713
	Baze	30898
	BBK	30862, 31224
	Beep	31163
	Bellagio	31004
	Belson	31086, 31923
	Binatone	31923
	Black Diamond	30713, 30833, 30884
	Blaupunkt	30717
	Blu:sens	31233, 31321
	Blue Nova International	31321
	Blue Parade	30571
	Blue Sky	30672, 30651, 30695, 30699, 30713, 30790, 30843, 31423
	Boghe	31004
	Boman	30783, 30898, 31005
	Bose	32023
	Brainwave	30770, 31115
	Brandt	30503, 30651, 30551
	Broksonic	30695
	Bush	30672, 30717, 30690, 30699, 30713, 30723, 30730, 30831, 30833, 30884, 31051, 31140, 31483, 31695, 31832
	Byd:sign	30872
C	C-Tech	30798, 31152
	California Audio Labs	30490
	Cambridge Audio	30751, 31109
	Cambridge Soundworks	30690
	Campomatic Digital	31051
	Cat	30699, 30789, 31421, 31923
	CCE	30730
	Celestial	31020
	cello	31730
	Centrex	30672, 31004
	Centrum	30713, 30789, 31005, 31227, 31923
	CGV	30751, 31115
	Changhong	30627, 31061
	Cinea	30831, 30841
	Cinetec	30713, 30872
	cineULTRA	30699
	CineVision	30833, 30869, 31483
	Citizen	30695
	Clairtone	30571
	Classic	30730, 31730
	Clatronic	30672, 30675, 30788, 31233
	Clayton	30713
	Coby	30730, 30852, 31086, 31321, 31923
	Codex	31233
	Commax	31321
	Conia	30672, 30852, 31321
	Contel	30788
	Continental Edison	30831, 30872
	Craig	30831
	Creative	30503, 30539
	Crown	30690, 30713, 30770, 31115
	Crypto	31228
	Curtis Mathes	31087
	Cybercom	30831
	CyberHome	30714, 30816, 30874, 31023, 31024, 31117, 31129, 31502
	Cytron	30651, 30705, 30774, 31347
D	D-Vision	31115, 31367
	Daenyx	30872
	Daewoo	30490, 30784, 30705, 30714, 30770, 30833, 30869, 30872, 31172, 31483, 31906
	Dalton	31036
	Dansai	30770, 30783, 31115, 31695
	Dantax	30539, 30713, 30723, 30790
	Daytek	30872, 31005
	Dayton	30872
	DCE	30831
	Decca	30770, 31115
	Denon	30490, 30634, 31634, **[32134]** *
	Denver	30672, 30699, 30788, 30898, 31056, 31104, 31321, 31923
	Denzel	30665
	Desay	30843, 31212
	Dgtec	30672
	Diamond	30651, 30751, 30768, 30790
	Digihome	30713
	DigiLogic	30713
	digiRED	30717
	Digitech	31832
	Digitor	30651, 30690, 30833, 31005, 31423
	Digitrex	30672, 31004, 31056
	DiK	30831
	Dinamic	30788
	Disney	30675, 30831, 31270
	DiViDo	30705
	DK Digital	30831
	DMTech	30783, 31271
	Dragon	30831
	DreamX	31151
	DSE	30833, 31152, 31730
	Dual	30651, 30665, 30675, 30713, 30730, 30783, 30790, 30831, 31023
	Durabrand	30713, 30831, 31023, 31502
	DVD2000	30521
	DVX	30768
E	E:max	31233, 31321
	EagleTec	30714
	eBench	31152
	ECC	30730
	Eclipse	30723, 30751
	Elfunk	30713, 30850, 30884
	Elin	30770
	Elite	31152
	Ellion	30850, 31421
	Elta	30672, 30690, 30770, 30788, 30850, 31051, 31115, 31151, 31233
	Eltax	31233, 31321
	Emerson	30591, 30675, 30705, 30821, 31268
	Enterprise	30591

