

SONY®

4-181-571-14(1)

Mini HI-FI Component System

Operating Instructions

MHC-GZR999D

MHC-GZR888D

MHC-GZR777D



WARNING

To reduce the risk of fire, do not cover the ventilation opening of the apparatus with newspapers, tablecloths, curtains, etc. Do not place the naked flame sources such as lighted candles on the apparatus.

To reduce the risk of fire or electric shock, do not expose this apparatus to dripping or splashing, and do not place objects filled with liquids, such as vases, on the apparatus.

As the main plug is used to disconnect the unit from the mains, connect the unit to an easily accessible AC outlet. Should you notice an abnormality in the unit, disconnect the main plug from the AC outlet immediately.

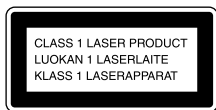
Do not install the appliance in a confined space, such as a bookcase or built-in cabinet.

Do not expose batteries or apparatus with battery-installed to excessive heat such as sunshine, fire or the like.

The unit is not disconnected from the mains as long as it is connected to the AC outlet, even if the unit itself has been turned off.

CAUTION

The use of optical instruments with this product will increase eye hazard.



This appliance is classified as a CLASS 1 LASER product. This marking is located on the rear exterior.

About this manual

- The instructions in this manual are for models MHC-GZR999D, MHC-GZR888D and MHC-GZR777D. Each model consists of the following components.

MHC-GZR999D

Main unit:

HCD-GZR999D

Speaker system:

SS-GZR999D (Front speakers)

SS-RSZ999D (Satellite speakers)

SS-WGR999D (Subwoofer)

MHC-GZR888D

Main unit:

HCD-GZR888D

Speaker system:

SS-GZR999D (Front speakers)

SS-RSZ999D (Satellite speakers)

MHC-GZR777D

Main unit:

HCD-GZR777D

Speaker system:

SS-GZR777D (Front speakers)

In this manual, the MHC-GZR999D is used for illustration purposes unless stated otherwise.

- Icons, such as **DVD-V**, listed at the top of each explanation indicate what kind of media can be used with the function being explained.
- The Control Menu items may be different depending on the disc.
- The Control Menu items may vary depending on the area.
- The Setup Menu items may be different depending on the area.
- The order of the displayed items may be different from the actual display.

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Playable discs

Type	Disc logo	Characteristics	Icon
DVD VIDEO	     	<ul style="list-style-type: none"> • DVD VIDEO • DVD-R/DVD-RW in DVD VIDEO format or video mode • DVD+R/DVD+RW in DVD VIDEO format 	
VR (Video Recording) mode	 	<ul style="list-style-type: none"> • DVD-R/DVD-RW in VR (Video Recording) mode (except for DVD-R DL) 	
VIDEO CD		<ul style="list-style-type: none"> • VIDEO CD (Ver. 1.1 and 2.0 discs) • Super VCD • CD-R/CD-RW/CD-ROM in video CD format or Super VCD format 	
CD		<ul style="list-style-type: none"> • Audio CD • CD-R/CD-RW in audio CD format 	

Continued 

Type	Disc logo	Characteristics	Icon
DATA CD		<ul style="list-style-type: none"> CD-R/CD-RW/CD-ROM in DATA CD format, containing MP3 files, JPEG image files, DivX video files and MPEG4 video files, and conforming to ISO 9660 Level 1/Level 2, or Joliet (extended format) 	
DATA DVD		<ul style="list-style-type: none"> DVD-ROM/DVD-R/DVD-RW/DVD+R/DVD+RW in DATA DVD format, containing MP3 files, JPEG image files, DivX video files and MPEG4 video files, and conforming to UDF (Universal Disk Format) 	

- MP3 files: MP3 (MPEG 1 Audio Layer 3) is a standard format defined by ISO (International Organization for Standardization)/MPEG (Moving Picture Experts Group) which compresses audio data. MP3 files must be in MPEG 1 Audio Layer 3 format.
- JPEG image files: JPEG image files must conform to the DCF image file format (DCF “Design rule for Camera File System”: Image standards for digital cameras regulated by “Japan Electronics and Information Technology Industries Association” (JEITA)).
- DivX video files: DivX video files must be recorded in DivX format with the extension “.avi” or “.divx”.
- MPEG4 video files: MPEG4 video files must be recorded in MP4 file format with the extension “.mp4” or “.m4v”.
- ISO 9660: A logical format of files and folders on CD-ROMs, defined by ISO.

Discs that cannot be played

- CD-ROMs recorded in PHOTO CD format
- DATA CDs recorded in MP3 PRO format
- Data part of CD-Extras¹⁾
- Data part of Mixed CDs²⁾
- Super Audio CDs
- DVD Audio discs
- DVD-RAMs
- CPRM compatible DVD-R/RW recorded in Copy-once programs³⁾
- Discs of non-standard shape (for example, heart, square, star)
- Discs that have adhesive tape, paper, or sticker attached to them
- Rental or used discs with attached seals where the glue extends beyond the seal
- Discs that have labels printed using ink that feels tacky when touched

¹⁾ CD-Extra: This format records audio (AUDIO CD data) on the tracks in session 1 and data on the tracks in session 2.

²⁾ Mixed CD: This format records data on the first track and audio (AUDIO CD data) on the second and subsequent tracks of a session.

³⁾ CPRM: "Content Protection for Recordable Media" is a coding technology that protects copyright for Copy-Once programs.

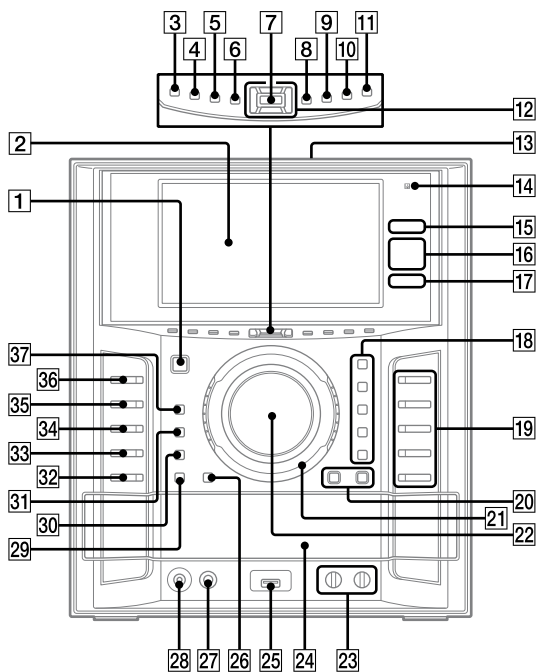
See "Region code of DVD VIDEOS you can play back on this system" and "Notes on discs" (page 125) regarding the region code and notes on discs.

Guide to parts and controls

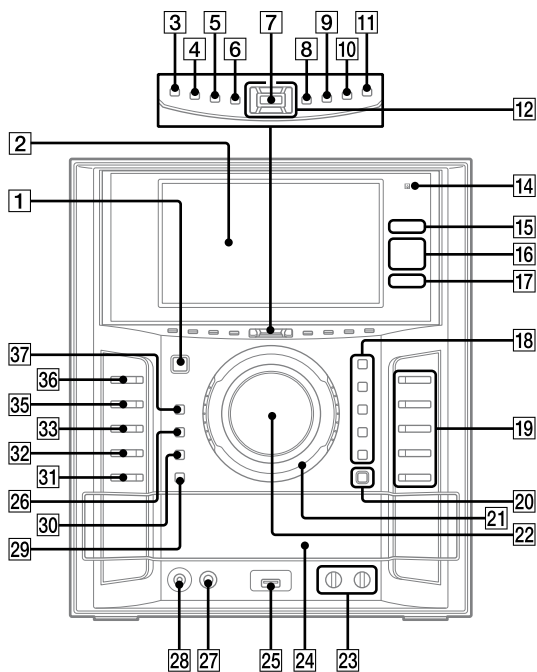
This manual mainly explains operations using the remote, but the same operations can also be performed using the buttons on the unit having the same or similar names.

Main unit

**MHC-GZR999D (except for Latin American models)/
MHC-GZR888D**

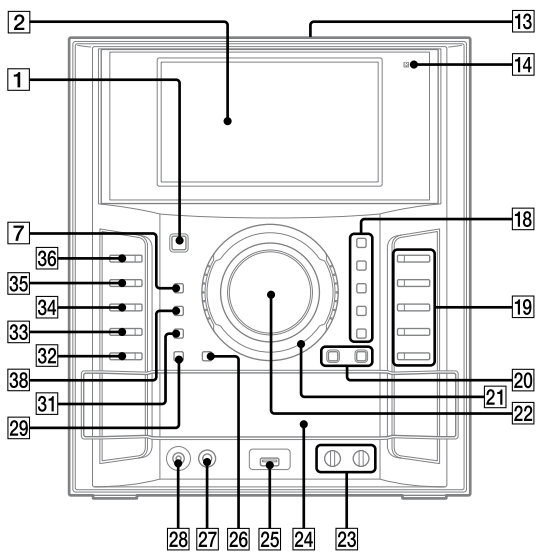


MHC-GZR999D (Latin American models only)



Continued

MHC-GZR777D



1**I/⏻ (on/standby) button**

Press to turn on or off the system.

STANDBY indicator

Lights up when the system is turned off.

2**Display****3****DISPLAY button (page 36) (MHC-GZR999D/GZR888D only)**

Press to display the clock in the front panel display.

4**OPTIONS button (page 34, 100) (MHC-GZR999D/GZR888D only)**

Press to enter the option menus.

5**DVD TOP MENU button (page 40) (MHC-GZR999D/GZR888D only)**

Press to display the DVD title on the TV screen.

6**DVD/TUNER MENU button (page 48, 68, 81) (MHC-GZR999D/GZR888D only)**

Press to turn on or off the menu items on the TV screen.

Press to preset the radio station.

7**ENTER button**

Press to enter the settings.

8**RETURN button (page 49, 83) (MHC-GZR999D/GZR888D only)**

Press to return to the previous menu on the TV screen.

9**☐ DISP button (page 37, 134) (MHC-GZR999D/GZR888D only)**

Press to turn on or off the Control Menu on the TV screen.

The Control Menu is displayed only when the “DVD” function or “USB” function is selected.

Continued 

10

CLEAR button (page 49, 54, 77, 83) (MHC-GZR999D/GZR888D only)

Press to delete a pre-programmed track. Press to erase files or folders from the connected optional USB device. Press to return to the original display when viewing the rotated image.

11

LCD ON/OFF button (MHC-GZR999D/GZR888D only)

Press to turn on or off the front panel display.

12

▲/▼/◀/▶ button (MHC-GZR999D/GZR888D only)

Press to select the menu items.

13

▲ PUSH OPEN/CLOSE button (except for Latin American models)

Press to insert or eject a tape.

14

Remote sensor

15

TIMER indicator (MHC-GZR999D/GZR888D only)

Lights up when the Play Timer or Rec Timer is set, and flashes when the Sleep Timer is set.

16

Dolby D (Dolby Digital) indicator
DTS indicator

(MHC-GZR999D/GZR888D only)
Indicates the current surround format.

17

USB MEMORY indicator (MHC-GZR999D/GZR888D only)

Lights up when the USB device is recognized.

18

DISC 1 — DISC 3* button (page 41, 71, 75)

Press to select a disc.

Press to switch to the “DVD” function from other function.

Lights up when a disc is in the disc tray, and flashes when the disc tray is selected (MHC-GZR999D/GZR888D only).

OPEN/CLOSE ▲ button

Press to load or eject a disc.

DISC SKIP/EX-CHANGE button (page 39, 41, 75)

Press to select a disc.

Press to exchange a disc while playing.

19**▶* (play) button**

Press to start playback.

||* (pause) button

Press to pause playback.

■ (stop) button

Press to stop playback.

◀◀/▶▶ (rewind/fast forward) button

Press to find a point in a track, file, chapter or video file.

◀||▶ button

Press to watch the slow-motion play.

TUNING +/- button

Press to tune in the desired station.

20**REC TO USB button (page 75, 79, 80)**

Press to transfer music from a disc or record the sound from an analog audio source to the connected USB device. Press to mark track numbers during recording.

REC TO TAPE button (page 72) (except for Latin American models)

Press to record on a tape.

21**OPERATION DIAL (page 40, 68)**Turn to select a track, chapter or video file.
Turn to select the preset station.**22****MASTER VOLUME**

Turn to adjust the volume.

23**MIC LEVEL**

Turn to adjust the microphone volume.

ECHO LEVEL

Turn to adjust the echo level.

Continued 

24

Disc tray

25

↔ (USB) port

Connect an optional USB device.

↔ (USB) indicator

Lights up in blue when the system is turned on.

Lights up in red when transferring or recording to the connected optional USB device or when erasing audio files or folders.

26

**EQ BAND/MEMORY button
(page 88)**

Press to select the frequency band when adjusting the equalizer.

27

MIC jack

Connect a microphone.

28

🎧 (PHONES) jack

Connect the headphones.

29

PRESET EQ button (page 88)

Press to select the preset sound effect.

30

**SOUND FIELD button (page 89)
(MHC-GZR999D/GZR888D only)**

Press to select the sound field for the surround sound.

31

GROOVE button (page 88)

Press to reinforce the bass.

32

VIDEO/SAT* button

Press to select the “VIDEO” or “SAT” function.

33

TUNER/BAND* button

Press to select the “TUNER” function.
Press to switch among FM and AM band.

34

**TAPE* button (except for Latin
American models)**

Press to select the “TAPE” function.

35

USB* button

Press to select the “USB” function.

36**DVD* button**

Press to select the "DVD" function.

37**SUBWOOFER* button**
(MHC-GZR999D only)

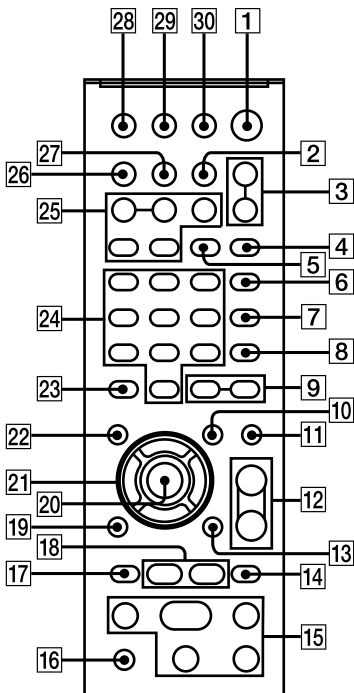
Press to turn on or off the subwoofer.

SUBWOOFER indicator
(MHC-GZR999D only)

Lights up when the subwoofer is turned on.

38**ILLUMINATION button** (page 100)
(MHC-GZR777D only)

Press to change the power illuminator.

* Lights up when selected. (MHC-GZR999D/
GZR888D only)**Remote****1****I/⏻ (on/standby) button**

Press to turn on or off the system.

TV I/⏻¹⁾ (on/standby) button

Press to turn on or off the TV.

Continued

2

DISC SKIP button (page 41, 75)

Press to select a disc.

3

FUNCTION +/- button

Press to select the “DVD,” “USB,” “TAPE,” “TUNER FM,” “TUNER AM” or “VIDEO/SAT” function.

4

PICTURE NAVI button (page 48, 82)

Press to display the thumbnail pictures.

5

REPEAT/FM MODE button (page 57, 69, 86)

Press to listen to a disc, a USB device, a single track or file repeatedly.

Press to select FM reception mode (monaural or stereo).

6

AUDIO button (page 43, 91, 104)

Press to select the desired audio signal on the TV screen.

7

SUBTITLE button (page 41)

Press to switch the language of the subtitle (DVD VIDEO only).

D. TUNING button (page 67)

Press to switch to the direct tuning mode.

8

MEMORY SELECT button (page 87)

Press to select the playback source or transferring destination on a Sony Ericsson mobile phone.

ANGLE button (page 41)

Press to change the angle (DVD VIDEO with multi-angles only).

9

 +/- button (page 40)

Press to select a folder.

10

DVD/TUNER MENU button (page 48, 68, 81)

Press to turn on or off the menu items on the TV screen.

Press to preset the radio station.

11

SOUND FIELD button (page 89)

Press to select the sound field for the surround sound.

12


VOLUME +/-²⁾ button

Press to adjust the volume.

TV VOL +/-¹⁾²⁾ button

Press to adjust the TV volume.

13

 DISPLAY button (page 32, 37, 45, 75, 93)

Press to turn on or off the Control Menu on the TV screen.

The Control Menu is displayed only when the “DVD” function or “USB” function is selected.

14

PRESET + button (page 68)

Press to select the preset station.


 (go forward) button

Press to select a track, chapter or video file.


TV CH +¹⁾ button

Press to change the TV channels.

15

 ²⁾ (play) button


Press to start playback.

 (rewind/fast forward) button


Press to find a point in a track, file, chapter or video file.

 SLOW/SLOW  button

Press to watch the slow-motion play.

 (pause) button

Press to pause playback.

 (stop) button

Press to stop playback.

TUNING +/- button

Press to tune in the desired station.

16

TV¹⁾ button

Press to operate the TV functions.

Continued 

17

PRESET — button (page 68)

Press to select the preset station.

◀◀ (go backward) button

Press to select a track, chapter or video file.

TV CH —¹⁾ button

Press to change the TV channels.

18

◀|| STEP ||▶ button (page 40)

Press to play one frame at a time when playback is paused.

ADVANCE •→ button (page 41)

Press to advance the current scene during playback.

←• REPLAY button (page 41)

Press to replay the previous scene during playback.

19

↶ RETURN button (page 49, 83)

Press to return to the previous menu on the TV screen.

20

ENTER button

Press to enter the settings.

21

▲/▼/◀/▶ button

Press to select the menu items.

22

DVD TOP MENU button (page 40)

Press to display the DVD title on the TV screen.

23

CLEAR button (page 38, 47, 54, 66, 77, 83)

Press to delete a pre-programmed track.
Press to erase files or folders from the connected optional USB device.
Press to return to the original display when viewing the rotated image.

-/--¹⁾ button

Press to enter a single-digit or double-digit number.

24**Numeric buttons²⁾**

Press to select a track, chapter or video file number.

Press to enter a password.

10/0¹⁾ button

Press to enter a double-digit number.

25**KEY CONTROL **b/#** button
(page 92)**

Press to change the key to suit your vocal range.

SCORE button (page 95)

Press to start or stop calculating your vocal score.

**KARAOKE MODE button
(page 91)**

Press to select the Karaoke mode.

KARAOKE PON button (page 93)

Press to activate the “Karaoke Pon” function.

26**DISPLAY button (page 36, 99,
100)**

Press to display the disc/USB device information (MHC-GZR777D only) or clock in the front panel display.

27**TIME/TEXT button (page 100)**

Press to change the information on the display.

28**TV INPUT¹⁾ button**

Press to switch the input sources.

SLEEP button (page 97)

Press to set the Sleep Timer.


29**TIMER MENU button (page 36,
97)**

Press to set the clock and the timers.

30**THEATRE SYNC button (page 38)**

Press to activate the “THEATRE SYNC” function.

¹⁾ This button is used to operate a Sony TV. For details, see “Operating a Sony TV” (page 33).

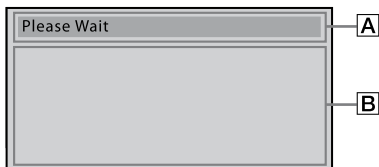
²⁾ The numeric button 5, TV VOL +, VOLUME + and  buttons on the remote have a tactile dot. Use the tactile dot as a reference when operating the system.

Display

MHC-GZR999D/GZR888D

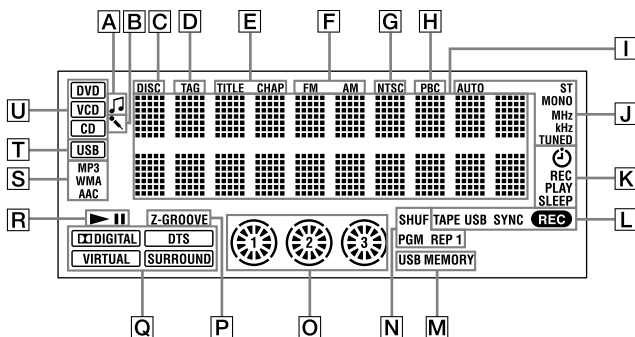
The front panel displays for MHC-GZR999D and MHC-GZR888D are liquid crystal displays (LCD). You can confirm contents and the Control Menu displayed on the TV screen in the LCDs.

To set the LCD, see “Setting the LCD (MHC-GZR999D/GZR888D only)” (page 34).



A Displays the text information.

B You can confirm contents and the Control Menu displayed on the TV screen.
PICTURE MODE and WIDE MODE menus are displayed when setting the LCD.

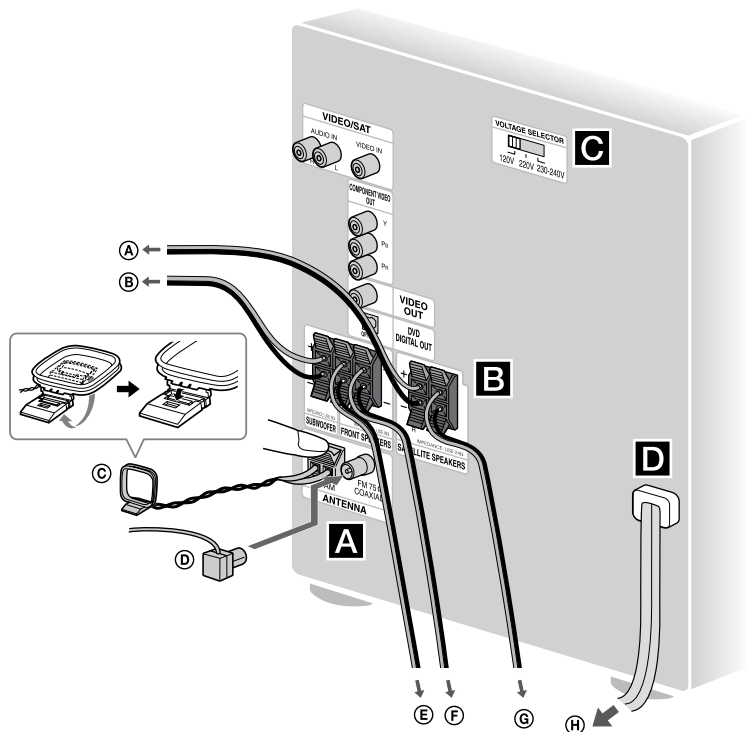


- A** Lights up when the track or file information is displayed.
- B** Lights up when the Karaoke mode is turned on.
- C** Lights up when disc number is displayed.
- D** Lights up when the MP3 file being played back has the ID3 tag.
- E** Lights up when the title or chapter number is displayed.
- F** Lights up in "TUNER" function.
- G** Lights up when the output video signal is NTSC.
- H** Lights up when playing VIDEO CD with PBC function.
- I** Displays the text information.
- J** Lights up in "TUNER" function.
- K** Lights up when the timer is set.
- L** Lights up during transfer or recording.
- M** Lights up when the USB device is recognized.
- N** Indicates the selected play mode.
- O** Indicates the disc presence.
- P** Lights up when "GROOVE" or "Z-GROOVE" is turned on.
- Q** Indicates the current surround format.
- R** Indicates the playback status of the disc, tape or USB device.
- S** Indicates the file format.
- T** Lights up when the "USB" function is selected.
- U** Indicates the type of disc being played back.

Getting Started

Hooking up the system securely

MHC-GZR999D



(A) To satellite speaker (Right)

(B) To subwoofer

(C) AM loop antenna

(D) FM lead antenna (Extend it horizontally.)

