DENON

AV SURROUND RECEIVER

AVR-5805
AVR-4806

OPERATING INSTRUCTIONS

Upgrade version for network function

Getting Started

This manual includes explanations of functions that are added after upgrading the amplifier.
For instructions on operating the amplifier, also refer to the operating instructions included with the amplifier.

Contents

Using the Network Audio Function

Internet radio function

Internet radio refers to radio programs broadcast over the Internet.
There are many stations throughout the world broadcasting Internet radio programs. These stations are of all sizes and types, some run by individuals, others by ground wave broadcast stations.
While ground wave radio stations can only be listened to within the range in which the waves reach, Internet radio can be listened to anywhere in the world.
The AVR-5805/4806 is equipped with the following Internet radio functions:
• Stations can be selected by genre and region.
• Up to 56 Internet radio stations can be preset.
• MP3 format Internet radio programs can be listened to.
• Your favorite radio stations can be registered by accessing the exclusive DENON Internet radio URL using a computer's browser. (The AV amplifier automatically downloads the registration settings (approximately once every other day).) (This is managed separately for each unit, so a MAC address or e-mail address must be registered.)
  ※ Exclusive URL : http://www.RadioDenon.com
    Use the MAC address you used when you applied for the amplifier's upgrade.

■ vTuner
The AVR-5805/4806's Internet radio station list uses "vTuner", a radio station database service. This database service is edited and prepared for the AVR-5805/4806.

Music server function

The AVR-5805/4806 is equipped with a network audio playback function allowing music files stored on a computer to be played via a LAN (local area network).
The AVR-5805/4806's network audio playback function connects to servers using the following technologies:
• Windows Media Connect
• The Designed to DLNA Guideline
• Windows Media DRM 10 (for network devices)

System requirements

The preparations described below must be made in order to use the Internet radio and music server functions.

■ Broadband Internet connection
A broadband connection to the Internet is necessary in order to use the AVR-5805/4806's Internet radio function.

> **NOTE:**
> • **You must have a contract with an Internet Service Provider (ISP) in order to connect to the Internet.** For instructions on connecting to the Internet, contact your ISP or a computer store.
> If you already have a broadband Internet connection there is no need to take out another contract.

■ Modem
A modem is a device for exchanging signals over the Internet using a broadband connection. Some are integrated into routers. For instructions on connecting to the Internet, contact your ISP or a computer store.

■ Router
A router is a device for connecting multiple pieces of equipment (computers, the AVR-5805/4806, etc.) to the Internet simultaneously.
When using the AVR-5805/4806, we recommend a router equipped with the following functions:
• Built-in DHCP (Dynamic Host Configuration Protocol) server.
  Function for automatically assigning the device's IP address on the LAN.
• Built-in 100 base TX switch
  When connecting multiple devices, it is recommended to have a built-in switching hub with a speed of 100 Mbps or greater.

> **NOTE:**
> • The type of router that can be used differs for different ISPs. For details, contact your ISP or a computer store.

■ Ethernet cable (CAT-5)
The AVR-5805/4806 does not come with an Ethernet cable. Purchase one of the required length.

■ Personal Computer
Install "Windows Media Connect" on your computer.
The required system for forming a music server is as described below.
1) OS (Operating system):
   Windows® XP Service pack2
2) Processor:
   Intel PentiumⅡ or AMD processor, etc., 1 GHz or greater optimum.
3) RAM:
   Min. 128 MB, 256 MB or greater recommended.
4) Software:
   .NET Framework 1.1
5) Internet browser:
   Microsoft Internet Explorer 5.01 or later

• LAN port required
• 300 MB or greater free hard disc space required

※ Extra free space is necessary to store music files.
The following table gives an approximate estimate of the required free space.

