



DVD HOME THEATER SOUND SYSTEM
SYSTEME HOME CINEMA DVD

DVX-C310

(DVR-C310+NX-SW300+NX-F300+NX-C300+NX-S300)

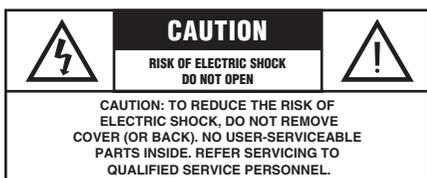
DVX-C310SW

(DVR-C310+NX-SW300)



OWNER'S MANUAL
MODE D'EMPLOI

IMPORTANT SAFETY INSTRUCTIONS



• Explanation of Graphical Symbols



The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert you 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 you to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

IMPORTANT

Please record the serial number of this DVD receiver in the space below.

MODEL:

Serial No.:

The serial number is located on the rear of this DVD receiver.

Retain this Owner’s Manual in a safe place for future reference.

- 1 Read these instructions.
- 2 Keep these instructions.
- 3 Heed all warnings.
- 4 Follow all instructions.
- 5 Do not use this apparatus near water.
- 6 Clean only with dry cloth.
- 7 Do not block any ventilation openings. Install in accordance with the manufacturer’s instructions.
- 8 Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
- 9 Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
- 10 Protect the power cord from being walked on or pinched particularly at the plugs, convenience receptacles, and the point where they exit from the apparatus.
- 11 Only use attachments/accessories specified by the manufacturer.
- 12 Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over. 
- 13 Unplug this apparatus during lightning storms or when unused for a long periods of time.
- 14 Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.
- 15 Be sure to allow spaces of at least 10 cm above, behind and on both sides of DVR-C310, and at least 1m above, 30cm behind and on both sides of NX-SW300.
- 16 Do not place the following objects on this unit:
A vessel with water in it.
If the vessel falls by vibrations and water spills, it may cause damage to the unit, and/or you may get an electric shock. Apparatus shall not be exposed to dripping or splashing.

FCC INFORMATION (for US customers)

1 IMPORTANT NOTICE: DO NOT MODIFY THIS UNIT!

This product, when installed as indicated in the instructions contained in this manual, meets FCC requirements. Modifications not expressly approved by Yamaha may void your authority, granted by the FCC, to use the product.

2 IMPORTANT: When connecting this product to accessories and/or another product use only high quality shielded cables. Cable/s supplied with this product MUST be used. Follow all installation instructions. Failure to follow instructions could void your FCC authorization to use this product in the USA.

3 NOTE: This product has been tested and found to comply with the requirements listed in FCC Regulations, Part 15 for Class "B" digital devices.

Compliance with these requirements provides a reasonable level of assurance that your use of this product in a residential environment will not result in harmful interference with other electronic devices. This equipment generates/uses radio frequencies and, if not installed and used according to the instructions found in the users manual, may cause interference harmful to the operation of other electronic devices. Compliance with FCC regulations does not guarantee that interference will not occur in all installations. If this product is found to be the source of interference, which can be determined by turning the product "OFF" and "ON", please try to eliminate the problem by using one of the following measures:

Relocate either this product or the device that is being affected by the interference.

Utilize power outlets that are on different branch (circuit breaker or fuse) circuits or install AC line filter/s.

In the case of radio or TV interference, relocate/reorient the antenna. If the antenna lead-in is 300 ohm ribbon lead, change the lead-in to coaxial type cable.

If these corrective measures do not produce satisfactory results, please contact the local retailer authorized to distribute this type of product. If you can not locate the appropriate retailer, please contact Yamaha Electronics Corp., 6660 Orangethorpe Ave. Buena Park, CA90622.

The above statements apply ONLY to those products distributed by Yamaha Corporation of America or its subsidiaries.

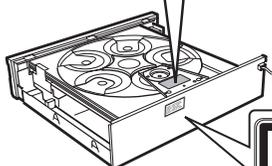
■ We Want You Listening For A Lifetime

YAMAHA and the Electronic Industries Association's Consumer Electronics Group want you to get the most out of your equipment by playing it at a safe level. One that lets the sound come through loud and clear without annoying blaring or distortion - and, most importantly, without affecting your sensitive hearing.

Since hearing damage from loud sounds is often undetectable until it is too late, YAMAHA and the Electronic Industries Association's Consumer Electronics Group recommend you to avoid prolonged exposure from excessive volume levels.



CAUTION VISIBLE AND INVISIBLE LASER RADIATION WHEN OPEN. AVOID EXPOSURE TO BEAM
ADVARSEL SYNLIG OG USYNLIG LASERSTRÅLING VED ÅBNING
UNDGÅ UDSÆTTELSE FOR STRÅLING
ADVARSEL SYNLIG OG USYNLIG LASERSTRÅLING NÅR DEKSEL
ÅPNES UNNGÅ EKSPONERING FOR STRÅLEN
VARNING SYNLIG OCH OSYNLIG LASERSTRÅLNING NÅR
DENNA DEL ÄR ÖPPNAD BETRakta EJ STRÅLEN
VARO! AVATTAESSA OLET SÄLTITINA NÄKVVÄLLE JA
NÄKYMÄTTÖMÄLLE LASER SÄTILYLLE. ÄLÄ KATSO SÄTEESSEN
VORSICHT SICHTBARE UND UNSICHTBARE LASERSTRÄHLUNG
WENN ABDECKUNG GEÖFFNET NICHT DEM STRAHL AUSSETZEN
DANGER VISIBLE AND INVISIBLE LASER RADIATION WHEN
OPEN AVOID DIRECT EXPOSURE TO BEAM
ATTENTION RAYONNEMENT LASER VISIBLE ET INVISIBLE EN
CAS D'OUVERTURE EXPOSITION DANGEREUSE AU FAISCEAU



CLASS 1 LASER PRODUCT
LASER KLASSE 1 PRODUKT
LUOKAN 1 LASERLAITE
KLASS 1 LASER APPARAT
PRODUIT LASER DE CLASSE 1

LASER SAFETY

This unit employs a laser. Due to possible eye injury, only a qualified service person should remove the cover or attempt to service this device.

DANGER

This unit emits visible laser radiation when open. Avoid direct eye exposure to beam. When this unit is plugged into a wall outlet, do not place your eyes close to the opening of the disc tray and other openings or look inside.

SÉCURITÉ LASER

L'appareil utilise un laser. En raison des risques de blessure des yeux, le retrait du couvercle ou les réparations de l'appareil devront être confiés exclusivement à un technicien d'entretien qualifié.

DANGER

Risque d'exposition au laser en cas d'ouverture. Eviter toute exposition au faisceau. Lorsque cet appareil est branché à la prise de courant, ne pas approcher les yeux de l'ouverture du plateau changeur et des autres ouvertures pour regarder à l'intérieur.

CAUTION: READ THIS BEFORE OPERATING YOUR UNIT.

- 1 To assure the finest performance, please read this manual carefully. Keep it in a safe place for future reference.
- 2 Install this sound system in a well ventilated, cool, dry, clean place with at least 10 cm on the top, 10 cm on the left and right, and 10 cm at the back of DVR-C310 and at least 1 m above, 30 cm behind and on both sides of NX-SW300 for adequate ventilation. — away from direct sunlight, heat sources, vibration, dust, moisture, and/or cold.
- 3 Locate this unit away from other electrical appliances, motors, or transformers to avoid humming sounds.
- 4 Do not expose this unit to sudden temperature changes from cold to hot, nor locate this unit in an environment with high humidity (i.e., a room with a humidifier) to prevent condensation inside this unit, which may cause an electrical shock, fire, damage to this unit, and/or personal injury.
- 5 Avoid installing this unit in a location where foreign objects may fall onto this unit or where this unit may be exposed to liquid dripping or splashing. On the top of this unit, do not place:
 - Other components, as they may cause damage and/or discoloration on the surface of this unit.
 - Burning objects (i.e., candles), as they may cause fire, damage to this unit, and/or personal injury.
 - Containers with liquid in them, as they may fall, spilling the liquid and causing an electrical shock to the user and/or damage to this unit.
- 6 Do not cover this unit with a newspaper, tablecloth, curtain, etc. in order not to obstruct heat radiation. If the temperature inside this unit rises, it may cause fire, damage to this unit, and/or personal injury.
- 7 Do not plug in this unit to a wall outlet until all connections are complete.
- 8 Do not operate this unit upside-down. It may overheat, possibly causing damage.
- 9 Do not use excessive force on switches, knobs and/or cords.
- 10 When disconnecting the power cord from the wall outlet, grasp the plug; do not pull the cord.
- 11 Do not clean this unit with chemical solvents; this might damage the finish. Use a clean, dry cloth.
- 12 Use only the voltage specified on this unit. Using this unit with a higher voltage than specified is dangerous and may cause fire, damage to this unit, and/or personal injury. YAMAHA will not be held responsible for any damage resulting from use of this unit with a voltage other than as specified.
- 13 To prevent damage by lightning, keep the power cord out and outdoor antennas disconnected from a wall outlet or the unit during a lightning storm.
- 14 Do not attempt to modify or fix this unit. Contact qualified YAMAHA service personnel when any service is needed. The cabinet should never be opened for any reason.
- 15 When not planning to use this unit for long periods of time (i.e., vacation), disconnect the AC power plug from the wall outlet.
- 16 Be sure to read the “TROUBLESHOOTING” section on common operating errors before concluding that this unit is faulty.
- 17 Before moving this unit, press STANDBY/ON to set the unit in standby mode, then disconnect the AC power plug from the wall outlet.
- 18 Condensation will form when the surrounding temperature changes suddenly. Disconnect the power cable from the outlet, then leave the unit alone.
- 19 When using the unit for a long time, the unit may become warm. Turn the power off, then leave the unit alone for cooling.
- 20 Install this unit near the AC outlet and where the AC power plug can be reached easily.

FOR CANADIAN CUSTOMERS

To prevent electric shock, match wide blade of plug to wide slot and fully insert.

This Class B digital apparatus complies with Canadian ICES-003.

This unit is not disconnected from the AC power source as long as it is connected to the wall outlet, even if this unit itself is turned off. This state is called the standby mode. In this state, this unit is designed to consume a very small quantity of power.

Laser component in this product is capable of emitting radiation exceeding the limit for Class 1.

WARNING

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

CAUTION

Danger of explosion if battery is incorrectly replaced. Replace only with the same or equivalent type.

Be sure to place this unit on the level surface.

If you do not place this unit on the level surface, PLAYXCHANGE will not function correctly, and may damage the disc(s) and/or this unit itself.

LASER

Type	Semiconductor laser GaAlAs
Wave length	650 nm (DVD) 784 nm (VCD/CD)
Output Power	7 mW (DVD/VCD/CD)
Beam divergence	60 degrees

CAUTION

Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

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English

INTRODUCTION

Thank you for purchasing this unit. This Owner's Manual explains the basic operation of this unit. This manual is printed prior to production. Design and specifications are subject to change in part as a result of improvements, etc. In case of differences between the manual and the product, the product has priority.

Notes about discs

- This DVD receiver is designed for use with the following discs: Super Audio CD (SA-CD), DVD-Video, Video CD, Super Video CD, Audio CD, CD-R, CD-RW, DVD-Audio, DVD+RW, DVD+R, DVD-R, DVD-RW and DVD-RW (VR format).



This DVD receiver can play:

- MP3 and picture (Kodak, JPEG) files recorded on CD-R(W)
- JPEG/ISO 9660 format (except Progressive JPEG)
 - Up to a resolution of 3072 x 2048
 - File name extensions (.jpg) must be used for this DVD receiver to recognize JPEG files
- Maximum 30 character display
- DivX® disc on CD-R[W]/DVD+R[W]/DVD-R[W]

Notes

- The multiple sessions of CD-R/RW can be played.
- Only the single session of DVD+R/RW and DVD-R/RW can be played.
- CD-R, CD-RW and DVD-RW (VR format) cannot be played unless finalized.
- Some discs cannot be played depending on the recording conditions, such as the PC environment and application software. The characteristics and condition of some discs; materials, scratches, curvature, etc., may result in playback failure.
- Be sure to use only CD-R and CD-RW discs made by reliable manufacturers.
- Do not use any non-standard shaped discs (heart-shaped, etc.).
- Do not use discs with tape, seals, or paste on their surface. Doing so may damage this DVD receiver.
- Do not use discs affixed with labels printed by a commercially available label printer.

Cleaning discs

- When a disc becomes dirty, clean it with a cleaning cloth. Wipe the disc from the center out. Do not wipe in a circular motion.
- Do not use solvents such as benzine, thinner, commercially available cleaners, or antistatic spray intended for analog records.

Disc care

- Write only on the printed side of a CD-R/CD-RW and only with a soft felt-tipped pen.
- Handle the disc by its edge; do not touch the surface.

Region codes

DVD discs must be labeled ALL regions or Region 1 (U.S.A. and Canada models) in order to play on this DVD receiver. You cannot play discs labeled for other regions.



Features



Active Servo Processing Subwoofer System with built-in power amplifier.

This subwoofer system (NX-SW300) employs Advanced YAMAHA Active Servo Technology which YAMAHA has developed for reproducing higher quality super-bass sound. This super-bass sound adds a more realistic, theater-in-the-home effect to your stereo system.

PLAYXCHANGE

Capable of changing discs without interrupting current disc playback.

Pressing PLAYXCHANGE on the front panel to open the disc tray and reload or unload discs during playback.

Patent information



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



"DTS" and "DTS Digital Surround" are registered trademarks of Digital Theater Systems, Inc.



"DivX", "DivX Certified", and associated logos are trademarks of DivXNetworks, Inc. and are used under license.



The XM name and related logos are registered trademarks of XM Satellite Radio Inc.

iPod®

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

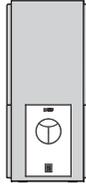
This product incorporates copyright protection technology that is protected by method claims of certain U.S. patents and other intellectual property rights owned by Macrovision Corporation and other rights owners. Use of this copyright protection technology must be authorized by Macrovision Corporation, and is intended for home and other limited viewing uses only unless otherwise authorized by Macrovision Corporation. Reverse engineering or disassembly is prohibited.

■ Main unit

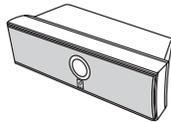
DVD receiver
(DVR-C310)



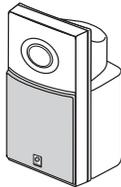
Subwoofer
(NX-SW300)



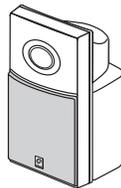
Center speaker*
(NX-C300)



Front speakers*
(NX-F300 x 2)



Surround speakers*
(NX-S300 x 2)



■ Supplied accessories

FM wire antenna



AM loop antenna



Remote control



Batteries (x 2)



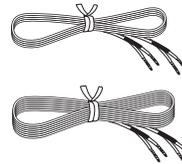
Video pin cable



System control cable



Speaker cables*
(5 m x 3)
(15 m x 2)



Fasteners (x 2)*

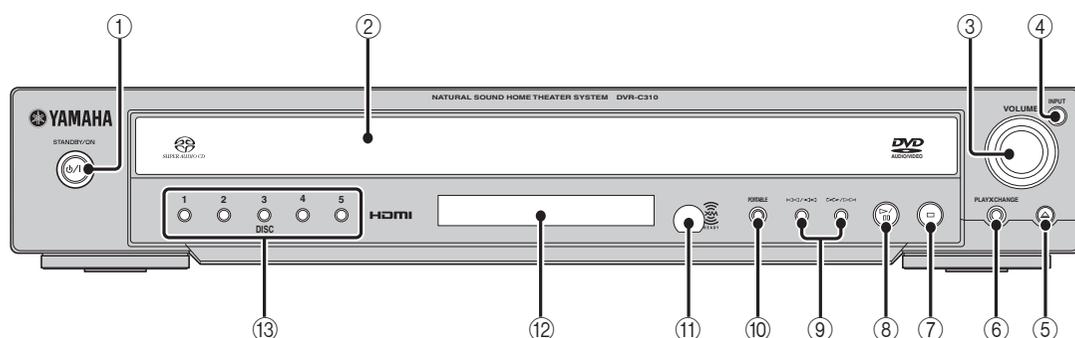


*DVX-C310 only

*DVX-C310 only

FUNCTIONAL OVERVIEW

■ Front panel (DVR-C310)

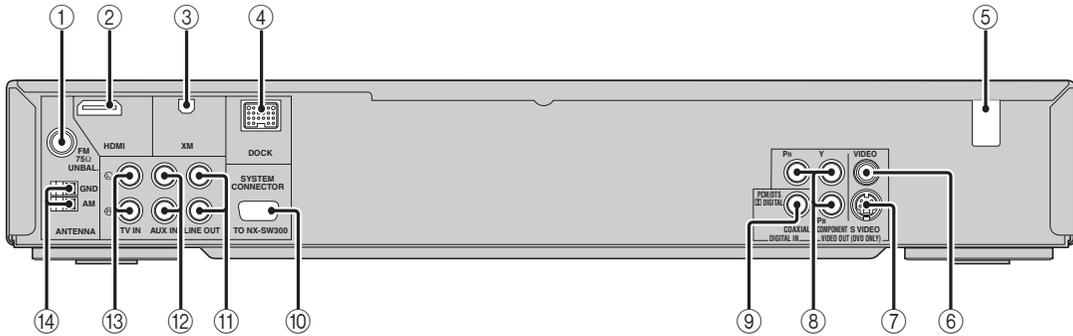


- ① **STANDBY/ON ($\phi/|$)**
Turns on this DVD receiver, or sets it to the standby mode.
While this DVD receiver is in the standby mode, it consumes a small amount of power.
- ② **Disc tray**
Loads up to 5 discs in the disc tray.
- ③ **VOLUME**
Adjusts the volume level.
- ④ **INPUT**
Selects the input source.
- ⑤ \triangle
Opens and closes the disc tray.
- ⑥ **PLAYXCHANGE**
Reloads or unloads discs without interrupting current disc playback.
- ⑦ \square
DVD/CD mode: stops playback.
TUNER mode: deletes a preset station if held more than two seconds, or cancels the preset installation in Plug and Play (see page 39).
- ⑧ \triangleright/\parallel
DVD/CD mode: starts or pauses playback.
TUNER mode: starts preset installation in Plug and Play (see page 39).
- ⑨ $\lll/\ggg, \lll/\ggg$
DVD/CD mode: selects the previous/next track or chapter. Press and hold to fast forward or fast reverse.
TUNER mode: selects the preset number.
- ⑩ **PORTABLE jack**
Connects a portable audio player.
- ⑪ **Remote control sensor**
Receives infrared signal from the remote control.
- ⑫ **Front panel display**
Shows information about the operational status of this DVD receiver.
MULTI
Lights up when you play a multi-channel audio source.
DOWNMIX
Lights up when you play discs that allow down mixing of multi-channel audio sources.
It does not light up for discs that prohibit down mixing, even if you play a multi-channel audio source.
- ⑬ **DISC (1, 2, 3, 4, 5) / LEDs**
Selects and directly plays back the preferred disc.
Each LED lights up in green when this DVD receiver recognizes that the corresponding disc has been loaded.

