

DENON

DSD-500
SPEAKER DOCK

Owner's Manual

SAFETY PRECAUTIONS



CAUTION

RISK OF ELECTRIC SHOCK

DO NOT OPEN



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

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

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

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

IMPORTANT SAFETY INSTRUCTIONS

1. Read these instructions.
2. Keep these instructions.
3. Heed all warnings.
4. Follow all instructions.
5. Do not use this apparatus near water.
6. Clean only with dry cloth.
7. Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
8. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
9. Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
10. Only use attachments/accessories specified by the manufacturer.
11. 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.
12. Unplug this apparatus during lightning storms or when unused for long periods of time.
13. 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.
14. 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.



R&TTE Directive 1999/5/EC

This product may be operated in the following countries;

AT	BE	CZ	DK	FI
FR	DE	GR	HU	IE
IT	NL	PL	PT	SK
ES	SE	GB	NO	CH

Indoor use only.

DECLARATION OF CONFORMITY

We declare under our sole responsibility that this product, to which this declaration relates, is in conformity with the following standards: EN60065, EN55013, EN55020, EN61000-3-2, EN61000-3-3, EN300328, EN301489-01, EN301489-17 and EN50371.
 Following the provisions of Low Voltage Directive 2006/95/EC and EMC Directive 2004/108/EC, the EC regulation 1275/2008 and its frame work Directive 2009/125/EC for Energy-related Products (ErP).

DENON EUROPE
 Division of D&M Germany GmbH
 An der Kleinbahn 18, Nettetal,
 D-41334 Germany

A NOTE ABOUT RECYCLING:

This product's packaging materials are recyclable and can be reused. Please dispose of any materials in accordance with the local recycling regulations.
 When discarding the unit, comply with local rules or regulations.
 Batteries should never be thrown away or incinerated but disposed of in accordance with the local regulations concerning battery disposal.
 This product and the supplied accessories, excluding the batteries, constitute the applicable product according to the WEEE directive.



Pb

☐ 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.
- Do not let insecticides, benzene, and thinner come in contact with 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.
- Do not keep the battery in a place exposed to direct sunlight or in places with extremely high temperatures, such as near a heater.

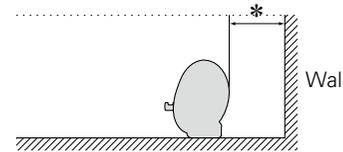
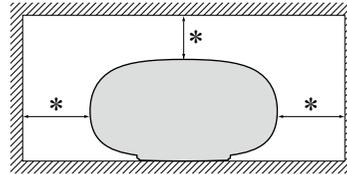
1. IMPORTANT NOTICE: DO NOT MODIFY THIS PRODUCT

This product, when installed as indicated in the instructions contained in this manual, meets R&TTE directive requirements. Modification of the product could result in hazardous Radio and EMC radiation.

2. CAUTION

- Separation distance of at least 20 cm must be maintained between this product and all persons.
- This product and its antenna must not be co-located or operating in conjunction with any other antenna or transmitter.

☐ 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 0.3 m is recommended.
- Do not place any other equipment on this unit.

Getting started

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

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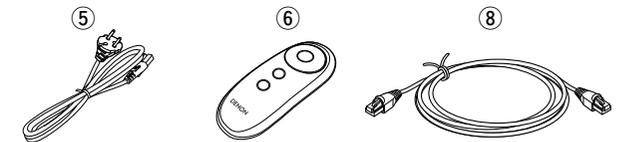
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Accessories

Check that the following parts are supplied with the product.

① Quick Setup Guide	1
② CD-ROM (Owner's manual)	1
③ Safety Instructions	1
④ Service network list	1
⑤ Power cord	1
⑥ Remote control unit	1
⑦ R03/AAA batteries	2
⑧ Ethernet cable (CAT-5)	1



Features

Equipped with a Dock that supports iPhone®, iPod touch® and iPad® (👉 [page 6](#))

This unit employs a slide type Dock that comes out when you push its front. By storing the Dock within this unit when you do not use it, this unit becomes compact.

You can charge iPhone, iPod touch, or iPad at the same time while playing back music.

Compatible with the AirPlay® function (👉 [page 15](#))

You can enjoy comfortable streaming playback of music from iPhone, iPod touch and iPad.

Received song and artist names appear on the display.

Compatible with “Cocoon App” for performing basic operations of the unit with an iPhone, iPod touch and iPad (👉 [page 3](#))

Equipped with Wi-Fi capabilities including Wi-Fi Protected Setup (WPS) (👉 [page 9](#))

Compatible with the Internet radio (👉 [page 17](#)) Also equipped with the Music Server function that plays back audio content on the network (👉 [page 20](#))

In addition to music files stored on PC and music servers on the network, you can enjoy various audio sources on the Internet such as the Internet radio.

Equipped with an organic EL display with great visibility

High contrast with low power can be achieved. Song and artist names are clearly displayed.

Cautions on handling

• Before turning the power on

Check once again that all connections are correct and that there are no problems with the connection cables.

- Power is supplied to some of the circuitry even when the unit is set to the standby mode. When 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

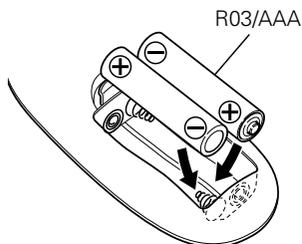
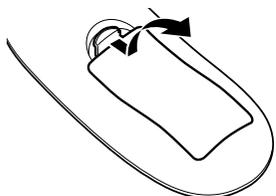
- Wipe the cabinet and control panel clean with a soft cloth.
- Follow the instructions when using a chemical cleaner.
- Benzene, paint thinner or other organic solvents as well as insecticide may cause material changes and discoloration if brought into contact with the unit, and should therefore not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

Remote operation

About the remote control unit

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.



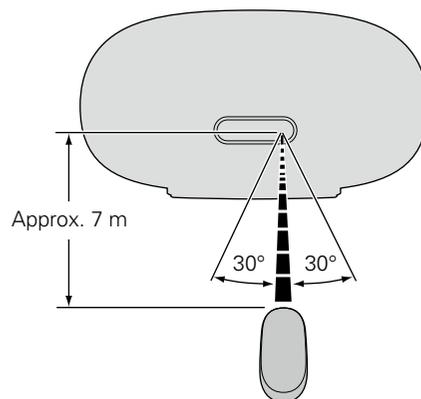
- 3 Put the rear cover back on.

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. Replace them with new batteries at an early date.)
- 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.



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.
- When using 3D video devices that transmit radio communication signals (such as infrared signals etc) between the various units (such as the monitor, 3D glasses, 3D transmitter unit etc), the remote control unit may not operate due to interference from those radio communication signals. If this occurs, adjust the direction and distance of the 3D communication for each unit, and check that the remote control unit operation is not affected by these signals.

Cocoon App



Cocoon App is DENON's proprietary application developed for iPhone, iPod touch and iPad.

With Cocoon App, you can use iPhone, iPod touch and iPad to:

- Operate this unit
- Manually make the wireless LAN settings on this unit ([page 9](#))
- Change preset Internet radio stations ([page 17](#))



- Bidirectional communication is performed.
- The Cocoon App can be downloaded for free from the App Store.

Preparations

Here, we explain the connections methods for this unit.

● Connections [page 5](#)



● Connecting to a home network (LAN) [page 7](#)



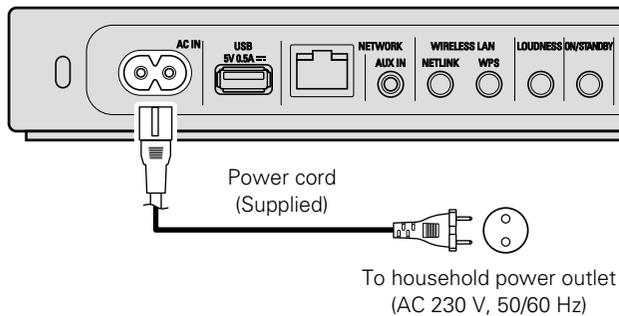
Connections

NOTE

- Do not plug in the power cord until all connections have been completed.
- When making connections, also refer to the owner's manual of the other components.
- Do not bundle power supply cords together with connection cables. Doing so can result in humming or noise.

Connecting the power cord

When all of the connections are completed, insert the power plug into the power outlet.

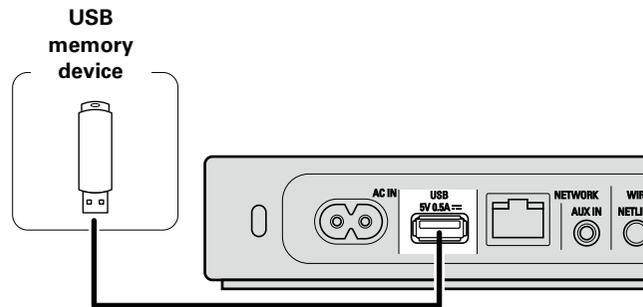


NOTE

- Only use the supplied power cord.
- Be sure the power cord is unplugged from the power outlet before connecting or disconnecting it to the AC inlet.

Connecting a USB memory device

- You can enjoy music stored on a USB memory device.
- For operating instructions see "Playing a USB memory device" (page 18).



- If the USB memory device is divided into multiple partitions, only the top partition can be selected.
- This unit is compatible with MP3 files conforming to "MPEG-1 Audio Layer-3" standards.
- DENON does not guarantee that all USB memory devices will operate or receive power. When using a portable USB connection type HDD of the kind to which an AC adapter can be connected to supply power, use the AC adapter.