Format	Bit rate	Per one minute	Per one hour
MP3/WMA	128 kbps	1 MB	60 MB
	192 kbps	1.5 MB	90 MB
	256 kbps	2 MB	120 MB
	392 kbps	3 MB	180 MB
WAV (LPCM)	1400 kbps	10 MB	600 MB

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• Video files may be displayed with some servers, but they cannot be placed with this amplifier.
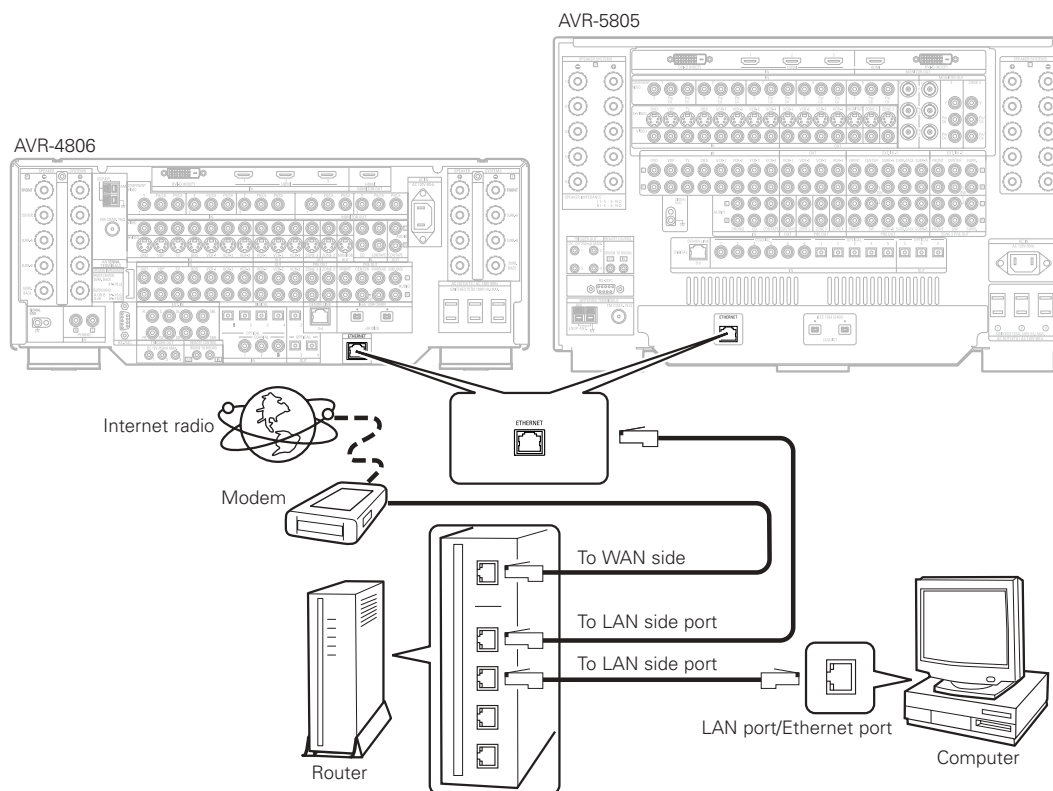
■ **Others**
• When the contract with your provider is of the type by which the network settings are made manually, you must make the network-related settings.
• The AVR-5805/4806 is not compatible with PPPoE. If your contract is of the PPPoE setting type, you need a PPPoE-compatible router.
• For some ISPs (Internet Service Providers), you may have to make proxy server settings in order to use the Internet radio function. If proxy server settings for connecting to the Internet have been made on the computer, make the same settings on the AVR-5805/4806.
• The AVR-5805/4806 is designed to make the network settings automatically using the DHCP and Auto IP functions.

Connecting Other Sources

■ **Connections**
Connect one side of the Ethernet cable (CAT-5) to the ETHERNET connector on the AVR-5805/4806's rear panel, the other side to the router.
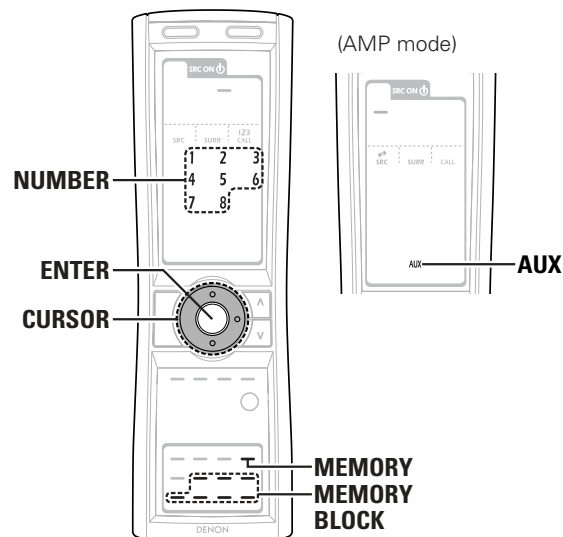

