



Mini Hi-Fi Component System

Operating Instructions



BMZ-K7D/K5D

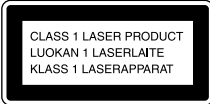
WARNING

To prevent fire or shock hazard, do not expose the unit to rain or moisture.

To prevent fire, do not cover the ventilation of the apparatus with news papers, table-cloths, curtains, etc. And don't place lighted candles on the apparatus.

To prevent fire or shock hazard, do not place objects filled with liquids, such as vases, on the apparatus.

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



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

The following caution label is located inside the apparatus.



Don't throw away the battery with general house waste, dispose of it correctly as chemical waste.

Except for Euro/UK, Russian models



ENERGY STAR[®] is a U.S. registered mark. As an ENERGY STAR[®] partner, Sony Corporation has determined that this product meets the ENERGY STAR[®] guidelines for energy efficiency.

This system incorporates Dolby[®] Digital, Dolby Pro Logic (II) adaptive matrix surround decoder, and the DTS[®] Digital Surround System.

* Manufactured under license from Dolby Laboratories.

"Dolby", "Pro Logic" and the double-D symbol are trademarks of Dolby Laboratories.

** Manufactured under license from Digital Theater Systems, Inc. "DTS" and "DTS Digital Surround" are registered trademarks of Digital Theater Systems, Inc.

US and foreign patents licensed from Dolby Laboratories.

Notes on DTS audio playback

- To enjoy DTS Digital Surround of DVD or CD, connect external 5.1 channel DTS Digital Surround Decoder to the DIGITAL OUT jack of this system (BMZ-K7D:Euro/UK, Russian models, BMZ-K5D:all models only).
- When you playback the CD recorded in DTS format, excessive noise may be heard from the speakers. Set the volume to minimum and be careful not to damage your speaker system.

AC power cord must be changed only at the qualified service shop.

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

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How to use this manual





- 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.
- The North American model is the model used for OSD (on-screen display) illustration purposes.
- The following symbols are used in this manual.



Symbol	Meaning
	Functions that can be used with DVDs
	Functions that can be used with VIDEO CDs
	Functions that can be used with audio CDs
	Functions that can be used with MP3 audio tracks
	Functions available for JPEG files

Playable discs

You can play back the following discs on this system. Other discs cannot be played back.

List of playable discs


Format of discs	Disc logo	Contents
DVD VIDEOS		Audio + Video
VIDEO CDs		Audio + Video
Audio CDs		Audio
CD-R/CD-RW (audio data)		Audio

Format of discs	Disc logo	Contents
CD-R/CD-RW (MP3 files)		Audio
CD-R/CD-RW (JPEG files)		Video

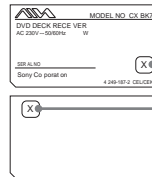
The “DVD VIDEO” logo is a trademark.

Region code of DVDs you can play on this system

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

DVDs labeled  will also be played on this system.

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



Region code (BMZ-K7D: Euro/UK, Russian models)
Region code (BMZ-K7D: except Euro/UK, Russian models, BMZ-K5D: all models)

Discs that this system cannot play

- CD-ROMs (except for extension “.MP3,” “.JPG,” or “.JPEG”)
- CD-Rs/CD-RWs other than those recorded in the following formats:
 - music CD format
 - video CD format
 - MP3/JPEG format that conforms to ISO9660*¹ Level 1/Level 2, Joliet or Multi Session*²

continued

- Data part of CD-Extras
- Super Audio CDs
- Progressive JPEG format files cannot be played on this system.
- DVD-RWs in VR mode (DVD-RWs created in VR (Video Recording) mode allow the contents to be programmed or edited.)
- DVD-ROMs
- DVD Audio discs
- A DVD with a different region code.
- Audio tracks in MP3PRO format.
- A disc that has a non-standard shape (e.g., card, heart).
- A disc with paper or stickers on it.
- A disc that has the adhesive, cellophane tape, or a sticker still left on it.

*1 ISO9660 Format

The most common international standard for the logical format of files and folders on a CD-ROM. There are several specification levels. In Level 1, file names must be in the 8.3 format (no more than eight characters in the name, no more than three characters in the extension “.MP3” or “.JPG”) and in capital letters. Folder names can be no longer than eight characters. There can be no more than eight nested folder levels. Level 2 specifications allow file names and folder names up to 31 characters long. Each folder can have up to 8 trees.

For Joliet in the expansion format (file and folder names can have up to 64 characters) make sure of the contents of the writing software, etc.

*2 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 CD is a CD having multiple sessions, with each segment from Lead-in to Lead-out regarded as a single session.

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

Notes on discs

- This system can play CD-R/CD-RW discs edited by the user. However, note that playback of some discs may not be possible depending on the recording device used for recording or the disc condition.
- Discs recorded on CD-R/CD-RW drives may not be played back because of scratches, dirt, recording condition or the driver’s characteristics.
- CD-R and CD-RW discs that have not been correctly finalized (processing to allow play by a normal CD player) cannot be played.
- CD-R and CD-RW discs recorded in multi-session that have not ended by “closing the session” are not supported.
- The system may be unable to play MP3/JPEG format files that do not have the extender “.MP3,” “.JPG,” or “.JPEG.”
- Attempting to play non-MP3/JPEG format files that have the extender “.MP3,” “.JPG,” or “.JPEG” may result in noise or malfunction. Playback is possible up to 8 levels.
- With formats other than ISO9660 level 1 and 2, folder names or file names may not be displayed correctly.
- The following discs take a longer time 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).
- Some CD-Rs, CD-RWs, DVD-Rs or DVD-RWs (in video mode) (DVD-RWs created in video mode have the same format as a DVD VIDEO) cannot be played on this system depending upon the recording quality or physical condition of the disc, or the characteristics of the recording device. Furthermore, the disc will not play if it has not been correctly finalized. For more information, see the operating instructions for the recording device.
- A disc recorded in packet write format cannot be played.

Note on playback operations of DVDs and VIDEO CDs

Some playback operations of DVDs and VIDEO CDs may be intentionally set by software producers. Since this system plays DVDs 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 DVDs or VIDEO CDs.

Copyrights

This product incorporates copyright protection technology that is protected by U.S. patents and other intellectual property rights. Use of this copyright protection technology must be authorized by Macrovision, and is intended for home and other limited viewing uses only unless otherwise authorized by Macrovision. Reverse engineering or disassembly is prohibited.

Music discs encoded with copyright protection technologies

This product is designed to playback 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.

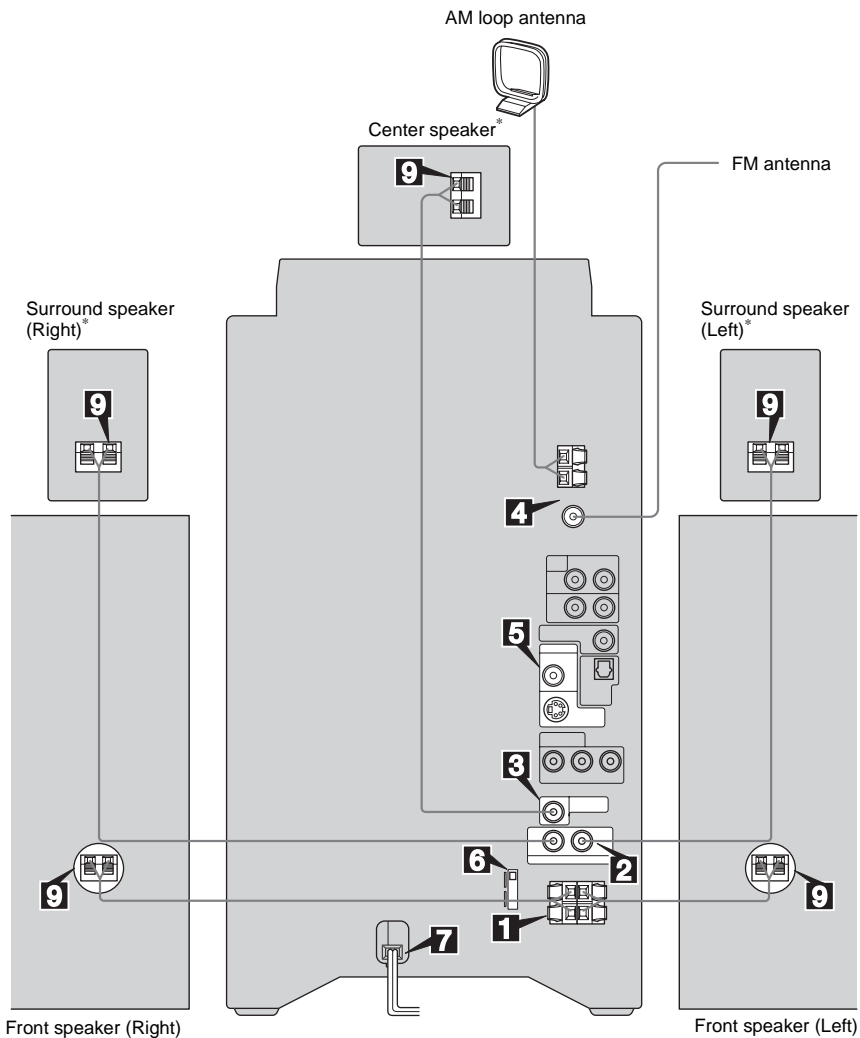
Cautions when playing a disc that is recorded in Multi Session