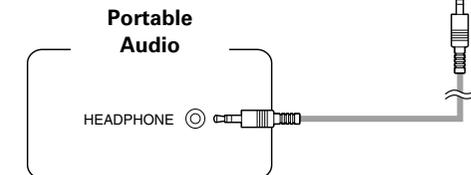
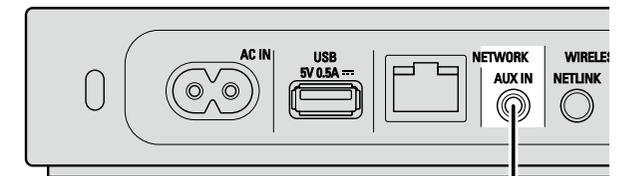
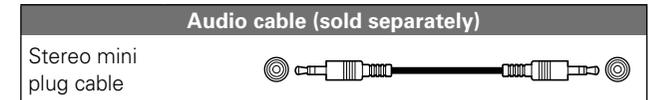
NOTE

- Note that DENON will accept no responsibility whatsoever for any problems arising with the data on a USB memory device when using this unit in conjunction with the USB memory device.
- USB memory devices will not work via a USB hub.
- It is not possible to use this unit by connecting the unit's USB port to a PC via a USB cable.
- Do not use an extension cable when connecting a USB memory device. This may cause radio interference with other devices.

Connecting a portable player

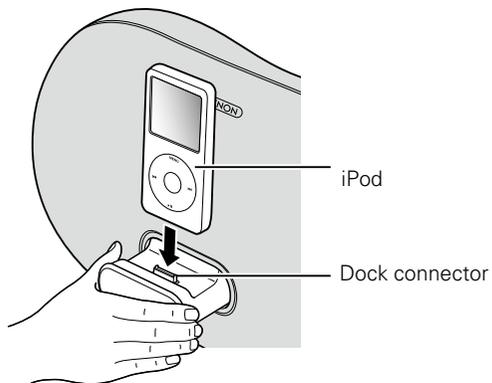
- If a portable player is connected via the AUX IN jack of the unit, music from the portable player can be played.
- For operating instructions see "Playing a portable player" (page 19).

Cables used for connections

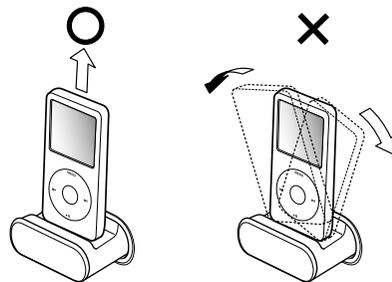


Connecting an iOS device

- You can enjoy music stored on an iOS device.
- For operating instructions see "Playing an iOS device" (page 14)



Dismantling

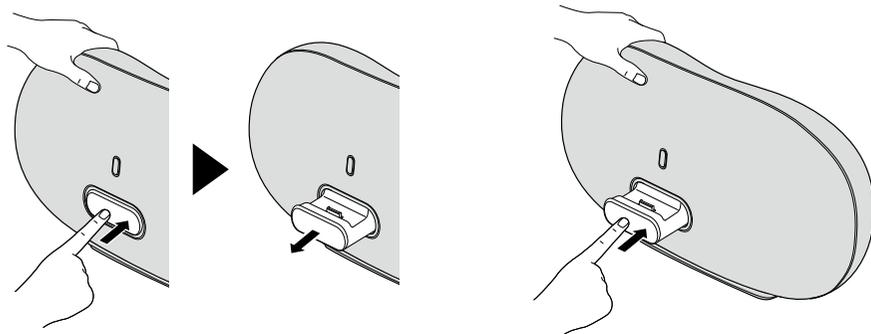


NOTE

- Depending on the type of iOS device 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 iOS device when using this unit in conjunction with the iOS device.

How to eject/store the Dock

- ① Push the front of the Dock, and it comes out.
- ② Push it again to store within this unit.



NOTE

- When ejecting/storing the Dock, hold the upper part of this unit with your hand to prevent this unit from moving or tipping over.
- When iPhone or iPod touch is not connected to this unit, store the Dock within this unit.

Supported iPod models

• iPod / iPod classic



iPod classic
80GB



iPod classic
160GB (2007)



iPod classic
160GB (2009)

• iPod nano



iPod nano
2nd generation
(aluminum)
2GB 4GB 8GB



iPod nano
3rd generation
(video)
4GB 8GB



iPod nano
4th generation (video)
8GB 16GB



iPod nano
5th generation (video camera)
8GB 16GB



iPod nano
6th generation
8GB 16GB

• iPod touch



iPod touch
1st generation
8GB 16GB 32GB



iPod touch
2nd generation
8GB 16GB 32GB



iPod touch
3rd generation
32GB 64GB



iPod touch
4th generation
8GB 32GB 64GB

• iPhone



iPhone
4GB 8GB 16GB



iPhone 3G
8GB 16GB



iPhone 3GS
8GB 16GB 32GB

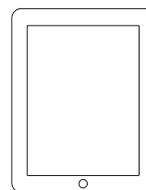


iPhone 4
16GB 32GB

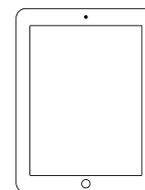


iPhone 4S
16GB 32GB 64GB

• iPad



iPad
16GB 32GB 64GB



iPad 2
16GB 32GB 64GB

(as of July 2012)

Connecting to a home network (LAN)

When this unit is connected to your home network (LAN), you can enjoy various audio sources via the network.

- Streaming playback from iPhone, iPod touch or iPad with AirPlay
- Internet radio
- Music files on music servers

Furthermore, you can operate this unit by using Cocoon App on iPhone, iPod touch or iPad.



To check for any firmware update available for improving this unit, etc., see "Firmware Update" ([page 26](#)) in the menu.

Required system

Broadband internet connection

Modem

Device that connects to the broadband circuit and conducts communications on the Internet.

A type that is integrated with a router is also available.

Router

When using this unit, we recommend you use a router equipped with the following functions:

- Built-in DHCP server
This function automatically assigns IP addresses on the LAN.
- Built-in 100BASE-TX switch
When connecting multiple devices, we recommend a switching hub with a speed of 100 Mbps or greater.
- When using with a wireless LAN, prepare a broadband router with built-in access point.

Ethernet cable (supplied) (CAT-5 or greater recommended)

- Use only a shielded STP or ScTP LAN cable which is available at retailer.
- The normal shielded-type Ethernet cable is recommended. If a flat-type cable or unshielded-type cable is used, other devices could be affected by noise.



- If you have an Internet provider contract for a line on which network settings are made manually, make the settings at "When "DHCP" is set to "Off" on your router" ([page 10](#)).
- With this unit, it is possible to use the DHCP and Auto IP functions to make the network settings automatically.
- When using this unit with the broadband router's DHCP function enabled, this unit automatically performs the IP address setting and other settings.
When using this unit connected to a network with no DHCP function, make the settings for the IP address, etc., at "When "DHCP" is set to "Off" on your router" ([page 10](#)).
- When setting manually, check the setting contents with the network administrator.

NOTE

- A contract with an ISP is required to connect to the Internet. No additional contract is needed if you already have a broadband connection to the Internet.
- The types of routers that can be used depend on the ISP. Contact an ISP or a computer shop for details.
- DENON assumes no responsibility whatsoever for any communication errors or troubles resulting from customer's network environment or connected devices.
- This unit is not compatible with PPPoE. A PPPoE-compatible router is required if you have a contract for a type of line set by PPPoE.
- Do not connect an NETWORK connector directly to the LAN port/Ethernet connector on your computer.
- To listen to audio streaming, use a router that supports audio streaming.

Network connections and settings

There are two types of network connections available – wired and wireless. Select either of them according to your router functions and operating environment.

Using a router equipped with the wireless LAN function

Connect this unit to your router wirelessly. Connection procedures differ according to the type of your router.

When your router is equipped with a WPS button

( [page 9](#))

When your router is not equipped with a WPS button and you are using iPhone, iPod touch or iPad

( [page 9](#))

Using a router that is not equipped with the wireless LAN function

Connect this unit to your router with an Ethernet cable. Connection procedures differ according to your router settings.

When “DHCP” is set to “On” on your router

( [page 10](#))

When “DHCP” is set to “Off” on your router

( [page 10](#))

Using PC to make network settings of this unit

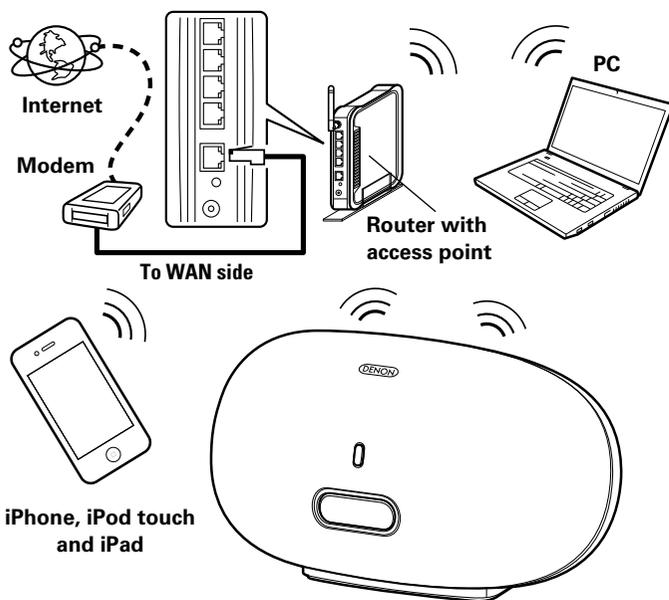
You can also use your PC to make network settings of this unit without iPhone, iPod touch or iPad.

When this unit is connected to your PC through wireless LAN ( [page 11](#))



“WPS” stands for Wi-Fi Protected Setup, a standard for making it easy to make security settings required when connecting wireless LAN devices.

Wireless LAN



When your router is equipped with a WPS button

By just pressing the WPS button on your router and this unit, the wireless LAN connection settings are made.

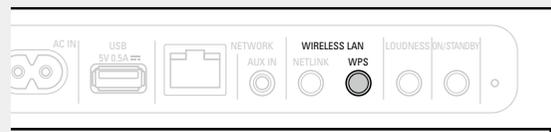


- Before turning this unit on, make sure that an Ethernet cable is not connected to this unit. If a cable is connected, have this unit enter the power standby mode and disconnect the cable.
- After the unit is turned on, it takes approximately 30 seconds for the WPS button on this unit to be available.

