I. SAFETY PRECAUTIONS

CAUTION
RISK OF ELECTRIC SHOCK
DO NOT OPEN

CAUTION:
TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK). NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

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

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

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

IMPORTANT SAFETY INSTRUCTIONS

1. Read these instructions.
2. Keep these instructions.
3. Heed all warnings.
4. Follow all instructions.
5. Do not use this apparatus near water.
6. Clean only with dry cloth.
7. Do not block any ventilation openings.
8. Install in accordance with the manufacturer’s instructions.
9. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
10. Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
11. Only use attachments/accessories specified by the manufacturer.
12. Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.
13. Unplug this apparatus during lightning storms or when unused for long periods of time.
14. Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.
15. Batteries shall not be exposed to excessive heat such as sunshine, fire or the like.

CAUTION:
To completely disconnect this product from the mains, disconnect the plug from the wall socket outlet.
The mains plug is used to completely interrupt the power supply to the unit and must be within easy access by the user.

FCC INFORMATION (For US customers)

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

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

3. NOTE
This product has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This product generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this product does cause harmful interference to radio or television reception, which can be determined by turning the product OFF and ON, the user is encouraged to try to correct the interference by one or more of the following measures:
• Reorient or relocate the receiving antenna.
• Increase the separation between the equipment and receiver.
• Connect the product into an outlet on a circuit different from that to which the receiver is connected.
• Consult the local retailer authorized to distribute this type of product or an experienced radio/TV technician for help.

For Canadian customers:
This Class B digital apparatus complies with Canadian ICES-003.
NOTES ON USE

WARNINGS

• Avoid high temperatures. Allow for sufficient heat dispersion when installed in a rack.
• Handle the power cord carefully. Hold the plug when unplugging the cord.
• Keep the unit free from moisture, water, and dust.
• Unplug the power cord when not using the unit for long periods of time.
• Do not obstruct the ventilation holes.
• Do not let foreign objects into the unit.
• Never disassemble or modify the unit in any way.
• Ventilation should not be impeded by covering the ventilation openings with items, such as newspapers, tablecloths, or curtains.
• Naked flame sources such as lighted candles should not be placed on the unit.
• Observe and follow local regulations regarding battery disposal.
• Do not expose the unit to dripping or splashing fluids.
• Do not place objects filled with liquids, such as vases, on the unit.
• Do not handle the mains cord with wet hands.
• When the switch is in the OFF (STANDBY) position, the equipment is not completely switched off from MAINS.
• The equipment shall be installed near the power supply so that the power supply is easily accessible.

CAUTIONS ON INSTALLATION

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

• More than 12 in. (0.3 m) is recommended.
• Do not place any other equipment on this unit.
Features

Fully Discrete, identical quality and power for all 5 channels (110 W x 5ch)
The unit is equipped with a power amplifier that reproduces high-fidelity sound in surround mode with equal quality and power for all channels, true to the original sound. The power amplifier circuit adopts a discrete-circuit configuration that achieves high-quality surround sound reproduction.

Supports HDMI 1.4a with 3D, Deep Color and x.v.Color function
This unit can output 3D video signals input from a Blu-ray Disc player to a TV that supports a 3D system.

4-HDMI inputs and 1-output
The unit is equipped with 4 HDMI input connectors for connecting devices with HDMI connectors, such as a Blu-ray Disc player, game machine, HD video camera, etc.

High definition audio support
The unit is equipped with a decoder which supports high-quality digital audio format for Blu-ray Disc players such as Dolby TrueHD, DTS-HD Master Audio, etc.

Dock connectivity for iPod® and network streaming
If an optional DENON control dock for iPod (ASD-3N, ASD-3W, ASD-51N or ASD-51W) is connected to this unit, you can listen to Internet radio or enjoy music and photos stored in your PC.

Easy to use, screen display
Simple settings are enabled with the setting menus displayed on the TV screen. When you control the sound volume, the volume level is displayed on the screen, and when you switch the input source, the name of the input source is displayed.

Cautions on handling

• Before turning the power switch on
  Check once again that all connections are correct and that there are no problems with the connection cables.
  • Power will be supplied to some of the circuitry even when the unit is set to the standby mode. When going on vacation or leaving home for long periods of time, be sure to unplug the power cord from the power outlet.
  • About condensation
    If there is a major difference in temperature between the inside of the unit and the surroundings, condensation (dew) may form on the operating parts inside the unit, causing the unit not to operate properly.
    If this happens, let the unit sit for an hour or two with the power turned off and wait until there is little difference in temperature before using the unit.

• Cautions on using mobile phones
  Using a mobile phone near this unit may result in noise. If that occurs, move the mobile phone away from this unit when it is in use.

• Moving the unit
  Turn off the power and unplug the power cord from the power outlet. Next, disconnect the connection cables to other system units before moving the unit.

• About Care
  • Wipe the cabinet and control panel clean with a soft cloth.
  • Follow the instructions when using a chemical cleaner.
  • Benzene, paint thinner or other organic solvents as well as insecticide may cause material changes and discoloration if brought into contact with the unit, and should therefore not be used.
Basic version

Here, we explain the connections and basic operation methods for this unit.

- Connections  page 4
- Playback (Basic operation)  page 11
- Selecting a listening mode (Surround mode)  page 19

For speaker connections, see page 24, page 2 “Connecting the speakers”.
Connections

**Important information**

- Make connections as follows before using this unit. Select an appropriate connection type according to the components to be connected.
- You may need to make some settings on this unit depending on the connection method. Refer to each description for more information.
- Select the cables (sold separately) according to the components being connected.

**NOTE**

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

**Relationship between video signals and monitor output**

**Examples of screen display**

- **Menu screen**
  - When the input source is switched
- **Status display screen**
  - When the volume is adjusted

**NOTE**

- HDMI signals cannot be converted into analog signals (see page 52).
- Analog signals cannot be converted into HDMI signals (see page 52).

**Examples of screen display**

- **Menu screen**
  - When the input source is switched
- **Status display screen**
  - When the volume is adjusted

Status display: The operating status appears briefly on the screen when the input source is switched or the volume is changed.

- If you operate the menu while playing back 3D video content or computer’s resolution (e.g. VGA), the playback video is replaced by the menu screen. The playback video is not displayed behind the menu screen.
- This unit does not show the status display while playing back 3D video content or computer’s resolution (e.g. VGA).
- The menu screen and status display are displayed when this unit and a TV are connected by HDMI.
Connecting an HDMI-compatible device

You can connect up to five HDMI-compatible devices (4-inputs/1-output) to the unit.

HDMI function

This unit supports the following HDMI functions:

• 3D
• Deep Color (page 53)
• x.v.Color, sYCC601 color, Adobe RGB color, Adobe YCC601 color (page 53, 54)
• High definition digital audio format

<table>
<thead>
<tr>
<th>Copyright protection system</th>
</tr>
</thead>
<tbody>
<tr>
<td>In order to play back digital video and audio such as BD-Video or DVD-Video via HDMI connection, both this unit and TV or the player need to support the copyright protection system known as HDCP (High-bandwidth Digital Content Protection System). HDCP is copyright protection technology comprised of data encryption and authentication of the connected AV device. This unit supports HDCP.</td>
</tr>
<tr>
<td>• If a device that does not support HDCP is connected, video and audio are not output correctly. Read the owner’s manual of your television or player for more information.</td>
</tr>
</tbody>
</table>

About HDMI cables

When a device supporting Deep Color signal transfer is connected, use a cable compatible “High Speed HDMI cable” or “High Speed HDMI cable with Ethernet”.

About 3D function

This unit supports input and output of 3D (3 dimensional) video signals of the HDMI 1.4a standards. To play back 3D video, you need a TV and player that provide support for HDMI1.4a standard 3D function and a pair of 3D glasses.

**NOTE**

• When playing back 3D video, refer to the instructions provided in the manual of your playback device together with this manual.
• If you operate the menu while playing back 3D video content, the playback video is replaced by the menu screen. The playback video is not displayed behind the menu screen.
• This unit does not show the status display while playing back 3D video content.
Connecting an HDMI-compatible device

• When this unit is connected to other devices with HDMI cables, connect this unit and TV also with an HDMI cable.
• When connecting a device that supports Deep Color transmission, please use a “High Speed HDMI cable” or “High Speed HDMI cable with Ethernet”.
• Video signals are not output if the input video signals do not match the monitor’s resolution. In this case, switch the Blu-ray Disc/DVD player’s resolution to a resolution with which the monitor is compatible.
• When this unit and monitor are connected with an HDMI cable, if the monitor is not compatible with HDMI audio signal playback, only the video signals are output to the monitor.

NOTE
• The audio signal from the HDMI output connector (sampling frequency, number of channels, etc.) may be limited by the HDMI audio specifications of the connected device regarding permissible inputs.
• Only an HDMI signal is output from the HDMI MONITOR OUT connector.

Connecting to a device equipped with a DVI-D connector

When an HDMI/DVI conversion cable (sold separately) is used, the HDMI video signals are converted to DVI signals, allowing connection to a device equipped with a DVI-D connector.

NOTE
• No sound is output when connected to a device equipped with a DVI-D connector. Make separate audio connections.
• Signals cannot be output to DVI-D devices that do not support HDCP.
• Depending on the combination of devices, the video signals may not be output.

Settings related to HDMI connections

Set as necessary. For details, see the respective reference pages.

Other Setup (page 35)

Make various other settings.
• HDMI Audio Out
• Display
• Setup Lock

NOTE
The audio signal input from the HDMI input connector can be output as an output signal from the HDMI output connector by setting the HDMI audio output destination to TV. Audio signals input via the Analog/Coaxial/Optical input connectors cannot be output from the HDMI output connector.
Connecting a TV

- Select the connector to use and connect the device.
- For instructions on HDMI connections, see “Connecting an HDMI-compatible device” (page 5).

To listen to TV audio through this device, use the optical digital connection.

**NOTE**

If the VIDEO input connector and S-VIDEO input connector are to be used, be sure to connect the MONITOR output connector of the unit and the VIDEO input connector of the TV, using a video cable.

**Cables used for connections**

<table>
<thead>
<tr>
<th>Video cable (sold separately)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Video cable</td>
</tr>
<tr>
<td>Optical cable</td>
</tr>
</tbody>
</table>

**Blu-ray Disc player / DVD player**

- You can enjoy video and audio from a Blu-ray Disc or DVD.
- Select the connector to use and connect the device.
- For instructions on HDMI connections, see “Connecting an HDMI-compatible device” (page 5).

**Cables used for connections**

<table>
<thead>
<tr>
<th>Video cable (sold separately)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Video cable</td>
</tr>
<tr>
<td>Audio cable (sold separately)</td>
</tr>
<tr>
<td>Audio cable</td>
</tr>
</tbody>
</table>

**Blu-ray Disc player / DVD player**

- You can enjoy video and audio from a Blu-ray Disc or DVD.
- Select the connector to use and connect the device.
- For instructions on HDMI connections, see “Connecting an HDMI-compatible device” (page 5).

**Cables used for connections**

<table>
<thead>
<tr>
<th>Video cable (sold separately)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Video cable</td>
</tr>
<tr>
<td>Audio cable (sold separately)</td>
</tr>
<tr>
<td>Audio cable</td>
</tr>
</tbody>
</table>

**Blu-ray Disc player / DVD player**

- You can enjoy video and audio from a Blu-ray Disc or DVD.
- Select the connector to use and connect the device.
- For instructions on HDMI connections, see “Connecting an HDMI-compatible device” (page 5).

**Cables used for connections**

<table>
<thead>
<tr>
<th>Video cable (sold separately)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Video cable</td>
</tr>
<tr>
<td>Audio cable (sold separately)</td>
</tr>
<tr>
<td>Audio cable</td>
</tr>
</tbody>
</table>

When you want to play back HD Audio (Dolby TrueHD, DTS-HD, Dolby Digital Plus, DTS Express) and Multi-channel PCM with this unit, use an HDMI connection (page 5 “Connecting an HDMI-compatible device”).
Connecting a digital camcorder

- You can enjoy video and audio from a digital camcorder.
- For instructions on HDMI connections, see “Connecting an HDMI-compatible device” (page 5).

Cables used for connections

<table>
<thead>
<tr>
<th>Video cable (sold separately)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Audio cable (sold separately)</td>
</tr>
<tr>
<td>Coaxial digital cable</td>
</tr>
</tbody>
</table>

Connecting a set-top box (Satellite tuner/Cable TV)

- You can watch satellite or cable TV.
- Select the connector to use and connect the device.
- For instructions on HDMI connections, see “Connecting an HDMI-compatible device” (page 5).

Cables used for connections

<table>
<thead>
<tr>
<th>Video cable (sold separately)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Audio cable (sold separately)</td>
</tr>
</tbody>
</table>

Satellite tuner/Cable TV

Digital camcorder

Set this to change the digital input connector to which the input source is assigned.

“Input Assign” (page 31)

- If a portable player is connected via the PORTABLE IN jack on the front panel, playback from the portable player has priority.
- You can enjoy games by connecting a game machine via the V.AUX input connector. In this case, select the input source to “V.AUX”.

in Set as Necessary

Set this to change the digital input connector to which the input source is assigned.