- This system can play Multi Session CDs when an MP3 audio track is contained in the first session. Any subsequent MP3 audio tracks recorded in later sessions can also be played back.
- This system can play Multi Session CDs when a JPEG image file is contained in the first session. Any subsequent JPEG image files recorded in later sessions can also be played back.
- If audio tracks and images in music CD format or video CD format are recorded in the first session, only the first session will be played back.

Getting Started

Hooking up the system

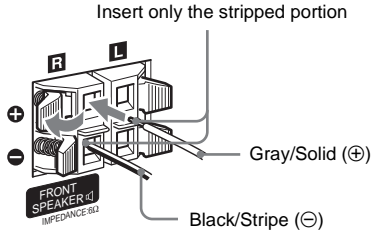
Perform the following procedures **1** to **8** to hook up your system using the supplied cords and accessories.



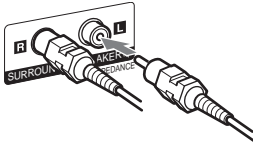
BMZ-K7D only

1 Connect the front speakers.

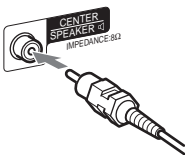
Connect the right and left speaker cords to the FRONT SPEAKER jacks as shown below.

**2 Connect the surround speakers. (BMZ-K7D only)**

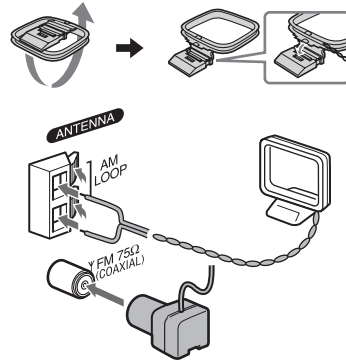
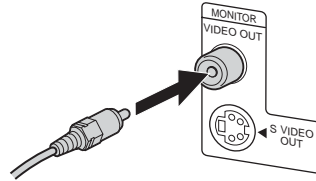
Connect the speaker cords to the SURROUND SPEAKER jacks as shown below.

**3 Connect the center speaker. (BMZ-K7D only)**

Connect the speaker cords to the CENTER SPEAKER jacks as shown below.

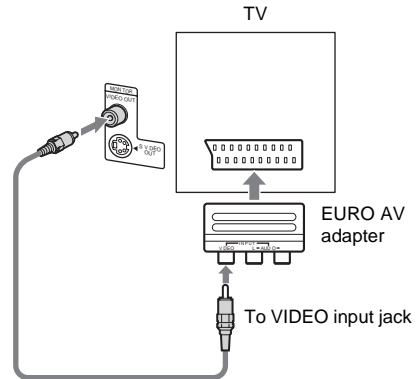
**4 Connect the FM and AM antennas.**

Set up the AM loop antenna, then connect it.

**5 Connect the video input jack of your TV to the VIDEO OUT jack with the supplied video cable.**

Euro/UK, Russian models only

When you connect to a TV equipped with a SCART jack, use the EURO AV adapter (supplied) to connect to the SCART (EURO AV) input jack on the TV.



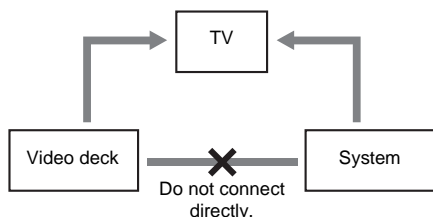
When using a TV

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

To output audio to the TV from this system, use audio cords (not supplied) to connect the MD (AUX) out L/R jacks to the audio input of your TV or the INPUT AUDIO L/R jacks of the EURO AV adapter.

When connecting a video deck

Connect the TV and the video deck using video and audio cords (not supplied) as shown below.



If you connect a video deck between this system and the TV, you may experience video leakage when watching the video signal from this system. Do not connect a video deck between this system and the TV.

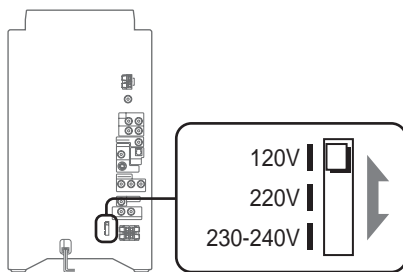
Tip

For even higher quality video images:

- Use an optional component video cord to connect the COMPONENT VIDEO input jacks on your TV to the COMPONENT VIDEO OUT jacks of this system. If your TV is compatible with progressive format file signals, use this connection and set “COMPONENT OUT” to “PROGRESSIVE” in “Adjusting the TV screen” (page 31).
- You can use an optional S-video cord to connect the S VIDEO input jack on your TV to the S VIDEO OUT jack of this system.

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

Depending on the model, the VOLTAGE SELECTOR may differ.



* Saudi Arabian model's voltage selector has 2 levels (120 – 127 V/220 V).

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

8 (Except for Latin American and Euro/UK, Russian models) Set the color system to PAL or NTSC depending on the color system of your TV.

The color system is factory set to NTSC for region code 3 models, and PAL for other region code models. Each time you perform the procedure below, the color system changes as follows:

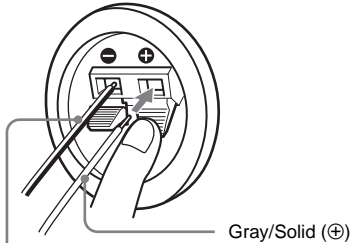
NTSC ↔ PAL

Use the buttons on the system.

- 1 Press I/⏻ to turn off the system.
- 2 Press I/⏻ while holding down ■■ on the unit.
The system turns on and the color system is changed.

9 Connect the speakers to the unit (Front, center*, surround* speakers)

Connect the speaker cords to the speaker jacks as shown below.



Black/Stripe (⊖)

* BMZ-K7D only

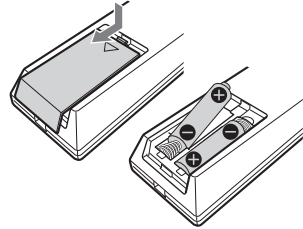
Notes

- Keep the speaker cords away from the antennas to prevent noise.
- The type of speakers supplied vary according to the model you purchased (see "Specifications" on page 78).
- Do not place the surround speakers on top of a TV.* This may cause distortion of the colors in the TV screen.
- Be sure to connect both left and right surround speakers.* Otherwise, the sound will not be heard.
- When you play back a VIDEO CD recorded in a different color system from the one you set for the unit, the picture image may be distorted.

* BMZ-K7D only

To connect optional components
See page 65.

Insert two R6 (size AA) batteries into the remote



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, replace both batteries with new ones.

When carrying this system

Perform the following procedure to protect the DVD mechanism.

