§Sherwood

R-904N
NetBoxx

IMPORTANT SAFETY INSTRUCTIONS

ENGLISH

1. Read these instructions.
2. Keep these instructions.
3. Heed all warnings.
4. Follow all instructions.
5. Do not use this apparatus near water.
6. Clean only with dry cloth.
7. Do not block any ventilation openings.
 Install in accordance with the manufacturer's instructions.
8. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
9. Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other.
 A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
10. Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
11. Only use attachments accessories specified by the manufacturer.

12. Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus.
 When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.

PORTABLE CART WARNING

13. Unplug this apparatus during lightning storms or when unused for long periods of time.
14. Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus have been exposed to rain or moisture, does not operate normally, or has been dropped.

Introduction

| READ THIS BEFORE OPERATING YOUR UNIT |
|---|

ENGLISH

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.

This symbol 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.

This symbol 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.**

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

※Note

Wall
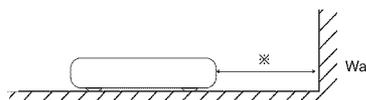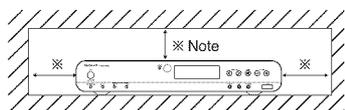
Do not block ventilation openings or stack other equipment on the top.

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

FCC INFORMATION
This equipment 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 equipment 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 equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment 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 equipment into an outlet on a circuit different from that to which the receiver is connected.
• Consult the dealer or an experienced radio/TV technician for help.

Caution : Any changes or modifications in construction of this device which are not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

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

FOR YOUR SAFETY

U.S.A CANADA	120 V

Units shipped to the U.S.A and CANADA are designed for operation on 120 V AC only.
Safety precaution with use of a polarized AC plug.
However, some products may be supplied with a nonpolarized plug.

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

ATTENTION : Pour éviter chocs électriques, introduire la lame la plus large de la fiche dans la borne correspondante de la prise et pousser jusqu' au fond.

ENERGY STAR® is a U.S. registered mark. As an ENERGY STAR® Partner, Sherwood has determined that this product meets the ENERGY STAR® guidelines for energy efficiency.

ENERGY STAR

CAUTION
• Leave a space around the unit for sufficient ventilation.
• Avoid installation in extremely hot or cold locations, or in an area that is exposed to direct sunlight or heating equipment.
• Keep the unit free from moisture, water, and dust.
• Do not let foreign objects in the unit.
• The ventilation should not be impeded by covering the ventilation openings with items, such as newspapers, table-cloths, curtains, etc.
• No naked flame sources, such as lighted candles, should be placed on the unit.
• Please be care the environmental aspects of battery disposal.
• The unit shall not be exposed to dripping or splashing for use.
• No objects filled with liquids, such as vases, shall be placed on the unit.
• Do not let insecticides, benzene, and thinner come in contact with the set.
• Never disassemble or modify the unit in any way.
■Notes on the AC power cord and the wall outlet.
• The unit is not disconnected from the AC power source(mains) as long as it is connected to the wall outlet, even if the unit has been turned off.
• To completely disconnect this product from the mains, disconnect the plug from the wall socket outlet.
• When setting up this product, make sure that the AC outlet you are using is easily acceptable.
• Disconnect the plug from the wall outlet when not using the unit for long periods of time.

CONTENTS

ENGLISH

System Connections

• Please be certain that this unit is unplugged from the AC outlet before making any connections.
• Since different components often have different terminal names, carefully read the operating instructions of the component connected.
• Be sure to observe the color coding when connecting audio, video and speaker cords.
• Make connections firmly and correctly. If not, it can cause loss of sound, noise or damage to the receiver.
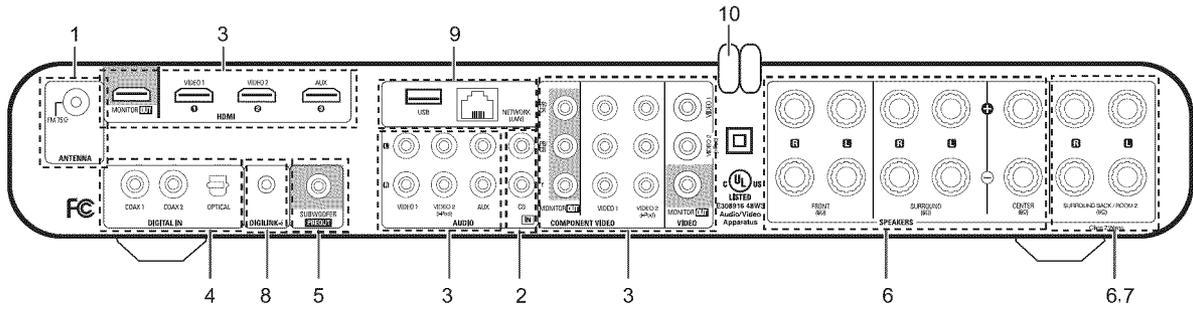
1. CONNECTING ANTENNAS

FM Indoor Antenna

FM Outdoor Antenna

• Change the position of the FM indoor antenna until you get the best reception of your favorite FM stations.

• A 75Ω outdoor FM antenna may be used to further improve the reception. Disconnect the indoor antenna before replacing it with the outdoor one.

2. CONNECTING AUDIO COMPONENT

• The CD IN jacks can be connected to a CD player, tape deck, etc.

L AUDIO
R OUT

CD CD player

CD
IN
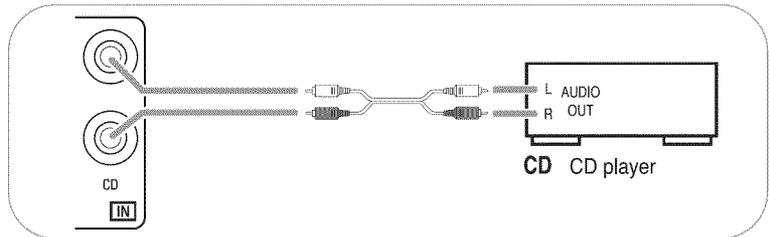
3. CONNECTING VIDEO COMPONENTS

• The jacks of VIDEO 1/VIDEO 2 can be connected to a BD player, DVD player, cable TV tuner, satellite system, etc.
• Connect the jacks of VIDEO 2 to the video component in the same way.
• The jacks of AUX can be connected to an additional video component without analog video jacks.
  The AUDIO jacks of AUX can be also connected to an additional audio component such as a CD player, tape deck, etc.
• There are two types of video jacks (COMPONENT, (composite) VIDEO) for analog video connections and the HDMI
  connectors for digital video and audio connections.
  Connect them to the corresponding video jacks according to their capability.
• For your reference, the excellence in picture quality is as follows : "HDMI" > "COMPONENT" > "(composite) VIDEO" .
• When making COMPONENT VIDEO connections, connect "Y" to "Y", "PB/CB" to "CB"(or "B-Y", "PB") and "PR/CR" to "CR"(or
  "R-Y", "PR").
• When viewing video program sources through MONITOR OUT jack, you must use the same type of video jacks that you did
  connect to video playback components such as BD player, DVD player, cable TV tuner, etc.
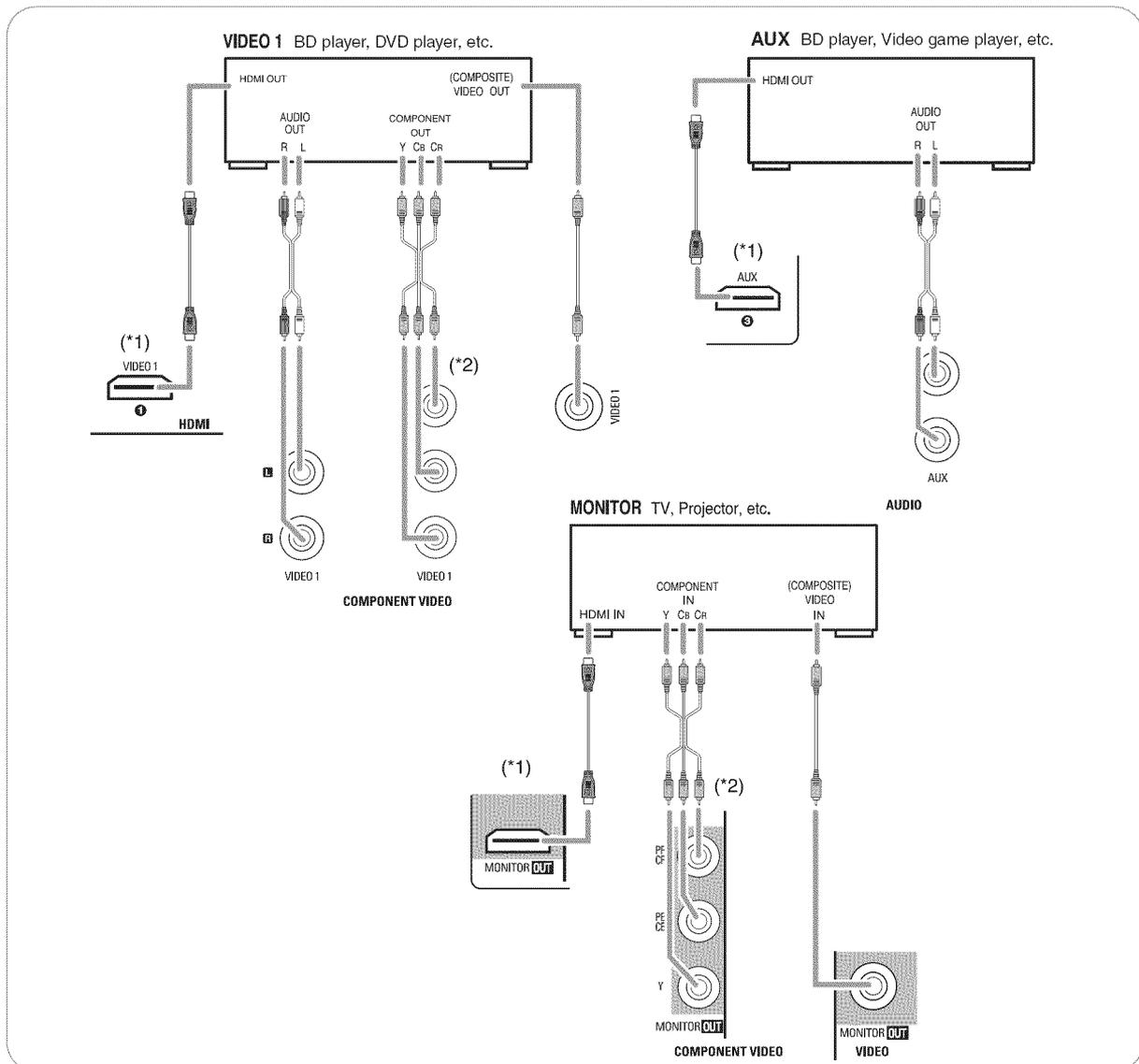
Notes :
• You can connect Apple iPod to this receiver via Sherwood iPod dock. If Sherwood iPod dock is connected to DIGILINK-i jack
  for system control, you should connect its video and audio jacks to the "VIDEO 2" jacks of this receiver. Because, when you
  control your iPod with the unit's remote control, the VIDEO 2/iPod is automatically selected as an input source and the
  corresponding operation is performed.
• You can enjoy viewing internet video contents that the VuNow Pod delivers via either the HDMI (given priority) or the
  (composite) VIDEO MONITOR OUT only, not the COMPONENT MONITOR OUTs.

Continued

■HDMI (High Definition Multimedia Interface) connection : (*1)
• You can connect the source component (BD player, etc.) to the display component (TV, projector, etc.) through this receiver with using a commercially available HDMI cord.
• The HDMI connection can carry uncompressed digital video signals and digital audio signals.
• The HDMI video stream signals (video signals) are theoretically compatible with DVI-D. When connecting to a TV monitor, etc., equipped with DVI-D connector, it is possible to connect using a commercially available HDMI-DVI converter cord. Since the HDMI-to-DVI connection cannot carry any audio signals, set the "HDMI" to "AMP" to hear the HDMI digital audio signals on this receiver. (For details, refer to the "When selecting the "HDMI (HDMI Audio Out)" on page 25.)

■Copyright protection system
• This unit supports HDCP (High-bandwidth Digital Contents Protection), technology to protect copyright of digital video signals against illegal duplication. HDCP must also be supported on the components connected to this unit.
• This unit is HDMI Ver. 1.3 compatible.
• HDMI, the HDMI logo and High-Definition Multimedia Interface are trademarks or registered trademarks of HDMI licensing LLC.

■Notes :
• For stable signal transfer, we recommend using HDMI cords that are a maximum of 5 meters in length.
• Among the components that support HDMI, some components can control other components via the HDMI connector. However, this unit cannot be controlled by another component via the HDMI connector.
• The audio signals from the HDMI connector (including the sampling frequency and bit length) may be limited by the component that is connected.
• The video signals will not be output properly if a component incompatible with HDCP is connected.
• If the resolutions of the video signals which are output from the MONITOR OUTs and your monitor TV are not matched, the picture is not clear, natural or displayed. In this case, change the setting of the resolution on the source component (DVD player, etc.) to one which the monitor TV can handle. (For details, refer to the operating instructions of the source component.)
• When you want to enjoy only the picture on your TV, not the sound, you should set the "HDMI" to AMP not to output the digital audio signal from the HDMI MONITOR OUT of this receiver. (For details, refer to "When selecting the "HDMI (HDMI Audio Out)" on page 25.)

4. CONNECTING DIGITAL INS

• The OPTICAL and the COAXIAL DIGITAL OUTs of the components that are connected to this unit can be connected to these DIGITAL INs.
• When making the COAXIAL DIGITAL connection, be sure to use a 75 Ω COAXIAL cord, not a conventional AUDIO cord.

■Notes :
• Be sure to make either a OPTICAL or a COAXIAL DIGITAL connection on each component. (You don't need to do both.)

Component with COAXIAL DIGITAL OUT
Component with COAXIAL DIGITAL OUT
Component with OPTICAL DIGITAL OUT
COAX 1   COAX 2   OPTICAL
DIGITAL IN

• If you connect the DIGITAL INs to your components, you should assign the DIGITAL INs correctly. (For details, refer to "When CD, AUX, VIDEO 1, VIDEO 2("V2/IPOD") is selected as an input source" on page 20.)
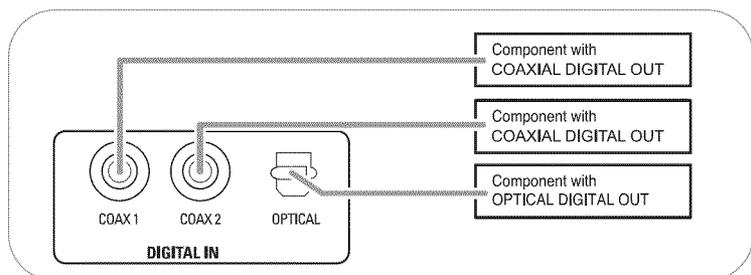
5. CONNECTING SUBWOOFER PRE OUT

• To emphasize the deep bass sounds, connect a powered subwoofer.

SUBWOOFER
PREOUT
Powered subwoofer
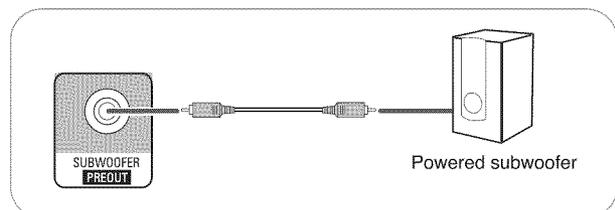
6. CONNECTING SPEAKERS

• Be sure to connect speakers firmly and correctly according to the channel(left and right) and the polarity (+ and -). If the connections are faulty, no sound will be heard from the speakers, and if the polarity of the speaker connection is incorrect, the sound will be unnatural and lack bass.
• When using only one surround back speaker, you should connect it to SURROUND BACK/ROOM2 LEFT channel.
• Because this receiver cannot drive the surround back speakers and the ROOM2 speakers simultaneously, you should assign their power amplifier correctly depending on how to use them. (For details, refer to "CONNECTING ROOM2 SPEAKERS" on page 9 and "When selecting the AMP ASSIGN" on page 48.)
• For installing the speakers, refer to "Speaker placement" on page 9.
• After installing the speakers, first adjust the speaker settings according to your environment and speaker layout. (For details, refer to "SETTING THE ROOM EQ" on page 49.)

Caution :
• Be sure to use the speakers with the impedance of 6 ohms or above.
• Do not let the bare speaker wires touch each other or any metal part of this unit. This could damage this unit and/or the speakers.
• Never touch the speaker terminals while the AC input cord is connected to the wall AC outlet. Doing so could result in electric shocks.
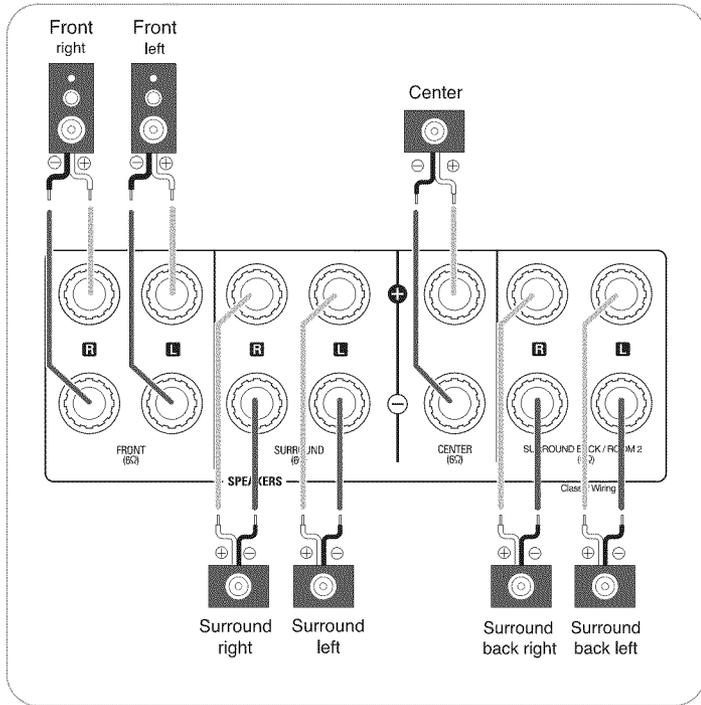
■Connecting speaker wire

1. Strip away approx. 10 mm (3/8 inch) of wire insulation, then twist the wire ends tight.	2. Loosen by turning the speaker terminal counter-clockwise.	3. Insert the bare part of the wire.	4. Tighten by turning it clockwise.
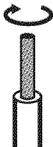
Speaker placement

Ideal speaker placement varies depending on the size of your room and the wall coverings, etc. The typical example of speaker placement and recommendations are as follows :

■Front left and right speakers and center speaker
• Place the front speakers with their front surfaces as flush with TV or monitor screen as possible.
• Place the center speaker between the front left and right speakers and no further from the listening position than the front speakers.
• Place each speaker so that sound is aimed at the location of the listener's ears when at the main listening position.

■Surround left and right speakers
• Place the surround speakers approximately 1 meter (40 inches) above the ear level of a seated listener on the direct left and right of them or slightly behind.

■Surround back left and right speakers
• Place the surround back speakers at the back facing the front at a narrower distance than front speakers.
• When using a single surround back speaker, place it at the rear center facing the front at a slightly higher position (0 to 20 cm) than the surround speakers.
• We recommend installing the surround back speaker(s) at a slightly downward facing angle. This effectively prevents the surround back channel signals from reflecting off the TV or screen at the front center, resulting in interference and making the sense of movement from the front to the back less sharp.

■Subwoofer
• The subwoofer reproduces powerful deep bass sounds. Place a subwoofer anywhere in the front as desired.

■Notes :
• When using a conventional TV, to avoid interference with the TV picture, use only magnetically shielded front left and right and center speakers.
• To obtain the best surround effects, the speakers except the subwoofer should be full range speakers.