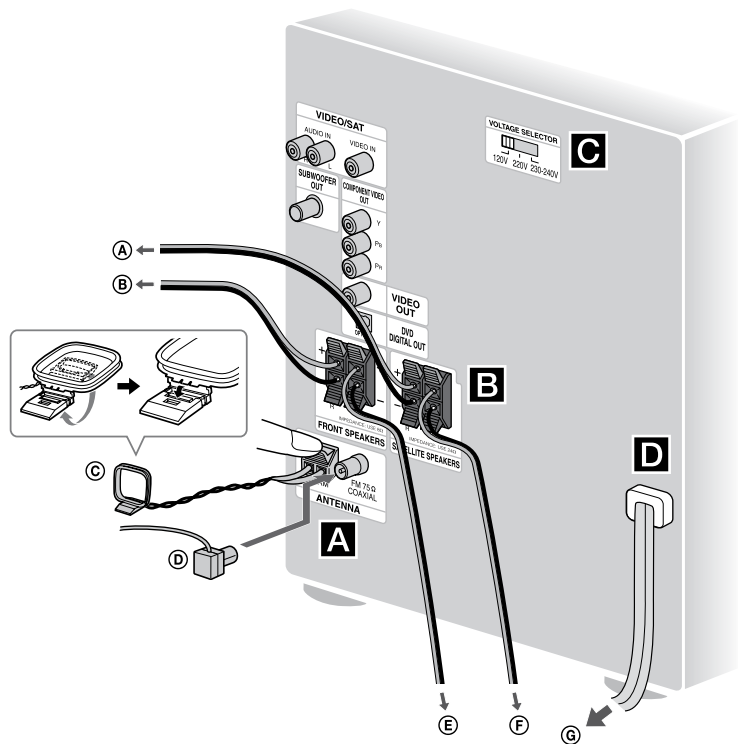
(E) To front speaker (Right)

(F) To front speaker (Left)

(G) To satellite speaker (Left)

(H) To wall outlet

MHC-GZR888D

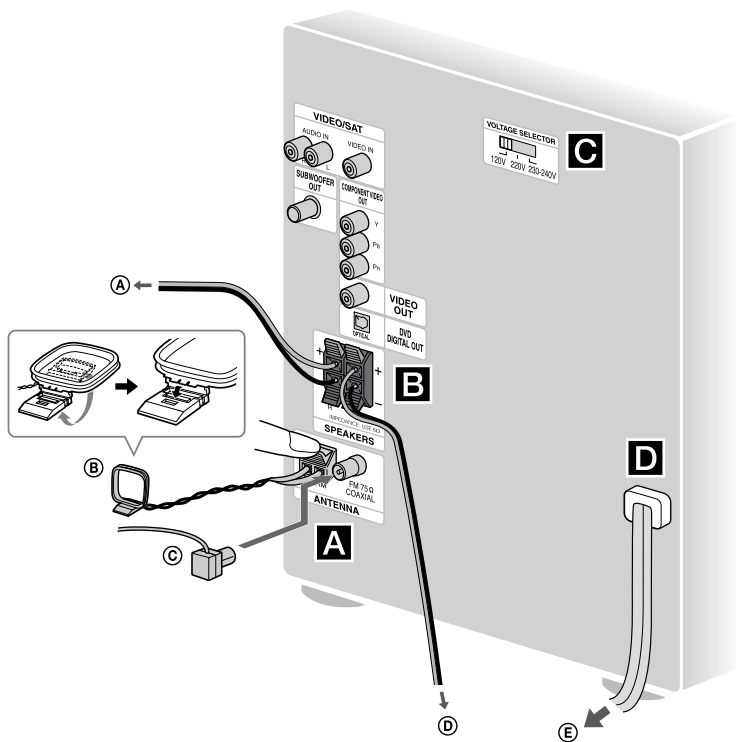


- (A) To satellite speaker (Right)
- (B) To front speaker (Right)
- (C) AM loop antenna
- (D) FM lead antenna (Extend it horizontally.)

- (E) To front speaker (Left)
- (F) To satellite speaker (Left)
- (G) To wall outlet

Continued

MHC-GZR77D



- A** To front speaker (Right)
- B** AM loop antenna
- C** FM lead antenna (Extend it horizontally.)

- D** To front speaker (Left)
- E** To wall outlet

A FM/AM antennas

Find a location and an orientation that provide good reception, and then set up the antenna.

Keep the antennas away from the speaker cords, the power cord and the USB cable to avoid picking up noise.

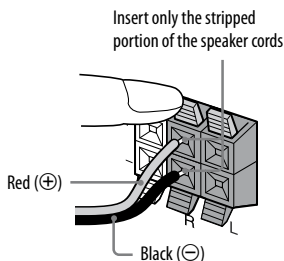
B Speakers

Insert only the stripped portion of the speaker cords.

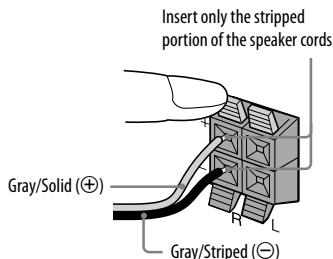
The speaker cords are color-coded with their respective speaker terminals.

The type of speakers supplied varies according to the model you purchased.

Front speakers

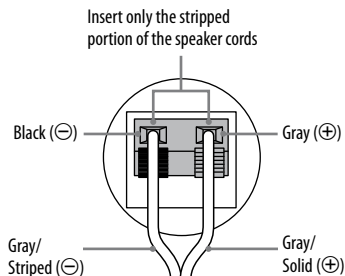


Satellite speakers (MHC-GZR999D/GZR888D only)



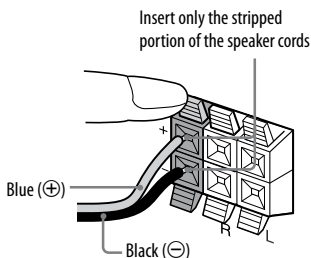
Terminals on the satellite speakers (MHC-GZR999D/GZR888D only)

Connect the speaker cords to the terminals on the satellite speakers as shown below.



Continued 

Subwoofer (MHC-GZR999D only)



Notes

- Be sure to connect the speakers securely and correctly.
- Be sure to match the satellite speaker cord to the appropriate terminal on the components: ⊕ to ⊕ and ⊖ to ⊖. If the cords are reversed, the sound will be distorted and will lack bass.
- Do not place the satellite speakers on top of a TV. This may cause distortion of the colors in the TV screen.

C Voltage selector

For models with a voltage selector, set VOLTAGE SELECTOR to the local power line voltage.

D Power

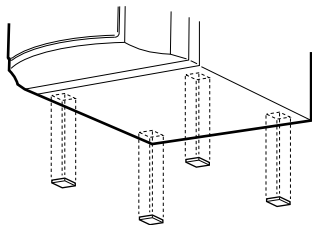
Connect the power cord to a wall outlet. The demonstration appears in the display. When you press I/⏻, the system turns on and the demonstration automatically ends.

If the supplied adaptor on the plug does not fit your wall outlet, detach it from the plug (only for models equipped with an adaptor).

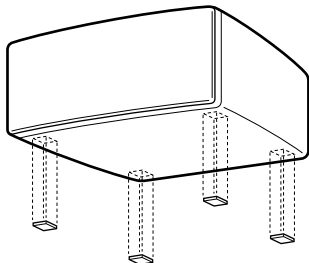
Attaching the speaker pads

Attach the supplied speaker pads at each corner on the bottom of the speakers to prevent them from slipping.

Front speakers (Left (4)/Right (4))/ Subwoofer (4)¹⁾



Satellite speakers (Left (4)/Right (4))²⁾

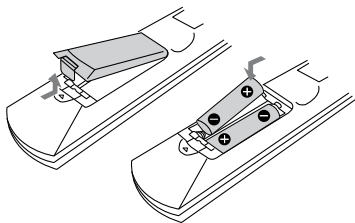


¹⁾ MHC-GZR999D only

²⁾ MHC-GZR999D/GZR888D only

Inserting batteries

Slide and remove the battery compartment lid, and insert the two supplied R6 (size AA) batteries, \ominus side first, matching the polarities shown below.



Note

If you do not use the remote for a long period of time, remove the batteries to avoid possible damage from battery leakage and corrosion.

Tip

With normal use, the batteries should last for about six months. When the remote no longer operates the system, replace both batteries with new ones.

Continued 

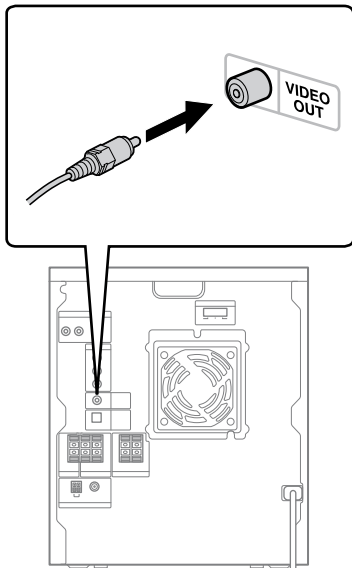
When carrying this system

Perform the following procedure to protect the DVD mechanism. Use buttons on the unit for the operation.

- 1 Press **I/⏻** to turn on the system, then press **DVD**.
- 2 Make sure that no disc is loaded in the system and check that "NO DISC" appears.
- 3 Hold down **▶**, and then press **I/⏻** until "STANDBY" appears in the display. Then, "LOCK" appears in the display.
- 4 Unplug the power cord.

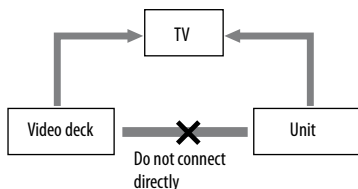
Hooking up the TV

Connect the video input jack of your TV to the VIDEO OUT jack with a video cord.



When connecting a video deck

Connect the video deck to the TV using a video cord. However, do not connect this unit to the TV through the video deck. Otherwise, you may experience video leakage when watching video images from this system. Connect this unit directly to the TV as shown below.



Tip

For higher quality video images, use the optional component video cords to connect the COMPONENT VIDEO input jacks on your TV to the COMPONENT VIDEO OUT jacks of this unit. If your TV is compatible with progressive format signals, use this connection and set "PROGRESSIVE (COMPONENT OUT)" to "ON" (page 32).

Changing the color system

(Except for Latin American models)
Set the color system to PAL or NTSC depending on the color system of your TV.

The default setting for color system is different depending on the area. Each time you perform the procedure below, the color system changes as follows:

NTSC ↔ PAL

- 1 Press I/⏻ to turn on the system.
- 2 Press FUNCTION +/- repeatedly to select "DVD" (or press DVD on the unit).
- 3 Press I/⏻ to turn off the system.
- 4 Press DISPLAY repeatedly until the clock is displayed.
- 5 Press I/⏻ on the unit while holding down **II** on the unit.
The system turns on automatically and the color system is changed. "COLOR NTSC" or "COLOR PAL" appears in the display.

Note

You cannot change the color system for any optional component connected to the VIDEO/SAT VIDEO IN jack.


Continued

Changing the format of the video signal output from COMPONENT VIDEO OUT jacks

Progressive is a method for displaying TV images that reduces flickering and sharpens the image. To use this method, you need to connect to a TV that can accept progressive signals.

You can output video signals from COMPONENT VIDEO OUT jacks in Interlace or Progressive format.



1 Press FUNCTION +/- repeatedly to select "DVD" (or press DVD on the unit).

2 Press  DISPLAY when playback is stopped.



The Control Menu appears on the TV screen.

3 Press  or  repeatedly to select  (SETUP), then press ENTER.



The options for "SETUP" appear.

4 Press  or  repeatedly to select "CUSTOM," then press ENTER.



The Setup Menu appears.

5 Press  or  repeatedly to select "VIDEO SETUP," then press ENTER.

The options for "VIDEO SETUP" appear.

6 Press  or  repeatedly to select "PROGRESSIVE (COMPONENT OUT)," then press ENTER.

The options for "PROGRESSIVE (COMPONENT OUT)" appear.

7 Press  or  repeatedly to select the desired setting, then press ENTER.

The default setting is underlined.

• OFF: Outputs interlace signals.

Select this setting when:

– your TV does not accept progressive signals.

– your TV is connected to jacks other than the COMPONENT VIDEO OUT jacks.

• ON: Outputs progressive signals.

Select this setting when:

– your TV accepts progressive signals.

– your TV is connected to the COMPONENT VIDEO OUT jacks.

When you select "ON," the confirmation display appears. Follow the steps below.

- 8** Press ◀ or ▶ repeatedly to select “START,” then press ENTER.

The system outputs the progressive signal for 5 seconds. Check that the screen is displayed correctly.

- 9** Press ◀ or ▶ repeatedly to select “YES.”

The system outputs the progressive signal. When you select “NO,” the system does not output the progressive signal.

Note

There would be no image on your TV or the image is not clear if your setting does not match your TV or connection.

When using a TV

Turn on the TV and select the video input so that you can view the pictures from this system.

Operating a Sony TV

You can use the following buttons to operate a Sony TV. These buttons have been marked in yellow.

To	Press
Turn the TV on or off	TV I/⏻ while holding down TV.
Switch the TV's input source between the TV and other input sources	TV INPUT while holding down TV.
Select the TV channels	TV CH +/- or numeric buttons* while holding down TV.
Adjust the volume of the TV speaker(s)	TV VOL +/- while holding down TV.

* For a double-digit number, while holding down TV, press -/-, then press the number. (For example, while holding down TV, press -/-, then 2 and 5 to enter 25.)

Setting the LCD (MHC-GZR999D/ GZR888D only)

You can make adjustments to pictures displayed in the LCD.

Use buttons on the unit and confirm operations in the LCD, for the following settings.

Note

Playback settings stored in the disc take priority over the LCD settings. Therefore, some of the LCD settings may not be performed.

- 1 Press **OPTIONS** on the unit repeatedly until "PICTURE MODE" or "WIDE MODE" appears in the LCD.
- 2 Press **▲** or **▼** repeatedly to select the desired setting, then press **ENTER**.

Setting the LCD

The default setting is underlined.

PICTURE MODE

Allows you to select options best suited for videos and pictures, respectively.

STANDARD: For standard pictures.

Recommended for home entertainment.

VIVID: Enhances picture contrast and sharpness.

CINEMA: For viewing film-based content.

PHOTO: For viewing photographs.

WIDE MODE

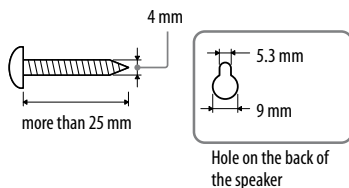
FULL: Select this when you view pictures in a 16:9-format. This setting displays pictures in full screen mode.

NORMAL: Select this when you view pictures in a 4:3-format. This setting displays a normal picture with bands on the left and right portions of the screen.

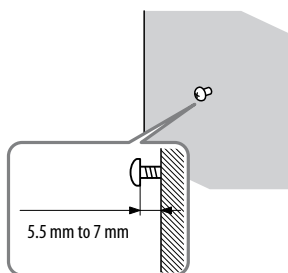
Positioning the speakers

To install the satellite speakers on the wall (MHC-GZR999D/GZR888D only)

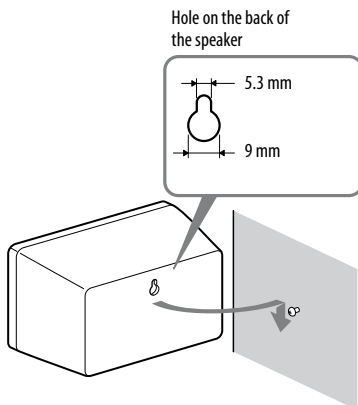
- 1 Prepare screws (not supplied) that are suitable for the hole on the back of each speaker. See the illustrations below.



- 2 Fasten the screws to the wall.
The screws should protrude 5.5 mm to 7 mm.



- 3 Hang the speakers on the screws.



Notes

- Use screws that are suitable for the wall material and strength. As a plaster board wall is especially fragile, attach the screws securely to a beam and fasten them to the wall. Install the satellite speakers on a vertical and flat wall where reinforcement is applied.
- Contact a screw shop or installer regarding the wall material or screws to be used.
- Sony is not responsible for accident or damage caused by improper installation, insufficient wall strength or improper screw installation, natural calamity, etc.

Setting the clock

Use buttons on the remote to set the clock.

- 1 Press I/⏻ to turn on the system.
- 2 Press TIMER MENU.
The hour indication flashes in the display.
If "PLAY SET?" flashes in the display, press ▲ or ▼ repeatedly to select "CLOCK SET?," then press ENTER.
- 3 Press ▲ or ▼ repeatedly to set the hour, and then press ENTER.
- 4 Use the same procedure to set the minutes.

Note

The clock settings are canceled when you disconnect the power cord or if a power failure occurs.

To display the clock when the system is off

Press DISPLAY repeatedly until the clock is displayed.
The clock is displayed for about 8 seconds.

Performing "QUICK" setup

Before using the system, you can make the minimum basic adjustments in "QUICK" setup. If you do not want to perform "QUICK" setup, press CLEAR in step 3. The guide message will disappear from the TV screen.

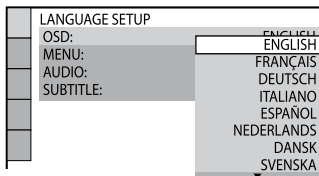
- 1 Turn on your TV and select the video input.
- 2 Press I/⏻ to turn on the system.

Notes

- Make sure there is no disc in the unit. Otherwise, the guide message does not appear.
- Make sure that headphones or microphones are not connected. Otherwise, you cannot perform "SPEAKER SETUP"

- 3 Press FUNCTION +/- repeatedly to select "DVD" (or press DVD on the unit).
The guide message appears at the bottom of the TV screen.

- 4** Press ENTER without loading a disc.
“LANGUAGE SETUP” appears on the TV screen.



- 5** Press \uparrow or \downarrow repeatedly to select a language, then press ENTER.
The setting is selected and “VIDEO SETUP” appears on the TV screen.

Tips

- The selected language is for “OSD,” “MENU” and “SUBTITLE.”
- The selectable language is different depending on the area.

- 6** Press \uparrow or \downarrow repeatedly to select the setting that matches your TV type.

If you have a 4:3 standard TV:

Select “4:3 LETTER BOX” or “4:3 PAN SCAN” (page 63).

If you have a wide-screen TV or a 4:3 standard TV with wide-screen mode:

Select “16:9” (page 63).

- 7** Press ENTER.

The setting is selected and “QUICK SETUP is complete.” appears on the TV screen.

The system is ready for playback.
If you want to change each setting individually, see “Using the Setup Menu” (page 61).


If you make a mistake

Press \leftarrow , then select the item again.

To quit “QUICK” setup

Press \square DISPLAY.

To recall “QUICK” setup settings

- 1 Press \square DISPLAY when playback is stopped.
The Control Menu appears on the TV screen.
- 2 Press \uparrow or \downarrow repeatedly to select  (SETUP), then press ENTER.
- 3 Press \uparrow or \downarrow repeatedly to select “QUICK,” then press ENTER.

Note

The guide message appears at the bottom of the TV screen when you turn on the system for the first time or after performing “RESET” (page 121).

Using the “THEATRE SYNC” function



THEATRE SYNC allows you to turn on your Sony TV and this system, changes the system's function to “DVD” and then switches the TV's input source you have set with just one button.

Preparing to use the “THEATRE SYNC” function

Register the TV's input source connected to this system.

To select the TV's input

Press the following buttons while holding down SLEEP.

Press	TV's input source
0	No input source (Default)
1 to 8	VIDEO 1 to VIDEO 8
9	COMPONENT 1
CLEAR	COMPONENT 2
 -	COMPONENT 3
 +	COMPONENT 4


The selected TV's input source is memorized into the remote.

Operating the “THEATRE SYNC” function

Keeping the remote pointed in the direction of the TV, press THEATRE SYNC until the TV turns on and the selected input source changes.

If this function does not work, change the transmission time. The transmission time varies depending on the TV.

To change the transmission time

Press the following buttons while holding down .

Press	Transmission time (seconds)
1	0.5 (Default)
2	1
3	1.5
4	2
5	2.5
6	3
7	3.5
8	4

Note

This function is only for Sony TV series, however, some TV products may also not work.

Disc

Playing a disc

DVD-V DVD-VR VIDEO CD C D DATA CD

DATA DVD


Depending on the DVD VIDEO or VIDEO CD, some operations may be different or restricted. Refer to the operating instructions supplied with the disc.

Note on the maximum number of tracks, files and folders on a DATA CD/DVD

This system cannot play a DATA CD/DVD in the following cases.

- When the number of tracks or files on a folder exceeds 150.
- When the number of folders on a disc exceeds 200.

These numbers may vary depending on the track structure, the file structure and the folder structure.




- 1 Press **FUNCTION** +/- repeatedly to select "DVD" (or press **DVD** on the unit).
- 2 Press **OPEN/CLOSE**  on the unit.

- 3 Load a disc with the label side facing up on the disc tray.

To load additional discs, press **DISC SKIP/EX-CHANGE** on the unit to rotate the disc tray.



When you play back an 8 cm disc such as a CD single, place it on the inner circle of the tray.

- 4 Press **OPEN/CLOSE**  on the unit to close the disc tray.
Do not forcibly push the disc tray to close it as this may cause a malfunction.
If the playback does not start automatically, press  (or  on the unit).
- 5 Press **VOLUME** +/- (or turn **MASTER VOLUME** on the unit) to adjust the volume.

Note

Depending on the system status, the volume level may not appear on the TV screen.

Other operations

To	Do this
Stop playback	Press ■ . To resume playback where you stopped the disc, press ▷ (or ▶ on the unit). To play back from the beginning of the disc, press ■ twice, then press ▷ (or ▶ on the unit).
Pause playback	Press ⏸ ¹⁾ . Press ⏸ again or press ▷ (or ▶ on the unit) to resume playback.
Select a track, audio file, chapter or video file ²⁾	Press ◀◀ or ▶▶ repeatedly (or turn OPERATION DIAL on the unit clockwise or counterclockwise) during playback. Or, press the numeric buttons when the Control Menu is turned off, then press ENTER ³⁾ .
Select a title ⁴⁾	Press DVD TOP MENU, then press ▲/▼/◀/▶ or numeric buttons.

To	Do this
Select a folder ⁵⁾	Press ⏪ +/- repeatedly during playback or when playback is paused.
Locate a point quickly in fast forward or fast reverse (Lock Search) ⁶⁾	Press ◀◀ or ▶▶ during playback. Each time you press ◀◀ or ▶▶ , the playback speed changes cyclically ⁷⁾ . To return to normal playback, press ▷ (or ▶ on the unit).
Watch frame by frame (Slow-motion Play) ⁸⁾	Press ◀◀ SLOW or SLOW ▶▶ (or either ◀◀ or ▶▶ on the unit) when playback is paused ⁹⁾ . Each time you press ◀◀ SLOW or SLOW ▶▶ , the playback speed changes. To return to normal playback, press ▷ (or ▶ on the unit).
Play one frame at a time (Freeze Frame) ⁸⁾	Press ◀◀ STEP or STEP ▶▶ to reverse or advance frame by frame when playback is paused ⁹⁾ . Each time you press ◀◀ STEP or STEP ▶▶ , the frame changes. To return to normal playback, press ▷ (or ▶ on the unit).

To	Do this
Replay the previous scene (Instant Replay) ¹⁰⁾	Press ◀• REPLAY during playback.
Briefly fast forward the current scene (Instant Advance) ¹⁰⁾	Press ADVANCE •▶ during playback.
Change the angle ¹¹⁾	Press ANGLE repeatedly during playback. Each time you press ANGLE, the angle changes.
Display the subtitle	Press SUBTITLE repeatedly during playback. Each time you press SUBTITLE, the subtitle language changes ¹²⁾ or turns off ¹³⁾ .
Select a disc	Press DISC SKIP (or one of DISC 1 — DISC 3 on the unit).
Switch to “DVD” function from another source	Press one of DISC 1 — DISC 3 on the unit (Automatic Source Selection).
Exchange other discs while playing	Press DISC SKIP/EXCHANGE on the unit.

- ¹⁾ There may be some disturbance in the video image.
- ²⁾ Except for JPEG image files. You cannot select an audio track or file during Lock Search operation of MP3 files.
- ³⁾ DVD VIDEO, DVD-R/-RW in VR mode, VIDEO CD, AUDIO CD and video files only.
- ⁴⁾ DVD VIDEO only.
- ⁵⁾ MP3 files, JPEG image files, DivX video files and MPEG4 video files only.
- ⁶⁾ Except for JPEG image files.
- ⁷⁾ Depending on the disc, the actual speed may differ.
- ⁸⁾ DVD VIDEO, DVD-R/-RW in VR mode, video files and VIDEO CD only.
- ⁹⁾ Except for VIDEO CD and video files.
- ¹⁰⁾ DVD VIDEO and DVD-R/-RW in VR mode only.
- ¹¹⁾ Multi-angle DVD VIDEO only.
- ¹²⁾ For DVD VIDEO, DVD-R/-RW in VR mode or DivX video files with multilingual subtitles.
- ¹³⁾ For DVD VIDEO, DVD-R/-RW in VR mode or DivX video files with a subtitle.

Notes

- You cannot perform resume playback during Shuffle Play or Program Play.
- Resume playback may not work properly with some discs.
- Resume playback is canceled when
 - you press **■** when playback is stopped.
 - you open the disc tray.
 - you change the function.
 - you change the settings in the Setup Menu.
 - you changed the “PARENTAL CONTROL” level.
- You cannot search for a still picture on a DVD-R/-RW in VR mode.
- You may not be able to use the Instant Replay or Instant Advance function in Repeat Play mode or with some scenes.
- Depending on the DVD VIDEO, you may not be able to change the angle, even if multi-angles are recorded on the DVD VIDEO.
- Depending on the DVD VIDEO, you may not be able to change the subtitles even if multilingual subtitles are recorded on the DVD VIDEO. You also may not be able to turn the subtitles off.
- You can change the subtitles if the DivX video file has an “.avi” or “.divx” extension and contains subtitle information within the same file.