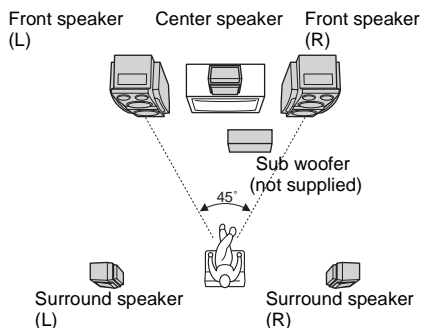
- 1 Press **I/⏻** to turn on the system, then press **FUNCTION** to select "DVD." Make sure that all discs are removed from the system.
- 2 Hold down **■** for 5 seconds until "MECHA LOCK" appears, then the system automatically turns off.
- 3 Unplug the power cord.

Note

If you turn on the system before unplugging the power cord, you need to perform the steps above again.

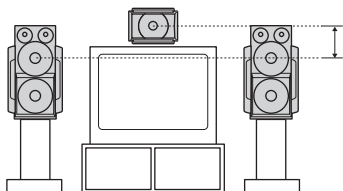
Positioning the speakers (BMZ-K7D only)

- 1 Place the front speakers at an angle of 45 degrees from your listening position.**

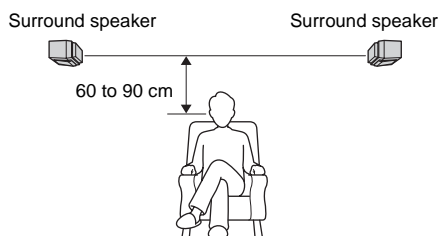


- 2 Place the center speaker at about the same height as the front speakers.**

Align the center speaker with the front speakers or place it slightly behind the front speakers.



- 3 Place the surround speakers facing each other at about 60 to 90 cm above your listening position.**



Note

Do not place the surround speakers on top of a TV. This may cause distortion of the TV screen colors.

Tip

You can enjoy 5.1 channel surround sound while playing a DVD. To adjust the speaker volume and level, see page 37.

Setting the clock

- 1 Press CLOCK/TIMER SET on the remote.**
If you have already set the clock, see “To adjust the clock.”
- 2 Press ◀◀ or ▶▶ to set the hour, then press ENTER.**
- 3 Press ◀◀ or ▶▶ to set the minute.**
Each press changes the time in 1-minute steps.
- 4 Press ENTER.**
The time display stops flashing and the clock starts from 00 seconds.

Tips

- MULTI JOG can also be used as well as ◀◀ or ▶▶.
- You can display the clock for 6 seconds by backlight by pressing DISPLAY when the system is turned off.

To adjust the clock

- 1 Press CLOCK/TIMER SET on the remote.**
- 2 Press ◀◀ or ▶▶ repeatedly to display “CLOCK” and then press ENTER.**
- 3 Carry out steps 2 to 4 described in “Setting the clock” to set the time.**

To display the time while the power is on
Press DISPLAY on the remote repeatedly. The clock display appears in the display for 6 seconds.

If “- : -” appears when the unit is turned off
There has been a power interruption. Reset the clock.

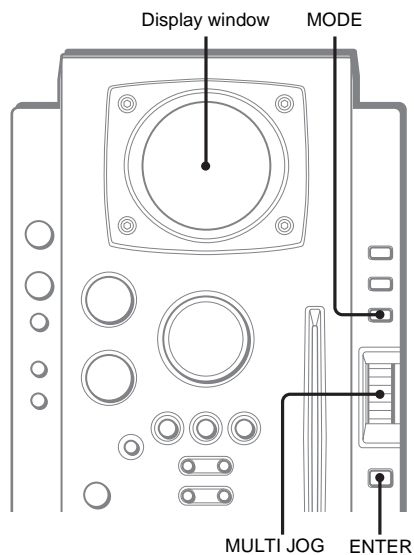
Changing the LEVEL meter

You can change the LEVEL meter.

- 1 Press MODE on the unit repeatedly until “PATTERN” is displayed, and then press ENTER.**
- 2 Within 6 seconds, turn the MULTI JOG dial on the unit to select one of the three LEVEL meter (PATTERN 1,2 and 3).**

Guide to the MULTI JOG dial

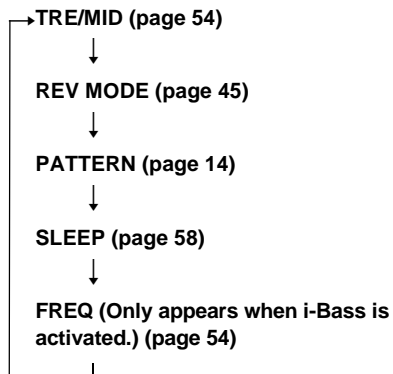
You can select various mode functions (TRE/MID, REV MODE, etc) when used in combination with the MODE, ENTER, and the MULTI JOG dial on the unit.



Operating the MULTI JOG dial

- 1 Press MODE repeatedly until the function you want appears in the display, then press ENTER.**

The following mode functions appear in the display. For details about each mode function, see the pages in parentheses.



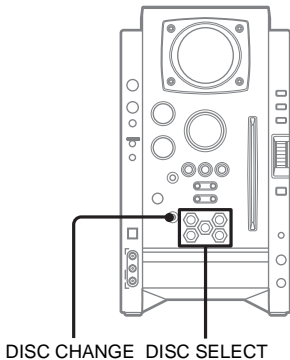
- 2 Turn the MULTI JOG dial to make the setting you want, then press ENTER.**

Inserting a disc

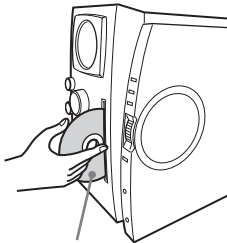
Use buttons on the unit for the operation.

1 Select a disc number you want to insert.

Press DISC CHANGE, then press DISC SELECT (the desired disc number) button.



2 Insert a disc.



Insert a disc with its label facing the right of the disc slot.

Repeat steps 1 and 2 to insert other discs into the slot.

Note

Do not use a disc with tape, seals or paste on it as this may cause malfunction.

Ejecting a disc

Use buttons on the unit for the operation.

— To eject a disc

Press ▲ EJECT, then press DISC SELECT (the disc number button) of the disc you want to eject.

— To eject all loaded discs

You can eject all loaded discs with a single operation.

Press ▲ EJECT for at least 2 seconds.

“EJECT ALL” will be displayed on the front panel display, and the discs will be ejected one by one automatically.

Tips

- The current disc number button blinks green. The current disc number button blinks green and red during playback.
- Loaded disc number buttons blink red when not playing back. Unloaded disc number buttons show no indication.

Note

Do not insert a disc while “PLEASE WAIT” appears on the display. It will cause malfunction.

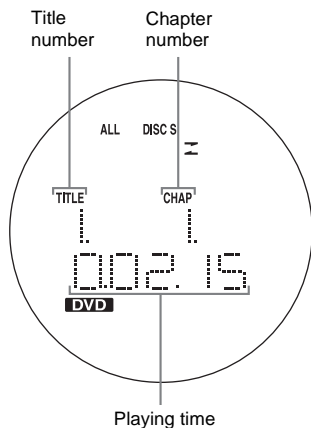
Playing a disc

— Normal Play/Shuffle Play

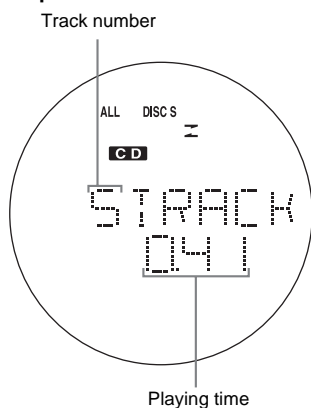


Before playing a DVD or a VIDEO CD, turn on your TV and select the video input. Depending on the DVD or VIDEO CD, some operations may be different or restricted. Refer to the operating instructions supplied with the disc.

Example: When a DVD disc is loaded



Example: When a CD disc is loaded



1 Press **FUNCTION** on the unit to switch the function to DVD.

2 Press **PLAY MODE** in stop mode repeatedly until the mode you want appears in the display.

Select	To play
ALL DISCS (Normal Play)	All discs in the disc slot continuously.
1DISC (Normal Play)	The tracks on the disc you have selected in original order.
ALBM (Normal Play)	All MP3 audio tracks in the album on the disc you have selected in original order. When playing a non-MP3 disc, Album Play performs the same operation as 1DISC Play.
ALL DISCS SHUF (Shuffle Play)*	All tracks on all discs in random order.
1 DISC SHUF (Shuffle Play)*	All tracks on the disc you have selected in random order.
ALBM SHUF (Shuffle Play)*	The MP3 audio tracks in the album on the disc you have selected in random order. When playing a non-MP3 disc, Album Shuffle Play performs the same operation as 1 DISC SHUF Play.
PGM (Program Play)*	The tracks on all discs in the order you want them to be played (see "Creating your own program" on page 23).