1. TV or Screen
2. Front left speaker
3. Subwoofer
4. Center speaker
5. Front right speaker
6. Surround left speaker
7. Surround right speaker
8. Surround back left speaker
9. Surround back right speaker
10. Surround center speaker
11. Listening position
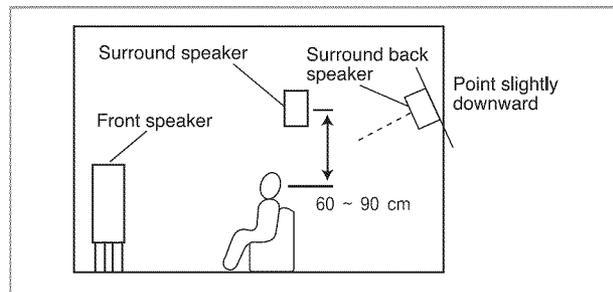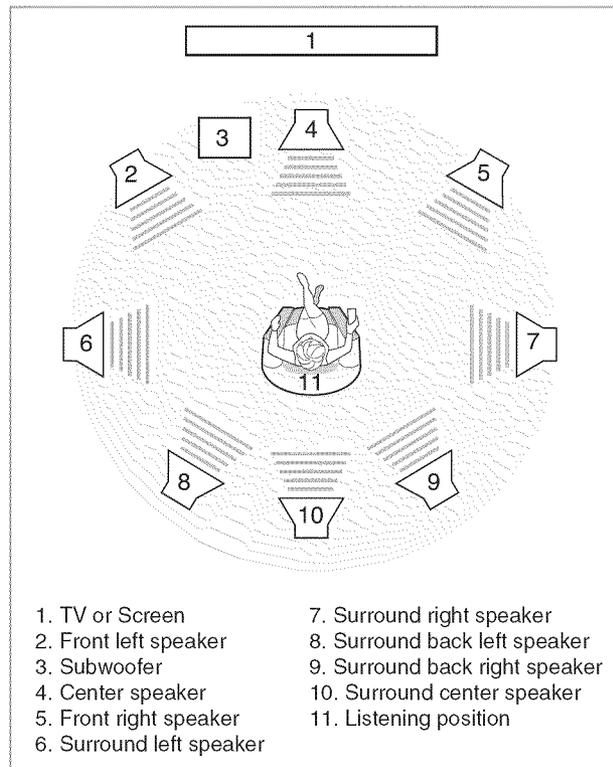
7. CONNECTING ROOM2 SPEAKERS

• ROOM2 playback feature allows you to play a different program source in another room as well as one source in the main room at the same time.
• For ROOM2 playback, connect the ROOM2 speakers to the SURROUND BACK/ROOM2 terminals.
• Because this receiver cannot drive the surround back speakers and the ROOM2 speakers simultaneously, you should assign their power amplifier correctly depending on how to use them. (For details, refer to "When selecting the AMP ASSIGN" on page 48.)

Main room   Another room (Room2)
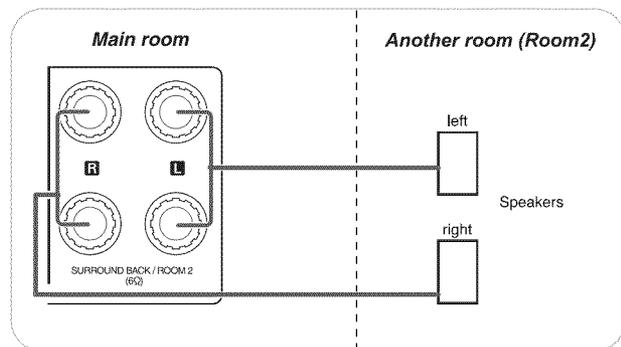
8. CONNECTING FOR SYSTEM CONTROL

• Connect this jack to the DIGILINK-i jack of Sherwood iPod dock that allows you to control the iPod with the unit's remote control.

Sherwood iPod dock
DIGILINK-i
DIGILINK-i
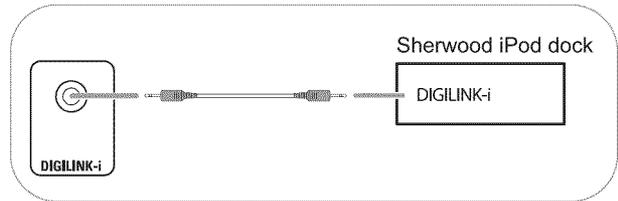
9. CONNECTING TO NETWORK

When you connect this receiver to a home network, you can enjoy viewing a variety of video contents and listening to internet radio audio that the built-in VuNow Pod delivers via broadband without the use of a personal computer (PC).
• There are two ways to connect to a home network as illustrated below :

■Wired Connection
• Connect the LAN connector of this receiver to your internet source.

NETWORK (LAN)

LAN

Internet   Modem   Broadband router   PC
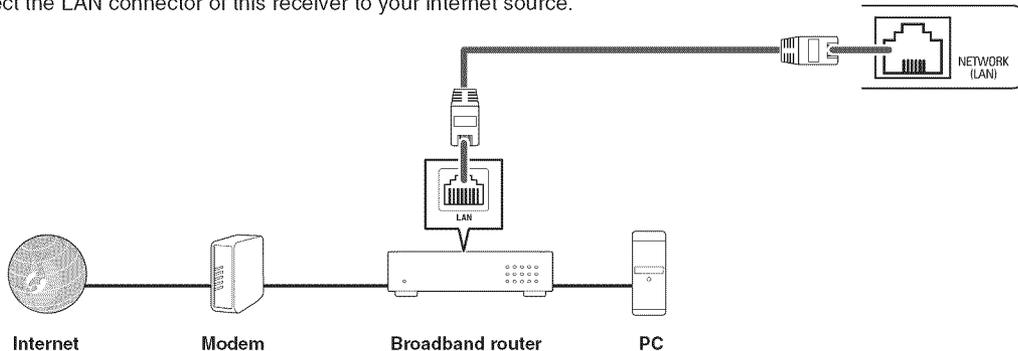
■Wireless Connection
• Connect the supplied VuNow USB Wireless adapter to the USB connector and install a broadband router supporting wireless LAN.
• The USB memory device can be also connected to the USB connector to play video or music files, etc. or to download the rented videos. (For details on connecting USB memory device, refer to "USB CONNECTOR" on page 12.)

USB

Internet   Modem   Broadband router   PC
                                  Supporting wireless LAN
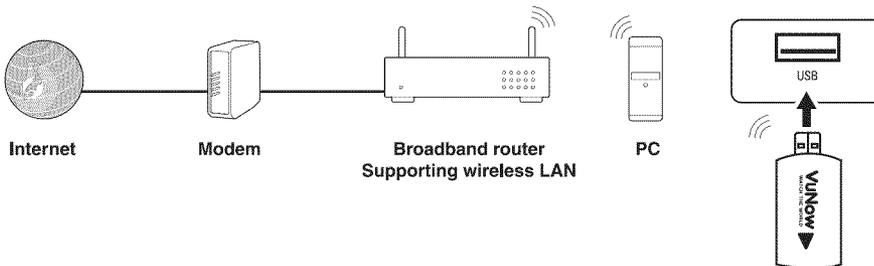
■Notes :
• Be sure to make either wired connection or wireless connection. (You don't need to do both.)
• After making a broadband internet connection, you should set the communication setting. (For details, refer to "Network" on page 42.)
• When using a broadband internet connection, a contract with an internet service provider is required. For more information, contact your nearest internet service provider.
• Refer to the operating instructions of the equipment because the connected equipment and connection method may differ depending on your internet environment.
• Use a LAN cable/router supporting 10 BASE-T/100 BASE-TX.
• A broadband speed of 768 kbps or more is recommended.
• Some LAN cables are easily affected by noise.
  We recommend using a shielded type cable.

10. AC INPUT CORD

• Plug this cord into a wall AC outlet.

Front Panel Controls

1. POWER switch
2. POWER ON/STANDBY button/indicator
3. SPEAKER button
4. VIDEO INPUT SELECTOR button
5. AUDIO INPUT SELECTOR button
6. SURROUND MODE UP/DOWN(〉/〈) buttons
7. STEREO button
8. VOLUME UP/DOWN (+/-) buttons
9. HEADPHONE jack
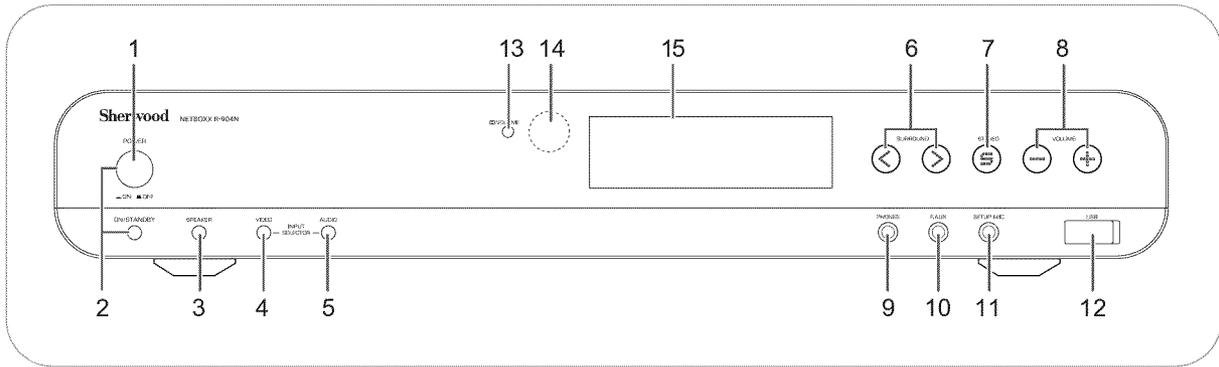
10. F. AUX jack
  For details, see next page.
11. SETUP MIC jack
  For details, see next page.
12. USB connector
  For details, see next page
13. DOLBY VOLUME indicator
14. REMOTE SENSOR
15. FLUORESCENT DISPLAY
  For details, see below.

■FLUORESCENT DISPLAY
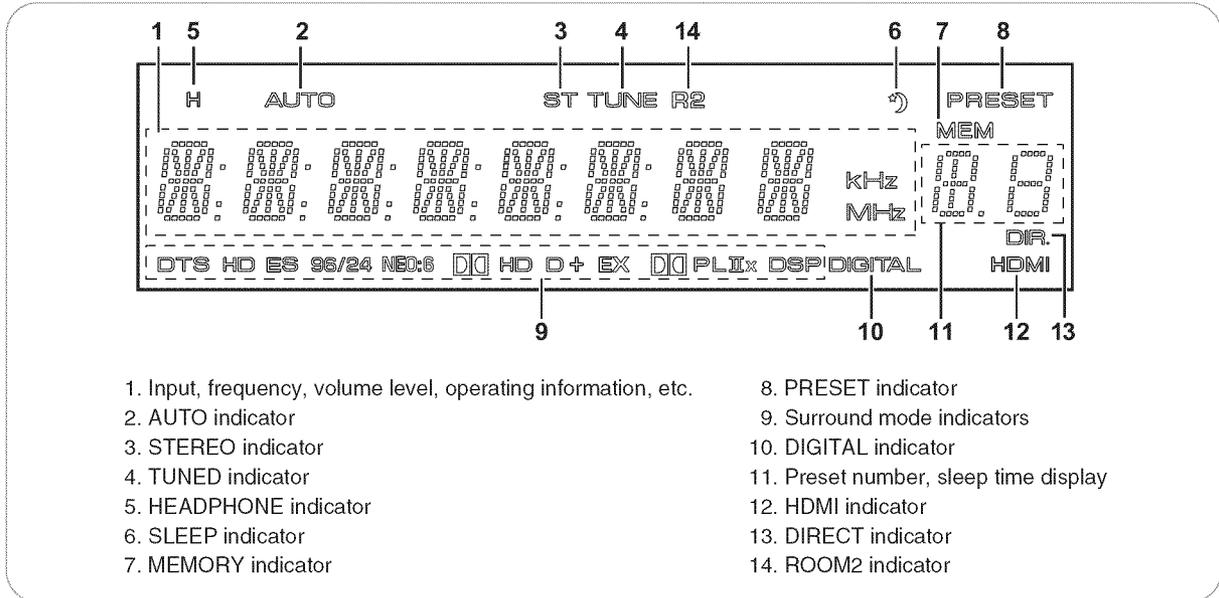
1. Input, frequency, volume level, operating information, etc.
2. AUTO indicator
3. STEREO indicator
4. TUNED indicator
5. HEADPHONE indicator
6. SLEEP indicator
7. MEMORY indicator

8. PRESET indicator
9. Surround mode indicators
10. DIGITAL indicator
11. Preset number, sleep time display
12. HDMI indicator
13. DIRECT indicator
14. ROOM2 indicator

ENGLISH

■ FRONT AUX JACK

• The FRONT AUX jack can be connected to additional audio components such as an MP3 player, etc.

■ **Note :**
• When connecting this jack to an MP3 player, etc., you should use the stereo mini cord, not a mono mini cord.

F.AUX

MP3 player, etc.

AUDIO
OUT
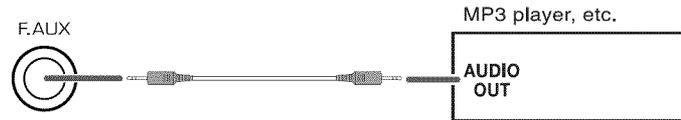
■ SETUP MIC JACK

• To use Room EQ setup function, connect the supplied microphone to the SETUP MIC jack. (For details, refer to "SETTING THE ROOM EQ" on page 49.)

■ **Notes:**
• Because the microphone for Room EQ setup is designed for use with this receiver, do not use a microphone other than the one supplied with this receiver.
• After you have completed the Room EQ setup procedure, disconnect the microphone.

SETUP MIC

Microphone
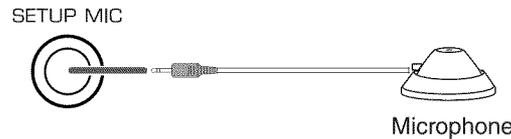
■ USB CONNECTOR

• This connector can be connected to a USB memory device to play video or music files, etc. or to download the rented videos from VuNow service. (For details, refer to "ENJOYING INTERNET VIDEOS" on page 31.)
• The supplied VuNow USB wireless adapter can be also connected to the USB connector for broadband internet connection. (For details on connecting the supplied VuNow USB wireless adapter, refer to "CONNECTING TO NETWORK" on page 10.)

USB

■ **Notes:**
• Before connecting a USB memory device, open the cover.
• Do not use a USB extension cable when connecting a USB memory device to this connector.
• After playing files or downloading the rented videos, remove the USB memory device performing "Eject USB Disk" procedure on page 34.)
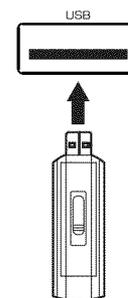
Universal Remote Controls

This universal remote control can operate not only this receiver but also most popular brands of audio and video components such as iPod docks, CD players, tape decks, TVs, BD/DVD players, satellite receivers, cable boxes, etc.
• To operate 7 components other than this receiver, you should enter the setup code for each component.
  (For details, refer to "USING FUNCTIONS OF REMOTE CONTROL" on page 16.)
• The numbered buttons on the remote control have different functions in different device modes. For details, refer to "FUNCTION TABLE of the NUMBERED BUTTONS" on the next page.

POWER ON button **1**

ROOM2 VOLUME
UP/DOWN(∧/∨) buttons
ROOM2 INPUT
SELECTOR buttons
MUTE button **4**

5

8
9

TUNING UP/DOWN(+/-) buttons **12**

DIMMER button **14**

DISPLAY button **17**

AUDIO ASSIGN button **19**
SURROUND MODE **20**
UP/DOWN (〉/〈) buttons **22**
23

NUMERIC (0~9, +10)/
INPUT SELECTOR buttons **24**
To select the desired input
source of TUNER~VuNow

LED

2 STANDBY button

DEVICE buttons
To operate the desired component with this remote control, first select the corresponding DEVICE button.

3 ROOM2 button

6 VOLUME UP/DOWN(+/-) buttons

7
11
10

13 PRESET UP/DOWN(+/-) buttons

15 SETUP button

16 CURSOR CONTROL, ENTER buttons

18 RETURN button

21 STEREO button

SOUND PARAMETER button

25 SLEEP button

MACRO(M1~M3) buttons
To operate a macro function, press the corresponding MACRO button.

Sherwood

■FUNCTION TABLE of the NUMBERED BUTTONS.

Device to be controlled / Button symbol	DOCK (for iPod Dock)	CD (for VCR)	AUX (for CD player)	BD (for Tape deck)	TV (for BD/DVD player)	SAT (for TV)	CBL (for Satellite receiver)	(for Cable box)
1 POWER ON	—	POWER ON	POWER ON	—	POWER ON	POWER ON	POWER ON	POWER ON
2 STANDBY	—	STANDBY (POWER OFF)	STANDBY (POWER OFF)	—	STANDBY (POWER OFF)	STANDBY (POWER OFF)	STANDBY (POWER OFF)	STANDBY (POWER OFF)
3 ROOM2 RDM	RANDOM	—	—	—	—	—	—	—
4 MUTE	—	MUTE	—	—	—	MUTE	MUTE	MUTE
5 CH ∧ / ALBUM ZOOM / CH ∨	ALBUM UP/DOWN (∧/∨)	CHANNEL UP/DOWN (∧/∨)	—	—	—	CHANNEL UP/DOWN (∧/∨)	CHANNEL UP/DOWN (∧/∨)	CHANNEL UP/DOWN (∧/∨)
6 + VOLUME −	—	VOLUME UP/DOWN (+/-)	—	—	—	VOLUME UP/DOWN (+/-)	VOLUME UP/DOWN (+/-)	VOLUME UP/DOWN (+/-)
7 CH. LEVEL T/V	—	INPUT SELECTOR	—	—	INPUT SELECTOR	INPUT SELECTOR	INPUT SELECTOR	INPUT SELECTOR
8 ●	—	RECORD	—	RECORD	—	—	—	—
9 ◀/❚❚	—	PAUSE	PAUSE	PAUSE	PAUSE	—	—	—
10 ▶	PLAY/PAUSE	PLAY	PLAY	PLAY	PLAY	—	—	—
11 ■	—	STOP	STOP	STOP	STOP	—	—	—
12 − TUNE + ◀◀ ▶▶	—	REWIND/FAST FORWARD (◀◀ / ▶▶)	—	REWIND /FAST FORWARD (◀◀ / ▶▶)	REVERSE/FORWARD SEARCH (◀◀ / ▶▶)	—	—	—
13 − PRESET + ❙◀◀ ▶▶❙	REVERSE/FORWARD SKIP (❙◀◀ / ▶▶❙)	—	REVERSE/FORWARD SKIP (❙◀◀ / ▶▶❙)	—	REVERSE/FORWARD SKIP (❙◀◀ / ▶▶❙)	—	—	—
14 DIMMER DISC MENU	MENU	—	—	—	DISC MENU	—	—	—
15 SETUP HOME MENU	—	—	—	—	HOME MENU	—	—	—
16 CURSOR CONTROL	CURSOR UP/DOWN	—	—	—	CURSOR UP/DOWN	—	—	—
16 ENTER	ENTER	—	—	—	ENTER	—	—	—
17 DISPLAY	—	—	—	—	DISPLAY	—	—	—
18 RETURN	—	—	—	—	RETURN	—	—	—
19 AUDIO ASSIGN Q RPT	REPEAT	—	—	—	REPEAT	—	—	—
20 − SURROUND − < > PLAY LIST	PLAY LIST UP/DOWN(>/<)	—	—	—	PLAY LIST UP/DOWN(>/<)	—	—	—
21 STEREO PLAY M.	—	—	—	—	PLAY MODE	—	—	—
22 AUDIO	—	—	—	—	AUDIO	—	—	—
23 SUBTITLE	—	—	—	—	SUBTITLE	—	—	—
24 VuNow ▶ 0 ~ 9 , +10	—	NUMERIC	NUMERIC	—	NUMERIC	NUMERIC	NUMERIC	NUMERIC
25 SLEEP DOCK M.	DOCK MODE	—	—	—	—	—	—	—

■Notes :
- Some functions for each component may not be available or may work differently.
- Depending on other kinds of components that are available for each DEVICE button, some functions may not be available or may work differently, too.
- For details about functions, refer to the operating instructions of each component.

OPERATING COMPONENTS WITH REMOTE CONTROL

1. Enter the setup code for each component other than this receiver. For details, refer to "Entering a setup code" on page 16.

2. Turn on the component you want to operate.

3. Press the DEVICE button on the remote control corresponding to the component you wish to operate.

4. Aim the remote control at the REMOTE SENSOR of the component you wish to control and press the button corresponding to the operation you want.

• In such a case that some components do not have the REMOTE SENSOR which receives the remote signals, this remote control cannot operate them.

LOADING BATTERIES

• When the remote control does not operate, the old batteries should be replaced. In this case, load new batteries within several minutes after removing old batteries.
• If the batteries are removed or have been exhausted for a longer period of time, memorized contents will be cleared. Should this happen, you should memorize them again.

1. Remove the cover.
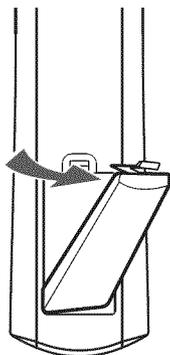
REMOTE CONTROL OPERATION RANGE

• Use the remote control within a range of about 7 meters (23 feet) and angles of up to 30 degrees aiming at the remote sensor.