“Input Assign” (page 31)
Connecting a control dock for iPod

- Connect a control dock for iPod to the unit to enjoy video and music stored on an iPod.
- For a control dock for iPod, use ASD-11R, ASD-3N, ASD-3W, ASD-51N and ASD-51W made by DENON (sold separately).
- For instructions on the control dock for iPod settings, refer to the control dock for iPod’s operating instructions.

Cables used for connections

- Audio cable (sold separately)
- Stereo mini plug cable

Connecting a portable player

If a portable player is connected via the PORTABLE IN jack of the unit, music from the portable player can be played.

Cables used for connections

- Audio cable
- Stereo mini plug cable

Use the AV/Control Cable supplied with the DENON control dock for iPod.

NOTE

- When connecting an iPhone to this unit, keep the iPhone at least 20 cm away from this unit. If the iPhone is kept closer to this unit and a telephone call is received by the iPhone, noise may be output from this device.
- Video images on an iPod cannot be output from the HDMI MONITOR output connector of this unit. To play the video images on an iPod, in addition to using an HDMI connection, connect a TV to the VIDEO MONITOR output connector of this unit. Also, switch the input setting of the TV to “Video”.

Set this to change the digital input connector to which the input source is assigned.

“Input Assign” (page 31)
Connecting an antenna

• Connect the FM antenna or AM loop antenna supplied with the unit to enjoy listening to radio broadcasts.
• After connecting the antenna and receiving a broadcast signal (page 17 “Listening to FM/AM broadcasts”), fix the antenna with tape in a position where the noise level becomes minimal.

AM outdoor antenna

Direction of broadcasting station

75 Ω coaxial cable

Ground

AM loop antenna (supplied)

FM outdoor antenna

FM indoor antenna (supplied)

■ AM loop antenna assembly

1 Put the stand section through the bottom of the loop antenna from the rear and bend it forward.

2 Insert the projecting part into the square hole in the stand.

■ Using the AM loop antenna

Suspending on a wall
Suspend directly on a wall without assembling.

Standing alone
Use the procedure shown above to assemble.

NOTE
• Do not connect two FM antennas simultaneously.
• Even if an external AM antenna is used, do not disconnect the AM loop antenna.
• Make sure the AM loop antenna lead terminals do not touch metal parts of the panel.
• If the signal has noise interference, connect the ground terminal (GND) to reduce noise.
• If you are unable to receive a good broadcast signal, we recommend installing an outdoor antenna. For details, inquire at the retail store where you purchased the unit.
Playback (Basic operation)

- Selecting the input source (page 11)
- Adjusting the master volume (page 11)
- Turning off the sound temporarily (page 11)
- Playing a Blu-ray Disc player/DVD player (page 12)
- Playing a portable player (page 12)
- Playing an iPod (page 13)
- Tuning in radio stations (page 17)
- Selecting a listening mode (Surround mode) (page 19)
- Playback (Advanced operation) (page 26)

Important information

Before starting playback, make the connections between the different components and the settings on the receiver.

NOTE

Also refer to the operating instructions of the connected components when playing them.

Selecting the input source

Press the input source select button (BD, DVD, TV, SAT/CBL, TUNER, DOCK, GAME, V.AUX) to be played back.

The desired input source can be selected directly.

You can also use the following operation to select an input source.

Using the button on the main unit

Press SOURCE ▲ or SOURCE ▼.

- Every time you press SOURCE ▲ or SOURCE ▼, the input source switches in the following order.

<table>
<thead>
<tr>
<th>DVD</th>
<th>BD</th>
<th>TUNER</th>
<th>DOCK</th>
</tr>
</thead>
<tbody>
<tr>
<td>TV</td>
<td>SAT/CBL</td>
<td>GAME</td>
<td>V.AUX</td>
</tr>
</tbody>
</table>

- When iPod ▶ on the main unit is pressed, the input source of this unit is switched to “DOCK” and the connected iPod is automatically played (page 16 “iPod play function”).

Adjusting the master volume

Use ▲▼ to adjust the volume.

When the “Volume Display” setting (page 34) is “Relative”

[Adjustable range] –80.5dB – 18.0dB

When the “Volume Display” setting (page 34) is “Absolute”

[Adjustable range] 0.0 – 99.0

- The variable range differs according to the input signal and channel level setting.

You can also operate via the main unit. In this case, perform the following operations.

Turn MASTER VOLUME to adjust the volume.

Turning off the sound temporarily

Press ▼.

- The power indicator flashes green.
- “MUTE” indicator on the display lights.
- ❌ appears on a TV screen.

- The sound is reduced to the level set at “Mute Level” (page 34).
- To cancel, press ▼ again. Muting can also be canceled by adjusting the master volume.
Playing a Blu-ray Disc player/DVD player

The following describes the procedure for playing Blu-ray Disc player/DVD player.

1 Prepare for playback.
   ① Turn on the power of the TV, subwoofer and player.
   ② Change the TV input to the input of this unit.
   ③ Load the disc in the player.

2 Press ON to turn on power to the unit.

3 Press BD or DVD to switch an input source for a player used for playback.

4 Play the component connected to this unit.
Make the necessary settings on the player (language setting, subtitles setting, etc.) beforehand.

---

Playing a portable player

The following describes the procedure for playing portable player.

1 Connect the portable player to this unit (page 9 “Connecting a portable player”).

2 Press ON to turn on power to the unit.

3 Press V.AUX to switch the input source to “V.AUX”.

4 Play the component connected to this unit.
Playing an iPod

If you use a separately sold DENON control dock for iPod (ASD-11R, ASD-3N, ASD-3W, ASD-51N or ASD-51W), you will be able to play back videos, photos, music, and other content on the iPod. The playback method differs depending on the control dock for iPod to be used and the files to be played back (music or video).

- Listening to music on an iPod (page 13)
- Viewing videos on an iPod
  - Playback in Browse mode (page 14)
  - You can play back the video files on an iPod.
  - Playback in Remode mode (page 15)
  - You can play back the video and photo files on an iPod.

Listening to music on an iPod

1. Prepare for playback.
   1. Connect the DENON control dock for iPod to this unit (page 9 “Connecting a control dock for iPod”).
   2. Set the iPod in the DENON control dock for iPod.

2. Press ON to turn on power to the unit.

3. Press DOCK to switch the input source to “DOCK”.
   - If “Browse mode” is selected in step 4, the following screen is displayed on a TV screen.

4. Press SEARCH and hold it down for 2 seconds or more to select the display mode.
   - There are two modes for displaying the contents recorded on the iPod.
     - Browse mode: Display iPod information on the TV screen.
       - English letters, numbers and certain symbols are displayed.
       - Incompatible characters are displayed as “.” (period).
     - Remote mode: Display iPod information on the iPod screen.
       - “Dock Remote” is displayed on the display of this unit.

<table>
<thead>
<tr>
<th>Display mode</th>
<th>Browse mode</th>
<th>Remote mode</th>
</tr>
</thead>
<tbody>
<tr>
<td>Playable files</td>
<td>Music file</td>
<td>✓</td>
</tr>
<tr>
<td></td>
<td>Photo file</td>
<td>✓</td>
</tr>
<tr>
<td></td>
<td>Video file</td>
<td>✓</td>
</tr>
<tr>
<td>Active buttons</td>
<td>Remote control unit (This unit)</td>
<td>✓</td>
</tr>
<tr>
<td></td>
<td>iPod</td>
<td>✓</td>
</tr>
</tbody>
</table>

   - When using an ASD-11R DENON control dock for iPod.
   - Video may not be output, depending on the combination of ASD-11R, ASD-3N, ASD-3W, ASD-51N or ASD-51W DENON control dock for iPod and iPod.

5. Use △∇ to select the item, then press ENTER or ► to select the file to be played.

6. Press ENTER, ► or ►/II.
   Playback starts.

NOTE
If the connections screen is not displayed, the iPod may not be properly connected. Reconnect it.
Playing an iPod

• To play back compressed audio with extended bass or treble reproduction, we recommend playback in RESTORER mode (page 39). The default setting is “ON”.
• In Browse mode, press STATUS during playback to check the title name, artist name and album name on the display of this unit.

NOTE
• Press STANDBY and set this unit’s power to the standby mode before disconnecting the iPod. You can also switch the input source to other than “DOCK” and then disconnect the iPod.
• Depending on the type of iPod and the software version, some functions may not operate.
• Note that DENON will accept no responsibility whatsoever for any problems arising with the data on an iPod when using this unit in conjunction with the iPod.

Viewing videos on an iPod

Playback in Browse mode
When an iPod equipped with a video function is connected to a DENON ASD-11R, ASD-3N, ASD-3W, ASD-51N and ASD-51W control dock for iPod, image files can be played in the Browse mode.

When using an ASD-11R

1 Prepare for playback.
   ① Connect the DENON control dock for iPod to this unit (page 9 “Connecting a control dock for iPod”).
   ② Set the iPod in the DENON control dock for iPod.
   ③ Connect the TV to the VIDEO MONITOR output connector of this unit.

2 Press ON to turn on power to the unit.

3 Press DOCK to switch the input source to “DOCK”.

4 Press SEARCH and hold it down for 2 seconds or more to select the “Browse mode”.
   • There are two modes for displaying the contents recorded on the iPod.
     Browse mode
     Display iPod information on the TV screen.
     • English letters, numbers and certain symbols are displayed. Incompatible characters are displayed as “.” (period).
     Remote mode
     Display iPod information on the iPod screen.
     • “Dock Remote” is displayed on the display of this unit.

5 Use △▽ to select “Videos”, then press ENTER or ▶.

6 Use △▽ to select the search item or folder, then press ENTER or ▶.

7 Use △▽ to select the video file, then press ENTER, ▶ or ▶/II.
   Playback starts.

8 Switch the input setting of the TV to “Video”.
   The video file is displayed on the TV screen.

NOTE
If the connections screen is not displayed, the iPod may not be properly connected. Reconnect it.
When using an ASD-3N, ASD-3W, ASD-51N or ASD-51W

1 Prepare for playback.
   ① Connect the DENON control dock for iPod to this unit (Page 9 “Connecting a control dock for iPod”).
   ② Set the iPod in the DENON control dock for iPod.
   ③ Connect the TV to the VIDEO MONITOR output connector of this unit.
   ④ Switch the input setting of the TV to “Video”.

2 Press ON to turn on power to the unit.

3 Press DOCK to switch the input source to “DOCK”.

4 Press SEARCH and hold it down for 2 seconds or more to select the “Browse mode”.
   • There are two modes for displaying the contents recorded on the iPod.
     - **Browse mode** Display iPod information on the TV screen.
       - English letters, numbers and certain symbols are displayed. Incompatible characters are displayed as “.” (period).
     - **Remote mode** Display iPod information on the iPod screen.
       - “Dock Remote” is displayed on the display of this unit.

   • In “Browse mode”, the iPod display is as shown at right.

   **NOTE**
   If the connections screen is not displayed, the iPod may not be properly connected. Reconnect it.

5 Use △▽ to select “Videos”, then press ENTER or ▶.

6 Use △▽ to select the search item or folder, then press ENTER or ▶.

7 Use △▽ to select the video file, then press ENTER, ▶ or ▶/II.
   Playback starts.

### Playback in Remote mode

This unit can play back on a TV screen photos and data stored on an iPod equipped with a slide show or video function.

1 Press and hold SEARCH to set the Remote mode.
   “Dock Remote” is displayed on the display of this unit.

2 Watching the iPod’s screen, use △▽ to select “Photos” or “Videos”.
   • Depending on the iPod model, it may be necessary to operate the iPod unit directly.

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

**NOTE**
“TV Out” at the iPod’s “Slide show Settings” or “Video Settings” must be set to “On” in order to display the iPod’s photo data or videos on the monitor. For details, see the iPod’s operating instructions.

**NOTE**
Video may not be output, depending on the combination of ASD-11R, ASD-3N, ASD-3W, ASD-51N or ASD-51W and iPod.
Playing an iPod

### iPod operation

<table>
<thead>
<tr>
<th>Operation buttons</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>STATUS</td>
<td>Check of title name/artist name/album name (in Browse mode)</td>
</tr>
<tr>
<td>SEARCH (Press and release)</td>
<td>Page search mode *1</td>
</tr>
<tr>
<td>SEARCH (Press and hold)</td>
<td>Browse / Remote mode switching</td>
</tr>
<tr>
<td>MEMORY</td>
<td>Store memory *2</td>
</tr>
<tr>
<td>MENU</td>
<td>Amp menu</td>
</tr>
<tr>
<td>△▼&lt;►&gt;</td>
<td>Cursor operation</td>
</tr>
<tr>
<td>ENTER (Press and release)</td>
<td>Enter / Pause</td>
</tr>
<tr>
<td>ENTER (Press and hold)</td>
<td>Stop</td>
</tr>
<tr>
<td>RETURN</td>
<td>Return</td>
</tr>
<tr>
<td>■►►►</td>
<td>Auto search (cue)</td>
</tr>
<tr>
<td>■►►►</td>
<td>Stop</td>
</tr>
<tr>
<td>►►</td>
<td>Play back / Pause</td>
</tr>
<tr>
<td>◄►</td>
<td>Manual search (fast-reverse/fast-forward)</td>
</tr>
<tr>
<td>REPEAT</td>
<td>Repeat playback</td>
</tr>
<tr>
<td>RANDOM</td>
<td>Shuffling playback</td>
</tr>
</tbody>
</table>

*1 When the menu screen is displayed, press SEARCH, then press ◄ (previous page) or ► (next page). To cancel, press △ or SEARCH.