* You cannot perform Shuffle Play and Program Play with DVDs.

3 Press ◀▶.

Tips

- You can change the play mode between 1DISC, ALL DISCS and ALBM using the on-screen display as follows:
 - 1 Press DVD DISPLAY in stop mode. The Control Menu appears.
 - 2 Press **↑** or **↓** to select “PLAY MODE,” then press ENTER.
 - 3 Press **↑** or **↓** to select the desired play mode, then press ENTER.
- Press CLEAR to cancel SHUF mode.
- You can also start playback by pressing the desired DISC SELECT button (the disc number button) if the disc is loaded.

Note

“ALBM” or “ALBM SHUF” appears even if you have selected a non-MP3 disc or MP3 disc with no albums. In this case, Album Play or Album Shuffle Play performs the same operation as 1DISC Play or 1DISC SHUF Play, respectively.

Other operations

To	Do this
Stop play	Press ■ . The playback stops at the point ■ is pressed (Resume Play). Press ■ again to cancel the Resume Play (page 18).
Pause	Press ⏸ ^{*1} . Press ⏸ or ◀▶ again to resume play.
Select a track or chapter	Press PREV/ ◀◀ or NEXT/ ▶▶ repeatedly (or turn the MULTI JOG dial on the unit to select a track or chapter).
Select an album of MP3	Press ALBUM – or + (or ALBUM PLAY LIST – or + on the unit) repeatedly after step 2 (page 16).
Locate a point quickly in fast forward or fast reverse (Lock Search ^{*2})	Press TUNING –/ ◀◀ or TUNING +/ ▶▶ (or press and hold ◀◀ / ◀◀ or ▶▶ / ▶▶ on the unit) during play. For DVD or VIDEO CD, each time you press the button, searching speed changes as follows: 1 (slow) ↔ 2 (faster than 1) For CD, searching speed does not change (1 (slow) play). To return to Normal Play, press ◀▶ .
Watch frame by frame (Slow-motion Play) ^{*1*3}	During play, press SLOW ◀◀ or ▶▶ . Each time you press the button, the playback speed changes as follows: Playback direction (DVD, VCD only) SLOW2 ▶▶ ^{*4} ↔ SLOW1 ▶▶ ^{*4} Opposite direction (DVD only) SLOW2 ◀◀ ^{*4} ↔ SLOW1 ◀◀ ^{*4} To return to Normal Play, press ◀▶ .
Select a disc in Stop mode	Press DISC SKIP (or DISC SELECT (the desired disc number) button on the unit).
Switch to DVD function from another source	Press the DISC SELECT button that is loaded.

^{*1} There may be some disturbance in the video image.
^{*2} Except for MP3 audio tracks
^{*3} DVD and VIDEO CD only
^{*4} SLOW2 **▶▶**/SLOW2 **◀◀** playback speed is slower than SLOW1 **▶▶**/SLOW1 **◀◀**. Slow-motion reverse play for DVD only.

Notes

- If the DVD top menu or a DVD menu is displayed during DVD playback for approximately one hour, the system automatically turns off.
- If DVD playback is paused for approximately one hour, the system automatically turns off.
- Depending on the DVD or VIDEO CD, some operations may be restricted.
- 2 channel sound is heard when using headphones.
- During Scan or Slow-motion Play, no sound is output.
- You cannot change the play mode during play.
- Some time may be needed to start playback of discs recorded in complex configurations such as many layers.
- The system can play MP3 (MPEG1 Audio Layer3) audio. The system cannot play audio tracks in MP3PRO format.
- This system can play Multi Session CDs when an MP3 audio track is located in the first session. Any subsequent MP3 audio tracks, recorded in later sessions, can also be played back.
- Maximum number of albums on a disc: 99 (The maximum number of MP3 audio tracks that can be contained on an album is 250.)
- An album that does not include an MP3 audio track is skipped.
- If you put the extension “.MP3” to data not in MP3 format, the system cannot recognize the data properly and will generate a loud noise which could damage your speaker system.
- When the system cannot play MP3, remove the disc and select “CUSTOM SETUP” from the setup items. Then select “DATA CD PRIORITY” and set to “MP3” (page 30) and insert the disc again.
- The system can play to a depth of 8 directories.

Tip

When disc access takes a long time, set “DVD PWR ON” by the DVD power manage function (page 41).

Resuming playback from the point you stopped the disc

— Resume Play

This system memorizes the point where you stopped the disc so you can resume from that point. Resume Play is not canceled when you turn off the system.

1 While playing a disc, press **■** to stop playback.

“RESUME” appears in the display. If “RESUME” does not appear, Resume Play is not available.

2 Press **◀▶**.

The player starts playback from the point you stopped the disc in step 1.

Notes

- You cannot perform Resume Play during Shuffle Play or Program Play.
- Depending on where you stopped the disc, the system may resume playback from a different point.
- Resume play is canceled when:
 - you press **■** in stop mode.
 - you disconnect the power cord.
 - you eject the disc.
 - you change the play mode.

Playing a track by entering the track number (on the remote only)

Press the number button(s) to enter the track number of the track you want to play. (To enter the MP3 audio track number, press ALBUM – or + repeatedly to select the desired album before entering the number.)

To enter a track number over 10

- 1 Enter the corresponding digits.
To enter 0, press 10/0.

- 2 Press ENTER.

Example:

To play track number 30, press 3 and 10/0, then press ENTER.

To play MP3 track number 100, press 1, 10/0 and 10/0, then press ENTER.

Playing DVDs using the menu

DVD

Some DVDs have menus to enhance your enjoyment of the DVD. You can play DVDs using these menus on TV screen.

- Using the DVD top menu

A DVD is divided into long sections of a picture or a music feature called “titles.” When you play a DVD which contains several titles, you can select the title you want using the menu.

- Using the DVD menu

Some DVDs allow you to select the disc contents using a menu. When you play these DVDs, you can select items such as the language for the subtitles and the language for the sound using the DVD menu.

- 1 **Press DVD TOP MENU or DVD MENU.**

The menu appears on the TV screen. The contents of the menu vary from disc to disc.

- 2 **Press ↑/↓/←/→ or the number buttons to select the title or item you want to play.**

- 3 **Press ENTER.**

Note

If the DVD top menu or a DVD menu is displayed during DVD playback for approximately one hour, the system automatically turns off.

Playing VIDEO CDs with PBC functions (Ver. 2.0)

— PBC Play



You can use PBC* menus on your TV screen to enjoy the disc's interactive software. The menu format and structure may differ depending on each disc.

* PBC: Playback Control

1 Press ◀▶ to start playing a VIDEO CD with PBC functions (Ver. 2.0).

The PBC menu appears on the TV screen.

2 Press ↑/↓ or the number buttons to select the item number you want.

3 Press ENTER.

4 Continue playback according to the instructions on the menus to enjoy interactive playback.

Refer to the operating instructions supplied with the disc, as the operating procedure may differ according to the VIDEO CD.

To go back to a previous menu

Press ↶ RETURN.

Note

Depending on the VIDEO CD, "Press ENTER" in step 3 may appear as "Press SELECT" in the operating instructions supplied with the disc. In this case, press SELECT (◀▶).

Tip

You can cancel playback with PBC functions.

1 In stop mode, press PREV ◀◀ or NEXT ▶▶, or the number buttons to select a track.

2 Press ◀▶.

"Play without PBC" appears on the TV screen and 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 ◀▶.

Playing JPEG Image Files



You can play JPEG image files on CD-ROMs, CD-Rs, or CD-RWs. However, the discs must be recorded according to ISO9660 level 1, level 2 or Joliet format for the system to recognize the files. You can also play discs recorded in Multi Session. See the instructions of the CD-R/RW device or recording software (not supplied) for details on the recording format.