ENGLISH
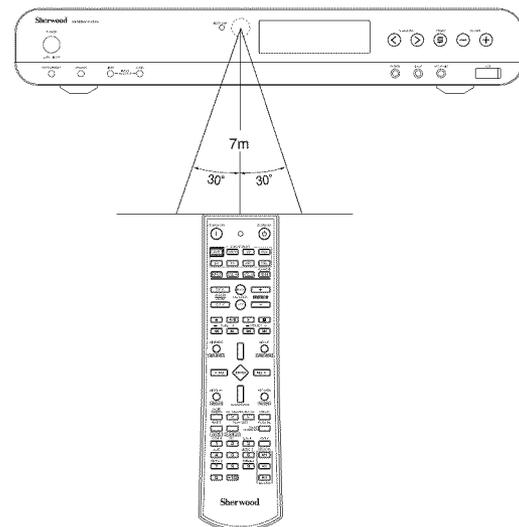
2. Load two batteries ("AAA" size, 1.5V) matching the polarity.
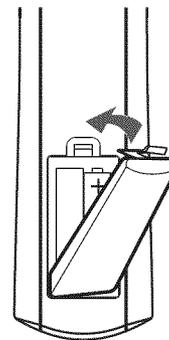
• Remove the batteries when they are not used for a long time.
• Do not use the rechargeable batteries (Ni-Cd type).
• Be sure to use alkaline batteries.

15

USING FUNCTIONS OF REMOTE CONTROL

• This remote control can control up to 8 different components.
• Before operating audio and video components other than this receiver with using this remote control, the setup code for each component should be entered.
• For system remote control operation, "000" was stored previously in the memory of the device button "DOCK" for Sherwood iPod dock, "CD" for Sherwood CD player, "BD" for Sherwood BD/DVD player and "TV" for Sherwood TV respectively as its factory setup code. So, you don't need to enter its code for each Sherwood component except in such a case that its code does not work.

Entering a setup code

1. Turn on the component you want to operate.

2. Find the setup codes according to the type and the brand name of your component, referring to "Setup Code Table" on page 57.

3. Press and hold down both the ENTER button and the desired one of the DEVICE buttons for more than 1 seconds.
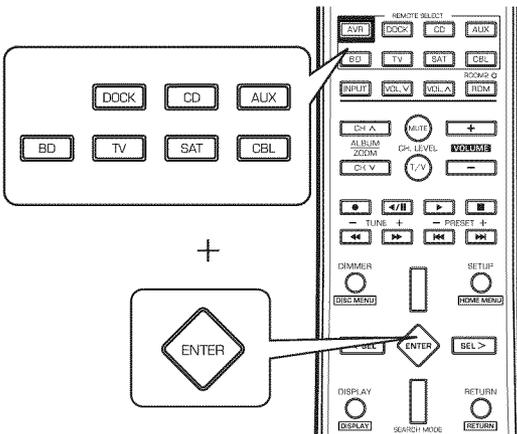
• The LED will flicker once.

■Note :
• The "AVR" button is unavailable for the audio components other than this receiver.

4. Enter a 3 digit code, aiming the remote control at the remote sensor on the component.

Example: When entering "001".
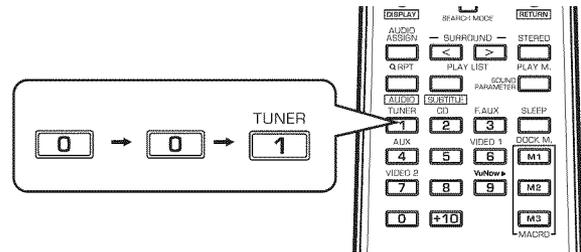
• If entering is performed successfully, the LED will flicker twice.
• To be sure that the setup code is correct, press the POWER ON (or STANDBY) button. If your component is turned off, the setup code is correct.
• When your component is not turned off, repeat the above steps 2 to 4, trying each code for your component until you find one that works.

■Notes:
• If the LED did not flicker twice, then repeat the above steps 3 to 4 and try entering the same code again.
• Manufacturers may use different setup codes for the same product category. For that reason, it is important that you check to see if the code you have entered operates as many controls as possible. If only a few functions operate, check to see if another code will work with more buttons.

5. Repeat the above steps 1 to 4 for each of your components.

ENGLISH

Using a punch-through function

This remote control may be programmed to operate either the AUDIO volume punch-through or the TV volume and/or TV channel punch-through in conjunction with any of the 8 components controlled by this remote control.
For example, since this receiver will likely be used as the sound system while watching TV, you may want to adjust this receiver's volume although this remote control is set to control the TV.
• When programming this remote control for the AUDIO volume punch-through, press and hold down both "AVR" button and "VOLUME +" button for more than 1 second.
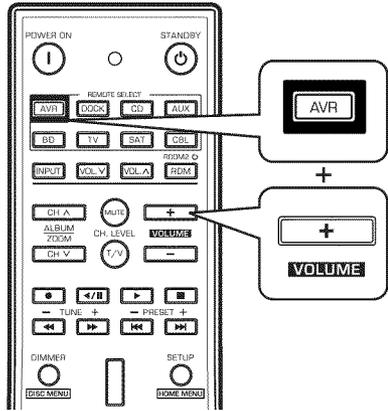
• If programming is performed successfully, the SET LED will flicker twice.
• When you want either TV volume or TV channel punch-through, press and hold down both "TV" button and either "VOLUME +" or "CH ∧" button for more than 1 second.

■Note :
• If you use one of AUDIO and TV volume punch-through functions, you cannot use the other.

■Removing a punch-through function
• When removing the AUDIO volume punch-through, press and hold down both "AVR" button and "VOLUME -" button for more than 1 second.
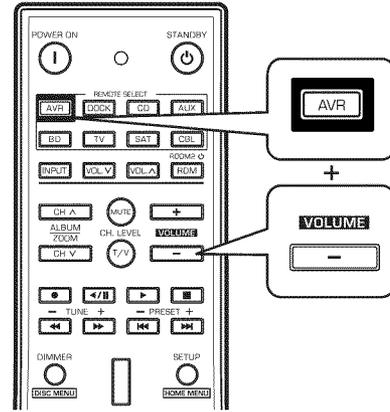
• If removing is performed successfully, the LED will flicker twice.
• When you want to remove either TV volume or TV channel punch-through, press and hold down both "TV" button and either "VOLUME -" or "CH ∨" button for more than 1 second.

■Removing all punch-through functions
Press and hold down both "AVR" button and "AUDIO ASSIGN" button for more than 1 second.
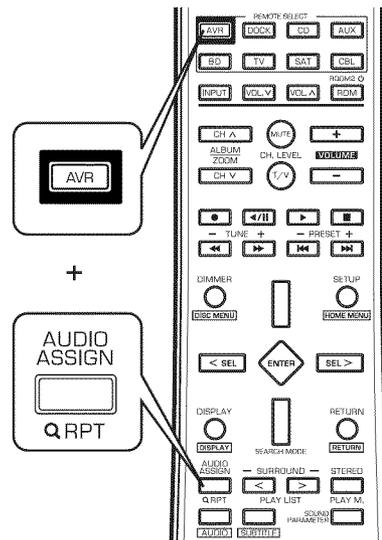
• If removing all punch-through functions is performed successfully, the LED will flicker twice.

ENGLISH

17

Programming a macro function

• The macro function enables you to program a series of button operations(up to 10) on this remote control into a single button.
• You can store up to three separate macro command sequences into "M1", "M2" and "M3" buttons.

1. Press and hold down both "ENTER" button and one of three NUMERIC buttons ("1" ~ "3") corresponding to "M1"~"M3" buttons for more than 1 second.

Example: When programming a series of button operations into "M1" button.
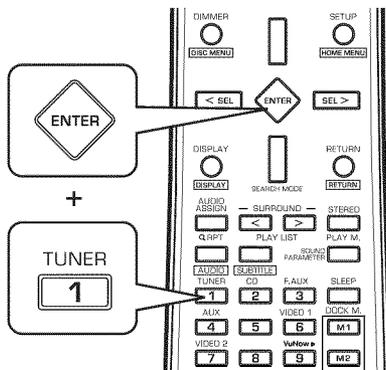
• If the macro mode is entered, the LED will flicker once.

2. Press the operation buttons you want to program in order.

■**Note :**
You should press the corresponding DEVICE buttons before pressing each operation button.
Example: When playing a BD on the BD player connected to VIDEO 2 jacks of this receiver.
①. Press "AVR" button to control this receiver.
②. Press "POWER ON" button to turn this receiver on.
③. Press "AVR" button to control this receiver.
④. Press "VIDEO 2(7)" button to select the desired input source.
⑤. Press "BD" button to control the BD player.
⑥. Press "POWER ON" button to turn the BD player on.
⑦. Press "BD" button to control the BD player.
⑧. Press "▶" button to start playback.
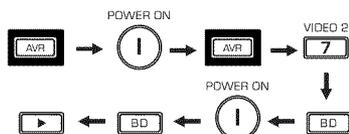
3. Press "ENTER" button.
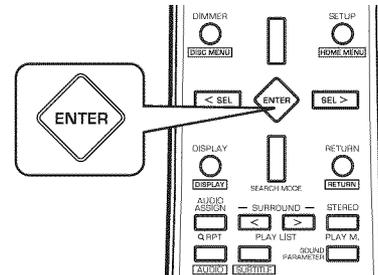
• If the programming is performed successfully, the LED will flicker twice.

■**To remove a macro program**
• When removing a macro program, perform the above steps 1 and 3, but ignore the step 2.

■**To change a macro program**
• When a new macro program is stored into a MACRO button with performing the above steps 1 to 3, the previous macro program is cleared from the memory of the MACRO button.

Operating a macro function

• Aim the remote control at the REMOTE SENSORs of the components to be controlled and press the MACRO button you want.
Example: When pressing "M1" button.
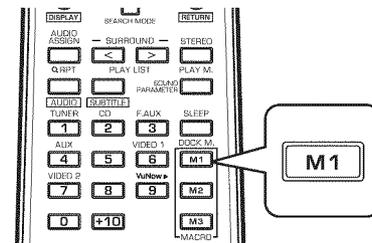
■**Notes:**
• The codes programmed into a MACRO button will be transmitted at an interval of 0.5 seconds. However, some components may not be able to complete one operation in 0.5 seconds and may miss the next code. In this case, the macro function cannot control the corresponding components correctly.
• Be sure to use the remote control within the remote control operation range of the components.
• Depending on the operation status of the components, etc., the macro function cannot control the corresponding components correctly.

18

Operations

■Notes:
• Before operating this receiver with the supplied remote control, refer to "Universal Remote Controls" on page 13 for details about operation.
• Before operating this receiver, first set this unit as desired for optimum performance, doing the system setup procedures. (For details, refer to "System Setup" on page 46.)

LISTENING TO A PROGRAM SOURCE

Before operation

• Enter the standby mode.
• The POWER ON/STANDBY indicator lights up amber. This means that the receiver is not disconnected from the AC mains and a small amount of current is retained to support the operation readiness.
• To switch the power off, push the POWER switch again.
Then the power is cut off and the POWER ON/STANDBY indicator goes off.
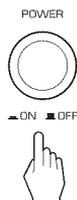
POWER

1. In the standby mode, turn the power on.

ON/STANDBY   POWER ON   STANDBY
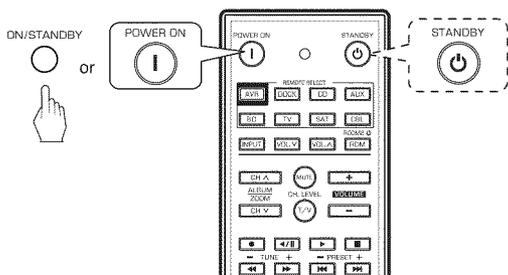
• Each time the POWER ON/STANDBY button on the front panel is pressed, the receiver is turned on to enter the operating mode (the POWER ON/STANDBY indicator lights up blue) or off to enter the standby mode (the POWER ON/STANDBY indicator lights up amber).
• On the remote control, press the POWER ON button to enter the operating mode or press the STANDBY button to enter the standby mode.

2. Switch the speakers on.

• Then "SPK ON" is displayed for several seconds and the sound can be heard from the speakers connected to the speaker terminals.
• When using the headphones for private listening, press the SPEAKER button again to switch the speakers off. Then "SPK OFF" is displayed for several seconds ("H" indicator lights up.)

SPEAKER

3. Select the desired input source.

VIDEO — INPUT SELECTOR — AUDIO   or
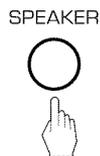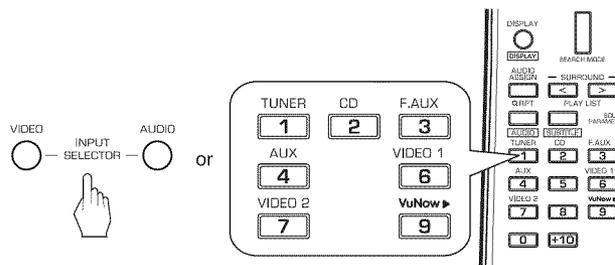
• Each time the "VIDEO" on the front panel is pressed, the input source changes as follows:
  → VIDEO 1 → V2/IPOD → VuNow —

• Each time the "AUDIO" button is pressed, the input source changes as follows:
  → TUNER → CD → AUX → F.AUX —
  (Frequency display)

• Each time the "TUNER" button on the remote control is pressed, the band changes as follows:
  → FM ST → FM MONO —

• To enjoy VuNow, refer to "ENJOYING INTERNET VIDEOS" on page 31.

■Note:
• When the VuNow is selected, depending on whether the HDMI MONITOR OUT is connected or not, the video signals are automatically output from either the HDMI MONITOR OUT (given priority) or the (composite) VIDEO MONITOR OUT only.

ENGLISH

19

When CD, AUX, VIDEO 1, VIDEO 2 ("V2/IPOD") is selected as an input source

4. Select the digital or analog input connected as desired.
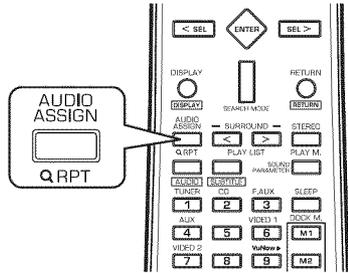
• Each time this button is pressed, the corresponding input is selected as follows :

c(oaxial)1 → c2 → o1 → H(HDMI audio)* → A(nalog)

* : When CD is selected, the HDMI audio input cannot be selected.

■**Notes:**
• When VuNow, tuner, F.AUX is selected as an input source, the digital input cannot be selected.
• When the selected digital input or HDMI input is not connected, the "DIGITAL" or "HDMI" indicator flickers and the analog input is automatically selected.

5. Operate the selected component for playback.

• When playing back the program sources with surround sound, refer to "ENJOYING SURROUND SOUND" on page 23.

6. Adjust the (overall) volume.
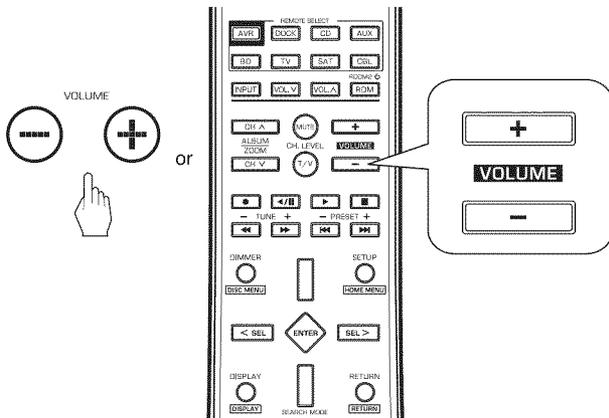
■**Note:**
• For safe amplifier operation, the maximum level may vary depending on the program source, surround mode, etc.

Muting the sound
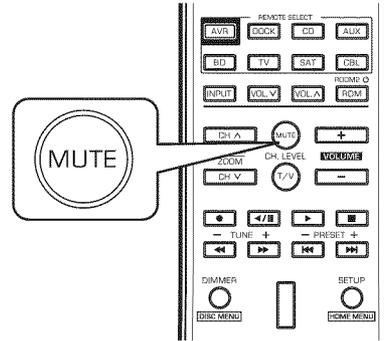
• "MUTE" is displayed.
• To resume the previous sound level, press it again.

Listening with headphones
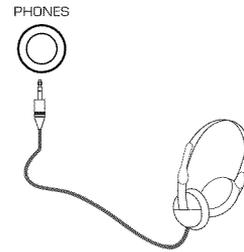
PHONES

• Be sure to switch speakers off.

■**Note:**
• Be careful not to set the volume too high when using headphones.

20

SURROUND SOUND

• This receiver incorporates a sophisticated Digital Signal Processor that allows you to create optimum sound quality and sound atmosphere in your personal Home Theater.

Surround modes

■DTS Digital Surround
DTS Digital Surround(also called simply DTS) supports up to 5.1 discrete channels and uses less compression for high fidelity reproduction. Use it with DVDs and CDs bearing the DTS logo.

■*DTS-ES™ Discrete 6.1*
This is a 6.1 channel discrete digital audio format adding a surround back channel to the DTS digital surround sound. The seven totally separate audio channels provide better spatial imaging and 360 degrees sound localization, perfect for sounds that pan across the surround channels. Use it with DVDs bearing the DTS-ES logo, especially those with a DTS-ES Discrete sound track.

■*DTS - ES™ Matrix 6.1*
This is a 6.1 channel discrete digital audio format inserting a surround back channel to the DTS digital surround sound through matrix encoding. Use it with DVDs bearing the DTS-ES logo.

■DTS Neo:6™ surround
DTS Neo:6 is a matrix decoding technology for archieving 7.1 channel surround playback.

■DTS 96/24
This is high resolution DTS with a 96 kHz sampling rate and 24 bit resolution, providing superior fidelity. Use it with DVDs bearing the DTS 96/24 logo.

■DTS-HD High Resolution Audio
Developed for use with HDTV, including the new video disc formats Blu-ray and HD DVD, this is the latest multi-channel audio format from DTS. It supports up to 7.1 channels with 96kHz/24 bit sampling rate and signal resolution.

■DTS-HD Master Audio
Designed to take full advantage of the additional storage space offered by the new Blu-ray and HD DVD disc formats, this new DTS format offers up to 7.1 discrete channels of uncompressed digital audio with 96 kHz/24 bit sampling rate and signal resolution.

Manufactured under license under U.S. Patent #'s: 5,451,942; 5,956,674; 5,974,380; 5,978,762; 6,226,616; 6,487,535; 7,212,872; 7,333,929;,7,392,195;7,272,567 & other U.S. and worldwide patents issued & pending.
DTS is a registered trademark and the DTS logos, Symbol, DTS-HD and DTS-HD Master Audio are trademarks of DTS, Inc.
© 1996-2008 DTS, Inc. All Rights Reserved.

■Dolby Digital
Dolby Digital is the multi-channel digital signal format developed by Dolby Laboratories. Discs bearing the Dolby Digital logo includes the recording of up to 5.1 channels of digital signals. This will put you right in the middle of the action, just like being in a movie theater or concert hall.

■Dolby Digital EX
This mode expands 5.1-channel sources for 6.1/7.1 channel playback. It's especially suited to Dolby Digital EX soundtracks that include a matrix-encoded surround back channel. The additional channel adds an extra dimension and provides an enveloping surround sound experience, perfect for rotating and fly-by sound effects.

■Dolby Digital Plus
Developed for use with HDTV, including the new video disc formats Blu-ray and HD DVD, this is the latest multichannel audio format from Dolby. It supports up to 7.1 channels with 48 kHz/24-bit sampling rate and signal resolution.

■Dolby TrueHD
Designed to take full advantage of the additional storage space offered by the new Blu-ray and HD DVD disc formats, this new Dolby format offers up to 7.1 discrete channels of lossless audio performance with 96 kHz/24 bit sampling rate and signal resolution.

■Dolby Pro Logic IIx surround
This mode expands any 2-channel source for 7.1-channel playback. It provides a very natural and seamless surround sound experience that fully envelopes the listener. As well as music and movies, video games can also benefit from the dramatic spatial effects and vivid imaging. It includes "Dolby Pro Logic IIx Movie" suited for playing movies, "Dolby Pro Logic IIx Music" suited for playing music and "Dolby Pro Logic IIx Game" suited for playing games.

■Dolby Pro Logic II surround
If you are not using any surround back speakers, Dolby Pro Logic II surround will be used instead of Dolby Pro Logic IIx surround. It includes Dolby Pro Logic II Movie, Dolby Pro Logic II Music and Dolby Pro Logic II Game like Dolby Pro Logic IIx surround.

■Dolby Pro Logic
This mode expands any 2-channel source(, including Dolby Surround source) for 4 channel (front left, center, front right and surround) playback. The surround channel is monaural, but is played through two surround speakers.

Manufactured under license from Dolby Laboratories.
Dolby and the double-D symbol are registered trademarks of Dolby Laboratories.

ENGLISH

• The following modes apply conventional 2-channel signals such as digital PCM or analog stereo signals to high performance Digital Signal Processor to recreate sound fields artificially. Select one of the 7 provided surround modes according to the program source you want to play.