1 Press the WPS button of the router.

2 Press WPS on the rear panel.

"Connecting" is displayed, and the unit starts connecting to the LAN.



- When the connection is made successfully, "Succeeded" appears.
- If the connection cannot be established, "Connection Failed" is displayed. Perform steps 1 – 2 again.



- If this unit is still not connected to the network after this procedure, manually enter the PIN code of WPS ([page 25](#)).

When your router is not equipped with a WPS button and you are using iPhone, iPod touch or iPad



Use the DENON application "Cocoon App" to make the wireless LAN connection settings.



- "Cocoon App" is free.
- Before turning this unit on, make sure that an Ethernet cable is not connected to this unit. If a cable is connected, have this unit enter the power standby mode and disconnect the cable.
- To make the connection settings by using PC without iPhone, iPod touch or iPad, see "Using PC to make network settings of this unit" ([page 11](#)).

1 Download "Cocoon App" to your iPhone, iPod touch or iPad from App Store.

2 Start the application.

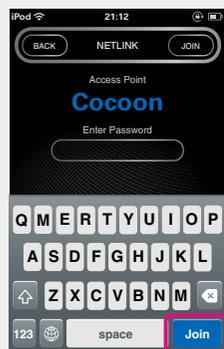
3 When the "SETUP" screen is displayed, tap "NetLink".

- "Scanning network for devices" is displayed.

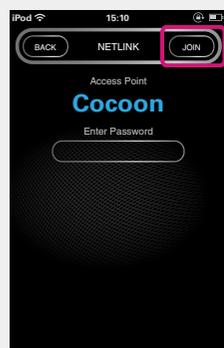


4 Enter the encryption key.

- Enter the encryption key of your router that is connected to your iPod, iPhone or iPad.
- Tap "Join".

**5 Place your iPod, iPhone or iPad in the dock of this unit (page 6).****6 Tap "JOIN".**

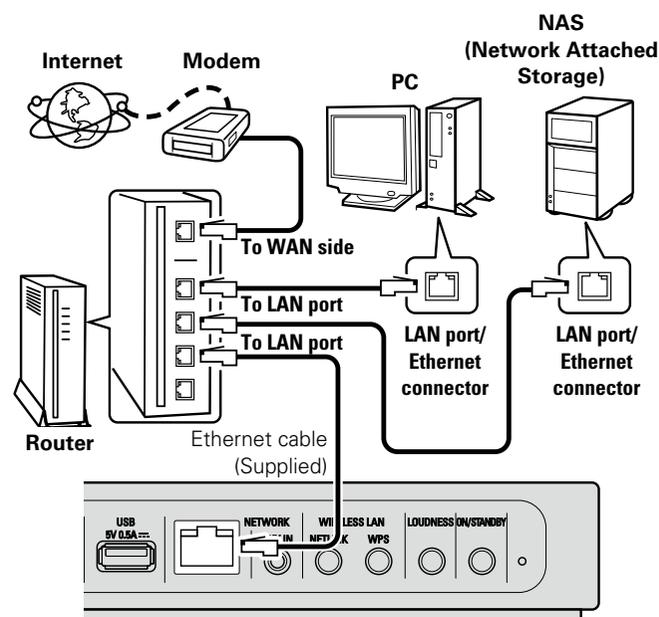
The network settings are copied to this unit from your iPod, iPhone or iPad and this unit is connected to the network.



- When this unit could not connect to the network, the application displays an error message. Perform steps 1 – 6 again.



The wireless network name (SSID) and encryption method used for this unit are the same as those set for the connected iPod, iPhone or iPad.

Wired LAN

For connections to the Internet, contact an ISP (Internet Service Provider) or a computer shop.

When "DHCP" is set to "On" on your router

When using this unit with the broadband router's DHCP function enabled, this unit automatically performs the IP address setting and other settings.

1 Connect the supplied Ethernet cable by referring to the above figure.**2 Press  to turn on power to the main unit.**

- When this unit could not connect to the network, perform steps 1 and 2 again.



You may need to set the network connection manually, depending on the provider you use. To set the connection manually, use the setting procedure of "When "DHCP" is set to "Off" on your router".

When "DHCP" is set to "Off" on your router

This section explains the settings when connecting this unit to a network that does not have a DHCP function.



To configure the settings manually, check the setting details with your network administrator.

1 Complete steps 1 – 4 in "When this unit is connected to your PC through wireless LAN" (page 11).**2 On the page that appears, set the information necessary for the network connection.**

- Click "Profile Configuration" on the upper left part of the page.
- Click "ADVANCE SETTING".
- Enter required items.
- When settings are completed, click "Apply".
- Connect the Ethernet cable.

- "Connecting" is displayed, and the unit starts connecting to the LAN.
- When the connection is made successfully, "Succeeded" appears.
- If the connection cannot be established, "Connection Failed" is displayed. Turn this unit off and on. If this unit is still not connected to the network after this procedure, complete steps 1 – 2 again.

Using PC to make network settings of this unit

□ When this unit is connected to your PC through wireless LAN



Before turning this unit on, make sure that an Ethernet cable is not connected to this unit. If a cable is connected, have this unit enter the power standby mode and disconnect the cable.

1 Press  to turn on power to the main unit.
It takes approximately 30 seconds for this unit to start.

2 Press NETLINK on the rear panel.
This unit restarts and "NetLink" appears on the display.

3 Connect to "Cocoon_Setup" in the wireless network settings on your PC.

- If "Cocoon_Setup" is not displayed, refresh the network.
- It may take up to two minutes to establish the connection.

4 Launch the browser on the PC connected to this unit, and enter the address "<http://169.254.1.1>".

5 On the page that appears, set the information necessary for the network connection.

- ① Click "Profile Configuration" on the upper left part of the page.
 - ② From the "Digital Media Player Wireless LAN Settings" dropdown list, select the SSID (Service Set ID) of your router.
 - ③ Enter the password.
 - ④ When settings are completed, click "Apply".
- "Connecting" is displayed, and the unit starts connecting to the LAN.
 - When the connection is made successfully, "Succeeded" appears.
 - If the connection cannot be established, "Connection Failed" is displayed. Perform steps 1 – 5 again.
 - It may take 120 seconds to establish the network connection.



- Enter the name in the "Friendly Name" box and click "Set" to change the friendly name. A friendly name is the name of this unit that is presented to the network.
- In "ADVANCE SETTING", you can manually make settings such as the IP address.

NOTE

NETLINK does not support proxy servers.

Operations

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

● Playback [page 13](#)

 iPod  page 14	 AirPlay  page 15	 Internet Radio  page 17
 USB  page 18	 PORTABLE PLAYER  page 19	 PC/NAS/DMS  page 20

● How to make detailed settings [page 22](#)

Playback

This section provides how to play back music with this unit.
This unit can play back music from the following devices (media).

- iPhone, iPod and iPad
 - When connected to this unit ([page 14](#))
 - When using AirPlay ([page 15](#))
- Internet radio ([page 17](#))
- Music files on USB flash memories ([page 18](#))
- Portable player ([page 19](#))
- Music server (PC on the network) ([page 20](#))

Preparations

Turning the power on

Press to turn on power to the unit.

This unit is turned on and the operation button on top lights.



You can also switch the power to standby by pressing **ON/STANDBY** on the main unit.

When power is switched to standby

Press .

- The operation button on top lights off and this unit enters the standby mode.

Completely turning off the power

Power continues to be supplied to some of the circuitry even when the power is in the standby mode. When leaving home for long periods of time, unplug the power cord from the power outlet.

NOTE

The settings made for the various functions may be cleared if the power cord is left unplugged from a power outlet for an extended period of time.

Preparations

Setting the current time (Auto Adjust) (24-Hour Display)

When this unit is connected to the network, the current time is automatically set.



- The default time zone of this unit is set to Western European Standard Time.
To change the Time Zone and Summer Time, see "Adjusting the clock automatically (Auto Adjust)" ([page 23](#)).
- When this unit is not connected to the network, set the time manually. See "Setting the current time (Manual Adjust) (24-Hour Display)" ([page 24](#)).

Operations possible during playback

Selecting the input source

You can select the device for which this unit outputs the audio that is connected to this unit.

Press .



- The input source is switched each time the button is pressed.



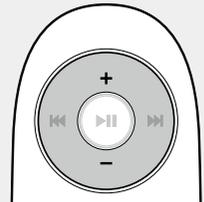
* These items are displayed if a relevant device is connected to this unit.

Adjusting the master volume

Press **+** or **-**.

The volume level is displayed.

[Adjustable range] 0 – 50



Adjusting the tone (LOUDNESS)

When you press LOUDNESS to the "On" (🔊) state, bass and treble sounds, which are hard to hear at a low volume level, are enhanced for a more natural audio quality.

Press **LOUDNESS** on the main unit.



- Press the button again to the "Off" (🔇) state to return to the original audio quality.

Various memory functions

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.

Playing an iOS device

With this unit, you can listen to music on an iOS device. It is also possible to operate the iOS device from the main unit or remote control.

For information on the iOS device models that can be played back with this unit, see "Connecting an iOS device" (👉 page 6).

Load the iOS device onto the Dock of this unit (👉 page 6 "Connecting an iOS device").

When the iOS device is loaded to the dock tray on this unit, the input source automatically switches to "iDevice".

- During AirPlay, the input source does not switch automatically. Press 🎵 to switch the input source to "iDevice".

NOTE

This function is activated around 30 seconds after the power is turned on.

❑ **Streaming music stored in iPhone, iPod touch or iPad directly to the unit** (👉 page 15)

❑ **Playing iTunes music with this unit** (👉 page 15)

❑ Disconnecting the iOS device

1 Press 🎵 to set the standby mode.

2 Remove the iOS device from the Dock of this unit.



NOTE

- Depending on the type of iOS device 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 iOS device when using this unit in conjunction with the iOS device.