*2 This functions when an ASD-3N, ASD-3W, ASD-51N or ASD-51W is used.

### iPod play function

If iPod is pressed when a control dock for iPod is connected, the iPod starts playback.

Press iPod.

- This unit's input source switches to "DOCK".
- iPod playback starts.
- You can pause the playback of a song by pressing iPod during iPod playback.

**NOTE**

If both a control dock for iPod ("DOCK") are connected, playback with control dock for iPod ("DOCK") takes priority.
Tuning in radio stations

Listening to FM/AM broadcasts

1. Press TUNER to switch the input source to “TUNER”.

2. Press BAND to select “FM” or “AM”.
   - **FM**: When listening to an FM broadcast.
   - **AM**: When listening to an AM broadcast.

3. Tune in the desired broadcast station.

   - **To tune in automatically (Auto tuning)**
     Press MODE to light the “AUTO” indicator on the display, then use TUNING ▲ or TUNING ▼ to select the station you want to hear.

   - **To tune in manually (Manual tuning)**
     Press MODE to turn off the display’s “AUTO” indicator, then use TUNING ▲ or TUNING ▼ to select the station you want to hear.

- If the desired station cannot be tuned in with auto tuning, tune it in manually.
- When tuning in stations manually, press and hold TUNING ▲ or TUNING ▼ to change frequencies continuously.

Presetting radio stations (Manual preset)

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

- Stations can be preset automatically at “Auto Preset” (page 32). If “Auto Preset” is performed after performing “Manual preset”, the “Manual preset” settings will be overwritten.

1. Tune in the broadcast station you want to preset.

2. Press MEMORY.

3. Press SHIFT to select the block (A to G) in which the channel (1 to 8 per a block) is to be preset, then press CH + or CH – to select the preset number.

4. Press MEMORY again to complete the setting.

- To preset other stations, repeat steps 1 to 4.

Default settings

<table>
<thead>
<tr>
<th>Block (A – G)</th>
<th>Default Settings</th>
</tr>
</thead>
<tbody>
<tr>
<td>A1 – A8</td>
<td>87.5 / 89.1 / 98.1 / 107.9 / 90.1 / 90.1 / 90.1 / 90.1 MHz</td>
</tr>
<tr>
<td>B1 – B8</td>
<td>520 / 600 / 1000 / 1400 / 1500 / 1710 kHz, 90.1 / 90.1 MHz</td>
</tr>
<tr>
<td>C1 – C8</td>
<td>90.1 MHz</td>
</tr>
<tr>
<td>D1 – D8</td>
<td>90.1 MHz</td>
</tr>
<tr>
<td>E1 – E8</td>
<td>90.1 MHz</td>
</tr>
<tr>
<td>F1 – F8</td>
<td>90.1 MHz</td>
</tr>
<tr>
<td>G1 – G8</td>
<td>90.1 MHz</td>
</tr>
</tbody>
</table>
## Tuning in radio stations

### 1. Listening to preset stations

**Press SHIF**T to select the memory block (A to G).

- **TUNER**
- **Preset Channel**
- A8 FM 90.1 MHz
- A7 FM 90.1 MHz
- A6 FM 90.1 MHz
- A5 FM 90.1 MHz
- A4 FM 107.9 MHz
- A3 FM 98.1 MHz
- A2 FM 89.1 MHz
- A1 FM 87.5 MHz

**[TUNING V] / [   CH+/-    ]**
- Tuning
- **[MEMORY]**
- **[BAND]**
- **[MODE]**
- **[DEMO]**

**Press** CH + or CH – to select the desired preset channel.

You can also operate via the main unit. In this case, perform the following operations.

**Press** TUNER PRESET CH + or TUNER PRESET CH – to select a preset radio station.

### 2. Tuner (FM/AM) operation

<table>
<thead>
<tr>
<th>Operation buttons</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>BAND</td>
<td>FM/AM switching</td>
</tr>
<tr>
<td>MEMORY</td>
<td>Preset memory registration</td>
</tr>
<tr>
<td>SHIFT</td>
<td>Preset channel block selection</td>
</tr>
<tr>
<td>MODE</td>
<td>Switch search modes</td>
</tr>
<tr>
<td>CH +, –</td>
<td>Preset channel selection</td>
</tr>
<tr>
<td>TUNING ▲▼</td>
<td>Tuning (up/down)</td>
</tr>
<tr>
<td>MENU</td>
<td>Amp menu</td>
</tr>
<tr>
<td>△▼◇◆</td>
<td>Cursor operation</td>
</tr>
<tr>
<td>ENTER</td>
<td>Enter</td>
</tr>
<tr>
<td>RETURN</td>
<td>Return</td>
</tr>
</tbody>
</table>
### Selecting a listening mode (Surround mode)

This unit can play input audio signals in multi-channel surround mode or in stereo mode. Select a listening mode suitable for the playback contents (cinema, music, etc.) or according to your liking.

#### Listening Mode

<table>
<thead>
<tr>
<th>Input audio signal</th>
<th>Playback</th>
<th>Listening mode</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-channel</td>
<td>Surround</td>
<td>Standard playback (v page 20)</td>
</tr>
<tr>
<td>Multi channel</td>
<td>Surround</td>
<td>Multi channel stereo playback (v page 21)</td>
</tr>
<tr>
<td>2-channel</td>
<td>Surround</td>
<td>Virtual playback (v page 21)</td>
</tr>
<tr>
<td>Multi channel</td>
<td>Surround</td>
<td>Stereo playback (v page 21)</td>
</tr>
<tr>
<td>2-channel</td>
<td>Stereo</td>
<td>Direct playback (v page 21)</td>
</tr>
<tr>
<td>Multi channel</td>
<td>Surround</td>
<td>Sound recorded in source is played as is.</td>
</tr>
</tbody>
</table>

- **Surround**: Surround-channel signals are created and played with surround playback. For multichannel signal input:
  - The surround signal recorded in source is played as surround playback. (The sound is played according to the settings of the speaker size in page 5 “Speaker Config.”)
  - Surround-back-channel signals that are not recorded in source can be created.

- **Multi channel stereo playback**: This mode is for enjoying stereo sound from all speakers.

- **Virtual playback**: This mode is for enjoying surround effects using only the front speakers or headphones.

- **Stereo playback**: If multichannel signals are input, they are mixed down to 2-channel audio and are played. Subwoofer signals are also output.

- **Direct playback**: Sound recorded in source is played as is.
  - Surround back signals are not created.
  - In this mode, the following items cannot be adjusted.
    - Tone (v page 38)
    - RESTORER (v page 39)

### Notes

- Some listening modes cannot be selected, depending on the audio format or number of channels of the input signal. For details, see “Types of input signals, and corresponding surround modes” (v page 50).
- Adjust the sound field effect with the menu “Audio Adjust” (v page 36) to enjoy your favorite sound mode.
- Buttons on the remote control unit can be used for operations. Press SURROUND ◀ or SURROUND ▶ and the modes are switched as shown below.

![Image of remote control with SURROUND buttons]

- The display varies depending on the audio format or the number of channels of input signals.
Standard playback

1. Playing the source (page 12 – 17).

2. Press SURROUND ◄ or SURROUND ► to select the surround decoder to play back multi-channel sound.
   Select the surround mode while viewing the display on the TV screen.
   • Which decoder can be selected depends on the settings of page 5 "Speaker Config."

   **DOLBY PLIIx** This mode is for 7.1-channel surround playback using the surround back speakers.
   • “PLIIx Cinema”, “PLIIx Music” or “PLIIx Game” is displayed.

   **DOLBY PLII** This mode is for 5.1-channel surround playback. Select this mode if no surround back
   speaker is to be used.
   • “PLII Cinema”, “PLII Music”, “PLII Game” or “Pro Logic” is displayed.

   **DTS NEO:6** This mode is for 7.1-channel or 5.1-channel surround playback using the surround back
   speakers.
   * This can be selected when “Speaker Config.” – “Surround Back” (page 5 “Speaker Config.”) is not set to “None”.

3. Press AUDIO ADJUST and then press ENTER.

4. Use ◄ ► to select the mode according to the content to be played and then press ENTER.

   **Cinema** This mode is suited for movie sources.

   **Music** This mode is suited for music sources. More sound is sent to the front speakers than in
   “Cinema” mode.

   **Game** This mode is suited for games.

   **Pro Logic** * This mode is suitable for playback of 2-channel sources recorded with Dolby Pro Logic.
   * This can be selected when “Speaker Config.” – “Surround Back” (page 5 “Speaker Config.”) is not set to “None”.

5. Press AUDIO ADJUST.
   The menu display disappears.

Surround playback of 2-channel sources

Displaying the currently playing surround mode

<table>
<thead>
<tr>
<th>Input signal</th>
<th>Surround mode</th>
<th>Display</th>
</tr>
</thead>
<tbody>
<tr>
<td>DOLBY DIGITAL (other than 2ch) / DOLBY DIGITAL EX</td>
<td>DOLBY DIGITAL</td>
<td>DOLBY DIGITAL</td>
</tr>
<tr>
<td>DOLBY DIGITAL + PLIIx CINEMA</td>
<td>DOLBY DIGITAL + PLIIx CINEMA</td>
<td>DOLBY D + PLIIx C</td>
</tr>
<tr>
<td>DOLBY DIGITAL + PLIIx MUSIC</td>
<td>DOLBY DIGITAL + PLIIx MUSIC</td>
<td>DOLBY D + PLIIx M</td>
</tr>
<tr>
<td>DOLBY DIGITAL Plus</td>
<td>DOLBY DIGITAL Plus</td>
<td>DOLBY DIGITAL +</td>
</tr>
<tr>
<td>DOLBY TrueHD</td>
<td>DOLBY TrueHD</td>
<td>DOLBY TrueHD</td>
</tr>
<tr>
<td>DTS (5.1ch) / DTS-ES Matrix 6.1 / DTS-ES Matrix 6.1 / DTS 96/24</td>
<td>DTS SURROUND</td>
<td>DTS SURROUND</td>
</tr>
<tr>
<td>DTS + PLIIx CINEMA</td>
<td>DTS + PLIIx CINEMA</td>
<td>DTS + PLIIx C</td>
</tr>
<tr>
<td>DTS + PLIIx MUSIC</td>
<td>DTS + PLIIx MUSIC</td>
<td>DTS + PLIIx M</td>
</tr>
<tr>
<td>DTS + NEO:6</td>
<td>DTS + NEO:6</td>
<td>DTS + NEO:6</td>
</tr>
<tr>
<td>DTS ES MATRIX6.1</td>
<td>DTS ES MATRIX6.1</td>
<td>DTS ES MATRIX6.1</td>
</tr>
<tr>
<td>DTS ES DSCRT6.1</td>
<td>DTS ES DSCRT6.1</td>
<td>DTS ES DSCRT6.1</td>
</tr>
<tr>
<td>DTS 96/24</td>
<td>DTS 96/24</td>
<td>DTS 96/24</td>
</tr>
<tr>
<td>DTS-HD</td>
<td>DTS-HD HI RES</td>
<td>DTS-HD HI RES</td>
</tr>
<tr>
<td>DTS-HD MSTR</td>
<td>DTS-HD MSTR</td>
<td>DTS-HD MSTR</td>
</tr>
<tr>
<td>PCM (multi ch)</td>
<td>MULTI CH IN</td>
<td>MULTI CH IN</td>
</tr>
<tr>
<td>MULTI IN + PLIIx CINEMA</td>
<td>MULTI IN + PLIIx CINEMA</td>
<td>MULTI IN + PLIIx C</td>
</tr>
<tr>
<td>MULTI IN + PLIIx MUSIC</td>
<td>MULTI IN + PLIIx MUSIC</td>
<td>MULTI IN + PLIIx M</td>
</tr>
<tr>
<td>MULTI CH IN 7.1</td>
<td>MULTI CH IN 7.1</td>
<td>MULTI CH IN 7.1</td>
</tr>
</tbody>
</table>

*1 This is displayed when the input signal is “DTS-ES Matrix 6.1” and this unit’s “AFDM” (page 37)
setting is “ON”.

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

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

Surround playback of multi-channel sources (Dolby Digital, DTS etc.)

1. Playing the source (page 12 – 17).

2. Press SURROUND ◄ or SURROUND ► to select the surround decoder to play back multi-channel sound.
   Select the surround mode while viewing the display on the TV screen.
   • Which decoder can be selected depends on the input signal, the settings of page 5 “Speaker Config.”.
Standard playback

Multi channel stereo playback
This mode is for enjoying stereo sound from all speakers.

1. Playing the source (page 12 – 17).
2. Press SURROUND ◀ or SURROUND ▶ to select “MULTI CH STEREO”.
   Multi channel stereo playback begins.