■Movie
This mode provides the effect of being in a movie theater when watching a action movies with dynamic soundtracks.

■Drama
This mode is suitable for movies with lots of dialog.

■Game
This mode is suitable for video games.

■Stadium
This mode provides the expansive sound field to achieve the true stadium effect when watching baseball or soccer games.

■Classic
This mode provides the acoustic effects of a large concert hall for classical music.

■Hall
This mode provides the ambience of a concert hall for rock or pop music.

■MULTI CH Stereo
This mode is for enjoying stereo sound from all speakers.

For your reference, the sound from each channel can be reproduced according to the surround modes as follows:

Modes \ Channels	FRONT L/R	CENTER	SURROUND L/R	SURROUND BACK L/R	SUBWOOFER
DTS-HD HIGH RESOLUTION AUDIO/MASTER AUDIO	O	O	O	O/—	O
DTS, DTS 96/24	O	O	O	—	O
DTS ES DISCRETE/MATRIX	O	O	O	O	O
DTS Neo: 6	O	O	O	O	—(*)
DOLBY DIGITAL PLUS / DOLBY TRUEHD	O	O	O	O/—	O
DOLBY DIGITAL	O	O	O	—	O
DOLBY DIGITAL EX	O	O	O	O	O
DOLBY PRO LOGIC IIx MOVIE/MUSIC/GAME	O	O	O	O	O
DOLBY PRO LOGIC II MOVIE/MUSIC/GAME, DOLBY PRO LOGIC	O	O	O	—	O
Other Surrounds	O	O	O	O	—(*)
STEREO	O	—	—	—	—(*)

(*): Depending on the subwoofer setting, the sound from the subwoofer channel may be reproduced.

• Depending on the speaker settings and the number of the encoded channels, etc., the sound from the corresponding channels cannot be reproduced.(For details, refer to "SETTING THE ROOM EQ" on page 50 and "SETTING THE SPEAKER SETUP" on page 50.)

ENJOYING SURROUND SOUND

■Notes:
- Before surround playback, first perform the speaker setup procedure, etc. on the SETUP menu for optimum performance.
  (For details, refer to "SETTING THE ROOM EQ" on page 49 and "SETTING THE SPEAKER SETUP on page 50.)

■Select the desired surround mode.
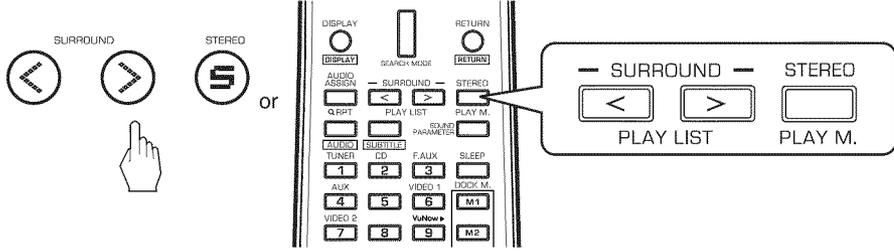
- Press the SURROUND MODE UP/DOWN (>/<) buttons to select a surround mode or press the STEREO button to select the stereo mode.
- Each time the SURROUND MODE UP/DOWN (>/<) buttons are pressed, the surround mode changes as follows :
  Auto surround mode :   The truest possible playback mode will be automatically selected according to the number of
  ("AUTO" indicator lights up)   channels in the signal being input.

Manual surround mode : You can select the desired of different surround modes selectable for the signal being input.
("AUTO" indicator goes off)

Signal format being input	Selectable surround mode
Dolby Digital Plus sources, Dolby TrueHD sources, Dolby Digital EX 6.1 channel sources	AUTO SURROUND, corresponding DOLBY mode, STEREO
Dolby Digital 5.1 channel sources	AUTO SURROUND, <DOLBY DIGITAL EX, DOLBY D+PLIIx MUSIC>, (DOLBY D+ PLIIx MOVIE), [DOLBY DIGITAL], STEREO
Dolby Digital 2 channel sources	AUTO SURROUND, <DOLBY PLIIx MOVIE, DOLBY PLIIx MUSIC, DOLBY PLIIx GAME>, [DOLBY PLII MOVIE, DOLBY PLII MUSIC, DOLBY PLII GAME], DOLBY PRO LOGIC, STEREO
DTS-HD High Resolution Audio sources, DTS-HD Master Audio sources, DTS ES Discrete 6.1 channel sources, DTS ES Matrix 6.1 channel sources, DTS 96/24 sources	AUTO SURROUND, corresponding DTS mode, STEREO
DTS sources	AUTO SURROUND,<DTS+NEO:6, DTS+PLIIx MUSIC>, (DTS+PLIIx MOVIE), [DTS], STEREO
PCM 2 channel sources, PCM multi-channel sources, Analog stereo sources, program sources from VuNow	AUTO SURROUND, <DOLBY PLIIx MOVIE, DOLBY PLIIx MUSIC, DOLBY PLIIx GAME>, [DOLBY PLII MOVIE, DOLBY PLII MUSIC, DOLBY PLII GAME], DOLBY PRO LOGIC, MOVIE, DRAMA, GAME, STADIUM, CLASSIC, HALL, MULCH CH STEREO, STEREO

- Depending on surround back speaker setting, some surround modes can be selected or not as follows:
  < >: Possible only when surround back speaker is not set to "NO".
  [ ] : Possible only when surround back speaker is set to "NO".
  ( ) : Possible only when surround back speaker is set to "X2".

■Note :
- When the SPEAKER button is set to off, only the stereo mode can be selected.

When adjusting the sound parameters

- You can adjust the different sound parameters for optimum surround effect.

1. Press the SOUND PARAMETER button.
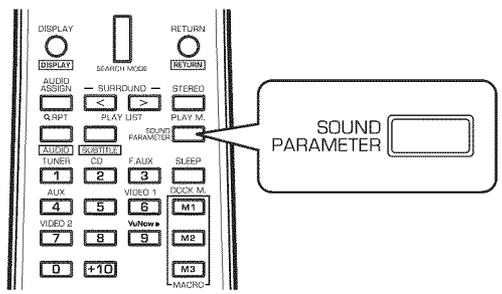
- The "EQ ~ " or ("L.SYNC ~ ", etc.) is displayed for several seconds.
- If the parameter mode disappears, press this button again.

23
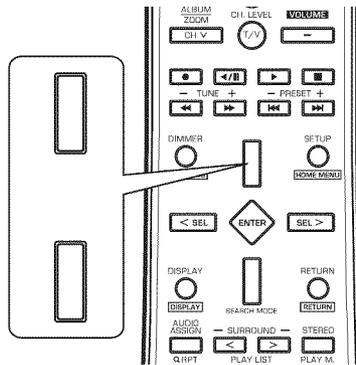
2. Press the CURSOR UP/DOWN buttons to select the desired parameter.

• Each time these buttons are pressed, the parameter mode changes as follows :

┌→ "EQ" ↔ "L.SYNC" ↔ "DM"↔ "DRC" ↔"LFE" ↔ "HDMI" ←┐
│ (Room EQ) (Lip-Sync) (Dual Mono) (Dynamic   (LFE level) (HDMI Audio Out)│
│   Range Control)   │
│   │
└→ "D.VOL" ↔ "PNRM" ↔ "DIMEN" ↔ "C.WIDTH" ↔ "A.DLY" ←┘
   (Dolby Volume) (Panorama)   (Dimension)   (Center Width)   (Auto Delay)
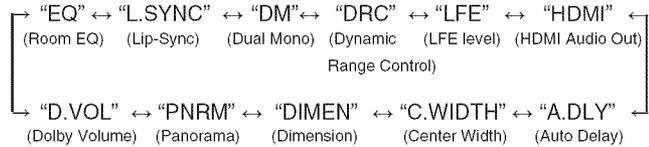
■Notes:
• To set the "EQ" to "ON", perform the ROOM EQ setup first. (For details, refer to "SETTING THE ROOM EQ" on page 49.)
• "C.WIDTH", "DIMEN" and "PNRM" can be selected only while listening in Dolby Pro Logic II Music or Dolby Pro Logic IIx Music mode.
• Some parameters such as "DRC", etc. may not be selected depending on the surround mode or program source, etc.

3. Press the CURSOR LEFT/RIGHT buttons to adjust the selected parameter as desired.
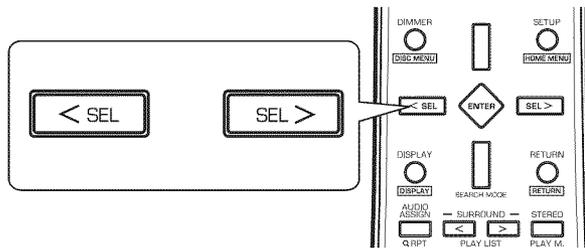
■When selecting the "EQ (Room EQ)"
• The room EQ is a kind of room equalizer for your speakers. According to the acoustic characteristics of your room measured by the ROOM EQ setup, the room EQ automatically adjusts the frequency response of your speakers.
• If you use different brands or sizes of speakers for some channels or have a room with unique acoustic characteristics, such as walls, furniture, and the dimensions or the shape of the room, we recommend using the room EQ.

OFF : To turn off the room EQ.
↕
ON : To adjust the frequency response of all speakers to the flattest response.

■When selecting the "L.SYNC (Lip-Sync)"
• There may be a slight time delay between the video and audio signals in case that some video playback equipments may process the video signals later than the audio signals due to signal processing procedure, etc.. Should this happen, you can adjust the time delay of audio signals to synchronize the sound with the picture.
• The time delay can be adjusted with the range of 0.0 ~ 9.0 frames (1 sec. = 30 frames).

■When selecting the "DM (Dual Mono)"
• Dual mono software usually is used to put two different mono soundtracks, that you can listen to together or separately, on one DVD, etc. With this setting you can choose which dual mono setting you want to listen to.
• This setting works only with dual mono encoded Dolby Digital and DTS soundtracks.

┌→ CH 1 : Only channel 1 is heard from the front speakers.
│   ↕
│ CH 2 : Only channel 2 is heard.
│   ↕
└→ CH 1+2 : Both channels are heard.

Continued

■When selecting the "DRC (Dynamic Range Control)"

• This function compresses the dynamic range of previously specified parts of Dolby Digital, Dolby TrueHD, Dolby Digital Plus, DTS, DTS-HD High Resolution Audio or DTS-HD Master Audio sound track (with extremely high volume) to minimize the difference in volume between the specified and non-specified parts. This makes it easy to hear all of the sound track when watching movies at night at low levels.

┌→ AUTO* : To adjust the level of dynamic range automatically.
│   ↕
│   MAX : To adjust it to "MAX" level.
│   ↕
│   MID : To adjust it to "MID" level.
│   ↕
└→ OFF : To turn the DRC function off.
* : Valid only when the digital signals from the Dolby TrueHD source are being input.

■When selecting the "LFE (LFE level)"

• Some Dolby Digital or DTS source, etc. includes LFE (ultra low bass) signals.
• The LFE level can be adjusted as desired.
   OFF : To output no sound from the LFE channel.
   ↕
   0 : In general, to set to 0dB (recommended value)
   ↕
   -10: To set to -10 dB for some early DTS software, etc.

■When selecting the "HDMI (HDMI Audio Out)"

• The HDMI connection can carry uncompressed digital video signals and digital audio signals.
Depending on whether the digital audio signals input into the HDMI IN are output from the HDMI MONITOR OUT of this receiver or not, you should set the HDMI AUDIO OUT correctly.
AMP : Not to output the HDMI digital audio signals from the HDMI MONITOR OUT of this receiver, meaning these signals
↕   are heard from the speakers connected to this receiver.
THRU : To output the HDMI digital audio signals from the HDMI MONITOR OUT, meaning these signals are heard from the speakers of your TV.

■Note :

• When the HDMI Audio Out is set to THRU, no sound will be heard from the speakers connected to this receiver (except ROOM 2 speakers) even though any input source is selected.

■When selecting the "A.DLY (Auto Delay)"

• This function automatically corrects the audio-to-video delay between components with the HDMI connection.
   OFF : To turn off the Auto Delay function.
   ↕
   ON : To turn it on.

■Note :

• This function is valid only when the connected display component supports the automatic audio/video synchronizing capability ("Lip-Sync") for HDMI. If the automatically set delay time is unsuitable, set it to OFF and adjust the delay time manually. (For details on the auto delay feature, refer to the operating instructions of the display component.)

■When selecting the "C.WIDTH (Center Width)"

• This adjusts the center image so it may be heard only from the center speaker, only from left/right speakers as a phantom image, or from all three front speakers to varying degrees.
• The control can be set in 8 steps from 0 to 7 (default value : 3)

■Note :

• This control valid only when the center speaker is not set to NO.

■When selecting the "DIMEN (Dimension)"

• This gradually adjusts the sound field either towards the front or towards the rear. The control can be set in 7 steps from -3 to +3 (default value : 0)

■When selecting the "PNRM (Panorama)"

• This mode extends the front stereo image to include the surround speakers for an exciting "wraparound" effect with side wall imaging. Select "OFF" or "ON" (default value : OFF).

ENGLISH

Continued

■When selecting the "D.VOL (Dolby Volume)"
• Dolby Volume is an intelligent system that improves the perceived audio frequency response at lower listening levels and corrects for volume inconsistencies between sources (e.g. a jazz radio station and a DVD) and between programming (e. g. a TV show and advertisement breaks).
OFF (Default value) : To turn off the Dolby Volume function. (The DOLBY VOLUME indicator goes off.)
↕
ON : To turn it on. (The DOLBY VOLUME indicator lights up.)

• If the Dolby Volume is set to ON, it will be automatically turns on the Volume Modeler that maintains the same perceived listening experience as the reference level experience.

■Note :
• If the Dolby Volume is changed to OFF, the volume level may be increased high.

◆When the Dolby Volume is set to ON
①. Press the ENTER button to enter the Dolby Volume setup.
  • Then "LVL (Volume Leveler)" is displayed for several seconds.
②. Press the CURSOR UP/DOWN buttons to select the desired parameter.
  • Each time these buttons are pressed, the parameter mode changes as follows :

> "LVL" ↔ "AMOUNT"
> (Volume Leveler)   (Volume Leveler Amount Control)
>
> "C/O" ↔ M/S ↔ HALF
> (Calibration Offset)   (Mid/Side mode)   (Half mode)
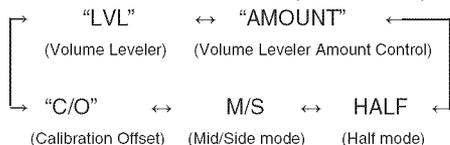
③. Press the CURSOR LEFT/RIGHT buttons to adjust the selected parameter as desired.

◆When selecting the "LVL" (Volume Leveler)
• The Volume Leveler maintains the perceived loudness of all content for example, from different channels or input sources.
OFF : To turn off the Volume Leveler function.
↕
ON (default value) : To turn it on.

■Note :
• If Volume Leveler is turned off, no level matching between sources and program material is performed. This is not the same as turning Dolby Volume off as volume related frequency response processing is still active.

◆When selecting the "AMOUNT" (Volume Leveler Amount Control)
The Volume Leveler Amount adjusts the amount of leveling applied by the Volume Leveler.
• The control can be set in 11 steps from 0 to 10 (default value : 9)

◆When selecting the "HALF" (Half mode)
If the Half mode is set to ON, the Volume Modeler does not apply volume contour gains for playback levels higher than reference level; just the volume setting, as a flat spectrum gain, is applied.
OFF (default value) : To turn off the Half mode.
↕
ON : To turn it on.

◆When selecting the "M/S" (Mid/Side mode)
The Mid/Side processing can improve stability of some stereo material.
OFF (default value) : To turn off the Mid/Side mode.
↕
ON : To turn it on.

◆When selecting the "C/O" (Calibration Offset)
The Calibration Offset allows you to compensate for speaker efficiencies and listening position.
• The control can be set from -15 to +15 dB (default value : 0 dB) and this should normally produce a good result when you set the speaker levels on this receiver using a SPL (Sound Pressure Level) meter.

Adjusting the current channel level

• After adjusting each channel level with test tone, adjust the channel levels either according to the program sources or to suit your tastes. (For details, refer to "When selecting the CHANNEL LEVEL" on page 52.)

1. Select the desired channel.
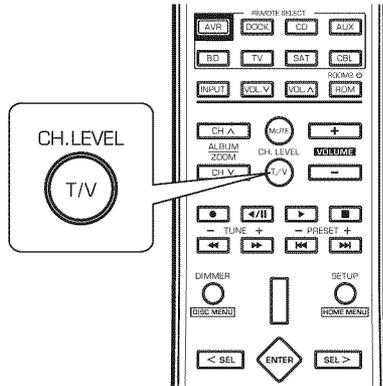
• Each time this button is pressed, the channel is selected as follows:

```
  ┌─ L  →  C  →  R  →  SR  →  (SBR  →  SBL) ─┐
  │ Front  Center  Front  Surround  Surr. Back  Surr. Back │
  │ Left          Right   Right    Right       Left       │
  │              SW    ←    SL    ←                        │
  └──────────  Subwoofer   Surround Left ──────────────────┘
```
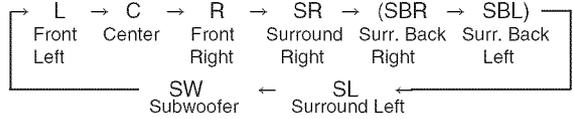
( ) : Possible only when the surround back speaker is set to 2ch ("x2") or 1ch ("x1")
• When the channel level disappears, press this button again.
• Depending on the speaker settings ("NO"), etc., some channels cannot be selected.

2. Adjust the level of the selected channel as desired.
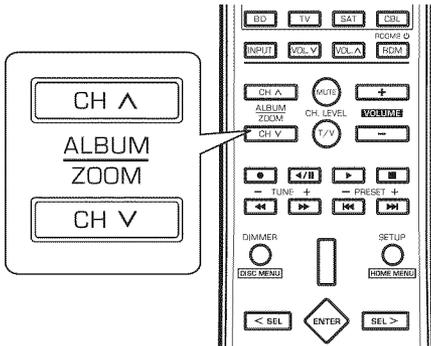
• The channel levels can be adjusted within the range of -15 ~ +15 dB.

■**Note:**
• When selecting the VuNow as an input source, you cannot adjust the channel levels.

3. Repeat the above steps 1 and 2 to adjust each channel level.

LISTENING TO RADIO BROADCASTS

Auto tuning

1. Select the desired band.

```
TUNER
  1
```

FM 87.50 MHz

|———————————————|
BAND   FREQUENCY

• Each time this button is pressed, the band changes as
  follows :

```
┌→  FM ST  →  FM MONO   ┐
│ ("ST" lights up)  ("ST" goes off) │
```
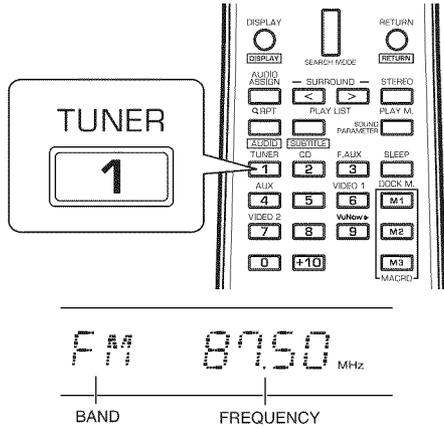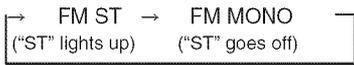
• When FM stereo broadcasts are poor because of weak
  broadcast signals, select the FM mono mode to reduce
  the noise, then FM broadcasts are reproduced in
  monaural sound.

2. Press the TUNING buttons for more than 0.5
second.

```
– TUNE +
 ◄◄    ►►
```

FM 89.10 MHz
TUNE
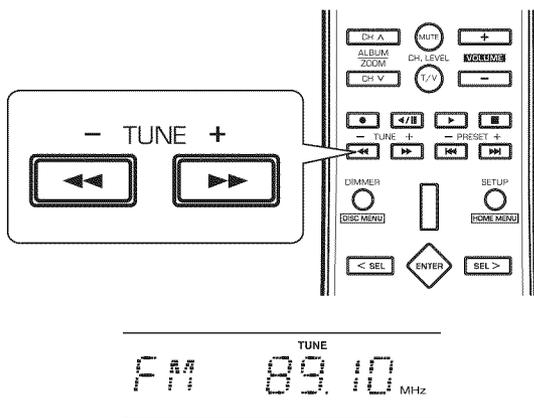
• The tuner will now search until a station of sufficient
  strength has been found. The display shows the tuned
  frequency and "TUNE".
• If the station found is not the desired one, simply repeat
  this operation.
• Weak stations are skipped during auto tuning.