	Entivo	30503, 30539
	Enzer	30784, 30770, 31228
	ESA	30821, 31268
	EuroLine	30675, 30788, 31115, 31233
F	Fenner	30651
	Ferguson	30651, 30695, 30713, 30884, 30898, 31695, 31730
	Finlux	30672, 30591, 30741, 30751, 30770, 30783
	Firstline	30651, 30713, 30843, 30869, 31530
	Fisher	30670
	Funai	30675, 30695, 31268
	Fusion	30862
G	Gateway	31158
	GE	30522, 30815, 30717
	General Electric	30717
	Germatic	31051
	Global Link	31224
	Global Solutions	30768
	Global Sphere	31152
	Go Video	30573, 30744, 30717, 30715, 30741, 30783, 30833, 30869, 31044, 31075, 31099, 31158, 31483, 31730
	GoldStar	30591, 30741, 30869
	Goodmans	30651, 30690, 30713, 30723, 30730, 30783, 30790, 30833, 31004, 31140, 31423, 31530, 31730, 31923
	GP Audio	31140
	GPX	30699, 30741
	Gradiente	30490, 30651
	Graetz	30665
	Gran Prix	30831, 30898
	Grandin	30713, 31233
	Greenhill	30717
	Grundig	30539, 30651, 30551, 30670, 30686, 30695, 30705, 30713, 30775, 30790, 31004, 31036, 31695, 31730, 31832, 31920
	Grunkel	30770, 30790, 30831
H	H & B	30713, 30841, 30850, 31233, 31421
	Haaz	30751, 31152
	Haier	30843
	Hanseatic	30741, 30783, 30790
	Harman/Kardon	30582, 30702
	HCM	30788
	HDT	30705
	HE	30730, 31163, 31923
	Henss	30713
	HiMAX	30843
	Hitachi	30573, 30664, 30665, 30713, 31247, 31920
	Hiteker	30672, 31923
	Hoeher	30651, 30713, 30831, 31004, 31224
	Home Electronics	30730, 30770
	Home Tech Industries	31224
	Hoyo	30665
	Humax	30646
	Hyundai	30783, 30850, 31061, 31228
I	iLo	31348
	Ingelen	30788
	Ingersol	31023
	Initial	30839, 30717
	Inno Hit	30713
	Insignia	31268
	Integra	30571, 30627, 31634
	Irradio	30869, 31115, 31224, 31233
	IRT	30783
	ISP	30695
J	Jamo	31036
	Jaton	30665
	JBL	30702
	JDB	30730
	JDV	31367
	Jeken	30699
	Jepssen	31250
	JMB	30695
	JNC	30672, 31271
	JSI	31423
	JVC	30503, 30539, 30558, 30623, 30867, 31164, 31597, 31860
	jWin	31051
K	Kansas Technologies	31233, 31530
	Karcher	30783
	Kawasaki	30790
	Kendo	30672, 30699, 30713, 30831
	Kennex	30713, 30770, 30898
	Kenwood	30490, 30534
	Kiiro	30770
	Kiss	30665, 30841, 31523
	KLH	30815, 30717, 30790, 31020
	Kloss	30533
	Koda	31230
	Konka	31192
	Koss	30651, 31061, 31423
	Kreisen	31421
	KXD	31321, 31923
L	Lasonic	30627, 30798, 30789
	Lawson	30768
	Lecson	31533
	Leiker	30872
	Lenco	30651, 30699, 30713, 30770, 30774
	Lenoir	31228
	Lenoxx	30690, 30838
	Lexia	30699, 30768
	LG	30591, 30741, 30790, 30869, 31906
	Lifetec	30651, 30831, 31347
	Limit	30768, 31104
	LiteOn	31058, 31158
	Lodos	30713
	Loewe	30539, 30511, 30741, 30885
	Logik	30713, 30884
	Logix	30705, 30783
	Luker	31367
	Lumatron	30695, 30705, 30713, 30741, 30833, 31115, 31321, 31832
	Lunatron	30741
	Luxman	30573
	Luxor	30713, 31004, 31695, 31730
M	Magnasonic	30651, 30675
	Magnat	31923
	Magnavox	30503, 30539, 30646, 30675, 30713, 30821, 30885, 31140, 31268
	Magnex	30723
	Majestic	31345
	Manhattan	30705, 30713