NOTE
When the input signal is Dolby TrueHD, Dolby Digital Plus, DTS-HD or DTS Express, you cannot select multi channel stereo mode.

Virtual playback
This mode is for enjoying surround effects using only the front speakers or headphones.

1. Playing the source (page 12 – 17).
2. Press SURROUND ◀ or SURROUND ▶ to select “VIRTUAL”.
   Virtual playback begins.

NOTE
When the input signal is Dolby TrueHD, Dolby Digital Plus, DTS-HD or DTS Express, you cannot select virtual mode.

Stereo playback
This is the mode for playing in stereo. The tone can be adjusted.
• Sound is output from the front left and right speakers and subwoofer.
• If multichannel signals are input, they are mixed down to 2-channel audio and are played.

1. Playing the source (page 12 – 17).
2. Press SURROUND ◀ or SURROUND ▶ to select “STEREO”.
   Stereo playback begins.

Direct playback
Sound recorded in source is played as is.
• Surround back signals are not created.
• In this mode, the following items cannot be adjusted.
  • Tone (page 38)
  • RESTORER (page 39)

1. Playing the source (page 12 – 17).
2. Press SURROUND ◀ or SURROUND ▶ to select “DIRECT”.
   Direct playback begins.
Advanced version

Here, we explain functions and operations that let you make better use of this unit.

- Speaker installation/connection (Advanced connection)  page 23
- Playback (Advanced operation)  page 26
- How to make detailed settings  page 28
Here we describe the installation, connection and setup methods for speakers other than 5.1-channel speakers. For the installation, connection and setup methods for 5.1-channel speakers, see page 2 “Connecting the speakers”.

Procedure for speaker settings

Install

Connect (page 24)

Install

Install the surround back speakers in a position 2 to 3 ft (60 to 90 cm) higher than ear level.

When 7.1ch (Surround back speaker) installed

When 2.1ch speakers installed

[Speaker abbreviations]

FL Front speaker (L)
FR Front speaker (R)
C Center speaker
SW Subwoofer
SBL Surround back speaker (L)
SBR Surround back speaker (R)
SL Surround speaker (L)
SR Surround speaker (R)

Listening position

*1 22° – 30°
*2 90° – 110°
*3 135° – 150°
Connect

- For the method of connecting 5.1-channel speakers, see page 2 "Connecting the speakers".
- For the method of connecting the TV, see page 4 "Connect this unit to the television using an HDMI cable (sold separately)".

7.1-channel (Surround back speaker) connection

- The illustration on the right shows a connection example for performing 7.1-channel playback using the surround back speakers.
- A power amplifier (sold separately) is required for this connection.

**NOTE**

- For speaker cable connections, see page 3 “Preparation”.
- Connect so that the speaker cable core wires do not protrude from the speaker terminal. The protection circuit may be activated if the core wires touch the rear panel or if the + and – sides touch each other (page 54 “Protection Circuit”).
- Never touch the speaker terminals while the power supply is connected. Doing so could result in electric shock.
- Use speakers with the speaker impedances shown below.

<table>
<thead>
<tr>
<th>Speaker terminals</th>
<th>Speaker impedance</th>
</tr>
</thead>
<tbody>
<tr>
<td>FRONT</td>
<td>6 – 16 Ω</td>
</tr>
<tr>
<td>CENTER</td>
<td></td>
</tr>
<tr>
<td>SURROUND</td>
<td></td>
</tr>
</tbody>
</table>

Power amplifier
2.1-channel / 2-channel connection

For 2-channel playback, disconnect the subwoofers.

NOTE
• For speaker cable connections, see page 3 “Preparation”.
• For speaker impedance, see page 24.
Adjusting the volume of the speakers

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

1. Press \textbf{CH LEVEL}.

2. Use \textbf{△▼} to select the speaker. The speaker that can be set switches each time one of the buttons is pressed.

3. Use \textbf{◄►} to adjust the volume.

- In the case of a subwoofer, pressing \textbf{◄} when it is at “–12 dB” will change the setting to “OFF”.

- If you do not press any button for approximately 5 seconds, the menu screen light turns off.

- When a headphone jack is inserted, the headphone channel level can be adjusted.

Adjusting the volume of groups of speakers (Fader function)

This function lets you adjust (fade) the sound all at once from the front (front speaker / center speaker) or rear (surround speaker / surround back speaker).

1. Press \textbf{CH LEVEL}.

2. Press \textbf{▼} to select “Fader”, then select the item to be adjusting using \textbf{◄►}.

3. Use \textbf{◄►} to adjust the volume of the speakers. (\textbf{◄}: front, \textbf{►}: rear)

- If you do not press any button for approximately 5 seconds, the menu screen light turns off.

- The fader function does not affect the subwoofer.

- The fader can be adjusted until the volume of the speaker is adjusted to the lowest value of –12 dB.
Sleep timer function
The power automatically goes into standby once the set time has elapsed. This is convenient for playing sources while going to sleep.

Press SLEEP and display the time you want to set.
The “SLEEP” indicator on the display lights.
- The time switches as shown below each time SLEEP is pressed.

To cancel the sleep timer
Press SLEEP to set “OFF”. The “SLEEP” indicator on the display turns off.
- If you do not press any button for approximately 5 seconds, the menu screen light turns off.
- The sleep timer setting is canceled if this unit’s power is set to standby or turned off.

Quick select function
All of the settings in step 1 can be memorized together. By memorizing frequently used settings, you can quickly access and enjoy a playback environment that is consistently the same.

- Saving the settings
1 Set the items below to the settings you want to save.
   - Input source (page 11)
   - Volume (page 11)
   - Surround mode (page 19)
   - Video Select (page 32)

2 Press and hold the desired QUICK SELECT until “Memory” appears on the display.
The current settings will be memorized.

Quick select defaults

<table>
<thead>
<tr>
<th>QUICK SELECT</th>
<th>Input source</th>
<th>Volume</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>BD</td>
<td>–40 dB</td>
</tr>
<tr>
<td>2</td>
<td>SAT/CBL</td>
<td>–40 dB</td>
</tr>
<tr>
<td>3</td>
<td>GAME</td>
<td>–40 dB</td>
</tr>
<tr>
<td>4</td>
<td>DOCK</td>
<td>–40 dB</td>
</tr>
</tbody>
</table>

- Recalling the settings
Press QUICK SELECT at which the settings you want to call out are saved.

Various memory functions

- Personal memory plus function
This function sets the settings (input mode, surround mode, HDMI output mode, audio delay etc.) last selected for the individual input sources.

- Last function memory
This function stores the settings which were made before going into the standby mode. When the power is turned back on, the settings are restored.
# How to make detailed settings

## Menu map

For menu operation, connect a TV to this unit and display the menu on the TV screen. For menu operations, see the following page.

### Speaker Setup
- **Speaker Config.**
  - Select speaker configuration and size (bass reproduction capability).
  - Page: 5
- **Bass Setting**
  - Set subwoofer and LFE signal range playback.
  - Page: 6
- **Distance**
  - Set distance from listening position to speakers.
  - Page: 6
- **Channel Level**
  - Set the volume of the test tone to be the same when it is output from each speaker.
  - Page: 7
- **Crossover Freq.**
  - Set the maximum frequency of the bass signal output from each channel to the subwoofer.
  - Page: 8

### Input Setup
- **Input Assign**
  - Changes input connector assignment.
  - Page: 31
- **Auto Preset**
  - Uses the auto preset function to program radio stations.
  - Page: 32
- **Preset Skip**
  - Sets the preset memories that you do not want to display when tuning.
  - Page: 32
- **Video Select**
  - Video of another input source is played back combined with the playing audio.
  - Page: 32
- **Input Mode**
  - Sets the audio input mode and decode mode.
  - Page: 32
- **Source Level**
  - Adjusts the playback level of the audio input.
  - Page: 33
- **Playback Mode**
  - Makes settings for iPod playback.
  - Page: 33

### Option Setup
- **Volume Control**
  - Sets the volume setting.
  - Page: 34
- **Other Setup**
  - Makes various other settings.
  - Page: 35

### Audio Adjust
- **Tone**
  - Adjusts the tonal quality of the sound.
  - Page: 38

### NIGHT MODE
- **Optimized setting for late-night listening.**
  - Compresses dynamic range (difference between loud and soft sounds).
  - Page: 38

### RESTARTER
- **Uncompresses compressed sources and apply bass boost for richer sound.**
  - Page: 39

### Audio Delay
- **Compensates for incorrect timing between video and audio.**
  - Page: 39

---

Items that only need to be set once

Set these for example upon purchase. Once these items are set, there is no need to set them again unless the speaker layout or the connected speakers have been changed.
Examples of menu and front display
Below we describe typical examples of displays on the TV screen and on the set’s display window.

<table>
<thead>
<tr>
<th>Menu display</th>
<th>Front display</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Top menu display</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
| ![Speaker Setup](image) | ![Speaker Setup](image) | 1. Press MENU to display the menu screen.  
2. TV screen: Displays the selected line.  
Display: Displays the selected item.  
- Use ▲▼ to move to the item you want to set.  
3. The number of the current selected setting menu is displayed. |
| ![Speaker Config.](image) | ![Speaker Config.](image) | 1. The number of the current selected setting menu is displayed.  
2. TV screen: Displays the selected line.  
Display: Displays the selected item.  
- Use ▲▼ to move to the item you want to set.  
3. ▲ is displayed at the sides of items whose setting can be changed. Use ◀▶ to change to the desired setting.  
4. Press ENTER to set to the mode in which the setting can be made. |
| ![Speaker Setup](image) | ![Speaker Setup](image) | 1. Press RETURN ◀ to return to the previous menu. |

| Display when changing settings | | |
| ![Speaker Config.](image) | ![Speaker Config.](image) | 1. Press ENTER.  
2. Press RETURN ◀ to return to the previous menu. |

| Display when resetting | | |
| ![Input Assign](image) | ![Input Assign](image) | 1. Press ▼ to select “Default”, then press ENTER.  
2. The number of the current selected setting menu is displayed.  
3. Press ◀ to select “Yes”, then press ENTER. |
Input Setup

Perform settings related to input source playback.
- You do not have to change the settings to use the unit. Make settings when needed.

Menu operation

1. Press MENU. The menu is displayed on the TV screen.
2. Use ▲▼ to select “Input Setup”, and then press ENTER.
3. Use ▲▼ to select the menu to be set or operated.
4. Press ENTER to enter the setting.

- To return to the previous item, press RETURN ▼.
- Exiting the Menu, press MENU while the menu is displayed. The menu display disappears.

Important information

About the display of input sources
In this section, the configurable input sources for each item are shown as follows.

- BD
- DVD
- TV
- SAT/CBL
- GAME
- V.AUX
- DOCK
- TUNER

Items that can be set with the “Input Setup” procedure

- Input Assign (see page 31)
- Auto Preset (see page 32)
- Preset Skip (see page 32)
- Video Select (see page 32)
- Input Mode (see page 32)
- Source Level (see page 33)
- Playback Mode (see page 33)
**Input Assign**

**Examples of “Input Assign” menu screen displays**

This screen appears when the “Input Setup” – “Input Assign” menu is selected. Use the “Input Assign” menu to change the digital input connectors that are assigned to the input sources in default settings.

**Input assignments menu operations**

1. Use ▲▼ to select “Input Assign”, and then press ENTER.

2. Use ▲▼▲▼ to select the input connector to be assigned.

3. Press ENTER to enter the setting.

**NOTE**

If all “OPTICAL” and “COAXIAL” assignment of the TV source are set to “OFF”, TV source cannot be selected with the input source selection.
**Auto Preset**

Use the auto preset function to program radio stations.

<table>
<thead>
<tr>
<th>Setting items</th>
<th>Setting details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Start</td>
<td>Start the auto preset process.</td>
</tr>
<tr>
<td></td>
<td>If an FM station cannot be preset automatically, select the desired station by tuning it in manually, then preset it manually.</td>
</tr>
</tbody>
</table>

**Preset Skip**

Default settings are underlined.

Set the preset memory block (from A to G) you do not want to display.

<table>
<thead>
<tr>
<th>Setting items</th>
<th>Setting details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Block A – Block G</td>
<td>Select a block to be skipped from among preset blocks (from A to G).</td>
</tr>
<tr>
<td>Skip</td>
<td>Do not display the selected preset memory block.</td>
</tr>
</tbody>
</table>

**Video Select**

Default settings are underlined.

Video of another input source is played back combined with the playing audio.

<table>
<thead>
<tr>
<th>Setting items</th>
<th>Setting details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Source</td>
<td>Play the picture and sound of the input source.</td>
</tr>
<tr>
<td>DVD / SAT/CBL / V.AUX / DOCK</td>
<td>Select video input source to view. This can be set for individual input sources.</td>
</tr>
<tr>
<td><strong>NOTE</strong></td>
<td>It is not possible to select HDMI input signals.</td>
</tr>
</tbody>
</table>

**Input Mode**

The input modes available for selection may vary depending on the input source.