1 Load a data disc recorded in JPEG into the system.

2 Press ◀▶.

The system starts to play the first JPEG image file in the first album on the disc.

Notes

- The system can play the extension ".JPG" or ".JPEG."
- Progressive JPEG format files cannot be played on this system.
- Some CD-Rs or CD-RWs cannot be played on this system depending on file format.
- Maximum album number: 99
- The maximum file number that can be contained on a single album is 250.
- Playback is possible up to 8 levels.

Selecting an album and file

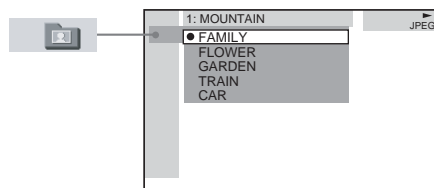
Use buttons on the remote for the operation.

1 Press DVD DISPLAY.

The Control Menu and disc name of JPEG data disc appears.

2 Press ↑/↓ to select "ALBUM," then press ENTER.

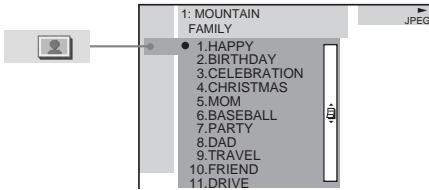
The list of albums contained in the disc appears.



3 Select an album you want to play using **↑** or **↓** and press **ENTER**.

4 Select “FILE” using **↑** or **↓** and press **ENTER**.

The list of files contained in the current album appears.



When the list of all files or albums cannot be displayed on the window, the jump bar appears. Press **→** to select the jump bar icon, and then scroll the jump bar to display the rest of the list using **↑** or **↓**.

5 Select a file using **↑** or **↓** and press **ENTER**.

The selected file starts playing.

To return the previous display

Press **←** or **↶** RETURN.

To turn off the display

Press DVD DISPLAY.

Note

Only the letters in the alphabet and numbers can be used for album or file names. Anything else is displayed as “ ”.

Tip

When a JPEG data disc is inserted, you can select an album using ALBUM – or +.

Enjoying the Slide show

1 Press **TUNING +/▶▶▶** (or press and hold **▶▶▶▶▶** on the unit) while displaying a **JPEG image**.

Slide show starts from the current image.

2 Press **◀▶** when you want to return to **Normal Play**.

To change the interval time of Slide show

Each time you press **TUNING +/▶▶▶** (or press and hold **▶▶▶▶▶** on the unit) during Slide show, the interval time changes as follows:

FF1▶▶ → FF2▶▶ → FF3▶▶

The FF3▶▶ interval time is faster than FF2▶▶.

To rotate the current image

Rotate the current image using ◀ or ▶.

Each time you press **▶**, the image turns clockwise by 90°.

Each time you press **◀**, the image turns counterclockwise by 90°.

Notes

- Slide show can play in only one direction.
- You cannot rotate the image during Slide show. Press **◀▶** to return to Normal Play before this operation.
- You cannot set “SHUF,” “PGM” when playing a JPEG file.

Playing repeatedly

— Repeat Play



You can play repeatedly all the titles/tracks/files or a single title/chapter/track on a disc.

Using the front panel display

Press **REPEAT** during play until “” or “” appears.

: For all the tracks on the disc, or all the tracks in the album* up to five times.

: For a single title/chapter/track only.

* When “ALBM” is selected for MP3 or JPEG

To cancel Repeat Play

Press **REPEAT** repeatedly until both “” and “” disappear.

Notes

- Depending on the DVD, you cannot perform Repeat Play.
- You cannot perform Repeat Play during PBC playback of VIDEO CDs (page 20).
- You cannot select “” during Program Play.
- When you select “,” that title/chapter/track is repeated endlessly until “” is canceled.
- You cannot select “” and “ALL DISCS SHUF” at the same time.

Using the on-screen display

1 Press **DVD DISPLAY** during play.

The Control Menu appears.

2 Press **↑** or **↓** repeatedly to select “**REPEAT**,” then press **ENTER**.

If you do not select “OFF,” the “REPEAT” indicator lights up in green.

3 Press **↑** or **↓** repeatedly to select the **Repeat Play** setting.

The default settings are underlined.

■ When playing a DVD

- OFF: does not play repeatedly.
- ALL*¹: repeats all the titles.
- TITLE: repeats the current title on a disc.
- CHAPTER: repeats the current chapter.

■ When playing a VIDEO CD/CD/MP3 when Program Play is set to OFF

- OFF: does not play repeatedly.
- ALL*¹: repeats all the tracks on a disc, or all the tracks in the current album*².
- TRACK: repeats the current track.

■ When playing a JPEG

- OFF: does not play repeatedly.
- ALL*¹: repeats all the files on the disc, or repeats the current album*².

■ When Program Play is set to ON

- OFF: does not play repeatedly.
- ALL: repeats Program Play.

4 Press **ENTER**.

Repeat Play starts.

*¹ When “ALL DISCS SHUF” is selected, you cannot select DVD or JPEG. When you play VIDEO CD/ CD/ MP3, you cannot select “REPEAT ALL.”

*² When “ALBM” is selected for MP3 or JPEG or “ALBM SHUF” is selected for MP3.

To cancel Repeat Play

Select “OFF” in step 3, or press **CLEAR**.

To turn off the Control Menu

Press **DVD DISPLAY** repeatedly until the Control Menu disappears.

Notes

- Depending on the DVD, you cannot perform Repeat Play.
- You cannot perform Repeat Play during PBC playback of VIDEO CDs (page 20).
- If you select “ALL,” the program repeats up to five times.

Creating your own program

— Program Play

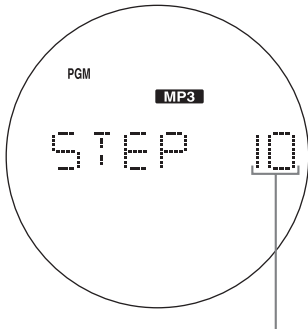


You can make a program of up to 25 steps.
You can synchro record the programed tracks onto a cassette tape (page 46).

Using the front panel display

- 1 Press **FUNCTION** repeatedly to switch the function to **DVD**.
- 2 Press **PLAY MODE** in stop mode repeatedly until **"PGM"** appears.
- 3 Press **DISC SKIP** (or **DISC SELECT** (the desired disc number) button on the unit) to select a disc.
- 4 Press **PREV** ◀◀ or **NEXT** ▶▶ repeatedly until the desired title or track number appears.

When programing an MP3, press **ALBUM** – or + to select album, then press **PREV** ◀◀ or **NEXT** ▶▶ repeatedly until the desired track number appears.



Total number of programed steps (including selected track).

- 5 Press **ENTER**.
The track is programed.
The program step number appears.
- 6 To program additional tracks, repeat steps 3 to 5.

7 Press ◀▶.

Program Play starts.

Other operations

To	Do this
Cancel Program Play	Press PLAY MODE in stop mode repeatedly until "PGM" disappears.
Check the program	Press PREV ◀◀ or NEXT ▶▶ repeatedly during play.
Clear a track from the end of program	Press CLEAR in stop mode.
Clear all tracks of the program	Press and hold CLEAR in stop mode.

Note

When you switch the play mode to **"PGM"** while **"◀ 1"** is selected, **"◀ 1"** is automatically canceled.

Tip

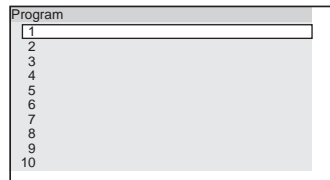
The program you made remains after Program Play finishes. To play the same program again, press



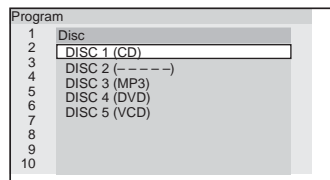
Using the on-screen display

- 1 Press **PLAY MODE** in stop mode repeatedly until **"PGM"** appears in the display.

The Program Display appears on the screen.