On Multi-disc Resume

(DVD VIDEO and VIDEO CD only)
This system can store the point where you stopped the playback of the disc for up to 6 discs and resumes playback when you insert the same disc again. If you store a playback resume point for the 7th disc, the playback resume point for the first disc will be deleted.
The default setting is “ON.” To turn off this function, set “MULTI-DISC RESUME” in “SYSTEM SETUP” to “OFF” (page 66).

Notes

- If “MULTI-DISC RESUME” in “SYSTEM SETUP” is set to “ON” and you play back a recorded disc such as DVD-R, the system may play back other recorded discs from the same playback resume point. To start playback from the beginning of the disc, press **■** twice and then press **▷** (or **▶** on the unit).
- The playback resume point is deleted when the power cord is disconnected.

Changing the language/sound

Press **AUDIO** repeatedly during playback to select the desired audio format or mode.

The default setting is underlined.

When playing a DVD VIDEO:

Depending on the DVD VIDEO, the option of language and audio format varies.

When a 4-digit number is displayed, the digits represent a language code (see "Language code list" (page 139)). When the same language is displayed two or more times, the DVD VIDEO is recorded in multiple audio formats. Note that the sound changes automatically depending on the disc.

Some DVD VIDEOS allow you to select items such as the language for the subtitles and the language for the sound using DVD/TUNER MENU.

When playing a DivX video file:

The options for audio format differ depending on the DivX video files.

When playing a DVD-R/-RW in VR mode:

The number of audio tracks recorded on a disc are displayed.

Example:

- 1: MAIN+SUB: the main and sub sound of the audio track 1.
 - 2: MAIN*: the main sound of the audio track 2.
 - 2: SUB*: the sub sound of the audio track 2.
 - 2: MAIN+SUB*: the main and sub sound of the audio track 2.
- * These items do not appear if only one audio stream is recorded on the disc being played back.

When playing a VIDEO CD, AUDIO CD, or MP3 file:

You can select the sound from the right or left channel and listen to the sound of the selected channel through both the right and left speakers. For example, when playing a track with the vocals on the right channel and the instruments on the left channel, you can hear the instruments from both speakers by selecting the left channel.

- STEREO: the standard stereo sound.
- 1/L: the sound of the left channel (monaural).
- 2/R: the sound of the right channel (monaural).

When playing a Super VCD:

- 1: STEREO: the stereo sound of the audio track 1.
- 1: 1/L: the sound of the left channel of the audio track 1 (monaural).
- 1: 2/R: the sound of the right channel of the audio track 1 (monaural).
- 2: STEREO: the stereo sound of the audio track 2.
- 2: 1/L: the sound of the left channel of the audio track 2 (monaural).
- 2: 2/R: the sound of the right channel of the audio track 2 (monaural).



Note

While the system is playing a Super VCD on which the audio track 2 is not recorded, no sound will come out when you select "2: STEREO," "2: 1/L" or "2: 2/R."

Playing VIDEO CDs with PBC functions (PBC Playback) (Version 2.0)

VIDEO CD



You can use the PBC (Playback Control) menus included on the VIDEO CDs (Version 2.0 only) on your TV screen to enjoy the disc's interactive software. The menu format and structure may differ depending on each disc.

1 Press  (or  on the unit) to start playing a VIDEO CD.

The PBC menu appears on the TV screen. Depending on the VIDEO CD, the menu may not appear.

2 Press the numeric buttons to select the desired item number.

3 Press ENTER.

Depending on the VIDEO CD, "Press ENTER" may appear as "Press SELECT" in the operating instructions supplied with the disc. In this case, press  (or  on the unit).

- 4** Continue playback according to the instructions on the menus.

Refer to the operating instructions supplied with the VIDEO CD, as the operating procedure may differ depending on the VIDEO CD.

Note

PBC playback is canceled when Shuffle Play, Program Play or Repeat Play is activated.

To cancel playback with PBC functions

- 1** Press **I◀◀** or **▶▶I** repeatedly or press the numeric buttons to select a track when playback is stopped.

- 2** Press **▷** (or **▶** on the unit) or ENTER.

Playback starts from the selected track. Still images, such as the menu screens, will not be shown.

To return to PBC playback, press **■** twice, then press **▷** (or **▶** on the unit).

Selecting "ORIGINAL" or "PLAY LIST"

DVD-VR

This function is only available for DVD-Rs/-RWs in VR mode with a playlist created.

- 1** Press **DISPLAY** when playback is stopped.

The Control Menu appears on the TV screen.

- 2** Press **▲** or **▼** repeatedly to select **ORIGINAL/PLAY LIST**, then press ENTER.

The options for "ORIGINAL/PLAY LIST" appear on the TV screen.

- 3** Press **▲** or **▼** repeatedly to select the desired setting.

- **PLAY LIST**: play back according to the playlist created on the disc.
- **ORIGINAL**: play back according to the originally recorded sequence.

- 4** Press ENTER.


Searching for items on a disc by the assigned numbers




You can search by different information recorded on a disc, such as title, track, scene, file, and folder. Each item is assigned a unique number on the disc, and you can select the numbered item you want from the Control Menu. You can also search for a particular point using the time code (Time Search) (DVD VIDEO and DVD-R/-RW in VR mode only).

1 Press DISPLAY.

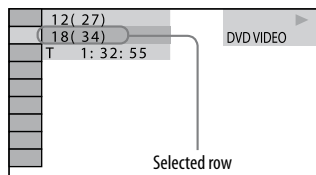
The Control Menu appears on the TV screen.

If “MEDIA” is set to “MUSIC/PHOTO” and “FILE” does not appear in the Control Menu, press  DISPLAY again.

2 Press or repeatedly to select the search item.

Example: when you select  (CHAPTER)

“** (**)” is selected (** refers to a number). The number in parentheses indicates the total number of titles, chapters, tracks, index, scenes, folders or files.



3 Press ENTER. “** (**)” change to “- - (**).”

4 Press or repeatedly or the numeric buttons to select the title, track, folder or file, etc. If you make a mistake, press CLEAR to cancel the number.





5 Press ENTER. The system starts playback from the selected title, track, folder or file, etc.

Tip

When the Control Menu display is turned off, you can search for a chapter (DVD VIDEO and DVD-R/-RW in VR mode) or track (AUDIO CD and VIDEO CD) or file (video files in DATA CD/DVD) by pressing the numeric buttons and ENTER.

To search for a particular point using the time code (Time Search)

(DVD VIDEO and DVD-R/-RW in VR mode only)





- 1 Press  DISPLAY.
- 2 Press  or  repeatedly to select  (TIME).
“T **: **: **” (elapsed playing time of the current title) is selected.
- 3 Press ENTER.
“T **: **: **” changes to “T--:--:--.”
- 4 Input the time code using the numeric buttons, then press ENTER.
For example, to find the scene at 2 hours, 10 minutes, and 20 seconds after the beginning, enter “21020.”
If you make a mistake, press CLEAR to cancel the number.

Note

Depending on the disc, you cannot perform Time Search.

Selecting a folder/file using the on-screen display

DATA  DATA 

- 1 Load a disc on the disc tray.
“FOLDER LIST” appears on the TV screen.
- 2 Press  DISPLAY.
The Control Menu appears on the TV screen.
- 3 Press  or  repeatedly to select  (MEDIA), then press ENTER.
The options for “MEDIA” appear on the TV screen.
 - MUSIC/PHOTO: for playing both MP3 files and JPEG image files in the same folder as a slide show
 - MUSIC: for playing MP3 files
 - VIDEO: for playing DivX video files or MPEG4 video files
 - PHOTO: for playing JPEG image files

Continued 

- 4** Press \uparrow or \downarrow repeatedly to select the desired option, then press ENTER. When the desired option has already selected, press DVD/TUNER MENU.

A list of folders that contains the files of the selected file type appears on the TV screen.

- 5** Press \uparrow or \downarrow repeatedly to select a folder.

Playing a folder:

Press \triangleleft (or \blacktriangleright on the unit).

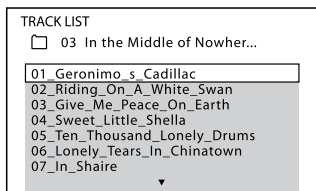
The system starts playback from the first file of the selected folder.

To stop playback, press \blacksquare .

Playing an MP3 file:

- 1** Press ENTER.

“TRACK LIST” appears.



- 2** Press \uparrow or \downarrow repeatedly to select the desired MP3 file, then press ENTER.

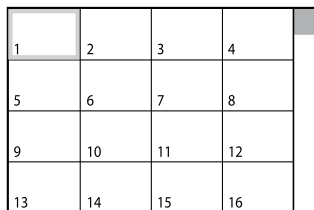
The system starts playing the selected MP3 file.

To stop playback, press \blacksquare .

Playing an image file:

- 1** Press PICTURE NAVI.

Thumbnail picture for the first 16 JPEG image files in the selected folder is displayed.



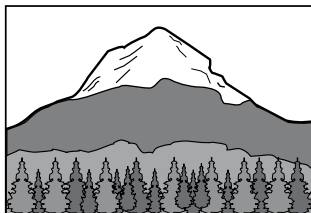
If there are more than 16 image files in the selected folder, the scroll bar appears at the right.

- 2** Press \uparrow / \downarrow / \leftarrow / \rightarrow repeatedly to select the image you want to view, then press \triangleleft (or \blacktriangleright on the unit).

The slide show starts from the selected image file.

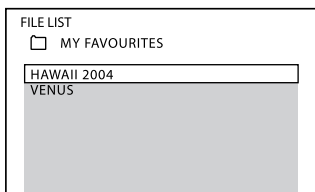
To stop playback, press \blacksquare .

The slide show stops when you press \uparrow or \downarrow .



Playing a video file:

- 1 Press ENTER.
“FILE LIST” appears.



- 2 Press **▲** or **▼** repeatedly to select the desired video file, then press ENTER.

The system starts playback of the selected video files.

To stop playback, press **■**.

Other operations

To	Do this
Display the next or previous page of “TRACK LIST,” “FOLDER LIST” or “FILE LIST”	Press ◀▶ or ▶▶ repeatedly.
Play back the next folder of MP3 files or video files	Press ▶▶▶ repeatedly until the last file of the current folder, then press ▶▶▶ once. To select the previous folder, select the folder from “FOLDER LIST?”
Return to “FOLDER LIST” when “TRACK LIST,” or “FILE LIST” is displayed	Press ↶ RETURN.
Play back the next folder of JPEG image files	Press ▶ repeatedly until the last file of the current folder, then press ▶ once. To select the previous folder, select the folder from “FOLDER LIST?”
Rotate the image by 90 degrees	Press ▲ or ▼ repeatedly while viewing an image. To return to the original view, press CLEAR.

Notes

- The system can play back MP3 files and JPEG image files. The system will play back any data with the extension “.mp3”, “.jpg” or “.jpeg” even if they are not in MP3 or JPEG format. Playing this data may generate a loud noise which could damage your speaker system.
- Depending on the encoding/writing software, recording device, or the recording media used to record an MP3 file, you may encounter problems such as cannot play back, sound interruptions and noise.
- The following discs/situations can increase the time it takes to start playback:
 - a disc recorded with a complicated tree structure.
 - a disc recorded in Multi Session.
 - a disc to which data can be added (non-finalized disc).
 - when the tracks or files in another folder have just been played back.
- Some CD-Rs/-RWs or DVD-Rs/-RWs/+Rs/+RWs cannot be played back on the system depending on the file format.
- The system can play back to a depth of 8 folders only.
- The system may not play certain types of JPEG image files (ex. a JPEG image file that is less than 8 (width) × 8 (height) pixels).
- When you press ◀ or ▶ to select the next or previous image, the image will return to its original view even if you have rotated the image previously.
- The slide show stops when you press ▲ or ▼.
- The system may not play back a video file when the file has been combined from two or more video files.
- The system cannot play back any video file that is more than 720 (width) × 576 (height) pixels in resolution or 2 GB in file size or larger.
- Depending on the video file, the picture may be unclear or the sound may skip.
- The system cannot play back some video files that are longer than 3 hours.
- Depending on the video file, the picture may pause or be unclear. In this case, it is recommended that you create the file at a lower bit rate.
- Due to the compression technology used for video files, it may take some time after you press ▷ for the picture to appear.
- Depending on the video file, the sound may not match the pictures on the screen.

Tip





If the number of viewing times has been preset, you can play back the DivX video files as many times as the preset number. The following occurrences are counted:








- when the system is turned off.
- when the disc is removed.
- when another video file is played back.

To play MP3 files and JPEG image files as a slide show with sound

(DATA CD and DATA DVD only)

You can play back a slide show with sound by first placing both JPEG image files and MP3 files in the same folder on a DATA CD/DVD.

- 1 Press  DISPLAY when playback is stopped.
The Control Menu appears on the TV screen.
- 2 Press  or  repeatedly to select  (MEDIA), then press ENTER.
The options for “MEDIA” appear on the TV screen.








- 3 Press  or  repeatedly to select “MUSIC/PHOTO”, then press ENTER.
When “MUSIC/PHOTO” has already selected, press DVD/TUNER MENU.
“FOLDER LIST” appears on the TV screen.
- 4 Press  or  repeatedly to select the desired folder, then press  (or  on the unit).
The slide show with sound starts from the selected folder.
To stop playback, press .
To cancel the slide show with sound, select “MUSIC” or “PHOTO” in step 3.

Note

If you play back a large data size of MP3 files and JPEG image files at the same time, the sound may skip.

To specify the slide show speed

(JPEG image files only)








- 1 Press  DISPLAY.
The Control Menu appears on the TV screen.
If “MEDIA” is set to “MUSIC/PHOTO” and “INTERVAL” does not appear in the Control Menu, press  DISPLAY again.
- 2 Press  or  repeatedly to select  (INTERVAL), then press ENTER.
The options for “INTERVAL” appear on the TV screen.
- 3 Press  or  repeatedly to select the desired transition interval.
The default setting is underlined.
 - NORMAL: Sets to the standard duration.
 - FAST: Sets the duration shorter than “NORMAL.”
 - SLOW 1: Sets the duration longer than “NORMAL.”
 - SLOW 2: Sets the duration longer than “SLOW 1.”
- 4 Press ENTER.
The selected setting takes effect.

Note

Some JPEG image files (especially progressive JPEG image files or JPEG image files with 3,000,000 pixels or more) may take a longer time to display than others, which may make the transitions seem longer than that of the option you selected.

To select a transition effect for image files in the slide show

(JPEG image files only)

- 1 Press  DISPLAY.
The Control Menu appears on the TV screen.
If “MEDIA” is set to “MUSIC/PHOTO” and “EFFECT” does not appear in the Control Menu, press  DISPLAY again.
- 2 Press  or  repeatedly to select  (EFFECT), then press ENTER.
The options for “EFFECT” appear on the TV screen.
- 3 Press  or  repeatedly to select the desired setting.
The default setting is underlined.
 - MODE 1: The image sweeps in from top to bottom of the screen.
 - MODE 2: The image sweeps in from left to right of the screen.
 - MODE 3: The image stretches out from the center of the screen.
 - MODE 4: The image randomly cycles through the effects.
 - MODE 5: The next image slides over the current image.
 - OFF: Turns off this function.
- 4 Press ENTER.
The selected setting takes effect.

To select playback priority of the file type

You can select playback priority when mixed media (MP3 files, JPEG image files or video files) are in the disc.

- Press **DISPLAY**.
The Control Menu appears on the TV screen.
- Press **↑** or **↓** repeatedly to select **MEDIA** (MEDIA), then press **ENTER**.
The options for “MEDIA” appear on the TV screen.
- Press **↑** or **↓** repeatedly to select the desired setting.
 - MUSIC/PHOTO:** You can play back a slide show with sound, when MP3 files and JPEG image files are in the same folder.
 - MUSIC:** MP3 file playback has priority.
 - VIDEO:** Video file playback has priority.
 - PHOTO:** JPEG image file playback has priority.
- Press **ENTER**.
The selected setting takes effect. For further details of the playback priority of file types, see page 138.

Using play mode

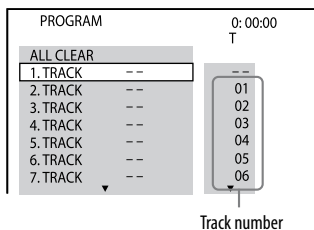
Creating your own program (Program Play)

VIDEO CD **C D**

You can make a program of up to 99 steps in the order you want them to be played back.

You can only program the tracks from the current disc.

- Press **DISPLAY** when playback is stopped.
The Control Menu appears on the TV screen.
- Press **↑** or **↓** repeatedly to select **PROGRAM** (PROGRAM), then press **ENTER**.
The options for “PROGRAM” appear on the TV screen.
- Press **↑** or **↓** repeatedly to select “SET →,” then press **ENTER**.



Continued 

4 Press \blacktriangleright .

The cursor moves to the track list "T" (in this case, "01").

PROGRAM	0:00:00
ALL CLEAR	T
1. TRACK --	--
2. TRACK --	01
3. TRACK --	02
4. TRACK --	03
5. TRACK --	04
6. TRACK --	05
7. TRACK --	06

5 Select the track you want to program.

For example, select track "02."

Press \uparrow or \downarrow repeatedly to select "02" under "T," then press ENTER.

PROGRAM	0:03:51
ALL CLEAR	T
1. TRACK --	--
2. TRACK --	01
3. TRACK --	02
4. TRACK --	03
5. TRACK --	04
6. TRACK --	05
7. TRACK --	06

Total time of the programmed tracks

6 To program other tracks, repeat steps 4 and 5.

7 Press \triangleright (or \blacktriangleright on the unit).

Program Play starts.

When the Program Play ends, you can restart the same program by pressing \triangleright (or \blacktriangleright on the unit).

To change a programmed step:

Press \uparrow or \downarrow repeatedly to select the programmed step number you want to change. Then, press \blacktriangleright and select the desired track number.

To delete a programmed step:

Press \uparrow or \downarrow repeatedly to select the programmed step number you want to delete. Then, press CLEAR.

To delete all of the programmed steps in the program list:

Press \uparrow to select "ALL CLEAR." Then, press ENTER.

To cancel Program Play

Press CLEAR or select "OFF" in step 3. To play back the same program again, select "ON" in step 3 and press ENTER.

Notes

- When Program Play is activated, the “REPEAT” setting is automatically changed to “ON” if the current setting is “ALL DISCS,” “ONE DISC” or “TRACK.”
- You cannot perform Program Play with VIDEO CDs during PBC playback.

Tip

The Program Play is canceled and the program list is cleared when

- you open the disc tray.
- you change the disc.
- you turn off the system.
- you change the function.

Playing in random order (Shuffle Play)

VIDEO CD C D DATA CD DATA DVD

You can play back the tracks on the current disc in random order. Each time you perform Shuffle Play, the playing order may differ.

Shuffle Play is only available for the tracks on the current disc.

1 Press DISPLAY.

The Control Menu appears on the TV screen.

2 Press or repeatedly to select (SHUFFLE), then press ENTER.

The options for “SHUFFLE” appear on the TV screen.

3 Press or repeatedly to select the desired setting.

The default setting is underlined.

When playing a VIDEO CD or AUDIO CD:

- OFF: Turns off this function.
- TRACK: all tracks on the current disc is played back randomly.

When Program Play is activated:



- OFF: Turns off this function.
- ON: all tracks in the program list are played back randomly.

Continued 

When playing a DATA CD/DVD (except for video files):

- **OFF:** Turns off this function.
- **ON (MUSIC):** all MP3 files in the selected folder on the current disc are played back randomly.
When no folder is selected, the first folder is played back randomly.

4 Press ENTER.

5 Press  (or  on the unit).
Shuffle Play starts.
To cancel Shuffle Play, press CLEAR or select “OFF” in step 3.

Notes

- You cannot perform Shuffle Play with VIDEO CDs during PBC playback.
- The same song may be played back repeatedly for MP3 files.

Tip

Shuffle Play is canceled when

- you open the disc tray.
- you change the disc.
- you turn off the system.
- you change the function.
- you perform Track/Index Search.
- you perform CD Synchro Recording or USB TRANSFER.
- you transfer music from a disc to a USB device.

Playing repeatedly (Repeat Play)

DVD-V

DVD-VR

VIDEO CD

C D

DATA CD




DATA DVD

You can play the contents on a disc repeatedly.



You can also repeat Shuffle Play or Program Play.

1 Press  DISPLAY.

The Control Menu appears on the TV screen.

2 Press  or  repeatedly to select  (REPEAT), then press ENTER.

The options for “REPEAT” appear on the TV screen.

3 Press  or  repeatedly to select the desired setting.

The default setting is underlined.

When playing a DVD VIDEO or DVD-R/DVD-RW in VR mode:

- **OFF:** does not play back repeatedly.
- **ALL DISCS:** repeats all discs.
- **ONE DISC:** repeats all the titles on the current disc.
- **TITLE:** repeats the current title.
- **CHAPTER:** repeats the current chapter.

When playing a VIDEO CD or AUDIO CD:

- **OFF**: does not play back repeatedly.
- **ALL DISCS**: repeats all discs.
- **ONE DISC**: repeats all the tracks on the current disc.
- **TRACK**: repeats the current track.

When playing a DATA CD or DATA DVD:

- **OFF**: does not play back repeatedly.
- **ALL DISCS**: repeats all discs.
- **ONE DISC**: repeats all the folders on the current disc.
- **FOLDER**: repeats the current folder.
- **TRACK¹⁾**: repeats the current audio file.
- **FILE²⁾**: repeats the current file.

¹⁾ MP3 files only.

²⁾ Video files only.

When Program Play or Shuffle Play is activated:

- **OFF**: does not play back repeatedly.
- **ON**: repeats the Program Play or Shuffle Play.

4 Press ENTER.

5 Press  (or  on the unit).

Repeat Play starts.

To cancel Repeat Play, press CLEAR or select "OFF" in step 3.

Notes

- You can also change the Repeat Play setting by pressing REPEAT/FM MODE repeatedly.
- Depending on the DVD VIDEO, you cannot perform Repeat Play.
- You cannot perform Repeat Play with VIDEO CDs during PBC playback.
- When playing a DATA CD/DVD which contains MP3 files and JPEG image files, the audio sound will not match the image if their playing time are different.
- Repeat Play is canceled when
 - you open the disc tray.
 - you change the disc (except when "ALL DISCS" is selected).
 - you turn off the system.
 - you change the function (except when "ALL DISCS" is selected).
 - you perform CD Synchro Recording or USB TRANSFER.
 - you transfer music from a disc to a USB device.

Adjusting the delay between the picture and sound (“A/V SYNC”)

DVD-V DVD-VR VIDEO CD DATA CD DATA DVD

When the sound does not synchronize with the pictures on the screen, you can adjust the delay between the picture and sound.

“A/V SYNC” does not work for MP3 files and JPEG image files in DATA CD/DVD.

1 Press DISPLAY.

The Control Menu appears on the TV screen.

2 Press or repeatedly to select (A/V SYNC), then press ENTER.

The options for “A/V SYNC” appear on the TV screen.

3 Press or repeatedly to select the desired setting.

The default setting is underlined.

- OFF: Does not adjust.
- ON: Adjusts the difference between picture and sound.

4 Press ENTER.

Note

Depending on the input stream, this function may not be effective.




Restricting playback of the disc (PARENTAL CONTROL)

DVD-V



You can limit the playback of some DVD VIDEOS according to a predetermined level such as the age of the users. When a limited scene is played back, that scene may be skipped or replaced with different scenes.

- 1 Press  DISPLAY when playback is stopped.



The Control Menu appears on the TV screen.



- 2 Press  or  repeatedly to select  (SETUP), then press ENTER.

The options for "SETUP" appear on the TV screen.

- 3 Press  or  repeatedly to select "CUSTOM," then press ENTER.

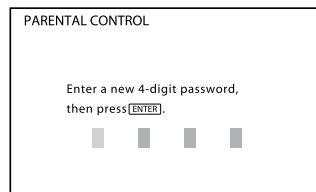
The Setup Menu appears on the TV screen.

- 4 Press  or  repeatedly to select "SYSTEM SETUP," then press ENTER.

- 5 Press  or  repeatedly to select "PARENTAL CONTROL," then press ENTER.

If you have not registered a password:

The display for registering a new password appears on the TV screen.




Enter a 4-digit password using the numeric buttons, then press ENTER. The display for confirming the password appears on the TV screen.

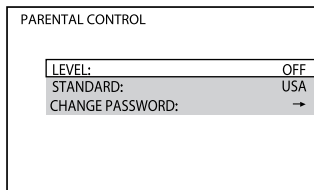
When you have already registered a password:

The display for entering the password appears on the TV screen.