<table>
<thead>
<tr>
<th>Setting items</th>
<th>Setting details</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Input Mode</strong></td>
<td>Set the audio input modes for the different input sources. It is normally recommended to set the audio input mode to &quot;Auto&quot;.</td>
</tr>
<tr>
<td>Auto</td>
<td>Automatically detect input signal and perform playback.</td>
</tr>
<tr>
<td>HDMI</td>
<td>Play only signals from HDMI input.</td>
</tr>
<tr>
<td>Digital</td>
<td>Play only signals from digital input (OPTICAL/COAXIAL).</td>
</tr>
<tr>
<td>Analog</td>
<td>Play only signals from analog input.</td>
</tr>
<tr>
<td></td>
<td>If an input source is &quot;BD&quot;, &quot;GAME&quot;, &quot;DOCK&quot;, &quot;DVD&quot; or &quot;V.AUX&quot; &quot;Digital&quot; can be selected by assigning &quot;Input Assign&quot; (page 31) to &quot;OPTICAL&quot; or &quot;COAXIAL&quot; (Selectable items differ depending on the input source.)</td>
</tr>
<tr>
<td></td>
<td>If an input source is &quot;TUNER&quot;, the setting is fixed to &quot;Analog&quot;.</td>
</tr>
<tr>
<td></td>
<td>If the input source is set to &quot;BD&quot;, &quot;TV&quot; or &quot;GAME&quot;, it cannot be set to &quot;Analog&quot;.</td>
</tr>
<tr>
<td></td>
<td>When digital signals are properly input, the [DIGITAL] indicator lights on the display. If the [DIGITAL] indicator does not light, check the digital input connector assignment and the connections.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Setting items</th>
<th>Setting details</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Decode Mode</strong></td>
<td>Set the audio decode mode for input source.</td>
</tr>
<tr>
<td>Auto</td>
<td>Detect type of digital input signal and decode and play automatically.</td>
</tr>
<tr>
<td>PCM</td>
<td>Decode and play only PCM input signals.</td>
</tr>
<tr>
<td>DTS</td>
<td>Decode and play only DTS input signals.</td>
</tr>
<tr>
<td>BD</td>
<td>Decode and play only BD input signals.</td>
</tr>
<tr>
<td>SAT/CBL</td>
<td>Decode and play only SAT/CBL input signals.</td>
</tr>
<tr>
<td>GAME</td>
<td>Decode and play only GAME input signals.</td>
</tr>
<tr>
<td>V.AUX</td>
<td>Decode and play only V.AUX input signals.</td>
</tr>
<tr>
<td>DOCK</td>
<td>Decode and play only DOCK input signals.</td>
</tr>
<tr>
<td></td>
<td>This item can be set for input sources for which &quot;OPTICAL&quot; or &quot;COAXIAL&quot; is assigned at &quot;Input Assign&quot; (page 31).</td>
</tr>
<tr>
<td></td>
<td>This item can be set for HDMI input sources (BD, DVD, SAT/CBL or GAME).</td>
</tr>
<tr>
<td></td>
<td>Normally set this mode to &quot;Auto&quot;. Set &quot;PCM&quot; and &quot;DTS&quot; when inputting the corresponding input signal.</td>
</tr>
</tbody>
</table>
## Source Level

<table>
<thead>
<tr>
<th>Setting items</th>
<th>Setting details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Source Level</td>
<td>This function corrects the playback level of the selected input source’s audio input. Make this setting if there are differences in the input volume levels between the different sources.</td>
</tr>
<tr>
<td></td>
<td>–12dB – +12dB (0dB)</td>
</tr>
</tbody>
</table>

## Playback Mode

This item can be set when the input source is “DOCK”.

<table>
<thead>
<tr>
<th>Setting items</th>
<th>Setting details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Repeat</td>
<td>Make settings for repeat mode.</td>
</tr>
<tr>
<td></td>
<td>All : All files are played repeatedly.</td>
</tr>
<tr>
<td></td>
<td>One : A file being played is played repeatedly.</td>
</tr>
<tr>
<td></td>
<td>OFF : Repeat playback mode is canceled.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Setting items</th>
<th>Setting details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shuffle</td>
<td>Make settings for shuffle mode.</td>
</tr>
<tr>
<td></td>
<td>DOCK</td>
</tr>
<tr>
<td></td>
<td>❑ When DENON control dock for iPod ASD-11R is connected</td>
</tr>
<tr>
<td></td>
<td>Songs : All files are played in shuffle playback mode.</td>
</tr>
<tr>
<td></td>
<td>Albums : Files in the album are played in shuffle playback mode.</td>
</tr>
<tr>
<td></td>
<td>OFF : Shuffle playback mode is canceled.</td>
</tr>
<tr>
<td></td>
<td>❑ When DENON control dock for iPod ASD-3N, ASD-3W, ASD-51N or ASD-51W is connected</td>
</tr>
<tr>
<td></td>
<td>ON : Shuffle playback mode is enabled.</td>
</tr>
<tr>
<td></td>
<td>OFF : Shuffle playback mode is canceled.</td>
</tr>
</tbody>
</table>
Option Setup

Make various option settings.

Menu operation

1 Press MENU.
The menu is displayed on the TV screen.

2 Use △▽ to select “Option Setup”, and then press ENTER.

3 Use △▽ to select the menu to be set or operated.

4 Press ENTER to enter the setting.
  • To return to the previous item, press RETURN.
  • Exiting the Menu, press MENU while the menu is displayed.
The menu display disappears.

Items that can be set with the “Option Setup” procedure

Option Setup:

Volume Control

Default settings are underlined.

Sets the volume setting.

<table>
<thead>
<tr>
<th>Setting items</th>
<th>Setting details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Volume Display</td>
<td>Relative: Display —dB (Min), in the range –80.5 dB to 20 dB. Absolute: Display in the range 0 (Min) to 99.</td>
</tr>
<tr>
<td></td>
<td>The “Volume Display” setting is applied also to the “Volume Limit” and “Power On Level” display method.</td>
</tr>
<tr>
<td>Volume Limit</td>
<td>OFF: Do not set a maximum volume. –20dB (61) / –10dB (71) / 0dB (81)</td>
</tr>
<tr>
<td></td>
<td>If “Volume Display” is set to “Absolute”, the value in ( ) is displayed.</td>
</tr>
<tr>
<td>Power On Level</td>
<td>Last: Use the memorized setting from the last session. – – – (0): Always use the muting on condition when power is turned on. –80dB – 18dB (1 – 99): The volume is adjusted to the set level.</td>
</tr>
<tr>
<td>Mute Level</td>
<td>Full: The sound is muted entirely. –40dB: The sound is attenuated by 40 dB down. –20dB: The sound is attenuated by 20 dB down.</td>
</tr>
</tbody>
</table>

Volume Control:

Sets the volume setting.

<table>
<thead>
<tr>
<th>Setting items</th>
<th>Setting details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Volume Display</td>
<td>Relative: Display —dB (Min), in the range –80.5 dB to 20 dB. Absolute: Display in the range 0 (Min) to 99.</td>
</tr>
<tr>
<td></td>
<td>The “Volume Display” setting is applied also to the “Volume Limit” and “Power On Level” display method.</td>
</tr>
<tr>
<td>Volume Limit</td>
<td>OFF: Do not set a maximum volume. –20dB (61) / –10dB (71) / 0dB (81)</td>
</tr>
<tr>
<td></td>
<td>If “Volume Display” is set to “Absolute”, the value in ( ) is displayed.</td>
</tr>
<tr>
<td>Power On Level</td>
<td>Last: Use the memorized setting from the last session. – – – (0): Always use the muting on condition when power is turned on. –80dB – 18dB (1 – 99): The volume is adjusted to the set level.</td>
</tr>
<tr>
<td>Mute Level</td>
<td>Full: The sound is muted entirely. –40dB: The sound is attenuated by 40 dB down. –20dB: The sound is attenuated by 20 dB down.</td>
</tr>
</tbody>
</table>
### Other Setup

Make various other settings.

<table>
<thead>
<tr>
<th>Setting items</th>
<th>Setting details</th>
</tr>
</thead>
</table>
| HDMI Audio Out      | **Amp** : Play back through speakers connected to the receiver.  
                      | **TV** : Play back through TV connected to the receiver.  
                      | If “TV” is selected, only an HDMI audio signal is output from the TV. |
| Auto Surround       | **ON** : Memorize settings. Automatically play with the last used surround mode.  
                      | **OFF** : Do not memorize settings. Surround mode does not change according to input signal.  
                      | The auto surround mode function lets you store in the memory the surround mode last used for playing the four types of input signals listed below.  
                      | 1) Analog and PCM 2-channel signals  
                      | 2) Dolby Digital and DTS 2-channel signals  
                      | 3) Dolby Digital and DTS multi-channel signals  
                      | 4) LPCM Multi-channel signals |
| Display             | **Bright** : Normal display brightness.  
                      | **Dim** : Reduced display brightness.  
                      | **Dark** : Very low display brightness.  
                      | **OFF** : Turns the display off.  
                      | Buttons on the main unit can be used for operations.  
                      | Each time **DIMMER** is pressed, the setting is changed as shown below.  
                      | ![Display settings](image) |

### Setup Lock

**Default settings are underlined.**

<table>
<thead>
<tr>
<th>Setting items</th>
<th>Setting details</th>
</tr>
</thead>
</table>
| **Setup Lock** | Protect settings from inadvertent change.  
                      | **ON** : Turn protection on.  
                      | **OFF** : Turn protection off.  
                      | To turn OFF the “Setup Lock”, follow the procedure below.  
                      | 1) Press and hold **MENU** for at least 3 seconds.  
                      | “Setup Lock : **ON**” appears on the display.  
                      | 2) Press **P** to select “OFF”, and then press **ENTER**.  
                      | **NOTE**  
                      | When “Setup Lock” is set to “ON”, the settings listed below can no longer be changed. Also, “Setup Lock!” is displayed if you attempt to operate related settings.  
                      | • Menu operations  
                      | • **Channel Level**  
                      | • **RESTORER**  
                      | • Audio Adjust |
### Adjusting the sound field effects

The sound being played in the surround mode can be adjusted to your liking. The items (parameters) that can be adjusted depend on the signal being input and the currently set surround mode. For details on the adjustable parameters, see "Surround modes and surround parameters" (page 48).

#### NOTE

Some setting items cannot be set while playback is stopped. Make the settings during playback.

#### Items that can be set with the audio adjust procedure

- **Audio Adjust**
  - **Tone**
  - **NIGHT MODE**
  - **RESTORER**
  - **Audio Delay**

---

#### Audio Adjust

Adjust surround sound parameters. It may not be possible to set this item depending on the input signal.

### Audio Adjust menu operations

1. Press AUDIO ADJUST and then press ENTER.
   - The menu is displayed on the TV screen.
2. Use △ ▽ to select the menu to be set or operated.
3. Press < > to enter the setting.
   - To return to the previous item, press RETURN.
   - Exiting the Menu, press AUDIO ADJUST while the menu is displayed.
   - The menu display disappears.

### Setting items

<table>
<thead>
<tr>
<th>Setting items</th>
<th>Setting details</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Mode</strong></td>
<td>Set the play modes for the different surround modes.</td>
</tr>
<tr>
<td></td>
<td>- In the PLIIx or PLII mode</td>
</tr>
<tr>
<td></td>
<td>Cinema: Surround sound mode optimized for movie sources.</td>
</tr>
<tr>
<td></td>
<td>Music: Surround sound mode optimized for music sources.</td>
</tr>
<tr>
<td></td>
<td>Game: Surround sound mode optimized for games.</td>
</tr>
<tr>
<td></td>
<td>Pro Logic: Dolby Pro Logic playback mode (PLII mode only).</td>
</tr>
<tr>
<td></td>
<td>- In the DTS NEO:6 mode</td>
</tr>
<tr>
<td></td>
<td>Cinema: Surround sound mode optimized for movie sources.</td>
</tr>
<tr>
<td></td>
<td>Music: Surround sound mode optimized for music sources.</td>
</tr>
<tr>
<td></td>
<td>The “Music” mode is also effective for movie sources including a lot of stereo music.</td>
</tr>
<tr>
<td><strong>LFE</strong></td>
<td>Adjust the low-frequency effects level (LFE).</td>
</tr>
<tr>
<td></td>
<td>-10dB – 0dB</td>
</tr>
<tr>
<td></td>
<td>For proper playback of the different sources, we recommend setting to the values below.</td>
</tr>
<tr>
<td></td>
<td>• Dolby Digital sources : &quot;0dB&quot;</td>
</tr>
<tr>
<td></td>
<td>• DTS movie sources : &quot;0dB&quot;</td>
</tr>
<tr>
<td></td>
<td>• DTS music sources : &quot;-10dB&quot;</td>
</tr>
</tbody>
</table>
### Adjusting the sound field effects

<table>
<thead>
<tr>
<th>Setting items</th>
<th>Setting details</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Center Image</strong></td>
<td>Assign center channel signal to front left and right channels for wider sound.</td>
</tr>
<tr>
<td><strong>Panorama</strong></td>
<td>Assign front L/R signal also to surround channels for wider sound.</td>
</tr>
<tr>
<td><strong>Dimension</strong></td>
<td>Shift sound image center to front or rear to adjust playback balance.</td>
</tr>
<tr>
<td><strong>Center Width</strong></td>
<td>Assign center channel signal to front left and right channels for wider sound.</td>
</tr>
<tr>
<td><strong>AFDM (Auto flag detect mode)</strong></td>
<td>Detect the source’s surround back channel signal and set the optimum surround mode automatically.</td>
</tr>
<tr>
<td><strong>D.Comp</strong></td>
<td>Compress dynamic range (difference between loud and soft sounds).</td>
</tr>
</tbody>
</table>

### Setting items Setting details

<table>
<thead>
<tr>
<th>Setting items</th>
<th>Setting details</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>SB CH OUT</strong></td>
<td>Sets the method of generating of the surround back channel.</td>
</tr>
<tr>
<td><strong>Subwoofer</strong></td>
<td>Turn subwoofer output on and off.</td>
</tr>
<tr>
<td><strong>Default</strong></td>
<td>The ”Audio Adjust” settings are returned to the default settings.</td>
</tr>
</tbody>
</table>

#### For 2-channel sources
- **ON**: The surround back channel is used.
- **OFF**: No signal is played from the surround back channels.