AVR-5805

AVR-4806

Internet radio

ETHERNET

Modem

To WAN side

To LAN side port

To LAN side port

LAN port/Ethernet port

Router

Computer

About Network Settings

■ **Network settings**
When using a broadband router (DHCP function), the network settings are made automatically, so there is no need to make the settings from the setup menu.
If the broadband router's DHCP function is turned off, make the network-related settings (☞ page 8).
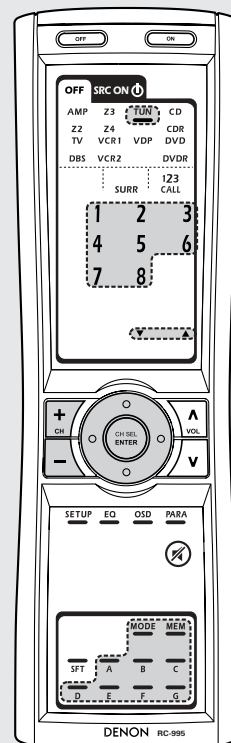
Basic Operation

(AMP mode)

NUMBER

ENTER

CURSOR

AUX

MEMORY
MEMORY
BLOCK

Operating the remote control unit

The digital tuner system buttons shown on the diagram below are used for net audio operations.

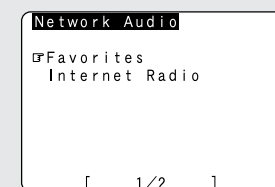|		
▲, ▼	:	Character search
MODE	:	Configuration mode selection
MEM	:	Preset and favorite registration
CH +, −	:	Preset channel selection
A ~ G	:	Preset memory blocks
1 ~ 8	:	Preset numbers
▲, ▼, ◄, ►	:	Cursor up, down, left and right
ENTER	:	Enter settings

Listening to Internet radio

The required system connections and settings must be made in order to listen to Internet radio.
"Update?" appears on the display when connecting to an Internet radio station for the first time.

1 **Press the AUX (AMP mode) button.**
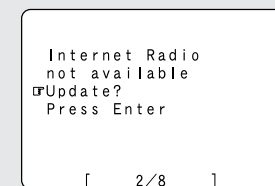• The "Network Audio" menu screen appears.

```
Network Audio

☞Favorites
  Internet Radio




    [   1/2    ]
```

2 **Press the CURSOR △ or ▽ button to select "Internet Radio", then press the ENTER or CURSOR ▷ button.**
• The initial screen when not connected to the Internet is displayed.

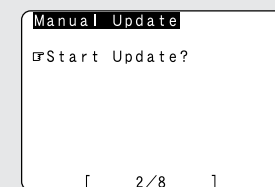**3** **Connecting to an Internet radio station for the first time:**
Press the ENTER or CURSOR ▷ button.
• The update screen appears.

```
  Internet Radio
  not available
☞Update?
  Press Enter



    [   2/8    ]
```
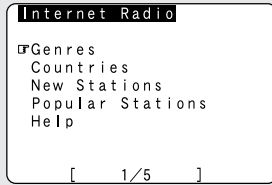
4 **Press the ENTER or CURSOR ▷ button once again.**
• The latest list of radio stations is downloaded from the vTuner site. (Several minutes are required for this download.)

```
Manual Update

☞Start Update?




    [   2/8    ]
```

4

5 Press the **CURSOR** △ or ▽ button to select the desired setting item, then press the **ENTER** or **CURSOR** ▷ button.

```
┌─────────────────────┐
│Internet Radio       │
│                     │
│☞Genres              │
│ Countries           │
│ New Stations        │
│ Popular Stations    │
│ Help                │
│                     │
│    [    1/5    ]     │
└─────────────────────┘
```

※ Finally, the list of Internet radio stations is displayed and those that can be played are indicated by the "✳" mark in front of them.