If you make a mistake when entering your password:

Press  repeatedly to delete the number you have entered, then re-enter your password again.

- 6** Enter or re-enter your 4-digit password using the numeric buttons, then press ENTER.
The display for setting the playback limitation level appears on the TV screen.



- 7** Press \uparrow or \downarrow repeatedly to select "STANDARD," then press ENTER.
The options for "STANDARD" appear on the TV screen.
- 8** Press \uparrow or \downarrow repeatedly to select a geographic area as the playback limitation level, then press ENTER.
The area is selected.
When you select "OTHERS \rightarrow ," enter the area code for the geographic area you want by using the numeric buttons (see "Parental Control area code list" (page 140)).

- 9** Press \uparrow or \downarrow repeatedly to select "LEVEL," then press ENTER.
The options for "LEVEL" appear on the TV screen.

- 10** Press \uparrow or \downarrow repeatedly to select the desired level, then press ENTER.
"PARENTAL CONTROL" setting is completed.
The lower the value, the stricter the limitation.



To turn off the "PARENTAL CONTROL" function

Set "LEVEL" to "OFF" in step 10.



To change the password

- 1 Press \uparrow or \downarrow repeatedly to select "CHANGE PASSWORD," then press ENTER in step 7 of "Restricting playback of the disc."
- 2 Enter your 4-digit password using the numeric buttons, then press ENTER.
- 3 Enter a new 4-digit password using the numeric buttons, then press ENTER.
- 4 To confirm your password, re-enter it using the numeric buttons, then press ENTER.

If you forget your password

Remove the disc and repeat steps 1 to 5 of “Restricting playback of the disc (PARENTAL CONTROL)” (page 59). When you are asked to enter your password, enter “199703” using the numeric buttons, then press ENTER. The display will ask you to enter a new 4-digit password. After you enter a new 4-digit password, reload the disc and press  (or  on the unit). When the display for entering your password appears, enter your new password.

To play back a disc for which “PARENTAL CONTROL” is set

- 1 Load the disc and press  (or  on the unit).
The display for entering your password appears on the TV screen.
- 2 Enter your 4-digit password using the numeric buttons, then press ENTER.
The system starts playback.

Notes







- When you play back DVD VIDEOS which do not have the “PARENTAL CONTROL” function, playback cannot be limited on this system.
- Depending on the DVD VIDEO, you may be asked to change the “PARENTAL CONTROL” level while playing the disc. In this case, enter your password, then change the level. If resume playback is canceled, the level returns to the original level.

Using the Setup Menu

By using the Setup Menu, you can make various adjustments to items such as picture and sound. Displayed items vary depending on the country or region.

Note

Playback settings stored in the disc take priority over the Setup Menu settings. Therefore, some of the Setup Menu settings may not be performed.

- 1 Press  DISPLAY when playback is stopped.
The Control Menu appears on the TV screen.
- 2 Press  or  repeatedly to select  (SETUP), then press ENTER.
The options for “SETUP” appear on the TV screen.
- 3 Press  or  repeatedly to select “CUSTOM,” then press ENTER.
The Setup Menu appears on the TV screen.

- 4** Press **↑** or **↓** repeatedly to select the setup item from the displayed list, then press **ENTER**.
The setup item is selected.

Setup items:

A	LANGUAGE SETUP
V	VIDEO SETUP
M	AUDIO SETUP
S	SYSTEM SETUP
B-R	SPEAKER SETUP

Example: "VIDEO SETUP"

Selected item

	VIDEO SETUP	
	TV TYPE:	16:9
	PROGRESSIVE (COMPONENT OUT):	OFF
	COLOR SYSTEM (VIDEO CD):	AUTO
	PAUSE MODE:	AUTO

Setup items

- 5** Press **↑** or **↓** repeatedly to select the desired item, then press **ENTER**.

The options for the selected item appear on the TV screen.

Example: "TV TYPE"

	VIDEO SETUP	
	TV TYPE:	16:9
	PROGRESSIVE (COMPONENT OUT):	16:9
	COLOR SYSTEM (VIDEO CD):	4:3 LETTER BOX
	PAUSE MODE:	4:3 PAN SCAN

Options

- 6** Press **↑** or **↓** repeatedly to select the desired setting, then press **ENTER**.

The setting is selected and setup is completed.

	VIDEO SETUP	
	TV TYPE:	4:3 LETTER BOX
	PROGRESSIVE (COMPONENT OUT):	OFF
	COLOR SYSTEM (VIDEO CD):	AUTO
	PAUSE MODE:	AUTO

Selected setting

A Setting the language — "LANGUAGE SETUP"

Set various languages for the on-screen display or sound track.

OSD

(On-Screen Display)

Switches the language of the on-screen display.

MENU*

(DVD VIDEO only)

Select the language for the DVD menu.

AUDIO*

(DVD VIDEO only)

Switches the language of the sound track. When you select "ORIGINAL," the language given priority in the disc is selected.

SUBTITLE*

(DVD VIDEO only)

Switches the language of the subtitle. When you select "AUDIO FOLLOW," the language for the subtitles changes according to the language you selected for the sound track.

* When you select a language in "MENU," "AUDIO," or "SUBTITLE" that is not recorded on the DVD VIDEO, one of the recorded language is automatically selected. However, depending on the disc, the language may not be selected automatically. If you select "OTHERS →" in "MENU," "AUDIO," and "SUBTITLE," enter a language code using the numeric buttons (see "Language code list" (page 139)).



Setting the TV screen — "VIDEO SETUP"

Choose the settings according to the TV you connected.

The default setting is underlined.

TV TYPE¹⁾

(DVD VIDEO only)

16:9: Select this when you connect a wide-screen TV or a TV with a wide mode function.



4:3 LETTER BOX: Select this when you connect a 4:3 screen TV. This setting displays a wide picture with bands on the upper and lower portions of the screen.



4:3 PAN SCAN²⁾: Select this when you connect a 4:3 screen TV. This setting displays the wide picture on the entire screen and cuts off the portions that do not fit.

Continued 

PROGRESSIVE (COMPONENT OUT)

Sets the progressive signal output from the COMPONENT VIDEO OUT jacks to on or off.

OFF: Outputs interlace signals.

ON: Outputs progressive signals.

For details, see “Changing the format of the video signal output from COMPONENT VIDEO OUT jacks” (page 32).

COLOR SYSTEM (VIDEO CD)

(Except for Latin American models)

Select the output video signal when you play back a VIDEO CD.

AUTO: Outputs the video signal according to the color system of the disc, either PAL or NTSC.

PAL: Changes the video signal of an NTSC disc and output it in PAL system.

NTSC: Changes the video signal of a PAL disc and output it in NTSC system.

BLACK LEVEL

(Latin American models only)

Selects the black level (setup level) for the video signals output from the jacks other than COMPONENT VIDEO OUT.

ON: Sets the black level of the output signal to the standard level.

OFF: Lowers the standard black level. Use this when the picture becomes too white.

BLACK LEVEL (COMPONENT OUT)

(Latin American models only)
Selects the black level (setup level) for the video signals output from the COMPONENT VIDEO OUT jacks.

“BLACK LEVEL (COMPONENT OUT)” setting is not available when the system outputs progressive signal.

OFF: Sets the black level of the output signal to the standard level.

ON: Raises the standard black level. Use this when the picture becomes too black.

PAUSE MODE

(DVD VIDEO and DVD-R/-RW in VR mode only)

AUTO: The picture, including subjects that move dynamically, is output with no jitter. Normally select this position.

FRAME: The picture, including subjects that do not move dynamically, is output in high resolution.

¹⁾ The default setting varies depending on the country or region.

²⁾ Depending on the DVD VIDEO, “4:3 LETTER BOX” may be selected automatically instead of “4:3 PAN SCAN” or vice versa.



Setting the audio options — “AUDIO SETUP”

Configure audio related settings.
The default setting is underlined.

AUDIO DRC¹⁾ (Dynamic Range Compression)

(DVD VIDEO only)

OFF: No compression of dynamic range.

STANDARD: Reproduces the sound track with the kind of dynamic range that the recording engineer intended. Useful for watching movies at low volume late at night.

MAX: Narrows the dynamic range fully.

TRACK SELECTION

(DVD VIDEO only)

Gives priority to the sound track which contains the highest number of channels when you play back a DVD VIDEO on which multiple audio (PCM, DTS, MPEG audio, or Dolby Digital) formats²⁾ are recorded.

OFF: No priority given.

AUTO³⁾: Priority given.

¹⁾ “AUDIO DRC” can only be performed with Dolby Digital sources.


²⁾ If each audio sound track has the same number of channels, the system selects the audio sound tracks in the order from PCM, DTS, Dolby Digital, to MPEG.

³⁾ When you set “TRACK SELECTION” to “AUTO,” the language may change. The “TRACK SELECTION” setting has higher priority than the “AUDIO” settings in “LANGUAGE SETUP” (page 37, 63). However, depending on the disc, this function may not be performed.



Setting the system — “SYSTEM SETUP”

SCREEN SAVER

The screen saver will help prevent your display device from becoming damaged (ghosting). Press any button (e.g., ) to cancel the screen saver.

ON: The screen saver image appears if you do not operate the system for about 15 minutes.

OFF: The screen saver does not appear.

BACKGROUND

Selects the background color or picture to be displayed on the TV screen. The background color or picture is displayed when playback is stopped or while playing an AUDIO CD and MP3 files.

JACKET PICTURE: The jacket picture (still picture) appears in the background, but only when the jacket picture is already recorded on the disc (DVD VIDEO, CD-Extra, etc.). If the disc does not contain a jacket picture, the “GRAPHICS” picture appears.

GRAPHICS: A preset picture stored in the system appears in the background.

BLUE: The background color is blue.

BLACK: The background color is black.

PARENTAL CONTROL

Sets the playback restrictions. For details, see “Restricting playback of the disc (PARENTAL CONTROL)” (page 59).

DivX

Displays the registration code for this system.

For more information, go to <http://www.divx.com> on the Internet.

MULTI-DISC RESUME

(DVD VIDEO and VIDEO CD only)

ON: Stores the resume playback point in the memory for up to 6 discs.

OFF: Does not store the resume playback point in the memory. Playback starts at the resume playback point only for the current disc in the system.

RESET*

Returns "SETUP" settings to the default settings. For details, see "To return the "SETUP" settings to the default settings", perform reset as follows:" (page 121).

* Except for "PARENTAL CONTROL" settings



Setting the speakers¹⁾ — "SPEAKER SETUP"

CONNECTION

FRONT: **YES**

SUBWOOFER²⁾:

YES: Select this if you have connected the subwoofer.

NONE: Select this if the subwoofer is not connected.

LEVEL (FRONT)

L 0.0 dB³⁾

R 0.0 dB³⁾

SUBWOOFER 0.0 dB⁴⁾⁵⁾

¹⁾ To return to the default setting when changing a setting, press CLEAR before you press ENTER. However, note that you cannot return the setting of "CONNECTION" to default setting. Note that you cannot perform "SPEAKER SETUP" when you connect headphones or microphones to the unit.

²⁾ Depending on the settings of other speakers, the subwoofer may output excessive sound.

³⁾ -6.0 dB (min) to 0.0 dB (max)

⁴⁾ -10.0 dB (min) to 0.0 dB (max)

⁵⁾ The items that are set to "NONE" in "CONNECTION" cannot be selected.

Tuner

Listening to the radio

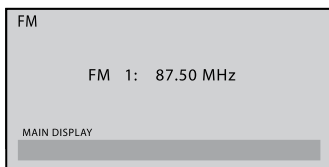
You can listen to a radio station either by selecting a preset station, or by manually tuning in the station.

- 1 Press FUNCTION +/- (or press TUNER/BAND on the unit) repeatedly to select "FM" or "AM."
- 2 Perform tuning.

For automatic scanning (MHC-GZR999D/GZR888D only):

Press and hold TUNING +/- until the frequency indication changes and then release.

Scanning stops automatically when a station is tuned in and "TUNED" appears in the display. When a FM stereo program is tuned in, "STEREO" appears in the display.



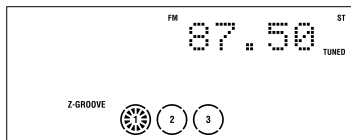
If "TUNED" does not appear and the scanning does not stop, press ■ and perform manual tuning.

For automatic scanning (MHC-GZR777D only):

Press and hold TUNING +/- until the frequency indication changes and then release.

"AUTO" appears in the display.

Scanning stops automatically when a station is tuned in and "TUNED" lights up in the display. When a FM stereo program is tuned in, "ST" lights up in the display.



If "TUNED" does not appear and the scanning does not stop, press ■ and perform manual tuning.

For manual tuning:

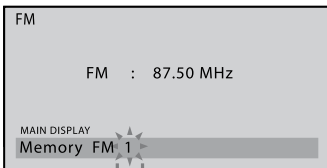
Press TUNING +/- repeatedly.

For direct tuning:

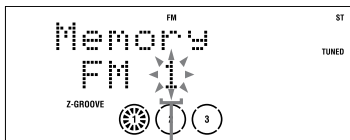
Press D.TUNING, then use the numeric buttons to enter the frequency of the desired station. For example, press 1, 0, 2, 5 and 0 to enter the frequency of FM 102.50 MHz, then press ENTER. If you cannot tune in the station, make sure you have entered the right frequency. If you still cannot tune in the station, the frequency is not used in your area. To cancel direct tuning, press D.TUNING.

Presetting a radio station

- 1 Tune in the desired station.
- 2 Press DVD/TUNER MENU.
“Memory?” flashes in the display.
- 3 Press ENTER or \rightarrow .
A preset number flashes in the display.
The stations are stored from preset number 1.



Preset number



Preset number

4 Press \uparrow or \downarrow repeatedly to select the desired preset number.

5 Press ENTER.
“Complete!” appears in the display.
The station is stored.

6 Repeat steps 1 to 6 to store other stations.

You can preset up to 20 FM stations and 10 AM stations.
To cancel presetting, press DVD/TUNER MENU.

7 To call up a preset number, press PRESET +/- repeatedly (or turn OPERATION DIAL on the unit clockwise or counterclockwise) to select the desired preset number.

You can also press the numeric buttons, then press ENTER to select a preset station.




Tips

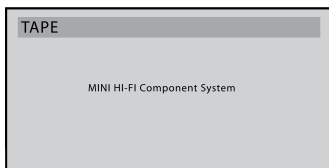
- To improve broadcast reception, adjust the supplied antennas, or connect an external antenna.
- When an FM stereo program has static noise, press REPEAT/FM MODE repeatedly until “MONO” appears in the display. There will be no stereo effect, but the reception will improve.
- You can also set the frequency by viewing the tuner information on the TV screen.

Tape






Playing a tape (except for Latin American models)

You can use TYPE I (normal) tape.

- 1 Press FUNCTION +/- repeatedly to select "TAPE" (or press TAPE on the unit).
- 2 Insert a tape.
Press  PUSH OPEN/CLOSE on the unit to insert a tape into the cassette holder with the side you want to play back facing upward. Make sure there is no slack in the tape to avoid damaging the tape or the cassette holder.
- 3 Press  (or  on the unit).
The tape starts playback.



Other operations

To	Do this
Stop playback	Press  .
Pause playback	Press  . Press  again to resume playback.
Fast-forward or rewind	Press  or  .

Recording onto a tape (except for Latin American models)

There are three ways to record on a TYPE I (normal) tape.

Use the buttons on the unit for the operation.

The recording level is adjusted automatically.

CD Synchro Recording

You can record an entire VIDEO CD, AUDIO CD, or DATA CD/DVD (MP3 files only) onto a tape.

Manual Recording

You can record just the portion you want from a sound source, including connected audio components.

Sound Mixing

You can “mix” sound from any one of the sound sources and singing or speaking into a microphone. The mixed sound can be recorded onto a tape.

- 1 Insert a recordable tape into the cassette holder with the side you want to record facing up.

- 2 Prepare the recording source.

For CD Synchro Recording:

Press DVD and load the disc you want to record. If you have already loaded the disc, press DISC 1 – DISC 3 to select the disc. When the system automatically starts playback, press ■ twice to cancel resume playback.

For Manual Recording and Sound Mixing:

Select the desired source to record or mix.

If you record a disc manually, start playing the disc first, then perform steps 3 and 4. To record only your favorite CD tracks, perform steps 1 to 6 of “Creating your own program (Program Play)” (page 53).

To record only sound from a microphone, connect a microphone and then press USB to select “USB” function. Make sure not to start playing the USB device in step 4.

- 3** Set the deck to stand by for recording.

For CD Synchro Recording:

Press REC TO TAPE.

If the play mode is set to Shuffle Play, Program Play or Repeat Play, it automatically switches to Normal Play (VIDEO CD and AUDIO CD only).

For Manual Recording and Sound Mixing:

Press REC TO TAPE.

- 4** Start recording.

For CD Synchro Recording:

Press ENTER. When the recording is completed, the system stops automatically.

For Manual Recording:

Press ENTER, and then start playing the desired recording source. If there is noise while recording from the tuner, reposition the appropriate antenna to reduce the noise.

For Sound Mixing:

Press ENTER, and then start playing the desired source and start singing or speaking into the microphone. If acoustic feedback (howling) occurs, reduce the volume, move the microphone away from the speakers, or change the direction of the microphone.

To stop recording

Press ■.

Notes

- CD Synchro Recording is not available with DVDs.
- You cannot listen to other sources while recording.
- When you record from a VIDEO CD, playback with PBC functions is automatically canceled (CD Synchro Recording only).
- If you connect or disconnect a microphone or headphones during recording, the sound may cut off for a moment.
- When “DVD” function or “USB” function is selected, Karaoke mode is automatically turned on when you connect a microphone to MIC jack.
- Do not eject the tape during recording, as this may cause irreparable damage to the tape and the tape deck.
- If you press REC TO TAPE during Manual Recording or Sound Mixing, the recording is paused. To resume recording, press REC TO TAPE again.
- The system may continue playback of other discs even after the Synchro Recording is completed.
- The selected sound field remains even if the headphones are connected or disconnected during recording.
- You cannot change the sound field when recording to the tape.

USB Device

Before using the USB device with this system

See “Compatible devices with this system” (page 132) for a list of USB devices that can be connected to this system.

Notes

- When USB cable connection is necessary, connect the USB cable supplied with the USB device to be connected. See the operating instructions supplied with the USB device to be connected for details on the operation method.
- It may take about 10 seconds before “Reading.” appears in the display depending on the type of USB device connected.
- Do not remove the USB device during transfer, recording or erase operations. Doing so may corrupt the data on the USB device or damage the USB device itself.
- Do not connect the system and the USB device through a USB hub.
- When the USB device is inserted, the system reads all the files on the USB device. If there are many folders or files on the USB device, it may take a long time to finish reading the USB device.

- Always turn off the system before removing the USB device. Removing the USB device while the system is on may corrupt the data on the USB device.
- Compatibility with all encoding/writing software cannot be guaranteed. If audio files on the USB device were originally encoded with incompatible software, those files may produce noise or interrupted audio, or may not play at all.


Note on the maximum number of files and folders on a USB device

This system cannot transfer, record or playback files and folders of the USB device in the following cases.

- When the number of files in a folder exceeds 150.
- When the number of folders on a USB device exceeds 200.

These numbers may vary depending on the file structure and the folder structure. Do not save other types of files or unnecessary folders on a USB device that has audio files, video files or JPEG image files.

Transferring music from a disc to a USB device


You can connect an optional USB device to the  (USB) port on the unit and transfer music from a disc to the USB device.

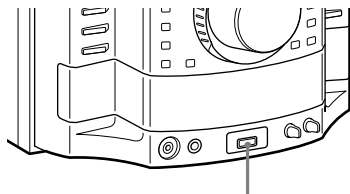
You can transfer music only from an AUDIO CD or DATA CD/DVD (MP3 files only).

The audio format of files transferred by this system is MP3. When transferring music from an AUDIO CD, the tracks are transferred as 128 kbps MP3 files. When transferring music from a DATA CD/DVD, MP3 files are transferred with the same bit rate as the original MP3 files. The amount of free space required on the USB device is about 1 MB per minute when transferring music from an AUDIO CD.

Required free space may be larger when transferring music from a DATA CD/DVD (MP3 files only).

You can easily transfer all the music on a disc to a USB device (USB TRANSFER). You can also transfer a single audio track or file during playback (REC1).

- 1 Connect the USB device to the  (USB) port.



Insert a USB device

Note

Do not use USB devices other than those listed in “Compatible devices with this system” (page 132). Operation of models not listed is not guaranteed. Operation may not always be ensured even when using a compatible USB device.

- 2 Press FUNCTION +/- repeatedly to select "DVD" (or press DVD on the unit), then load the disc you want to transfer.

If you have loaded the disc, press DISC SKIP repeatedly (or DISC 1 — DISC 3 on the unit) to select the disc. When the system automatically starts playback, press ■ twice to cancel resume playback.

- 3 Set the USB device to stand by for transferring.

USB TRANSFER:

Press REC TO USB on the unit.

REC1:

Start playback of the track or MP3 file you want to transfer, then press REC TO USB on the unit.

The USB device stands by for transferring.

- 4 Start transferring.

Press ENTER.

Transferring starts.

When the transfer is completed, access to the USB device and the disc player stops automatically.

To stop transferring


Press ■.


To remove the USB device

- 1 Press ■ to stop playback.
- 2 Press I/⏻ to turn off the system.
- 3 Remove the USB device.

Using the on-screen display

You can also transfer music using the on-screen display.

- 1 Press  DISPLAY when playback is stopped.
The Control Menu appears on the TV screen.

- 2 Press **↑** or **↓** repeatedly to select  (USB TRANSFER), then press ENTER.

The options for “USB TRANSFER” appear on the TV screen.

- 3 Press **↑** or **↓** repeatedly to select the desired option, then press ENTER.

For AUDIO CD:

- TRACK: The tracks on the AUDIO CD appear. You can transfer the desired track.

For DATA CD/DVD:

- TRACK: The folders on the DATA CD/DVD appear. You can transfer the desired MP3 file.
- FOLDER: The folders on the DATA CD/DVD appear. You can transfer all MP3 files in the folder.

“Reading.” appears, and the tracks or folders appear on the TV screen.

Note

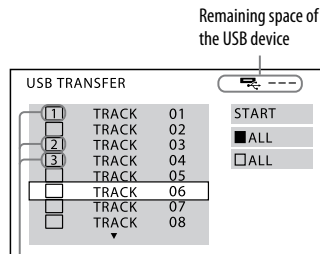
It may take some time to display the tracks or folders depending on the number of tracks or folders.

- 4 Select the tracks you want to transfer.

For AUDIO CD:

Press **↑** or **↓** repeatedly to select the track, then press ENTER.

The tracks are marked in the order that you select. To cancel the selection, press ENTER again.



Tracks to be transferred

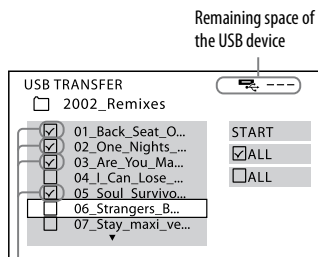
To select all tracks on the AUDIO CD

Press **↑/↓/←/→** repeatedly to select “**■ ALL**,” then press ENTER. To cancel the selection, select “**□ ALL**,” then press ENTER.

For DATA CD/DVD:

Press **▲** or **▼** repeatedly to select the MP3 files or folders, then press ENTER.

The MP3 files or folders are marked. To cancel the selection, press ENTER again.



MP3 files or folders to be transferred

To select all tracks or folders on the DATA CD/DVD

Press **▲/▼/◀/▶** repeatedly to select **[X] ALL**, then press ENTER. To cancel the selection, select **[] ALL**, then press ENTER.

- 5 Press **▲/▼/◀/▶** repeatedly to select **START**, then press ENTER. The system starts transferring and the transfer status appears. No sound is output during transfer. To stop transferring, press **■**.

To return to the previous display

Press **↵** RETURN.

To erase audio files or folders from the USB device

You can erase audio files or folders on the USB device.

- 1 Connect the USB device to the **⚡ (USB)** port.
- 2 Press **FUNCTION +/-** repeatedly to select **“USB”** (or press **USB** on the unit). **“FOLDER LIST”** appears.
- 3 Press **▲** or **▼** repeatedly to select a folder. To erase all audio files in a folder, press **CLEAR**. To erase an audio file, press **ENTER**. **“TRACK LIST”** appears. Press **▲** or **▼** repeatedly to select the desired audio file, then press **CLEAR**.
- 4 Press **◀** or **▶** repeatedly to select **“YES.”** To cancel the erase operation, select **“NO.”**
- 5 Press **ENTER**. The selected audio file or folder is erased.