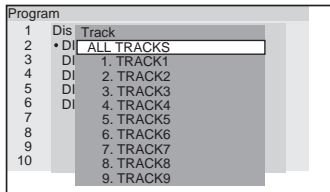


- 2 Press **→**, then press **↑** or **↓** repeatedly to select the disc.



3 Press →.

The cursor moves to the album or track (in this case, “DISC 1”).



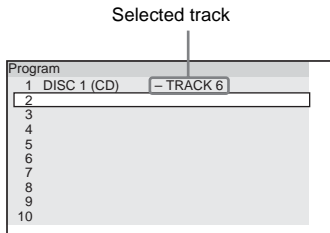
* When the list of all tracks cannot be displayed on the window, the jump bar appears. Press → to select the jump bar icon, and then scroll the jump bar to display the rest of the list using ↑/↓. Press ← or ↶ RETURN to return to the track list.

4 Select the album or track you want to program.

■ When programing a VIDEO CD or CD

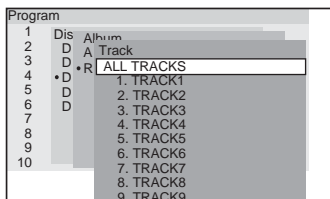
For example, select track “6.”

Press ↑/↓ or the number buttons to select “6,” then press ENTER.

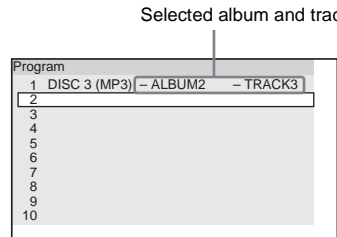


■ When programing MP3

For example, select track “3” of album “2.”
Press ↑/↓ to select “2,” then press →.



Press ↑/↓ or the number buttons to select “3,” then press ENTER.



5 To program other discs, albums or tracks, repeat step 2 to 4.

6 Press ◀▶.

Program Play starts.

When the program ends, you can restart the same program again by pressing ◀▶.

Other operations

To	Do this
Return to Normal Play	Press CLEAR during play.
Turn off the Program Display	Press PLAY MODE when the Program Play is stopped.
Clear a track from the end of program	Press CLEAR in step 5.
Clear all tracks of the program	Press and hold CLEAR in step 5.

Notes

- Program Play function is not available for DVD and JPEG.
- When you switch the play mode to “PGM” while “↵ 1” is selected, “↵ 1” is automatically canceled.

Tip

The program you made remains in the system’s memory even after Program Play finishes. Press ◀▶ to play the same program again.

Searching for a title/ chapter/track/index/ album/file



You can search a title (DVD), chapter (DVD), track (CD, VIDEO CD, MP3), index (VIDEO CD), album (MP3, JPEG) and file (JPEG). As titles, tracks and albums are assigned unique numbers on the disc, you can select the desired one from the Control Menu. Also chapters and indexes are assigned unique numbers on the disc, so you can select the desired one by entering its number. Or, you can search for a particular point using the time code (Time Search).

Searching for a title/track/ album/file

1 Press DVD DISPLAY.

The Control Menu appears.

2 Press \uparrow or \downarrow repeatedly to select the search method.

■ When playing a DVD

“TITLE”

■ When playing a VIDEO CD without PBC function

“TRACK”

■ When playing a CD

“TRACK”

■ When playing an MP3

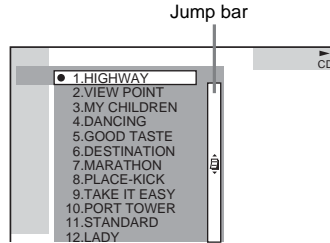
“ALBUM” or “TRACK”

■ When playing a JPEG

“ALBUM” or “FILE”

3 Press ENTER.

The list of contents in the disc appears.



When the list of all tracks or albums cannot be displayed on the window, the jump bar appears. Press \rightarrow to select the jump bar icon, and then scroll the jump bar to display the rest of the list using \uparrow/\downarrow . Press \leftarrow or \hookrightarrow RETURN to return to the track or the album list.

4 Press \uparrow or \downarrow to select the desired track, then press ENTER.

The system starts playback from the selected track.

Searching for a chapter/index

1 Press DVD DISPLAY.

The Control Menu appears.

2 Press \uparrow or \downarrow to select the search method.

■ When playing a DVD

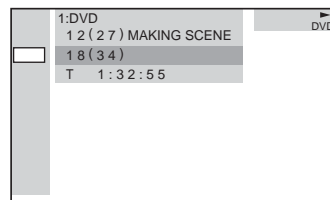
“CHAPTER”

■ When playing a VIDEO CD

“INDEX”

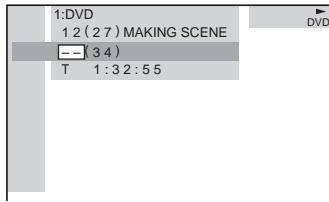
“** (**)” is selected (** refers to a number).

The number in parentheses indicates the total number of chapters or indexes.



3 Press ENTER.

“** (***)” changes to “-- (***)”.



4 Press ↑ or ↓ repeatedly, or press the number buttons to select the chapter or index number you want to search.

If you make a mistake, press CLEAR to cancel the number, then select another number.

5 Press ENTER.

Playback starts from the selected number.

To turn off the Control Menu

Press DVD DISPLAY repeatedly until the Control Menu disappears.

To cancel searching

Press ↶ RETURN.

To search for a particular point using the time code (except for JPEG)

— Time Search

1 In step 2, select “TIME.”

“T **: **: **: **” (playing time of the current title or track) is selected.

2 Press ENTER.

“T - -: - -: - -” appears above “T **: **: **: **”.

3 Input the time code using the number buttons, then press ENTER.

For example, to find the scene at 2 hours, 10 minutes, and 20 seconds after the beginning, enter “2:10:20.”

Notes

- The title, chapter or track number displayed on the TV screen is recorded data on the disc.
- You cannot search a scene of a VIDEO CD.
- If you play a DVD, input the playing time of the current title using the time code. If you play a CD, VIDEO CD or MP3, input the playing time of the current track using the time code.

Tip

You can change the display to show playing time or remaining time. For details, see “Checking the total playing time and titles (DVD/VIDEO CD/CD/MP3/JPEG)” (page 62).

Changing the sound/ subtitle/language



Changing the sound (DVD only)

If a DVD is recorded with multilingual tracks, you can select the language you want while playing the DVD. If the DVD is recorded in multiple audio formats (PCM, Dolby Digital, MPEG audio, or DTS), you can select the audio format you want while playing the DVD.

1 Press DVD DISPLAY during play.

The Control Menu appears.

2 Press ↑ or ↓ repeatedly to select “AUDIO,” then press ENTER.

The options for “AUDIO” appear.

3 Press ↑ or ↓ repeatedly to select the audio signal you want.

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

When 4-digit is displayed, they represent the language code (see “Language code list” on page 80). When the same language is displayed twice or more times, the DVD is recorded in multiple audio formats.

4 Press ENTER.

To turn off the Control Menu

Press DVD DISPLAY repeatedly until the Control Menu disappears.

Notes

- For discs not recorded in multiple audio format, you cannot change the sound.
- During DVD playback, the sound may change automatically.

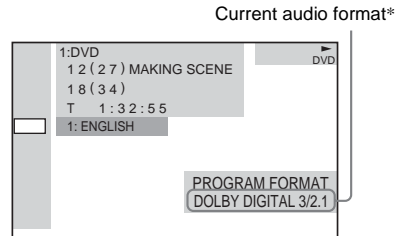
Tip

You can also select the audio setting by pressing AUDIO.

Displaying the audio information of the disc (DVD only)

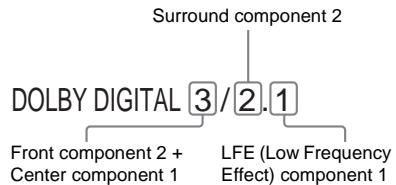
When you select “AUDIO,” the channels being played are displayed on the screen.

For example, in Dolby Digital format, multiple signals ranging from monaural to 5.1 channel signals can be recorded on a DVD. Depending on the DVD, the number of recorded channels may differ.