Manual tuning

• Manual tuning is useful when you already know the
  frequency of the desired station.
• After selecting the desired band, press the TUNING
  buttons repeatedly until the right frequency has been
  reached.

```
– TUNE +
 ◄◄    ►►
```
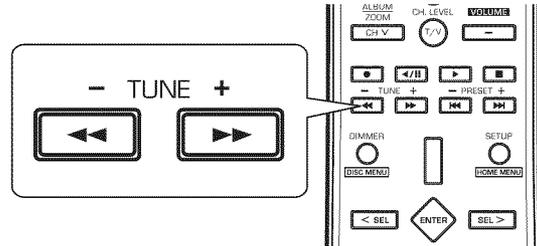
Auto presetting

• Auto presetting function automatically searches for FM
  stations only and store them in the memory.
• While listening to FM radio broadcasts, press and hold
  down the ENTER button for more than 2 seconds.

```
ENTER
```
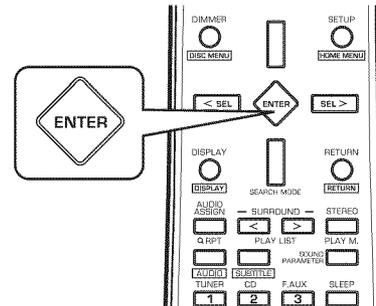
• Then "AUTO MEM" flickers and this receiver starts auto
  presetting.
• To stop auto presetting, press this button again.
• Up to 30 FM stations can be stored.

■**Notes:**
• FM stations of weak strength cannot be memorized.
• To memorize weak stations, preform "Manual presetting"
  procedure with using "Manual tuning" operation.

Presetting radio stations

• You can store up to 30 preferred stations in the memory.

1. Tune in the desired station with auto or manual tuning.

2. Press the ENTER button.

```
FM    89.10 MHz·0·
```
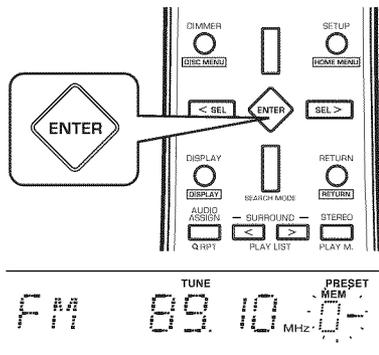
• "MEM", etc. flicker.

3. Select the desired preset number (1~30) and press the ENTER button.

```
― PRESET +
```
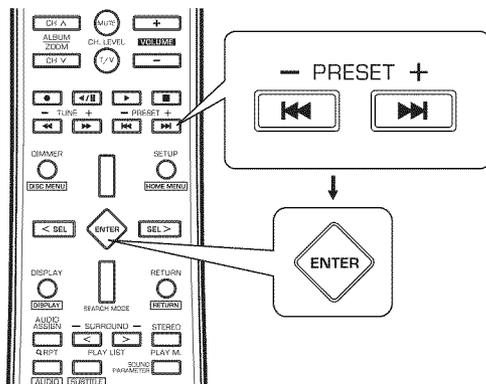
• The station has now been stored in the memory.
• A stored frequency is erased from the memory by storing another frequency in its place.

4. Repeat the above steps 1 to 3 to memorize other stations.

■MEMORY BACKUP FUNCTION

The following items, set before the receiver is turned off, are memorized.
• INPUT SELECTOR settings
• Surround mode settings
• Preset stations, etc.

Tuning to preset stations

• After selecting the tuner as an input source, select the desired preset number.

```
― PRESET +
```
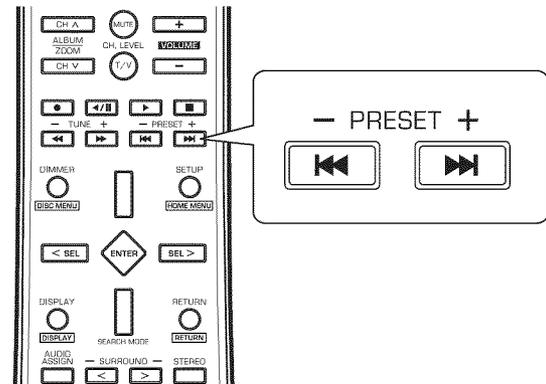
ABOUT VuNow Pod

This receiver is equipped with the VuNow Pod that delivers a variety of video contents and internet radio audio, etc. via broadband to your TV without the use of a personal computer (PC). The VuNow Pod provides an ultimate experience that allows you to view, download, and store your favorite videos on it.

■The VuNow Pod allows you to :

• Access internet video content via broadband internet connection directly on your TV.
• Support for wired or wireless internet connectivity.
• Direct Access to popular websites and Internet TV & Radio channels.
• Access premium channels like CinemaNow and PlayOn.
• Watch YouTube videos by categories.
• Rapidly search for internet videos using the built-in video search engine.
• Share media contents from a computer or a NAS device over a network using Digital Living Network Alliance(DLNA) compliant media server including Windows Media Player(WMP).
• Play personal content like music, videos, and photos stored on any PC on the Local Area Network(LAN) connection.
• Access internet radio audio.
• Use a USB memory device for storage to download rented videos.
• Play personal content directly from the USB memory device.
• Bookmark a library of your favorite videos.

• VuNow Pod is capable of connecting directly to the Internet and includes state-of-the-art Digital Rights Management (DRM) technology. Using the DRM technology, VuNow Pod ensures full protection of content provided by content providers.
• The VuNow Service provides access to a wide variety of videos. These videos are available for Rent or for viewing (Watch). Availability of videos for Rent or for Watch is displayed on the screen, when a video is selected.
• A video available for Rent can be downloaded on your VuNow Pod for future play whereas Watch allows you to stream and play the video directly on your TV.
• VuNow Pod supports USB memory device which can be used to play the stored media contents and also used as storage to download rented videos. You can select and rent the Video of your choice.

■Disclaimer

This is an original work by Verismo Networks and is protected by applicable copyright laws worldwide. Neither the whole nor any part of this work may be reproduced, stored, adapted or transmitted, published, modified in any form or by any means whatsoever, mechanical, electronic, photographic, graphic, optic recording or otherwise, translated into any language or computer language, without the prior written permission of Verismo Networks.
Unless by way of a separate agreement, Verismo Networks makes no representations or warranties with respect to the contents hereof, including their accuracy and error-free nature, and shall not be responsible for any loss or damage caused to the user by the direct or indirect use of this information.
Furthermore, Verismo Networks reserves the right to use the subject matter of this notice in any manner whatsoever, with no obligation to notify the recipient of the subject matter of any changes made hereto.
All products referenced herein are trademarks of the company and/or of those referenced.

"Portions of this product are the copyright of Verismo Networks, Inc. All intellectual property rights in such portions of the product and documentation are owned by Verismo and are protected by United States copyright laws, other applicable copyright laws and international treaty provisions. Verismo and its suppliers retain all rights not expressly granted.

Copyright© 2009-10 Verismo Networks

Remote Controls for VuNow Pod

• Each function on the remote control for VuNow Pod is explained in the following table.

Button Symbol	Function name	Functions	Button Symbol	Function name	Functions
VuNow ▶ 9	VuNow selector	Select VuNow as an input source.	CH ∧ ALBUM ZOOM CH ∨	ZOOM/PAGE +/-	Used to zoom in/zoom out in playback mode. In other pages used as PAGE UP/ PAGE DOWN buttons.
DIMMER DISC MENU	MENU	Display menu options for the current screen.	DISPLAY DISPLAY	INFO	Playback options(Navigate to previous/next video, fast-forward, rewind, pause/play, zoom in/zoom out) for the currently playing media title.
AUDIO ASSIGN Q RPT	SEARCH	Provide a context sensitive relevant search for a media title.	RETURN RETURN	BACK	Returns to the previously displayed screen. To go to the home page, keep this button pressed for a few seconds.
■	STOP	Stop the current activity.	ENTER	OK/SELECT	Select an option or a media title.
◀/||	PAUSE	Pause the video	▶	PLAY	Play the video
– TUNE + ◀◀ ▶▶	REWIND(◀◀)/ FAST FORWARD(▶▶)	Rewind or fast forward the video	– PRESET + ◀◀ ▶▶	REVERSE(◀◀)/ FORWARD(▶▶) SKIP	Jump to the previous or the next video
SETUP HOME MENU	HOME MENU	Returns to the home page	< SEL / SEL >	UP/DOWN/ RIGHT/LEFT	Navigate up, down, to the right or left on the screen.

ENJOYING INTERNET VIDEOS

■Note:
• You can enjoy viewing internet video contents via either the HDMI(given prioity) or the (composite) VIDEO MONITOR OUT only, not the COMPONENT MONITOR OUTs.

1. Select the VuNow as an input source.
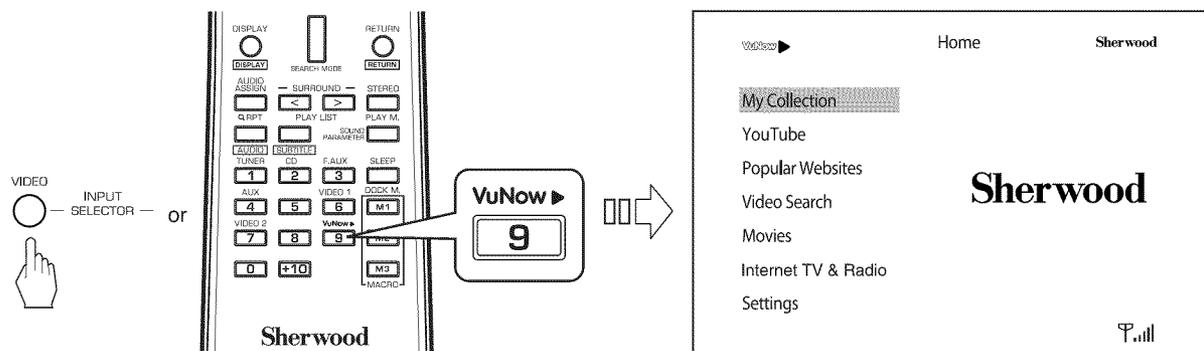
• Then the VuNow Pod home page is displayed.

2. Press the CURSOR UP/DOWN buttons to select the desired feature, then press the "ENTER" button.
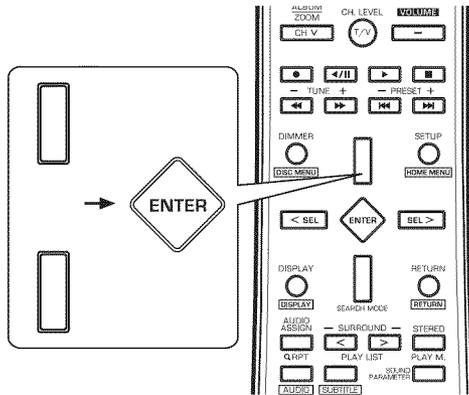
3. Press the CURSOR buttons to select the desired item, then press the "ENTER" button.
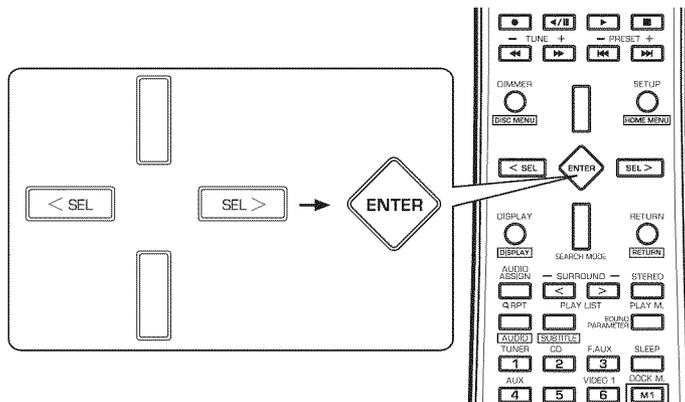
- Then the selected item will be played back or performed.
- When the sub-menu of the selected item is displayed, repeat this step to select the desired item.
- To go back to the previous menu, press the "RETURN" button.

Features	Items
My Collection : This feature lists videos that you have recently accessed, bookmarked, downloaded, or rented through the VuNow Pod.	• **Browse USB Disk** : The VuNow Pod enables media contents on your USB storage device to be watched on your wide screen TV. The USB storage device also acts as storage to download and store the rented videos from VuNow service and CinemaNow videos, etc. (See "Browse USB Disk" on page 35.) • Rented Videos : The videos listed in Rented Videos are downloaded or streamed from movie channels upon completion of payment. Videos are automatically deleted from the list upon expiration. • **Home Network** : This is a key feature of VuNow Pod that enables you to share and enjoy the digital media stored in your PC on your TV. The digital media includes music, video, and photos. (See "Home Network" on page 35.) • **My Channels** : This option displays videos added to My Channels while using the Internet TV & Radio on the VuNow Pod. Listed videos provide details about the channel title, date, time of adding. (See "My Channels" on page 36.) • **Bookmarks** : This option displays videos added to bookmarks while using various features of VuNow Pod. Listed videos provide details about the video title, date, time of adding as bookmark, and name of the channel from which VuNow Pod accessed the video. (See "Bookmarks" on page 36.) • **Recently Played** : This option lists recently viewed videos and helps you to have instant access to the videos that you have already viewed but do not remember the details. (See "Recently Played" on page 37.)

Features	Options
YouTube : This is the most popular video sharing website on the internet. This enables you to upload, view, and share videos with other YouTube users.	• Featured : This option lists the YouTube videos for the day. This includes a list of videos suggested by the YouTube staff. The listed video displays the title, duration of the video, number of views, rating on 5 counts and the source of the video. • **Search** : This option enables you to search for a specific video on the YouTube website. You can use this option when you want to watch a YouTube video of your choice. It lists videos that match the string of characters entered in the search box. (See "Search" on page 37.) • **Login** : This option enables you to access your existing YouTube user account. Before continuing to access your YouTube account using VuNow Pod, ensure that the account is created using a PC. VuNow Pod can remember up to 4 user names with the option to remember the password(s). Using Login you can access your customized options on the YouTube such as My Subscription, My Playlist, My Favorites, and My Uploads. (See "Login" on page 38.) • Most Viewed : This option displays the list of the most viewed videos on the YouTube website. This list is based on the number of views for a video. • Most Recent : This option lists the most recently uploaded videos to YouTube website. This enables you to view the latest entries available on YouTube. You will see a list of recently viewed videos providing details about the duration of the video, number of views for the video, and the name of the album. • Top Favorites : This option lists the videos that have maximum number of favorite setting by the users. This enables you to view the top favorite video on the YouTube website. The videos are grouped under relevant categories. The listed video displays the title, duration of the video, number of views, rating on 5 counts and the source of the video. • Top Rated : This option lists the videos that have received top rating by the users. The videos are available in various categories. This enables you to search a video among the YouTube's Top Rated. The listed video displays the title, duration of the video, number of views, rating on 5 counts and the source of the video. • Channels : This option in YouTube enables you to access the popular content on YouTube website provided by VuNow service. The channels page enables you to navigate to the video listing page to access video content on YouTube. • Settings : This option allows you to choose the specific country for YouTube region. From the list of countries, select the country, then the VuNow Pod will point to the corresponding YouTube site.
Popular Websites	The popular website feature enables you to enjoy the popular video sites available on the internet. Videos from various popular websites like PlayOn, CNN Video, ABC news, ESPN, and PGATour, etc. are available for viewing. (• For details on PlayOn, see "About PlayOn" on page 41.)

ENGLISH

Features	Options
Video Search	The Video Search feature enables you to search any video available on the internet. This search using the VuNow Pod is not specific to any website. The search is based on the string of characters entered in the search box. The search result will list the top level folders available on the internet. (See "Video Search" on page 39.)
Movies	The Movies feature enables you to access movie channels provided by VuNow service. Accessing these channels helps you to watch the programs live or rent the video for future viewing. These channels include the video on demand as well as the premium channels like CinemaNow. (See "Movies" on page 39.)
Internet TV & Radio	The Internet TV & Radio feature makes it possible to view digital content live on your TV. The VuNow Pod provides you an option to view your favorite TV or radio channels in a specific region.

Settings : This allows you to manually configure the settings of the VuNow Pod.	• **Network** : This helps you to configure the network settings. (See "Network" on page 42.)
	• Product Settings
	  ✳ TV Resolution : This enables you to manually select the TV resolutions.
	  ✳ HDTV Auto Resize : This enables some TVs to automatically re-size the video when playing a low resolution video.
	  ✳ Playback Options : This enables you to set the playback option while viewing personal digital media.
	  ✳ Time Zone : This enables you to set the time zone to your region.
	  ✳ Language : By default, the language is set to English.
	  ✳ Product Info : This provides you with the details about your VuNow Pod such as the current configuration, product ID, VuNow Pod software version (Client Version), latest software version available on the VuNow Server(Server Version) and Time Zone details.
	• Internet Speed Test : This enables you to check the downlink speed. This helps you to calculate the time required for an intended download.
	• Factory Defaults : This allows you to take the VuNow Pod to the factory defaults. This also provides you the option to retain the video contents associated with the VuNow Pod.
	• Eject USB Disk : To protect the USB storage device, it is recommended that you use this option before removing the USB storage device from this receiver.
	• Third Party Applications : In the future, when applications are developed by our partners for VuNow Pod, you will have an option to install these on the Pod. This will allow you to manage these applications when they are available.

• Because the operations for the features and the options written in bold font differs, follow their own procedures.

■**Notes :**
• The features and the options may vary based on the VuNow service offerings.
• This manual explains the basic operation for the VuNow Pod. Therefore, for details, visit the VuNow website at www.vunow.com.
• A TV screen may be burned out if a static picture is displayed for a long time in the stop mode, etc.
 To prevent this, this unit automatically activates the screen saver function if a static picture, etc. is displayed for over 5 minutes.
 To cancel the screen saver function, press the CURSOR buttons, etc.

Browse USB Disk

■To view the contents of a USB storage device

1. Insert the USB storage device into the USB connector.

• Then you will receive a message asking for direct access to these media contents for several seconds.

2. Select "YES" with using the CURSOR and the "ENTER" buttons.

• Then the contents of the USB storage device is displayed.
• In such a case that the USB device is already connected, select "My Collection" feature from home page, then select "Browse USB Disk" option.

3. Select the desired content and play it.

• Then the selected content will be played.

■Note :
• To remove the USB device, perform "Eject USB Disk" on page 34.

Home Network

You can use any Digital Living Network Alliance(DLNA) compliant Media Server like Windows Media Player to serve the digital contents to the VuNow Pod.
Features available under Home Network are as follows :
• Music - Enables you to listen to musics stored in your PC. You can run the tracks in the background while viewing slideshows.
• Video - Enables you to view videos stored in your PC on TV.
• Picture - Enables you to view photos stored in your PC as slideshow on TV.

■Note :
• The VuNow Pod display options will be dependent on the support provided by the PC Media Server. The features and description in this section are indicative. To play the digital contents, you have to enable the sharing option on the PC media server.

■To play the contents stored in your PC using media sharing of Windows Media Player.

1. Run Windows Media Player on your PC.

2. Select "Library" tap in the menu bar, and then select "Media Sharing".

3. In the "Media Sharing" dialog box, select the "Share my media" check box.

4. In the list of devices below the "Share my media" check box, select the newly added VuNow Pod.

5. On this receiver, select "My Collection" from home page.

6. Select "Home Network" in "My Collection" section.

• Then the PC list appears.

7. Select your PC.

• Then the folders available in your PC are displayed.

8. Select the desired folder.

9. Select the desired content and play it.

■Playable digital contents.

Music files		Video files		
File type	File extension	File type	Codec type	File extension
MP3	.mp3	VC1	Basic	.wmv
WAV	.wav	H.264	Basic	.mov, .mp4, .avi
WMA	.wma	MPEG2	Premium	.mpg, .mpeg, .vob

• The playable photo file formats are .jpg and .jpeg.

My Channels

■To add a channel to My Channels

• You can add any internet channel to this list.

1. Select "Internet TV & Radio" from home page.

2. Select the desired of internet channels.

3. Press the "DISC MENU" button.

• Then the options of "Add To My Channels" is displayed for several seconds.

4. Select "Add To My Channels".

• The selected channel is added to the list.

■To play a channel listed in the "My Channels"

1. Select "My Channels" in "My Collection" section.

2. Select a channel in the list of channels and play it.

• Then the selected channel is played.

■To remove a channel

1. Select "My Channels" in "My Collection" section.

2. Select a channel in the list of channels.

3. Press the "DISC MENU" button.

Then the options are displayed for several seconds.

Options	Description
Remove from My Channels	Removes the selected channel
Jump to Page	Allows you to jump to a page if the entries are more

4. Select the "Remove from My Channels"

• Then the selected channel is removed.

Bookmarks

■To Bookmark a video

• You can bookmark a video in "YouTube", "Popular Websites", "Movies" section, etc.

1. Select a video.

2. Press the "DISC MENU" button.

The the options of "Bookmark this Video" is displayed for several seconds.

3. Select the "Bookmark this Video".

• The selected video gets bookmarked.