#### For multi-channel sources
- Set the decoding method for the surround back channel.
  - **DSCRT ON**: Play the surround back signals included in the 7.1-channel source.
  - **MTRX ON**: Generate and play the surround back signals from the surround channel signals of the DTS source.
  - **ES DSCRT**: Play the surround back signals included in the 6.1-channel DTS source.
  - **PLix C**: Generate and play the surround back signals by decoding the signals in the Dolby Pro Logic IIx Cinema mode.
  - **PLix M**: Generate and play the surround back signals by decoding the signals in the Dolby Pro Logic IIx Music mode.

#### AFDM
- **ON**: Set.
- **OFF**: Do not set.

#### D.Comp
- **Low** / **Mid** / **High**: These set the compression level.
- **OFF**: Turn dynamic range compression off.

#### DRC
- **Auto**: Automatic dynamic range compression on/off control according to source. This can be set in the Dolby TrueHD mode.
- **Low** / **Mid** / **High**: These set the compression level.
- **OFF**: Dynamic range compression always off.

### Notes
- **NOTE**: If the setting in “Speaker Config.” – “Surround Back” is other than “None”, “SB CH OUT” is not displayed.
- **NOTE**: This can be set when playing DTS sources.
- **NOTE**: This can be selected when playing DTS sources including a signal to identify discrete 6.1-channel signals.
- **NOTE**: This can be set when “Speaker Config.” – “Surround Back” is set to other than “None”.
- **NOTE**: If the source being played contains a surround back signal, the decoder type is automatically selected by the AFDM function. Set “AFDM” to “OFF” to switch to your preferred decoder.

#### Default
- **Yes**: Reset to the defaults.
- **No**: Do not reset to the defaults.
Adjusting the sound field effects

**Tone**

Around items indicate the settings made upon purchase.

Adjust the tonal quality of the sound.

1. **Press TONE.**

2. **Use \(<\), \(>\) to select “ON”.**
   - **ON** Allow tone adjustment (bass, treble).
   - **OFF** Playback without tone adjustment.

   **NOTE**
   The tone cannot be adjusted in the direct mode.

3. **Press \(\triangle\), \(\triangledown\) to select an item to be set, and use \(<\), \(>\) to select a setting value.**
   - **Bass** Adjust low frequency range (bass).
     - \(-6\)dB \(-6\)dB \(0\)dB
   - **Treble** Adjust high frequency range (treble).
     - \(-6\)dB \(+6\)dB \(0\)dB

   “Bass” or “Treble” can be set when “Tone Control” is set to “ON”.

**NIGHT MODE**

Around items indicate the settings made upon purchase.

Optimized setting for late-night listening.

Press NIGHT to select your desired mode.

1. **Press NIGHT to select your desired mode.**

   - **OFF** Not set.
   - **Low** Set the adjusted value to “Low”.
   - **Mid** Set the adjusted value to “Middle”.
   - **High** Set the adjusted value to “High”.

   **NOTE**
   When a Dolby TrueHD signal is output, “DRC” is displayed on the TV screen.
   The setting mode is also changed as shown below.
   - **OFF** Not set.
   - **Low** Set the adjusted value to “Low”.
   - **Mid** Set the adjusted value to “Middle”.
   - **High** Set the adjusted value to “High”.
   - **Auto** Automatic dynamic range compression on/off control according to the source.

   If you do not press any button for approximately 5 seconds, the menu screen light turns off.
Adjusting the sound field effects

Compressed audio formats such as MP3, WMA (Windows Media Audio) and MPEG-4 AAC reduce the amount of data by eliminating signal components that are hard for the human ear to hear. The RESTORER function generates the signals eliminated upon compression, restoring the sound to conditions near those of the original sound before compression. It also corrects the sense of volume of the bass to obtain richer sound with compressed audio signals.

Press **RESTORER** to select “ON” or “OFF”.

- **ON**: Use RESTORER.
- **OFF**: Do not use RESTORER.

- This can also be set by pressing **RESTORER** on the main unit.
- This item can be set with analog signals or when a PCM signal (fs = 44.1/48 kHz) is input.
- This cannot be set when the surround mode is set to “DIRECT”.
- This item default setting for “iPod” is “ON”. All others are set to “OFF”.
- When set to “ON”, **RESTORER** is displayed.

Audio Delay

While viewing video, manually adjust the time to delay audio output.

Use **AUDIO DELAY +, –** to select the value to be set.

**Audio Delay**: 0ms

- **0ms** – **200ms**

Store “Audio Delay” for each input source.
**Information**

Information on the main unit’s various settings (Status) and on input signals (Audio Input Signal) is shown on the display. The information displayed changes each time you press STATUS. The information is displayed for several seconds before the display returns to its original condition.

**[Items to be checked]**
- Input source
- Surround mode
- Input digital terminal
- Input mode
- Decode mode
- Video select
- Dialogue normalization etc.

**NOTE**

The information displayed differs according to the input source.

**Dialogue normalization function**

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

The figure is the corrected value. This cannot be changed.
Here, we list various information related to this unit. Please refer to this information as needed.

- Part names and functions  page 42
- Other information  page 47
- Troubleshooting  page 55
- Specifications  page 57
- Index  page 58
Part names and functions

Front panel

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

1. **Power operation button**
   (ON/STANDBY) – (4, 3)
   Turns power to this unit on and off (standby).

2. **Power indicator** – (4, 3)

3. **Headphones jack (PHONES)**
   When the headphones are plugged into this jack, audio will no longer be output from the connected speakers or from the PRE OUT connectors.

   **NOTE**
   To prevent hearing loss, do not raise the volume level excessively when using headphones.

4. **QUICK SELECT buttons** – (27)

5. **iPod play button (iPod ▶)** – (16)

6. **iPod system buttons** – (16, 57)
   - Stop button (1)
   - Skip buttons ( ◀, ▶)

7. **PORTABLE IN jack** – (9)

8. **V.AUX INPUT connectors**
   Remove the cap covering the connectors when you want to use them.

9. **MASTER VOLUME control knob** – (11)

10. **Master volume indicator**

11. **Display** – (43)

12. **Remote control sensor** – (46)

13. **Tuner preset channel buttons**
    (TUNER PRESET CH +, –) – (18)

14. **SHIFT button** – (17, 18)

15. **TUNER button** – (17)

16. **Input source select buttons (SOURCE ▲▼)** – (11)

17. **RESTORER button** – (39)

18. **SLEEP button** – (27)

19. **DIMMER button** – (39)

20. **STATUS button** – (19)
Display

1. Decoder indicators
   These light when the respective decoders are operating.

2. Input signal indicators
   The input source name, surround mode, setting values and other information are displayed here.

3. Information display
   This lights according to the setting of the front speakers.

4. Master volume indicator
   This lights when the sleep mode is selected (page 27).

5. MUTE indicator
   This lights when the mute mode is select (page 11).

6. Surround back indicator
   This lights when audio signals are being output from the surround back speakers (page 6 “Speaker Config. (Cont.)”).

7. Input mode indicators
   Set the audio input modes for the different input sources (page 32).

8. RESTORER indicator
   This lights when the RESTORER mode is selected (page 39).

9. HDMI indicator
   This lights when playing using HDMI connections.

10. Tuner reception mode indicators
    These light according to the reception conditions when the input source is set to “TUNER”.

STEREO : In the FM mode, this light when receiving stereo broadcasts.
TUNED : Lights when the broadcast is properly tuned in.
AUTO : This light when in the auto tuning mode.
Rear panel

See the page indicated in parentheses ( ).

**NOTE**
Do not touch the inner pins of the connectors on the rear panel. Electrostatic discharge may cause permanent damage to the unit.
Remote control unit

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

1. Power buttons
   (ON, STANDBY) .................................................. 9
2. Sleep timer button (SLEEP) ................................... 27
3. DIMMER button .................................................. 35
4. Input source select buttons .................................. 11
5. QUICK SELECT buttons ...................................... 27
6. MENU button ...................................................... 29, 30
7. Cursor buttons ................................................... 29, 30
8. ENTER button ..................................................... 29, 30
9. Channel level button (CH LEVEL) ......................... 26
10. RESTORER button ............................................... 39
11. NIGHT button .................................................... 38
12. SURROUND buttons .......................................... 19, 20, 21
13. iPod system buttons ......... (16)
   • Skip buttons (<<, >>)
   • Stop button (■)
   • Play/Pause button (►/▌)
   • Search buttons (<<, >>)
   • Repeat playback button (REPEAT)
   • Random playback button (RANDOM)
14. Remote control signal transmitter ......................... 46
15. SEARCH button .................................................. 13, 14
16. STATUS button .................................................. 13
17. MEMORY button ................................................ 17
18. BAND button ..................................................... 17
19. MODE button ..................................................... 17
20. CHANNEL buttons ............................................. 17
21. AUDIO DELAY button (+, –) .................................. 39
22. RETURN button (□) ............................................. 29, 30
23. TONE button ..................................................... 38
24. Muting button (N) ................................................. 11
25. TUNING buttons (ADF) ........................................ 17
26. Master volume control buttons (M, D) ................. 11, 29
27. BAND button ..................................................... 17
28. MODE button ..................................................... 17
29. CHANNEL buttons ............................................. 17
30. AUDIO DELAY button (+, –) .................................. 39
31. SEARCH button .................................................. 13, 14
32. STATUS button .................................................. 13
33. MEMORY button ................................................ 17
34. BAND button ..................................................... 17
35. MODE button ..................................................... 17
36. CHANNEL buttons ............................................. 17
37. AUDIO DELAY button (+, –) .................................. 39
38. SURROUND buttons .......................................... 19, 20, 21
39. iPod system buttons ......... (16)
   • Skip buttons (<<, >>)
   • Stop button (■)
   • Play/Pause button (►/▌)
   • Search buttons (<<, >>)
   • Repeat playback button (REPEAT)
   • Random playback button (RANDOM)
Inserting the batteries

1. Remove the rear lid in the direction of the arrow and remove it.
2. Load the two batteries properly as indicated by the marks in the battery compartment.
3. Put the rear cover back on.

NOTE
- Insert the specified batteries in the remote control unit.
- Replace the batteries with new ones if the set does not operate even when the remote control unit is operated close to the unit. (The supplied batteries are only for verifying operation.)
- When inserting the batteries, be sure to do so in the proper direction, following the ♂ and ♀ marks in the battery compartment.
- To prevent damage or leakage of battery fluid:
  - Do not use a new battery together with an old one.
  - Do not use two different types of batteries.
  - Do not attempt to charge dry batteries.
  - Do not short-circuit, disassemble, heat or dispose of batteries in flames.
  - Do not keep the battery in a place exposed to direct sunlight or in places with extremely high temperatures, such as near a heater.
  - If the battery fluid should leak, carefully wipe the fluid off the inside of the battery compartment and insert new batteries.
- Remove the batteries from the remote control unit if it will not be in use for long periods.
- Used batteries should be disposed of in accordance with the local regulations regarding battery disposal.
- The remote control unit may function improperly if rechargeable batteries are used.

Operating range of the remote control unit

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

Approx. 23 ft/7 m

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

This product uses the following technologies:

<table>
<thead>
<tr>
<th>Technology</th>
<th>Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dolby Pro Logic</td>
<td>Manufactured under license from Dolby Laboratories. &quot;Dolby&quot;, &quot;Pro Logic&quot; and the double-D symbol are trademarks of Dolby Laboratories.</td>
</tr>
<tr>
<td>DTS-HD Master Audio</td>
<td>Manufactured under license under U.S. Patent #'s: 5,451,942; 5,956,674; 5,974,380; 5,978,762; 6,226,616; 6,487,535; 7,212,872; 7,333,929; 7,392,195; 7,272,567 &amp; other U.S. and worldwide patents issued &amp; pending. DTS and the Symbol are registered trademarks, &amp; DTS-HD, DTS-HD Master Audio, and the DTS logos are trademarks of DTS, Inc. Product includes software. © DTS, Inc. All Rights Reserved.</td>
</tr>
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<td>HDMI</td>
<td>HDMI, the HDMI Logo and High-Definition Multimedia Interface are trademarks or registered trademarks of HDMI Licensing LLC in the United States and other countries.</td>
</tr>
</tbody>
</table>
**Surround**

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

## Surround modes and surround parameters

This table shows the speakers that can be used in each surround mode and the surround parameters adjustable in each surround mode.