Folder and file generation rules

When first transferring music to the USB device, a “MUSIC” folder is created directly below the “ROOT” folder. Folders and files are generated within this “MUSIC” folder as follows.

USB TRANSFER¹⁾

Music source	Folder name	File name
MP3	Same as the music source ²⁾	
CD-DA	“FLDR001” ³⁾	“TRACK001” ³⁾

REC1

Music source	Folder name	File name
MP3	“REC1-MP3” ⁴⁾	Same as the music source ²⁾
CD-DA	“REC1-CD” ⁴⁾	“TRACK001” ³⁾

¹⁾ Except when resuming playback.

²⁾ Up to 64 characters of folder name and 60 characters of file name are assigned.

³⁾ Folder and file numbers are assigned serially thereafter.

⁴⁾ A new file is created in the “REC1-MP3” or “REC1-CD” folder each time REC1 is performed.


Notes

- When transferring music from a CD, the tracks are transferred as 128 kbps MP3 files. When transferring music from an MP3 disc, MP3 files are transferred with the same bit rate as the original MP3 files.
- If you start transferring in shuffle play mode or repeat play mode, the selected play mode is automatically canceled and the play mode switches to normal play mode.
- CD text information is not transferred in the created MP3 files.
- If you cancel music being transferred partway, an incomplete MP3 file, generated on the USB device, will be deleted.
- Transferring stops automatically if:
 - you change the function.
 - you turn off the system.
 - the USB device runs out of space during the transfer process.
 - the number of files or folders on the USB device reaches the limit for the number that the system can recognize.
- You cannot change the sound field when transferring to the USB device.
- If the folder to be erased contains non-MP3/WMA (Windows Media Audio)/AAC (Advanced Audio Coding) audio files or sub folders, these are not erased.
- If a folder or audio file that you are trying to transfer already exists on the USB device with the same name, a sequential number is added after the name without overwriting the original folder or file.

Recording analog audio to a USB device

You can record the sound from analog audio sources. The sound is recorded as 128 kbps MP3 file.

The “TAPE” function is not available for Latin American models.

- 1 Connect the USB device to the  (USB) port.
- 2 Press FUNCTION +/- repeatedly to select the desired source.
 - TAPE (except for Latin American models): To record from this system's tape deck.*
 - TUNER FM/AM: To record from this system's tuner.
 - VIDEO/SAT: To record from the optional component connected to the VIDEO/SAT AUDIO IN L/R jacks.


* Recording continues even though tape playback has ended.

- 3 Press REC TO USB on the unit. “Please Wait” appears and the display cycles between “Free xx.x GB” (free space on the USB device) and “Push Enter.”
The USB device stands by for recording.
- 4 Start playing the desired source to record, then press ENTER.

To stop recording

Press .

To remove the USB device

- 1 Press  to stop recording.
- 2 Press I/⏻ to turn off the system.
- 3 Remove the USB device.

To mark track numbers

You can mark the track numbers during recording of any source.

Press REC TO USB on the unit at the point you want to add a track mark.

The system pauses recording for a few seconds and adds track mark, showing message “New Track.” No sound is recorded during pause time.

Note

The track numbers are automatically marked when you record more than 60 minutes.

Folder and file generation rules

When first recording the analog audio to the USB device, a “MUSIC” folder is created directly below the “ROOT” folder.

Folders and files are generated within this “MUSIC” folder as follows.

Music source	Folder name	File name
Tape	“TAPE001”*	“TRACK001”*
Tuner	“FM001”* or “AM001”*	“TRACK001”*
VIDEO/ SAT AUDIO IN L/R	“VIDEO001”* or “SAT001”*	“TRACK001”*

* Folder and file numbers are assigned serially thereafter.

Note

Recording stops automatically when:

- you change the function.
- you change the band.
- you turn off the system.
- the USB device runs out of space during the recording.
- the number of files or folders on the USB device reaches the limit for the number that the system can recognize.

Playing a file of the USB device

See “Compatible devices with this system” (page 132) for a list of USB devices that can be connected to this system.


You can listen to music stored in the USB device.


The audio formats that can be played back on this system are as follows: MP3*/WMA*/AAC*




You can view image files and video files stored in the USB device.

The image file and video file formats that can be played back on this system are as follows: JPEG/DivX/MP4*

* Files with DRM (Digital Rights Management) copyright protection cannot be played back on this system.



- 1 Press FUNCTION +/- repeatedly to select “USB” (or press USB on the unit).
- 2 Connect the USB device to the  (USB) port.

- 3 Press  DISPLAY when playback is stopped.
The Control Menu appears on the TV screen.

- 4 Press  or  repeatedly to select  (MEDIA), then press ENTER.

The options for “MEDIA” appear on the TV screen.

- MUSIC: for playing audio files
- VIDEO: for playing DivX video files or MPEG4 video files
- PHOTO: for playing JPEG image files

- 5 Press  or  repeatedly to select the desired option, then press ENTER. When the desired option has already selected, press DVD/TUNER MENU.

A list of folders that contains the files of the selected file type appears on the TV screen.

- 6 Press \blacktriangle or \blacktriangledown repeatedly to select a folder.

Playing a folder:

Press \blacktriangleright (or \blacktriangleright on the unit).

The system starts playback from the first file of the selected folder.

To stop playback, press \blacksquare .

Playing an audio file:

- 1 Press ENTER.

“TRACK LIST” appears.



- 2 Press \blacktriangle or \blacktriangledown repeatedly to select the desired audio file, then press ENTER.

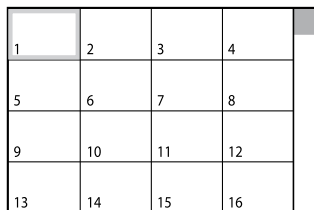
The system starts playback of the selected audio file.

To stop playback, press \blacksquare .

Playing an image file:

- 1 Press PICTURE NAVI.

Thumbnail picture for the first 16 JPEG image files in the selected folder is displayed.



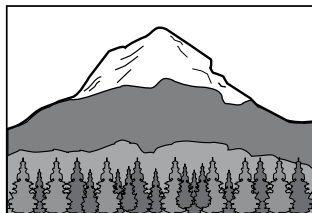
If there are more than 16 image files in the selected folder, the scroll bar appears at the right.

- 2 Press \blacktriangle / \blacktriangledown / \blacktriangleleft / \blacktriangleright repeatedly to select the image you want to view, then press \blacktriangleright (or \blacktriangleright on the unit).

The slide show starts from the selected image file.

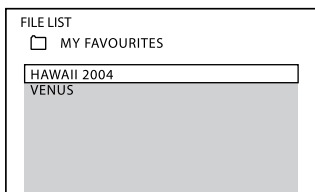
To stop playback, press \blacksquare .

The slide show stops when you press \blacktriangle or \blacktriangledown .



Playing a video file:

- 1 Press ENTER.
“FILE LIST” appears.



- 2 Press **▲** or **▼** repeatedly to select the desired video file, then press ENTER.

The system starts playing the selected video files.

To stop playback, press **■**.

Other operations

To	Do this
Display the next or previous page of “TRACK LIST,” “FOLDER LIST” or “FILE LIST”	Press ◀▶ or ▶▶ repeatedly.
Play back the next folder of audio files or video files	Press ▶▶▶ repeatedly until the last file of the current folder, then press ▶▶▶ once. To select the previous folder, select the folder from “FOLDER LIST”
Return to “FOLDER LIST” when “TRACK LIST,” or “FILE LIST” is displayed	Press ↶ RETURN.
Play back the next folder of JPEG image files	Press ▶ repeatedly until the last file of the current folder, then press ▶ once. To select the previous folder, select the folder from “FOLDER LIST.”
Rotate the image by 90 degrees	Press ▲ or ▼ repeatedly while viewing an image. To return to the original view, press CLEAR.

To remove the USB device

- 1 Press **■** to stop playback.
- 2 Press **I/⏻** to turn off the system.
- 3 Remove the USB device.

Notes

- The file formats that this system can play are as follows:
 - MP3: file extension “.mp3”
 - WMA: file extension “.wma”
 - AAC: file extension “.m4a”
 - JPEG: file extension “.jpg” or “.jpeg”
 - MP4: file extension “.mp4” or “.m4v”
 - DivX: file extension “.avi” or “.divx”Note that even when file names have the above file extensions, if the actual files differ, playing these files may generate a loud noise which could damage the speaker system and the system may malfunction.
- The following USB devices/situations can increase the time it takes to start playback:
 - a USB device recorded with a complicated tree structure.
 - when the files in another folder have just been played back.
 - when you play back an AAC file.
- The system can play back to a depth of 8 folders only.
- Resume playback is canceled when you turn off the system or change the function.
- This system does not necessarily support all the functions provided in a connected USB device.
- The playback order for the system may differ from the order of the connected USB device.
- Folders that have no MP3/WMA/AAC audio files, DivX/MPEG4 video files or JPEG image files are skipped.

To specify the slide show speed

(JPEG image files only)







- 1 Press **⏻** DISPLAY repeatedly until the Control Menu for JPEG image files appears on the TV screen.
- 2 Press **▲** or **▼** repeatedly to select **INTERVAL** (INTERVAL), then press ENTER. The options for “INTERVAL” appear on the TV screen.
- 3 Press **▲** or **▼** repeatedly to select the desired transition interval. The default setting is underlined.
 - NORMAL: Sets to the standard duration.
 - FAST: Sets the duration shorter than “NORMAL.”
 - SLOW 1: Sets the duration longer than “NORMAL.”
 - SLOW 2: Sets the duration longer than “SLOW 1.”
- 4 Press ENTER. The selected setting takes effect.

Note

Some JPEG image files (especially progressive JPEG image files or JPEG image files with 3,000,000 pixels or more) may take a longer time to display than others, which may make the transitions seem longer than that of the option you selected.







To select a transition effect for image files in the slide show

(JPEG image files only)

- 1 Press  DISPLAY repeatedly until the Control Menu for JPEG image files appears on the TV screen.
- 2 Press  or  repeatedly to select  (EFFECT), then press ENTER. The options for “EFFECT” appear on the TV screen.
- 3 Press  or  repeatedly to select the desired setting. The default setting is underlined.
 - MODE 1: The image sweeps in from top to bottom of the screen.
 - MODE 2: The image sweeps in from left to right of the screen.
 - MODE 3: The image stretches out from the center of the screen.
 - MODE 4: The image randomly cycles through the effects.
 - MODE 5: The next image slides over the current image.
 - OFF: Turns off this function.
- 4 Press ENTER. The selected setting takes effect.

Playing in random order (Shuffle Play)

You can play back the files on the USB device in random order. Each time you perform Shuffle Play, the playing order may differ.

- 1 Press  DISPLAY. The Control Menu appears on the TV screen.
- 2 Press  or  repeatedly to select  (SHUFFLE), then press ENTER. The options for “SHUFFLE” appear on the TV screen.
- 3 Press  or  repeatedly to select the desired setting. The default setting is underlined.
 - OFF: Turns off this function.
 - ON (MUSIC): all audio files in the selected folder on the USB device is played back randomly. When no folder is selected, the first folder is played back randomly.
- 4 Press ENTER. Shuffle Play starts. To cancel Shuffle Play, press CLEAR or select “OFF” in step 3.

Notes

- Shuffle Play is canceled when:
 - you remove the USB device.
 - you turn off the system.
 - you change the function.
- The same song may be played back repeatedly for audio files.

Playing repeatedly (Repeat Play)

You can play back audio files, video files or JPEG image files on the USB device repeatedly.

You can also repeat Shuffle Play.

1 Press DISPLAY.

The Control Menu appears on the TV screen.

2 Press or repeatedly to select (REPEAT), then press ENTER.

The options for “REPEAT” appear on the TV screen.

3 Press or repeatedly to select the desired setting.

The default setting is underlined.

- OFF: Turns off this function.
- MEMORY: repeats all the folders on the USB device.
- FOLDER: repeats the current folder.
- TRACK¹⁾: repeats the current file.
- FILE²⁾: repeats the current file.

¹⁾ Audio files only.

²⁾ Video files only.

When Shuffle Play is activated:

- OFF: Turns off this function.
- ON: repeats the Shuffle Play.

4 Press ENTER.

5 Press (or on the unit).

Repeat Play starts.

To cancel Repeat Play, press CLEAR or select “OFF” in step 3.

Note

Repeat Play is canceled when:

- you remove the USB device.
- you turn off the system.
- you change the function.

Tip

You can also change the Repeat Play setting by pressing REPEAT/FM MODE repeatedly.

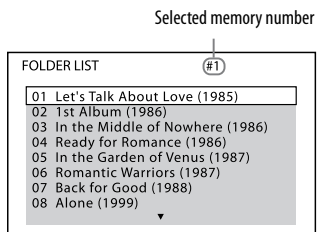
Selecting the playback source or transferring destination on the Sony Ericsson mobile phone

When listening to music from a Sony Ericsson mobile phone (W302 / W595 / W760i / W890i / W902 / W910i) or when transferring music from this system to the mobile phone, you can select the playback source or transferring destination as follows:

- internal memory of the mobile phone
- Memory Stick

To select the playback source in the “USB” function

Press MEMORY SELECT repeatedly. You can select the internal memory or Memory Stick of the mobile phone.



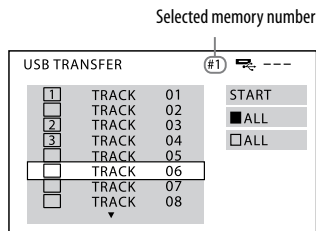
To select the transferring destination in the “DVD” function

- 1 Load a CD, DATA CD or DATA DVD.

- 2 Press MEMORY SELECT repeatedly. You can select the internal memory or Memory Stick of the mobile phone.

Notes

- You cannot select the playback source or transferring destination during playback or transferring. Stop playback or transferring, and then select the playback source or transferring destination.
- You can check the selected memory number on the TV screen.



- You can select a Memory Stick when the selected memory number is as follows:

Model name	Memory number
W302	#1
W595	#2
W760i	#2
W890i	#2
W902	#2
W910i	#2

- If there is no Memory Stick inserted in the mobile phone, you cannot select playback source or the transferring destination.
- Select a transferring destination before transfer.

Sound Adjustment

Adjusting the sound

To	Do this
Reinforce the sound	Press GROOVE on the unit ¹⁾ . Each time you press the button, the display changes as follow: GROOVE ON ²⁾ → Z-GROOVE ON ²⁾ → GROOVE OFF → GROOVE ON → ...
Select the preset sound effect	Press PRESET EQ on the unit repeatedly ³⁾ .

- ¹⁾ The last selected setting appears when GROOVE on the unit is pressed once.
- ²⁾ The volume switches to power mode and the equalizer curve changes.
- ³⁾ The last selected preset effect appears when PRESET EQ on the unit is pressed once.

To turn on the subwoofer (MHC-GZR999D only)

Press SUBWOOFER on the unit. The SUBWOOFER indicator on the unit lights up.

Preset effect options

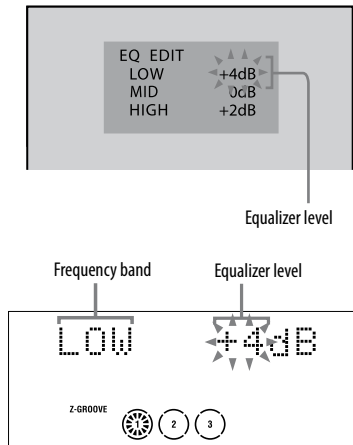
Effect	Category
ROCK	Standard music sources
POP	
JAZZ	
DANCE	
SOUL	
TECHNO	
HIP HOP	
MOVIE	Video files
MP3 EQ	MP3 files
USER EQ 1, 2, 3	User equalizer setting (see “To adjust the graphic equalizer and store the user equalizer setting” (page 88))
FLAT	Original music source (cancels the preset effect)

To adjust the graphic equalizer and store the user equalizer setting

You can adjust the sound by raising or lowering the level of specific frequency band, then store up to three user equalizer setting, in the memory.

- 1** Press EQ BAND/MEMORY on the unit repeatedly to select a frequency band or surround effect.

- 2 Press **◀◀/▶▶** to adjust the level or select surround effect you want.



- 3 Repeat steps 1 and 2 to adjust the level of other frequency bands and surround effect.
- 4 Press **ENTER**.
“MEMORY EQ-1” appears in the display.

- 5 Press **◀◀/▶▶** to select a user equalizer number (1 – 3) for the equalizer setting (“MEMORY EQ-1” through “MEMORY EQ-3”) you want to store.

- 6 Press **ENTER**.
This setting is automatically stored as the user equalizer setting you selected in step 5.
The previous setting stored at this memory location is erased and replaced by the new setting.

Tip

If you do not want to store the setting, press **◀◀/▶▶** to select “EXIT?” and then press **ENTER**.

Selecting the sound field

You can take advantage of the surround sound simply by selecting one of the sound fields. They bring the exciting and powerful sound of movie theaters into your home.

Press **SOUND FIELD** repeatedly.

The last selected sound field appears in the display, and then you can select the desired sound field.

When the headphones are not connected:

2CH STEREO

Reproduces stereo output from multi channel sources such as DVD VIDEOS during “DVD” function. The system outputs the original sound during functions other than “DVD” and during playback of stereo sources such as AUDIO CD, VIDEO CD and MP3 files.

2CH SURR

Reproduces stereo output with surround effect from multi channel sources such as DVD VIDEO during “DVD” function. The system outputs the original sound with surround effect during functions other than “DVD.”

VIRTUAL A*

Creates 3 sets of virtual surround speakers from the sound of the front speakers. This sound field is only effective when you play back multi channel sources.

VIRTUAL B*

Creates 1 set of virtual surround speakers from the sound of the front speakers without using actual surround speakers. This mode is effective when the distance between the front speakers is short. This sound field is only effective when you play back multi channel sources.

When the headphones are connected:

HP 2CH

The normal sound field for headphones.

HP SURR

The sound field for headphones with surround effect.

HP VIRTUAL*

The sound field for headphones with virtual surround effect. This sound field is only effective when you play back multi channel sources.

- * These sound fields cannot be selected when:
- the system is in stand by or during transfer or recording.
 - the Karaoke mode is turned on.

Notes

- Depending on the disc, the surround effect may not be as much as expected.
- You cannot change the sound field when transferring or recording to the USB device.
- The sound output from the satellite speakers is the same as that from the front speakers (MHC-GZR999D/GZR888D only).

Singing along: Karaoke

DVD-V DVD-VR VIDEO CD C D DATA CD
DATA DVD

You can enjoy Karaoke by setting the system to Karaoke mode.

- 1 Press FUNCTION +/- repeatedly to select "DVD" or "USB" (or press DVD or USB on the unit).
- 2 Turn MIC LEVEL on the unit to "MIN" to reduce the microphone volume.
- 3 Connect a microphone to MIC jack on the unit.
The Karaoke mode is turned on. "KARAOKE MODE: ON" appears on the TV screen.
For MHC-GZR777D, "🎤" appears in the front panel display.
- 4 Start playing the music and adjust the volume.

DVD VIDEO, DVD-R/-RW in VR mode, video files:

The system outputs the audio format that you have selected.

AUDIO CD, VIDEO CD, MP3 files:

The audio setting automatically changes to "1/L" and the system outputs the left channel audio.

If you want to hear vocal:

Press AUDIO repeatedly to select another audio channel.

- 5 Start singing along with the music and adjust the microphone volume by turning MIC LEVEL.

To turn off the Karaoke mode

Disconnect the microphone or press KARAOKE MODE. "KARAOKE MODE: OFF" appears on the TV screen.

To adjust the microphone echo level

Turn ECHO LEVEL on the unit. To cancel the echo effect, turn ECHO LEVEL on the unit to "MIN."

Notes

- The sound input from the microphone is not output from the DVD DIGITAL OUT jack.
- Karaoke mode is automatically turned off when:
 - you turn off the system.
 - you change the function (except for the “DVD” function or “USB” function).
 - you connect the headphones.
 - you disconnect the microphone.
- If howling occurs:
 - move the microphone away from the speakers.
 - change the direction of the microphone.
 - lower the MIC LEVEL or ECHO LEVEL.
 - press VOLUME — repeatedly (or turn MASTER VOLUME on the unit counterclockwise).

Changing the key (Key Control)

You can change the key to suit your vocal range, except when the system is in stop mode.

Press **KEY CONTROL** **b/#** to suit your vocal range in Karaoke mode. You can adjust the key higher or lower in 13 steps (**b6** — **#6**).

Notes

- Depending on the disc, you may not be able to change the key.
- The key automatically returns to the original key when:
 - you turn off the system.
 - you change the function.
 - you change the disc.
 - you open the disc tray.
 - you stop playback.
 - the title, track or audio file changes.
 - you change the folder.
 - the play item is changed during PBC playback.
 - you perform Lock Search.
 - you cancel Karaoke mode.
 - DVD layer is changed.

Playing Karaoke with any stereo disc (“Karaoke Pon”)

You can enjoy Karaoke with a stereo-recorded disc, even if it is a non-Karaoke disc, by reducing the sound of the vocals.

Press **KARAOKE PON** in Karaoke mode.

To cancel “Karaoke Pon” mode, press **KARAOKE PON** again.

Notes

- This function may not work well when:
 - only a few instruments are playing.
 - a duet is playing.
 - the vocals on the disc deviate from the center.
 - playing monaural-recorded discs (the accompaniment is also reduced).
 - playing multiplex discs.
- During “Karaoke Pon” mode, the stereo effect is reduced.
- “Karaoke Pon” mode is automatically canceled when:
 - you turn off the system.
 - you change the function.
 - you change the disc.
 - you open the disc tray.
 - you press **AUDIO**.
 - you set “**VOCAL SELECT**” to other than “**OFF**”
 - you cancel Karaoke mode.

Selecting the vocals (Vocal Select)

DVD-V

VIDEO CD




C D

When playing a DVD with the “Dolby Digital Karaoke” format in Karaoke mode, you can turn on or off the guide vocal recorded in the Karaoke track. When playing a **VIDEO CD** or **AUDIO CD** in Karaoke mode, you can listen to the vocals.

You can also change the guide vocal channel. You can select different kinds of vocals.

1 Press  **DISPLAY** in Karaoke mode.

The Control Menu appears on the TV screen.

2 Press  or  repeatedly to select  (**VOCAL SELECT**), then press **ENTER**.

The options for “**VOCAL SELECT**” appear on the TV screen.

3 Press **↑** or **↓** repeatedly to select the desired vocal channel.

The output channel changes as follows.

The default setting is underlined.

When playing a DVD VIDEO

- OFF: Turns off the guide vocal.
- 1+2: Guide vocal 1+2
- 1: Guide vocal 1
- 2: Guide vocal 2

When playing a VIDEO CD or AUDIO CD

- OFF: Turns off the guide vocal.
- L+R: The same sound is output from both speakers.
- STEREO: The standard stereo sound

When playing a Super VCD

- OFF: Turns off the guide vocal.
- 1:L+R: The same sound of the audio track 1 is output from both speakers.
- 1:STEREO: The stereo sound of the audio track 1
- 2:L+R: The same sound of the audio track 2 is output from both speakers.
- 2:STEREO: The stereo sound of the audio track 2

4 Press **ENTER**.







Notes




- When playing a DVD VIDEO, the function works only with the “Dolby Digital Karaoke” format.
- Depending on the disc, you may not be able to change the guide vocal channel.
- The channel returns to the default setting when:
 - you turn off the system.
 - you change the function.
 - you change the disc.
 - you open the disc tray.
 - you press AUDIO.
 - you cancel Karaoke mode.
 - you set “Karaoke S” mode to on.
- When playing a DVD VIDEO recorded only with one kind of guide vocal, select “1.”

Selecting the scoring mode (Score Mode)

When Karaoke mode is turned on, you can use the scoring mode.

Your score is calculated by comparing your voice with the music source.

- 1 Press  DISPLAY in Karaoke mode.
The Control Menu appears on the TV screen.
- 2 Press  or  repeatedly to select  (SCORE MODE), then press ENTER.
The options for “SCORE MODE” appear on the TV screen.
- 3 Press  or  repeatedly to select a setting.
The default setting is underlined.
 - BEGINNER 1: Beginner level. The score updates every 3 seconds.
 - BEGINNER 2: Beginner level.
 - EXPERT 1: Advance level. The score updates every 3 seconds.
 - EXPERT 2: Advance level.
 - DEMO: Demonstration mode. The score is displayed regardless of singing.
- 4 Press ENTER.