■ Rear panel (DVR-C310)

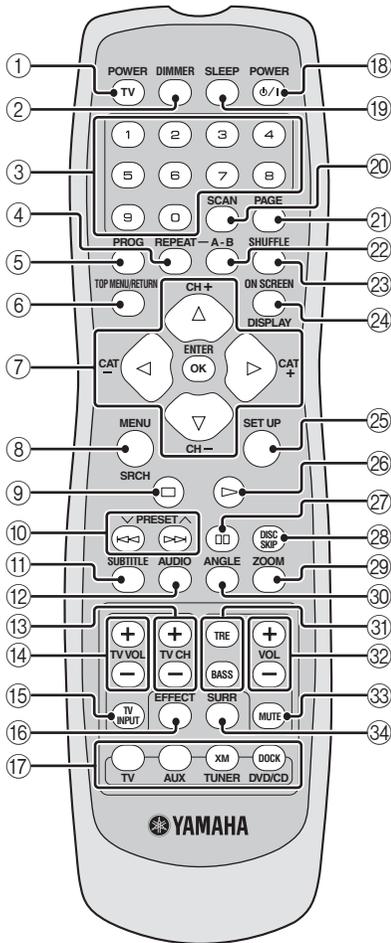
1

INTRODUCTION



- ① **FM ANT terminal**
Connect the FM antenna.
- ② **HDMI jack**
Connect to an HDMI compatible component (see page 13).
- ③ **XM jack**
Connect an XM Passport System (see page 41).
- ④ **DOCK terminal**
Connect a YAMAHA iPod universal dock (see page 15).
- ⑤ **AC power cord**
Connect to a standard AC outlet.
- ⑥ **VIDEO output jack**
Connect to the video (composite) jack of your TV (see page 12).
- ⑦ **S-VIDEO output jack**
Connect to the S-video jack of your TV or VCR (see page 12, and 14).
- ⑧ **COMPONENT VIDEO OUT jacks**
Connect to the Y Pb/Cb Pr/Cr jacks of your TV (see page 12).
- ⑨ **COAXIAL input jack**
Connect to the digital out jack on a digital audio component (see page 16).
- ⑩ **SYSTEM CONNECTOR terminal**
Connect to the subwoofer (see page 11).
- ⑪ **LINE OUT jacks**
Connect to the audio input jacks of your VCR (see page 14).
- ⑫ **AUX IN jacks**
Connect to the audio output jacks on your VCR or cassette deck (see page 14).
- ⑬ **TV IN jacks**
Connect to the corresponding audio output jacks of your TV (see page 12).
- ⑭ **GND and AM ANT terminals**
Connect the AM loop antenna (see page 17).

Remote control (For DVR-C310)



Note

For details on how to use the remote control, see page 18.

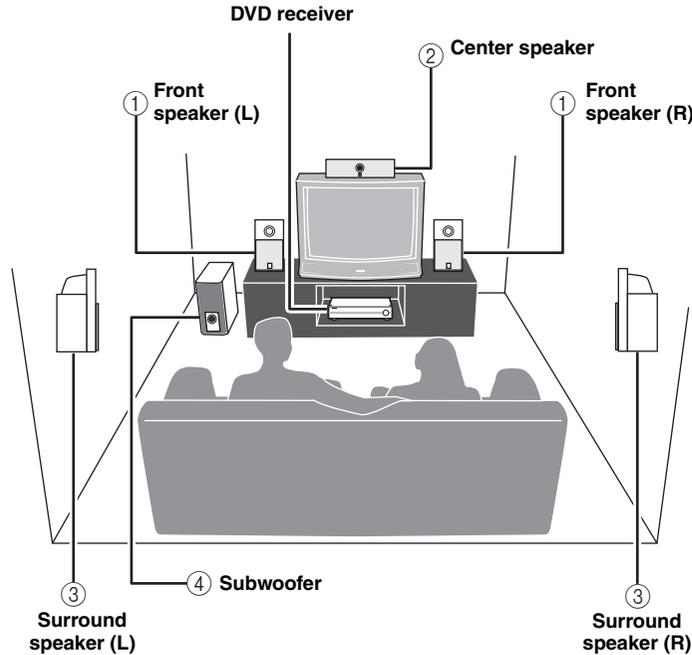
- ① **POWER (TV)**
Turns on the TV, or sets it to the standby mode.
- ② **DIMMER**
Selects different levels of brightness for the display panel.
- ③ **Numeric keypad (0 – 9)**
Enters a track/title number of the disc.
Enters a number of a preset radio station.
- ④ **REPEAT**
Selects various repeat modes.
- ⑤ **PROG**
DVD/CD mode: starts programming.
TUNER mode: starts automatic/manual preset programming if held for more than two seconds.
- ⑥ **TOP MENU/RETURN**
Returns to the previous menu.
Displays the top-level disc menu (if available).
- ⑦ **Cursors** (◀▶/▲▼)
DVD/CD mode: Use to select OSD menu items.
TUNER mode: press ◀▶ to tune into a station or press ▲/▼ to starts automatic tuning. When this DVD receiver is in the XM Satellite Radio mode, see page 42.
- ENTER (OK)**
Confirms a selection.
- ⑧ **MENU**
Accesses the menu of a disc. During playback, returns to the main menu.
For VCD version 2.0 only:
Switches PBC (playback control) on or off.
- ⑨ ◻
DVD/CD mode: stops playback. Holding down the button opens and closes the disc tray.
TUNER mode: deletes a preset station if held more than two seconds, or cancels the preset installation in Plug and Play (see page 39).
- ⑩ ^ **PRESET** v (◀◀▶▶)
DVD/CD mode: selects the previous/next track or chapter. Press and hold to fast forward or fast reverse.
TUNER mode: selects the preset number.
- ⑪ **SUBTITLE**
Selects a subtitle language.

- ⑫ **AUDIO**
Selects an audio language (DVD) or an audio channel (VCD).
- ⑬ **TV CH (+ / -)**
Switches the TV channel.
- ⑭ **TV VOL (+ / -)**
Adjusts the TV volume.
- ⑮ **TV INPUT**
Switches the TV input.
- ⑯ **EFFECT**
Selects a sound effect.
- ⑰ **Input selection buttons**
Select the input source.
TV: switches to TV input source.
AUX: switches to AUX ANALOG, AUX DIGITAL or AUX FRONT input source.
TUNER: switches to TUNER/FM, TUNER/AM or XM RADIO input source.
DVD/CD: switches to DVD/CD or iPod input source.
- ⑱ **POWER (⏻/⏻)**
Turns on this DVD receiver, or sets it to the standby mode.
While this DVD receiver is in the standby mode, it consumes a small amount of power.
- ⑲ **SLEEP**
Sets the sleep timer.
- ⑳ **SCAN**
Scans each track/chapter on the disc.
- ㉑ **PAGE**
Turns the pages of DVD-Audio still pictures.
- ㉒ **REPEAT A-B**
Repeats a specific section on a disc.
- ㉓ **SHUFFLE**
Plays tracks in random order.
- ㉔ **ON SCREEN/DISPLAY**
Accesses or exits from the OSD (on screen display) menu of this DVD receiver.
- ㉕ **SET UP**
Accesses or exits from the setup menu of this DVD receiver.
- ㉖ ▷
DVD/CD mode: starts playback.
TUNER mode: starts preset installation in Plug and Play (see page 39).
- ㉗ ⏸
DVD/CD mode: pauses playback.
- ㉘ **DISC SKIP**
Selects another disc.
- ㉙ **ZOOM**
Enlarges the video image.
- ㉚ **ANGLE**
Selects a DVD disc camera angle (if available).
- ㉛ **TRE/BASS**
Selects the TREBLE (high tone) or BASS (low tone) sound mode.
Use the VOLUME control to change the tone level.
- ㉜ **VOL (+ / -)**
Adjusts the volume level.
- ㉝ **MUTE**
Mutes the sound. Press again to restore the audio output to the previous volume level.
- ㉞ **SURR**
Switches to multi-channel surround mode or stereo mode.

SPEAKER SETUP

■ Roles and layout of the speakers

To enjoy quality sounds you need to place the speakers in their appropriate positions and install them correctly. The following shows the recommended layout of the speakers. For the best possible surround sound, all of the speakers (except the subwoofer) should be placed at the same distance from the listening position.



① Front Speakers (L, R)

Place the front left/right speakers on both sides of your TV at equal distances.
Main roles: Produces front channel (stereo) sounds and effect sounds.

② Center Speaker

Place the center speaker on top of the TV or inside the TV rack so that the speaker and TV are aligned vertically.
Main role: Produces sounds oriented toward the center of the screen such as dialogues or vocal sounds.

③ Surround Speakers (L, R)

Place the surround left/right speakers behind the listening position.
Main roles: Produces surround sounds and effect sounds.

④ Subwoofer

Place the subwoofer near a front speaker and turn it slightly toward the center of the room to reduce wall reflections.
Main roles: Produces bass sounds and low frequency (LFE) sounds contained in Dolby Digital or DTS.

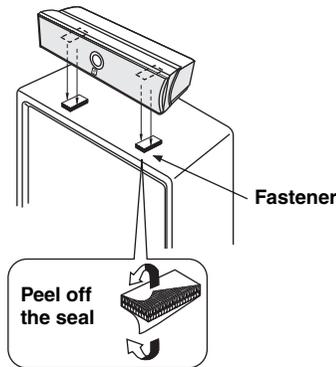
Notes

- To avoid magnetic interference, do not position the front speakers too close to your TV.
- Allow adequate ventilation around the DVD receiver and subwoofer.
- Bass sounds produced by the subwoofer may be heard differently depending on the listening position and subwoofer location. To enjoy desired sounds, try to change the location of the subwoofer according to the listening position.

■ Placing the speakers

Placing the center speaker (NX-C300)

When placing the center speaker on the top of the TV, use the supplied fasteners to secure the speaker.



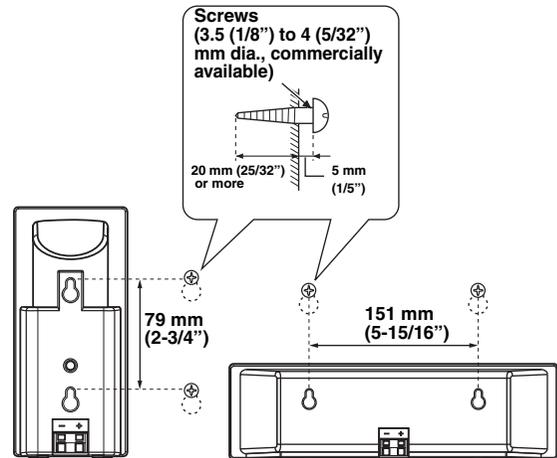
- ① Peel off the seals on one side of the fasteners and attach them to the bottom of the center speaker.
- ② Peel off the seals on the other side of the fasteners and attach them to the top of the TV.

Notes

- Do not place the speaker on the TV if the top of the TV is uneven or narrower than the bottom surface of the speaker. Doing so may cause the speaker to fall. In this case, place the speaker inside a TV rack or on a level floor.
- Before attaching the fasteners to the TV, clean the surface with a dry cloth. A dirty or wet surface may weaken the adhesive force and cause the speaker to fall.
- Do not touch the bonding surfaces of the fasteners after peeling off the seals. Doing so may weaken the adhesive force and cause the speaker to fall.

Attaching to a wall

You can attach the speakers to a wall using commercially available screws (Diameter: 3.5 to 4 mm (1/8" to 5/32"), Length: 25 mm (1") or more). Each speaker requires two screws.



- ① Install two screws in the wall where you want to place the speaker.
- ② Hang the speaker on the screws using the holes in the rear of the speaker.

Notes

- To attach a speaker to a wall using screws, the wall must be firm. Do not attach a speaker to a wall that is made of weak materials such as plaster or veneered woods. Doing so may cause the speaker to fall.
- After attaching each speaker, check that the speaker is fixed securely. YAMAHA will bear no responsibility for any accidents caused by improper installations.

Hanging on a wall (NX-F300, NX-S300)

You can hang the speakers on a wall using a commercially available bracket and screws (Diameter: 6 mm). Attach a bracket firmly to the rear of the speakers using screws. Then mount a screw on the wall where the speaker is to be hung and hook the speaker securely onto the mounted screws.

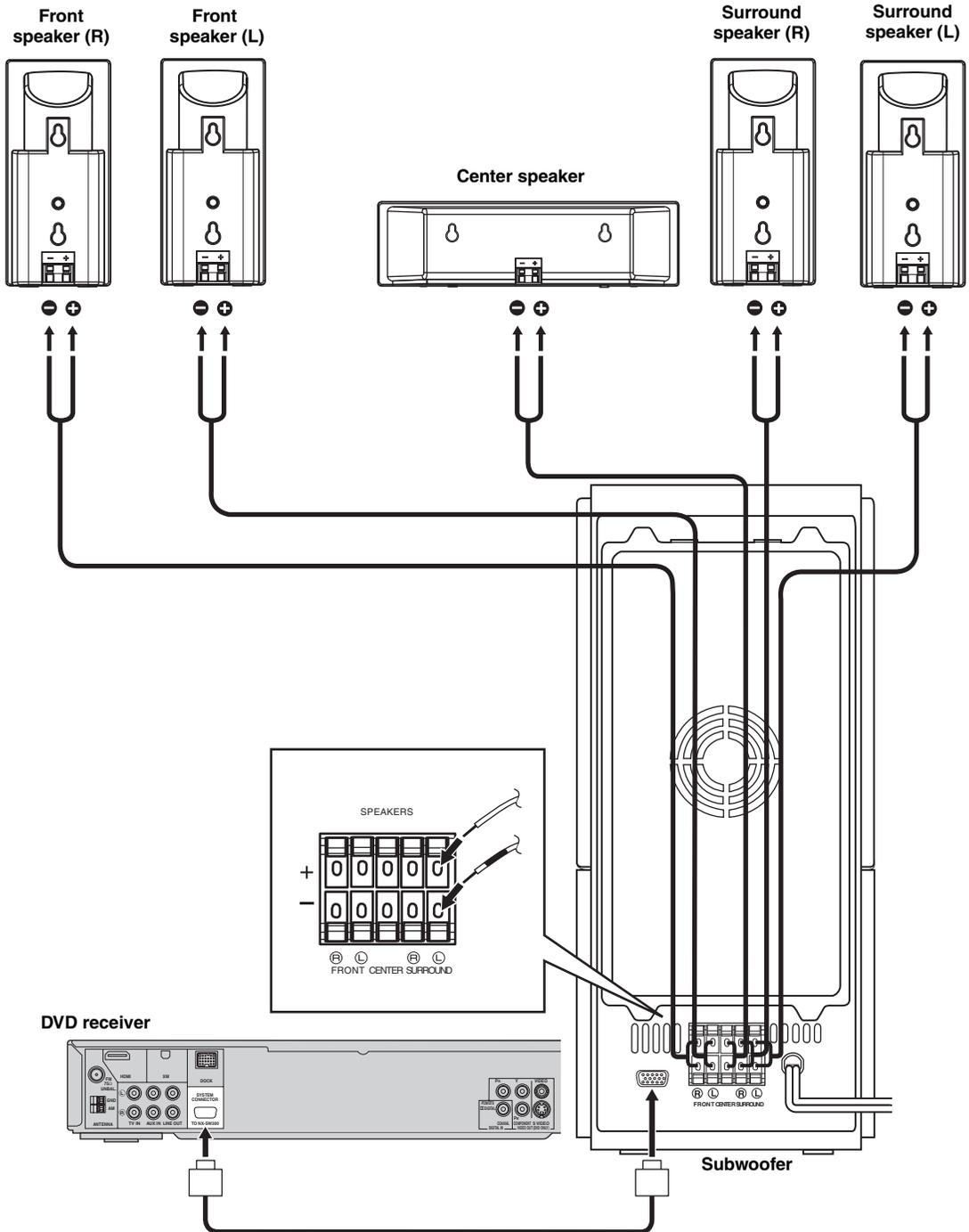
Note

Do not use screw threads measured in inches for this installation. Use metric screw threads only.

■ Speaker connections

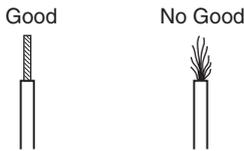
Note

Do not connect the power cord of the subwoofer and DVD receiver into an AC outlet until all cable connections are completed.

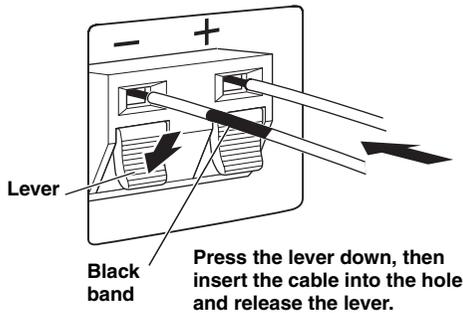


■ Connecting the speaker cables

Be sure to twist the cable core firmly in a clockwise direction. Twisting loosely may cause a short.

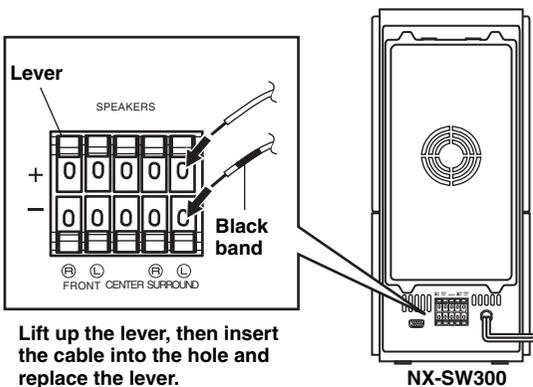


Connect the speaker cable with the white line to the plus (Red (+)) connector on the front/center/surround speakers and connect the speaker cable with the black band to the minus (Black (-)) connector.



■ Connecting the subwoofer

Connect the speaker cable with the white line to the plus (Red (+)) connector on the front/center/surround speakers and connect the speaker cable with the black band to the minus (Black (-)) connector.

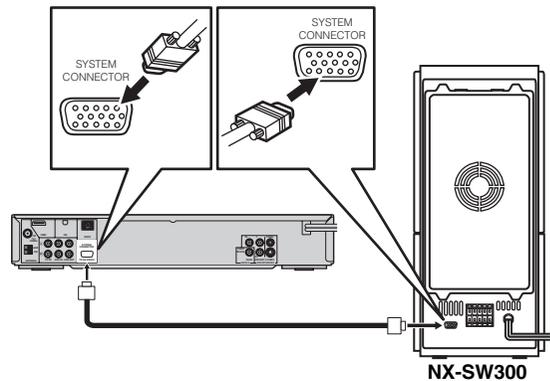


Notes

- Do not use excessive force when inserting the cable plug. Doing so may damage the cable or speaker terminals.
- When connecting the speakers, fix the speaker cables in place so that cables do not loosen. If your foot or hand accidentally gets caught on a loose speaker cable, the speaker may fall.

■ Connecting the DVD receiver and the subwoofer

Connect the subwoofer to DVD receiver using the system control cable. Attach one end to the subwoofer and the other to the **SYSTEM CONNECTOR** terminal at the rear of the DVD receiver.



Notes

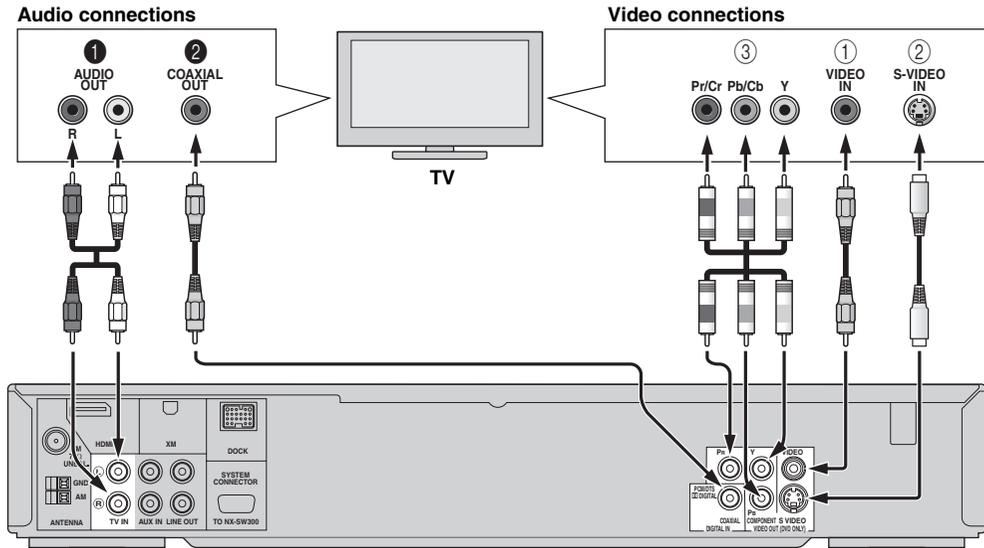
- After inserting the system control cable, be sure to tighten the cable screws.
- Ensure that the speaker cables are correctly connected. Improper connections may damage the system due to a short-circuit.
- When connecting the speakers, fix the speaker cables in place so that cables do not loosen. If your foot or hand accidentally gets caught on a loose speaker cable, the speaker may fall.
- To prevent unwanted noise, do not place the subwoofer too close to the DVD receiver, AC power adaptor, TV or other sources of radiation.