6 Select the station, then press the **ENTER** or **CURSOR** ▷ button to set.
 • Connection starts, and the station starts playing once the buffer reaches "100%".

※ The pause mode is set if the **ENTER** button is pressed for less than 2 seconds while playing an Internet radio program, and playback resumes if the **ENTER** button is pressed again for less than 2 seconds.

※ If the **ENTER** button is pressed and held in for more than 2 seconds when in the play or pause mode, playback stops and the previous menu window reappears.

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• There are many Internet radio stations on the Internet. The programs they broadcast and their bit rates vary widely.
  Generally, the higher the bit rate, the higher the sound quality, but streamed music or sound may be broken if the communication lines or servers are busy. Inversely, programs with low bit rates have lower sound quality but tend to be more stable.
• "Server Full" or "Connection Down" is displayed if the station is congested or if it is not broadcasting.

Presetting (registering) Internet radio stations

There are two ways to register stations: by presetting them or by storing them in your favorites.
Stations that are preset can be tuned in directly from the remote control unit.

1 Press the **MEMORY** button while playing the Internet radio station you want to register.
 • The registration menu screen appears.

```
┌─────────────────────┐
│Favorites/Preset     │
│                     │
│☞Favorites           │
│ Preset              │
└─────────────────────┘
```

2 Press the **CURSOR** △ or ▽ button to select "Preset", then press the **ENTER** or **CURSOR** ▷ button.
 • The preset registration screen appears.

3 Press a **MEMORY BLOCK (A ~ G)** button, then press a **NUMBER (1 ~ 8)** button to register the station at the desired preset channel.
 • This completes registration.

※ If no button is pressed, the set times out and the normal display reappears.

※ Registered presettings can be checked on the on-screen display.
  The presettings can only be displayed with the on-screen display when the "Network Audio" function is selected.

NOTE:
 • Registered presettings are deleted when they are overwritten.

■ **Listening to preset Internet radio stations**

When the "Network Audio" function is selected, press a **MEMORY BLOCK (A ~ G)** button, then press a **NUMBER (1 ~ 8)** button.
 • The connection is made automatically and playback starts.

Registering Internet radio stations in your favorites

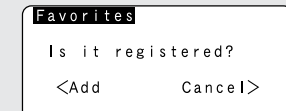Your favorites are listed at the top of the menu screen, so registered stations can be tuned in easily.

1 Press the **MEMORY** button while playing the Internet radio station you want to register.
 • The registration menu screen appears.

```
┌─────────────────────┐
│Favorites/Preset     │
│                     │
│☞Favorites           │
│ Preset              │
└─────────────────────┘
```

2 Press the **CURSOR** △ or ▽ button to select "Favorites", then press the **ENTER** or **CURSOR** ▷ button.
 • The favorites registration screen appears.

```
┌─────────────────────┐
│Favorites            │
│                     │
│ Is it registered?   │
│                     │
│ <Add      Cancel>   │
└─────────────────────┘
```

3 Press the **CURSOR** ◁ button to register the station.

※ To cancel without registering, press the **CURSOR** ▷ button.
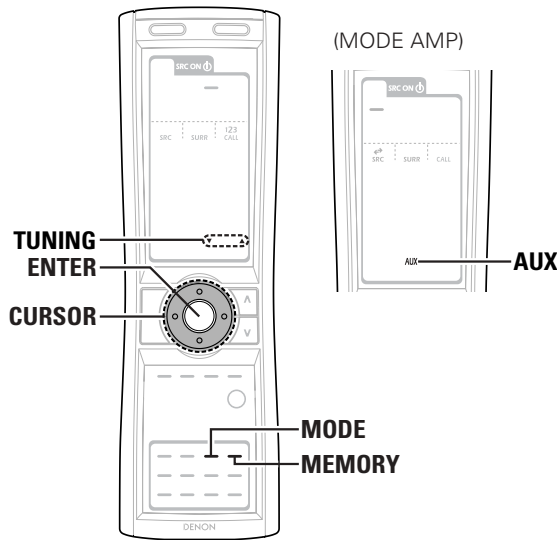
■ **Listening to Internet radio stations registered in your favorites**

1 When the "Network Audio" function is selected, press the **CURSOR** △ or ▽ button to select "Favorites", then press the **ENTER** or **CURSOR** ▷ button.
 • The Internet radio stations registered in your favorites are displayed.