■To play a bookmarked video

1. Select "Bookmarks" in "My Collection" section.

2. Select a a bookmarked video in the list of Bookmarks and play it.

• Then the selected video is played.

■To delete a bookmark

1. Select "Bookmarks" in "My Collection" section.

2. Select a video in the list of Bookmarks.

3. Press the "DISC MENU" button.

• Then the options are displayed for several seconds.

Options	Description
Delete this Bookmark	Deletes the selected bookmark
Jump to Page	Allows you to jump to a page if the entries are more

4. Select the "Delete this Bookmark"

• Then the selected bookmark is deleted.

Recently Played

■To play a recently played video

1. Select "Recently Played" in "My Collection" section.

2. Select a video in the Recently played list and play it.

■To clear a video in the Recently Played list

1. Select "Recently Played" in "My Collection" section.

2. Select a video in the Recently Played list.

3. Press the "DISC MENU" button.

Then the options are displayed for several seconds.

Options	Description
Clear Recently Played	Removes the selected video
Add to My Channels	Adds the selected video to My Channels
Jump to Page	Allows you to jump to a page if the entries are more.

4. Select the "Clear Recently Played".

• Then the selected video is removed.

Search

■To search a video on the YouTube website

1. Select "YouTube" from home page.

2. Select "Search" in "YouTube" section.

• Then the soft keypad appears.

• The table below lists keys and uses of soft keypad.

Key Name	Uses
DEL	To delete the last character entered in the search box.
CLR	To clear the search string entered in the search box.
Space	To insert a space(blank) in the search box.

Key Name	Uses
MORE	To display more special characters needed to enter a string.
Alphabet	To enter letters from the alphabet keys.
Numeric	To enter numbers from the numeric keys.
Special character	To enter special characters such as @, &, %, etc.

3. Enter the search string using the soft keypad.

• Then the list of videos searched is displayed.

4. Select a video in the search list and play it.

• Then the selected video is played.

■YouTube search menu options
• During YouTube search, press the "DISC MENU" button. Then the options are displayed for several seconds.

Options	Description
Bookmark this Video	Bookmarks and lists the video under "Bookmarks" in "My Collection" section for future viewing.
Bookmark this Search	Adds the search string to Bookmarks in "My Collection" section.
Jump to Page	Allows you to jump to a page if the entries are more.

■YouTube Playback Menu Options
• During YouTube playback, press the "DISC MENU" button. Then the options are displayed for several seconds.

Options	Description
Related Videos	Displays list of related videos on a video listing page.
Bookmark this Video	Bookmarks and lists the video under "Bookmarks" in "My Collection" section for future viewing.
Add to Favorites*	Adds to your customized option - My favorites.
Rate this Video*	Enables you to rate the selected video.
Flag as Inappropriate*	Enables you to flag those video that do not belong to the listed category.

*: These option will be available when you login to your personal YouTube account.

Login

▓ Adding an account

The "Add Account" option allows you to add your existing YouTube account to VuNow Pod. Thus this option enables you to access YouTube using VuNow Pod.

▓ Note :
• Up to four user account names can be added.

1. Select "YouTube" from home page.

2. Select "Login" in "YouTube" section.

3. Select the "Add Account" option.

• Then the user name entry screen appears with a soft keypad.

4. Using the soft keypad, enter the user name and press the "OK" key.

• Then the password entry screen appears.

5. Using the soft keypad, enter the password.

• To save the password in the VuNow Pod, select the "Remember Password" and set it to on pressing the "ENTER" button.

6. Press the "OK" key.

Then the user name is listed in "YouTube" section.

7. To access your YouTube account, select your user name and press the "ENTER" button.

▓ Removing an account

• The "Remove Account" option enables you to remove your YouTube user account from the VuNow Pod. However, you can login to these accounts through the PC.

1. Select "YouTube" from home page.

2. Select "Login" (or "Change User") in "YouTube" section.

3. Select the "Remove Account" option.

Then the Remove Account screen appears displaying the existing user name.

4. Select the user name.

Then the selected user account is removed from the VuNow Pod.

▓ Logging in to an existing user account

• The "Login" option allows you to access your YouTube account and view your customized options on TV at the click of a button. This enables you to search, view and bookmark the selected video apart from enjoying other privileges such as viewing related videos, adding the selected videos to your favorites list, rating videos, and flagging the selected video.

1. Select "YouTube" from home page.

2. Select "Login" in "YouTube" section.

3. Select your user name.

• Then the selected user name is listed in "YouTube" section.

▓ Changing YouTube user account

• The "Change User" option enables you to access multiple YouTube accounts which are added on the VuNow Pod. This option thus enables more than one person to access their YouTube accounts using VuNow Pod.

1. To change the user when logging in to on user account, select "YouTube" from home page.

2. Select "Change User" in "YouTube" section.

3. Select the user name you want to change.

• Then the selected user name is changed to in "YouTube" section.

▓ Logging out of YouTube

1. Select "YouTube" from home page.

2. Select "Change User" in "YouTube" section.

3. Select "Logout"

• Then you will be logged out.

Video Search

1. Select "Video Search" from home page.

• Then the soft keypad appears.

2. Perform the steps 3 and 4 in "Search" procedure on page 37.

■Video Search Menu Options

• During video search, press the "DISC MENU" button. Then "Bookmark ~" option is displayed for several seconds.

Movies

■About Video on Demand

The Video on Demand is one of the main features of VuNow Pod. It enables you to Rent or Watch your favorite videos. Watching videos live or renting is defined by VuNow Service.

■Renting (Downloading) videos

• The videos available on Rent can be downloaded onto the VuNow Pod. Thus you can create your own collection of videos within the "My Collection" feature. To download videos, you need to have a USB storage device connected for storage.

1. Select "Movies" from home page.

2. Select a channel.

3. Select a category.

4. Select a video in the list.

Then the information on the selected video appears.

5. Select the "Rent" key.

■Video Renting Options

While downloading the rented video, press the "DISC MENU" button. Then the options are displayed for several seconds.

Options	Description
Delete this Download	Deletes the selected download.
Pause this Download	While downloading, pauses the selected downloaded.
Pause All Downloads	While downloading, pauses all the downloads in progress
Resume this Download*	Resumes the selected paused download.
Resume All Downloads*	Resumes and queues all paused downloads.

*: These options will be available when you have paused video(s) download.

■Watching videos

• The videos available for watch can be streamed and played directly on TV.

1. Select "Movies" from home page.

2. Select a channel.

3. Select a category.

4. Select a video in the list.

• Then the information on the selected video appears.

5. Select the "Watch Now".

ENGLISH

■About CinemaNow

CinemaNow is a Web-based digital video distribution
company. The CinemaNow library contains approximately
10,000 feature-length films, short films, music concerts and
television.
With the most diverse range of content available on the
internet, CinemaNow is a good choice for viewers seeking
wide and unique range of videos that are not available on
network television, cable, or at the local video store.
VuNow Pod allows the user to browse, select and play this
CinemaNow content directly on the TV. You also have an
option to use your PC to push your rented or bought content
to your VuNow Pod.

■To create your CinemaNow Account

You need to have a CinemaNow account to use the
CinemaNow feature of your VuNow Pod.
You can access CinemaNow movies on your VuNow Pod
using an account that is specifically created on this website.

1. Using your PC, visit the CinemaNow website at
www.cinemanow.com.

2. Click on the REGISTER option that appears in
the top right corner of the window.

3. Fill in the necessary information in the provided
fields and click on the SUBMIT button.

• An account will be created. You can use this account to
access CinemaNow movie from the VuNow Pod.

■Note :
• Accounts created only on www.cinemanow.com can be
accessed from your VuNow Pod.

■To register CinemaNow account from VuNow Pod

To enjoy CinemaNow contents via VuNow Pod, The VuNow
Pod registration will be needed.

1. Select "Movies" from home page.

2. Select the CinemaNow channel in the list.

• Then the options of the CinemaNow appears.

3. Select "Login".

• Then the user name entry screen appears with a soft
keypad.

4. Enter your user name and password to access
your CinemaNow account.

• Your VuNow Pod is now registered with the CinemaNow
account.

■Note :
• This is a one time activity and not required again unless
you explicitly logout from the CinemaNow Zone.

■To buy or rent videos from the CinemaNow account (using PC)

1. Log into your CinemaNow account at
www.cinemanow.com on the PC.

2. Select video to be bought or rented.

3. Select the "BUY NOW" or "RENT NOW".

4. Select the "CHECKOUT" and perform the
checkout procedure.

5. Select the "Watch It On" to match with your
registered VuNow Pod.("registered user name-
Pod")

6. Select the "START DOWNLOAD".

• Then the selected video will be pushed to your VuNow
Pod. Ensure that you have the USB storage device
connected to this receiver.

7. Within 90 seconds of pushing the video to your
VuNow Pod, you will get a pop up message
about the availability of the title. Please select
"OK".

Then the download of the video will start immediately.

8. Select "My Collection" from home page.

9. Select "Rented Videos" in "My Collection"
section.

• Then the list of available videos is displayed.

10. Select a video to start play.

■To buy or rent videos directly using VuNow Pod

■Note :
• Ensure that the user is registerd at www.cinemanow.com with the credit card information.

1. Perform the steps 1~4 "To register CinemaNow account from VuNow Pod" procedure on page 40.

2. Select the option in "CinemaNow" section.

• Then a wide array of movies classified in various categories is displayed.

3. Select a video to be rented.

• Then information on the selected video appears displaying the cost of rent.

4. Select the "Rent" and confirm the payment.

• The video is then queued for download and is stored under "Rented Videos" in "My Collection" section.

■To search a video

1. Select "Movies" from home page.

2. Select the CinemaNow channel in the list.

• Then the options of the CinemaNow appears.

3. Select "Search".

• Then the soft keypad appears.

4. Perform the steps 3 and 4 in "Search" procedure on page 37.

■Search menu options
• While searching for a video, press the "DISC MENU" button. Then the options are displayed for several seconds.
• For details, see the table explained in "YouTube search menu options" on page 37.

■Playback options while playing videos.

1. While playing a video, press the "DISPLAY" button.

• Then a progress bar and the playback options are displayed for several seconds.

Options	Description
◄◄	Goes back to the previous video in the list.
◄◄	Rewinds the video.
❚❚ / ►	Pauses/Plays the video.
►►	Fast forwards the video.
►❚	Jumps to the next video in the list.
▣	Resizes the video using zooming in or zooming out.

2. Select a option and press the "ENTER" button.

■About PlayOn
The VuNow Pod also supports the PlayOn feature.
PlayOn lets you watch Netflix, Hulu, CBS, YouTube, CNN, ESPN and more directly on the TV and also enables you to enjoy your local PC media files with its newly released local media sharing feature.
You can see all your digital photos, listen to your stored music, and watch videos on your PC through the same PlayOn Digital Media Server.

• For details on operation for PlayOn, visit the PlayOn website at www.themediamall.com/playon.

ENGLISH

Network

The VuNow Pod can be connected to your home network with wired connection or wireless connection. (For details, refer to "CONNECTING TO NETWORK" on page 10.) The network connection can be established by using the "Network Wizard" or "Advanced" options available within the VuNow Pod.

■**Configuring the VuNow Pod using Network Wizard**
It provides you with the option to select wired or wireless mode. Wired is the recommended mode to be used while connecting the VuNow Pod to a network.

＊**Wired Network connection**

1. Select "Settings" from home page.

2. Select "Network" in "Settings" section.

• Then the configuration type screen appears.

3. Select "Network Wizard".

• Then the network type screen appears.

4. Select "Wired [Preferred]".

• Then the VuNow Pod automatically detects your Home Network, Internet settings and VuNow Pod Server settings and conducts a download speed test of the connection.

5. Select "Done" to confirm successful connection establishment.

＊**Wireless Network connection**

1. Perform the steps 1~3 in "Wired Network connection" procedure above.

2. Select "Wireless".

• Then the Wireless Network list appears.

3. Select your wireless network.

• In such a case that the WEP input list appears, perform the following steps 4 and 5.

4. Select your WEP key type.

• Then the soft keypad appears.

5. Enter the WEP key for the wireless network and press "OK" key.

• Then the VuNow Pod automatically detects your Home Network, Internet settings and VuNow Pod server settings and conducts a download speed test of the connection.

6. Select "Done" to confirm successful connection establishment.

■**Configuring the VuNow Pod using Advanced**
• The Advanced option enables you to manually configure the VuNow Pod on your home network in the Wired and the Wireless mode.
Configuring the VuNow Pod using the Advanced option is recommended only if you are aware of the settings used for your home network and can customize them.

＊**Advanced Wired Mode**

1. Select "Settings" from home page.

2. Select "Network" in "Settings" section.

• Then the configuration type screen appears.

3. Select "Advanced".

• Then the "Settings" screen appears.

• The table below describes the options available on the "Settings" screen.

Option Name	Option Type	Description
Network	Wired, Wireless	According to your home network connection, choose it.
IP Settings	Auto, Static	Choosing Auto would enable DHCP service, or you can set it to static. By default, the Auto is set.

Following fields have to be set manually if the IP Settings is set to static.

IP Address	IP address	The IP address of the VuNow Pod.
Subnet Mask	Subnet mask	Subnet mask of your network.
Gateway	Gateway IP address	IP address of the gateway.
DNS	DNS server IP address	IP address of the DNS server.
Cancel		To exit Network.
Save		To confirm the settings.

4. Set the "Network" to "Wired".

5. Set each setting and select "Save" on the "Settings" screen.

∗Advanced Wireless Mode

1. Perform the steps 1~3 in "Advanced Wired Mode" procedure on the previous page.

2. Set the "Network" to "Wireless".

3. Set each setting and select "Next" on the "Settings" screen.

• Then the next screen appears displaying settings such as SSID, Security and so on.

4. Select "Scan" to search for available wireless networks at "SSID" option.

• Then the wireless network list appears.

5. Select your wireless network.

6. Set each setting and select "Save" on the next screen.

Upgrading the VuNow Pod from the Vunow Server

• If you may receive a message to upgrade the VuNow Service, we recommend that you upgrade your VuNow Service immediately.

■Notes:
• It is recommended that you upgrade to the latest version to enjoy the new features available. Other reason for upgrading are to fix known security holes and bugs.
• If you do not get the upgrade message, please go to "Settings" -> "Product Settings" -> "Product Info" and note down the product ID, client version and server version. E-mail the data to the contact details provided at support@VuNow.com

ENGLISH

OTHER FUNCTIONS

Operating the sleep timer

• The sleep timer allows the system to continue to operate for a specified period of time before automatically shutting off.
• To set the receiver to automatically turn off after the specified period of time.
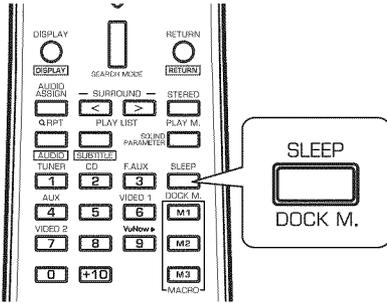
• Each time this button is pressed, the sleep time changes as follows:

$$\rightarrow \quad 30 \quad \rightarrow \quad 60 \quad \rightarrow \quad 90 \quad \rightarrow \text{OFF} \quad \rceil$$
Unit : minutes
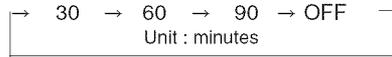
• While operating the sleep timer, " 🌙 " lights up.
• When the sleep time is selected, the fluorescent display is dimly lit.

Adjusting the brightness of the fluorescent display
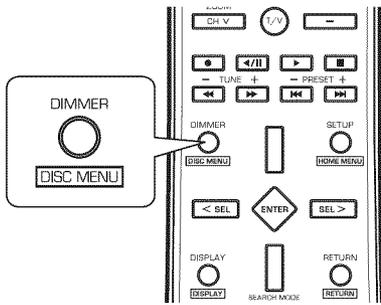
• Each time this button is pressed, the brightness of the fluorescent display changes as follows:

$$\rightarrow \text{ON} \quad \rightarrow \quad \text{dim} \quad \rightarrow \quad \text{OFF} \quad \rceil$$
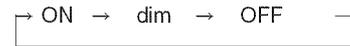
• In the display OFF mode, if some buttons are pressed, the display OFF mode may be canceled for several seconds depending on operation status.

■Note:
• When selecting the VuNow as an input source, you cannot adjust the brightness of the fluorescent display.

Displaying the operation status

During playback,
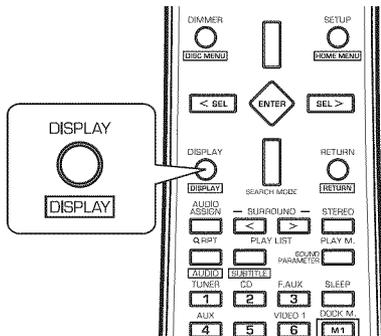
• Each time this button is pressed, the display mode changes as follows:

$$\rightarrow \boxed{\begin{array}{c}\text{Surround}\\\text{mode}\end{array}} \rightarrow \boxed{\text{Volume}} \rightarrow \boxed{\begin{array}{c}\text{Input}\\\text{source}\end{array}} \rceil$$
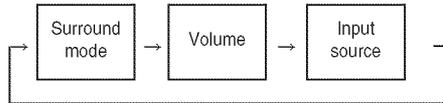
■Note:
• When selecting the VuNow as an input source, you cannot check the operation status.

ROOM2 SOURCE PLAYBACK

• This function allows enjoying one source in the main room and playing another in a different room at the same time.

■Notes:
• Only the analog input signal from the ROOM2 source can be heard. So, be sure to make analog audio connection and select analog input for ROOM2 source.
• Even when this receiver enters the standby mode, in such a case that "R2", etc. light up dim and the SURROUND </>, STEREO and VOLUME -/+ buttons on the front panel light up blue as it does in the operating mode, meaning only the ROOM2 circuitry operates, the ROOM2 source can be played independently.
• When you do not use the ROOM2 function, turn off the ROOM2 function to save electricity.

1. Turn on the ROOM2 function.
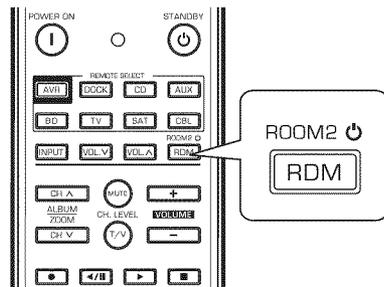
• "ROOM2 ~" is displayed for several seconds.
• Each time the ROOM2 button is pressed, the ROOM2 mode changes as follows :
  ON : To turn on the ROOM2 function.
  ↕ ("R2" lights up.)
  OFF : To turn it off. ("R2" goes off.)

■Notes:
• To hear the sound of ROOM2 source from the speakers connected to the SURROUND BACK/ROOM2 terminal, you should set the "AMP" to "R2" first. (For details, refer to "When selecting the AMP ASSIGN" on page 48.)
• When the ROOM2 mode is set to OFF, you cannot select the ROOM2 input and adjust the ROOM2 volume.

2. Select the desired input as a ROOM2 source.
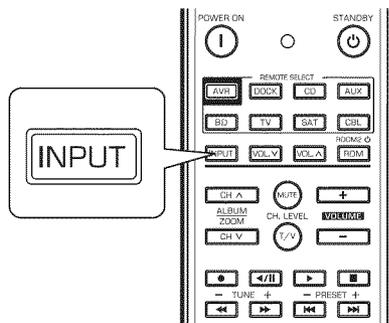
• Each time this button is pressed, the ROOM2 input can be selected among CD, AUX, F.AUX, TUNER, VIDEO1, V2/IPD.

■Note:
• You cannot select VuNow as a ROOM2 source.

3. Adjust the ROOM2 volume.
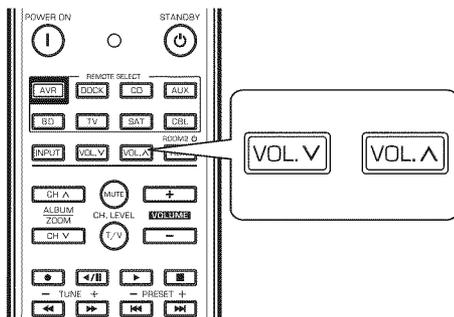
4. Start play on the component related to the ROOM2 source.

System Setup

• The setup menu is displayed on the fluorescent and allows you to perform the setup procedures easily. In most situations, you will only need to set this once during the installation and layout of your home theater, and it rarely needs to be changed later. The setup menu consists of 4 main menus; SYSTEM, SET ROOM EQ, SPEAKER SETUP and MULTI ROOM SETUP. These menus are then divided up into various sub-menus.

1. Turn the setup menu on.

```
SYSTEM
```
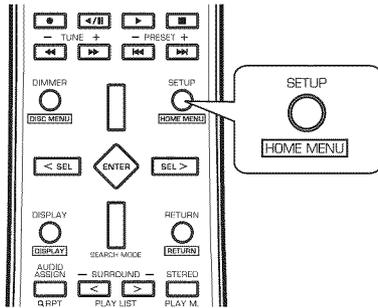
• The setup menu will be shown.
• To turn the menu off, press this button again.