### Symbols in the table

- ○ This indicates the audio output channels or surround parameters that can be set.
- □ This indicates the audio output channels. The output channels depend on the settings of page 5 “Speaker Config.”.

<table>
<thead>
<tr>
<th>Surround mode (page 19)</th>
<th>Channel output</th>
<th>Audio Adjust (page 36)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Front L/R</td>
<td>Center</td>
</tr>
<tr>
<td>DIRECT (2channel)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DIRECT (Multi-channel)</td>
<td></td>
<td>□</td>
</tr>
<tr>
<td>STEREO</td>
<td></td>
<td>□</td>
</tr>
<tr>
<td>MULTI CH IN</td>
<td></td>
<td>□</td>
</tr>
<tr>
<td>DOLBY PRO LOGIC IIx</td>
<td></td>
<td>□</td>
</tr>
<tr>
<td>DOLBY PRO LOGIC II</td>
<td></td>
<td>□</td>
</tr>
<tr>
<td>DTS NEO:6</td>
<td></td>
<td>□</td>
</tr>
<tr>
<td>DOLBY DIGITAL</td>
<td></td>
<td>□</td>
</tr>
<tr>
<td>DOLBY DIGITAL Plus</td>
<td></td>
<td>□</td>
</tr>
<tr>
<td>DOLBY TrueHD</td>
<td></td>
<td>□</td>
</tr>
<tr>
<td>DTS SURROUND</td>
<td></td>
<td>□</td>
</tr>
<tr>
<td>DTS 96/24</td>
<td></td>
<td>□</td>
</tr>
<tr>
<td>DTS-HD</td>
<td></td>
<td>□</td>
</tr>
<tr>
<td>DTS Express</td>
<td></td>
<td>□</td>
</tr>
<tr>
<td>MULTI CH STEREO</td>
<td></td>
<td>□</td>
</tr>
</tbody>
</table>

### Notes

1. A signal for each channel contained in an input signal is output as audio.
2. Only when “SV Mode” is set to “LFE+Main” (page 6 “Bass Setting”), sound is output from the subwoofer.
3. This item can be selected when a Dolby Digital or DTS signal is played.
4. This item can be selected when a Dolby TrueHD signal is played.
5. This item can be selected when a Dolby Digital or DTS signal or DVD-Audio is played.
<table>
<thead>
<tr>
<th>Surround mode [page 19]</th>
<th>Audio Adjust [page 36]</th>
<th>PRO LOGIC II/IIx Music mode only</th>
<th>NEO:6 Music mode only</th>
<th>Tone [page 38]</th>
<th>RESTORER 7 [page 39]</th>
</tr>
</thead>
<tbody>
<tr>
<td>DIRECT (2 channel)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DIRECT (Multi-channel)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>STEREO</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MULTI CH IN</td>
<td>○</td>
<td>○</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DOLBY PRO LOGIC IIx</td>
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<tr>
<td>DTS NEO:6</td>
<td>○</td>
<td>○</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DOLBY DIGITAL</td>
<td>○</td>
<td>○</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>DOLBY DIGITAL Plus</td>
<td>○</td>
<td>○</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DOLBY TrueHD</td>
<td>○</td>
<td>○</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DTS SURROUND</td>
<td>○</td>
<td>○</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DTS 96/24</td>
<td>○</td>
<td>○</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DTS-HD</td>
<td>○</td>
<td>○</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DTS Express</td>
<td>○</td>
<td>○</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MULTI CH STEREO</td>
<td>○</td>
<td>○</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>VIRTUAL</td>
<td>○</td>
<td>○</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*2 Only when "SW Mode" is set to “LFE+Main” [page 6 "Bass Setting"], sound is output from the subwoofer.
*6 This item can be selected when a Dolby Digital or DTS or DVD-Audio signal is played.
*7 This item can be set when the input signal is analog, PCM 48 kHz or 44.1 kHz.
### Types of input signals, and corresponding surround modes

This table shows the input signal that can be played in each surround mode. Check the audio signal of the input source then select the surround mode.

#### Symbols in the table
- ● This indicates the default surround mode.
- ○ This indicates the surround mode that is fixed when “AFDM” (page 37) is set to “ON”.
- S This indicates the selectable surround mode.

#### Input signal types and formats

<table>
<thead>
<tr>
<th>Surround mode (page 19)</th>
<th>NOTE</th>
<th>ANALOG</th>
<th>PCM</th>
<th>DTS-HD</th>
<th>DTS</th>
<th>DOLBY</th>
<th>DOLBY DIGITAL</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>LINEAR PCM</td>
<td>LINEAR PCM</td>
<td>DTS-HD Master Audio</td>
<td>DTS-HD High Resolution Audio</td>
<td>DTS EXPRESS</td>
<td>DTS ES DS CRT (With flag)</td>
</tr>
<tr>
<td>DTS SURROUND</td>
<td></td>
<td>LINEAR PCM (multi ch)</td>
<td>LINEAR PCM (2ch)</td>
<td>DTS-HD Master Audio</td>
<td>DTS-HD High Resolution Audio</td>
<td>DTS EXPRESS</td>
<td>DTS ES DS CRT (With flag)</td>
</tr>
<tr>
<td>DTS-HD MSTR</td>
<td>●</td>
<td></td>
<td></td>
<td></td>
<td>●</td>
<td></td>
<td>○</td>
</tr>
<tr>
<td>DTS-HD HI RES</td>
<td>○</td>
<td></td>
<td></td>
<td></td>
<td>○</td>
<td></td>
<td>○</td>
</tr>
<tr>
<td>DTS ES DSCRT6.1</td>
<td>●</td>
<td></td>
<td></td>
<td></td>
<td>●</td>
<td>○</td>
<td>● ○</td>
</tr>
<tr>
<td>DTS ES MTRX6.1</td>
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<td></td>
<td></td>
<td></td>
<td>○</td>
<td></td>
<td>○</td>
</tr>
<tr>
<td>DTS SURROUND</td>
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<td></td>
<td></td>
<td></td>
<td>●</td>
<td></td>
<td>● ○</td>
</tr>
<tr>
<td>DTS 96/24</td>
<td>○</td>
<td></td>
<td></td>
<td></td>
<td>○</td>
<td></td>
<td>○</td>
</tr>
<tr>
<td>DTS + PLix CINEMA</td>
<td>●</td>
<td></td>
<td></td>
<td></td>
<td>●</td>
<td>○</td>
<td>● ○</td>
</tr>
<tr>
<td>DTS + PLix MUSIC</td>
<td>○</td>
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<td></td>
<td></td>
<td>○</td>
<td></td>
<td>○</td>
</tr>
<tr>
<td>DTS EXPRESS</td>
<td>●</td>
<td></td>
<td></td>
<td></td>
<td>●</td>
<td>○</td>
<td>● ○</td>
</tr>
<tr>
<td>DTS + NEO:6</td>
<td>●</td>
<td></td>
<td></td>
<td></td>
<td>●</td>
<td>○</td>
<td>● ○</td>
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<td>DTS NEO:6 MUSIC</td>
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<td></td>
<td></td>
<td>○</td>
<td></td>
<td>○</td>
</tr>
</tbody>
</table>

#### Surround mode (page 19)

- If “Speaker Config.” – “Surround Back” (page 6, “Speaker Config.”) is set to “None”, this surround mode cannot be selected.
<table>
<thead>
<tr>
<th>Surround mode (page 19)</th>
<th>NOTE</th>
<th>ANALOG</th>
<th>PCM</th>
<th>DTS-HD</th>
<th>DTS-HD</th>
<th>DTS</th>
<th>DOLBY</th>
<th>DOLBY DIGITAL</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>ANALOG</td>
<td>LINEAR PCM (multi ch)</td>
<td>LINEAR PCM (2ch)</td>
<td>DTS-HD Master Audio</td>
<td>DTS-HD High Resolution Audio</td>
<td>DTS EXPRESS</td>
<td>DTS ES DSORT (With Flag)</td>
</tr>
<tr>
<td>MULTICH IN</td>
<td></td>
<td></td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
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<tr>
<td>MULTI CH IN</td>
<td></td>
<td></td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
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<tr>
<td>MULTI CH IN + PLIIx CINEMA</td>
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<td>●</td>
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</tr>
</tbody>
</table>

* If “Speaker Config.” – “Surround Back” (page 5 “Speaker Config.”) is set to “None”, this surround mode cannot be selected.
## Relationship between video signals and monitor output

<table>
<thead>
<tr>
<th>Input connector</th>
<th>Output connector</th>
<th>Menu displayed</th>
</tr>
</thead>
<tbody>
<tr>
<td>HDMI</td>
<td>S-VIDEO</td>
<td>VIDEO</td>
</tr>
<tr>
<td>×</td>
<td>×</td>
<td>×</td>
</tr>
<tr>
<td>×</td>
<td>×</td>
<td>○</td>
</tr>
<tr>
<td>○</td>
<td>×</td>
<td>×</td>
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<tr>
<td>○</td>
<td>×</td>
<td>○</td>
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<tr>
<td>○</td>
<td>×</td>
<td>×</td>
</tr>
<tr>
<td>○</td>
<td>×</td>
<td>×</td>
</tr>
</tbody>
</table>

○ Video signal input present  
× No video signal input  
○ < > The input signal between the < > marks is output.  
× No video signal output  
○ () Superimposed on the picture indicated in ( ).  
× () Only the picture in () is output.

### NOTE
- If you operate the menu while playing back 3D video content or computer’s resolution (e.g. VGA), the playback video is replaced by the menu screen. The playback video is not displayed behind the menu screen.
- This unit does not show the status display while playing back 3D video content or computer’s resolution (e.g. VGA).
Digital, so it offers greater flexibility in response to
high-quality thanks to extra data bit rate performance.

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

Dolby Pro Logic II
Dolby Pro Logic II is a matrix decoding technology
developed by Dolby Laboratories.

Deep Color
This technology allows expression of more number of
colors than the conventional 8 bits and can
reproduce colors close to natural ones without color
streak.

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

Dolby TrueHD
Dolby TrueHD is a high-definition audio technology
developed by Dolby Laboratories, using lossless
coding technology to faithfully reproduce the sound
of the studio master.

Dolby Digital
Dolby Digital is a multi-channel digital signal format
developed by Dolby Laboratories.

Dolby Digital EX
Dolby Digital EX is a 6.1-channel surround format
proposed by Dolby Laboratories that allows users
to enjoy in their homes the “DOLBY DIGITAL
SURROUND EX” audio format jointly developed by
Dolby Laboratories and Lucas Films.
The 6.1 channels of sound, including surround back
channels, provide improved sound positioning and
expression of space.

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

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

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

DTS-ES™ Discrete 6.1
DTS-ES™ Discrete 6.1 is a 6.1-channel discrete
digital audio format adding a surround back (SB) channel to the DTS digital surround sound.

Dolby TrueHD
Dolby TrueHD is a high-definition audio technology
developed by Dolby Laboratories, using lossless
coding technology to faithfully reproduce the sound
of the studio master.

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

DTS Express
DTS Express is an audio format supporting low bit
rates (max. 5.1 channels, 24 to 256 kbps).

DTS-HD
This audio technology provides higher sound quality
and enhanced functionality than the conventional
DTS and is adopted as an optional audio for Blu-ray
Disc. This technology supports multi-channel, high
data transfer speed, high sampling frequency, and
lossless audio playback. Maximum 7.1-channels are supported in Blu-ray Disc.

DTS-HD Master Audio
DTS-HD Master Audio is a lossless audio format
created by Digital Theater System (DTS). This format
provides the facility to support up to 8 audio
channels with a sampling frequency of 96kHz/24bit
resolution and up to 6 audio channels with a
sampling frequency of 192kHz/24bit resolution.
It is fully compatible with conventional products,
including conventional DTS digital surround
5.1-channel data.

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

Dynamic range
The difference between the maximum undistorted
sound level and the minimum discernible level above the noise emitted by the device.

HDCP
HDCP is an abbreviation of High-Definition Multimedia Interface, which is an AV digital interface that can be connected to a TV or amplifier. Video signal and audio signal can be connected using 1 cable.

LFE
LFE is an abbreviation of Low Frequency Effect, which is an output channel that emphasizes low frequency effect sound. Surround audio is intensified by outputting 20 Hz to 120 Hz deep bass.
MP3 (MPEG Audio Layer-3)
This is an internationally standardized audio data compression scheme, using the “MPEG-1” video compression standard. It compresses the data volume to about one eleventh its original size while maintaining sound quality equivalent to a music CD.

MPEG (Moving Picture Experts Group), MPEG-2, MPEG-4
These are the names for digital compression format standards used for the encoding of video and audio. Video standards include “MPEG-1 Video”, “MPEG-2 Video”, “MPEG-4 Visual”, “MPEG-4 AVC”. Audio standards include “MPEG-1 Audio”, “MPEG-2 Audio”, “MPEG-4 AAC”.