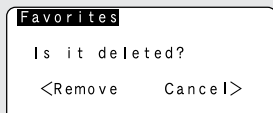**2** Press the **CURSOR** △ or ▽ button to select the desired radio station, then press the **ENTER** or **CURSOR** ▷ button.
 • Playback starts.

(MODE AMP)

TUNING
ENTER

CURSOR

AUX

MODE
MEMORY

■ Deleting radio stations from your favorites

1 **At the screen on which the Internet radio stations registered in your favorites are displayed, press the CURSOR △ or ▽ button to choose the radio station you want to delete, then press the MEMORY button.**
• The delete screen appears.

```
Favorites
  Is it deleted?

  <Remove    Cancel>
```
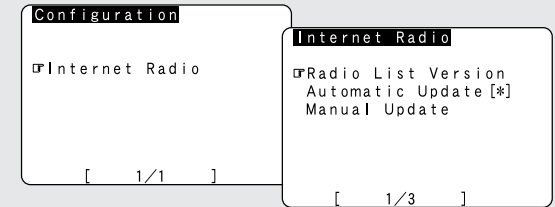
2 **Press the CURSOR ◁ button to delete the station.**

※ To cancel without deleting, press the **CURSOR** ▷ button.

Character search function (searching by first letter)

The character search function (searching by first letter) can be used to select the desired item from the menu screen displaying the list of Internet radio stations or music files stored on the computer.

1 **While the menu screen is displayed, press the TUNING ▲ or ▼ button.**
• The character search screen appears.

```
Character Search

  ☞A
```

2 **Press the TUNING ▲ or ▼ button to select the first letter of the item you want to search for.**
• After several seconds, the menu screen is displayed with the cursor set to the item starting with the letter selected in step 2.

※ If there is more than one item starting with the letter selected in step 2, the items are displayed in alphabetical order.

Updating the list of radio stations

1 **When the "Network Audio" function is selected, press the MODE button to select the configuation mode, then press the ENTER or CURSOR ▷ button.**
• The settings screen appears.

```
Configuration


 ☞Internet Radio



     [   1/1    ]
```

```
Internet Radio

 ☞Radio List Version
   Automatic Update [*]
   Manual Update


     [   1/3    ]
```

2 **Press the CURSOR △ or ▽ button to select "Automatic Update" or "Manual Update", then press the ENTER or CURSOR ▷ button.**
• The update screen appears.

※ Select "Radio List Version" to display the current version.

3-1 **When "Automatic Update" is selected: Press the ENTER or CURSOR ▷ button to select "Yes".**
• The list of radio stations is updated approximately once every other day.

3-2 **When "Manual Update" is selected: Press the ENTER or CURSOR ▷ button.**
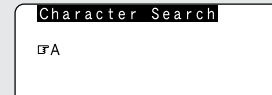• The list of radio stations is updated this one time.

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• When "Yes" is set for "Automatic Update", set "Power Saving" in the network-related settings to "OFF". (☞ page 8) When used with "Power Saving" set to "ON", we recommend performing the "Manual Update" procedure periodically (about once a week).
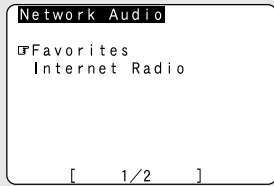
Playing music files stored on the computer (music server)

The necessary system connections and settings must be made in order to play music files.

Music files (of WMA, MP3 or WAV format) or playlists (of m3u or wpl format) stored on a computer (music server) connected to the amplifier via a network are played. The computer's server software must be launched in advance and the files to be played must be set as server contents. For details see the server software's operating instructions.