■Notes:
• When the VuNow is selected as an input source, the system setup cannot be performed.

2. Select the desired menu using the CURSOR UP/DOWN buttons.
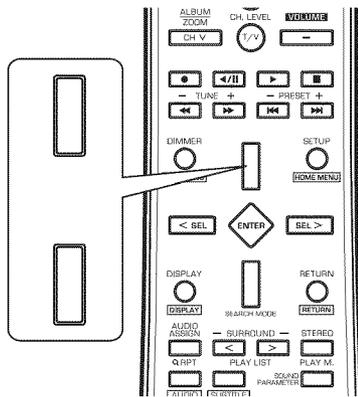
3. Confirm your selection.
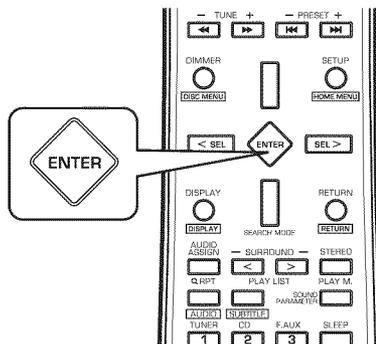
• When selecting "SYSTEM", see "SETTING THE SYSTEM" on page 48.
• When selecting "SET RMEQ", see "SETTING THE ROOM EQ" on page 49.
• When selecting "SPK SET", see "SETTING THE SPEAKER SETUP" on page 50.
• When selecting "MLT ROOM", see "SETTING THE MULTI ROOM SETUP" on page 54.

■Setup menu flow
• The setup menu flow is as follows :

◆ SYSTEM ──── AMP : BACK / R2

                     TONE : OFF / ON ──── TRE : 0 / -10 ~ +10

                     PWR-M : OFF / 60 / 30 / 10 / ON ──── BASS : 0 / -10 ~ +10

                                                                : Default settings

◆ SET RMEQ

◆ SPK SET ──── SPK CFG ──── F : LARGE / SMALL

                                  C : LARGE / SMALL / NO

                                  S : LARGE / SMALL / NO

                                  SB : LX2 / LX1 / SX2 / SX1 / NO

                                  SW : YES / PLUS / NO

                     X.OVER ──── X.OVER : 50 / 80 / 100 / 150 / 200

                     CH LEVEL ──── T. TONE : M / A ──── L : 0 dB / -15 ~ +15

                                                    C : 0 dB / -15 ~ +15

                                                    R : 0 dB / -15 ~ +15

                                                    SR : 0 dB / -15 ~ +15

                                                    SBR : 0 dB / -15 ~ +15

                                                    SBL : 0 dB / -15 ~ +15

                                                    SL : 0 dB / -15 ~ +15

                                                    SW : 0 dB / -15 ~ +15

                     DISTANCE ──── L : 10.0 FT / 0.1 ~ 30.0

                                    C : 10.0 FT / 0.1 ~ 30.0

                                    R : 10.0 FT / 0.1 ~ 30.0

                                    SR : 10.0 FT / 0.1 ~ 30.0

                                    SBR : 10.0 FT / 0.1 ~ 30.0

                                    SBL : 10.0 FT / 0.1 ~ 30.0

                                    SL : 10.0 FT / 0.1 ~ 30.0

                                    SW : 10.0 FT / 0.1 ~ 30.0

◆ MLT ROOM ──── ROOM2 : OFF / ON

                                    R2 : TUNER / CD / AUX / F.AUX / VIDEO 1/ V2/IPD

                                    R2VOL : 40 / MIN(0) ~ MAX(80)

• When "RETURN" is selected on a sub-menu, it will returns to the previous menu.

■Notes :
• "MLT ROOM" can be selected only when the "AMP" is set to "R2". (For details, refer to "When selecting the AMP ASSIGN" on page 48.)
• During setup menu operation, only the (POWER ON/) STANDBY button and the buttons required for system setup will function.

SETTING THE SYSTEM

◆ SYSTEM ———— AMP : **BACK** / R2
                TONE : **OFF** / ON ———— TRE : **0** / -10 ~ +10
                PWR-M : **OFF** / 60 / 30 / 10 / ON ——— BASS : **0** / -10 ~ +10

• AMP (AMP ASSIGN) : To assign the surround back channels' power amplifier correctly depending on how to use the speakers.
• TONE : To adjust the tone (bass and treble) as desired.
• PWR-M (POWER MANAGER) : To set the POWER MANAGER mode depending on how to use the VuNow for power saving.

1. Press the CURSOR UP/DOWN buttons to select the desired item.

2. Press the CURSOR LEFT/RIGHT buttons to set the selected item as desired.

■When selecting the AMP ASSIGN

• The surround back channels' power amplifier can drive the surround back speakers or the ROOM 2 speakers. Depending on how to use the speakers, you should assign the power amplifier correctly. (For details, refer to "CONNECTING SPEAKERS" on page 8 and "CONNECTING ROOM2 SPEAKERS" on page 9.)

BACK (SURROUND BACK) : To drive the surround back speakers when connecting the SURROUND BACK/ROOM2 channels
‡   to them.

R2 (ROOM2) : To drive the ROOM2 speakers when connecting the SURROUND BACK/ROOM2 channels to them.

■When selecting the TONE

OFF : To listen to a program source without the tone effect. ("DIR" lights up.)
‡
ON : To adjust the tone for your taste. ("DIR" goes off.)

◆When the TONE CONTROL is set to ON to adjust the tone (bass and treble)
①. Press the ENTER button to enter the tone adjustment mode.
   • Then "TRE ~" will be displayed.
②. Press the CURSOR UP/DOWN buttons to select the desired tone mode.
③. Press the CURSOR LEFT/RIGHT buttons to adjust the selected tone as desired.
   • The tone level can be adjusted within the range of -10 ~ +10 dB.
   • In general, we recommend the bass and treble to be adjusted to 0 dB (flat level).
   • Extreme settings at high volume may damage your speakers.
   • To complete tone adjustment, repeat the above steps ② and ③.

■When selecting the POWER MANAGER

OFF : To turn on the VuNow circuitry constantly when this unit is turned on.
‡
60 / 30 / 10 : If the specified period of time elapses after selecting the input source other than VuNow, the VuNow circuitry will
‡   be turned off.
ON : To turn on the VuNow circuitry when the VuNow is selected as an input source.

SETTING THE ROOM EQ

• Room EQ lets you avoid troublesome listening-based speaker setup and achieve good surround sound. Room EQ has the feature that provides the optimum listening environment at the listening position in your room. You should connect the supplied microphone to the SETUP MIC jack so that this receiver can analyze the information form a series of test tones emitted from speakers at listening position and can adjust the size, channel level, distance and frequency response of each speaker automatically.

• If you want to personalize your speaker setup by making the settings manually, perform the "SETTING THE SPEAKER SETUP" on page 50.

• After the Room EQ setup has been completed, set the Room EQ as desired. (For details, refer to "When selecting the "EQ (Room EQ)" on page 24.)

■Preparations

①. Check that the speakers are securely connected to this receiver.
   • If your subwoofer has adjustable volume and crossover frequency, set the volume halfway and set the crossover frequency to the maximum or the low pass filter off.

②. Connect the supplied microphone to the SETUP MIC jack on the front panel.(For details, refer to "SETUP MIC JACK" on page 12.)

■Notes :

• Because the microphone for Room EQ setup is designed for use with this receiver, to use the Room EQ setup function, do not use a microphone other than the one supplied with this receiver.

• After you have completed the Room EQ setup procedure, disconnect the microphone.

1. Place the microphone on a flat level surface at the listening position.

• If possible, use a tripod, etc. to attach the microphone at the same height as your ears would be when you are seated in your listening position.

• Ensure there are no obstacles between the speakers and the microphone.

2. Press the ENTER button to check the speaker configuration when "SET RMEQ" is displayed.

• "SET RMEQ" flickers while the receiver outputs the test tones to determine the speakers present in your setup and then "CHECK OK" is displayed.

■Notes :

• Try to be as quiet as possible while outputting the test tones.

• For correct speaker settings, do not adjust the volume while outputting the test tones.

• If there is too much ambient noise, error message will be displayed.
   In such a case, press the ENTER button to confirm "RETRY?" after checking for ambient noise.

• If there may be a problem with speaker connection, "ERR ~" (error message) will be displayed.
   If confirming "RETRY?" with pressing the ENTER button does not fix the problem, turn off the power and check the speaker connection.

3. To check the speaker configuration, press the CURSOR UP/DOWN buttons to select the speaker.

• Each time the CURSOR UP/DOWN buttons are pressed, the speaker is changed.

• If the speaker configuration is not correct, press the CURSOR LEFT/RIGHT buttons to change the setting. When the correction is finished, confirm the speaker configuration.

4. To confirm the speaker configuration, press the CURSOR UP/DOWN buttons to select "CHECK OK", then press the ENTER button.

• Then the Room EQ setup will start.

• If any operation is not performed while displaying "CHECK OK" for 10 seconds, the Room EQ setup will start automatically.

5. If the Room EQ setup has been completed, it will be returned to the Room EQ setup.

• Then the settings made in the Room EQ setup are memorized. You can check these settings on the "SPEAKER SETUP" menu. (For details, refer to "SETTING THE SPEAKER SETUP" on page 50.)

SETTING THE SPEAKER SETUP

- After you have installed this receiver and connected all the components, you should adjust the speaker settings for the optimum sound acoustic according to your environment and speaker layout.
- Even when you change speakers, speaker positions, or the layout of your listening environment, you should adjust the speaker settings, too.
- When performing the Room EQ setup procedure, you need not perform the SPEAKER CONFIGURATION, the CHANNEL LEVEL and the SPEAKER DISTANCE procedures. (For details, refer to "SETTING THE ROOM EQ" on page 49.)

◆ SPK SET ─── SPK CFG ─── F : LARGE / SMALL
                                    C : LARGE / SMALL / NO
                                    S : LARGE / SMALL / NO
                                    SB : LX2 / LX1 / SX2 / SX1 / NO
                                    SW : YES / PLUS / NO
              X.OVER ─── X.OVER : 50 / 80 / 100 / 150 / 200
              CH LEVEL ─── T. TONE : M / A ─── L : 0 dB / -15 ~ +15
                                              C : 0 dB / -15 ~ +15
                                              R : 0 dB / -15 ~ +15
                                              SR : 0 dB / -15 ~ +15
                                              SBR : 0 dB / -15 ~ +15
                                              SBL : 0 dB / -15 ~ +15
                                              SL : 0 dB / -15 ~ +15
                                              SW : 0 dB / -15 ~ +15
              DISTANCE ─── L : 10.0 FT / 0.1 ~ 30.0
                               C : 10.0 FT / 0.1 ~ 30.0
                               R : 10.0 FT / 0.1 ~ 30.0
                               SR : 10.0 FT / 0.1 ~ 30.0
                               SBR : 10.0 FT / 0.1 ~ 30.0
                               SBL : 10.0 FT / 0.1 ~ 30.0
                               SL : 10.0 FT / 0.1 ~ 30.0
                               SW : 10.0 FT / 0.1 ~ 30.0
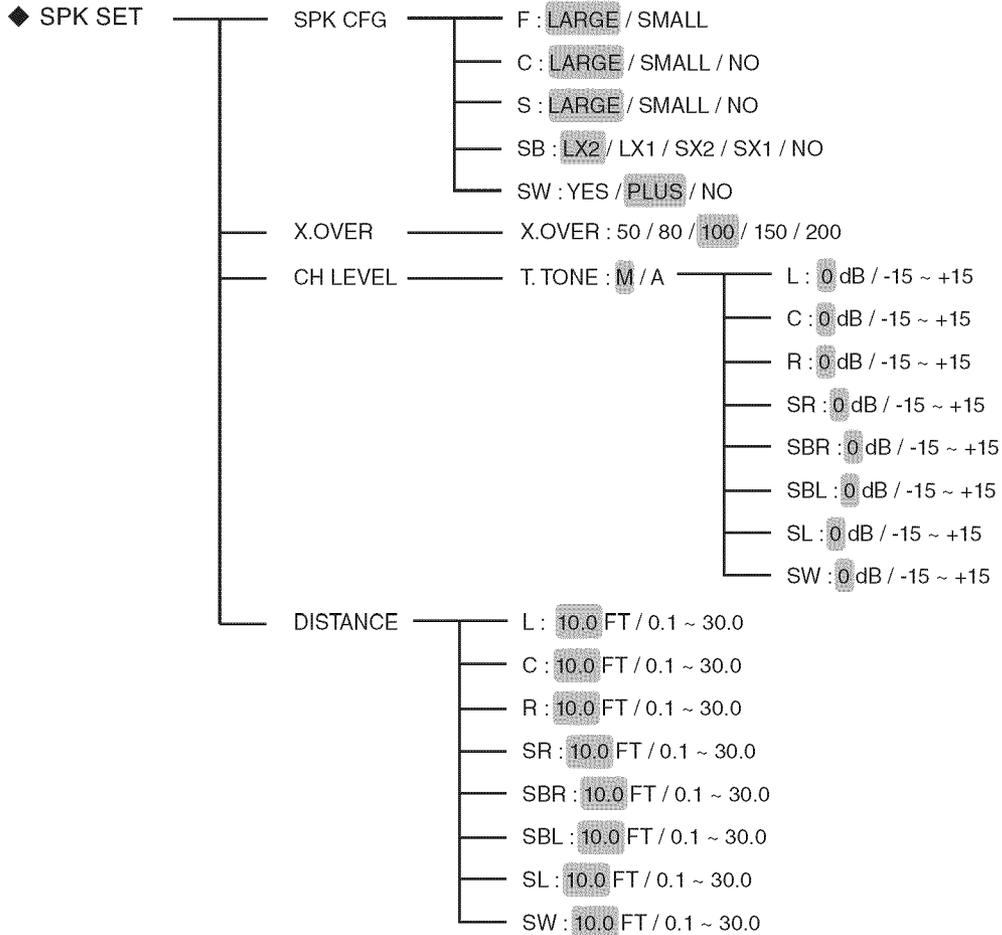
- SPK CFG (SPEAKER CONFIGURATION) : To adjust the speakers depending on whether they are connected or not.
- X.OVER (CROSSOVER FREQUENCY) : To select the desired crossover frequency.
- CH (CHANNEL) LEVEL : To adjust each channel level with the test tone.
- DISTANCE (SPEAKER DISTANCE) : To select the distance between the listening position and each speaker to set the delay time automatically for optimum surround playback.

50

When selecting the SPEAKER CONFIGURATION

1. Press the CURSOR UP/DOWN buttons to select the "SPK CFG", then press the ENTER button.

• Then "F ~" will be displayed.

2. Press the CURSOR UP/DOWN buttons to select the desired speaker.

3. Press the CURSOR LEFT/RIGHT buttons to set the selected speaker as desired.

• Depending on your speaker type, you can select one of these following speaker types.
• Front, Center, Surround and Surround Back speakers :
  LARGE (or L) : Select this when connecting speakers that can fully reproduce sounds below crossover frequency.
  SMALL (or S) : Select this when connecting speakers that can not fully reproduce sounds below crossover frequency.
  When this is selected, sounds below crossover frequency are sent to the subwoofer or speakers which are set to "LARGE" (when not using a subwoofer).
  NO : Select this when no speakers are connected. When this is selected, sounds are sent to the speakers which are not set to "NO".
  ( ) : Selectable for Surround Back speakers.

• Surround Back speakers :
  x2/x1 : Select the desired depending on the number of speakers connected to SURROUND BACK/ROOM2 terminals.
• SubWoofer :
  YES : Select this to output LFE signals and bass frequencies of channels set to "SMALL" from the subwoofer.
  PLUS : Select this if you want the subwoofer to output bass sound continuously or you want deeper bass (the bass frequencies that would normally come out the front and center speakers are also routed to the subwoofer.)
  NO : Select this when the subwoofer is not connected. The bass frequencies are output from other speakers.

■Notes :
• When speakers are set to "SMALL", you should set their crossover frequency correctly according to their frequency characteristics. (For details, refer to "When selecting the CROSSOVER FREQUENCY" on page 52.)
• When the "F" (Front) is set to "SMALL, "C" (Center), "S" (Surround) and "SB" (Surround Back) cannot be set to "LARGE" and the "SW" (SubWoofer) cannot be set to "NO".
• When the "S" (Surround) is set to "SMALL", the "SB" (Surround Back) cannot be set to "L" (Large).

4. Repeat the above steps 2 and 3 until the speakers are all set to the desired mode.

■About the speaker size
• Select "LARGE" or "SMALL" not according to the actual size of the speaker but according to the speaker's capacity for playing low frequency (bass sound below frequency set on the "CROSSOVER FREQUENCY" menu) signals.
• If you do not know, try comparing the sound at both settings (setting the volume to a level low enough so as not to damage the speakers) to determine the proper setting.

ENGLISH

When selecting the CROSSOVER FREQUENCY

1. Press the CURSOR UP/DOWN buttons to select the "X.OVER", then press the ENTER button.

• Then "X.OVER ~" will be displayed.

2. Press the CURSOR LEFT/RIGHT buttons to set the crossover frequency as desired.

• You can select the crossover frequency among 50, 80, 100, 150 and 200 Hz.

■**About the crossover frequency**
• When speakers are set to "SMALL", low frequencies in those channels that are below the crossover frequency are to output from subwoofer or front speakers which are set to "LARGE" (when not using a subwoofer).
• Refer to the operating instructions of the speakers to be connected. If the frequency range of your speaker is 100Hz ~ 20kHz, the crossover frequency should be set to 100 Hz (or slightly higher).

When selecting the CHANNEL LEVEL

1. Press the CURSOR UP/DOWN buttons to select the "CH LEVEL", then press the ENTER button.

• Then "T.TONE ~" will be displayed.

2. Press the CURSOR LEFT/RIGHT buttons to select the desired mode.

• Each time these buttons are pressed, the mode changes as follows :

M (MANUAL) : To move the test tone manually from speaker to speaker and to adjust the individual channel levels.
↕
A (AUTO) : To adjust the channel levels as the test tone moves from speaker to speaker automatically.

3. Press the ENTER button to confirm your selection.

• After the volume increases to the reference level, test tone will be output.
• When the "A" (AUTO) is selected, the test tone will be output from each speaker for 2 seconds.

4. Press the CURSOR LEFT/RIGHT buttons to adjust the level of each channel.

• When the "M" (MANUAL) is selected, select the speakers to be output the test tone with using the CURSOR UP/DOWN buttons.
• You can adjust the channel level within the range of -15 ~ +15 dB.

■**Note :**
• The test tone will not be output from the speakers set to "NO".

5. To cancel the test tone function, press the RETURN button.

• The previous menu will be returned.

When selecting the SPEAKER DISTANCE

1. Press the CURSOR UP/DOWN buttons to select the "DISTANCE", then press the ENTER button.

• Then "L ~" will be displayed.

2. Press the CURSOR UP/DOWN buttons to select the desired speaker.

■**Note :**
• You cannot select the speakers set to "NO".

3. Press the CURSOR LEFT/RIGHT buttons to set the selected speakers as desired.

• You cannot set the distance within the range of 0.1 ~ 30 feet in 0.1 feet intervals.

4. Repeat the above steps 2 and 3 until the distances are all set as desired.

■**About the speaker distance**
When enjoying multi-channel surround playback with Dolby Digital and DTS sources, etc., it is ideal that the center, surround, surround back and subwoofer speakers should be the same distance from the main listening position as the front speakers. By entering the distance between the listening position and each speaker, the delay times of center, surround, surround back and subwoofer speakers are automatically adjusted to create an ideal listening environment virtually as if the center, surround, surround back and subwoofer speakers were at their ideal locations respectively.

SETTING THE MULTI ROOM SETUP

• The ROOM2 function allows enjoying one source in the main room and playing another in a different room at the same time.

◆ MLT ROOM ———— ROOM2 : OFF / ON

                ├── R2 : TUNER / CD / AUX / F.AUX / VIDEO 1/ V2/IPD

                └── R2VOL : 40 / MIN(0) ~ MAX(80)
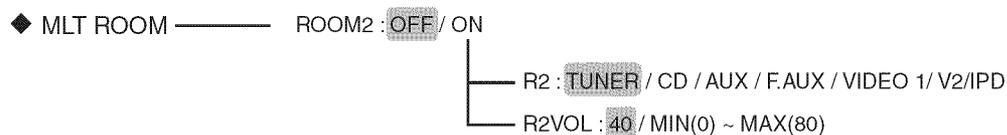
• ROOM2 (ROOM2 mode) : To turn on or off the ROOM2 function.
• R2 (ROOM2 input) : To select the desired ROOM2 source.
• R2VOL (ROOM2 volume) : To adjust the ROOM2 volume.