❑ Remote control and iOS device button relations

Remote control buttons	iOS device buttons	Operation on this unit
▶▶	▶▶	Play the track / Pause the track.
⏮, ⏭ (Press and release)	⏮, ⏭ (Press and release)	Play the track from the beginning/ Play the next track.
⏮, ⏭ (Press and hold)	⏮, ⏭ (Press and hold)	Fast-reverse the track/ Fast-forward the track.

AirPlay function

Enjoy music from your iTunes library with high quality sound anywhere in your home.

Use the Apple Remote app* for iPhone, iPod touch and iPad to control iTunes from any room in your home.

* Available as a free download from the App Store.

NOTE

- Before using the AirPlay function, this unit must be connected to the network. For how to connect this unit to the network, see "Network connections and settings" (page 8).
- To use the AirPlay function, you must update iPhone, iPod touch or iPad to iOS 4.2.1 or higher.

Streaming music stored in iPhone, iPod touch or iPad directly to the unit

1 Make the Wi-Fi settings for iPhone, iPod touch or iPad.

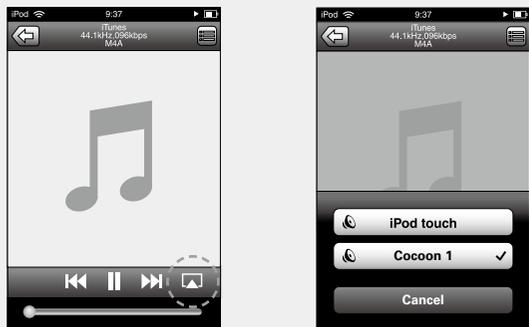
- For details, see your device's manual.

2 Startup iPhone, iPod touch, or iPad music or iPod app.

 is displayed on the iPhone, iPod touch or iPad screen.

3 Tap the AirPlay icon .

4 Select the speaker you want to use.



NOTE

When the AirPlay function is used, this unit plays back at the volume level set on iPhone, iPod touch, iPad, or iTunes.

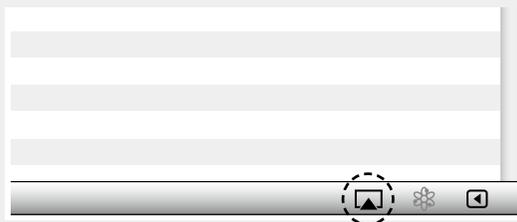
First minimize the volume level on iPhone, iPod touch, iPad, or iTunes before playback. Then, start playback and adjust the volume to the desired level.

Playing iTunes music with this unit

1 Install iTunes 10, or later, on a Mac or Windows PC that is connected to the same network as this unit.

2 Turn this unit ON.

3 Launch iTunes and click the AirPlay icon displayed in the lower right of the window and select this unit from the list.



4 Choose a song and click play in iTunes.

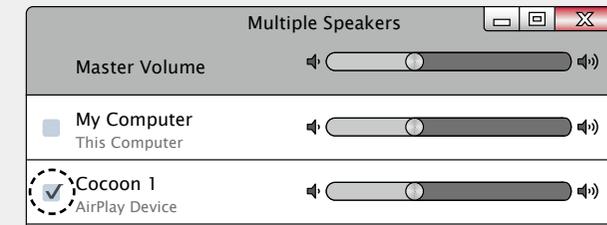
The music will stream to this unit.

Selecting multiple speakers (devices)

It is possible to play iTunes songs on your home's AirPlay compatible speakers (devices) other than those of this unit.

1 Click the AirPlay icon and select "Multiple Speakers" from the list.

2 Check the speakers you want to use.



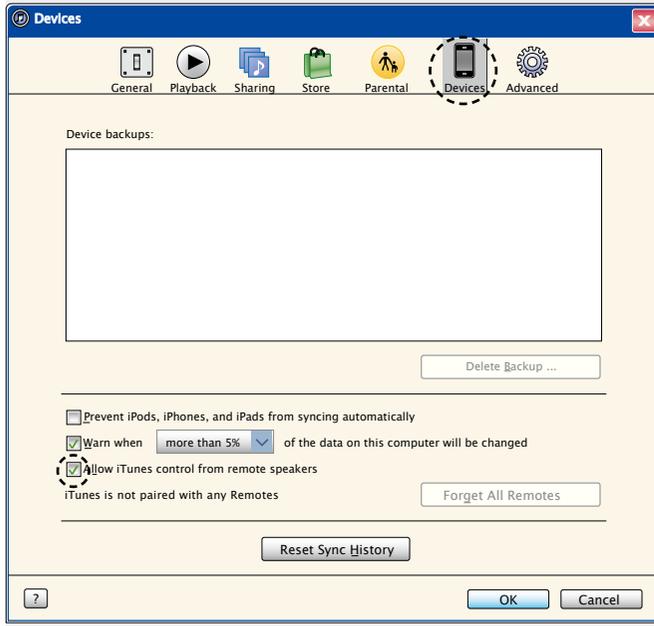
□ Perform iTunes playback operations with the remote control unit of this unit

With this unit's remote control unit, you can perform iTunes song play, pause, and auto search (cue) operations.

1 Select “Edit” – “Preferences...” on the menu.

2 Select “Devices” in the iTunes setting window.

3 Check “Allow iTunes control from remote speakers”, and then click “OK”.



- Source input will be switched to “AirPlay” when AirPlay playback is started.
- You can stop AirPlay playback by choosing other input source.
- For information about how to use iTunes, also see the Help for iTunes.
- The screen may differ depending on the OS and software versions.

Listening to internet radio

Internet radio refers to radio broadcasts distributed over the Internet. Internet radio stations from around the world can be received.

NOTE

Before playing back the Internet radio, this unit must be connected to the network. For how to connect this unit to the network, see "Network connections and settings" (page 8).

Important information

The broadcast station types and specifications supported by this unit for playback are as follows.

[Playable broadcast station types]

Supported file types	Internet radio
WMA (Windows Media Audio)	✓
MP3 (MPEG-1 Audio Layer-3)	✓

[Playable broadcast station specifications]

	Sampling frequency	Bit rate	Extension
WMA (Windows Media Audio)	32/44.1/48 kHz	48 – 192 kbps	.wma
MP3 (MPEG-1 Audio Layer-3)	32/44.1/48 kHz	32 – 320 kbps	.mp3

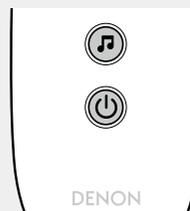
Listening to preset Internet radio stations

1 Prepare for playback.

- ① Check the network environment, then turn on this unit's power (page 8 "Network connections and settings").
- ② If settings are required, make the "Network connections and settings" (page 8).
- ③ If settings are required, make the "Setting the current time (Auto Adjust) (24-Hour Display)" (page 13).

2 Press to switch the input source to "Preset 1", "Preset 2" or "Preset 3".

Playback starts.



- Use Cocoon App to change preset details.



- There are many Internet radio stations on the Internet, and the quality of the programs they broadcast as well as the bit rate of the tracks varies widely.

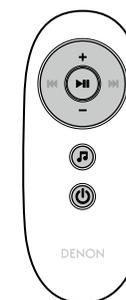
Generally, the higher the bit rate, the higher the sound quality, but depending on the communication lines and server traffic, the music or audio signals being streamed may be interrupted. Inversely, lower bit rates mean a lower sound quality but less tendency for the sound to be interrupted.

- "Server Full" or "Connection Down" is displayed if the station is busy or not broadcasting.
- The Internet radio station name appears on the display of this unit.

NOTE

The radio station database service may be suspended without notice.

Internet radio operation buttons



Operation buttons	Function
+ , -	Volume up / down
	Mute On/Off
	Switching the input source
	Power on/standby

Playing a USB memory device

A USB memory device can be connected to the USB port of this unit to play music files stored on the USB memory device.

Important information

- Only USB memory devices conforming to mass storage class and MTP (Media Transfer Protocol) standards can be played on this unit.
- This unit is compatible with USB memory devices in "FAT16" or "FAT32" format.
- This unit is compatible with MP3 files conforming to "MPEG-1 Audio Layer-3" standards.
- File types that this unit can play back and specifications are shown below.

[Supported file types]

Supported file types	USB memory devices *1
WMA (Windows Media Audio)	✓*2
MP3 (MPEG-1 Audio Layer-3)	✓
WAV	✓
MPEG-4 AAC	✓*3
FLAC (Free Lossless Audio Codec)	✓

*1 USB memory device

- This unit is compatible with MP3 ID3-Tag (Ver. 2) standard.
- This unit is compatible with WMA META tags.
- If the image size (pixels) of an album artwork exceeds 500 × 500 (WMA/MP3/WAV/FLAC) or 349 × 349 (MPEG-4 AAC), then music may not be played back properly.

*2 Copyright-protected files can be played on certain portable players compatible with MTP.

*3 Only files that are not protected by copyright can be played on this unit.

Content downloaded from pay sites on the Internet are copyright protected. Also, files encoded in WMA format when ripped from a CD, etc. on a computer may be copyright protected, depending on the computer's settings.



If the number of files stored in a USB memory device exceeds 1,000, the access speed may become slower.

NOTE

File types that this unit does not support are not displayed.

[Compatible formats]

	Sampling frequency	Bit rate	Extension
WMA (Windows Media Audio)	32/44.1/48 kHz	48 – 192 kbps	.wma
MP3 (MPEG-1 Audio Layer-3)	32/44.1/48 kHz	32 – 320 kbps	.mp3
WAV	32/44.1/48 kHz	–	.wav
MPEG-4 AAC	32/44.1/48 kHz	16 – 320 kbps	.aac/ .m4a/ .mp4
FLAC (Free Lossless Audio Codec)	32/44.1/48 kHz	–	.flac

Maximum Number of Playable Files and Folder

The limits on the number of folders and files that can be displayed by this unit are as follows.

Item	Media	USB memory devices
Memory capacity		FAT16 : 2 GB, FAT32 : 2 TB
Number of folders		FAT16 or FAT32 format 500
Number of files *		5000

* The allowable number of files may differ according to the USB memory device capacity and the file size.

Folder playback sequence

You can only play back files stored in the top level folder (root).