CONNECTION

■ Connecting a TV

Notes

- You only need to make one audio connections from the following options (① or ②) and one video connection from the following options (①,② or ③) depending on the capabilities of your TV.
- Do not connect the power cords until all cable connections are completed.



① VIDEO output jack

Use the supplied video pin cable (yellow) to connect the **VIDEO** jack of this DVD receiver to the video input jack (or A/V In/Video In/Composite/Baseband jack) of your TV.

② S VIDEO output jack

S-video connections achieve a clearer picture than composite video connections. Use a commercially available S-video cable to connect the **S VIDEO** jack of this DVD receiver to the S-video input jack (or Y/C or S-VHS jack) of your TV.

③ COMPONENT VIDEO OUT jacks

Use commercially available component video cables (red/blue/green) to connect the **Y Pb Pr** jacks of this DVD receiver to the corresponding component video input jacks (or the Y Pb/Cb Pr/Cr/ YUV jacks) of your TV.

Progressive scan video quality is only available when using **Y Pb Pr** in conjunction with a progressive scan TV. To activate the progressive scan function see page 34.

① TV IN jacks

To output TV sound from the speakers connected to this DVD receiver, use commercially available audio cables (white/red) to connect the **TV IN** input jacks of this DVD receiver to the corresponding audio output jacks of your TV.

② COAXIAL jack

To output TV sound from the speakers connected to this DVD receiver, use a commercially available coaxial cable to connect the **COAXIAL** input jack of this DVD receiver to the corresponding coaxial output jack of your TV.

Notes

- If you connect this DVD receiver to the analog audio and digital audio at the same time, the digital audio signals input at the COAXIAL jack take priority over the analog audio signals input at the TV IN jacks.
- You can connect this DVD receiver to your TV using an HDMI cable. For details, see “Connecting an HDMI component” on page 13.

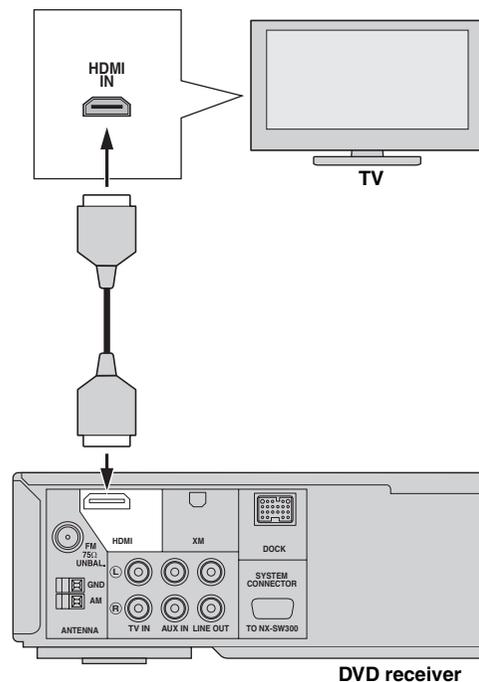
■ Connecting an HDMI component

HDMI (High-Definition Multimedia Interface) is the first industry-supported, uncompressed, all-digital A/V (audio/video) interface.

By connecting to an HDMI component (such as a TV), you can enjoy standard, enhanced or high-definition video as well as multi-channel digital audio using a single cable.

When used in combination with HDCP (High-bandwidth Digital Content Protection), HDMI provides a secure audio/video interface that meets the security requirements of content providers and system operators.

For further information on HDMI, visit the HDMI website at “<http://www.hdmi.org/>”.



Viewing and Listening to playback from an HDMI component

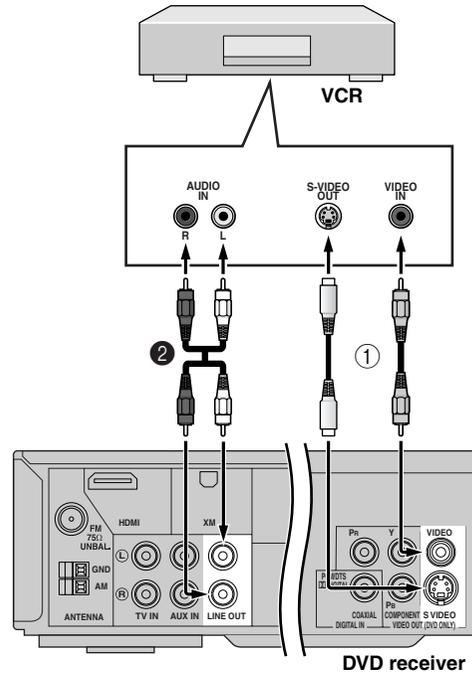
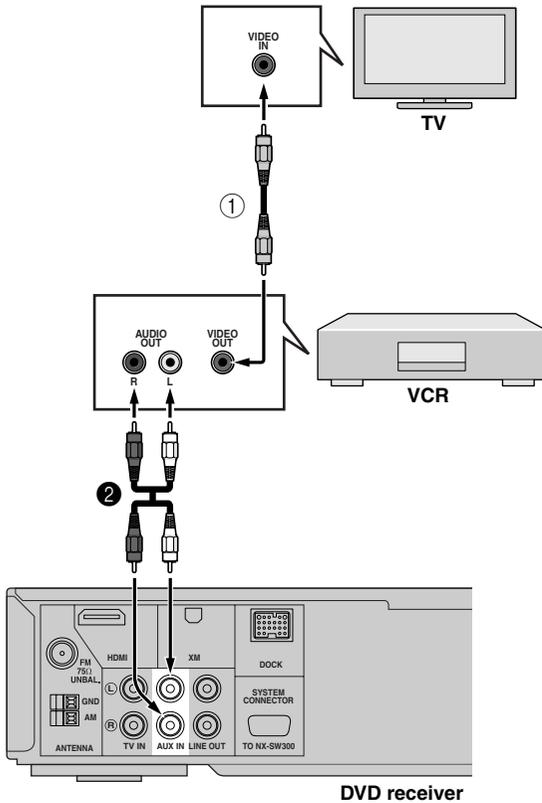
- ① Connect **HDMI** output jack of this DVD receiver to the HDMI input jack of your HDMI compatible component using a commercially available HDMI cable.
- ② Select the appropriate audio output from [HDMI SETUP] in [AUDIO SETUP PAGE] (see page 33).
- ③ Select the appropriate video output from [HDMI SETUP] in [VIDEO SETUP PAGE] (see page 35).

Notes

- This DVD receiver is not compatible with HDCP-incompatible HDMI or DVI components.
- You need a commercially available HDMI/DVI conversion cable when you connect this DVD receiver to other DVI components.
- When connecting an HDMI component, refer to the instruction manual for the component.
- Do not disconnect or connect the HDMI cable from this DVD receiver or turn off the power of the HDMI/DVI component connected to the HDMI jack of this DVD receiver while data is being transferred. Doing so may disrupt playback or cause noise.

■ Connecting a VCR

Connect a VCR and enjoy video cassette tapes.



Using a VCR for recording DVD playback

- 1 Connect the **S VIDEO** output of this DVD receiver to the S-video input jack of your VCR.

OR

Connect the **VIDEO** output jack of this DVD receiver and the video input jack of your VCR.

- 2 Connect the **LINE OUT** jacks of this DVD receiver to the audio input jacks of your VCR.

Note

Some DVDs are copy protected. You cannot record copy-protected discs using a VCR.

Viewing and listening to playback from a VCR

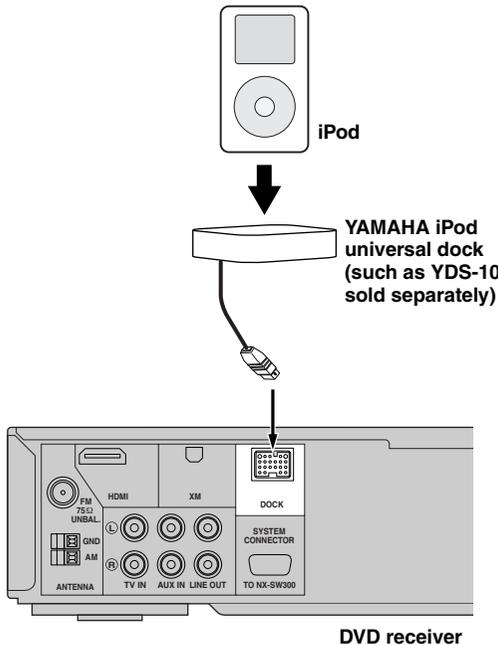
- 1 Connect the video output jack of the VCR and the video input jack of your TV.
- 2 Connect the **AUX IN** jacks of this DVD receiver to the audio output jacks of your VCR.

Note

Before starting operation, press **AUX** repeatedly to select "AUX ANALOG" to activate the input source.

■ Connecting a YAMAHA iPod universal dock

This DVD receiver is equipped with the **DOCK** terminal on the rear panel that allows you to connect a YAMAHA iPod universal dock (such as YDS-10 sold separately) where you can station your iPod and control playback of your iPod using the supplied remote control.

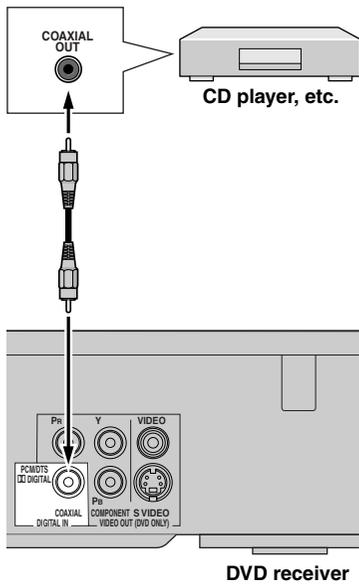


- ① Connect a YAMAHA iPod universal dock to the **DOCK** terminal on the rear panel of this DVD receiver using its dedicated cable.
 - ② Once the connection is complete, station your iPod in the YAMAHA iPod universal dock.
- For details on how to operate your iPod, see page 27.

Notes

- Only iPod (Click and Wheel), iPod nano, and iPod mini are supported.
- You need a YAMAHA iPod universal dock and its dedicated cable compatible with the DOCK terminal of this DVD receiver.
- Do not connect any iPod accessories (such as headphones, a wired remote control, or an FM transmitter) to your iPod when it is stationed in a YAMAHA iPod universal dock.
- Once your iPod is stationed in a YAMAHA iPod universal dock connected to the DOCK terminal of this DVD receiver, this DVD receiver begins the signal transmission with your iPod.
- Unless your iPod is firmly stationed in a YAMAHA iPod universal dock connected to the DOCK terminal of this DVD receiver, audio signals may not be output properly.
- Once the connection between your iPod and this DVD receiver is complete, “DOCKED” appears in the front panel display. If the connection between your iPod and this DVD receiver fails, “NOT DOCKED” appears in the front panel display.
- Your iPod battery is automatically charged when your iPod is stationed in a YAMAHA iPod universal dock connected to the DOCK terminal of this DVD receiver except when this DVD receiver is turned off, in DVD/CD mode and in changer mode.
- Only analog audio signals of your iPod are input at the DOCK terminal, and the analog audio signals can be output at the analog LINE OUT jacks for recording.
- Depending on the type of iPod, you may need to insert one of the iPod adapters supplied with a YAMAHA iPod universal dock into the dock slot before you station your iPod.

■ Connecting a digital audio component



Listening to playback

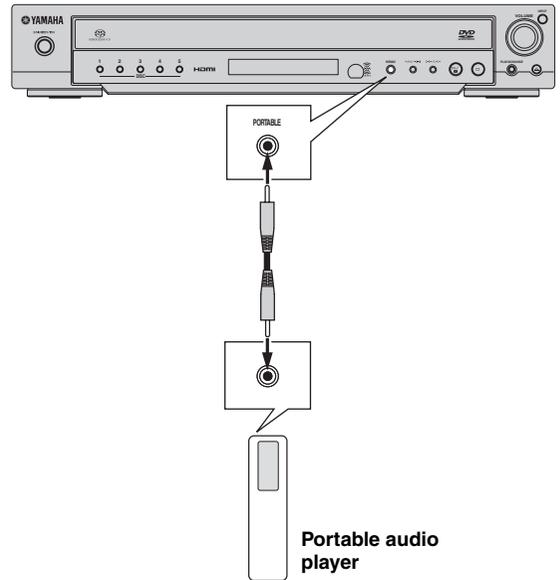
Connect the **COAXIAL** jack of this DVD receiver to the digital output jack of a digital audio component.

Notes

- Before starting operation, press **AUX** repeatedly to select “AUX DIGITAL” to activate the input source.
- You cannot hear or record the Super Audio-CD or MP3-CD playback if you use a digital connection.
- For playback through a digital connection, set the digital output of that player to PCM format.
- Always refer to the owner’s manual of the connected component for complete connection and usage details.

■ Connecting a portable audio player

Be sure to turn off the volume of this DVD receiver and the connected component before making connections.



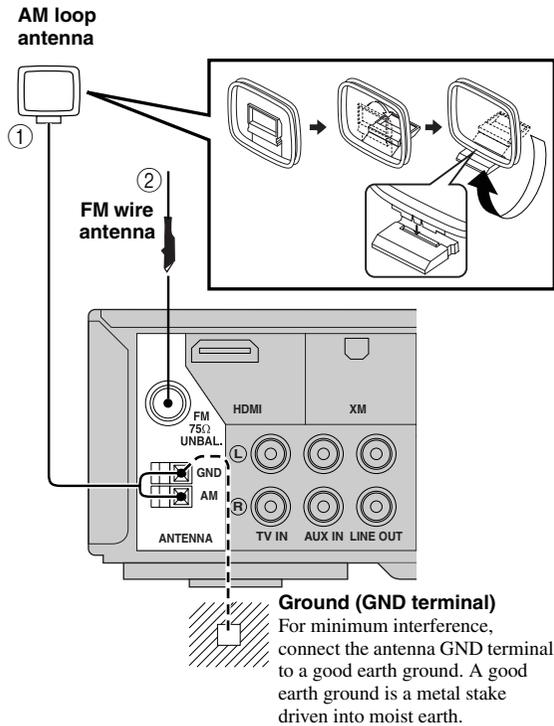
Listening to playback

Use the **PORTABLE** jack on the front panel to connect your portable audio player to this DVD receiver.

Note

Before starting operation, press **AUX** repeatedly to select “AUX FRONT” to activate the input source.

■ Connecting the FM/AM antennas



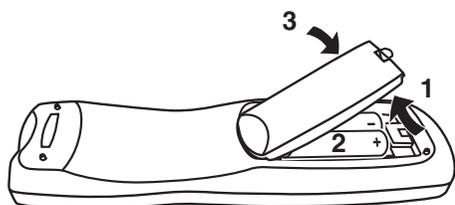
- ① Connect the supplied AM loop antenna to the **AM ANT** terminal. Place the AM loop antenna on a shelf or attach it to a stand or wall.
- ② Connect the supplied FM wire antenna to the **FM ANT** terminal. Extend the FM wire antenna and fix its ends to the wall.

Notes

- Adjust the position of the antennas for optimal reception.
- Place the antennas as far as possible from your TV, VCR or other sources of radiation to prevent unwanted interference.
- The AM loop antenna should be placed away from this DVD receiver.
- A properly installed outdoor antenna provides clearer reception than an indoor one. If you experience poor reception quality, an outdoor antenna may improve the quality. Consult the nearest authorized YAMAHA dealer or service center about outdoor antennas.

GETTING STARTED

■ Inserting batteries into the remote control



- ① Open the battery compartment.
- ② Insert two batteries type R06 or AA, following the indications (+/-) inside the compartment.
- ③ Close the battery compartment.

To replace the batteries

If the batteries grow old, the effective operation distance of the remote control decreases considerably. If this happens, replace the batteries with two new ones as soon as possible.

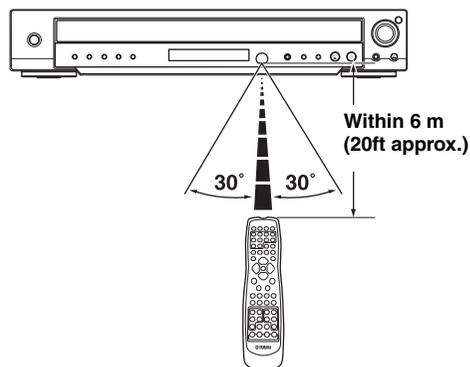
Notes

- Insert batteries correctly according to the polarity markings (+/-). The batteries inserted in the opposite direction may leak.
- Replace the exhausted batteries immediately with new ones to prevent a leakage.
- Remove the batteries from the compartment if the remote control is not used for more than a month.
- If the batteries have leaked, dispose of them immediately. Avoid touching the leaked material or letting it come into contact with clothing, etc. Clean the battery compartment thoroughly before installing new batteries.
- Do not use old batteries together with new ones.
- Do not use different types of batteries (such as alkaline and manganese batteries) together. Read the packaging carefully as these different types of batteries may have the same shape and color.
- Dispose of the batteries correctly in accordance with your local regulations.

If the remote control is without batteries for more than 2 minutes, or if exhausted batteries remain in the remote control, the contents of the memory may be cleared. When the memory is cleared, insert new batteries and reset the remote control codes. When changing the batteries, be careful not to press any of the buttons on the remote control. Doing so will clear the contents of the memory.

■ Using the remote control

Use the remote control within 6 m (20 ft approx.) of the DVD receiver and point it toward the remote control sensor.



Handling the remote control

- Do not spill water or other liquids on the remote control.
- Do not drop the remote control.
- Do not leave or store the remote control in the following types of conditions:
 - places of high humidity, such as near a bath
 - places of high temperature, such as near a heater or stove
 - places of extremely low temperatures
 - dusty places

■ Turning on the power

IMPORTANT!

Make sure that you have completed all the necessary connections (see page 12).

- ① Connect the AC power cord to an AC outlet.
- ② Turn on your TV and set the TV to the correct Video IN channel (e.g. EXT1, EXT2, AV1, AV2, AUDIO/VIDEO, etc.). Refer to the manual supplied with your TV for details.
- ③ Turn on this DVD receiver.
- ④ Press **DVD/CD** on the remote control.
→ “DVD/CD” appears in the front panel display and the default screen appears on the TV.

About the auto standby function

This DVD receiver is automatically set to the standby mode when disc playback is stopped or paused for more than 15 minutes.

When “SCREEN SAVER” is set to “ON” (see page 31):

The background is displayed when disc playback is stopped or the paused picture is displayed for 15 minutes.



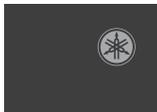
Background



Example of a paused picture



The screen saver is displayed for 15 minutes.



This DVD receiver is set to the standby mode.

When “SCREEN SAVER” is set to “OFF” (see page 31):

The background or the paused picture is displayed for 30 minutes.



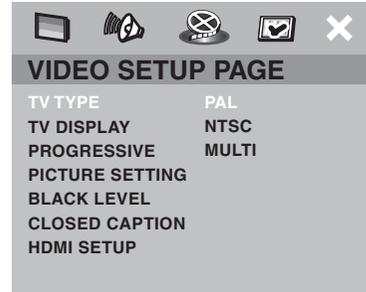
This DVD receiver is set to the standby mode.

■ Setting a TV type and display

This DVD receiver is compatible with both NTSC and PAL video formats. Select the color system that matches your TV.

Note

For details on how to use the OSD menu, see page 29.



PAL

Select this if the connected TV is a PAL system TV. It will change the video signals of NTSC discs and output them in PAL format.

NTSC

Select this if the connected TV is an NTSC system TV. It will change the video signals of PAL discs and output them in NTSC format.