1 Press the AUX button.
• The "Network Audio" menu screen appears.

```
Network Audio

⏵Favorites
 Internet Radio




[    1/2    ]
```

※ The host names of the computer(s) (music server(s)) on the network are displayed.

2 Press the CURSOR △ or ▽ button to select the host name of the computer (music server) on which the music file you want to play is located, then press the ENTER or CURSOR ▷ button.

3 Press the CURSOR △ or ▽ button to select the search item or the desired folder, then press the ENTER or CURSOR ▷ button.

※ Playable music files are indicated by the "＊" mark in front of them.

4 Press the CURSOR △ or ▽ button to select the music file, then press the ENTER or CURSOR ▷ button.
• Connection starts, and playback starts once the buffer reaches "100%".

※ Press the **CURSOR** ▽ button to select the next file, the **CURSOR** △ button to select the previous file.
※ During playback, press the **ENTER** button once to pause playback, then press the **ENTER** button again to resume playback.
※ If the **ENTER** button is pressed and held in for more than 2 seconds when in the play or pause mode, playback stops and the previous menu screen reappears.

■ Playing music files that have been preset or registered in your favorites

The same operations as for Internet radio stations can be used to preset music files or register them in your favorites and play them.

NOTE:
• Registered presettings are deleted when they are overwritten.
• When the operations describe below are performed, the music server database is updated and it may no longer be possible to play the music files that have been preset or registered in your favorites.
   When the music server is stopped and restarted
   When music files are deleted from or added to the music server
• When using an ESCIENT server, place ESCIENT before the server name.

Operating the AVR-5805/4806 using a browser

Internet Explorer can be used on the computer connected to the AVR-5805/4806 over the network to operate the AVR-5805/4806. Check the AVR-5805/4806's IP address beforehand and input this IP address in Internet Explorer to display the AVR-5805/4806's control panel.

Operate in the same way as with normal Internet browsing to control the AVR-5805/4806.

Check the AVR-5805/4806's IP address at: "System Setup Menu" – ＊"7.Option Setup" – "7.Network Setup" – "IP Address".

When you use this function, set "Standby Mode Power Saving" to "OFF". ("System Setup" – ＊"7.Option Setup" – "7.Network Setup" – "Network Option").

＊AVR-5805 only

Network-related settings (Network Setup)

If you are using a broadband router (DHCP function), there is no need to make the settings at "System Setup Menu" - *"7.Option Setup" - "7.Network Setup", since the DHCP function is set to "ON" in the AVR-5805/4806's default settings.
If the AVR-5805/4806 is being used connected to a network without the DHCP function, the network settings must be made. In this case, some knowledge of networks is required.

*AVR-5805 only

■ DHCP (Dynamic Host Configuration Protocol) and Auto IP

These are systems by which the IP address and other network settings are automatically set for the AVR-5805/4806, computer, broadband router and network devices.

■ DNS (Domain Name System)

This is a system for converting the domain names used when browsing Internet sites (for example, "www.jp") into the IP addresses actually used for communications (for example, "202.221.192.106").

Setting the IP Address

1.DHCP Settings
Set whether or not to make the DHCP settings automatically.

ON (default settings):
The DHCP function is enabled.

OFF:
The DHCP function is disabled.

2.IP Address
Set the IP address within the ranges shown below. The Net Audio function cannot be used if other IP addresses are set.
  CLASS A: 10.0.0.0 ~ 10.255.255.255
  CLASS B: 172.16.0.0 ~ 172.31.255.255
  CLASS C: 192.168.0.0 ~ 192.168.255.255

3.Subnet Mask
When connecting an xDSL modem or terminal adapter directly to the AVR-5805/4806, input the subnet mask indicated in the documentation supplied by your provider. Normally input 255.255.255.0.

4.Gateway
Set the IP address within the ranges shown below.
When connected to a gateway (router), input its IP address.