Playing files stored on USB memory devices

1 Connect the USB memory device to the USB port (☞ [page 5](#) “Connecting a USB memory device”).

2 Press  to switch the input source to “USB”.
Playback starts.



- If the USB memory device is divided into multiple partitions, only the top partition can be selected.
- This unit is compatible with MP3 files conforming to “MPEG-1 Audio Layer-3” standards.
- DENON does not guarantee that all USB memory devices will operate or receive power. When using a portable USB connection type HDD of the kind to which an AC adapter can be connected to supply power, use the AC adapter.

NOTE

- Note that DENON will accept no responsibility whatsoever for any problems arising with the data on a USB memory device when using this unit in conjunction with the USB memory device.
- USB memory devices will not work via a USB hub.
- It is not possible to connect and use a computer via the USB port of this unit using a USB cable.
- Do not use an extension cable when connecting a USB memory device. This may cause radio interference with other devices.

Removing the USB memory device

1 Press  to set the standby mode.

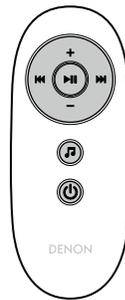
2 Check that the communication indicator on the USB memory device is not flashing, then pull out the USB memory device.



NOTE

Do not remove the USB memory device from the unit when the USB memory communication indicator is flashing. Doing so may damage the USB memory device, or may corrupt the files recorded on the USB memory device.

☐ USB memory device operation buttons



Operation buttons	Function
+ , -	Volume up / down
⏮ ⏭	Auto search (cue)
⏸	Playback / Pause
	Switching the input source
	Power on/standby

Playing a portable player

The following describes the procedure for playing portable player.

1 Connect the portable player to this unit (☞ [page 5](#) “Connecting a portable player”).

2 Press  to turn on power to the main unit.

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

4 Play the component connected to this unit.



Playing back files stored on PC or NAS with Cocoon App (Music Server)

This unit can play back music files and playlists (m3u, wpl) stored on a PC, Digital Media Server (DMS) and on Network Attached Storage (NAS) that supports DLNA.

NOTE

- Before playing back music files on music servers, this unit must be connected to the network. For how to connect this unit to the network, see “Connecting to a home network (LAN)” ([page 7](#)).



For playable file formats and restrictions, see “Important information” ([page 21](#)).

Applying media sharing settings

Here, we apply the settings to share music files stored on a PC and NAS on the network.

Sharing media stored in PC

If you are using a media server, be sure to apply this setting first.



- While this unit is operated by a media control device, “Music Server” appears on the display of this unit.
- When selecting this unit from the media control device, the name of this unit is displayed as its friendly name.
- To check the friendly name, see “Checking the network information” ([page 25](#)).

Settings for playing back with Windows Media Player 12 (Windows 7)

NOTE

Perform this procedure after changing the control panel display to “Category”.

- 1** In the PC’s “Control Panel”, select “Network and Internet” - “Choose homegroup and sharing options”.
- 2** Select the “Stream my pictures, music, and videos to all devices on my home network” check box and select “Choose media streaming options”.
- 3** Select “Allowed” in the drop-down list for “Cocoon 1”.
- 4** Select “Allowed” in the drop-down list for “Media programs on this PC and remote connections...”.
- 5** Click “OK” to finish.

Settings for playing back with Windows Media Player 11

- 1** Start up Windows Media Player 11 on the PC.
- 2** Select “Media Sharing” in the “Library”.
- 3** Click the “Share my media” check box, select “Cocoon 1”, and then click “Allow”.
- 4** As you did in step 3, select the icon of the device (other PCs and mobile devices) you want to use as a media controller, and then click “Allow”.
- 5** Click “OK” to finish.

Sharing media stored in NAS

Change settings on the NAS to allow this unit and other devices (PCs and mobile devices) used as media controllers to access the NAS. For details, see the owner’s manual that came with the NAS.

About playback



When you start playback on PC, NAS, or DMS, the input source for this unit automatically switches to "Music Server", and audio is output from this unit.

The name of the currently played back track and its artist name appear on the display of this unit.

When this unit is operating, you can perform operations such as playing back and stopping files through DMC operations. You can also adjust or mute the volume.

Pressing while this unit is playing back stops the playback on this unit and switches to "Preset 1".

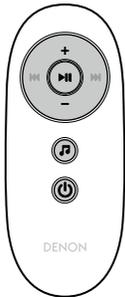


- When using a server that supports transcoding such as Windows Media Player (version 11 or higher), you can play back WMA Lossless files.
- Depending on the played back file, the track name or artist name may not be displayed.

NOTE

The music display order depends on the specifications of your PC, NAS, or DMS.

Music Server operation buttons



Operation buttons	Function
+ , -	Volume up / down
	Mute On/Off
	Switching the input source
	Power on/standby

Important information

- The network audio playback function of this unit connects to the server using technologies shown below.
 - Windows Media Player Network Sharing Service
- File types that this unit can play back and specifications are shown below.

[Supported file types]

Supported file types	Music Server *1
WMA (Windows Media Audio)	✓
MP3 (MPEG-1 Audio Layer-3)	✓
WAV	✓
MPEG-4 AAC	✓*2
FLAC (Free Lossless Audio Codec)	✓

A server or server software compatible with distribution in the corresponding formats is required to play music files via a network.

*1 Music Server

- This unit is compatible with MP3 ID3-Tag (Ver. 2) standard.
- This unit is compatible with WMA META tags.

*2 Only files that are not protected by copyright can be played on this unit.

Content downloaded from pay sites on the Internet are copyright protected. Also, files encoded in WMA format when ripped from a CD, etc. on a computer may be copyright protected, depending on the computer's settings.

NOTE

File types that this unit does not support are not displayed.

[Specifications of supported files]

	Sampling frequency	Bit rate	Extension
WMA (Windows Media Audio)	32/44.1/48 kHz	48 – 192 kbps	.wma
MP3 (MPEG-1 Audio Layer-3)	32/44.1/48 kHz	32 – 320 kbps	.mp3
WAV	32/44.1/48 kHz	–	.wav
MPEG-4 AAC	32/44.1/48 kHz	16 – 320 kbps	.aac/ .m4a/ .mp4
FLAC (Free Lossless Audio Codec)	32/44.1/48 kHz	–	.flac

How to make detailed settings

Menu map

Setting items	Detailed items	Description	Page
Language			23
Language		Sets the language for display the menu.	
Clock	Auto Adjust(On)	Automatically performs the clock setting from the time information on the Internet.	23
Clock	Time Zone(+12H)	Sets your local time zone (for Auto Adjust).	23
	Summer Time(Off)	Sets the Summer Time information (for Auto Adjust).	24
	Auto Adjust Now	Obtains the current time.	24
	Manual Adjust	Adjusts the clock manually.	24
Max Vol Level			25
Max Vol Level		Make a setting for maximum volume.	
Network Info.		Display network information.	25
Network Info.		Friendly Name / DHCP=On or Off / IP Address / Primary DNS / Secondary DNS / MAC Address	
WPS			25
WPS(PIN)		Sets the wireless connection using WPS (PIN code method).	
Firmware Update			26
Firmware Update		Starts the firmware update.	
Factory Reset			-
Factory Reset		Reset to the defaults.	
Exit			-
Exit		To exit the menu, select "Exit".	

Menu operation

NOTE

Use buttons on this unit for menu operations. Buttons on the remote control do not work.

1 Press + and - at the same time.



- The selected item appears on the display.

2 Press + or - to select the menu to be set.

3 Press ►|| to enter the setting.

- To return to the previous item, use + or - to select "Exit", and press ►||.
- To exit the menu, select "Exit" in the top menu, and press ►||. The menu disappears.

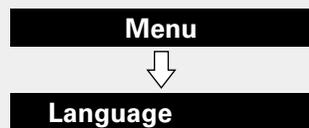
Setting the language (Language)

Sets the language for display the menu.

- The factory default setting is "English".

1 Press + and – at the same time.

Turns on the menu settings mode and the menu appears on the display (☞ page 22 "Menu map").



2 Press ►||, then press + or – to select the language you want to set.

English / Deutsch / Français / Español / Italiano /
Svenska / Nederlands / РУССКИЙ / (EXIT)

3 Press ►|| to enter the setting

The top menu is displayed again.

Setting the clock (Clock)

You can automatically adjust the clock of this unit using the Internet.



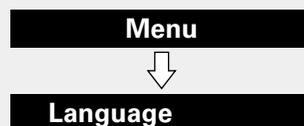
To use this function, the unit must be connected to the Internet.

Adjusting the clock automatically (Auto Adjust)

Use the following procedure to automatically adjust the clock.

1 Press + and – at the same time.

Turns on the menu settings mode and the menu appears on the display (☞ page 22 "Menu map").



2 Press + or – to select "Clock", then press ►||.

3 Press + or – to select "Auto Adjust(On)", then press ►||.

4 Press + or – to select "On" or "Off".

The operation to receive the current time starts.

On Automatically adjust the clock.

Off Does not automatically adjust the clock.

5 Press ►|| to enter the setting

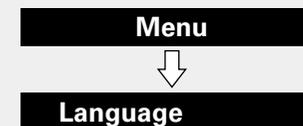
The "Clock" menu is displayed again.

Setting the Time Zone (Time Zone)

Use the following procedure to select your local standard time (time zone).

1 Press + and – at the same time.

Turns on the menu settings mode and the menu appears on the display (☞ page 22 "Menu map").



2 Press + or – to select "Clock", then press ►||.

"Auto Adjust(On)" is displayed.

3 Press + or – to select "Time Zone(+1H)", then press ►||.

" +1H(Central European Time)" is displayed.

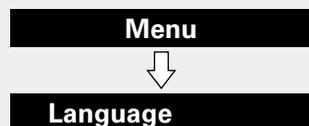
4 Press + or – to select your local standard time (time zone) in your lives, then press ►||.

The "Clock" menu is displayed again.

Setting the Summer Time (Summer Time)

Use the following procedure to set Summer time if the Summer time system is used in your country.