MULTI

Select this if the connected TV is compatible with both NTSC and PAL formats (such as a multi-system TV). The output format will be in accordance with the video signals of the disc.

Notes

- Before changing the current TV standard setting, ensure that your TV supports the selected TV type.
- If the picture is not displayed properly on your TV, wait for 15 seconds for this DVD receiver to activate automatic recovery.

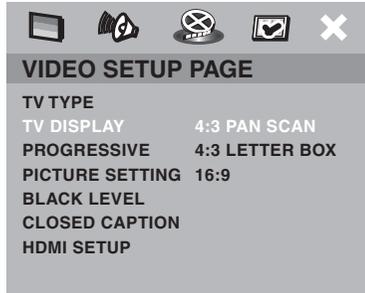
When changing the color system using the remote control:

- ① Press  on the front panel to open the disc tray.
- ② Press , and then press **AUDIO**.
→ The setting is switched between NTSC and PAL.

Setting an aspect ratio for your TV

You can set the aspect ratio of this DVD receiver to match your TV. If the aspect ratio of your TV is 4:3, you do not need to change this setting. If you have a widescreen TV, select [16:9].

For details, see “Setting the TV display” on page 34.



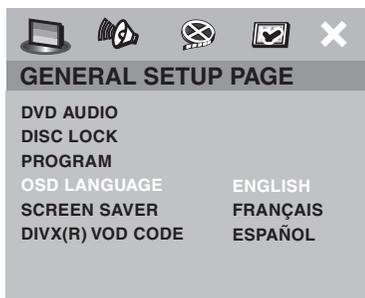
■ Setting language preferences

You can select your own preferred language settings. This DVD receiver automatically switches to your preferred language whenever you load a disc. If the selected language is not available on the disc, the default language of the disc will be used instead. The OSD language in the system menu remains once selected.

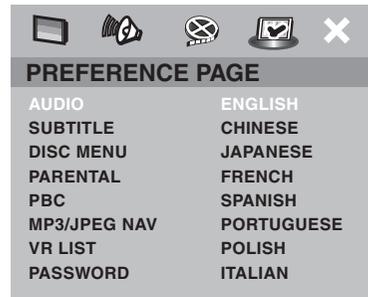
Note

For details on how to use the OSD menu, see page 29.

Setting the OSD language



Setting the audio, subtitle and disc menu languages



Note

Before displaying [PREFERENCE PAGE], be sure to press twice to stop playback.

[AUDIO] (audio language)

[SUBTITLE] (subtitle language)

[DISC MENU] (disc's menu language)

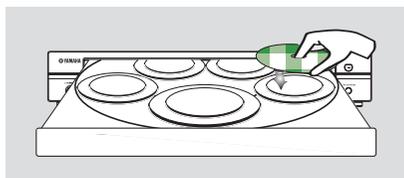
DISC OPERATION

IMPORTANT!

- If the inhibit icon (⊘ or "X") appears on the TV screen when a button is pressed, the function for that button is not available on the current disc or at the current time.
- DVD discs and a DVD receiver are designed with regional restrictions. Before playing a disc, make sure the disc is for the same zone as your DVD receiver.
- Do not push on the disc tray or put any objects other than discs on the disc tray. Doing so may cause the DVD receiver to malfunction.

Basic playback

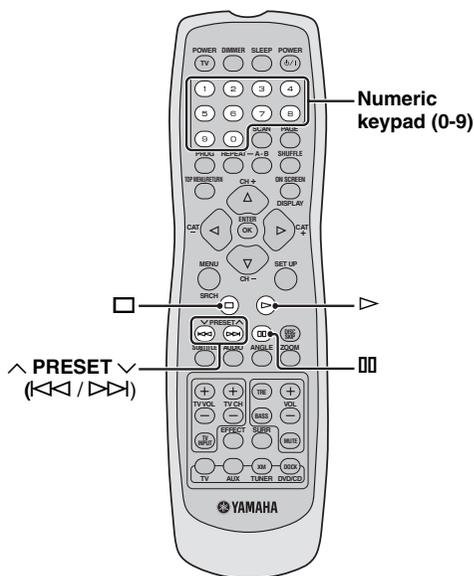
- 1 Press **STANDBY/ON** (⏻/⏻) on the front panel or **POWER** (⏻/⏻) on the remote control.
- 2 Press **⏻** on the front panel to open the disc tray.
- 3 Place discs in the disc tray with the printed side up.



- 4 Press **▶/⏻** on the front panel or **▶** on the remote control.
→ The disc tray closes and playback starts automatically for all of the loaded discs in the tray in sequence.
- 5 To stop playback, press **⏻** on the front panel or on the remote control.
 - To play back a specific disc directly, press **DISC SKIP** repeatedly on the remote control or press **DISC (1, 2, 3, 4, 5)** on the front panel.
 - Press **PLAYXCHANGE** on the front panel to open the disc tray, and then reload or unload discs without interrupting current disc playback.
 - Playback stops after all discs have been played.
 - When the disc tray is open, press **▶/⏻**, **⏻**, **PLAYXCHANGE** or **DISC (1, 2, 3, 4, 5)** to close the disc tray automatically.

General operation

Unless stated otherwise, all operations described here are carried out using the supplied remote control.



Pausing playback

- 1 During playback, press **⏻**.
→ Playback is paused and the sound is muted.
- 2 Press **⏻** again to select the next picture frame.
- 3 To resume normal playback, press **▶**.

Selecting a track/chapter

- Press **<<</>>>** or use the **numeric keypad (0-9)** to select a track/chapter number
- During repeat playback of a track/chapter, press **<<</>>>** to replay the same track/chapter.

Searching backward/forward

- 1 Press and hold **<<</>>>**.
- 2 While searching, press **<<</>>>** repeatedly to select the desired speed.
- 3 To resume normal playback, press **▶**.

Stopping playback

- Press **⏻**.

■ Selecting various repeat/shuffle functions

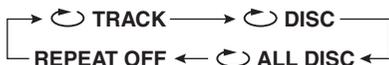
Repeat

Each time you press **REPEAT**, the display changes as follows:

Repeating chapter/title/disc (DVD-V)



Repeat track/disc (except DVD-V/DVD-A)



Repeating track/group/disc (DVD-A)



↻ **CHAPTER***: repeats the current chapter.

↻ **TITLE***: repeats the current title.

↻ **DISC**: repeats the entire disc.

↻ **ALL DISC**: repeats all discs loaded in the tray.

↻ **TRACK***: repeats the current track.

↻ **GROUP***: repeats the current group

REPEAT OFF: exits from the repeat mode.

* This feature may not be available with some discs.

Notes

- The availability of the repeat feature differs depends on the disc.
- When only one disc is available in the disc tray, it is continuously played when ↻ **ALL DISC** is selected.
- For VCD, repeat playback is not available when the PBC mode is selected.

Repeating a section within a chapter/track

- ① While playing a disc, press **A-B** at the desired starting point.
- ② Press **A-B** again at the desired end point.
→ The section repeats continuously.
- ③ To exit the sequence, press **A-B**.

Note

A and B can only be set within the same chapter/track.

Shuffle (except DVD/DVD-Audio/VCD/SVCD/DivX)

With the Shuffle function, you can play tracks in random order.

- During playback, press **SHUFFLE** repeatedly to select from SHUFFLE DISC, SHUFFLE ALL DISC, and SHUFFLE OFF.

→ The selected mode appears in the front panel display for several seconds.

SHUFFLE DISC: all tracks on the disc currently playing are played in a random order.

SHUFFLE ALL DISC: tracks from all discs are played in a random order:

To exit from the shuffle mode

- Press **SHUFFLE** repeatedly to select SHUFFLE OFF.

Notes

- For Hybrid SA-CDs, tracks on the SA-CD layer will be played by default. (see "Playing Super Audio CDs" on page 25).
- If the disc currently playing is a CD, only tracks from CDs and the CD layer of SA-CDs will be played.
- If the disc currently playing is formatted in SA-CD (SA-CD layer), MP3 or WMA, tracks on the disc currently playing are played in a random order. When all the tracks on that disc have been played, shuffle playback continues with the next disc.

■ Operations for video playback (DVD/VCD/SVCD)

Using the disc menu

Depending on the disc, a menu may appear on the TV screen once you load the disc.

To select a playback feature or item

- Use ◀ / ▶ / ▲ / ▼ or the **numeric keypad (0-9)** on the remote control, and then press **ENTER (OK)** to start playback.

To access or exit from the menu

- Press **MENU** on the remote control.

On-screen display (OSD)

The OSD menu shows disc playback information (e.g., the title or chapter number, elapsed playing time or audio/subtitle language). A number of operations are possible without interrupting disc playback.

- ① During playback, press **ON SCREEN**.
→ A list of available disc information appears on the TV screen.

DVD

MENU	
TITLE	02/14
CHAPTER	02/14
AUDIO	5.1CH
SUBTITLE	OFF
BITRATE 16 ██████████ TITLE ELAPSED 0:02:25	

VCD/SVCD

MENU	
TRACK	02/14
DISC TIME	0:49:17
TRACK TIME	0:03:43
REPEAT	OFF
BITRATE 16 ██████████ TITLE ELAPSED 0:02:25	

- ② Press \triangle / ∇ to view the information, and then press **ENTER (OK)** to access the selected item.
- ③ Use the **numeric keypad (0-9)** to input the number/time or press \triangle / ∇ to make a selection, and then press **ENTER (OK)** to confirm the selection.
→ Playback changes to the selected time or to the selected title/chapter/track.

To exit from the menu

- Press **ON SCREEN** again.

Zooming

This function allows you to enlarge or reduce the image on the TV screen and pan through the enlarged picture.

- ① During playback, press **ZOOM** repeatedly to display the picture at different scales.
- ② Use \triangleleft / \triangleright / \triangle / ∇ to pan through the enlarged picture.
→ Playback continues.

To return to the original size

- Press **ZOOM** again.

Resuming playback from the last stopped point

You can resume playback of the last 10 discs, even if the discs were ejected or the power of this DVD receiver was turned off.

- ① Load one of the last played 10 discs.
→ “LOADING #” (#: the disc tray number (1-5)) appears on the TV screen.
- ② Press \triangleright while “LOADING #” is displayed on the TV screen.
→ “RESUME PLAY” appears on the TV screen and the disc is played back from the last point.

To cancel the resume mode

- When playback is stopped, press \square again.

Advancing by frame

- ① During playback, press \square on the remote control.
→ Playback is paused and sound is muted.
- ② Press \square again to select the next picture frame.
- ③ To resume normal playback, press \triangleright .

Preview function

Preview function includes the following two types.

Digest:

This function displays a thumbnail to help you to preview the following sections of the disc.
TITLE, CHAPTER, GROUP, TRACK

Interval:

This function divides the following options at regular intervals to help you preview the scene you want to see.

TITLE, CHAPTER, GROUP, TRACK, DISC



(Example of 6 thumbnails in the display)

Note

The menu appears on the TV screen differs depending on the disc or current status (playback or stop).

**Preview title/chapter
(DVD for example)**

- ① Press **SCAN**.
→ The menu appears on the TV screen.

SELECT DIGEST TYPE:
TITLE DIGEST
CHAPTER DIGEST
TITLE INTERVAL
CHAPTER INTERVAL

- ② Press \triangle / ∇ to highlight [TITLE DIGEST], [CHAPTER DIGEST], [TITLE INTERVAL] or [CHAPTER INTERVAL] and then, press **ENTER (OK)** to open one option.
- ③ Use \lll / \ggg to open the previous or next page.
- ④ Use \triangleleft / \triangleright / \triangle / ∇ to select a title/chapter or use the **numeric keypad (0-9)** to input the selected title/chapter number next to [SELECT].
- ⑤ Press **ENTER (OK)** to start playback from the scene you select.

To exit from the preview function

- Use \triangleleft / \triangleright / \triangle / ∇ to highlight [EXIT] and press **ENTER (OK)** to confirm.

To return to the preview menu

- In step ③ and ④, use \triangleleft / \triangleright / \triangle / ∇ to highlight [MENU] and then, press **ENTER (OK)** to confirm.

Special DVD features**Playing by title**

- ① Press **TOP MENU/RETURN**.
→ The disc title menu appears on the TV screen.
- ② Use \triangleleft / \triangleright / \triangle / ∇ or the **numeric keypad (0-9)** to select a playback option.
- ③ Press **ENTER (OK)** to confirm your selection.

Camera angle

If the disc contains sequences recorded from different camera angles, this function allows you to view the picture from a number of different angles.

- Press **ANGLE** repeatedly to select the desired angle.

Audio

For DVD - Changing the audio language and/or format

- Press **AUDIO** repeatedly to select an audio language.
- For VCD - Changing the audio channel
- Press **AUDIO** repeatedly to select the available audio channels provided by the disc (STEREO, MONO LEFT, MONO RIGHT or MIX-MONO).

Subtitles

- Press **SUBTITLE** repeatedly to select a subtitle language for DVD, DivX and DVD-VR format discs that contain subtitles.

Special VCD & SVCD features**Playback control (PBC)**

For VCD with playback control (PBC) feature (version 2.0 only)

- ① Press **MENU** to toggle between “PBC ON” and “PBC OFF”.
→ If you select “PBC ON”, the disc menu (if available) appears on the TV.
- ② Use \lll / \ggg or the **numeric keypad (0-9)** to select a playback option.
- ③ During playback, press **TOP MENU/RETURN** to return to the menu screen (if PBC is selected).

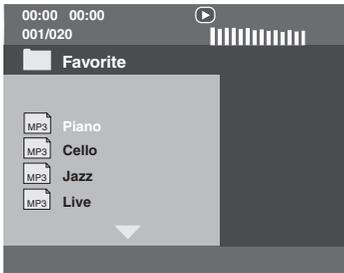
If you want to skip the index menu and play back a disc directly from the beginning:

- Press **MENU** on the remote control to turn off PBC. This function can also be accessed via the [PREFERENCE PAGE] menu (see “PBC” on page 37).

■ Playing MP3/JPEG/DivX®/WMA discs

This DVD receiver can play MP3, JPEG, DivX® and WMA files on a personally recorded CD-R/RW disc or commercial CD.

- ① Load a disc.
 - The disc reading time may exceed 30 seconds due to the complexity of the directory/file configuration.
 - The data disc menu appears on the TV screen.
- ② Playback starts automatically. If not, press ▷.



During playback, you can:

- ① Press ◀◀ / ▶▶ to select another track/file in the current folder.
- ② Press ⏸ to pause playback.
- ③ Press ▷ to resume playback.

Notes

- It may not be possible to play certain MP3, JPEG, DivX® and WMA discs due to the configuration and characteristics of the discs or the recording conditions.
- It is normal to experience an occasional pixelation during DivX® playback due to poor clarity of digital contents during internet downloading.
- During the playback of the JPEG pictures, press ◀ / ▶ / △ / ▽ to rotate the pictures.

Selecting a folder and track/file

- ① Press △ / ▽ to select a folder, and then press **ENTER (OK)** to open the folder.
- ② Press △ / ▽ to select a track/file.
- ③ Press **ENTER (OK)** to confirm your selection.
 - Playback starts from the selected file to the end of the folder.

Playing MP3 music and JPEG pictures simultaneously

- ① Load a disc that contains both music and picture data.
 - The disc menu appears on the TV screen.
- ② Select an MP3 track.
- ③ During MP3 music playback, select a picture from the TV screen, and then press ▷.
 - The picture files are played back one after another until the end of the folder.

Stopping the playback

- Press **MENU**, and then press □.

Note

Some files on Kodak or JPEG discs may be distorted during playback due to the configuration and characteristics of the discs.

■ Playing Super Audio CDs

- ① Load a Super Audio CD.
 - The disc menu appears on the TV screen.
- ② Playback starts automatically.

Notes

- If the Super Audio CD consists of multi-channel and stereo tracks, multi-channel tracks have the priority for playback. For details about Super Audio CD, see page 53.
- Programming function is not available when playing back Super Audio CD tracks.

To playback stereo tracks

- Use △ / ▽ to make your selection from the disc menu, and then press ▷.

■ DVD-Audio Features

DVD-Audio has developed for the sole purpose of creating high quality pure sound with Linear PCM and Packed PCM (lossless coding) in up to six audio-channels. Sampling frequencies of 192 kHz/24 bits are supported.

Moreover, many DVD-Audio discs offer slide show and page turn capabilities.

Note

When you play a down mix prohibited disc, DOWNMIX indicator does not light up in the front panel display.

Changing pages

Some DVD-Audio discs contain information pages for photo galleries, artist biographies, lyrics, etc.

- Each time you press **PAGE** on the remote control, the display moves to the next page.

Playing bonus groups

Some discs contain bonus groups that require a four-digit password to gain access. In this case, consult the disc jacket and other packaging for information.

- ① Press **□** to stop playback, and then press **ON SCREEN**.
→ The group and track list is displayed on the TV screen.
- ② Press **△ / ▽** to select a bonus group, and then press **ENTER (OK)**
- ③ Enter a four-digit password using the **numeric keypad (0-9)**, and then press **ENTER (OK)**
- ④ Press **△ / ▽** to select a track, and then press **ENTER (OK)**.

DVD-Video mode

Some DVD-Audio discs include DVD-Video contents that can be played on conventional DVD-Video players.

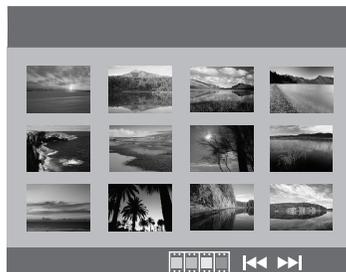
■ Playing JPEG/Kodak picture CDs

- ① Load a disc (JPEG or Kodak picture CD).
→ For JPEG discs, the picture menu appears on the TV screen.
→ For Kodak discs, the slideshow begins.
- ② Press **▷** to start the slideshow.

Preview function (JPEG)

This function displays the content of the current folder or the entire disc.

- ① Press **□** during the playback.
→ 12 thumbnail pictures appear on the TV screen.



- ② Press **◀◀ / ▶▶** to display the other pictures on the previous/next page.
- ③ Use **◀ / ▶ / △ / ▽** to highlight one of the pictures, and then press **ENTER (OK)** to start playback.

OR

Move the cursor to highlight **⏏** on the bottom of the page to start playback from the first picture on the current page.

- ④ Press **MENU** to return to the picture CD menu.

Zooming pictures

- ① During playback, press **ZOOM** repeatedly to display the picture at the different scales.
- ② Use **◀ / ▶ / △ / ▽** to view the zoomed picture.

Playback with the multi-angles

During playback, use **◀ / ▶ / △ / ▽** to rotate the picture on the TV screen.

△ : rotates the picture vertically.

▽ : flips the picture horizontally.

◀ : rotates the picture counter-clockwise.

▶ : rotates the picture clockwise.

Scan effect

- Press **ANGLE** repeatedly to choose a scan effect.
→ Various scan effects appear in the top left corner of the TV screen.

iPod® OPERATION

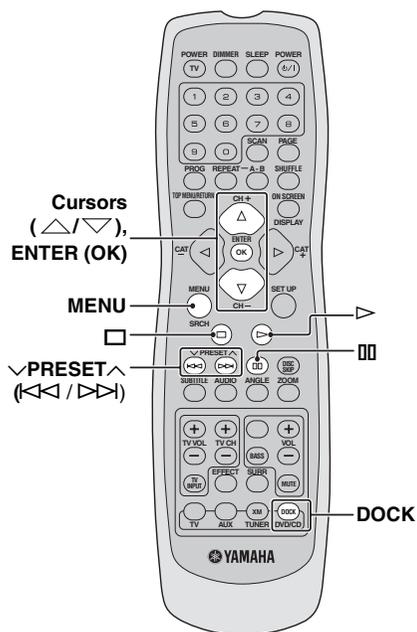
■ Controlling iPod using the OSD

Once your iPod is stationed in the YAMAHA iPod universal dock, you can perform the operations of your iPod using the supplied remote control with the aid of the OSD menu. You can also browse the songs stored on your iPod in the OSD menu.