- 5 Start playing the music.
- 6 Press SCORE before singing a song in Karaoke mode.
The previous highest score appears on the TV screen and the display changes as follows according to the level selected for “SCORE MODE.”
 - 00: When you select “BEGINNER 1” or “EXPERT 1.”
 - --: When you select “BEGINNER 2” or “EXPERT 2.”
 - DEMO: When you select “DEMO.”
- 7 After singing for more than a minute, press SCORE again to view your score.
Your score is calculated from a scale of 0 to 99.
Your score is displayed for 5 seconds, during which time the system enters pause mode.
After your score, the ranking is displayed as follows:
 - The ranking is displayed as a list with top 3 scores.
 - Your score and ranking for the last song flash.
 - If you are in the top 10, your ranking is displayed. If not, “10+” is displayed.
 - If your score is “0,” your score is not displayed in the ranking list.

Notes

- The highest score is reset when the system is turned off.
- The “SCORE MODE” function may be canceled when certain remote buttons are pressed.
- In some cases, you may not be able to use the scoring mode.

Tip

The “SCORE MODE” setting is automatically changed to “BEGINNER 1” when the system is turned off.

Other Operations

Using the timers

The system offers three timer functions. You cannot activate both the Play Timer and the Rec Timer at the same time. If you use either with the Sleep Timer, the Sleep Timer has priority.

The “TAPE” function is not available for Latin American models.

Use buttons on the remote to use the timer functions.

Sleep Timer

You can fall asleep to music. This function works even if the clock is not set.

Press SLEEP repeatedly to select the time you want.

The system turns off after the preset time.

Play Timer

You can wake up to DVD, FM/AM reception, tape (except for Latin American models) or optional USB device at a preset time.

Make sure you have set the clock.

Rec Timer

You can record from a preset radio station at a specified time.

Make sure you have set the clock.

1 Prepare the sound source.

For Play Timer:

Prepare the sound source, and then press VOLUME +/- (or turn MASTER VOLUME on the unit) to adjust the volume.

For Rec Timer:

Tune in the desired radio station or call up the desired preset station.

2 Select the timer set mode.

Press TIMER MENU.

3 Press \blacktriangle or \blacktriangledown repeatedly to select “PLAY SET?” or “REC SET?,” then press ENTER.

“ON” appears and the hour indication flashes in the display.

4 Set the time to start playback or recording.

Press \blacktriangle or \blacktriangledown repeatedly to set the hour, then press ENTER.

The minute indication flashes in the display. Use the procedure above to set the minute. “OFF” appears and the hour indication flashes in the display.


- 5 Use the same procedure as in step 4 to set the time to stop playback or recording.
- 6 Select the sound source when using Play Timer, or prepare the tape (except for Latin American models) or the USB device when using Rec Timer.

For Play Timer:

Press \blacktriangle or \blacktriangledown repeatedly until the desired sound source appears, and then press ENTER. The display shows the timer settings.

For Rec Timer:

The display shows the timer settings. When recording to a tape, insert a recordable tape into the cassette holder with the side you want to record facing up.

When recording to a USB device, press FUNCTION +/- repeatedly to select "USB" (or press USB on the unit), then connect the USB device to the  (USB) port.

- 7 Press I/⏻ to turn off the system. When you set the Rec Timer, the system turns on 90 seconds before the preset time. When you set the Play Timer, the system turns on 30 seconds before the preset time. If the system is on at the preset time, the Play Timer and the Rec Timer will not play. Do not operate the system from the time the system turns on until the playback or recording starts.

To check the setting

- 1 Press TIMER MENU. "TIMER SELECT?" flashes in the display.
- 2 Press ENTER.
- 3 Press \blacktriangle or \blacktriangledown repeatedly to select "PLAY SELECT?" or "REC SELECT?"
- 4 Press ENTER.

To change the setting

Start over from step 1.

To cancel the timer

- 1 Press TIMER MENU.
“TIMER SELECT?” flashes in the display.
- 2 Press ENTER.
- 3 Press \blacktriangle or \blacktriangledown repeatedly to select “TIMER OFF.”
- 4 Press ENTER.

Notes

- The Play Timer and Rec Timer will not be activated if the system is turned on or if “STANDBY” flashes in the display. Be sure to turn off the system at least 120 seconds before the preset time.
- The volume is reduced to minimum during Rec Timer.
- The track numbers are automatically marked when you record more than 60 minutes.

Tips

- The Play Timer setting remains as long as the setting is not canceled manually.
- The Rec Timer is canceled automatically after the Rec Timer has been activated.

Changing the display

Turning off the display

– Power Saving Mode

The demonstration display and the clock display can be turned off to minimize the amount of power consumed during standby mode (Power Saving Mode).

Press DISPLAY repeatedly while the system is turned off.

Demonstration¹⁾ →

No display (Power Saving Mode) →

Clock²⁾ → Demonstration → ...

¹⁾ The display changes and the indicators flash even when the system is turned off.

²⁾ The clock display automatically turns to Power Saving Mode after 8 seconds.

Note

You cannot perform the following operations during Power Saving Mode:

- Setting the clock.
- Changing the AM tuning interval.

Changing the power illuminator

You can change the illumination pattern around the MASTER VOLUME on the unit.

1 Select the illumination setting.

For MHC-GZR999D/GZR888D:

Press OPTIONS on the unit repeatedly until "ILLUMINATION" appears in the display.

For MHC-GZR777D:

Press ILLUMINATION on the unit.

2 Press ◀◀ or ▶▶ to select the desired illumination pattern, then press ENTER.

Viewing information about the disc and USB device in the front panel display (MHC-GZR777D only)

Press DISPLAY.

Each time you press DISPLAY, the display changes from ① → ② → ③ → ① → ...

- ① Disc/USB device information
- ② Clock display (for 8 seconds)
- ③ Effect name (for 4 seconds)

Checking the elapsed playing time, remaining time and titles

Press TIME/TEXT during playback. Each time you press TIME/TEXT, the display changes from ① → ② → ... → ① → ...

When playing a DVD VIDEO or DVD-R/-RW in VR mode:

- When the menu or the title without a chapter is played back
 - ① Elapsed playing time of the menu or the current title
 - ② Disc title¹⁾

- When a chapter other than above condition is played back
 - ① Elapsed playing time of the current title
 - ② Remaining time of the current title
 - ③ Elapsed playing time of the current chapter
 - ④ Remaining time of the current chapter
 - ⑤ Disc title¹⁾
 - ⑥ Title and chapter²⁾

When playing an AUDIO CD or VIDEO CD without PBC function:

- ① Elapsed playing time of the current track
- ② Remaining time of the current track
- ③ Elapsed playing time of the disc³⁾
- ④ Remaining time of the disc³⁾
- ⑤ Track name¹⁾⁴⁾
- ⑥ Track and index⁵⁾⁶⁾

When playing a VIDEO CD with PBC function:

- ① Elapsed playing time of the current scene
- ② Disc title¹⁾
- ③ Scene number⁷⁾

When playing MP3 files or video files on a DATA CD/DVD or USB device:

- ① Elapsed playing time of the current file
- ② File name⁸⁾⁹⁾

Checking the total playing time and titles

Press TIME/TEXT repeatedly when playback is stopped. Each time you press TIME/TEXT, the display changes from ① → ② → ① → ...

DVD VIDEO or DVD-R/-RW in VR mode:

- ① Total number of titles on the disc
- ② Disc title¹⁾

AUDIO CD or VIDEO CD without PBC playback:

- ① Total number of the tracks on the disc and the total playing time of the disc
- ② Disc title¹⁾

VIDEO CD with PBC playback:

- ① Total number of scenes on the disc
- ② Disc title¹⁾

¹⁾ "NO TEXT" appears in the display if the DVD VIDEO is not a DVD-TEXT disc, the AUDIO CD is not a CD-TEXT disc or the VIDEO CD does not have text information.

²⁾ Title and chapter are displayed for 2 seconds before the display returns to the elapsed playing time.

³⁾ When Program Play or Shuffle Play is turned on, the elapsed playing time and the remaining time of the disc would be skipped.

⁴⁾ AUDIO CD only

⁵⁾ VIDEO CD only

- 6) The current track number and the current index number (for a disc without PBC) or the current scene number (for a disc with PBC) are displayed for 2 seconds before the display returns to the elapsed playing time.
- 7) The current scene number is displayed for 2 seconds before the display returns to the elapsed playing time.
- 8) When playing video files, the current folder number and the current file number are displayed for 2 seconds before the display returns to elapsed playing time when you press TIME/TEXT during display of title of the file.
- 9) If an MP3 file has the ID3 tag, the system will display an album name or title name from the ID3 tag information. The system supports ID3 ver 1.0/1.1/2.2/2.3. ID3 ver 2.2/2.3 tag information display has priority when both ID3 ver 1.0/1.1 and ver 2.2/2.3 tags are used for a single MP3 file.

Notes

- If you play back a disc containing JPEG image files only, "JPEG" appears in the display.
- You cannot use TIME/TEXT to change the display of disc/USB device information when:
 - a JPEG image file is played back.
 - playback is stopped for DATA CD/DVDs or USB devices with MP3 files and/or JPEG image files.
 - playback is stopped for DATA CD/DVDs or USB devices with video files.
- Characters that cannot be displayed appear as "_".
- The elapsed playing time of MP3 files and video files may not be displayed correctly.

Viewing information about the disc and USB device in the on-screen display

Press DISPLAY.

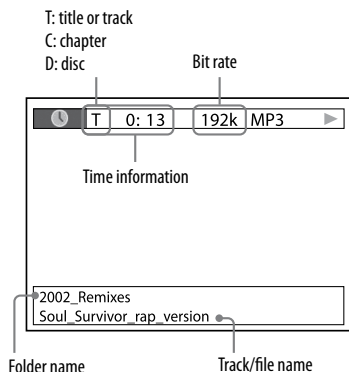
Each time you press DISPLAY, the display (the front panel display only) changes from ① → ② → ③ → ① → ...

- ① No display
- ② Clock display (for 8 seconds)
- ③ Effect name (for 4 seconds)

Press TIME/TEXT.

Each time you press TIME/TEXT while playing the disc or USB device, the display changes from ① → ② → ... → ① → ...

The time display that you can view on the TV screen depends on the media you are playing.



Note

The Control Menu display will show different items depending on the media type.

When playing a DVD VIDEO or DVD-R/-RW in VR mode:

- ① Elapsed playing time of the current title
- ② Remaining time of the current title
- ③ Elapsed playing time of the current chapter
- ④ Remaining time of the current chapter
- ⑤ Elapsed playing time of the current title and disc title

When playing a VIDEO CD with PBC function:

- ① Elapsed playing time of the current scene
- ② Disc title

When playing an AUDIO CD or VIDEO CD without PBC function:

- ① Elapsed playing time of the current track
- ② Remaining time of the current track
- ③ Elapsed playing time of the disc
- ④ Remaining time of the disc
- ⑤ Elapsed playing time of the current track and track name

When playing MP3 files or video files on a DATA CD/DVD or USB device:

Elapsed playing time of the current file and folder/file name*

* If an MP3 file has the ID3 tag, the system will display an album name or title name from the ID3 tag information. The system supports ID3 ver 1.0/1.1/2.2/2.3. ID3 ver 2.2/2.3 tag information display has priority when both ID3 ver 1.0/1.1 and ver 2.2/2.3 tags are used for a single MP3 file.

Notes

- Only alphabet letters, numbers and some symbols can be displayed.
- Depending on the media, the system can only display a limited number of characters.
- For MP3 files with format other than ISO 9660 Level 1 and Level 2, folder name and file name may not be displayed.

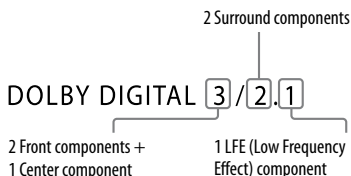
Displaying the audio information of the disc and USB device

(DVD VIDEO and video files only)
When you press AUDIO repeatedly during playback, the format of the current audio signal is displayed on the TV screen.

When playing a DVD VIDEO:

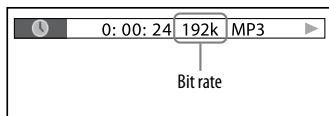
For example, in Dolby Digital format, multiple signals ranging from monaural to 5.1 channel signals can be recorded on a DVD VIDEO.

Example: For Dolby Digital 5.1 channel



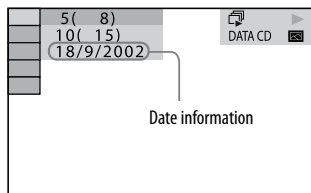
When playing a video file:

Example: For MP3 format



Checking the date information of JPEG image files

When "Exif"* tag is recorded in the JPEG image files, you can check the date information in the Control Menu by pressing DISPLAY during playback.



* "Exchangeable Image File Format" is a digital camera image format defined by the "Japan Electronics & Information Technology Industries Association" (JEITA).

Note

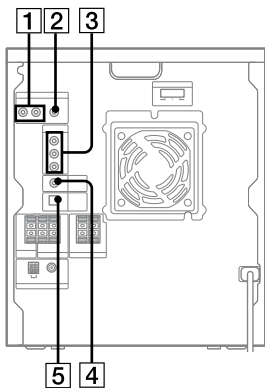
The date information format varies depending on the area.

Hooking up optional components

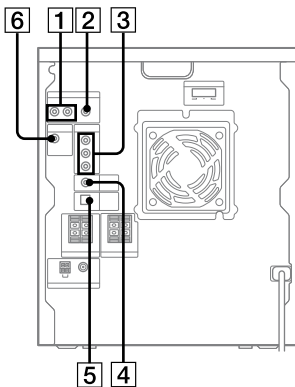
To enhance your system, you can connect optional components. Refer to the operating instructions provided with each component.

Rear panel

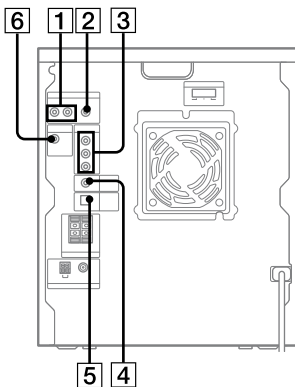
MHC-GZR999D



MHC-GZR888D



MHC-GZR777D



Continued

1 VIDEO/SAT AUDIO IN L/R jacks

Connect the audio output jacks of an optional component (such as VCR or satellite tuner).

2 VIDEO/SAT VIDEO IN jack

Connect the video output jack of an optional component (such as VCR or satellite tuner).

3 COMPONENT VIDEO OUT jacks

Connect the component video input jacks of the TV or projector. If your TV accept progressive format signals, you must use this connection and set "PROGRESSIVE (COMPONENT OUT)" to "ON" (page 32). You can enjoy higher quality video images.

Note

You cannot output the video signal from the VIDEO/SAT VIDEO IN jack through the COMPONENT VIDEO OUT jacks of this unit.

4 VIDEO OUT jack

Connect the video input jack of the TV or projector.

5 DVD DIGITAL OUT jack

Connect the digital optical input jack of an optional digital component (such as amplifier). You can enjoy 5.1 channel sound, if the connected amplifier equipped with Dolby Digital or DTS decoder.

Notes

- Sound is output only when the system function is set to "DVD" or "USB"
- If you press AUDIO, SOUND FIELD or the buttons related to Karaoke mode, or if you connect or disconnect microphones or headphones, the sound cuts off for a moment.

6 SUBWOOFER OUT jack (MHC-GZR888D/GZR777D only)

Connect the audio input jack of an optional subwoofer.

Note

The effect may be limited or noise may occur depending on the connected subwoofer or the type of music being played back.

Listening to a connected VCR or satellite tuner

- 1 Press FUNCTION +/- repeatedly (or press VIDEO/SAT on the unit) to select "VIDEO" or "SAT."
- 2 Start playing the connected component.

To switch between the "VIDEO" and "SAT" function

Hold down VIDEO/SAT on the unit and press **■** on the unit while the system is on. The system switches the function from "VIDEO" to "SAT" or vice versa.

Note

If the sound is distorted or too loud when "VIDEO" is selected, change the function to "SAT."

Enjoying the multi channel sound with the optional amplifier

- 1 Connect the digital optical cord. See "Hooking up optional components" (page 105).
- 2 Connect the speakers (not supplied) to an optional amplifier equipped with a decoder. For the speakers placement, refer to the operating instructions supplied with the connected amplifier.
- 3 Start playing a multi channel source, such as a DVD VIDEO.
- 4 Select the desired audio format. See "Changing the language/sound" (page 43).

Additional Information

Troubleshooting

Should you encounter a problem with your system, do the following:

- 1 Make sure the power cord and speaker cords are connected correctly and firmly.
- 2 Find your problem in the troubleshooting checklist below and take the indicated corrective action.

If the problem persists after doing all of the above, consult your nearest Sony dealer.

If the STANDBY indicator flashes

Immediately unplug the power cord, and check the following items.

- If your system has a voltage selector, is the voltage selector set to the correct voltage?
- Are you using only the supplied speakers?
- Are the + and – speaker cords short-circuited?
- Is anything blocking the ventilation holes on the rear of the system?

After the STANDBY indicator stops flashing, reconnect the power cord, and turn on the system. If the issue persists, contact your nearest Sony dealer.

General

The display starts flashing as soon as you plug in the power cord even though you have not turned on the system.

- Press DISPLAY once while the system is off. The demonstration disappears.

“- -: -” appears in the display.

- A power failure has occurred. Set the clock (page 36) and timer settings (page 97) again.

The system does not turn on.



- Is the power cord plugged in?
- Is the voltage selector set correctly to match the local power line voltage? (For models with a voltage selector only)

The clock or timer setting is canceled.

- The power cord is disconnected or a power failure occurred. Redo “Setting the clock” (page 36). If you have set the timer, redo “Using the timers” (page 97).

There is no sound.

- Press VOLUME + repeatedly (or turn MASTER VOLUME on the unit clockwise).

- The headphones are connected to the PHONES jack.
- Check the speaker connections (page 24).
- There is no audio output during Rec Timer.
- The system is in pause mode, in Slow-motion Play or in Lock Search. Press  (or  on the unit) to start the playback.
- No sound is output when transferring music to the USB device.

There is no microphone sound.

- Press VOLUME + repeatedly (or turn MASTER VOLUME on the unit clockwise) or turn MIC LEVEL on the unit clockwise to adjust the microphone volume.
- Make sure the microphone is connected to MIC jack correctly.
- Make sure the microphone is turned on.

There is severe hum or noise.

- A TV or VCR is placed too close to the unit. Move the unit away from the TV or VCR.
- Move the unit away from the source of noise.
- Connect the unit to a different wall outlet.
- Install a noise filter (commercially available) to the power cord.

The timer does not function.

- Check the timer setting and set the correct time (page 98).
- Cancel the Sleep Timer function.

The remote does not function.

- Remove the obstacles between the remote and the unit.
- Move the remote closer to the unit.
- Point the remote at the unit's sensor.
- Replace the batteries (R6/size AA).
- Locate the unit away from the fluorescent light.

There is acoustic feedback.

- Reduce the volume.
- Move the microphone away from the speakers or change the direction of the microphone.

The color irregularity on the TV screen persists.

- Turn off the TV set once, then turn it on after 15 to 30 minutes. If the color irregularity still persists, place the speakers farther away from the TV set.

The sound from the component connected to the VIDEO/SAT AUDIO IN L/R jacks is distorted.

- If “VIDEO” appears in the display when you press VIDEO/SAT on the unit, switch the display to “SAT” (see “To switch between the “VIDEO” and “SAT” function” (page 107)).

“THEATRE SYNC” function does not work.

- If distance between the TV and this unit is too far, this function may not work. Install the unit near the TV.

Speakers

Sound comes from one channel or unbalanced left and right volume.

- Place the speakers as symmetrically as possible.
- Check that the speakers are connected securely and correctly.
- The source being played back is monaural.

Sound lacks bass.

- Check that the speaker’s + and – terminals are connected correctly.

There is no sound from the subwoofer.

- Make sure that “SUBWOOFER” setting is set to “YES.”
- Set the subwoofer level to the appropriate level.

- Check that the subwoofer is connected securely and correctly.
- For MHC-GZR999D, check that the SUBWOOFER indicator on the unit is lit.

There is no sound from the satellite speaker (MHC-GZR999D/GZR888D only).


- Check that the satellite speakers are connected securely and correctly.

Disc Player

The disc does not eject and “LOCKED” appears in the display.

- Consult your nearest Sony dealer or local authorized Sony service facility.

The disc tray does not close.

- Load the disc correctly.
- Always close the disc tray by pressing OPEN/CLOSE  on the unit. Do not forcibly push the disc tray to close it as this may cause a malfunction.

The system does not eject the disc.

- You cannot eject the disc when performing CD Synchro Recording or USB TRANSFER. Press ■ to cancel the operation, then press OPEN/CLOSE ▲ on the unit to eject the disc.
- Consult your nearest Sony dealer.

Playback does not start.

- Check whether a disc is loaded.
- Wipe the disc clean (page 125).
- Reload the disc.
- Load the disc that this system can play back (page 7, 39).
- Load the disc on the disc tray with the label side facing up.
- Remove the disc and wipe away the moisture on the disc, then leave the system turned on for a few hours until the moisture evaporates.
- Press ▷ (or ► on the unit) to start playback.
- The region code on the DVD VIDEO does not match the system.

The sound skips.

- Wipe the disc clean (page 125).
- Reload the disc.
- Move the unit to a place without vibration (e.g., on top of a stable stand).
- Move the speakers away from the unit, or place them on separate stands. When you listen to a track or file with bass sounds at high volume, the speaker vibration may cause the sound to skip.

Playback does not start from the first track.

- Shuffle Play mode, Program Play mode or Repeat Play mode is selected.
- Resume playback has been selected. Press ■ twice. Then, press ▷ (or ► on the unit) to start playback.
- The title of DVD VIDEO or PBC menu automatically appears on the TV screen.

Playback starts automatically.

- The DVD VIDEO features an auto playback function.

Playback stops automatically.

- Some discs may contain an auto pause signal. While playing such a disc, the playback stops at auto pause signal.

You cannot perform some functions such as Stop, Lock Search, Slow-motion Play, Repeat Play, Shuffle Play or Program Play.

- Depending on the disc, you may not be able to do some of the operations above. Refer to the operating instructions supplied with the disc.

The DATA CD/DVD (MP3 file/JPEG image file/DivX video file/MPEG4 video file) cannot be played back.

- The DATA CD is not recorded in a format that conforms to ISO 9660 Level 1, Level 2, or Joliet (expansion format).
- The DATA DVD is not recorded in a format that conforms to UDF (Universal Disk Format).
- The MP3 file does not have the extension “.mp3”.
- The data is not stored in the desired format.
- The audio file is not stored in MP3 (MPEG 1 Audio Layer 3) format.
- The system can play back to a depth of 8 folders only.
- The disc contains more than 200 folders.
- The folder contains more than 150 files.
- The JPEG image file does not have the extension “.jpg” or “.jpeg”.
- The JPEG image file is larger than 3,072 (width) × 2,048 (height) pixels in normal mode, or more than 2,000,000 pixels in Progressive JPEG mode which is mainly used on the Internet website.

- For MP3 files and JPEG image files, the DATA CD/DVD contains a video file.
- The MPEG4 video file does not have the extension “.mp4” or “.m4v”.
- The DivX video file does not have the extension “.avi” or “.divx”.
- The video file is larger than 720 (width) × 576 (height) pixels.
- If you cannot change the “MEDIA” setting, re-load the disc or turn the system off, then on.

The MP3 files take longer time to play back than others.

- After the system reads all the MP3 files on the disc, playback may take more time than usual if:
 - the number of folders or MP3 files on the disc is very large.
 - the file structure is extremely complex.

“Data error” appears on the TV screen when playing a DATA CD/DVD.

- The MP3 file/JPEG image file you want to play is broken.
- The MP3 file does not conform to MPEG 1 Audio Layer 3.
- The JPEG image file format does not conform to DCF.

- The JPEG image file has the extension “.jpg” or “.jpeg”, but is not in JPEG format.
- The DivX video file has the extension “.avi” or “.divx”, but is not in DivX format.
- The DivX video file does not conform to a DivX Certified profile.
- The MPEG4 video file has the extension “.mp4” or “.m4v”, but is not in MP4 format.

The disc title, CD-TEXT and DVD-TEXT characters do not appear properly.

- The disc is recorded in format other than ISO 9660 Level 1, Level 2 or Joliet (expansion).
- The character code that can be displayed by this system are as follows:
 - Upper cases (A to Z)
 - Numbers (0 to 9)
 - Symbols (< > * +, ? / [] \ _)
 Other characters appear as “_”.

The surround effect is difficult to hear when you are playing a Dolby Digital or MPEG audio sound track.

- Make sure the sound field is set properly (page 89).
- Check the speaker connection (page 24).

- Depending on the DVD VIDEO, the output signal may not be the entire 5.1 channel. It may be monaural or stereo, even if the sound track is recorded in Dolby Digital or MPEG audio format.