- 1 Press + and – at the same time.**
Turns on the menu settings mode and the menu appears on the display (☞ [page 22](#) "Menu map").



- 2 Press + or – to select "Clock", then press ►II.**
"Auto Adjust(On)" is displayed.
- 3 Press + or – to select "Summer Time(Off)", then press ►II.**
- 4 Press + or – to select "Off(0H)" or "On(+1H)", then press ►II.**
The "Clock" menu is displayed again.

Setting the current time (Auto Adjust Now)

When the unit is connected to the Internet, the current time is set automatically.

- 1 Press + and – at the same time.**
Turns on the menu settings mode and the menu appears on the display (☞ [page 22](#) "Menu map").



- 2 Press + or – to select "Clock", then press ►II.**
"Auto Adjust(On)" is displayed.
- 3 Press + or – to select "Auto Adjust Now", then press ►II.**
The operation to receive the current time starts.
 - The current time is displayed for several seconds when it is received successfully.
 - If the current time is not received successfully, "Connection Failed" appears.

Setting the current time (Manual Adjust) (24-Hour Display)

When the unit is not connected to the Internet, set the current time manually.

- 1 Press + and – at the same time.**
Turns on the menu settings mode and the menu appears on the display (☞ [page 22](#) "Menu map").



- 2 Press + or – to select "Clock", then press ►II.**
"Auto Adjust(On)" is displayed.
- 3 Press + or – to select "Manual Adjust", then press ►II.**
- 4 Press + or – to set the "hours", then press ►II.**
- 5 Press + or – to set the "minutes", then press ►II.**
The current time is set.



If you use "Manual Adjust" to set the time, "Auto Adjust" is set to "Off".

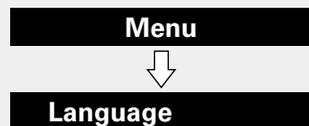
Setting the volume limit (Max Vol Level)

Make a setting for maximum volume.

- The factory default setting is "50".

1 Press + and – at the same time.

Turns on the menu settings mode and the menu appears on the display (☞ [page 22](#) "Menu map").



2 Press + or – to select "Max Vol Level", then press ►||.

"Max Volume" menu appears.

3 Press + or – to select the volume "0 – 50", then press ►||.

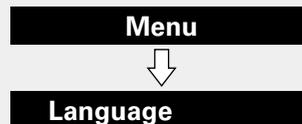
The top menu is displayed again.

Setting the network (Network Info.)

Checking the network information

1 Press + and – at the same time.

Turns on the menu settings mode and the menu appears on the display (☞ [page 22](#) "Menu map").



2 Press + or – to select "Network Info.", then press ►||.

3 Press + or – to select the item you want to check.

- Select "Exit" and press ►|| to return to the top menu.

WPS Settings (PIN code method)

Use this procedure to configure the wireless LAN settings.



Before turning this unit on, make sure that an Ethernet cable is not connected to this unit. If a cable is connected, have this unit enter the power standby mode and disconnect the cable.

1 Press + and – at the same time.

Turns on the menu settings mode and the menu appears on the display (☞ [page 22](#) "Menu map").

2 Press + or – to select "WPS(PIN)", then press ►||.

"Searching" is displayed, and the access point you have set is displayed.

3 Press + or – to select the access point whose PIN code you want to display, and press ►||.

PIN code number is displayed.

4 Set this PIN code to the register.

When connection is established with access point, "Succeeded" is displayed.

- For how to register the PIN code, see the owner's manual of your router with access point.

Firmware Update

- In order to update the firmware, the environment and settings required for connecting to broadband internet are needed (page 8).
- Perform the firmware update operation after at least 2 minutes has elapsed since turning this unit's power ON.

1 Press + and – at the same time.

Turns on the menu settings mode and the menu appears on the display (page 22 "Menu map").

2 Press + or – to select "Firmware Update", then press ►||.

3 Press + or – to select "Check for Update" or "Start", then press ►||.

Check for Update Check for firmware updates.

Use + or – to select the item, and press ►||.

- Up to Date: It is already the latest firmware.
- Available Yes: Updates to the latest firmware.
- Available No: Does not update to the latest firmware.

Start Determines whether to update or not.

Use + or – to select the item, and press ►||.

- Yes: Performs update.
- No: Does not perform update.

- If updating fails, the set automatically retries, but if updating is still not possible, one of the messages shown below is displayed. If the display reads as shown below, check the settings and network environment, then update again.

Display	Description
Updating fail	Updating failed.
Login failed	Failure to log into server.
Server is busy	Server is busy. Wait a while then try again.
Connection fail	Failure in connecting to server.
Download fail	Downloading of the firmware has failed.

Notes concerning use of "Firmware Update"

- Do not turn off the power until updating or upgrading is completed.
- Even with a broadband connection to the Internet, approximately 20 minutes is required for the updating procedure to be completed.
- Once updating starts, normal operations on this unit cannot be performed until updating is completed. Furthermore, updating the firmware may reset the backup data for the parameters, etc. set for this unit.
- If the update fails, remove and re-insert the power cord. "Update Retry" appears on the display and update restarts from the point at which update failed. If the error continues despite this, check the network environment.



See the DENON website for details about updates.

Auto standby

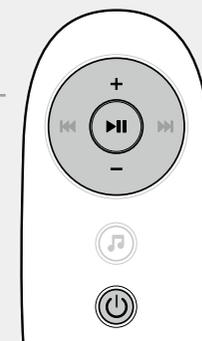
With the Auto Standby ON, this unit will automatically enter the standby mode after about 30 continuous minutes of stop mode with no operation.

- The default setting for the Auto Standby mode is "On".

1 Insert the power plug into the power outlet and press ⏻.

"Always Display Clock?" is displayed.

2 Press + or – to select "Yes" or "No", then press ►||.



Yes (Auto Standby Off) The unit does not go into standby automatically.

No (Auto Standby On) The unit goes into standby after 30 minutes.

NOTE

In the following situations, the Auto standby function does not operate.

- When iPod, iPhone or iPad is connected to the Dock connector on this unit.
- When the input source is "AUX" and a device connected to the AUX IN jack.
- When the input source being played is "Internet Radio" or "Music Server".

Informations

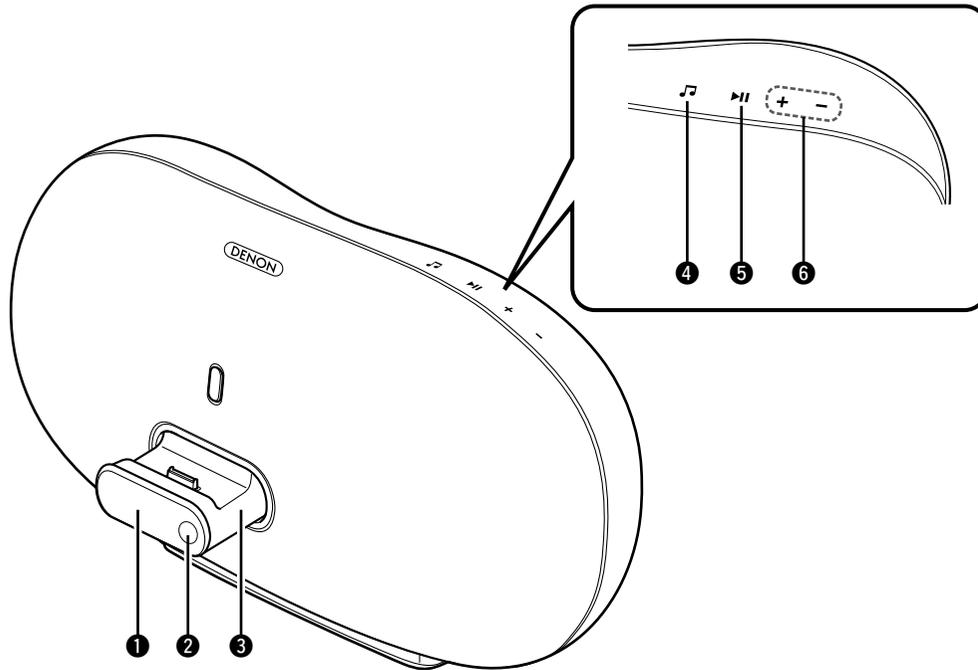
Here, we list various information related to this unit.
Please refer to this information as needed.

- Part names and functions  [page 28](#)
- Other information  [page 30](#)
- Troubleshooting  [page 33](#)
- Specifications  [page 36](#)
- Index  [page 37](#)

Part names and functions

Front panel

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

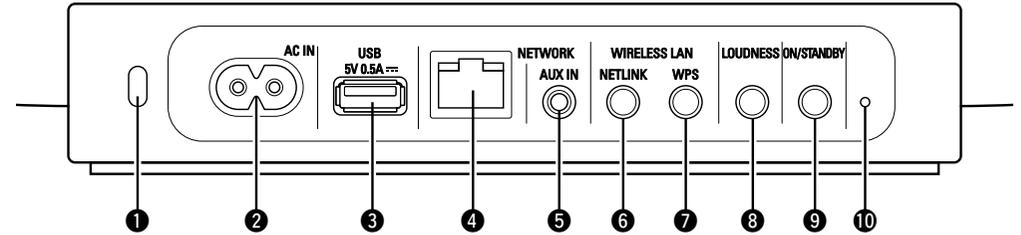


- 1 Display**
 [Wireless LAN signal strength]
- ▬▬▬▬ : Strong
 - ▬▬▬ : Medium
 - ▬▬ : Weak
 - ✖ : Not connected

- 2 Remote control sensor** (3)
- 3 Dock** (6)
- 4 Input source select button (🎵)** (13)
- 5 Play/Pause button (▶||)** (14, 22, 35)
- 6 Volume control buttons (+, -)** (13, 22, 35)

Rear panel

See the page indicated in parentheses ().