Notes

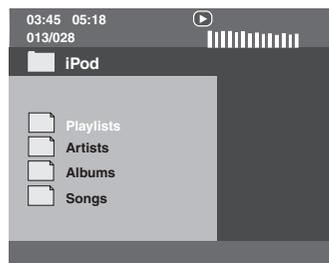
- Operations can not be done with the controls on your iPod.
- The YAMAHA background appears in the display window of your iPod.
- You cannot browse the photos or video clips stored on your iPod using the OSD of this DVD receiver.
- The music menu items shown on the iPod menu may differ depending on the disc.
- If the connection between your iPod and this DVD receiver fails, “NOT DOCKED” appears in the front panel display.
- When you operate your iPod using the OSD menu of this DVD receiver, “All” folder is not displayed.
- If the song you want to play is not found in the music menu items, select it from “Songs”.

Remote control functions



- ① Press **INPUT** on the front panel or **DOCK** on the remote control repeatedly until “DOCKED” appears in the front panel display.

→ The iPod menu appears on the TV screen.



- ② Use \triangle / ∇ or **ENTER (OK)** to move the cursor to select the desired music menu item from the following options.
 - Playlists > Songs
 - Artists > Album > Songs
 - Album > Songs
 - Songs
 - Genres > Artists > Albums > Songs
 - Composers > Albums > Songs
- ③ Press \triangleright to start playback.

To return to the previous menu

- Press **MENU**.

Shuffle

Use this feature to set this DVD receiver to play songs or albums in a random order.

- Press **SHUFFLE** to turn on the shuffle mode.

→ “SHUFFLE” appears on your TV.

To exit from the shuffle mode

- Press **SHUFFLE** again.

Note

This function is only available when your iPod is set to the shuffle mode.

Repeat

Use this feature to set this DVD receiver to repeat one song or a sequence of songs.

- Press **REPEAT** repeatedly to select from REPEAT ONE, REPEAT ALL, and REPEAT OFF.

→ The selected mode appears on your TV.

REPEAT ONE: set this DVD receiver to repeat one song.

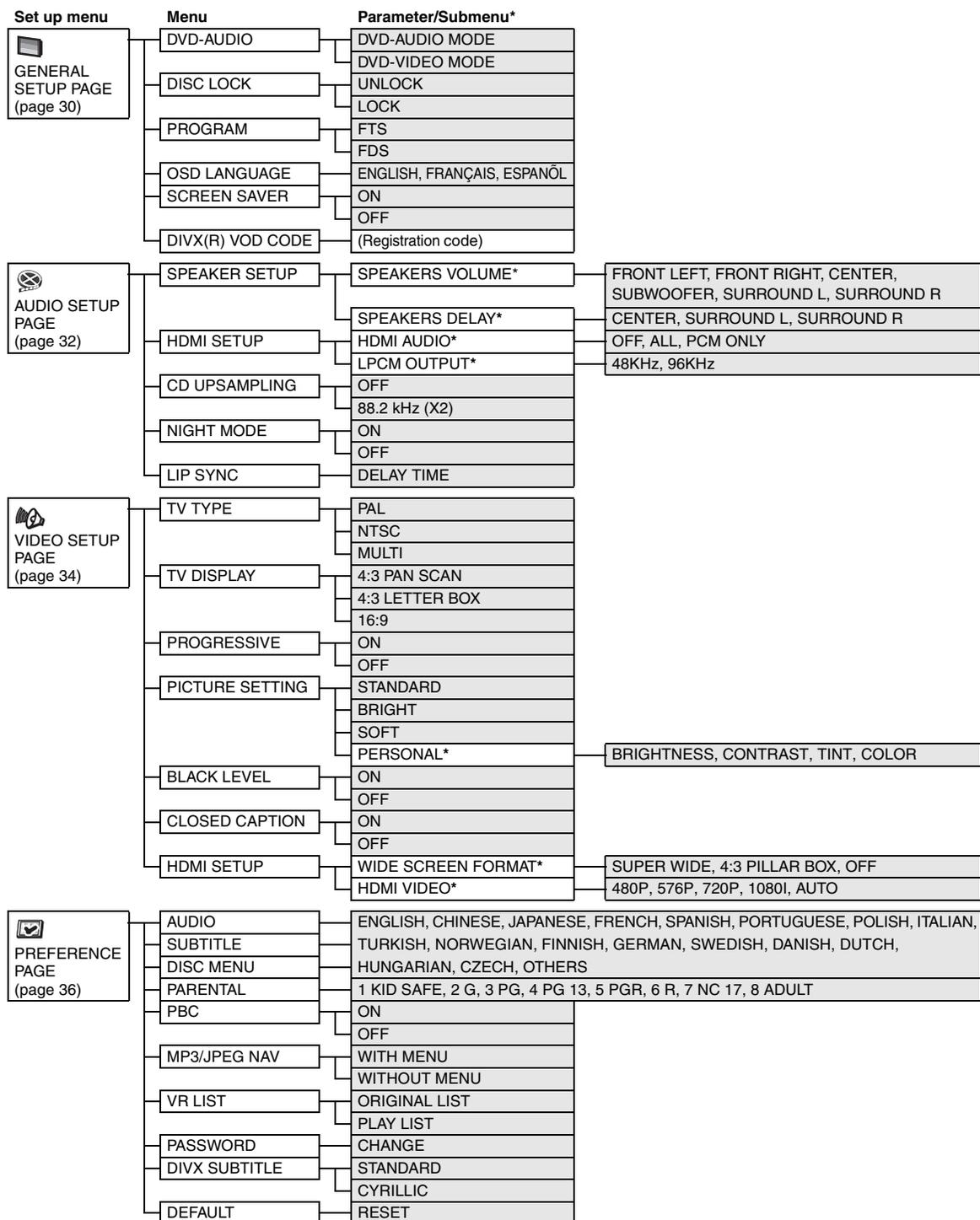
REPEAT ALL: set this DVD receiver to repeat a sequence of songs.

To exit from the repeat mode

- Press **REPEAT** repeatedly to select REPEAT OFF.

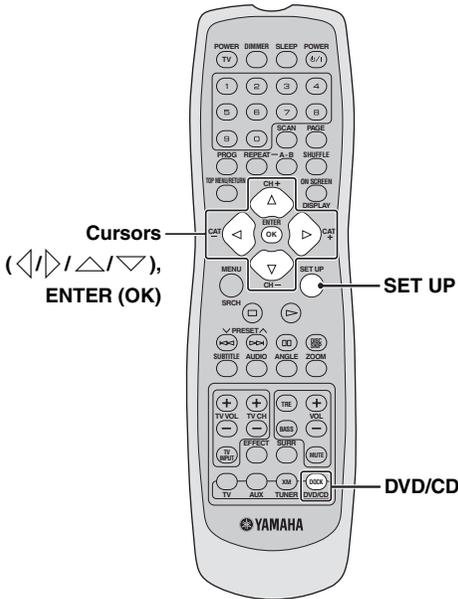
DVD SETUP MENU OPTIONS

Menu overview

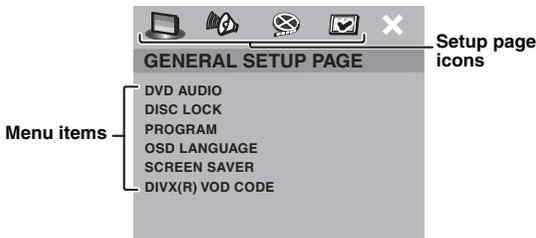


Using the OSD menu

Setup is carried out on the TV screen, enabling you to customize this DVD receiver to suit your own particular requirements. Follow the procedures below to start the OSD menu operations.



- Press **DVD/CD**, and then press **SET UP** to display the OSD menu on your TV.



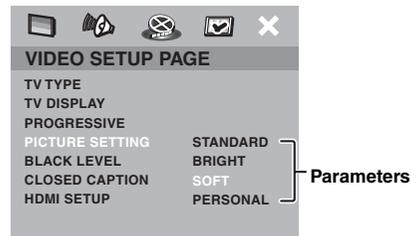
- Press \leftarrow / \rightarrow to select the desired setup page icon, and then press **ENTER (OK)**.
→ Menu items and parameters appear.



- Press \triangle / ∇ to highlight the desired menu item, and then press \triangleright or **ENTER (OK)**.
→ If the selected menu item has submenus, repeat step ③.
→ If the selected menu item has adjustment window, proceed to step ⑤.



- Press \triangle / ∇ to select the desired parameter, and then press **ENTER (OK)** to confirm your selection.
– Refer to the following pages for details of the menu that requires a particular operation.



To return to the previous menu

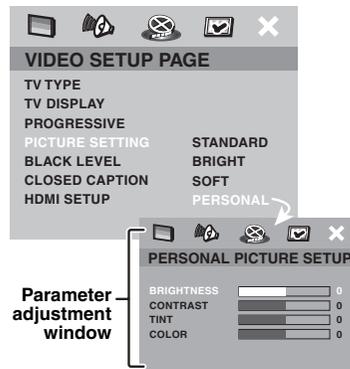
- Press \triangleleft .

To exit from the menu

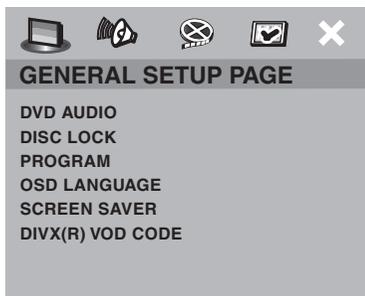
- Press **SET UP**.

If the parameter has the adjustment window:

- Press \leftarrow / \rightarrow to adjust the parameter, and then press **ENTER (OK)** to confirm your selection.



■ General setup



Selecting DVD-Audio or DVD-Video

[GENERAL SETUP PAGE] - [DVD-AUDIO]

DVD-AUDIO MODE

Select this to playback the contents of the DVD-Audio.

DVD-VIDEO MODE

Select this to playback the contents of the DVD-Video.

Notes

- The DVD-AUDIO indicator lights up when a DVD-Audio disc is playing.
- When you select DVD-VIDEO MODE, the DVD-AUDIO indicator goes out.

Locking/Unlocking discs for viewing

Not all discs are rated or coded by the manufacturer of the disc. You can prevent playback of a specific disc by locking the disc. You can lock up to 40 discs on this DVD receiver.

[GENERAL SETUP PAGE] - [DISC LOCK]

UNLOCK

Select this to unlock the disc and allow future playback.

LOCK

Select this to lock playback of the current disc. Subsequent access to a locked disc requires a six-digit password. The default password is '000 000' (see "Changing the password" on page 38).

Programming disc tracks

Program: Track

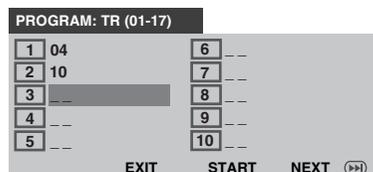
(except for Picture CD/SA-CD/MP3/WMA/DivX®)

You can playback the contents of a disc in the desired order by programming the tracks to be played. You can store up to 20 tracks per disc with a maximum of 10 discs.

- ① Press **PROG** on the remote control.

OR

[GENERAL SETUP PAGE] - [PROGRAM] - [F.TS]



To input your favorite tracks/chapters

- ② Use the **numeric keypad (0-9)** to enter a valid track/chapter number.
- ③ Use $\leftarrow / \rightarrow / \triangle / \nabla$ to move the cursor to the next position.
 - If the track number has more than ten digits, press \rightarrow to move to the next page, and then proceed with programming.

OR

- Use $\leftarrow / \rightarrow / \triangle / \nabla$ to highlight [NEXT] on the program menu, and then press **ENTER (OK)**.
- ④ Repeat steps ② and ③ to input another track/chapter number.

To remove a track

- ⑤ Use $\leftarrow / \rightarrow / \triangle / \nabla$ to move the cursor to the track you want to remove, and then press **ENTER (OK)**.
→ The track is removed from the program menu.

Program: Disc

You can playback discs in the desired order by programming the discs to be played. You can store up to 5 discs.

- ① Press **PROG** on the remote control.
OR
[GENERAL SETUP PAGE] - [PROGRAM] - [FDS]



To input your favorite discs

- ② Use the **numeric keypad (0-9)** to enter a valid disc number.
- ③ Use $\leftarrow / \rightarrow / \triangle / \nabla$ to move the cursor to the next position.
- ④ Repeat steps ② and ③ to input another disc number.

To remove a disc

- ⑤ Use $\leftarrow / \rightarrow / \triangle / \nabla$ to move the cursor to the disc you want to remove, and then press **0**.
→ The disc is removed from the program menu.

To start program playback

- Use $\leftarrow / \rightarrow / \triangle / \nabla$ to highlight [START] on the program menu, and then press **ENTER (OK)**.
→ Playback starts for the selected tracks or discs in the programmed sequence.

To exit from program playback

- Use $\leftarrow / \rightarrow / \triangle / \nabla$ to highlight [EXIT] on the program menu, and then press **ENTER (OK)**.

OSD language

This menu contains various language options for the on-screen display (OSD) language. For details, see “Setting the OSD language” on page 20.
[GENERAL SETUP PAGE] - [OSD LANGUAGE]

Screen saver

Use this feature to turn on or off the screen saver.
[GENERAL SETUP PAGE] - [SCREEN SAVER]

ON

Select this if you wish to turn off the TV screen when disc playback is stopped or paused for more than 15 minutes.

OFF

Select this to disable the screen saver function.

DivX®VOD registration code

Yamaha provides you with the DivX®VOD (Video On Demand) registration code that allows you to rent and purchase videos using the DivX®VOD service. For more information, go to www.divx.com/vod.
[GENERAL SETUP PAGE] - [DIVX(R) VOD CODE]
→ The window displaying the registration code appears.

To exit from the window

- Press **ENTER (OK)**.

Notes

- All the videos downloaded from DivX®VOD can only be played back on this DVD receiver.
- The time search function is not available during DivX® movie playback.

■ Audio setup



Speaker setup

You can adjust the delay times (for center and surround speakers only) and volume level for individual speakers. These adjustments let you optimize the sound of your system to best suit your surroundings and setup.

[AUDIO SETUP PAGE] - [SPEAKER SETUP]

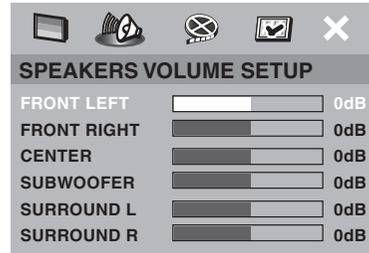
Notes

- Press **SURR** on the remote control to select the multi-channel surround mode before adjusting the speaker settings (see page 46).
- Before setting [SPEAKER SETUP], be sure press twice to stop playback.



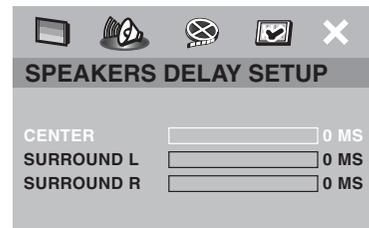
[SPEAKERS VOLUME]

Volume level setting for individual speakers (–6dB to +6dB).



[SPEAKERS DELAY]

Delay time settings is in relation to the listening position/distance for center and surround speakers (0 MS to 15 MS).



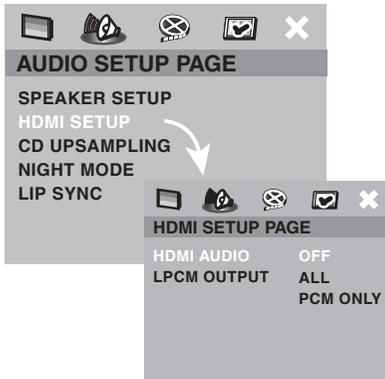
Notes

- Use a longer delay time settings when the surround speakers are closer to the listener than the front speakers.
- A test tone will be automatically generated to help you judge the sound level of each speaker.

HDMI setup

When you have connected this DVD receiver to an HDMI-compatible component via HDMI jack, adjust the following menu items to match the audio output capability of this DVD receiver.

[AUDIO SETUP PAGE] - [HDMI SETUP]



[HDMI AUDIO]

Adjust the audio output depending on the connected component.

OFF

Selects this to turn off the HDMI audio output.

ALL

Select this if you have connected this DVD receiver to a multi-channel decoder or receiver via the HDMI jack of this DVD receiver.

PCM ONLY

Select this if the component you have connected via the HDMI jack is not capable of decoding multi-channel audio signals. The audio sampling rate depends on [LPCM OUTPUT] setting.

[LPCM OUTPUT]

Set this if you have connected this DVD receiver to a PCM-compatible component via HDMI jack. Discs are recorded at a certain sampling rate. The higher sampling rate provides the better sound quality.

48KHz

Select this to play back discs recorded at the sampling rate of 48kHz. All 96kHz PCM data streams (if available) are converted to the sampling rate of 48kHz.

96KHz

Select this to play back discs recorded at the sampling rate of 96kHz. If the 96kHz disc is copy protected, the digital output is automatically converted to the sampling rate of 48kHz.

CD upsampling

Use this feature to convert your music CD to a higher sampling rate using sophisticated digital signal processing for better sound quality. If you activate the upsampling function, this DVD receiver automatically switches to the stereo mode.

[AUDIO SETUP PAGE] - [CD UPSAMPLING]

OFF

Select this to disable CD-upsampling.

88.2 kHz (X2)

Select this to convert the sampling rate of CDs to twice that of the original.

Notes

- This setting is only valid for signals output at the analog jacks.
- If you have activated the upsampling function, this DVD receiver automatically switches to stereo mode.

Night mode

In the night mode, high volume output is softened and low volume output is brought upward to an audible level. It is useful when you watch your favorite action movie without disturbing others at night.

[AUDIO SETUP PAGE] - [NIGHT MODE]

ON

Select this to level out the volume.

OFF

Select this when you want to enjoy the full dynamic range of surround sound.

Note

This function is only available for Dolby Digital.

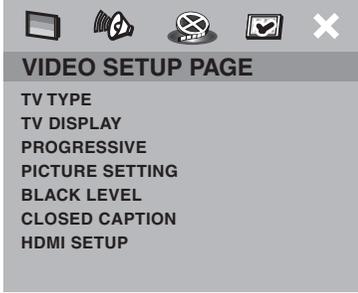
Lip synchronization

This feature allows you to delay the sound output from the speaker in order to synchronize it with the video image. This may be necessary when using certain LCD monitors or projectors.

[AUDIO SETUP PAGE] - [LIP SYNC]

- Press ◀ / ▶ to adjust the delay time (between 0 ms and 200 ms), and then press **ENTER (OK)** to confirm your selection.

Video setup



TV type

Use this feature to select a color system that matches your TV. For details, see “Setting a TV type and display” on page 19.

[VIDEO SETUP PAGE] - [TV TYPE]

Setting the TV display

Set the aspect ratio of this DVD receiver to match your TV. The format you select must be available on the disc. Otherwise, the TV display setting will not affect the picture during playback.

[VIDEO SETUP PAGE] - [TV DISPLAY]

4:3 PAN SCAN

Select this if the aspect ratio of your TV is 4:3 and you want both sides of the picture to be trimmed or formatted to fit your TV screen.

4:3 LETTER BOX

Select this if the aspect ratio of your TV is 4:3. In this case, a wide picture with black bands on the upper and lower portions of the TV screen are displayed.

16:9

Select this if you have a widescreen TV.

The following shows the relationship between the setting of this DVD receiver and the TV display.

When the aspect ratio of your TV is 4:3:

Setting	Playback disc	TV display	
4:3 PAN SCAN	16:9		*1
	4:3		
4:3 LETTER BOX	16:9		
	4:3		

When the aspect ratio of your TV is 16:9 (widescreen):

Setting	Playback disc	TV display	
16:9	16:9		
	4:3		*2

*1: If the disc is not assigned to playback with panscan, it is played with letterbox.

*2: The side of the picture may be stretched depending on the TV. In this case, check the screen size and aspect ratio of your TV.

Progressive function

This feature is only valid if you have connected this DVD receiver to a progressive scan TV through the component video jacks (see “Connecting a TV” on page 12).