* “PCM,” “DTS,” or “DOLBY DIGITAL” is displayed. For “DOLBY DIGITAL,” the channels in the playing track are displayed numerically as follows:

For Dolby Digital 5.1 ch:



The display examples are as follows:

- PCM (stereo)

```
PROGRAM FORMAT  
PCM 48kHz 24bit
```

- Dolby Surround

```
PROGRAM FORMAT  
DOLBY DIGITAL 2/0  
DOLBY SURROUND
```

- Dolby Digital 5.1ch

```
PROGRAM FORMAT  
DOLBY DIGITAL 3/2.1
```

- DTS

```
PROGRAM FORMAT  
DTS 3/2.1
```

Displaying the subtitles (DVD only)

With DVDs on which multilingual subtitles are recorded, you can change the subtitle language while playing a DVD, or turn the subtitles on or off whenever you want.

For example, you can select the language you want to master and turn the subtitles on for better understanding.

1 Press DVD DISPLAY during play.

The Control Menu appears.

2 Press ↑ or ↓ repeatedly to select “SUBTITLE,” then press ENTER.

The options for “SUBTITLE” appear.

3 Press ↑ or ↓ repeatedly to select the language you want, then press ENTER.

The subtitles are displayed in the selected language.

When 4-digit is displayed, they represent the language code (see “Language code list” on page 80).

To cancel the SUBTITLE setting

Select “OFF” in step 3.

To turn off the Control Menu

Press DVD DISPLAY repeatedly until the Control Menu disappears.

Note

Depending on the DVD, you may not be able to change the subtitles even if multilingual subtitles are recorded on the DVD.

Tip

You can also select the subtitle language by pressing SUBTITLE.

Changing the screen display language, DVD menu language and audio track auto selection mode

— LANGUAGE SETUP/CUSTOM SETUP

1 Press DVD SETUP in stop mode.

The Setup Display appears.

2 Press **↑** or **↓** repeatedly to select “LANGUAGE SETUP” or “CUSTOM SETUP,” then press ENTER.

Select	Setup item
LANGUAGE SETUP	OSD DVD MENU AUDIO SUBTITLE
CUSTOM SETUP	TRACK SELECTION AUDIO DRC DATA CD PRIORITY JPEG DATE

3 Press **↑** or **↓** repeatedly to select an item, then press ENTER.

4 Press **↑** or **↓** repeatedly to select a setting, then press ENTER.

Note

When the selected language is not recorded on the DVD, one of the recorded languages is automatically selected (except for “OSD”).

Tips

- You can reset all the DVD settings except for Parental Control by performing the operations described under “To return the DVD setup to the default settings, perform reset as follows:” (page 74).
- If you select “OTHERS→” in “DVD MENU,” “AUDIO” or “SUBTITLE,” select and enter the language code from the language code list using the number buttons (page 80). The selected language code (4-digit) is displayed the next time you select “OTHERS→.” Korean language code is 1301.

■ OSD (on-screen display)

Switches the display language on the screen. Select the language from the displayed list.

■ DVD MENU (DVD only)

Select the language for the DVD menu.

■ AUDIO (DVD only)

Switches the language of the sound track. Select the language from the displayed list.

■ SUBTITLE (DVD only)

Switches the language of the subtitle. Select the language from the displayed list.

■ TRACK SELECTION (DVD only)

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

OFF	No priority given.
AUTO	Priority given.

■ AUDIO DRC (Dynamic Range Compression)

Narrows the dynamic range of the soundtrack. Useful for watching movies at low volume late at night.

OFF	No compression of dynamic range.
STANDARD	Reproduces the sound track with the kind of dynamic range that the recording engineer intended.
MAX	Narrows the dynamic range fully.

Note

Dynamic range compression only works in Dolby Digital.

■ DATA CD PRIORITY (MP3, JPEG only)

Set priority data you want to play, when you play the data disc (CD-ROM/CD-R/CD-RW) contained MP3 audio tracks and JPEG image files.

<u>MP3</u>	If an MP3 file exists on the disc, the system recognises the disc as an “MP3 Disc.” If only JPEG files exist on the disc, the system recognises the disc as a “JPEG Disc.”
<u>JPEG</u>	If a JPEG file exists on the disc, the system recognises the disc as a “JPEG Disc.” If only MP3 files exist on the disc, the system recognises the disc as an “MP3 Disc.”

■ JPEG DATE

Change the date information order of a JPEG image in the Control Menu as:

MM/DD/YYYY

YYYY/MM/DD

DD/MM/YYYY

YYYY/DD/MM

YYYY: Year

MM: Month

DD: Day

Notes

- When you set to “AUTO,” the language setting may change. The “TRACK SELECTION” setting has higher priority than the “AUDIO” setting in “LANGUAGE SETUP.”
- If PCM, MPEG audio, DTS, and Dolby Digital sound tracks have the same number of channels, the system selects PCM, DTS, Dolby Digital, and MPEG audio sound tracks in this order.
- Depending on the DVD, the audio channel with priority may be predetermined. In this case, you cannot give priority to the DTS, or Dolby Digital or MPEG audio format by selecting “AUTO.”
- When you play Multi Session discs with different formats mixed in each session, the format of the first session is recognized as the disc type. Tracks in the second and subsequent sessions are played if they are the same format as the first session, but different format tracks are not played. However, in the case of CD-DA, even if CD-DA tracks are present in the second and subsequent sessions, only the CD-DA tracks in the first session are played.

Adjusting the angle/image



Changing the angles (DVD only)

When playing a DVD on which various angles (multi-angles) for a scene are recorded, the “ANGLE” indicator appears in the display. This means that you can change the viewing angle. For example, while playing a scene of a train in motion, you can display the view from either the front of the train, the left window of the train or from the right window without having the train’s movement interrupted.

1 Press DVD DISPLAY during play.

The Control Menu appears.

2 Press \uparrow or \downarrow repeatedly to select “ANGLE.”

The angle number appears. The number in parentheses indicates the total number of angles. The “ANGLE” indicator lights up in green when angles are recorded on the disc.

3 Press ENTER.

The angle number changes to “-.”

4 Select the angle you want using the number buttons or \uparrow/\downarrow , then press ENTER.

The angle is changed to the selected angle.

To turn off the Control Menu

Press DVD DISPLAY repeatedly until the Control Menu disappears.

Note

Depending on the DVD, you may not be able to change the angles even if multi-angles are recorded on the DVD.

Tip

You can also select the angle by pressing ANGLE.

Adjusting the TV screen

— SCREEN SETUP/CUSTOM SETUP

1 Press DVD SETUP in stop mode.

The Setup Display appears.

2 Press **↑** or **↓** repeatedly to select “SCREEN SETUP” or “CUSTOM SETUP,” then press ENTER.

Select	Setup item
SCREEN SETUP	TV TYPE SCREEN SAVER BACKGROUND COMPONENT OUT
CUSTOM SETUP	VCD COLOR SYSTEM

3 Press **↑** or **↓** repeatedly to select an item, then press ENTER.

4 Press **↑** or **↓** repeatedly to select a setting, then press ENTER.

■ TV TYPE (DVD only)

Select the aspect ratio of the connected TV.

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 displayed on the upper and lower portions of the screen.
4:3 PAN SCAN	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.

- 16:9



- 4:3 LETTER BOX



- 4:3 PAN SCAN



Note

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

■ SCREEN SAVER

Turn on and off the screen saver. If you turn on the screen saver, the screen saver image appears when you leave the player in pause or stop mode for 15 minutes or when you play a CD, disc with MP3 audio tracks or JPEG image files (except for during Slide show) for more than 15 minutes. The screen saver will help prevent your display device from becoming damaged (ghosting). Press any DVD-related button to turn off the screen saver.

<u>ON</u>	Turns on the screen saver.
<u>OFF</u>	Turns off the screen saver.

■ BACKGROUND

Select the background color or picture on the TV screen when the playback is stopped or while playing a CD.

<u>JACKET PICTURE</u>	The jacket picture (still picture) appears in the background, but only when the jacket picture is already recorded on the disc (CD-EXTRA, etc.). If the disc does not contain a jacket picture, the “GRAPHICS” picture appears.
<u>GRAPHICS</u>	The preset picture stored in the system appears in the background.
<u>BLUE</u>	The background color is blue.
<u>BLACK</u>	The background color is black.