	Marantz	30503, 30539, 30675
	Mark	30713
	Marquant	30770
	Matsui	30672, 30651, 30695, 30713, 30884, 31004, 31695, 31730
	Maxdorf	30788
	Maxent	31347
	Maxim	30713, 30872, 31367
	Maya	31345
	MBO	30690, 30730, 31730
	McIntosh	31533
	MDS	30713
	Mecotek	30770
	Medion	30651, 30630, 30774, 30783, 30831, 31006, 31270, 31345, 31347, 31423
	MEI	30790
	Memorex	30690, 30695, 30831, 31270
	Metronic	30690
	Metz	30525, 30571, 30713
	MiCO	30723, 30751, 31223
	Micromaxx	31695
	Micromedia	30503, 30539
	Micromega	30539, 31005
	Microsoft	30522, 31708
	Microstar	30831
	Minato	30752
	Minax	30713
	Minerva	30705
	Minoka	30770, 31115
	Mintek	30839, 30717
	Mirror	30752
	Mitsubishi	31521, 30521, 30713, 31403
	Mizuda	30770, 31451
	Monyka	30665
	MPX	30843
	Mustek	30730, 31730
	Mx Onda	30651, 30751, 31223
	Mystral	30831
N	NAD	30741
	Naiko	30770, 31004, 31367
	Narita	31367
	NEC	30741, 30869, 31404
	Neovia	31271
	Nesa	30717
	Neufunk	30665
	Nevir	30770, 30831, 31197
	NexxTech	31402
	Nikkai	31923
	Nintaus	31051, 31202
	Niro	32024
	Norcent	30872, 31923
	Nordmende	30774, 30831
	Noriko	30752
	Nova	31923
	Nowa	30843
	Nu-Tec	31228
O	Okano	30752
	Olidata	30672
	Omni	30690, 30833, 30838, 30862, 31104, 31832
	Onix	30838
	Onkyo	30503, 30627
	Oopla	31158
	Oppo	31224
	Optim	30843
	Optimus	30525, 30571
	Orbit	30872
	Orion	30695, 31233, 31695
	Oritron	30651
	Ormond	30713
P	P&B	31451
	Pacific	30695, 30713, 30759, 30768, 30790, 30831
	Packard Bell	30831
	Palladium	30695, 30713, 31906, 31920
	Palsonic	30672, 30852, 31056, 31321
	Panasonic	30503, 30490, 30571, 30703, 31362, 31462, 31490, 31579, 31762, 31834, 31905, 31908
	Panda	30717, 30789, 31203
	peeKTon	30898, 31224
	Philco	30690, 30862
	Philips	30503, 30539, 30646, 30675, 30854, 30885, 31158, 31260, 31267, 31340, 31354
	Philo	31345
	Phonotrend	30699
	PianoDisc	31024
	Pioneer	30490, 30525, 30571, 30631, 31965
	Plu2	30850
	Pointer	30784
	Polaroid	31020, 31061, 31086
	Polk Audio	30539
	Portland	30770
	Powerpoint	30872, 31005
	Presidian	30675
	Prima	31228
	Prinz	30831
	Prism	30705, 30831
	Pro2	31345
	ProCaster	31004
	Proceed	30672
	Proline	30672, 30651, 30686, 30833, 31004, 31483
	Proscan	30522
	Proson	30713
	Prosonic	30699, 30752
	ProVision	30699, 30730, 31163, 31321, 31923
	Pye	30539, 30646
Q	QONIX	31051
	Qwestar	30651
R	Radionette	30741, 30869, 31906, 32024
	RadioShack	30571
	Raite	30665
	RCA	30522, 30571, 30717, 30790, 30822, 31022, 31132, 31769, 31913, 31965
	Realistic	30571
	REC	30490
	Redstar	30759, 30763, 30770, 30788, 30898, 31345, 31923
	Relisys	31347
	Reoc	30752, 30768
	Revoy	30699, 30841
	Rex	30838
	Richmond	31233
	Rio	30869
	Roadstar	30672, 30690, 30699, 30713, 30730, 30833, 30898, 31051, 31227
	Rocksonic	30789
	Ronin	30872
	Rotel	30558, 30623
	Rowa	30717, 30759, 30872, 31004
	Rownsonic	30789
S	Saba	30651, 3055
	Sabaki	30798
	Saivod	30759, 30831, 31367