[VIDEO SETUP PAGE] - [PROGRESSIVE]

ON

Select this to enable the progressive scan function.

OFF

Select this to disable the progressive scan function.

Notes

- Ensure that your TV is equipped with progressive scan.
- Connect using a component video cable.
- If no picture is displayed, wait for 15 seconds for this DVD receiver to activate automatic recovery.

CONSUMERS SHOULD NOTE THAT NOT ALL HIGH DEFINITION TELEVISION SETS ARE FULLY COMPATIBLE WITH THIS PRODUCT AND MAY CAUSE ARTIFACTS TO BE DISPLAYED IN THE PICTURE. IN CASE OF 525 OR 625 PROGRESSIVE SCAN PICTURE PROBLEMS, IT IS RECOMMENDED THAT THE USER SWITCH THE CONNECTION TO THE “STANDARD DEFINITION” OUTPUT. IF THERE ARE QUESTIONS REGARDING OUR VIDEO MONITOR COMPATIBILITY WITH THIS MODEL 525P AND 625P DVD PLAYER, PLEASE CONTACT OUR CUSTOMER SERVICE CENTER.

This DVD receiver is compatible with the complete line of YAMAHA products, including the projectors DPX-1300, DPX-830 and the plasma monitor PDM-4220.

Picture settings

This DVD receiver comes with three predefined sets of picture color settings and one personal setting that you can define yourself.

[VIDEO SETUP PAGE] - [PICTURE SETTING]

STANDARD

Select this for the standard picture setting.

BRIGHT

Select this to make the TV picture brighter.

SOFT

Select this to make the TV picture softer.

PERSONAL

Select this to personalize your picture color by adjusting the brightness, contrast, tint and color (saturation).

[VIDEO SETUP PAGE] - [PICTURE SETTING]

→ The [PERSONAL PICTURE SETUP] menu appears.



BRIGHTNESS

Increase the value to brighten the picture or vice versa. Zero (0) is the average brightness setting value.

CONTRAST

Increase the value to sharpen the picture or vice versa. Zero (0) is the average contrast setting value.

TINT

Increase the value to darken the picture or vice versa. Zero (0) is the average tint setting value.

COLOR

Increase the value to enhance the color in your picture or vice versa. Zero (0) is the average color setting value.

Selecting the black level

If you set the TV type to NTSC, set black level shift to ON to improve the color contrast during playback.

The black level setting has no effect if the TV type is set to PAL (see “Setting a TV type and display” on page 19).

[VIDEO SETUP PAGE] - [BLACK LEVEL]

ON

Select this to enhance the black level.

OFF

Select this for standard black level setting.

Closed captions

Closed captions are data hidden in the video signals of specific discs and are invisible without the use of a special decoder. The difference between subtitles and captions is that subtitles are intended for hearing persons and captions are for the hearing impaired. Subtitles rarely show all of the audio. For example, captions show sound effects (e.g., “phone ringing” and “footsteps”), while subtitles do not.

Before you select this function, please ensure that the disc contains closed caption information and your TV set also supports this function.

[VIDEO SETUP PAGE] - [CLOSED CAPTION]

ON

Select this to enable the closed caption function.

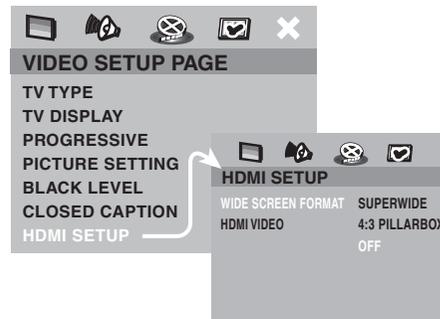
OFF

Select this to disable the closed caption function.

HDMI setup

When you have connected this DVD receiver to an HDMI-compatible component via HDMI jack, adjust the following menu items to match the video output capability of this DVD receiver.

[VIDEO SETUP PAGE] - [HDMI SETUP]



[WIDE SCREEN FORMAT]

Adjust the aspect ratio of the projected image on the screen.

SUPER WIDE

Select this to display 16:9 image on the 16:9 screen. This function is only available when the input source is 720p or 1080i.

4:3 PILLAR BOX

Select this to display 4:3 image on the 16:9 screen with a black pillar applied to the left and the right side.

OFF

No aspect ratio adjustment is made.

[HDMI VIDEO]

Adjust the resolution depending on the connected component.

480P

480 progressive-scan video.

576P

576 progressive-scan video.

720P

720 progressive-scan video.

1080I

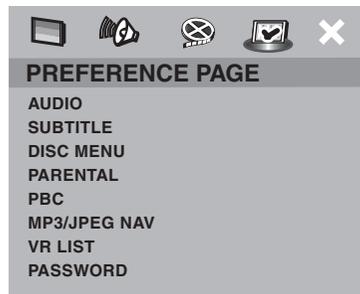
1080 interlace video.

AUTO

The resolution is automatically selected to match the component you are using.

Note

Be sure to set [TV TYPE], [WIDE SCREEN FORMAT] and your component setting to match the selected resolution.

■ Preference setup**Audio, subtitle and disc menus**

These menus contain various language options for the audio, subtitle and disc menus recorded on the DVD. For details, see “Setting the audio, subtitle and disc menu languages” on page 20.

[PREFERENCE PAGE] - [AUDIO], [SUBTITLE], or [DISC MENU]

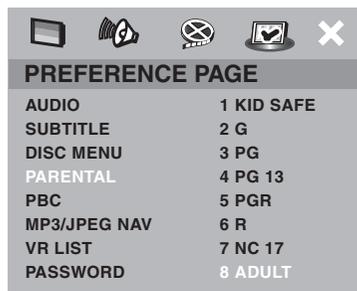
If the language you want is not in the list:

- ① Select [OTHERS] from the language options.
- ② Use the **numeric keypad (0-9)** on the remote control to enter the 4-digit language code (see “LIST OF LANGUAGE CODES” at the end of this manual”) and press **ENTER (OK)** to confirm your selection.

Restricting playback with parental control

Some DVDs may have a parental level assigned to the complete disc or to certain scenes on the disc. This feature lets you set a playback limitation level. The rating levels are from 1 to 8 and are country dependent. You can prohibit the playing of certain discs that are not suitable for your children or play alternative scenes for certain discs.

[PREFERENCE PAGE] - [PARENTAL]



- To disable parental control, and have all discs play, select [8 ADULT].
- DVDs that are rated above the level you selected do not play unless you enter the six-digit password. In that case, use the **numeric keypad (0-9)** to enter the six-digit password (see “Changing the password” on page 38).

Notes

- VCD, SVCD, CD have no level indication, so the parental control function has no effect with these types of discs. This also applies to most illegal DVDs.
- Some DVDs are not encoded with a rating though the movie rating may be printed on the disc cover. The rating level feature does not prohibit play of such discs.

PBC

You can turn on or off PBC. This feature is available only on Video CD 2.0 with the playback control (PBC) feature. For details, see “Playback control (PBC)” on page 24.

MP3/JPEG navigator

MP3/JPEG navigator can be set only if the disc was recorded with a menu. It allows you to select different display menus for easy navigation.

[PREFERENCE PAGE] - [MP3/JPEG NAV]

WITH MENU

Select this to display only the folder menu of the MP3/Picture CD.

WITHOUT MENU

Select this to display all the files contained in the MP3/Picture CD.

Playback of VR format

There are two ways to play back a disc in VR (Video Recording) format: ORIGINAL LIST and PLAY LIST. This feature is not available with non-VR format discs.

[PREFERENCE PAGE] - [VR LIST]

ORIGINAL LIST

Select this to play the originally recorded titles on the disc.

PLAY LIST

Select this to play the edited version of the disc. This feature is only available when a play list has been created.

To playback of a disc in VR format

- ① Press **SET UP** to close the setup menu.
- ② Press **▷**. The setting you selected begins to play.

To preview VR format

- ③ During playback, press **SCAN**.
- ④ Press **△ / ▽** to highlight either [TITLE DIGEST] or [TITLE INTERVAL], and then press **ENTER (OK)**.

TITLE DIGEST

This function display thumbnails of titles on the screen. A maximum of six thumbnails are displayed per page.

→ In ORIGINAL LIST mode, the originally recorded titles on the disc are displayed.

→ In PLAY LIST mode, every title in the play list is displayed.

TITLE INTERVAL

This function divides and displays the contents of each title being played back in regular intervals, making it easy to preview the recording. A maximum of six thumbnails are displayed per page.

→ If the title being played back is short, the TITLE DIGEST function will be performed instead.

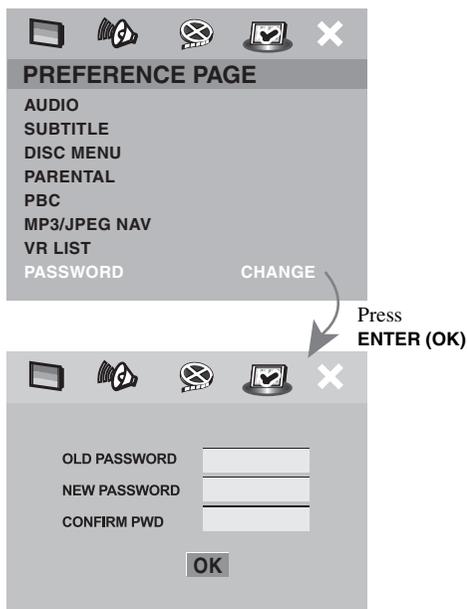
Note

For details, see “Preview function” on page 23.

Changing the password

The same password is used for both Parental Control (page 36) and Disc Lock (page 30). Enter your six-digit password to play a prohibited disc when prompted on the screen. The default password is '000 000'.

[PREFERENCE PAGE] - [PASSWORD] - [CHANGE]



- ① Use the **numeric keypad (0-9)** to enter your old six-digit password.
 - When doing this for the first time, enter '000 000'.
 - If you forget your old six-digit password, enter '000 000'.
- ② Enter the new six-digit password.
- ③ Enter the new six-digit password again to confirm the password.
 - The new six-digit password is now valid.
- ④ Press **ENTER (OK)** to confirm your new password.

Playing back DivX files with subtitles

The font sets listed below are available for DivX external subtitle files. You can see the proper font set on-screen by setting the following options.

[PREFERENCE PAGE] - [DIVX SUBTITLE]

STANDARD

Supports the following languages:

Albanian, Breton, Catalan, Danish, Dutch, English, Faroese, Finnish, French, Gaelic, German, Icelandic, Irish, Italian, Norwegian, Portuguese, Spanish and Swedish.

CYRILLIC

Supports the following languages:

Bulgarian, Belorussian, English, Macedonian, Moldavian, Russian, Serbian and Ukrainian.

Note

Some external subtitle files may not be displayed correctly or at all.

Restoring to the factory defaults

Setting the DEFAULT function resets all options and your personal settings to the initial factory settings, except your password for Parental Control (page 36) and Disc Lock (page 30).

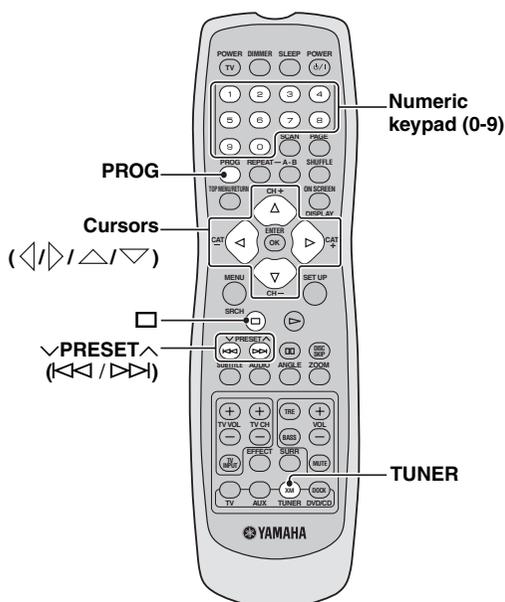
[PREFERENCE PAGE] - [DEFAULT] - [RESET]

- Press **ENTER (OK)** to reset the parameters to the initial factory settings.

FM/AM TUNING

■ Tuning stations

There are two tuning methods: automatic and manual. Automatic tuning is effective when station signals are strong and there is no interference.



Notes

- Hold down ◀ / ▶ to continue searching.
- Switch the FM mode from stereo to mono if the FM station you have selected has a weak signal.
- Each time you press **SURR**, the front panel display changes as follows:



■ Presetting stations

There are three ways presetting methods: plug and play, automatic and manual. Use these methods to store up to 20 FM and 10 AM stations. You can then recall any preset station easily by selecting the preset station number.

Note

This DVD receiver will exit presetting mode if no button is pressed within 20 seconds.

Automatic tuning

- ① Press **TUNER** repeatedly to select “TUNER/FM” or “TUNER/AM”.
- ② Press ▲ / ▼ briefly.
→ “SEARCH” appears, and this DVD receiver automatically detects the radio stations that have strong signals for your selection.

Manual tuning

- ① Press **TUNER** repeatedly to select “TUNER/FM” or “TUNER/AM”.
- ② Press ◀ / ▶ to tune into the desired station manually.

Plug and Play

This function enables this DVD receiver to automatically tune into FM stations followed by AM stations with strong signals.

- ① Press **TUNER**.
→ “AUTO PRESET” and “PRESS PLAY” appears one after the other if installation has not been completed.
- ② Press ▶ on the front panel to start installation.
→ “AUTO PRESET” appears.

Notes

- When tuning is completed, this DVD receiver starts play the last tuned station.
- If no valid frequency is detected during Plug and Play, “CHECK ANTENNA” appears.

To cancel the installation

Before installation is completed, press □.

Automatic presetting

You can select the preset number from which this DVD receiver will store stations and/or begin tuning toward lower frequencies.

- ① Press **TUNER** repeatedly to select “TUNER/FM” or “TUNER/AM”.
- ② Press **◀◀ / ▶▶** or use the **numeric keypad (0-9)** to select the preset number under which the first station will be stored.
- ③ Press and hold **PROG** until “AUTO PRESET” appears.

Notes

- Any stored station data existing under a preset number is cleared when you store a new station under that preset number.
- If no preset number is selected, automatic preset begins from preset (1) and all former preset will be overwritten.

Manual presetting

You can choose and store only your favorite stations by manually. Also, if the station you want to store is weak in signal strength, store it by manually.

- ① Tune into a station which you want to store (see “Tuning stations” on page 39).
- ② Press **PROG**.
- ③ Press **◀◀ / ▶▶** to select a preset number.
 - Press **▶▶** to select a higher preset number and press **◀◀** to select a lower preset number.
- ④ Press **PROG** again to store.
- ⑤ Repeat steps ① to ④ to store other stations.

Selecting preset stations

You can tune any desired station simply by selecting the preset number under which it was stored.

- Press **◀◀ / ▶▶** or use the **numeric keypad (0-9)** to select a desired preset number.
 - The station band, preset number, and frequency appear in the front panel display.

Deleting a preset radio station

- ① Tune into a station which you want to delete (see “Tuning stations” on page 39).
- ② Press and hold **□** on the front panel until “AM XX DELTD” or “FM XX DELTD” (XX: preset number) appears.
 - The selected station is deleted.

XM[®] SATELLITE RADIO TUNING

XM Satellite Radio is the satellite radio service with millions of listeners across the United States and Canada, broadcasting live daily. The XM Satellite Radio channel lineup includes over 160 digital channels of choice from coast to coast: 67 commercial-free music channels, featuring hip hop to opera, classical to country, bluegrass to blues; 33 channels of premier sports, talk, comedy, children's and entertainment programming; and more than 20 channels of the traffic and weather information for major metropolitan areas nationwide. Because XM Satellite Radio is a subscription service, you will need to set up an account and activate service with XM using your XM Satellite Radio ID number. To check your ID number, follow "Activating XM Satellite Radio" on page 43. For further information on XM Satellite Radio services, visit the XM Satellite Radio website at "http://www.xmradio.com/" (for residents in the United States) or "http://www.xmradio.ca/" (for residents in Canada).

Notes

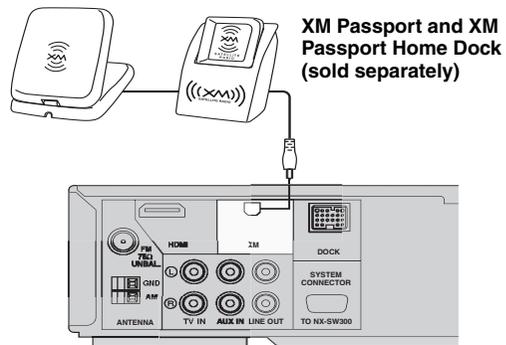
- The XM Satellite Radio service is only available in the 48 contiguous United States (not available in Alaska and Hawaii) and Canada.
- XM Passport System and monthly subscription are sold separately. For details, visit the XM Satellite Radio website at "http://www.xmradio.com/" (for residents in the United States) or "http://www.xmradio.ca/" (for residents in Canada).
- For information on obtaining XM Passport System, visit the XM Satellite Radio website at "http://www.xmradio.com/" (for residents in the United States) or "http://www.xmradio.ca/" (for residents in Canada), or consult your local retailer that sells XM Ready products.
- To ensure the optimal reception of the XM Satellite Radio signals, the XM Passport System must be placed at or near a southerly facing window with no obstacles in the path to the sky. You can mount it indoors or outdoors.

Information from XM Satellite Radio Inc.

XM monthly service subscription sold separately. XM Passport and XM Passport Home Dock required to receive XM service (sold separately). Installation costs and other fees and taxes, including a one-time activation fee may apply. Subscription fee is consumer only. All fees and programming subject to change. Channels with frequent explicit language are indicated with an "XL". Channel blocking is available for XM radio receivers by calling "1-800-XMRADIO (1-800-967-2346)" (for residents in the United States) or "1-877-GET-XMSR (1-877-438-9677)" (for residents in Canada). Subscriptions subject to Customer Agreement available at "http://www.xmradio.com/" (for residents in the United States) or "http://www.xmradio.ca/" (for residents in Canada). XM service only available in the 48 contiguous United States and Canada. "XM Ready" is a trademark of XM Satellite Radio Inc. © 2006 XM Satellite Radio Inc. All rights reserved.

Connecting XM Passport System

Connect XM Passport and XM Passport Home Dock (sold separately) to the XM jack on the rear panel of this DVD receiver. For details, see the operating instructions provided with XM Passport System.

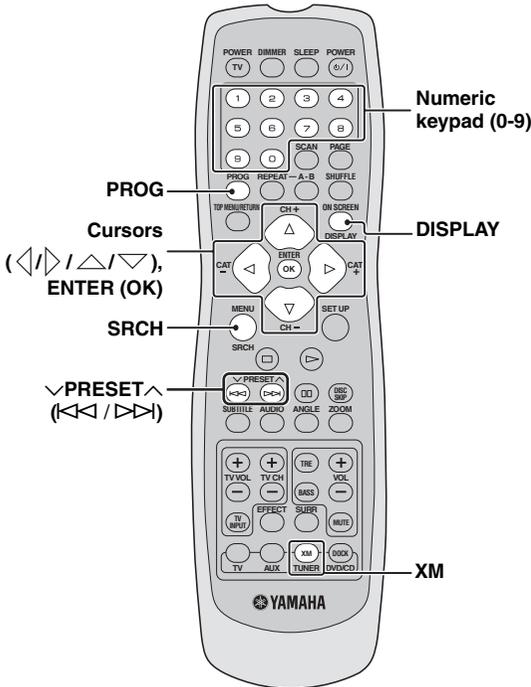


XM Satellite Radio controls and functions

Note

The following controls are available only when “XM RADIO” is selected as the input source.

Remote control functions



- ① **Numeric key pads**
(All Channel Search or Category Search mode)
Use 1 to 9 and 0 to enter a channel number directly.
(Preset Search mode)
Use 1 to 9 and 0 to enter a preset channel directly.
- ② **PROG**
Stores a preset channel in the memory.