Protection Circuit
This is a function to prevent damage to components within the power supply when an abnormality such as an overload, excess voltage occurs or temperature for any reason. In this unit, the power indicator blinks and the unit enters standby mode when an abnormality occurs.

Sampling frequency
Sampling involves taking a reading of a sound wave (analog signal) at regular intervals and expressing the height of the wave at each reading in digitized format (producing a digital signal). The number of readings taken in one second is called the “sampling frequency”. The larger the value, the closer the reproduced sound is to the original.

Speaker impedance
This is an AC resistance value, indicated in Ω (ohms). Greater power can be obtained with this value smaller.

sYCC601 color
Like x.v.Color, each of these color spaces defines a palette of available colors that is larger than the traditional RGB color model.

WMA (Windows Media Audio)
This is audio compression technology developed by Microsoft Corporation. WMA data can be encoded using Windows Media® Player Ver.7, 7.1, Windows Media® Player for Windows® XP and Windows Media® Player 9 Series. To encode WMA files, only use applications authorized by Microsoft Corporation. If you use an unauthorized application, the file may not work properly.

x.v.Color
This function lets HDTVs display colors more accurately. It enables display with natural, vivid colors. “x.v.Color” is a Sony registered trademark.
**Troubleshooting**

If a problem should arise, first check the following:
1. Are the connections correct?
2. Is the set being operated as described in the owner’s manual?
3. Are the other components operating properly?

If this unit does not operate properly, check the items listed in the table below. Should the problem persist, there may be a malfunction.

In this case, disconnect the power immediately and contact your store of purchase.

### [General]

<table>
<thead>
<tr>
<th>Symptom</th>
<th>Cause/Solution</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Power does not turn on.</td>
<td>• Check whether the power plug is correctly inserted into the power outlet.</td>
<td>444</td>
</tr>
<tr>
<td></td>
<td>• The protection circuit is active. Disconnect the power plug from the electric outlet, wait 5 to 10 seconds and then insert it back into the outlet.</td>
<td></td>
</tr>
<tr>
<td>Display is off.</td>
<td>• Set “Display” on the menu to something other than “OFF”.</td>
<td>555</td>
</tr>
<tr>
<td>The power indicator is blinking red.</td>
<td>• The temperature inside the unit has risen. Please turn off power once, and re-apply the power after the temperature has fallen sufficiently.</td>
<td>444</td>
</tr>
<tr>
<td></td>
<td>• Please re-install this unit in a place having good ventilation.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Please use speakers which have the specified impedance.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• The speaker cable has shorted (is touching). Firmly twist the core wire in the speaker cable, and then re-connect it to the speaker terminal.</td>
<td></td>
</tr>
<tr>
<td>After turning on the power, the power indicator is blinking red.</td>
<td>• This unit amplifier circuit has failed. Turn off the power and please contact the DENON service adviser.</td>
<td>555</td>
</tr>
<tr>
<td>Set does not operate properly.</td>
<td>• Reset the microprocessor.</td>
<td>555</td>
</tr>
</tbody>
</table>

### [HDMI]

<table>
<thead>
<tr>
<th>Symptom</th>
<th>Cause/Solution</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>No audio is output with HDMI connection.</td>
<td>• Check the connection of the HDMI connectors.</td>
<td>555</td>
</tr>
<tr>
<td></td>
<td>• When outputting HDMI audio from the speakers, set “HDMI Audio Out” on the menu to “Amp”.</td>
<td>555</td>
</tr>
<tr>
<td></td>
<td>• When outputting HDMI audio from a TV, set “HDMI Audio Out” on the menu to “TV”.</td>
<td>555</td>
</tr>
<tr>
<td>No video is output with HDMI connection.</td>
<td>• Check the connection of the HDMI connectors.</td>
<td>555</td>
</tr>
<tr>
<td></td>
<td>• Set the input source to match the connected HDMI connector.</td>
<td>555</td>
</tr>
<tr>
<td></td>
<td>• Check whether the TV is compatible with copyright protection (HDCP). If connected to a device not compatible with HDCP, video will not be output correctly.</td>
<td>555</td>
</tr>
</tbody>
</table>

### [Video]

<table>
<thead>
<tr>
<th>Symptom</th>
<th>Cause/Solution</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>No picture appears.</td>
<td>• Check the TV connection.</td>
<td>555</td>
</tr>
<tr>
<td></td>
<td>• Set the TV input correctly.</td>
<td>555</td>
</tr>
</tbody>
</table>
### Audio

<table>
<thead>
<tr>
<th>Symptom</th>
<th>Cause/Solution</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Audio is not output.</td>
<td>• Check the connections for all devices.</td>
<td>3, 10, 12, 13, 14</td>
</tr>
<tr>
<td></td>
<td>• Check the speaker connections and configurations.</td>
<td>19</td>
</tr>
<tr>
<td></td>
<td>• Check whether the audio device power is turned on.</td>
<td>19</td>
</tr>
<tr>
<td></td>
<td>• Adjust the master volume.</td>
<td>19</td>
</tr>
<tr>
<td></td>
<td>• Cancel the mute mode.</td>
<td>19</td>
</tr>
<tr>
<td></td>
<td>• Select a suitable input source.</td>
<td>19</td>
</tr>
<tr>
<td></td>
<td>• Select a suitable input mode.</td>
<td>19</td>
</tr>
<tr>
<td></td>
<td>• Disconnect the headphones. No sound is output from the speakers or the PRE OUT connectors when headphones are connected.</td>
<td>19</td>
</tr>
</tbody>
</table>

### No sound is produced from surround back speaker.

<table>
<thead>
<tr>
<th>Cause/Solution</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Set “Speaker Config.” – “Surround Back” on the menu to something other than “None”.</td>
<td>9</td>
</tr>
<tr>
<td>• Set the surround mode to something other than “STEREO”.</td>
<td>9</td>
</tr>
</tbody>
</table>

### No sound is produced from subwoofer.

<table>
<thead>
<tr>
<th>Cause/Solution</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Check the subwoofer connections.</td>
<td>32</td>
</tr>
<tr>
<td>• Turn on the subwoofer’s power.</td>
<td>32</td>
</tr>
<tr>
<td>• Set “Speaker Config.” – “Subwoofer” on the menu to “Yes”.</td>
<td>32</td>
</tr>
<tr>
<td>• If “Front” and “Center” for “Speaker Config.” are set to “Large”, and “SW Mode” is set to “LFE”, no sound may be output from the subwoofers, depending on the input signal or selected surround mode.</td>
<td>32</td>
</tr>
</tbody>
</table>

### DTS sound is not output.

<table>
<thead>
<tr>
<th>Cause/Solution</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Set “Decode Mode” on the menu to “Auto” or “DTS”.</td>
<td>32</td>
</tr>
</tbody>
</table>

### Dolby TrueHD, DTS-HD, Dolby Digital Plus audio is not output.

<table>
<thead>
<tr>
<th>Cause/Solution</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Make HDMI connections.</td>
<td>5</td>
</tr>
</tbody>
</table>

### Dolby PLII mode or DTS NEO:6 mode cannot be selected.

<table>
<thead>
<tr>
<th>Cause/Solution</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Check that “Speaker Config.” – “Center” or “Surround” is set to other than “None”. If the speaker system is 2.0/2.1ch, this surround mode cannot be selected.</td>
<td>9</td>
</tr>
<tr>
<td>• When headphones are used, Dolby PLII or DTS NEO:6 cannot be selected.</td>
<td>9</td>
</tr>
</tbody>
</table>

### RESTORER cannot be selected.

<table>
<thead>
<tr>
<th>Cause/Solution</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Check that an analog signal or PCM signal (fs=44.1/48 kHz) is input. For playback of multichannel signals such as Dolby Digital or DTS surround, RESTORER cannot be used.</td>
<td>39</td>
</tr>
</tbody>
</table>

### Radio

<table>
<thead>
<tr>
<th>Symptom</th>
<th>Cause/Solution</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reception fails, or there is a lot of noise or distortion.</td>
<td>• Change the antenna orientation or position.</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>• Separate the AM loop antenna from the unit.</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>• Use an FM outdoor antenna.</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>• Separate the antenna from other connection cables.</td>
<td>10</td>
</tr>
</tbody>
</table>

### iPod cannot be played.

<table>
<thead>
<tr>
<th>Cause/Solution</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Check the iPod connections.</td>
<td>9</td>
</tr>
<tr>
<td>• Insert the AC adaptor of the iPod control dock into the power outlet.</td>
<td>9</td>
</tr>
<tr>
<td>• Switch the input source to “DOCK”.</td>
<td>9</td>
</tr>
</tbody>
</table>

### “Connection Error” is displayed.

<table>
<thead>
<tr>
<th>Cause/Solution</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Unable to communicate properly. Turn off the power to this unit, disconnect the iPod and then reconnect it.</td>
<td>11</td>
</tr>
<tr>
<td>• The iPod is not responding. Turn off the power to this unit, disconnect the iPod and then reconnect it.</td>
<td>11</td>
</tr>
</tbody>
</table>

### “Not Support” is displayed.

<table>
<thead>
<tr>
<th>Cause/Solution</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>• The iPod connected to the unit is not compatible. Please make sure the iPod you are connecting is compatible.</td>
<td>–</td>
</tr>
<tr>
<td>• The software version of the connected iPod is an old one. Please update to the latest version.</td>
<td>–</td>
</tr>
</tbody>
</table>

### Remote Control Unit

<table>
<thead>
<tr>
<th>Symptom</th>
<th>Cause/Solution</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>The set cannot be operated with the remote control unit.</td>
<td>• Batteries are worn out. Replace with new batteries.</td>
<td>46</td>
</tr>
<tr>
<td></td>
<td>• Operate the remote control unit within a distance of about 23 ft/7 m from this unit and at an angle of within 30°.</td>
<td>46</td>
</tr>
<tr>
<td></td>
<td>• Remove any obstacle between this unit and the remote control unit.</td>
<td>46</td>
</tr>
<tr>
<td></td>
<td>• Insert the batteries in the proper direction, checking the φ and Θ marks.</td>
<td>46</td>
</tr>
<tr>
<td></td>
<td>• The set’s remote control sensor is exposed to strong light (direct sunlight, inverter type fluorescent bulb light, etc.). Move the set to a place in which the remote control sensor will not be exposed to strong light.</td>
<td>46</td>
</tr>
</tbody>
</table>
Resetting the microprocessor

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

1. Turn off the power using ON/STANDBY.
2. Press ON/STANDBY while simultaneously pressing 8 and 9.
3. Once the display starts flashing at intervals of about 1 second, release the two buttons.

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

Specifications

Audio section
- Power amplifier
  Rated output:
  - Front: 75 W + 75 W (8 Ω, 20 Hz – 20 kHz with 0.08 % T.H.D.)
  - 110 W + 110 W (6 Ω, 1 kHz with 0.7 % T.H.D.)
  - Center: 75 W (8 Ω, 20 Hz – 20 kHz with 0.08 % T.H.D.)
  - 110 W (6 Ω, 1 kHz with 0.7 % T.H.D.)
  - Surround: 75 W + 75 W (8 Ω, 20 Hz – 20 kHz with 0.08 % T.H.D.)
  - 110 W + 110 W (6 Ω, 1 kHz with 0.7 % T.H.D.)

Output connectors:
- Analog
  Input sensitivity/Input impedance: 200 mV/47 kΩ
  Frequency response: 10 Hz – 100 kHz — 0, –3 dB (DIRECT mode)
  S/N: 98 dB (IHF–A weighted, DIRECT mode)

Video section
- Standard video connectors
  Input/output level and impedance: 1 Vp-p, 75 Ω
  Frequency response: 5 Hz – 10 MHz — 0, –3 dB

Tuner section
- [FM]
  Receiving Range: 87.5 MHz – 107.9 MHz
  Usable Sensitivity: 1.2 μV (12.8 dBf)
  50 dB Quieting Sensitivity: MONO 2.8 μV (20.2 dBf)
  S/N (IHF–A): MONO 70 dB
  STEREO 67 dB
  Total harmonic Distortion (at 1 kHz): MONO 0.7 %
  STEREO 1.0 %

- [AM]
  Received Range: 520 kHz – 1710 kHz
  Usable Sensitivity: 18 μV
  Total harmonic Distortion (at 1 kHz): MONO 0.7 %
  STEREO 1.0 %

General
- Power supply: AC 120 V, 60 Hz
- Power consumption: 330 W
  0.5 W (Standby)

Remote control unit (RC-1158)
- Batteries: R03/AAA Type (two batteries)
- Maximum external dimensions: 1-3/16” (W) x 8-5/16” (H) x 55/64” (D) (50 x 211 x 22 mm)
- Weight: 3.9 oz (110 g, including batteries)

For purposes of improvement, specifications and design are subject to change without notice.
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**X**
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**Y**
- YouTube .......................................................... 5

**Z**
- Zoom ............................................................. 5
Dimensions

Unit: in. (mm)

Weight: 19 lbs 13.5 oz (9.0 kg)