	Salora	30741
	Sampo	30752, 31321, 31347
	Samsung	30490, 30573, 30744, 30199, 30820, 30899, 31044, 31075, 31635, 31932
	Sansui	30784, 30695, 30751, 30763, 30768, 31051, 31228, 31230, 31695, 31832
	Sanyo	30670, 30675, 30695, 30713, 30873, 31228
	Scan	30705, 30850
	ScanMagic	30730, 31730
	ScanSonic	31695
	Schaub Lorenz	30770, 30788, 31115, 31151
	Schneider	30539, 30646, 30651, 30705, 30713, 30774, 30783, 30788, 30790, 30831, 30869, 31367
	Schwaiger	30752
	Scientific Labs	30768
	Scott	30672, 30651, 31005, 31036, 31233, 31423
	Seeltech	31224, 31451
	SEG	30798, 30665, 30713, 30763, 30872, 30884, 31483, 31530
	Sensory Science	31158
	Shanghai	30672
	Sharp	30630, 30675, 30713, 30752, 31256, 32015, 32024
	Sharper Image	31117
	Sherwood	30717, 30741, 30770
	Shinco	30717
	Shinsonic	30533, 30839
	Siemssen	31382
	Sigmatek	31005, 31224
	Siltex	31224
	Silva	30788, 30898
	Silva Schneider	30831, 30898
	SilverCrest	31152
	Simaudio	30885
	Singer	30690, 30751, 30768
	Sistemas	30672
	Skantic	30539, 30713
	Skymaster	30730, 30768
	Skyworth	30898
	Sliding	31115
	Slim Art	30784
	SM Electronic	30690, 30730, 30768, 31152
	Smart	30705, 30713
	Sonai	30755
	Sonashi	30831
	Sonic Blue	30573, 30715, 30783, 30869, 31099
	Sony	30533, 31533, 30864, 30573, 30630, 30772, 31033, 31070, 31431, 31433, 31536, 31633, 31769, 31981, 32043
	Sound Color	31233
	Soundmaster	30768
	Soundmax	30768
	Soundwave	30783
	Spectra	30872
	Standard	30651, 30768, 30788, 30831, 30898
	Star Clusters	31152, 31227
	Starlogic	31005
	Starmedia	31005, 31224
	Stevison	31367
	Strong	30713
	Sunkai	30770, 30850
	Sunstech	30831
	Sunwood	30788, 30898
	Superscan	30821
	Supervision	30768, 31152
	SVA	30672, 30717, 30752, 31105
	Sylvania	30630, 30675, 30821, 31268
	Symphonic	30675, 30821, 31268
	Synn	30768
T	Tandberg	30713, 31695
	Tangent	31321
	Targa	31227
	Tatung	30770, 31695
	Tchibo	30741
	TCL	31180
	TCM	30741, 30790
	Teac	30571, 30717, 30675, 30741, 30759, 30768, 30790, 30833, 31006, 31197, 31227
	Tec	30898
	Technica	31367, 31695
	Technics	30490, 30703, 31905
	Technika	30770, 30831, 31115, 31695
	Technisson	31115
	Technosonic	30730, 31051, 31115
	Techwood	30713, 31530
	Tedelex	30690, 30768, 31004, 31228
	Telefunken	30789, 30790, 30833, 31483, 31832, 31923
	Teletech	30713, 30768
	Tensai	30651, 30690, 30770
	Tevion	30651, 30798, 30768, 30833, 30898, 31036, 31227, 31347, 31382, 31483, 31730, 31923
	Theta Digital	30571
	Thomson	30522, 30511, 30551
	Tivo	31503
	Tokai	30784, 30665, 30788, 30790, 30898
	Tom-Tec	30789
	Top Suxess	31224
	Toshiba	30503, 30573, 30539, 30695, 31045, 31154, 31503, 31510, 31769
	TRANS-continents	30831, 30872, 31321, 31327
	Transonic	30730
	Tredex	30843
	TruVision	31451
	Tsinghua Tongfang	31205
	TSM	31224
U	Umax	30690, 31151
	Unimax	30770
	United	30675, 30695, 30699, 30713, 30730, 30788, 30884, 31115, 31152, 31228, 31367, 31832
	Universum	30591, 30713, 30741, 30790, 30869, 31227, 31530, 31913
	Uptek	30763
	upXus	31345
	Urban Concepts	30503, 30539
	US Logic	30839
V	Venturer	30790
	Vestel	30713, 30884, 31530
	Victor	31597
	Vieta	30705
	Viewmaster	30862, 31224
	Voxson	30690, 30730, 30774, 30831
	Vtrek	31228
W	Waitec	31151, 31224, 31233
	Walkvision	30717
	Waltham	31530
	Welkin	30831
	Wellington	30713
	Weltstar	30713
	Wesder	30699
	Wharfedale	30686, 30751, 30752, 30790, 31832
	Wilson	30831, 31233
	Windsor	30713
	Windy Sam	30573
	WIZE	31115
	Woxter	31005, 31151, 31224
X	Xbox	30522, 31708
	Xenius	30790
	XLogic	30768, 31152, 31228
	XMS	30770, 30788
	Xoro	31183, 31250
Y	Yakumo	31004, 31056
	Yamada	30872, 31004, 31056, 31151, 31158
	Yamaha	30490, 30539, 30646, 30545, 31354
	Yamakawa	30665, 30872, 31104
	Yukai	30730, 31730
Z	Zenith	30503, 30591, 30741, 30869, 31906
	Zeus	30784