The sound loses stereo effect when you play back a DVD VIDEO, VIDEO CD, AUDIO CD, MP3 file or video file.

- Unplug the microphone or press KARAOKE MODE repeatedly until “KARAOKE MODE: OFF” appears in the display.
- Make sure the system is connected properly.
- Check the speaker connection (page 24).

USB device

You cannot start transferring or recording to a USB device.

- The following problems may have occurred.
 - The USB device is full.
 - The number of files and folders on the USB device has reached the upper limit.
 - The USB device is write-protected.

Transferring or recording is stopped before it is finished.

- You are using an unsupported USB device. See “Compatible devices with this system” (page 132) for the supported device types.
- The USB device is not formatted correctly. Refer to the operating instructions supplied with the USB device for how to format.
- Turn off the system and remove the USB device. If the USB device has a power switch, turn the USB device off and then on again after removing it from the system. Then perform transferring or recording again.
- If the transfer, recording and erase operations are repeated multiple times, the file structure within the USB device becomes fragmented. Refer to the operating instructions supplied with the USB device for how to deal with this problem. If the problem persists, contact your nearest Sony dealer.

Transferring or recording results in an error.

- You are using an unsupported USB device. See “Compatible devices with this system” (page 132) for the supported device types.
- Turn off the system and remove the USB device. If the USB device has a power switch, turn the USB device off and then on again after removing it from the system. Then perform transferring or recording again.
- The USB device was disconnected or the power was turned off during the transfer or recording process. Delete the partially-transferred file or partially-recorded file, and perform transferring or recording again. If this does not fix the problem, the USB device may be broken. Refer to the operating instructions supplied with the USB device for how to deal with this problem. If the problem persists, contact your nearest Sony dealer.

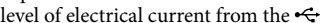

MP3 files or folders on the USB device cannot be erased.

- Check if the USB device is writeprotected.
- The USB device was disconnected or the power was turned off during the erase operation. Delete the partially-erased file. If this does not fix the problem, the USB device may be broken. Refer to the operating instructions supplied with the USB device for how to deal with this problem. If the problem persists, contact your nearest Sony dealer.

Are you using a supported USB device?

- If you connect an unsupported USB device, the following problems may occur. See “Compatible devices with this system” (page 132) for the supported device types.
 - The USB device is not recognized.
 - File or folder names are not displayed on this system.
 - Playback is not possible.
 - The sound skips.
 - There is noise.
 - A distorted sound is output.
 - Transferring or recording stops before it is finished.

“OVER CURRENT” appears.


- A problem has been detected with the level of electrical current from the  (USB) port. Turn off the system and remove the USB device from the  (USB) port. Make sure there is no problem with the USB device. If this display pattern persists, contact your nearest Sony dealer.

There is no sound.

- The USB device is not connected correctly. Turn off the system and reconnect the USB device, then turn on the system and check if “USB MEMORY” lights up.

There is noise, skipping, or distorted sound.

- Turn off the system, then reconnect the USB device.
- The music data itself contains noise, or the sound is distorted. Noise may have entered during the transfer or recording process. Delete the file, and try transferring or recording again.
- The bit rate used when encoding audio files was low. Send audio files with higher bit rate to the USB device.

The USB device cannot be connected into the  (USB) port.

- The USB device is being connected backwards. Connect the USB device in the correct orientation.

“READING” is displayed for an extended time, or it takes a long time before playback starts.

- The reading process can take a long time in the following cases.
 - There are many folders or files on the USB device.
 - The file structure is extremely complex.
 - The memory capacity is excessive.
 - The file size is extremely large.
 - The internal memory is fragmented.

Thus, we recommend following these guidelines.

- Total folders on USB device: 200 or less
- Total files per folder: 150 or less

Erroneous display

- Send the music data to the USB device again, as the data stored in the USB device may have been corrupted.
- The character code that can be displayed by this system are as follows:
 - Upper cases (A to Z)
 - Numbers (0 to 9)
 - Symbols (< > * +, ? / [] \ _)Other characters appear as “_.”



The USB device is not recognized.

- Turn off the system and reconnect the USB device, then turn on the system.
- See “Compatible devices with this system” (page 132) for the supported device types.
- The USB device does not work properly. Refer to the operating instructions supplied with the USB device for how to deal with this problem. If the problem persists, contact your nearest Sony dealer.

“Data error” appears on the display when playing a USB device.

- The MP3 file/JPEG image file you want to play is broken.
- The JPEG image file format does not conform to DCF.
- The JPEG image file has the extension “.jpg” or “.jpeg”, but is not in JPEG format.

Play does not start.

- Turn off the system and reconnect the USB device, then turn on the system.
- See “Compatible devices with this system” (page 132) for the supported device types.
- Press  (or  on the unit) to start playback.

Play does not start from the first file.

- Set the play mode to Normal Play mode.

Files cannot be played back.

- The MP3 file does not have the extension “.mp3”.
 - The WMA file does not have the extension “.wma”.
 - The AAC file does not have the extension “.m4a”.
 - The MP4 file does not have the extension “.mp4”.
 - The audio file is not stored in MP3/WMA/AAC format.
 - The video file is not stored in MP4/DivX format.
 - The JPEG image file does not have the extension “.jpg” or “.jpeg”.
 - The JPEG image file is larger than 3,072 (width) × 2,048 (height) pixels in normal mode, or more than 2,000,000 pixels in Progressive JPEG mode which is mainly used on the Internet website.
 - Check the “MEDIA” setting (page 138).
 - USB device formatted with file systems other than FAT12, FAT16 or FAT32 are unsupported.*
- The MP3 file is not stored in MP3 (MPEG 1 Audio Layer 3) format.
 - The WMA file stored in WMA DRM/WMA Lossless/WMA PRO cannot be played back.
 - The AAC file stored in copyright-protected AAC or AAC Lossless format cannot be played back.
 - AAC files encoded at a sampling frequency of 96 kHz cannot be played back.
 - If you use a partitioned USB device, only audio files on the first partition can be played.
 - The system can play back to a depth of 8 folders only.
 - The number of folders has exceeded 200.
 - The number of files has exceeded 150.
 - Files that are encrypted or protected by passwords, etc. cannot be played back.
- * This system supports FAT12, FAT16 and FAT32, but some USB devices may not support all of these FAT. For details, see the operating instructions of each USB device or contact the manufacturer.

Picture

There is no picture.

- The “VIDEO/SAT” function is selected, but there is no input signal.
- Check that the system is connected securely.
- The video cord is damaged. Replace it with a new one.
- Make sure you connect the unit to the video input jack of your TV (page 106).
- Make sure you turn on the TV and operate the TV correctly.
- Make sure you select the video input on the TV so that you can view the pictures from the system.
- Make sure you set the color system correctly, according to your TV’s color system (except for Latin American models).
- Set “PROGRESSIVE (COMPONENT OUT)” to “OFF” if you connect your TV to the COMPONENT VIDEO OUT jacks and your TV cannot accept progressive signal.
- You have set to progressive format but your TV cannot accept the signal in progressive format. In this case, connect the VIDEO OUT jack to the TV and set to the Interlace format (page 32).

- Even if your TV is compatible with progressive format (525p/625p) signals, the image may be affected when you set to progressive format. In this case, set to interlace format (the default setting) (page 32).

Picture noise appears.

- Wipe the disc clean (page 125).
- If video signal from your system has to go through your VCR to your TV, the copy-protection applied to some DVD VIDEO programs could affect the picture quality.
- When you play back a VIDEO CD recorded in a different color system from the one you set to the system, the picture image may be distorted (except for Latin American models) (page 64).
- When you connect your TV to the COMPONENT VIDEO OUT jacks and play back video-based software in progressive signal format, some sections of the image may appear unnatural due to the conversion process.
- Set the color system to match your TV (except for Latin American models) (page 31).

The aspect ratio of the TV screen cannot be changed even though you can set “TV TYPE” under “VIDEO SETUP” in the Setup Menu when you play back a wide picture.

- The aspect ratio is fixed on your DVD VIDEO.
- Depending on the TV, you may not change the aspect ratio.

Messages do not appear on the TV screen in your desired language.

- Select the language for the on-screen display in “OSD” under “LANGUAGE SETUP” in the Setup Menu (page 37, 62).

The language for the sound track cannot be changed.

- Multilingual tracks are not recorded on the DVD VIDEO being played back.
- The DVD VIDEO prohibits changing the language for the sound track.

The subtitles language cannot be changed.

- Multilingual subtitles are not recorded on the DVD VIDEO being played back.
- The DVD VIDEO prohibits changing the subtitles.

The subtitles cannot be turned off.

- The DVD VIDEO prohibits turning off subtitles.

The angles cannot be changed.

- Multi-angles are not recorded on the DVD VIDEO being played back.
- The DVD VIDEO prohibits changing the angles.

Tuner

The radio presetting is canceled.

- The power cord is disconnected or a power failure occurred for longer than a day. Redo “Presetting a radio station” (page 68).

There is severe hum or noise. (“TUNED” or “STEREO” flashes in the display.)

- Set the proper band and frequency (page 67).
- Connect the antenna properly (page 24).
- Find a place and an orientation that provide good reception, then set up the antenna again. If you cannot obtain good reception, we recommend that you connect a commercially available external antenna.
- The supplied FM lead antenna receives signals along its entire length, so make sure you extend it fully.

- Locate the antennas as far away from the speaker cords and the power cord as possible, to avoid picking up noise.
- Try turning off the surrounding electrical equipment.

A stereo FM program cannot be received in stereo.

- Press REPEAT/FM MODE repeatedly until "MONO" disappears from the display.

Tape deck (except for Latin American models)

The tape does not record or playback, or there is a decrease in sound level.

- The tape heads are dirty (see "Cleaning the tape heads" (page 128)).

There is excessive wow or flutter, or the sound drops out.

- The capstans or pinch rollers are dirty (see "Cleaning the tape heads" (page 128)).

The tape does not record.

- No tape is loaded. Load a tape.
- The tab has been removed from the tape. Cover the broken tab with adhesive tape (page 128).
- The tape has reeled to the end.

Optional components

There is no sound.

- Refer to General item "There is no sound." (page 108) and check the condition of the system.
- Connect the component properly (page 105) while checking:
 - if the cords are connected properly.
 - if the cord plugs are firmly inserted all the way.
- Turn on the connected component.
- Refer to the operating instructions supplied with the connected component and start playback.

To change the AM tuning interval

(Except for Saudi Arabian models)

The AM tuning interval is factory-preset to 9 kHz (or 10 kHz for some areas).

Use buttons on the unit for the operation.

- 1 Press TUNER/BAND repeatedly to select "AM."
- 2 Press I/⏻ to turn off the system.
- 3 Press DISPLAY repeatedly until "Sony DEMO" appears in the display.
- 4 Press I/⏻ while holding down TUNING +. "AM 9K STEP" or "AM 10K STEP" appears in the display. When you change the interval, all the AM preset stations are erased.


If the system still does not operate properly after performing the above measures or other troubles not described above occur, reset the system as follows:

Use buttons on the unit to reset the system to its factory default settings.

- 1 Unplug the power cord.
- 2 Plug the power cord back in.
- 3 Press I/⏻ to turn on the system.
- 4 While holding down ■, press DISC 3 and press I/⏻ at the same time. "COLD RESET" appears in the display. The system is reset to the factory settings except for the "SETUP" settings. You should set the settings you made, such as the preset stations, clock and timer.

To return the "SETUP" settings to the default settings*, perform reset as follows:

- 1 Press ☐ DISPLAY when playback is stopped. The Control Menu appears on the TV screen.

- 2 Press ▲ or ▼ repeatedly to select  (SETUP), then press ENTER.
 - 3 Press ▲ or ▼ repeatedly to select "CUSTOM," then press ENTER. The Setup Menu appears.
 - 4 Press ▲ or ▼ repeatedly to select "SYSTEM SETUP," then press ENTER.
 - 5 Press ▲ or ▼ repeatedly to select "RESET," then press ENTER.
 - 6 Press ◀ or ▶ repeatedly to select "YES," then press ENTER. It takes a few seconds to complete. Do not press I/⏻ when resetting the system.
- * Except for "PARENTAL CONTROL" settings

Self-diagnosis Function

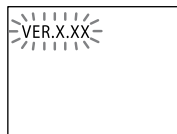
(When letters/numbers appear in the display)

When the self-diagnosis function is activated to prevent the system from malfunctioning, a 5-character service number (e.g. C 13 50) with a combination of a letter and 4 digits appears on the TV screen or the front panel display. In this case, check the following table.

First 3 characters of the service number	Cause and corrective action
C 13	This disc is dirty. <ul style="list-style-type: none">• Clean the disc with a soft cloth (page 125).
C 31	The disc is not inserted correctly. <ul style="list-style-type: none">• Restart the system, then re-insert the disc correctly.
E XX (XX is a number)	To prevent a malfunction, the system has performed the self-diagnosis function. <ul style="list-style-type: none">• Contact your nearest Sony dealer or local authorized Sony service facility and give the 5-character service number. Example: E 61 10

When displaying the version number on the TV screen

When you turn on the system, the version number [VER.X.XX] (X is a number) may appear on the TV screen. Although this is not a malfunction and for Sony service use only, normal system operation will not be possible. Turn off the system, and then turn on the system again to operate.



Messages

For MHC-GZR777D, one of the following messages may appear or flash in the front panel display during operation.

For MHC-GZR999D/GZR888D, messages similar to the following, or more detailed information, may appear on the TV screen during operation.

CANNOT PLAY

- A disc that cannot be played back was inserted.
- A DVD VIDEO with unsupported region code was inserted.

DATA ERROR

You tried to play a file on the USB device that is not playable.

DATA ERROR (for DATA CD/DVDs)

- The MP3 file, JPEG image file, DivX video file and MPEG4 video file you want to play back is damaged.
- The MP3 file does not conform to MPEG 1 Audio Layer 3 format.
- The JPEG image file does not conform to DCF format.
- The MP3 file has the extension “.mp3”, but is not in MP3 format.
- The JPEG image file has the extension “.jpg” or “.jpeg”, but is not in JPEG format.

- The DivX video file does not conform to DivX Certified profiles.
- The DivX video file has the extension “.avi” or “.divx”, but is not in DivX format.
- The MPEG4 video file has the extension “.mp4” or “.m4v”, but is not in MP4 format.

DEVICE ERROR

The USB device could not be recognized or an unknown device is connected.

DEVICE FULL!

The USB device is full.

DVD NO DISC

There is no disc on the disc tray.

ERASE ERROR

Erase of audio files or folders on the USB device failed.

FATAL ERROR

The USB device has been disconnected while transferring to the USB device.

FOLDER FULL!

The number of folders on the USB device has reached the maximum.

HUB NOT SUPPORTED

You have connected a USB hub to this system.

INVALID

You have pressed an invalid button.

JPEG

A JPEG image file is being played back.

NO AUDIO

There is no audio file in the selected folder.

NO DATA

There is no file or folder to play back.

NO DEVICE

No USB device is connected.

NO TAB (except for Latin American models)

You cannot record the tape because the tab has been removed from the tape.

NO TAPE (except for Latin American models)

There is no recordable tape in the tape deck.

NOT IN USE

- You have pressed a button whose operation is not allowed or invalid at that time.
- You tried to play a disc that is not playable for recording onto a tape (except for Latin American models).


NOT SUPPORTED

An unsupported USB device is connected.

OFF TIME NG!

The on time and off time of Play Timer or Rec Timer is the same.

OVER CURRENT

An over current from the  (USB) port was detected.

PASSWORD

“PARENTAL CONTROL” is set.

PLEASE WAIT

- The system is doing initialization process.
- The system is readying for usage of a USB device.

PROTECTED!

The USB device is write-protected.

PUSH STOP

You have pressed the buttons whose operation is only possible when playback is stopped.

READING

- The system is reading information of the disc. Some buttons are not available.
- The system is recognizing the USB device.

REC ERROR

Transferring did not start, stopped partway, or otherwise could not be performed.

TRACK FULL!

The number of audio files on the USB device has reached the maximum.


Precautions

Notes on discs

- Before playing, wipe the disc with a cleaning cloth from the center out to the edge.
- Do not clean discs with solvents, such as benzine, thinner, or commercially available cleaners or anti-static spray intended for vinyl LPs.
- Do not expose discs to direct sunlight or heat sources such as hot air ducts, nor leave it in a car parked in direct sunlight.

Region code of DVD VIDEOS you can play back on this system

Your system has a region code printed on the back of the unit and will only play back DVD VIDEOS labeled with identical region code.

DVD VIDEOS labeled  will also be played back on this system.

If you try to play back any other region code DVD VIDEO, the message "Playback prohibited by area limitations." will appear on the TV screen. Depending on the DVD VIDEO, no region code indication may be labeled even though playing the DVD VIDEO is prohibited by area restrictions.

Note on DualDiscs

A DualDisc is a two sided disc product which mates DVD recorded material on one side with digital audio material on the other side. However, since the audio material side does not conform to the Compact Disc (CD) standard, playback on this product is not guaranteed.

Notes on CD-R/-RW and DVD-R/-RW/+R/+RW

- In some cases, CD-Rs/-RWs and DVD-Rs/-RWs/+Rs/+RWs cannot be played back on this system due to the recording quality or physical condition of the disc, or the characteristics of the recording device and authoring software. The disc will not be played back if it has not been correctly finalized. For more information, see the operating instructions for the recording device.
- Note that some playback functions may not work with some DVD+Rs/+RWs, even if they have been correctly finalized. In this case, view the disc by normal playback.
- A disc created in Packet Write format cannot be played back.

Note on playback operations of DVD VIDEOS and VIDEO CDs

Some playback operations of DVD VIDEOS and VIDEO CDs may be intentionally set by software producers. Since this system play back DVD VIDEOS and VIDEO CDs according to the disc contents the software producers designed, some playback features may not be available. Also, refer to the instructions supplied with the DVD VIDEOS or VIDEO CDs.

Music discs encoded with copyright protection technologies

This product is designed to play back discs that conform to the Compact Disc (CD) standard. Recently, various music discs encoded with copyright protection technologies are marketed by some record companies. Please be aware that among those discs, there are some that do not conform to the CD standard and may not be playable by this product.

Notes on Multi Session disc

- If the first session is recorded in AUDIO CD or VIDEO CD format, only the first session will be played back.
- The system will recognize a Multi Session disc as an AUDIO CD if there is a session recorded in AUDIO CD format on the disc. However, the system will only play back the disc if the first session is recorded in AUDIO CD format.
- This system can play back Multi Session discs when an MP3 file, a JPEG image file, a DivX video file or an MPEG4 video file is contained in the first session. Any subsequent MP3 files, JPEG image files, DivX video files or MPEG4 video files recorded in later sessions can also be played back.
- With DATA CD or DATA DVD, the system will only play back video files even if it contains MP3 files or JPEG image files.

Note on copyright-protected content

The transferred music is limited to private use only. Use of the music beyond this limit requires permission of the copyright holders.

On cleaning discs, disc/lens cleaner

Do not use a commercially available cleaning disc or disc/lens cleaner (wet or spray type). These may cause apparatus to malfunction.

On operating voltage

Before operating the system, check that the operating voltage of the unit is identical with the voltage of your local power supply.

On safety

- Completely disconnect the power cord (mains lead) from the wall outlet (mains) if it is not going to be used for an extended period of time. When unplugging the unit, always grip the plug. Never pull the cord itself.
- Should any solid object or liquid get into the system, unplug the system, and have it checked by qualified personnel before operating it again.

On placement

- Do not place the system in an inclined position or in locations that are extremely hot, cold, dusty, dirty, or humid or lacking adequate ventilation, or subject to vibration, direct sunlight or a bright light.
- Be careful when placing the unit or speakers on surfaces that have been specially treated (for example, with wax, oil, polish) as staining or discoloration of the surface may result.
- If the system is brought directly from a cold to a warm location or is placed in a very damp room, moisture may condense on the lens inside the DVD player, and cause the system to malfunction. In this situation, remove the disc, and leave the system turned on for about an hour until the moisture evaporates.

On heat buildup

- Heat buildup on the unit during operation is normal and is not cause for alarm.
- Do not touch the cabinet if it has been used continuously at a high volume because the cabinet may have become hot.
- Do not obstruct the ventilation holes.

In case color irregularity is observed on a nearby TV screen

With the magnetically shielded type of speakers, the speakers can be installed near a TV set. However, color irregularity may still be observed on the TV screen depending on the type of your TV set. In this situation, turn off the TV, wait 15 to 30 minutes, and turn it back on. If there is no improvement, move the speakers far away from the TV.

IMPORTANT NOTICE

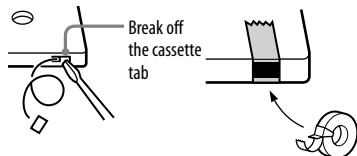
Caution: If you leave a still video image or on-screen display image displayed on your TV for an extended period of time via this system, you risk permanent damage to your TV screen. Projection TVs are especially susceptible to this.

Cleaning the cabinet

Clean this system with a soft cloth slightly moistened with a mild detergent solution. Do not use any type of abrasive pad, scouring powder, or solvent, such as thinner, benzine, or alcohol.

To prevent a tape from being accidentally recorded over (except for Latin American models)

Break off the cassette's overwrite protection tab from side A or B as illustrated.



To later reuse the tape for recording, cover the broken tab with adhesive tape.

About a tape longer than 90 minutes (except for Latin American models)

The use of the tape with more than 90 minutes of play time is not recommended except for long, continuous recording or playback.

Cleaning the tape heads (except for Latin American models)

Use dry- or wet-type cleaning cassette (available separately) after every 10 hours of use, before you start an important recording, or after playing an old tape. Failure to clean the tape heads can cause degraded sound quality or an inability of the unit to record or play tapes. For details, refer to the instructions of the cleaning cassette.

Specifications

Main unit

Amplifier section

The following measured at AC 127 V, 60 Hz (Mexican model)

The following measured at AC 127 V, 220 V, 240 V, 50/60 Hz (Saudi Arabian model)

The following measured at AC 120 V, 220 V, 240 V, 50/60 Hz (Other models)

MHC-GZR999D

Power output (rated):

135 W + 135 W (at 6 Ω , 1 kHz, 1% THD, at LINK MODE)

RMS output power (reference)

Front speaker:

210 W + 210 W (per channel at 8 Ω , 1 kHz)

Satellite speaker:

90 W + 90 W (per channel at 24 Ω , 1 kHz)

Subwoofer:

240 W (at 6 Ω , 100 Hz)

MHC-GZR888D

Power output (rated):

125 W + 125 W (at 6 Ω , 1 kHz, 1% THD, at LINK MODE)

RMS output power (reference)

Front speaker:

210 W + 210 W (per channel at 8 Ω , 1 kHz)

Satellite speaker:

90 W + 90 W (per channel at 24 Ω , 1 kHz)

MHC-GZR777D

Power output (rated):

105 W + 105 W (at 6 Ω , 1 kHz, 1% THD)

RMS output power (reference):

210 W + 210 W (per channel at 6 Ω , 1 kHz)

Inputs

VIDEO/SAT VIDEO IN (phono jack):

1 V_{p-p}, 75 Ω

VIDEO/SAT AUDIO IN L/R (phono jacks):

voltage 250/450 mV, impedance 47 k Ω

MIC (phone jack):

sensitivity 1 mV, impedance 10 k Ω

Outputs

VIDEO OUT (phono jack):

max. output level 1 V_{p-p}, unbalanced, Sync negative, load impedance 75 Ω

COMPONENT VIDEO OUT

Y: 1 V_{p-p}, 75 Ω

PB: 0.7 V_{p-p}, 75 Ω

Pr: 0.7 V_{p-p}, 75 Ω

DVD DIGITAL OUT (Square optical connector jack, rear panel):

Wavelength 650 nm

PHONES (stereo mini jack):

accepts headphones of 8 Ω or more

SUBWOOFER OUT (MHC-GZR888D/GZR777D only):

Voltage 1 V, impedance 1 k Ω

FRONT SPEAKERS

MHC-GZR999D/GZR888D:

Use only the supplied speaker SS-GZR999D.

MHC-GZR777D:

Use only the supplied speaker SS-GZR777D.

SATELLITE SPEAKERS (MHC-GZR999D/
GZR888D only):

Use only the supplied speaker
SS-RSZ999D.

SUBWOOFER (MHC-GZR999D only):

Use only the supplied subwoofer
SS-WGR999D.

🔌 (USB) port: Type A
Maximum current:
500 mA

Disc player section

System:

Compact disc and digital audio and
video system

Laser Diode Properties

Emission Duration: Continuous

Laser Output*: Less than $44.6\mu\text{W}$

* This output is the value measurement
at a distance of 200mm from the
objective lens surface on the Optical
Pick-up Block with 7mm aperture.