- ③ **Cursors** (◀/▶/▲/▼)
(All Channel Search mode)
Press **CAT-** (◀)/**CAT+** (▶) to change the channel category.
Press **CH+** (▲)/**CH-** (▼) to search for a channel within all channels. Press and hold for quick search.
(Category Search mode)
Press **CAT-** (◀)/**CAT+** (▶) to change the channel category.
Press **CH+** (▲)/**CH-** (▼) to search for the channel within a selected category. Press and hold for quick search.
(Preset Search mode)
Press **CH+** (▲)/**CH-** (▼) to change the preset channel number.
- ENTER (OK)**
Press **ENTER (OK)** to confirm an entered channel number.
- ④ **SRCH**
Changes the search mode between the All Channel Search, Category Search, and Preset Search modes.
- ⑤ **DISPLAY**
Displays the XM Satellite Radio information such as channel number, channel name, category, artist name, or song title displayed in the front panel display.
- ⑥ **XM**
Selects “XM RADIO” as the input source.

■ Activating XM Satellite Radio

To sign up for an account with the XM Satellite Radio service, an XM Satellite Radio ID number is required. Follow the procedure below to check your ID number, and then visit the website or call toll-free with a major credit card handy for signing up.

For residents in the United States

URL: <http://activate.xmradio.com/>

Toll-free: 1-800-XM-RADIO (1-800-967-2346)

For residents in Canada

URL: <https://activate.xmradio.ca/on-line-activation/activation.jsp>

Toll-free: 1-877-GET-XMSR (1-877-438-9677)

- ① Press **XM** repeatedly until “XM RADIO” appears in the front panel display.
- ② Press and hold **DISPLAY** to check the XM Satellite Radio reception level.
→ “ANTENNA XX” appears (XX: reception level, 0 to 100%).
- Check the XM Satellite Radio reception level and adjust the orientation of XM Passport System for a better percentage of the reception level.

Note

If “ANTENNA” appears in the front panel display, the XM Passport System may not be connected to the XM jack on the rear panel of this DVD receiver properly. See “Connecting XM Passport System” on page 41 and check the connection.

- ③ Press **CH+ (△)/CH- (▽)** to select channel “0”.
→ “RADIO ID” appears in the front panel display for few seconds, and then the Radio ID number appears.

Note

You cannot select channel “0” if the All Channel Search mode (see page 44) is not selected.

- ④ Check the XM Radio Satellite Radio ID number displayed in the front panel display and write it down.

ID: _____

■ Basic XM Satellite Radio operations

- ① Press **XM** repeatedly until “XM RADIO” appears in the front panel display.
- ② Press **DISPLAY**.
→ The XM Satellite Radio information (such as channel number, channel name, category, artist name, or song title) for the currently selected channel appears in the front panel display.
- ③ Search for a channel by using one of the XM Satellite Radio search modes (see page 44).

Notes

- When you select “XM” as the input source, this DVD receiver automatically recalls the previously selected channel.
- The XM Satellite Radio signals can be output at the LINE OUT jacks.
- You can set the XM Satellite Radio preset channels (see page 45).
- You can display the XM Satellite Radio information in the front panel display (see page 45).

■ Selecting the XM Satellite Radio search mode

You can search for the desired channel using one of the three search modes (All Channel Search, Category Search, and Preset Search modes). You can also enter the channel number directly to select the desired channel by using the Direct Number Access mode.

All Channel Search mode

- ① Press **XM** repeatedly until “XM RADIO” appears in the front panel display.
- ② Press **SRCH** repeatedly to select “ALL CH SEARCH”.
- ③ Press **CAT-** (◀)/**CAT+** (▶) repeatedly to change the channel category.
- ④ Press **CH+** (△)/**CH-** (▽) repeatedly to search for a channel within all channels.

Category Search mode

- ① Press **XM** repeatedly until “XM RADIO” appears in the front panel display.
- ② Press **SRCH** repeatedly to select “CAT SEARCH”.
- ③ Press **CAT-** (◀)/**CAT+** (▶) repeatedly to change the channel category.
- ④ Press **CH+** (△)/**CH-** (▽) repeatedly to search for a channel with the selected channel category.

Preset Search mode

- ① Press **XM** repeatedly until “XM RADIO” appears in the front panel display.
- ② Press **SRCH** repeatedly to select “PRESET SEARCH”.
- ③ Press **CH+** (△)/**CH-** (▽) repeatedly to change the preset channel number (1 to 40).

Note

You can also select the preset channel number (1 to 40) directly by pressing the **numeric key pads** on the remote control.

Direct Number Access mode

- ① Press **XM** repeatedly until “XM RADIO” appears in the front panel display.
- ② Press **SRCH** repeatedly to select “ALL CH SEARCH” or “CAT SEARCH”.
- ③ Press the **numeric key pads** on the remote control to enter the up to three-digit channel number.

Notes

- If no button is pressed within three seconds after you enter one-digit or two-digit number, this DVD receiver automatically recognizes the number you have entered (one-digit or two-digit number) as the channel number.
- Pressing a button other than the **numeric key pads** cancels the Direct Number Access mode procedure.

■ Setting the XM Satellite Radio preset channels

You can use this feature to store up to 40 XM Satellite Radio channels. You can then recall any preset channel easily by selecting the preset channel number as described in “Preset Search mode” on page 44.

- ① Search for a channel you want to set as a preset channel by using one of the XM Satellite Radio search modes.
See “Selecting the XM Satellite Radio search mode” on page 44.
- ② Press **PROG**.
“PRESET” appears in the front panel display for approximately 5 seconds.

Note

You must proceed to and carry out steps ③ through ④ while the “PRESET” indicator is flashing in the front panel display

- ③ Press **CH+** (▲)/**CH-** (▼) repeatedly to select the desired preset number (1 to 40) or use the **numeric key pads** to select the preset number directly.
→ “<CH> XX” appears (XX: preset number).
- ④ Press **PROG** again to store the currently selected channel into the selected preset number.
→ “XX[channel number][channel name]” appears (XX: preset number).

Note

If **PROG** is not pressed within 5 seconds after you enter the preset number in step ③, this DVD receiver will automatically cancel the programing, and the last tuned station will be restored.

Deleting a preset station

- ① Tune into a station which you want to delete by selecting the preset number under which it was stored.
- ② Press and hold **□** on the front panel or on the remote control.
→ “<CH> XX DELTD” appears in the front panel display (XX: preset number). If no preset number is available, “<CH> 0 DELTD” appears in the front panel display.

■ Displaying the XM Satellite Radio information

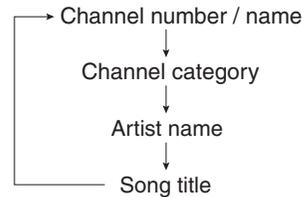
You can display the XM Satellite Radio information (such as channel number, channel name, category, artist name, or song title) for the currently selected channel in the front panel display.

Note

If a status message or an error message appears in the front panel display, see the “XM Satellite Radio” section in “TROUBLESHOOTING” on page 49 for appropriate remedies.

Displaying the XM Satellite Radio information in the front panel display

- Press **DISPLAY** repeatedly to toggle between the following XM Satellite Radio information display modes.



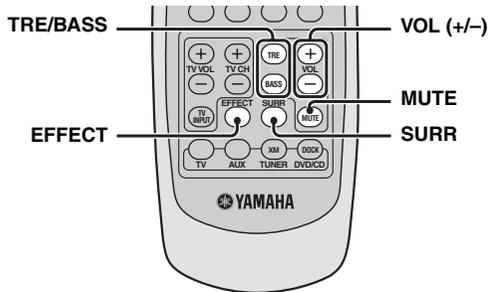
Note

The front panel display can indicate up to 11 alphanumeric characters at once. If the information contains more than 11 characters, all the characters are scrolled once, and then the first 11 characters remain in the front panel display.

SOUND CONTROLS

Note

For proper surround sound, make sure the speakers and subwoofer are connected to this DVD receiver (see “Speaker connections” on page 10).



Selecting surround sound

- Press **SURR** repeatedly to select MULTI-CHANNEL or STEREO.

The availability of the various surround sound modes depends on the number of speakers used and the sound available on the disc.

The center and surround speakers operate only in multi-channel surround mode.

Stereo broadcasts or recordings produce some surround channel effects when played in a surround mode. However, mono (single channel sound) sources do not produce any sound from the surround speakers.

Selecting digital sound effects

You can select preset digital sound effects that match the content of your disc, or that optimize the sound of the musical style you are playing.

- Press **EFFECT** to select from the available sound effects.

When playing back movie discs or while in TV mode:

“CONCERT”, “DRAMA”, “ACTION” or “SCI-FI”.

When playing back music discs or in TUNER, AUX or iPod mode:

“ROCK”, “DIGITAL”, “CLASSIC” or “JAZZ”.

Notes

- Digital sound effects and the treble/bass features cannot be activated at the same time.
- For flat sound output, select “CONCERT” or “CLASSIC”.

Adjusting the treble/bass level

The treble (high tone) and bass (low tone) features enable you to define the sound-processor settings.

- Press **TRE** or **BASS** on the remote control.
- Within five seconds, press **VOL (+/-)** to adjust the treble or bass level (MIN, -2, -1, 0, +1, +2 or MAX).
→ If the **VOL (+/-)** is not adjusted within 5 seconds, this DVD receiver automatically cancel the adjustments.

Adjusting the volume

- Use the **VOLUME** control on the front panel or press **VOL (+/-)** on the remote control to increase or decrease the volume level.
→ “VOL MIN” appears at the minimum volume level and “VOL MAX” appears at the maximum volume level.

Note

You can continuously increase or decrease the volume level if you press and hold **VOL (+/-)**.

Muting the sound

- Press **MUTE** on the remote control to mute the sound.
→ “MUTE” appears in the front panel display.
- Press **MUTE** on the remote control again or press **VOL (+/-)** to resume the sound output.

REMOTE CONTROL FEATURES

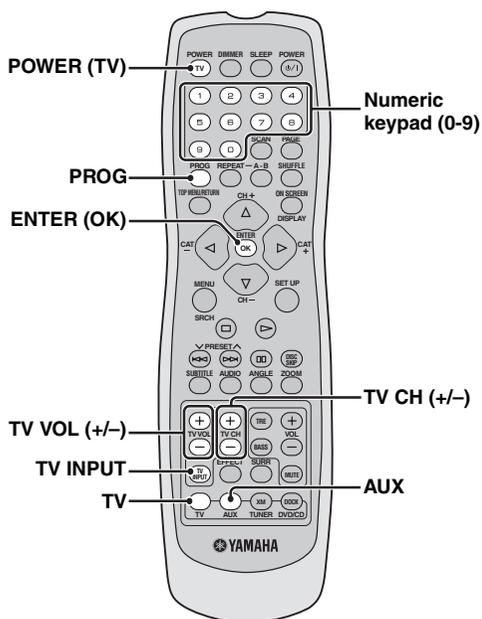
In addition to controlling this DVD receiver, the remote control can also operate the other A/V components made by YAMAHA and other manufacturers. To control other components, you must set up the remote control with the appropriate remote control codes.

Note

Depending on the external A/V component you are using, you may not be able to operate the component with the remote control, even if a remote control code is set. In this case, operate the component using the supplied remote control.

■ Setting remote control codes

Set a TV remote control code for **TV** and set a cable or satellite tuner remote control code for **AUX**.



- ① Press and hold **TV** or **AUX**.
- ② Press **PROG**, and then release both keys.
- ③ Press the **numeric keypad (0-9)** to enter the 4 digit remote control codes (see “LIST OF REMOTE CONTROL CODES” at the end of this manual).
- ④ Press **PROG** again to store.

Operating your TV

- Press **TV** for your TV operations.

POWER (TV)*

Turns on or off the power of your TV.

TV VOL (+/-)*

Adjusts the audio output level of your TV.

TV INPUT*

Switches the input source for the TV.

Numeric keypad (0-9)

Selects a TV channels for playback.

TV CH (+/-)*

Switches between the available TV channels.

*You can also operate these functions in DVD/CD or TUNER mode.

Operating your cable and satellite tuner

- Press **AUX** for your cable and satellite tuner operations.

POWER (TV)

Turns on or off the power of your cable or satellite tuner.

ENTER (OK)

Confirms a selection.

Numeric keypad (0-9)

Cable: enters a number of a cable channel.

Satellite tuner: enters a number of a preset radio station.

TV CH (+/-)

Switches between the available cable or satellite tuner channels.

■ Dimming the display screen

Use to adjust the brightness of the front panel display.

- Press **DIMMER** repeatedly to select the desired brightness from the following options:
DIM 1: 70% brightness
DIM 2: 40% brightness
DIM OFF: normal brightness

To cancel the dimmer settings

- Press **DIMMER** repeatedly to select “DIMMER OFF”.
→ “DIMMER OFF” appears in the front panel display.

■ Setting the sleep timer

Use this feature to automatically set this DVD receiver to the standby mode after a specified time period. The sleep timer is useful if you are going to sleep after a certain amount of time while this DVD receiver is still playing back a source.

- ① Press **SLEEP** repeatedly to set the amount of time for sleep timer.
→ “SLEEP XX” appears in the front panel display (XX: 15, 30, 45, 60 or OFF).
- ② Wait for few seconds without operating this DVD receiver to confirm the setting for the sleep time.
→ “SLEEP” appears in the front panel display.
→ Countdown of 10 seconds is displayed before this DVD receiver switches to standby mode.
“SLEEP 10” → “SLEEP 9”.... →
“SLEEP 2” → “SLEEP 1”

To cancel the sleep timer

- Press **SLEEP** repeatedly to select “SLEEP OFF”.
→ “SLEEP OFF” appears in the front panel display.

TROUBLESHOOTING

Refer to the table below when this DVD receiver does not function properly. If the problem you are experiencing is not listed below or if the instruction below does not help, turn off this DVD receiver, disconnect the power cable, and contact the nearest authorized YAMAHA dealer or service center.

General

Problem	Solution
No power	Check if the AC power cord is properly connected.
	Press STANDBY/ON on the front panel of this DVD receiver to turn on the power.
No picture	Refer to your TV's manual for correct Video In channel selection. Change the TV channel until you see the DVD screen.
	Press DVD/CD on the remote control in order to switch to DVD/CD mode.
Completely distorted picture or black/white picture	If this happens when you are changing the setting of the 'TV TYPE', wait for 15 seconds for auto recovery.
	If this happens when you are turning on the progressive scan feature, wait for 15 seconds for auto recovery.
	Check the video connection.
	Sometimes a small amount of picture distortion may appear. This is not a malfunction.
	Clean a disc.
The aspect ratio of the screen cannot be changed even though you have set the TV display	The aspect ratio is fixed on the DVD disc.
	Depending on the TV, it may not be possible to change the aspect ratio.
No sound or distorted sound	Adjust the volume.
	Check if the system cable is properly connected.
	Check if all speaker cables are properly connected.
	Make sure that the audio cables are connected and press the input selection buttons to select the correct input source (TV or AUX, for example) to choose the equipment that you want to hear through the DVD receiver.
	Check if the AC power cord of the subwoofer is properly connected.
	Make sure that you use a disc supported by the DVD receiver.
Sound is too low on one side	Check if all cables are properly connected.
Cannot activate some features such as Angles, Subtitles, or multi-language Audio	The features may not be available on the DVD receiver.
	Changing the language for the sound or subtitle is prohibited on the DVD.
DVD videos cannot be copied with the VCR	Some DVDs are copy protected. You cannot record copy-protected discs using a VCR.
The disc is ejected without an operation	Make sure that you use a disc supported by the DVD receiver.
Not able to select some items in the setup menu	Press STOP twice before selecting the setup menu.
	Depending on the disc, some menu items are not available.
The DVD receiver does not start playback	Insert a readable disc with the playback side facing down. The DVD-R/DVD+R/DVD-RW/DVD+RW/CD-R/CD-RW/DVD-RW (VR format) must be finalized.
	Check the disc type, color system (PAL or NTSC) of your TV and region code of the disc.
	Check for any scratches or smudges on the disc.
	Press SET UP to turn off the setup menu screen.
	You may need to enter the password in order to change the parental control rating level or to unlock the disc for playback.
	Moisture has condensed inside the DVD receiver. Remove the disc and leave this DVD receiver turned on for about an hour.

Problem	Solution
A source cannot be recorded by an analog component connected to the DVD receiver	Connect the source component to the LINE OUT jacks of the DVD receiver.
Sounds played on the AV equipment connected to the DVD receiver cannot be recorded with external recording equipment	Connect those equipment to the DVD receiver with analog connections.
The volume does not increase or sounds are distorted	Turn on the power of the component connected to the DVD receiver.
There is no sound from the center, surround speakers and subwoofer	Make sure the center, surround speakers and subwoofer are connected correctly.
	Adjust the volume level in the setup menu.
	Press SURR button to select a correct surround sound setting.
	Make sure the source you are playing is recorded or broadcast in surround sound (DTS, Dolby Digital, etc.).
“SPEAKER ERR” appears in the display panel	Unplug the subwoofer, then make sure the front, center and surround speakers are connected correctly.
	Set the DVD receiver to the standby mode, then disconnected the power cord. Wait for about 30 seconds, then reconnect the power cord and turn on the DVD receiver.
Unable to play DivX® movies	Check that the DivX® file was encoded in ‘Home Theater’ mode with a DivX® 5.x encoder.
The DVD receiver does not work	Disconnect the power cord from the power outlet for a few minutes. Reconnect the power cord and try to operate again as usual.

Remote control

Problem	Solution
The remote control does not work for operating other equipment	Set the correct remote control code. Depending on the model and year of the product, the DVD receiver’s remote control may not be able to operate it partly or wholly. In this case, use the remote control supplied with each product.
The remote control does not function properly	Select the source (DVD/CD or TUNER, etc.) before pressing the function button (▶, ◀◀ / ▶▶▶).
	Reduce the distance between the remote control and this DVD receiver.
	Replace the batteries with new ones.

Tuner

Problem	Solution
Radio reception is poor	If the signal is too weak, adjust the antenna or connect an external antenna for better reception.
	Increase the distance between this DVD receiver and your TV or VCR.
	Tune in to the correct frequency.
	Place the antenna farther away from any equipment that may be causing the noise.

XM Satellite Radio

If an operation takes longer than usual or an error occurs, one of the following messages may appear in the front panel display. In this case, follow the corresponding solutions.

Status message	Solution
"ANTENNA"	Check the XM Passport System connections and orient it for the best reception level.
"UPDATING"	The XM user encryption code is being updated. Wait until the encryption code is updated.
"NO SIGNAL"	Check the XM Passport System connections and orient it for the best reception level.
"LOADING"	If it takes longer than four seconds for audio or text data to be decoded, wait until the decoding process has finished.
"OFF AIR"	Check the channel number again or select another XM Satellite Radio channel due to the XM Satellite Radio channel you selected is not currently broadcasting any signals.
"<XM> - - -"	The Channel Station ID (SID) is no longer available.
"."	No artist name or song title is available.
"CAT - - -"	No channels are available for the selected category. Select another channel category by pressing CAT- (◀)/CAT+ (▶) on the remote control repeatedly.

GLOSSARY

Analog

Sound that has not been turned into numbers. Analog sound varies, while digital sound has specific numerical values. These jacks send audio through two channels, the left and right.

Aspect ratio

Horizontal and vertical ratio of a displayed image. The horizontal vs. vertical ratio of conventional TV is 4:3, and that of wide-screens is 16:9.

Bit

Short for binary digit. Represents the smallest unit of information manipulated on a computer. In audio systems, the bit size determines resolution to digitize analog signals.

The larger the bit size, the larger the dynamic range (the ratio of maximum and minimum frequency level) and the finer the sounds. Generally, an audio CD is 16 bit and DVD audio is 24 bit.

Bit rate

The amount of data used to hold a given length of music; measured in kilobits per second, or kbps. Also, the speed at which you record. Generally, the higher the bit rate, or recording speed, the better the sound quality. However, higher bit rates use more space on a disc.