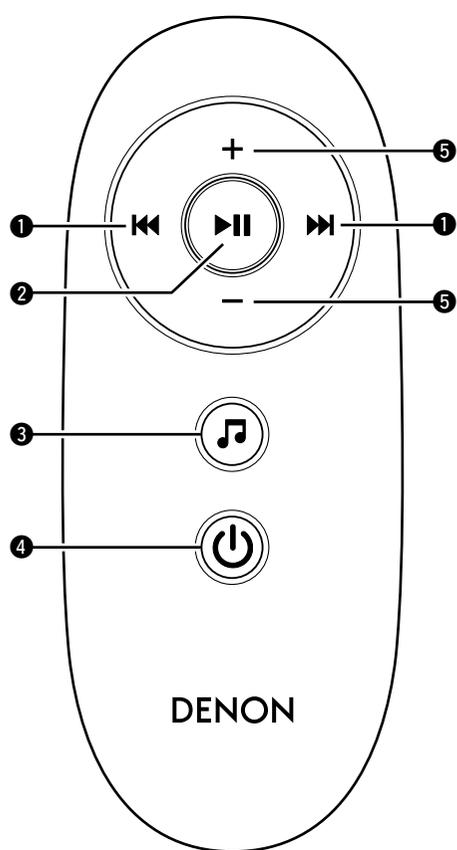
- 1 Security slot**
 You can attach a security cable to deter theft.
 Use a security cable that is compatible with this unit. For details, contact your dealer.
- 2 AC inlet (AC IN)** (5)
- 3 USB port** (5)
- 4 Network connector (NETWORK)** (10)
- 5 AUX IN jack** (5)
- 6 NETLINK button** (11)
- 7 WPS button** (9)
- 8 LOUDNESS button** (14)
- 9 Power operation button (ON/STANDBY)** (13)
 Turns power to this unit on and off (standby).
- 10 Reset hole** (35)

NOTE

Security cables have deterrent effects, but do not completely prevent theft or misuse of this unit.

Remote control unit

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



- ❶ Skip buttons (⏮, ⏭) (14)
- ❷ Play/Pause button (▶⏸) (14, 19)
- ❸ Input source select button (🎵) (13)
- ❹ Power operation button (⏻) (13)
- ❺ Volume control buttons (+, -) (13)

Other information

- ❑ **Trademark information** ([page 30](#))
- ❑ **Explanation of terms** ([page 31](#))

Trademark information

This product uses the following technologies (Random order):



"Made for iPod", "Made for iPhone" and "Made for iPad" mean that an electronic accessory has been designed to connect specifically to iPod, iPhone or iPad, respectively, and has been certified by the developer to meet Apple performance standards.

Apple is not responsible for the operation of this device or its compliance with safety and regulatory standards. Please note that the use of this accessory with iPod, iPhone or iPad, may affect wireless performance.

AirPlay, the AirPlay logo, iPad, iPhone, iPod, iPod classic, iPod nano, iPod shuffle and iPod touch are trademarks of Apple Inc., registered in the U.S. and other countries.

- Individual users are permitted to use iPad, iPhone, iPod, iPod classic, iPod nano, iPod shuffle, and iPod touch for private copy and playback of non-copyrighted contents and contents whose copy and playback is permitted by law. Copyright infringement is prohibited by law.

Explanation of terms

A

AES (Advanced Encryption Standard)

This is a next generation standard encryption method replacing the current DES and 3DES, and because of its high security it is expected to be applied widely to wireless LANs in the future. It uses the "Rijndael" algorithm developed by two Belgian cryptographers to divide the data into blocks of fixed lengths and encrypt each block. It supports data lengths of 128, 192 and 256 bits and key lengths of 128, 192 and 256 bits as well, offering extremely high encryption security.

AirPlay

AirPlay sends (plays) contents recorded in iTunes or on an iPhone/iPod touch/iPad to a compatible device via the network.

App Store

App Store is a site that sells application software for such devices as the iPhone or iPod Touch, and is operated by Apple Inc.

B

Bit rate

This expresses the read amount per 1 second of video/audio data recorded in a disc. A larger number means higher sound quality, but also means a larger file size.

D

DLNA

DLNA and DLNA CERTIFIED are trademarks and/or service marks of Digital Living Network Alliance. Some contents may not be compatible with other DLNA CERTIFIED™ products.

F

FLAC

FLAC stands for Free lossless Audio Codec, and is a lossless free audio file format. Lossless means that the audio is compressed without any loss in quality. The FLAC license is as shown below.

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I

IEEE 802.11b

This is one wireless LAN standard set by the 802 working group that establishes LAN technology standards at the IEEE (Institute of Electrical and Electronics Engineers) of the United States. It uses the 2.4 GHz band usable freely without a radio frequency license (ISM band), enabling communications at a maximum speed of 11 Mbps.

- The value indicated above is the maximum theoretical value for the wireless LAN standard, and does not indicate the actual data transfer rate.

IEEE 802.11g

This is another wireless LAN standard set by the 802 working group that establishes LAN technology standards at the IEEE (Institute of Electrical and Electronics Engineers) of the United States, and is compatible with IEEE 802.11b. It also uses the 2.4 GHz band, but enables communications at a maximum speed of 54 Mbps.

- The value indicated above is the maximum theoretical value for the wireless LAN standard, and does not indicate the actual data transfer rate.

iTunes

iTunes is the name of the multimedia player provided by Apple Inc. It enables management and playback of multimedia contents including music and movies. iTunes supports many main file formats including AAC, WAV, and MP3.

M

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".

N

Network Names (SSID: Security Set Identifier)

When forming wireless LAN networks, groups are formed to prevent interference, data theft, etc. This grouping is done by "SSID" or "Security Set Identifiers". For further security, a WEP key is set and signal transfer is not possible unless the SSID and WEP key match.

P

Protection Circuit

This is a function to prevent damage to devices 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.

S

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.

T

TKIP (Temporal Key Integrity Protocol)

This is a network key used for WPA. The encryption algorithm is RC4, the same as for WEP, but the security level is increased by changing the network key used for encryption for each packet.

V

vTuner

This is a free online content server for Internet radio. Note that usage fees are included in upgrade costs.

For inquiries about this service, visit the vTuner site below.

vTuner website: <http://www.radiodnon.com>

This product is protected by certain intellectual property rights of Nothing Else Matters Software and BridgeCo. Use or distribution of such technology outside of this product is prohibited without a license from Nothing Else Matters Software and BridgeCo or an authorized subsidiary.

W

WEP Key (Network Key)

This is key information used for encrypting data when conducting data transfer. On this unit, the same WEP key is used for data encryption and decryption, so the same WEP key must be set on both devices in order for communications to be established between them.

Wi-Fi®

Wi-Fi Certification assures tested and proven interoperability by the Wi-Fi Alliance, a group certifying interoperability among wireless LAN devices.

Windows Media DRM

This is a copyright protection technology developed by Microsoft.

Content providers are using the digital rights management technology for Windows Media contained in this device (WM-DRM) to protect the integrity of their content (Secure Content) so that their intellectual property, including copyright, in such content is not misappropriated. This device uses WM-DRM software to play Secure Content (WM-DRM Software). If the security of the WM-DRM Software in this device has been compromised, owners of Secure Content (Secure Content Owners) may request that Microsoft revoke the WM-DRM Software's right to acquire new licenses to copy, display and/or play Secure Content. Revocation does not alter the WM-DRM Software's ability to play unprotected content. A list of revoked WM-DRM Software is sent to your device whenever you download a license for Secure Content from the Internet or from a PC. Microsoft may, in conjunction with such license, also download revocation list onto your device on behalf of Secure Content Owners.

Windows Media Player Ver.11 or later

This is a media player distributed free of charge by Microsoft Corporation.

It can play playlists created with Ver.11 or later of Windows Media Player, as well as WMA, DRM WMA, WAV, and other files.

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.

WPA (Wi-Fi Protected Access)

This is a security standard established by the Wi-Fi Alliance. In addition to the conventional SSID (network name) and WEP key (network key), it also uses a user identification function and encrypting protocol for stronger security.

WPA2 (Wi-Fi Protected Access 2)

This is a new version of the WPA established by the Wi-Fi Alliance, compatible with more secure AES encryption.

WPA-PSK/WPA2-PSK (Pre-shared Key)

This is a simple authentication system for mutual authentication when a preset character string matches on the wireless LAN access point and client.

WPS (Wi-Fi Protected Setup)

This is a standard drawn up by the Wi-Fi Alliance to ease the task of setting up wireless LAN connections and configuring security.

There are two methods: push-button and PIN (Personal Identification Number) code.

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 devices operating properly?

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

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

[General]

Symptom	Cause/Solution	Page
Power does not turn on.	<ul style="list-style-type: none"> Check whether the power plug is correctly inserted into the power outlet. 	5
The operation buttons on the upper part of this unit flash white approximately every 2 seconds.	<ul style="list-style-type: none"> The protection circuit has been activated by a rise in the humidity inside the unit. Please turn off power once, and re-apply the power after the temperature has fallen sufficiently. Please re-install this unit in a place having good ventilation. 	31 –
The operation buttons on the upper part of this unit flash white approximately every 0.5 seconds.	<ul style="list-style-type: none"> This unit amplifier circuit has failed. Turn off the power and please contact the DENON service adviser. 	–
Set does not operate properly.	<ul style="list-style-type: none"> Reset the microprocessor. 	35

[Audio]

Symptom	Cause/Solution	Page
Audio is not output.	<ul style="list-style-type: none"> Check the connections for all devices. Check whether the audio device power is turned on. Adjust the master volume. Check the connection with the playback device and select the proper input source. 	5 , 6 , 9 , 10 – 13 13

[iPod / USB memory device / Internet radio / Music Server]