DVD Recorder

1	4Kus	31158
A	Airis	31321
	Akira	31321
	Alba	31530
	Apex Digital	31056
	Aristona	30646
	Aspire Digital	31168
B	Belson	31086
C	Cat	31421
	cello	31730
	Centrum	31227
	Classic	31730
	Coby	31086
	Commax	31321
	Conia	31321
	CyberHome	31129, 31502
	Cytron	31347
D	Denon	30490
	Denver	31056
	Digitrex	31056
	DSE	31730
	Durabrand	31502
E	E:max	31321
	Ellion	31421
	Eltax	31321
	Emerson	30675
F	Ferguson	31730
	Firstline	31530
	Funai	30675
G	Gateway	31158
	Go Video	30741, 31158, 31730
	Goodmans	31530, 31730
	GPX	30741
	Grundig	31730
H	H & B	31421
	Humax	30646
I	iLo	31348
J	JVC	31164, 31597
K	Kansas Technologies	31530
	Kreisen	31421
	KXD	31321
L	LG	30741
	Lifetec	31347
	LiteOn	31158
	Loewe	30741
	Lumatron	31321
	Luxor	31730
M	Magnavox	30646, 30675
	Matsui	31730
	Maxent	31347
	MBO	31730
	Medion	31347
	MiCO	30751
	Mitsubishi	31403
	Mustek	31730
N	NEC	31404
O	Oopla	31158
P	Palsonic	31056, 31321
	Panasonic	30490, 31579
	Philips	30646, 31158
	Pioneer	30631
	Polaroid	31086
	ProVision	31321
	Pye	30646
R	RCA	30522
	Relisys	31347
	Roadstar	31227
S	Sampo	31347
	Samsung	30490, 31635
	ScanMagic	31730
	Schneider	30646
	SEG	31530
	Sensory Science	31158
	Sharp	30630, 30675
	Sony	31033, 31070, 31431, 31433, 31536
	Star Clusters	31227
	Sylvania	30675
T	Tangent	31321
	Targa	31227
	Teac	31227
	Techwood	31530
	Tevion	31227, 31347, 31730
	Thomson	30551
	Toshiba	31510
U	Universum	31227, 31530
V	Vestel	31530
	Victor	31597
W	Waltham	31530
Y	Yakumo	31056
	Yamada	31056, 31158
	Yamaha	30646
	Yukai	31730
Z	Zenith	30741

DVD preset codes / Codes préréglés DVD			
	32134 (default / défaut)		30490
DENON Model No. / Modéle numéro	DVD-555	DVD-2910	DVD-800
	DVD-755	DVD-2930CI	DVD-1600
	DVD-900	DVD-3800	DVD-2000
	DVD-910	DVD-3910	DVD-2500
	DVD-955	DVD-3930CI	DVD-3000
	DVD-1000	DVD-5900	DVD-3300
	DVD-1200	DVD-5910	
	DVD-1500	DVD-9000	
	DVD-1710	DVM-715	
	DVD-1910	DVM-1800	
	DVD-1930CI	DVM-1805	
	DVD-2200	DVM-1815	
	DVD-2800	DVM-2815	
	DVD-2800II	DVM-4800	
	DVD-2900		

[ ]*: Preset codes set upon shipment from the factory.

※1 : These preset codes can be recorded in the SAT/CBL mode.

※2 : These preset codes can be recorded in the TV mode.

※3 : These preset codes can be recorded in the VCR mode.

※4 : These preset codes can be recorded in the DVD mode.

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