COMPONENT VIDEO OUT

Jacks for inputting or outputting a component video signal. Component video signal consists of three lines, the luminance signal (Y) and two color difference signals (P_B/C_B , P_R/C_R), which enable to provide high-quality video.

DivX

DivX is a popular media technology created by DivX, inc. DivX media files contain highly compressed video with high visual quality that maintains a relatively small file size. DivX files can also include advanced media features like menus, subtitles, and alternate audio tracks. Many DivX media files are available for download online, and you can create your own using your personal content and easy-to-use tools from DivX.com.

Dolby Digital

Digital surround sound system which is developed by Dolby Laboratories provides completely independent multi-channel audio. With 3 front channels (left, center, and right) and 2 surround stereo channels, Dolby Digital provides five full-range audio channels. With an additional channel especially for bass effects (called LFE, or low frequency effect), the system has a total of 5.1-channels (LFE is counted as 0.1 channel). By using 2-channel stereo for the surround speakers, more accurate moving sound effects and surround sound environment are possible than with Dolby Surround.

Dolby Surround Pro Logic II

It is an improved matrix decoding technology that provides better spatiality and directionality on Dolby Surround programme material; provides a convincing three-dimensional soundfield on conventional stereo music recordings; and is ideally suited to bring the surround experience to automotive sound. While conventional surround programming is fully compatible with Dolby Surround Pro Logic II decoders, soundtracks will be able to be encoded specifically to take full advantage of Pro Logic II playback, including separate left and right surround channels. (Such material is also compatible with conventional Pro Logic decoders.)

DTS (Digital Theater Systems)

Digital surround sound system developed by Digital Theater Systems, Inc., which provides 5.1 channel audio (max). With an abundance of audio data, it is able to provide authentic-sounding effects.

Interlace

The most common type of scanning used in televisions. It divides a screen into even and odd numbered fields for scanning, and then builds an image by combining them into one image (frame).

JPEG (Joint Photographic Expert Group)

A standardized image compression system proposed by the Joint Photographic Expert Group. It can reduce image data sizes to 1 to 10% of their original sizes, and works on digital photographs effectively.

MP3 (MPEG Audio Layer-3)

An audio file compression technology. It can reduce audio data sizes to about 10% of their original sizes while maintaining CD-level audio quality.

MPEG (Moving Pictures Experts Group)

International standard for digital video and audio compression generated by ISO (International Organization for Standardization) and IEC (International Electrotechnical Commission). Includes MPEG-1, MPEG-2, and MPEG-3. MPEG-1 offers VHS level video quality and is often used on video CDs. MPEG-2 offers S-VHS level video quality and is often used on DVDs.

Parental control

Limits Disc play according to the age of the users or the limitation level in each country. The limitation varies from disc to disc; when it is activated, playback will be prohibited if the software's level is higher than the user-set level.

Playback control (PBC)

An on-screen menu recorded on a Video CD or SVCD that enables interactive playback and searching.

Progressive Scan

A method of displaying all scanning lines in a frame at once, reducing flicker noticeable on a larger screen and creating a sharp and smooth image.

Region code

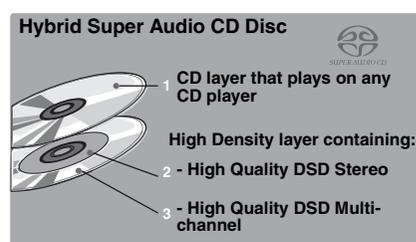
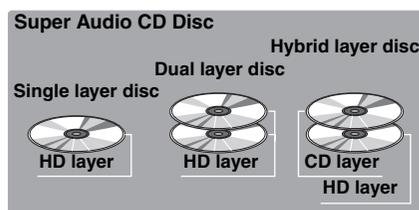
Many DVD discs include a region code so that the copyright owner can control DVD software distribution only to regions where they are ready to distribute. There are six regions codes, which restrict a DVD receiver to playing a DVD disc with the same region code.

S-video output

A jack for inputting or outputting an S-video signal. S-video signal consists of two lines, the luminance signal (Y) and color signal (C), which enable to provide high-quality video during playback or recording.

Super Audio CD

Audio format based upon the current CD standards but includes a greater amount of information that provides higher quality sound. There are three types of discs: single layer, double layer and hybrid discs. The hybrid disc can be played on existing CD players as well as Super Audio CD players since it contains both standard audio CD and Super Audio CD information.

**Surround**

A receiver for creating realistic three-dimensional sound fields full of realism by arranging multiple speakers around the listener.

VR format (Video Recording format)

A DVD video recording format, which allows editing DVD video data recorded onto a disc. You need a VR format compatible player for playback.

SPECIFICATIONS

DVD RECEIVER (DVR-C310)

TUNER SECTION

FM Tuning Range	87.50 to 108.00 MHz
AM Tuning Range	530 to 1700 kHz

DISC SECTION

Laser Type	Semiconductor
Disc Diameter	12 cm/8cm
Video Decoding	MPEG-1/MPEG-2/DivX® 5, DivX® 4, DivX® 3
Video DAC	12 bits/108 MHz
Signal System	PAL/NTSC
Video Format	4:3/16:9
Composite Video Output	1.0 Vp-p, 75 Ω
S-video Output	Y - 1.0 Vp-p, 75 Ω C - 0.3 Vp-p, 75 Ω
Component Video Output	Y - 1.0 Vp-p, 75 Ω Pb/Cb Pr/Cr - 0.7 Vp-p, 75 Ω
Audio DAC	24 bits/192 kHz
Frequency Response	4 Hz - 20 kHz (44.1 kHz) 4 Hz - 22 kHz (48 kHz) 4 Hz - 44 kHz (96 kHz)
Audio S/N	105 dB
Distortion	0.0035%
Dynamic Range	95 dB

AUDIO FORMAT

Digital	Dolby Digital/DTS/ MPEG PCM	Compressed Digital 16, 20, 24 bits fs 44.1, 48, 96 kHz
	MP3 (ISO 9660)	24, 32, 56, 64, 96, 128, 256 kbps fs 16, 22.05, 24, 32, 44.1, 48 kHz
	WMA	32 to 192 kbps, mono, stereo

Full decoding of Dolby Digital and DTS multi-channel sound

Dolby Surround Compatible Downmix from Dolby Digital multi-channel sound

Dolby Pro Logic II

GENERAL

Power Supply	120 V, 60 Hz
Power Consumption	20 W
Frequency Response	20 Hz to 20 kHz/-3 dB (Front, Center, Surround)
Signal-to-Noise Ratio	> 100 dB
Input Sensitivity	
- AUX In, TV In	300 mV
Dimensions (W x H x D)	435 x 75 x 434 mm
Weight	5.6 kg

FRONT SPEAKER (NX-F300)

System	2-way, Bass Reflex System
Impedance	6 Ω
Speaker Drivers	6.5 cm (2.5") woofer + 2.5 cm (1")
Frequency Response	100 Hz ± 20 Hz - 20 kHz
Dimensions (W x H x D)	83 x 181 x 78 mm
Weight	0.7 kg

CENTER SPEAKER (NX-C300)

System	2-way, Bass Reflex System
Impedance	6 Ω
Speaker Drivers	6.5 cm (2.5") Full range x 2 + Piezo
Frequency Response	100 Hz ± 20 Hz - 20 kHz
Dimensions (W x H x D)	298 x 84 x 78 mm
Weight	1.1 kg

SURROUND SPEAKER (NX-S300)

System	2-way, Bass Reflex System
Impedance	6 Ω
Speaker Drivers	6.5 cm (2.5") Full range + Piezo
Frequency Response	100 Hz ± 20 Hz - 20 kHz
Dimensions (W x H x D)	83 x 181 x 78 mm
Weight	0.6 kg

SUBWOOFER (NX-SW300)

Power Supply Rating	120 V, 60 Hz
Power Consumption	360 W
System	Bass Reflex System
Impedance	6 Ω
Speaker Driver	16 cm (6 1/2") woofer
Frequency Response	40 Hz - 100 ± 20 Hz
Dimensions (W x H x D)	178 x 402 x 461 mm
Weight	12 kg

Amplifier Section

Output Power	
- Front	150 W RMS (10% THD, 1 kHz)/channel
- Surround	150 W RMS (10% THD, 1 kHz)/channel
- Center	150 W RMS (10% THD, 1 kHz)
- Subwoofer	150 W RMS (10% THD, 100 Hz)

Specifications subject to change without prior notice.

LIST OF LANGUAGE CODES / LISTE DE CODES DE LANGUES

Abkhazian	6566	Frisian	7089	Lithuanian	7684	Samoan	8377
Afar	6565	Gaelic; Scottish Gaelic	7168	Luxembourgish	7666	Sango	8371
Afrikaans	6570	Galleghan	7176	Macedonian	7775	Sanskrit	8365
Albanian	8381	Georgian	7565	Malagasy	7771	Sardinian	8367
Amharic	6577	German	6869	Malay	7783	Scottish Gaelic; Gaelic	7168
Arabic	6582	Gikuyu; Kikuyu	7573	Malayalam	7776	Serbian	8382
Armenian	7289	Greek	6976	Maltese	7784	Shona	8378
Assamese	6583	Guarani	7178	Manx	7186	Sindhi	8368
Avestan	6569	Gujarati	7185	Maori	7773	Sinhalese	8373
Aymara	6589	Hausa	7265	Marathi	7782	Slovak	8375
Azerbaijani	6590	Hebrew	7269	Marshallese	7772	Slovenian	8376
Bashkir	6665	Herero	7290	Moldavian	7779	Somali	8379
Basque	6985	Hindi	7273	Mongolian	7778	Sotho, Southern	8384
Belarusian	6669	Hiri Motu	7279	Nauru	7865	South Ndebele	7882
Bengali	6678	Hungarian	7285	Navaho, Navajo	7886	Spanish; Castilian	6983
Bihari	6672	Icelandic	7383	Navajo; Navaho	7886	Sundanese	8385
Bislama	6673	Ido	7379	Ndebele, North	7868	Swahili	8387
Bokmål, Norwegian	7866	Indonesian	7368	Ndebele, South	7882	Swati	8383
Bosnian	6683	Interlingua (International)	7365	Ndonga	7871	Swedish	8386
Breton	6682	Interlingue	7369	Nepali	7869	Tagalog	8476
Bulgarian	6671	Inuktitut	7385	Northern Sami	8369	Tahitian	8489
Burmese	7789	Inupiaq	7375	North Ndebele	7868	Tajik	8471
Castilian, Spanish	6983	Irish	7165	Norwegian	7879	Tamil	8465
Catalan	6765	Italian	7384	Norwegian Bokmål; Bokmål	7866	Tatar	8484
Chamorro	6772	Japanese	7465	Norwegian Nynorsk	7878	Telugu	8469
Chechen	6769	Javanese	7486	Nyanja; Chichewa; Chewa	7889	Thai	8472
Chewa; Chichewa; Nyanja	7889	Kalaallisut	7576	Nynorsk, Norwegian	7878	Tibetan	6679
Chichewa; Chewa; Nyanja	7889	Kannada	7578	Occitan (post 1500); Proven	7967	Tigrinya	8473
Chinese	9072	Kashmiri	7583	Old Bulgarian; Old Slavonic	6785	Tonga (Tonga Islands)	8479
Chuang; Zhuang	9065	Kazakh	7575	Old Church Slavonic; Old	6785	Tsonga	8483
Church Slavic; Slavonic	6785	Khmer	7577	Old Slavonic; Church	6785	Tswana	8478
Church Slavonic; Church	6785	Kikuyu; Gikuyu	7573	Oriya	7982	Turkish	8482
Chuvash	6786	Kinyarwanda	8287	Oromo	7977	Turkmen	8475
Cornish	7587	Kirghiz	7589	Ossetian; Ossetic	7983	Twi	8487
Corsican	6779	Komi	7586	Ossetic; Ossetian	7983	Uighur	8571
Croatian	7282	Korean	7579	Pali	8073	Ukrainian	8575
Czech	6783	Kuanyama; Kwanyama	7574	Panjabi	8065	Urdu	8582
Danish	6865	Kurdish	7585	Persian	7065	Uzbek	8590
Dutch	7876	Kwanyama; Kuanyama	7574	Polish	8076	Vietnamese	8673
Dzongkha	6890	Lao	7679	Portuguese	8084	Volapük	8679
English	6978	Latin	7665	Provençal; Occitan (post)	7967	Walloon	8765
Esperanto	6979	Latvian	7686	Pushto	8083	Welsh	6789
Estonian	6984	Letzeburgesch;	7666	Quechua	8185	Wolof	8779
Faroeese	7079	Limburgan; Limburger	7673	Raeto-Romance	8277	Xhosa	8872
Fijian	7074	Limburger; Limburgan	7673	Romanian	8279	Yiddish	8973
Finnish	7073	Limburgish; Limburger	7673	Rundi	8278	Yoruba	8979
French	7082	Lingala	7678	Russian	8285	Zhuang; Chuang	9065
						Zulu	9085

LIST OF REMOTE CONTROL CODES / LISTE DES CODES DE COMMANDE

TV			1018, 1020, 1021, 1022		1076, 1077		1047
Yamaha	1009, 1011, 1036, 1068	CXC	1053	Grundig	1026, 1055, 1056, 1082	Nikko	1011, 1032, 1051
Admiral	1033, 1080	Daewoo	1009, 1016, 1023, 1032, 1039, 1079, 1083, 1084	Harvard	1024, 1053	Nokia	1044
Aiko	1032	Daytron	1009	Hitachi	1015, 1021, 1036	Nordmende	1035, 1057, 1058, 1071
Akai	1011	Dual	1063	ICE	1063, 1069, 1076	NTC	1062
Alba	1005, 1013, 1014, 1064, 1076	Dumont	1008, 1009	Itt/Nokia	1044	Oceanic	1044, 1061
AOO	1009, 1011	Emerson	1009, 1015, 1016, 1039, 1050, 1051, 1052, 1053, 1065, 1070, 1080, 1083, 1084	JC Penny	1003, 1009, 1010, 1011, 1016, 1017, 1018, 1021, 1022, 1040, 1051, 1090	Onwa	1053
Audiovox	1032, 1053, 1079, 1083			JVC (Victor)	1013, 1019, 1025, 1042	Panasonic	1018, 1043, 1068, 1086
Belcor	1009			Kendo	1014	Philco	1009, 1011, 1020, 1036, 1080
Bell & Howell	1007, 1039	Envision	1011	Kenwood	1009, 1011	Philips	1014, 1020
Blaupunkt	1055, 1056, 1059, 1082	Ferguson	1004, 1014, 1028, 1035, 1054, 1066, 1071	KTV	1011, 1016, 1053	Pilot	1009, 1011, 1016
Blue sky	1064			Loewe	1029	Pioneer	1015, 1046, 1049, 1085, 1086
Bradford	1053	First line	1005, 1062, 1063, 1067, 1072, 1074	Magnavox	1011, 1013, 1020, 1052	Portland	1009, 1016, 1032
Brandt	1035, 1057, 1058	Fisher	1039	Marantz	1011, 1014, 1020	Quasar	1018, 1045, 1068
Brokwood	1009	Funai	1048, 1052, 1053, 1069	Matsui	1005, 1012, 1013, 1014, 1027, 1060, 1063, 1072, 1076	Radio Shack	1009, 1011, 1016, 1017, 1021, 1038, 1044, 1049, 1051
Bush	1005, 1013, 1014, 1064, 1070, 1072, 1076, 1077	Futurtec	1053			RCA	1009, 1015, 1017, 1018, 1031, 1033, 1087, 1088, 1089, 1090, 1091
Candle	1011, 1021	GE	1010, 1017, 1018, 1033, 1051, 1070, 1079, 1088, 1090	MGA	1009, 1011, 1037, 1049	Realistic	1009, 1011, 1016, 1021, 1039, 1045, 1051, 1053
Clatronic	1030, 1067, 1075			Mitsubishi	1009, 1033, 1034, 1038, 1081	SABA	1029, 1035, 1044, 1057, 1058, 1071
Contec	1053	Gibraltar	1008, 1009, 1011	MTC	1009, 1011, 1021, 1022, 1062, 1081		
Craig	1043, 1053	LG/Goldstar	1002, 1003, 1009, 1011, 1014, 1016, 1021, 1052	Multitec	1053		
Croslex	1020	Goodmans	1013, 1014, 1027, 1063,	NEC	1009, 1011, 1013, 1021,		
Crown	1016, 1053, 1078						
Curtis Mathis	1007, 1011, 1016, 1017,						

Sampo	1011, 1016	Oak	3009	Bush	4002	Nokia	4005, 4032, 4037, 4049, 4054, 4063		
Samsung	1009, 1011, 1014, 1021, 1022, 1031, 1051	Pacific	3039	CNT	4045	Nordmende	4029		
Sanyo	1039, 1060, 1079	Panasonic	3001, 3013	Cambridge	4024	Orbitech	4039		
Schneider	1014, 1064, 1067, 1073, 1076	Paragon	3001	Canal Satellite	4059	Oxford	4024		
Scott	1009, 1051, 1052, 1053, 1065	Philips	3061, 3054, 3055, 3056, 3065, 3069, 3071	Canal+	4059	Pace	4002, 4009, 4014, 4023, 4037, 4055, 4058		
Sharp	1016, 1033, 1045	Pulsar	3001	Chamel Master	4029	Palladium	4048		
Shogun	1009	Pioneer	3010, 3014, 3018, 3036	Comlink	4019	Palsat	4039		
Siemens	1014, 1041, 1055, 1056, 1059, 1082	PVP Stereo	Visual Matrix 3002	Connexions	4031	Panda	4037		
Signature	1007	Quasar	3001	Crown	4015	Panasonic	4086, 4077		
Sony	1001, 1006	Radio Shack	3051, 3070, 3072, 3073	Cyrus	4011	Philips	4007, 4011, 4020, 4037, 4048, 4059		
Soundesign	1051, 1052, 1053	Rembrandt	3004	D-Box	4054	Phonotrend	4019, 4050		
Starlite	1053	Runco	3001	DDC	4029	Pioneer	4021, 4059		
Sylvania	1011, 1020	Salora	3026	DNT	4011, 4031	Planet	4061		
Telefunken	1021	Samsung	3014, 3040	Echostar	4031, 4036, 4061	Promax	4037		
Thomson	1035, 1057, 1058, 1071	Satbox	3024	Emanon	4034	Prosat	4019		
Toshiba	1012, 1013, 1022, 1039, 1040	Scientific	3003, 3032, 3049	Ferguson	4002, 4009, 4010, 4023	Quadral	4029, 4044		
Videch	1009, 1013, 1051	Scientific Atlanta	3003, 3008, 3021	Fidelity	4016	Radio shack	4083		
Wards	1007, 1009, 1010, 1011, 1020, 1021, 1045, 1051, 1052	Seawoo	3045	Finlux	4005, 4024, 4032, 4037	Radiola	4011		
<hr/>									
CABLE									
ABC	3002, 3003, 3004, 3006, 3008	Signal	3007	Fracarro	4061	Radix	4031, 4064		
Andover	3037	Signature	3004	Freecom	4034	RCA	4084, 4076, 4090		
Bell & Howell	3006	Starcom	3002, 3007	Fujitsu	4094 4012	RFT	4011, 4013, 4019		
Birmingham Cable Communication	3020	Stargate	3007	FTE Humax	4060	Saba	4023, 4045		
British Telecom	3002, 3012	Starquest	3007	Fube	4030, 4031, 4034	Sabre	4037		
Cabletime	3016, 3019, 3025, 3029	STS	3015	G-sat	4009	Sagem	4056		
Contec	3009	Taihan	3043	Galaxis	4019, 4057, 4060	Salora	4005		
Clyde	3011	Teleservice	3022	General Instrument	4085, 4080, 4069, 4082, 4083, 4092	Samsung	4066, 4067, 4068		
Cryptovision	3038	Tele+1	3028	Gold Box	4059	SAT	4027, 4038		
Daehan	3043	Tudi	3023	Gooding	4048	Satcom	4026, 4051		
Daeryung	3003	Tusa	3007	Goodmans	4010	Satec	4009		
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