Symptom	Cause/Solution	Page
iOS device cannot be played.	<ul style="list-style-type: none"> Some iOS devices do not support being used connected directly to the Dock connector. 	6
The file names are not displayed properly ("...", etc.).	<ul style="list-style-type: none"> Characters that cannot be displayed are used. This is not a malfunction. On this unit, characters that cannot be displayed are replaced with a "." (period). The USB cable connecting the USB memory device and the unit uses incompatible tags. Use USB memory devices with tags supported by the unit. 	– 18
When a USB memory device is connected, "USB" is not displayed on the menu.	<ul style="list-style-type: none"> The set cannot recognize a USB memory device. Check the connection. This unit supports mass storage class and MTP-compatible USB memory devices. It will not recognize other USB memory devices. A USB memory device that the set cannot recognize is connected. This is not a malfunction. DENON does not guarantee that all USB memory devices will operate or receive power. USB memory device is connected via USB hub. Connect the USB memory device directly to the USB port. The unit supports file structures with up to 8 levels and a total maximum of 5000 subfolders and files per 1 folder. Change the file structure of the USB memory device if necessary. 	5 – – – 18
Files on a USB memory device cannot be played.	<ul style="list-style-type: none"> The USB memory device format should be set to FAT16 or FAT32. For details, refer to the USB memory device's operating instructions. If the USB memory device is divided into multiple partitions, only files in partition one can be played. Files are stored in a non-compatible format. Record the files in a compatible format. You are attempting to play a file that is copyright protected. Files that are copyright protected cannot be played on this unit. 	– – 18 18

Symptom	Cause/Solution	Page
Internet radio cannot be played.	• Ethernet cable is not properly connected or network is disconnected. Check the connection status.	9, 10
	• Program is being broadcast in non-compatible format. Only Internet radio programs in MP3 and WMA can be played on this unit.	17
	• The firewall of the PC or router has been activated. Check the firewall settings of the connected PC or router.	–
	• Radio station is not currently broadcasting. Choose a radio station that is currently broadcasting.	–
	• IP address is wrong. Check the set's IP address.	25
	• Some radio stations may go silent at certain times of the day. In this case, no audio is output even when a station is received. Try again later, or switch to another radio station.	–
Files stored on a computer cannot be played.	• Files are stored in a non-compatible format. Record in a compatible format.	21
	• You are attempting to play a file that is copyright protected. Files that are copyright protected cannot be played on this unit.	21
	• Set and computer are connected by USB cable. The set's USB port cannot be used for connection to a computer.	–
	• Media sharing settings are not correct. Change media sharing settings so that the unit can access the folders on your computer.	20
Music stored on a NAS cannot be played.	• If you use a NAS in conformity with the DLNA standard, enable the DLNA server function in the NAS setting.	–
	• If you use a NAS that does not conform with the DLNA standard, play the music via a PC. Set Windows Media Player's media sharing function and add NAS to the selected play folder.	20
	• If connection is restricted, set audio equipment as the connection target.	–
Server is not found, or it is not possible to connect to the server.	• The computer's or router's firewall is activated. Check the computer's or router's firewall settings.	–
	• Computer's power is not turned on. Turn on the power.	–
	• Server is not running. Launch the server.	–
	• Set's IP address is wrong. Check the set's IP address.	25
Cannot connect to preset radio stations.	• Radio station is not currently broadcasting. Wait a while before trying again.	–
	• Radio station is not currently in service. It is not possible to connect to radio stations that are no longer in service.	–

Symptom	Cause/Solution	Page
For some radio stations, "Radio station server full" or "Connection down" is displayed and station cannot be connected to.	• Station is congested or not currently broadcasting. Wait a while before trying again.	–
Sound is broken during playback.	• Network or USB memory device's signal transfer speed is slow or communications lines or radio station is congested. This is not a malfunction. When playing broadcast data with a high bit rate, the sound may be broken, depending on the communications conditions.	–
Sound quality is poor or noise is heard during play.	• File being played has a low bit rate. This is not a malfunction.	–

[AirPlay]

Symptom	Cause/Solution	Page
The AirPlay icon  is not displayed in iTunes or on the iPhone/iPod touch/iPad.	• This unit and the computer or iPhone/iPod touch/iPad are not connected to the same network (LAN). Connect the computer or iPhone/iPod touch/iPad to the same network as this unit. • iTunes or the iPhone/iPod touch/iPad do not have firmware that supports AirPlay installed. Update to the latest firmware.	9, 10 26
No sound.	• The volume in iTunes or on the iPhone/iPod touch/iPad is set to the minimum setting. Adjust the volume to the optimum level. • This unit is not selected in the screen that is displayed when iTunes or the iPhone/iPod touch/iPad is started. Start iTunes or switch on the iPhone/iPod touch/iPad, click the AirPlay icon  in the displayed screen, and select this unit. • AirPlay playback has not started. Click the ► button in iTunes or press the ► button on the iPhone/iPod touch/iPod.	– 15 –
When using AirPlay with the iPhone/iPod touch, the sound suffers from intermittent breaks or AirPlay does not function.	• Quit the application running in the background of the iPhone/iPod touch, and then play using AirPlay. • When playing via a wireless connection, outside conditions may affect the unit. To remedy this, change the network environment, e.g. shorten the distance to the wireless LAN access point. • Update the iPhone/iPod touch application or iTunes to the latest version.	– – –

[Remote control unit]

Symptom	Cause/Solution	Page
The set cannot be operated with the remote control unit.	<ul style="list-style-type: none">• Batteries are worn out. Replace with new batteries.• Operate the remote control unit within a distance of about 7 m from this unit and at an angle of within 30°.• Remove any obstacle between this unit and the remote control unit.• Insert the batteries in the proper direction, checking the ⊕ and ⊖ marks.• The set's remote control sensor is exposed to strong light (direct sunlight, inverter type fluorescent bulb light, etc.). Move the set to a place in which the remote control sensor will not be exposed to strong light.	3 3 3 3 3

Resetting the microprocessor

When the microprocessor is reset, all the settings are reset to their default values.

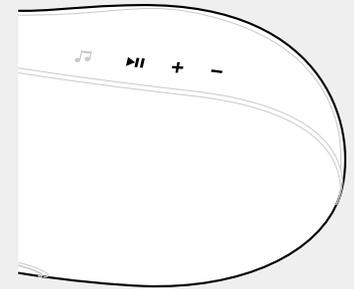
1 Press + and – at the same time.

Turns on the menu settings mode and the menu appears on the display ([page 22](#) "Menu map").

2 Press + or – to select "Factory Reset", then press ►||.

3 Press + or – to select "Reset? Yes", then press ►||.

"Initialized" is displayed and the default settings are restored.



If "Initialized" does not display in step 3, start over from step 1.

How to reset

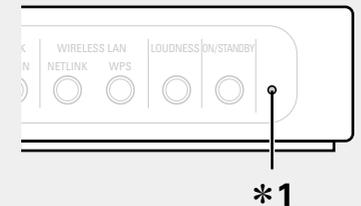
"Reset" is an operation that restarts this unit.

Perform this procedure if the display is abnormal or if operations cannot be performed.

When the power of this unit is on, insert a thin stick (*2) into the reset hole (*1), and press the reset button within this unit.

This unit automatically restarts.

- Prepare a thin stick (such as a toothpick and straightened paper clip) for pressing the reset button within this unit.
 - * 1 Thickness (dia.): 0.5 mm – 1.5 mm
 - * 2 Length: 30 mm or longer



Specifications

□ Audio section

- **Amplifiers:** 4 x 25 W ClassD
- **Drivers:** 2 x 40 mm Tweeter
2 x 100 mm Woofer

□ Clock

- **Clock method** Within 1 – 2 minutes per month

□ Wireless LAN

- Network type (wireless LAN standards):** Conforming to IEEE 802.11b
Conforming to IEEE 802.11g (Conforming to Wi-Fi®)*
- Transfer rate:** DS-SS: 11 / 5.5 / 1 Mbps (Automatic switching)
OFDM: 54 / 48 / 36 / 24 / 18 / 12 / 9 / 6 Mbps (Automatic switching)
- Security:** SSID (Network name)
WEP key (network key) (64/128 bits)
WPA-PSK (TKIP/AES)
WPA2-PSK (TKIP/AES)
- Used frequency range:** 2.412 MHz – 2.472 MHz
- No. of channels:** Conforming to IEEE 802.11b : 13ch (DS-SS) (Of which 1 channel used)
Conforming to IEEE 802.11g : 13ch (OFDM) (Of which 1 channel used)

□ General

- Power supply:** AC 100 – 240 V, 50/60 Hz
- Power consumption:** 50 W
0.5 W (Standby)

* Wi-Fi® conformity indicates tested and proven interoperability by the “Wi-Fi Alliance”, a group certifying interoperability among wireless LAN devices.

For purposes of improvement, specifications and design are subject to change without notice.

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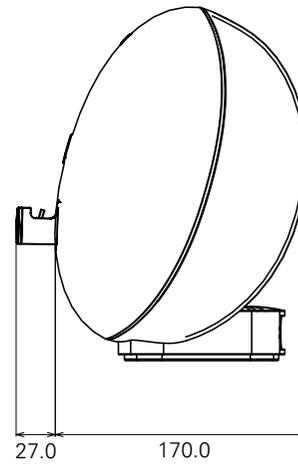
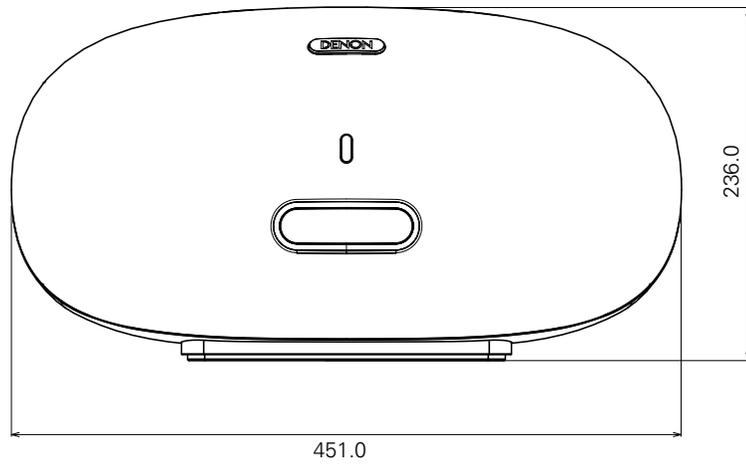
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Dimensions

Unit : mm



Weight : 5.4 kg