5.Primary DNS / Secondary DNS
Set the IP address within the ranges shown below.
If there is only one DNS address indicated in the documentation supplied by your provider, input it at "e. 1st".
If there are two or more DNS addresses, input the first one at "f. 2nd".

Setting the Proxy

Make this setting when connecting to the Internet via a proxy server.

1.Proxy:
In some cases it is necessary to pass through a proxy server to connect to the Internet.

ON:
The proxy server is enabled.

OFF (default settings):
The proxy server is disabled.

2.Proxy Address/Name
Input the proxy server domain name or address. If "ON" has been set at the "Proxy" setting, the character input mode is set when this item is selected and the **CURSOR** ▷ button is pressed. Use the **CURSOR** △, ▽, ◁ and ▷ buttons to choose the character, then press the **ENTER** button. Once all the characters have been input, the character input mode is canceled.

3.Port
Input the proxy server port number. If "ON" has been set at the "Proxy" setting, the number input mode is set when this item is selected and the **CURSOR** ▷ button is pressed. Use the **CURSOR** △, ▽, ◁ and ▷ buttons to choose the number, then press the **ENTER** button. Once all the numbers have been input, the number input mode is canceled.

• Once the settings are completed, press the **ENTER** button three times to quit the "System Setup Menu".

Standby Mode Power Saving

When not using the AVR-5805/4806 connected in a network, set "ON" to reduce the power consumption when in the standby mode.
Set "OFF" when using the AVR-5805/4806 connected in a network.

PC Language

Select according to the language of the computer being used.
The languages are indicated with three letters conforming to ISO639-2.

Additional Information

Windows Media Connect

This is a media server provided free of charge by Microsoft since October 2004.

It operates with all types of music jukebox programs, but is optimum with Windows Media Player Ver. 10.

Windows Media Connect can be used to play playlists created on jukebox software such as Windows Media Player Ver. 10, as well as WMA, DRM WMA, MP3 and WAV files.

■ Explanation for installing Windows Media Connect

1. If installation of Windows XP Service Pack 2 is not yet complete, either download free of charge from Microsoft or via the Windows Update installer.
2. Download the latest version of Windows Media Player Ver. 10 either directly from Microsoft or using the Windows Update installer.
3. Download Windows Media Connect (usable since October 12, 2004) either directly from Microsoft or using the Windows Update installer.

vTuner

This is an Internet radio free online contents server. Note that usage fess are included in upgrade costs.

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

vTuner website: http://www.radiodenon.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.

Windows Media DRM

A copyright-protected 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") way 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 PC. Microsoft may, in conjunction with such license, also download revocation list onto your device on behalf of Secure Content Owners.

Windows Media, and Windows Logo are trademarks, or registered trademark of Microsoft corporation in the united states and/or other countries.

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- No signals are output to the digital output terminals when playing copyright-protected music files.
- The AVR-5805/4806 is compatible with "MPEG-1 Audio Layer-3" MP3 files (with sampling frequencies of 32, 44.1 or 48 kHz). It is not compatible with "MPEG-2 Audio Layer-3", "MPEG-2.5 Audio Layer-3", "MP1" or "MP2" files.
- The AVR-5805/4806 is compatible with bit rates of 32 to 320 kpbs for MP3 files and 48 to 192 kpbs for WMA files.
- The AVR-5805/4806 is compatible with WMA files with sampling frequencies of 32, 44.1 or 48 kHz.
- The AVR-5805/4806 is compatible with MP3 ID3-Tag (Ver.2).
- The AVR-5805/4806 is compatible with WMA meta tags.
- With the AVR-5805/4806, the folder names, file names, etc., can be displayed on the main unit's display and the OSD. Up to 95 characters can be displayed.

FCC INFORMATION (For US customers)

1. COMPLIANCE INFORMATION

Product Name: AV Surround Receiver
Model Number: AVR-5805/4806

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.

Denon Electronics (USA), LLC
19C Chapin Road, Suite 205
Pine Brook, NJ 07058-9385
Tel. 973-396-0810 (Main)

2. IMPORTANT NOTICE: DO NOT MODIFY THIS PRODUCT

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

3. NOTE

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

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

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

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

DENON