Frequency response

DVD (PCM 48 kHz): 2 Hz — 22 kHz
(± 1 dB)

CD: 2 Hz — 20 kHz (± 0.5 dB)

Video color system format

Latin American models: NTSC

Other models: NTSC and PAL

Tape deck section (except for Latin American models)

Recording system:

4-track 2-channel, stereo

Tuner section

FM stereo, FM/AM superheterodyne tuner

FM tuner section

Tuning range:

87.5 MHz — 108.0 MHz (50 kHz step)

Antenna:

FM lead antenna

Antenna terminals:

75 Ω unbalanced

Intermediate frequency:

10.7 MHz

AM tuner section

Tuning range

Saudi Arabian model:

531 kHz — 1,602 kHz (9 kHz step)

Latin American models:

530 kHz — 1,710 kHz (10 kHz step)

531 kHz — 1,710 kHz (9 kHz step)

Australian model:

531 kHz — 1,710 kHz (9 kHz step)

530 kHz — 1,710 kHz (10 kHz step)

Other models:

531 kHz — 1,602 kHz (9 kHz step)

530 kHz — 1,610 kHz (10 kHz step)

Antenna:

AM loop antenna

Antenna terminals:

External antenna terminal

Intermediate frequency:

450 kHz

Speaker

**Front speaker (SS-GZR999D) for
MHC-GZR999D/GZR888D**

**Front speaker (SS-GZR777D) for
MHC-GZR777D**

Speaker system:

3-way, Bass reflex, Magnetically
shielded

Speaker unit

Woofer: 180 mm, cone type

Tweeter: 50 mm, horn type

Super Tweeter: 40 mm, horn type

Rated impedance:

8 Ω (SS-GZR999D),

6 Ω (SS-GZR777D)

Dimensions (W/H/D):
Approx. 255 mm × 350 mm ×
255 mm

Mass:
Approx. 5.2 kg

Satellite speaker (SS-RSZ999D) for MHC-GZR999D/GZR888D

Speaker system:

Full range, Bass reflex

Speaker unit

Full range: 80 mm, cone type

Rated impedance: 24 Ω

Dimensions (W/H/D):

Approx. 174 mm × 96 mm × 113 mm

Mass:

Approx. 570 g

Subwoofer (SS-WGR999D) for MHC-GZR999D

Speaker system:

Subwoofer system, Bass reflex

Speaker unit

Subwoofer: 200 mm, cone type

Rated impedance: 6 Ω

Dimensions (W/H/D):

Approx. 275 mm × 325 mm ×
320 mm

Mass:

Approx. 6.7 kg

General

Power requirements

Argentine and Thai models:

AC 220 V, 50/60 Hz

Saudi Arabian model:

AC 120 V — 127 V, 220 V, 230 V

— 240 V, 50/60 Hz, adjustable with
voltage selector

Mexican model:

AC 127 V, 60 Hz

Other models:

AC 120 V, 220 V, 230 V — 240 V,

50/60 Hz, adjustable with voltage
selector

Power consumption

MHC-GZR999D: 215 W

MHC-GZR888D: 170 W

MHC-GZR777D: 160 W

Dimensions (W/H/D) (excl. speakers):

Approx. 280 mm × 325 mm ×
430 mm

Mass (excl. speakers)

MHC-GZR999D: Approx. 12.8 kg
(Latin American models), approx.
13.2 kg (other models)

MHC-GZR888D: Approx. 12.8 kg

MHC-GZR777D: Approx. 11.6 kg

Supplied accessories:

Remote Commander (1)

AM loop antenna (1)

FM lead antenna (1)

Video cord (1) (MHC-GZR777D
only)

Speaker pads (MHC-GZR999D
(20), MHC-GZR888D (16), MHC-
GZR777D (8))

Speaker cords (2) (MHC-GZR999D/
GZR888D only)

Microphone (1) (Philippine model
only)

R6 (Size AA) batteries (2)

Supported file format

MP3 (MPEG 1 Audio Layer-3)

File extension: .mp3

Bitrate: 32 kbps — 320 kbps, VBR

Sampling frequencies: 32/44.1/48 kHz

DRM: Not compatible

WMA

File extension: .wma

Bitrate: 48 kbps — 192 kbps

Sampling frequencies: 44.1 kHz

DRM: Not compatible

AAC

File extension: .m4a
Bitrate: 48 kbps — 320 kbps
Sampling frequencies: 44.1 kHz
DRM: Not compatible

DivX

File extension: .avi/.divx
Video codec: DivX video
Bitrate: 8 Mbps (MAX)
Frame rate: 30 fps
Resolution: 720 × 576 pixels
Audio codec: MP3

MPEG4

File format: MP4 File Format
File extension: .mp4/.m4v
Video codec:
 MPEG4 Simple Profile
 (AVC is not compatible.)
Bitrate: 4 Mbps
Frame rate: 30 fps
Resolution: 720 × 576 pixels
Audio codec:
 AAC-LC
 (HE-AAC is not compatible.)
DRM: Not compatible

Design and specifications are subject to change without notice.

- Standby power consumption: 0.5 W
- Halogenated flame retardants are not used in the certain printed wiring boards.

Compatible devices with this system

You can use the following devices on this system.

Verified Sony USB devices

Product name	Model name	
Walkman®	NWD-B103 / B105 / B103F / B105F	
	NWD-E023F / E025F	
	NWZ-A815 / A816 / A816B / A818	
	NWZ-A726 / A726B / A728 / A728B / A729 / A826 / A828 / A829	
	NWZ-B133 / B135 / B133F / B135F	
	NWZ-E435F / E436F / E438F	
	NWZ-S515 / S516 / S615F / S616F / S618F / S715F / S716F / S718F	
	NWZ-S636F / S638F / S639F / S736F / S738F / S739F	
	IC Recorder	ICD-UX71 / UX81 / UX91
		ICD-SX700 / SX800 / SX900
	MICROVAULT	USM512JX / 1GJX / 2GJX / 4GJX
USM512JX / 1GJX / 2GJX / 4GJX		
USM1GL / 2GL / 4GL / 8GL / 16GL		
USM1GLX / 2GLX / 4GLX / 8GLX / 16GLX		
USM1GLX / 2GLX / 4GLX / 8GLX / 16GLX		

Verified Sony Ericsson mobile phone

Product name	Model name
Walkman® phone	W302 / W350i / W380i / W580i / W595 / W660i / W710i / W760i / W850i / W880i / W890i / W902 / W910i / W960i / W980

Notes

- When formatting the USB device, be sure to format using the device itself or the dedicated formatting software for that device. Otherwise, you may be unable to transfer music to the USB device properly on this system.
- Do not use USB devices other than these USB devices. Operation of models not listed here is not guaranteed.
- Operation may not always be ensured even when using these USB devices.
- Some of these USB devices may not be available for purchase in certain areas.


Notes on using the Sony Ericsson mobile phone

- Connect to this system with the power of the mobile phone on.
- When connecting to this system, set the data transfer mode of your mobile phone to File Transfer (Mass Storage). For details, refer to the operation manual supplied with the mobile phone.
- Use the USB cable supplied with the mobile phone when connecting to this system.
- While the mobile phone is connected to this system, do not insert or remove the memory card.
- Some files supported by the mobile phone are not supported by this system.
- In the case that the song which is registered as the playlist in the mobile phone is erased by this system, the playlist registration is not deleted.
- The Play Timer and Rec Timer in this system are not supported.

Notes on Walkman®

- Some files supported by the Walkman® are not supported by this system.
- When transferring music to a Walkman® using "Media Manager for WALKMAN," be sure to transfer in MP3 format.
- When connecting a Walkman® to the system, be sure to connect after the display "Creating Library" or "Creating Database" on the Walkman® has disappeared.

Guide to the Control Menu display

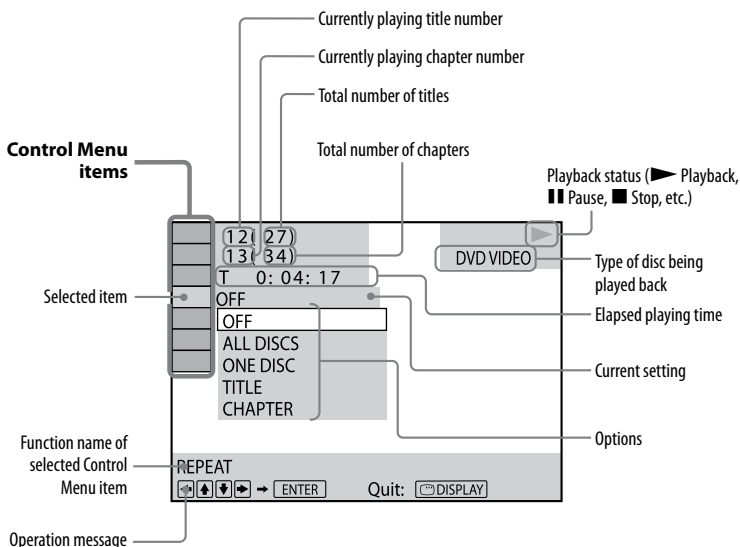
Use the Control Menu to select a function and to view related information. Press  DISPLAY repeatedly to turn on, turn off or change the Control Menu display as follows:

Control Menu display 1 → Control Menu display 2* → Control Menu display off → Control Menu display 1 → ...


* Control Menu display 2 appears when available.

Control Menu display








The Control Menu display 1 and 2 will show different items depending on the disc type. Example: Control Menu display 1 when playing a DVD VIDEO
















To turn off the Control Menu

Press  DISPLAY repeatedly until the Control Menu disappears from the TV screen.

List of Control Menu items

Item	Item Name, Function, Relevant Disc Type
	[TITLE] (page 46)/[SCENE]/[TRACK] (page 46) Selects the title, scene or track to be played back. DVD-V DVD-VR VIDEO CD
	[CHAPTER]/[INDEX] (page 46) Selects the chapter or index to be played back. DVD-V DVD-VR VIDEO CD
	[TRACK]¹⁾ (page 46) Selects the track or audio file to be played back. C D DATA CD DATA DVD
	[ORIGINAL/PLAY LIST] (page 45) Selects the playback sequence either to the originally recorded sequence or to the playlist created on the disc. DVD-VR
	[TIME]¹⁾ (page 47) Checks the elapsed playing time and the remaining time. You can play from a desired point by inputting the time code (DVD VIDEO/DVD-VR only). DVD-V DVD-VR VIDEO CD C D DATA CD DATA DVD
	[PROGRAM] (page 53) Plays back the tracks in the order you want. VIDEO CD C D
	[SHUFFLE]¹⁾ (page 55, 85) Plays back the tracks or audio files in random order. VIDEO CD C D DATA CD DATA DVD

Item	Item Name, Function, Relevant Disc Type
	<p>[REPEAT]¹⁾ (page 56, 86) Plays back all discs repeatedly, the entire disc (all titles/all tracks/all files/all folders) repeatedly or one title/chapter/track/folder/file repeatedly.</p> <p>DVD-V DVD-VR VIDEO CD C D DATA CD DATA DVD</p>
	<p>[A/V SYNC] (page 58) You can adjust the delay between the picture and sound.</p> <p>DVD-V DVD-VR VIDEO CD DATA CD DATA DVD</p>
	<p>[SETUP]¹⁾ (page 36, 61) QUICK Use “QUICK” Setup to choose the language of the on-screen display and the aspect ratio of the TV screen. CUSTOM In addition to the “QUICK” setup setting, you can adjust other settings.</p> <p>DVD-V DVD-VR VIDEO CD C D DATA CD DATA DVD</p>
	<p>[FOLDER]¹⁾ (page 57, 76) Selects the folder to be played back.</p> <p>DATA CD DATA DVD</p>
	<p>[FILE]¹⁾ (page 57) Selects the JPEG image file or video file to be played back.</p> <p>DATA CD DATA DVD</p>
	<p>[DATE]¹⁾ (page 104) Displays the date when the picture was taken by a digital camera.</p> <p>DATA CD DATA DVD</p>
	<p>[INTERVAL]¹⁾ (page 52, 84) Specifies the duration for which the slides are displayed on the TV screen.</p> <p>DATA CD DATA DVD</p>

Item	Item Name, Function, Relevant Disc Type
	<p>[EFFECT]¹⁾ (page 52, 85) Selects the transition effects to be used for changing slides during a slide show.</p> <p>DATA CD DATA DVD</p>
	<p>[MEDIA]¹⁾ (page 47, 51, 53, 81) Selects the data type (audio file, JPEG image file, video file, or both MP3 file and JPEG image file) to be played back.</p> <p>DATA CD DATA DVD</p>
	<p>[USB TRANSFER] (page 76) Transfers music on an AUDIO CD or DATA CD/DVD to a USB device.</p> <p>CD DATA CD DATA DVD</p>
	<p>[KARAOKE MODE]¹⁾ (page 91) Sets Karaoke mode to on or off.</p> <p>DVD-V DVD-VR VIDEO CD CD DATA CD DATA DVD</p>
	<p>[VOCAL SELECT]²⁾ (page 93) Selects the guide vocal recorded on the “Dolby Digital Karaoke” Format disc (DVD VIDEO only). Selects the vocal type recorded on the disc (VIDEO CD, AUDIO CD only). Turns off the vocal.</p> <p>DVD-V VIDEO CD CD</p>
	<p>[SCORE MODE]¹⁾²⁾ (page 95) Calculates your vocal score by comparing your voice with the music source.</p> <p>DVD-V DVD-VR VIDEO CD CD DATA CD DATA DVD</p>

¹⁾ These functions are the same when using a USB device. However, some menu items may not be available.

²⁾ This function is only available during Karaoke mode.

Playback priority of file types

The table below describes the playback priority of file types under the “MEDIA” setting.

File type on a disc or USB device	“MEDIA” setting				
	VIDEO		MUSIC/PHOTO	MUSIC	PHOTO
	Disc	USB device	Disc	Disc/USB device	Disc/USB device
Video files only	Video files	Video files	Video files	Video files	Video files
JPEG image files only	JPEG image files	JPEG image files	JPEG image files	JPEG image files	JPEG image files
Audio files only	MP3 files	Audio files	MP3 files	Audio files*	Audio files*
Video files and JPEG image files	Video files	Video files	JPEG image files	Video files	JPEG image files
Video files and audio files	Video files	Video files	MP3 files	Audio files*	Audio files*
Audio files and JPEG image files	MP3 files and JPEG image files with slide show	Audio files	MP3 files and JPEG image files with slide show	Audio files*	JPEG image files
Video files, audio files, and JPEG image files	Video files	Video files	MP3 files and JPEG image files with slide show	Audio files*	JPEG image files

* When using a disc, you can play MP3 files only.

Language code list

The language spellings conform to the ISO 639:1988 (E/F) standard.

Code	Language	Code	Language	Code	Language	Code	Language
1027	Afar	1186	Scots Gaelic	1350	Malayalam	1513	Siswati
1028	Abkhazian	1194	Galician	1352	Mongolian	1514	Sesotho
1032	Afrikaans	1196	Guarani	1353	Moldavian	1515	Sundanese
1039	Amharic	1203	Gujarati	1356	Marathi	1516	Swedish
1044	Arabic	1209	Hausa	1357	Malay	1517	Swahili
1045	Assamese	1217	Hindi	1358	Maltese	1521	Tamil
1051	Aymara	1226	Croatian	1363	Burmese	1525	Telugu
1052	Azerbaijani	1229	Hungarian	1365	Nauru	1527	Tajik
1053	Bashkir	1233	Armenian	1369	Nepali	1528	Thai
1057	Byelorussian	1235	Interlingua	1376	Dutch	1529	Tigrinya
1059	Bulgarian	1239	Interlingue	1379	Norwegian	1531	Turkmen
1060	Bihari	1245	Inupiak	1393	Occitan	1532	Tagalog
1061	Bislama	1248	Indonesian	1403	(Afan) Oromo	1534	Setswana
1066	Bengali; Bangla	1253	Icelandic	1408	Oriya	1535	Tonga
1067	Tibetan	1254	Italian	1417	Punjabi	1538	Turkish
1070	Breton	1257	Hebrew	1428	Polish	1539	Tsonga
1079	Catalan	1261	Japanese	1435	Pashto; Pushto	1540	Tatar
1093	Corsican	1269	Yiddish	1436	Portuguese	1543	Twì
1097	Czech	1283	Javanese	1463	Quechua	1557	Ukrainian
1103	Welsh	1287	Georgian	1481	Rhaeto-Romance	1564	Urdu
1105	Danish	1297	Kazakh	1482	Kirundi	1572	Uzbek
1109	German	1298	Greenlandic	1483	Romanian	1581	Vietnamese
1130	Bhutani	1299	Cambodian	1489	Russian	1587	Volapük
1142	Greek	1300	Kannada	1491	Kinyarwanda	1613	Wolof
1144	English	1301	Korean	1495	Sanskrit	1632	Xhosa
1145	Esperanto	1305	Kashmiri	1498	Sindhi	1665	Yoruba
1149	Spanish	1307	Kurdish	1501	Sangho	1684	Chinese
1150	Estonian	1311	Kirghiz	1502	Serbo-Croatian	1697	Zulu
1151	Basque	1313	Latin	1503	Singhalese	1703	Not specified
1157	Persian	1326	Lingala	1505	Slovak		
1165	Finnish	1327	Laothian	1506	Slovenian		
1166	Fiji	1332	Lithuanian	1507	Samoa		
1171	Faroese	1334	Latvian; Lettish	1508	Shona		
1174	French	1345	Malagasy	1509	Somali		
1181	Frisian	1347	Maori	1511	Albanian		
1183	Irish	1349	Macedonian	1512	Serbian		

Parental Control area code list

Code	Area	Code	Area	Code	Area	Code	Area
2044	Argentina	2165	Finland	2362	Mexico	2149	Spain
2047	Australia	2174	France	2376	Netherlands	2499	Sweden
2046	Austria	2109	Germany	2390	New Zealand	2086	Switzerland
2057	Belgium	2248	India	2379	Norway	2528	Thailand
2070	Brazil	2238	Indonesia	2427	Pakistan	2184	United Kingdom
2079	Canada	2254	Italy	2424	Philippines		
2090	Chile	2276	Japan	2436	Portugal		
2092	China	2304	Korea	2489	Russia		
2115	Denmark	2363	Malaysia	2501	Singapore		

Glossary

Auto Pause

An automatic pause according to the signal encoded on the disc while playing a VIDEO CD. If the CD/DVD player does not resume playback for a long time, perform resume playback manually.

Chapter

Subdivision of a title on a DVD VIDEO. A title is composed of several chapters.

DivX®

Digital video technology created by DivX, Inc. Videos encoded with DivX technology are among the highest quality with a relatively small file size.

Dolby Digital

This movie theater sound format is more advanced than Dolby Surround Pro Logic. In this format, the surround speakers output stereo sound with an expanded frequency range and a subwoofer channel for deep bass is independently provided. This format is also called “5.1” because the subwoofer channel is counted as 0.1 channel (since it functions only when a deep bass effect is needed). All six channels in this format are recorded separately for superior channel separation. Furthermore, since all the signals are processed digitally, less signal degradation occurs.

“Dolby Digital Karaoke” format

(DVD VIDEO only)

The Dolby Digital format, which reproduces surround sound using 5 channels, can also contain the “Dolby Digital Karaoke” format which is specialized for Karaoke. In the “Dolby Digital Karaoke” format discs, guide melody and guide vocal tracks are recorded in addition to the accompaniment. You can select guide vocal when Karaoke mode is turned on.

DTS

Digital audio compression technology developed by DTS, Inc. This technology conforms to 2-channel surround. The surround channel is stereo and there is discrete subwoofer channel in this format. DTS provides the same 2 discrete channels of high quality digital audio. The good channel separation is realized because the all channel data is recorded discrete and processed in digital.

DVD VIDEO

A disc that contains up to 8 hours of moving pictures even though its diameter is the same as an AUDIO CD. The data capacity of a single-layer and single-sided DVD VIDEO, at 4.7 GB (Giga Byte), is 7 times that of an AUDIO CD. Furthermore, the data capacity of a dual-layer and single-sided DVD VIDEO is 8.5 GB, a single-layer and double-sided DVD VIDEO 9.4 GB, and a dual-layer and double-sided DVD VIDEO 17 GB. The picture data uses the MPEG 2 format, one of the worldwide standards for digital compression technology. The picture data is compressed to about 1/40 of its original size. The DVD VIDEO also uses variable rate coding technology that changes the data to be allocated according to the status of the picture. The audio data is recorded in Dolby Digital as well as in PCM, allowing you to enjoy more realistic audio presence. Furthermore, various advanced functions such as the multi-angle, multilingual, and Parental Control functions are provided with the DVD VIDEO.

DVD-RW

A DVD-RW is a recordable and rewritable disc that is the same size as a DVD VIDEO. The DVD-RW has two different modes: VR mode and Video mode. DVD-RWs created in Video mode have the same format as a DVD VIDEO, while discs created in VR (Video Recording) mode allow the contents to be programmed or edited.

DVD+RW

A DVD+RW (plus RW) is a recordable and rewritable disc. DVD+RWs use a recording format that is comparable to the DVD VIDEO format.

File

Audio file (MP3/WMA/AAC), JPEG image file, DivX video file or MPEG4 video file recorded on a DATA CD, DATA DVD or USB device. ("File" is an exclusive definition for this system.)

Film based software, Video based software

DVD VIDEOS can be classified as Film based or Video based software. Film based DVD VIDEOS contain the same images (24 frames per second) that are shown at movie theaters. Video based DVD VIDEOS, such as television dramas or sitcoms, displays images at 30 frames (or 60 fields) per second.

Folder

Section of a music or picture piece on a DATA CD, DATA DVD or USB device containing MP3 files, JPEG image files, DivX video files or MPEG4 video files.

Interlace format (Interlaced scanning)

The Interlace format is the NTSC standard method for displaying TV images at 30 frames per second. Each frame is scanned twice-alternately between the even numbered scanning lines and then odd numbered scanning lines, at 60 times per second.

Menu Playback

Playback using the menu screens recorded on VIDEO CDs with PBC functions. You can enjoy simple interactive software using the menu playback function.

Multi-angle function

Various angles, or viewpoints of the video camera, for a scene are recorded on some DVD VIDEOS.

Multilingual function

Several languages for the sound or subtitles in a picture are recorded on some DVD VIDEOS.

Multi Session

This is a recording method that enables adding of data using the Track-At-Once method. Conventional CDs begin at a CD control area called the Lead-in and end at an area called Lead-out. A Multi Session disc is a disc having multiple sessions, with each segment from Lead-in to Lead-out regarded as a single session.

Parental Control

A function of the DVD VIDEO to limit playback of the disc by the age of the users according to the limitation level in each country. The limitation varies from disc to disc; when it is activated, playback is completely prohibited, violent scenes are skipped or replaced with other scenes and so on.


Playback Control (PBC)

Signals encoded on VIDEO CDs (Version 2.0) to control playback. By using menu screens recorded on VIDEO CDs with PBC functions, you can enjoy playing simple interactive programs, programs with search functions, and so on.

Progressive format (sequential scanning)

In contrast to the Interlace format, the progressive format can reproduce 50 frames — 60 frames per second by reproducing all scanning lines (525 lines for the NTSC system, 625 lines for PAL system). The overall picture quality increases and still images, text and horizontal lines appear sharper. This format is compatible with the 525 or 625 progressive format.

Region Code

This system is used to protect copyrights. A region code is allocated on each DVD system or DVD VIDEO according to the sales region. Each region code is shown on the unit as well as on the disc packaging. The system can play back the discs that match its region code. The system can also play back discs with the “” mark. Even when the region code is not shown on the DVD VIDEO, the region limit may still be activated.

Scene

On a VIDEO CD with PBC functions, the menu screens, moving pictures and still pictures are divided into sections called “scenes.”

Title

The longest section of a picture or a music piece on a DVD VIDEO; a movie, etc., for a picture piece on video software, or the entire album in audio software.

Track

Section of a music or a picture on a VIDEO CD, or section of a music on a CD.

VIDEO CD

A compact disc that contains moving pictures.

The picture data uses the MPEG 1 format, one of the worldwide standards for digital compression technology. The picture data is compressed to about 1/140 of its original size. Consequently, a 12 cm VIDEO CD can contain up to 74 minutes of moving pictures.

VIDEO CDs also contain compact audio data.

Sounds outside the range of human hearing are compressed while the sounds we can hear are not compressed. VIDEO CDs can hold 6 times the audio information of conventional AUDIO CDs.

There are 2 versions of VIDEO CDs.

- Version 1.1: You can play back only moving pictures and sounds.
- Version 2.0: You can play back high-resolution still pictures and enjoy PBC functions.

This system conforms to both versions.

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