■Notes :
• To select "MLT ROOM", set the "AMP" to "R2" first. (For details, refer to "When selecting the AMP ASSIGN" on page 48.)
• Only the analog input signal from the ROOM2 source can be heard. So, be sure to make analog audio connection and select analog input for ROOM2 source.

1. Press the CURSOR LEFT/RIGHT buttons to set the ROOM2 mode as desired.

• Each time these buttons are pressed, the ROOM2 mode changes as follows :

ON : To turn on the ROOM2 function. ("R2" lights up.)
   ↕
OFF : To turn it off. ("R2" goes off.)

■Notes :
• When the ROOM2 mode is set to OFF, you cannot select the ROOM2 input and adjust the ROOM2 volume.
• When you do not use the ROOM2 function, turn off the ROOM2 function to save electricity.

■When the ROOM2 mode is set to ON

2. Press the CURSOR UP/DOWN buttons to select the desired item.

3. Press the CURSOR LEFT/RIGHT buttons to set the selected item as desired.

■When selecting the ROOM2 input
• You can select the desired among CD, AUX, F.AUX, TUNER, VIDEO1, V2/IPD.

■Note :
• You cannot select VuNow as a ROOM2 source.

■When selecting the ROOM2 volume
• You can adjust the ROOM2 volume within the range of 0 ~ 80 dB.

Troubleshooting Guide

If a fault occurs, run through the table below before taking your receiver for repair.
If the fault persists, attempt to solve it by switching the receiver off and on again. If this fails to resolve the situation, consult your dealer. Under no circumstances should you attempt to repair the receiver yourself. This could void the warranty.

PROBLEM	POSSIBLE CAUSE	REMEDY
No power	• The AC input cord is disconnected. • Poor connection at AC wall outlet or the outlet is dead or off.	• Connect cord securely. • Check the outlet using a lamp or another appliance.
No sound	• The speaker wires are disconnected. • The master volume is adjusted too low. • The MUTE button is pressed to ON. • Incorrect selection of input source. • Incorrect connections between the components. • The HDMI Audio Out is set to THRU.	• Check the speaker connections. • Adjust the master volume. • Press the MUTE button to cancel the muting effect. • Select the desired input source correctly. • Make connections correctly. • Set it to AMP. (For details, refer to "When selecting the HDMI (HDMI Audio Out)" on page 25.)
No sound from the surround speakers	• Surround mode is switched off(stereo mode). • Master volume and surround level are too low. • Monaural source is used. • Surround speaker setting is "NO".	• Select a surround mode. • Adjust master volume and surround level. • Select a stereo or surround source. • Select the desired surround speaker setting.
No sound from the center speaker	• Stereo mode, etc is selected. • Center speaker setting is "NO". • Master volume and center level are too low.	• Select the desired surround mode. • Select the desired center speaker setting. • Adjust master volume and center level.
No sound from the surround back speakers	• The input signal format or the current surround mode cannot support the 7.1(or 6.1) surround. • The surround back channels' power amplifier is assigned to "R2". • Master volume and surround back level are too low. • Surround back speaker setting is "NO".	• Under the proper situations, perform the 7.1(or 6.1) surround playback.(For details, refer to "ENJOYING SURROUND SOUND" on page 23.) • Assign the power amplifier to the surround back channels.(For details, refer to "When selecting the AMP ASSIGN" on page 48.) • Adjust master volume and surround back level. • Select the desired surround back speaker setting.
No picture	• Video connections between this unit and the monitor TV are not made correctly. • Incorrect selection of input source on the monitor TV.	• Make proper video connections. • Select the input source correctly.
No picture with an HDMI connection	• HDMI connection between this unit and the monitor TV is not made correctly. • The monitor TV or other equipments do not support HDCP.	• Make proper HDMI connection. • This unit will not output video signal unless the connected equipments supports HDCP.
Noise or distorted picture	• Video format of your monitor TV, BD/DVD player, etc. is different from NTSC.	• Change the video format to NTSC.
No picture with home network connection	• Home network connection between this unit and broadband router is not correctly. • The communication setting is not set correctly. • The settings related to VuNow are not set correctly.	• Make proper home network connection. • Set the setting correctly. • Set the settings correctly.
Stations cannot be received	• No antenna is connected. • The desired station frequency is not tuned in. • Antenna is in wrong position.	• Connect an antenna. • Tune in the desired station frequency. • Move antenna and retry tuning.
Preset stations cannot be received	• An incorrect station frequency has been memorized. • The memorized stations are cleared.	• Memorize the correct station frequency. • Memorize the stations again.
Poor FM reception	• No antenna is connected. • The antenna is not positioned for the best reception. • Weak signals.	• Connect an antenna. • Change the position of the antenna. • Install an outdoor FM antenna.
Remote control unit does not operate.	• Batteries are not loaded or exhausted. • The remote sensor is obstructed.	• Replace the batteries. • Remove the obstacle.

Specifications

■AMPLIFIER SECTION
- Power output, stereo mode, 6 Ω, THD 0.5%, 1 kHz | **2× 100 W**
- Total harmonic distortion at -3 dB, 6 Ω, 1 kHz | **0.5%**
- Input sensitivity/impedance
    Line (CD, AUX, VIDEO) | **200 mV/47kΩ**
- Signal to noise ratio, IHF "A" weighted
    Line (CD, AUX, VIDEO) | **100 dB**
- Frequency response
    Line (CD, AUX, VIDEO), 20 Hz ~ 70 kHz | **+0, -3 dB**
- Bass/Treble control, 100 Hz/10 kHz | **±10 dB**
- Surround mode, only channel driven
    Front power output, 6 Ω, 1 kHz, THD 0.7 % | **100 W / 100 W**
    Center power output, 6 Ω, 1 kHz, THD 0.7 % | **100 W**
    Surround power output, 6 Ω, 1 kHz, THD 0.7 % | **100 W / 100 W**
    Surround back / ROOM2 power output, 6 Ω, 1 kHz, THD 0.7 % | **100 W / 100 W**

■DIGITAL AUDIO SECTION
- Sampling frequency | **32, 44.1, 48, 96, 192 kHz**
- Digital input level
    Coaxial, 75 Ω | **0.5 Vp-p**
    Optical, 660 nm | **-15 ~ -21 dBm**

■VIDEO SECTION
- Video format | **NTSC**
- Input sensitivity(=Output level), 75 Ω
    Video (Composite(normal)) | **1 Vp-p**
    Component video (R-Y signal) | **0.5 Vp-p**
    (B-Y signal) | **0.5 Vp-p**
    (Y signal) | **1.0 Vp-p**
- HDMI connector | **19 pin**

■FM TUNER SECTION
- Tuning frequency range | **87.5~107.9 MHz**
- Usable sensitivity, THD 3%, S/N 30 dB | **9 dBf**
- 50 dB quieting sensitivity, mono/stereo | **20.2 / 45.3 dBf**
- Signal to noise ratio, 65 dBf, mono/stereo | **70 / 65 dB**
- Total harmonic distortion, 65 dBf,1 kHz, mono/stereo | **0.8 / 1.0 %**
- Frequency response, 30 Hz~15 kHz | **±3 dB**
- Stereo separation, 1 kHz | **30 dB**
- IF rejection ratio | **70 dB**

■GENERAL
- Power supply | **120 V ~ 60 Hz**
- Power consumption | **120 W**
- Dimensions (W× H× D, including protruding parts) | **430 x 72 x 306 mm(17 x 2-7/8 x 12 inches)**
- Weight (Net) | **4.58 kg (10.1 lbs)**

Note: Design and specifications are subject to change without notice for improvements.

Setup Code Table

TV

AOC	005	003			
Admiral	041	031			
Aiko	014				
Akai	005				
Alaron	026				
Ambassador	024				
America Action	027				
Ampro	043				
Anam	027	047	048	049	
Audiovox	030	027	014	034	
Baysonic	027				
Belcor	003				
BenQ	051				
Bell & Howell	019	001			
Bradford	027				
Brockwood	003				
Broksonic	028	031			
CXC	027				
Candle	005	011			
Carnivale	005				
Carver	010				
Celebrity	050				
Cineral	030	014			
Citizen	012	005	011	006	014
Concerto	011				
Contec	027				
Craig	027				
Crosley	010				
Crown	027	006			
Curtis Mathes	007	010	019	008	030	041
	012	005	016	011	001	006
	022	032	038	040		
Daewoo	030	003	006	014	034	035
Daytron	003				
Denon	016				
Dumont	002	003			
Dwin	044	036			
Electroband	050				
Emerson	019	028	031	027	029	025
	003	026	006	024	034	035
Envision	005				
Fisher	019				
Fujitsu	026				
Funai	027	026	023		
Futuretech	027				
GE	007	008	030	041	029	025
	004	015	038	040		
Gibralter	002	005	003		

Goldstar	005	025	003	011	
Gradiente	009	011			
Grunpy	027	026			
Hallmark	025				
Harley Davidson	026				
Harman/Kardon	010				
Havard	027				
Hitachi	016	011	018		
Infinity	010				
Inteq	002				
JBL	010				
JCB	050				
JVC	009	046			
KEC	027				
KTV	027	005	006		
Kenwood	005	003			
LG	011				
LXI	007	010	019	020	025
Logik	001				
Luxman	011				
MGA	017	005	025	003	
MTC	012	005	003	011	
Magnavox	010	005	026		
Majestic	001				
Marantz	010	005			
Matsushita	042				
Magatron	025	016			
Memorex	019	042	031	017	025	011
	001					
Midland	007	002	008	006	015	
Minutz	004					
Mitsubishi	041	017	025	003		
Motorola	041					
Multitech	027					
NAD	020	025	022			
NEC	005	003	011			
NTC	014					
Nikko	005	025	014			
Onwa	027					
Optimus	019	042	022			
Optonica	041	021				
Orion	028	031	026			
Panasonic	008	042				
Penney	007	020	008	012	005	025
	004	003	011	006	015	040
Pilco	010	031	005	016	003	
Philips	010					

Pilot	005	003	006			
Pioneer	022					
Portland	003	006	014			
Prism	008					
Proscan	007					
Proton	025	032				
Pulsar	002	003				
Quasar	008	042	021			
RCA	007	008	041	003	013	015
	037	038	039	040		
Radio Shack	007	019	021	027	005	025
	003	011	006			
Realistic	019	021	027	005	025	003
	011	006				
Runco	002	005	033			
SSS	027	003				
Sampo	005	006				
Samsung	012	005	025	003	011	045
Samsux	006					
Sansei	030					
Sansui	031					
Sanyo	019					
Scimitsu	003					
Scotch	025					
Scott	028	027	025	003	026	
Sears	007	010	019	020	025	026
	011	023				
Semivox	027					
Semp	020					
Sharp	041	021	006			
Sherwood	000	001	002	052		
Shogun	003					
Signature	001					
Sony	050					
Soundesign	027	025	026			
Squareview	023					
Starlite	027					
Supreme	050					
Sylvania	010	005				
Symphonic	023					
TMK	025	011	024			
Tandy	041					
Technics	008	042				
Technoi Ace	026					
Techwood	008	011				
Teknika	010	027	017	012	003	026
	011	001	006	014		
Telefunken	011					
Toshiba	019	020	012			
Totevision	006					
Vector Research	005					
Victor	009					
Vidikron	010					

Vidtech	025	003				
Wards	010	021	005	025	004	003
	026	011	001			
White Westinghouse	031	034	035			
Yamaha	005	003				
Zenith	002	031	001	014		

DOCK-VCR

Admiral	027	021				
Adventura	050					
Aiko	025					
Aiwa	005	034				
Akai	026					
America Action	025					
America High	004					
Asha	023					
Audiovox	005					
Beaumark	023					
Bell & Howell	017					
Brocksonic	021					
Broksonic	020	018	021	001		
CCE	015	025				
Calix	005					
Canon	004					
Carver	016					
Cineral	025					
Citizen	005	025				
Colt	015					
Craig	005	012	023	015	024	
Curtis Mathes	013	004	026	028		
Cybernex	023					
Daewoo	010	025				
Denon	008					
Dynatech	034					
Electrohome	005					
Electrophonic	005					
Emerex	002					
Emerson	005	020	000	018	009	021
	001	025				
Fisher	012	017				
Fuji	004	003				
Funai	034					
GE	013	004	027	023		
Garrard	034					
GoldStar	005	006				
Gradiente	034					
HI-Q	012					
Harley Davidson	034					
Harman/Kardon	016	006				
Harwood	015					

Headquarter	011				
Hitachi	034	008	026		
JVC	014	026			
Jensen	026				
KEC	005	025			
KLH	015				
Kenwood	014	026	006		
Kodak	004	005			
LXI	005				
Lloyd's	034				
Logik	015				
MEI	004				
MGA	023	009			
MGN Technology	023				
MTC	023	034			
Magnasonic	025				
Magnavox	004	007	016	034	019
Magnin	023				
Marantz	004	016			
Marta	005				
Matsushita	004	028	029		
Memorex	004	005	027	007	012	023
	017	021	011	031	032
Minolta	008				
Mitsubishi	027	014	009		
Motorola	004	016			
Multitech	034	015			
NEC	017	014	026	006	
Nikko	005				
Noblex	023				
Olympus	004				
Opimus	005	027	017	028	029	030
	031	032			
Orion	020	021	001		
Panasonic	004	028	022	029	031
Penny	004	005	023	008	006
Pentax	008				
Philco	004	021			
Philips	004	016			
Pilot	005				
Pioneer	014				
Profitronic	023				
Proscan	013				
Protec	015				
Pulsar	007				
Quarter	011				
Quartz	011				
Quasar	004	028	029	031	
RCA	013	004	027	023	008	019
Radio Shack	034				
Radix	005				
Randex	005				

Realistic	004	005	027	012	034	017
	011				
Runco	007				
STS	008				
Samsung	023	010	033		
Sanky	027	007			
Sansui	034	014	021	026	024
Sanyo	012	023	017	011	
Scott	020	010	018	009	
Sears	004	005	012	034	008	017
	011				
Semp	010				
Sharp	027				
Sherwood	000				
Shintom	015				
Shogun	023				
Singer	015				
Sony	004	002	034	003	
Syvania	004	016	034	009	
Symphonic	034				
TMK	023				
Tatung	026				
Teac	034	026			
Technics	004	028			
Teknika	004	005	034		
Thomas	034				
Toshiba	010	009			
Totevision	005	023			
Unitech	023				
Vector	010				
Vector Research	006				
Video Concepts	010				
Videosonic	023				
Wards	013	004	027	012	016	023
	034	008	015	019	
White WestingHouse	021	025			
XR-100	004	034	015		
Yamaha	006				
Zenith	007	034	021	003	

DOCK - TV/VCR

Ameira High	004 (TV use 008)
Brocksonic	001
Colt	015
Cutis Mathes	004 (TV use 008)
Daewoo	025
Emerson	001
Funai	034
GE	004 (TV use 008) 013 (TV use 007)
	027 (TV use 041) 023

Hitachi	004 (TV use 008) 034
HQ	034
Lloyds	034
MGA	023
Megavox	016 (TV use 010) 004 (TV use 008)
	034
Magnin	023
Memorex	005 028 (TV use 042)
Mitsubishi	027 (TV use 041)
Orion	001
Panasonic	004 (TV use 008) 028 (TV use 042)
Penney	004 (TV use 008) 023
	028 (TV use 042)
Quasar	004 (TV use 008) 028 (TV use 042)
RCA	013 (TV use 007) 004 (TV use 008)
	027 (TV use 041)
Sansui	034
Sanyo	023
Sear	034 005
Sharp	027 (TV use 041)
Sony	002 (TV use 050)
Symphonic	034
Zenith	034

BD/DVD

Apex	015
Chinese Manufacturer	025
Harman/Kardon	009
JVC	008
Kenwood	005
Megavox	024
Mitsubishi	027
Onkyo	024
Panasonic	013
Philips	024 006
Pioneer	003 014 026
Proscan	002
RCA	002
Samsung	017
Sherwood	001 023 012 011 000 016
	018 019 020 021 022
Sony	004
Technics	013
Theta Digital	014
Toshiba	024
Yamaha	013 007
Zenith	024 010

CBL

ABC	002	003	009	030	006 008
Allegro	018	021			
Archer	018	026			
Bell&Howell	009				
Century	018				
Citizen	018	021			
Comtronics	014				
Contec	011				
Eastern	001				
Emerson	026				
Everquest	010	014			
Focus	022				
Garrard	018				
Gemini	010				
General Electric	084				
General Instrument	033	032	006	034	
GoldStar	017	014			
Goodmind	026				
Hamlin	012	020	004	013	
Hitachi	006				
Jasco	010	018	021		
Jerrold	002	007	033	032	009 010
	006	034			
Movie Time	015				
NSC	015				
Oak	011				
Optimus	031				
Panasonic	016	031			
Philips	018				
Pioneer	017	025			
Popular Mechanics	022				
RCA	031				
Radio Shack	010	021	026	028	
Recoton	022				
Regal	012	020			
Regency	001				
Rembrandt	006				
Samsung	017	014			
Scientific Atlanta	003	023	030	027	
Sherwood	000				
Signal	010	014			
Signature	006				
SL Marx	014				
Sprucer	031				
Starcom	002	010			
Stargate	010	014	026		
Starquest	010				
Teleview	014				
Tocom	007	008			

Tusa	010		
TV86	015		
Unika	018		
Universal	018	019	
Viewstar	015		
Zenith	024		
Zentek	022		

SAT

AlphaStar	008		
Chaparral	001		
Echostar	009		
Expreevu	009		
General Instrument	016	015	018
Hitachi	011		
HTS	009		
Hughes Net.Sys	007		
JVC	009		
Jerrold	016	015	
Megavox	006	005	
Memorex	006		
Next Level	018		
Panasonic	017		
Philips	006	005	
Primestar	016	015	
Radio Shack	018		
RCA	003	002	012
Realistic	014		
Sherwood	000		
Sony	004		
Star Choice	018		
Toshiba	010		
Uniden	006	005	014
Zenith	013		

AUX-MD

Sherwood	035 (for Mini Disc)

AUX-USB

Sherwood	000

AUX-LD

Denon	007	
Mitsubishi	007	
NAD	007	
Pioneer	007	
Sony	017	018

AUX-TAPE

Aiwa	004	034	
Carver	004		
Harman/Kardon	016	004	
JVC	022	024	
Kenwood	008		
Megavox	004		
Marantz	004		
Onkyo	012	025	
Opimus	002	020	
Panasonic	038		
Pioneer	002	019	011
Sansui	004		
Sony	021	014	026
Technics	038		
Victor	024		
Wards	002		
Yamaha	010	009	

AUX-CD AMP

Aiwa	030	
Carver	023	
Curtis Mathes	027	
Denon	037	
Harman/Kardon	040	
Linn	023	
Megavox	023	
Marantz	023	
Panasonic	039	
Philips	023	040
Pioneer	003	027
Sony	019	033
Technics	039	
Wards	003	
Yamaha	028	

ENGLISH

AUX-HOME AUTOMATION

GE	043
Lutron	044
One For All	042
Radio Shack	043
Security System	042
Universal X10	042
X10	042

AUX-DBS

Aiwa	045	029
Fisher	005	
Harman/Kardon	046	
JBL	046	
JVC	047	
Jerrold	031	
RCA	006	
Scientific Artlanta	032	
Sony	045	
Starcom	031	

AUX-VIDEO ACCESSORY

Archer	013
GC Electronics	013
Jebsee	013
Rabbit	036
Radio Shack	013
Telecaption	015

CD

Aiwa	010	030		
Burmester	019			
California Audio Lab	002			
Carver	010	012	020	
DKK	001			
Denon	028	034		
Emerson	035			
Fisher	012	033		
Garrard	019	018		
Genexxa	004	035		
Harman/Kardon	010	011		
Hitachi	004			
JVC	007			
Kenwood	003	029	016	024	025
Krell	010			
LXI	035			

Linn	010					
MCS	002					
MTC	019					
Megavox	010	035				
Marantz	002	010	013			
Mission	010					
NSM	010					
Nikko	033					
Onkyo	008	026				
Opimus	001	004	012	035	029	
	019	009	021	020		
Panasonic	002	031				
Parasound	019					
Philips	010	023				
Pioneer	004	035	021	017		
Proton	010					
QED	010					
Quasar	002					
RCA	012	035	006	036		
Realistic	012	019	013			
Rotel	010	019				
SAE	010					
Sansui	010	035				
Sanyo	012					
Scott	035					
Sears	035					
Sharp	029	013	037			
Sherwood	013	027	038	039	040	041
	000					
Sony	001	014	022			
Soundesign	009					
Tascam	019					
Teac	019	018	033	013		
Technics	002	031				
Victor	007					
Wards	010	006				
Yamaha	005	015				
Yorx	032					

R-904N
NetBoxx

⑨ Sherwood