■ COMPONENT OUT (except for Euro/UK, Russian models)

Change the type of signal output from the COMPONENT VIDEO OUT jacks on the system.

<u>INTERLACE</u>	Select this when you are connected to a standard (interlace format) TV.
------------------	---

PROGRESSIVE Select this when you have a TV that can accept progressive signals.

To force the system to switch to interlace when PROGRESSIVE is selected (on the unit only) (Depending on the model, this operation may not be possible.)

Make sure the function is set to DVD, then hold down **■** and press FUNCTION.

Notes

- “PROGRESSIVE” does not work for PAL signals. Even if you set “COMPONENT OUT” to “PROGRESSIVE,” the output signal is automatically switched to interlace format for PAL signals.
- When “COMPONENT OUT” is set to “PROGRESSIVE,” no video signal is output from the VIDEO OUT or S VIDEO OUT jacks.

■ VCD COLOR SYSTEM (except for Latin American and Euro/UK, Russian models)

Select the color system when you play a VIDEO CD.

<u>AUTO</u>	Outputs the video signal in the system of the disc, either PAL or NTSC. If your TV uses a DUAL system, select AUTO.
<hr/>	
PAL	Changes the video signal of an NTSC disc and outputs it in the PAL system.
<hr/>	
NTSC	Changes the video signal of a PAL disc and outputs it in the NTSC system.

Notes

- You cannot change the color system of the disc itself.
- Except for Latin American and Euro/UK, Russian models, you can change the color system of this unit according to the connected TV (page 10).

Restricting disc playback

— CUSTOM PARENTAL CONTROL/ PARENTAL CONTROL



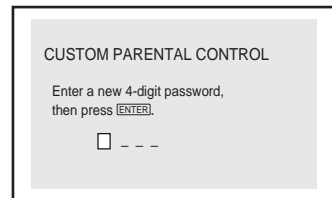
Preventing playback of specific discs

— CUSTOM PARENTAL CONTROL

You can set the playback restrictions so that the system will not play inappropriate discs. You can set the same Custom Parental Control password for up to 25 discs. When you set the twenty-sixth disc, the playback restriction for the first disc is canceled.

- 1 Insert the disc you want to lock.**
If the disc is playing, press **■** to stop play.
- 2 Press DVD DISPLAY in stop mode.**
The Control Menu appears.
- 3 Press **↑** or **↓** repeatedly to select “CUSTOM PARENTAL CONTROL,” then press ENTER.**
The “CUSTOM PARENTAL CONTROL” is selected.
- 4 Press **↑** or **↓** repeatedly to select “ON→,” then press ENTER.**

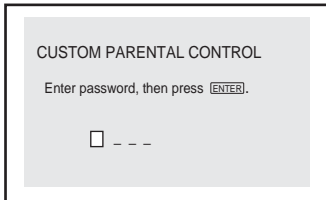
■ If you have not entered a password
The display for registering a new password appears.



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

■ When you have already registered a password

The display for entering the password appears.



5 Enter or re-enter your 4-digit password using the number buttons, then press ENTER.

“Custom parental control is set.” appears and the screen returns to the Control Menu.

If you make a mistake entering your password

Press **←** before you press ENTER and input the correct number.

If you make a mistake

Press **↶** RETURN, then start from step 3 again.

To turn off the Control Menu

Press **↶** RETURN, then press DVD DISPLAY repeatedly until the Control Menu disappears.

To turn off the Custom Parental Control function

- 1 In step 4, select “OFF→,” then press ENTER.
- 2 Enter your 4-digit password using the number buttons, then press ENTER.

To change the password

- 1 In step 4, select “PASSWORD→,” then press ENTER.
The display for entering the password appears.
- 2 Enter your 4-digit password using the number buttons, then press ENTER.
- 3 Enter a new 4-digit password using the number buttons, then press ENTER.
- 4 To confirm your password, re-enter it using the number buttons, then press ENTER.

Playing the disc for which Custom Parental Control is set

- 1 **Insert the disc for which Custom Parental Control is set.**
The “CUSTOM PARENTAL CONTROL” display appears.

- 2 **Enter your 4-digit password using the number buttons, then press ENTER.**
The system is ready for playback.

Tip

If you forgot your password, enter the 6-digit number “199703” using the number buttons when the “CUSTOM PARENTAL CONTROL” display asks you for your password, then press ENTER. The display will ask you to enter a new 4-digit password.

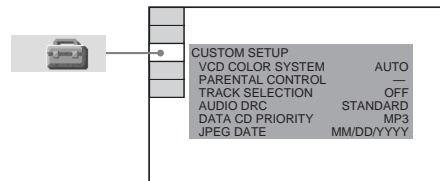
Limiting playback by children (DVD only)

— PARENTAL CONTROL

You can limit the playback of some DVDs according to a predetermined level such as the age of the users. The same password is used for both Custom Parental Control and Parental Control.

When a limited scene is played back, that scene is cut or replaced with a preset other scene.

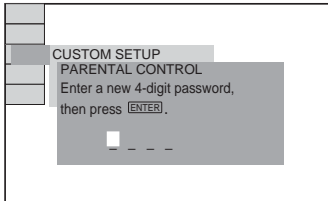
- 1 **Press DVD SETUP in stop mode.**
The Setup Display appears.
- 2 **Press **↑** or **↓** repeatedly to select “CUSTOM SETUP,” then press ENTER.**
The “CUSTOM SETUP” display appears.



- 3** Press **↑** or **↓** repeatedly to select “PARENTAL CONTROL→,” then press ENTER.

■ **If you have not entered a password**

The display for registering a new password appears.

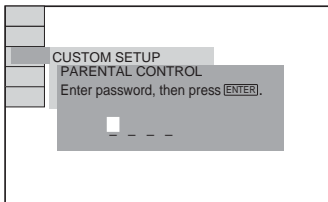


Enter a 4-digit password using the number buttons, then press ENTER.

The display for confirming the password appears.

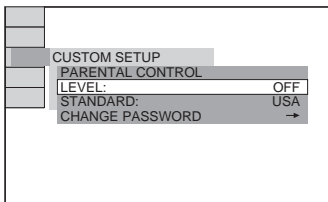
■ **When you have already registered a password**

The display for entering the password appears.



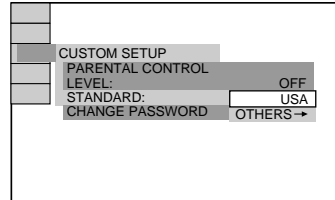
- 4** Enter or re-enter your 4-digit password using the number buttons, then press ENTER.

The display for setting the playback limitation level and changing the password appears.



- 5** Press **↑** or **↓** repeatedly to select “STANDARD,” then press ENTER.

The options for “STANDARD” appear.



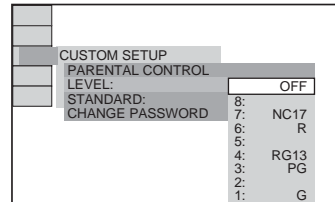
- 6** Press **↑** or **↓** repeatedly to select a geographic area as the playback limitation level, then press ENTER.

The area is selected.

When you select “OTHERS→,” select and enter the standard code in the table on page 35 using the number buttons.

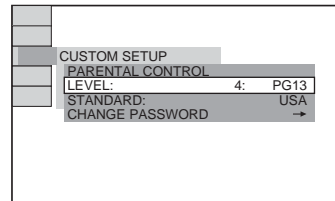
- 7** Press **↑** or **↓** repeatedly to select “LEVEL,” then press ENTER.

The options for “LEVEL” appear.



- 8** Press **↑** or **↓** repeatedly to select the level you want, then press ENTER.

The Parental Control setting is completed.



The lower the value, the more strict the limitation.

If you make a mistake

Press **←** or **↶** RETURN to go back to the previous screen.

To turn off the Control Menu

Press DVD SETUP repeatedly until the Control Menu disappears.

To turn off the Parental Control function and play the DVD after entering your password

Set “LEVEL” to “OFF” in step 8.

To change the password

- In step 5, to select “CHANGE PASSWORD→,” then press ENTER. The display for entering the password appears.
- Follow step 3 to enter a new password.

Playing the disc for which Parental Control is set

- Insert the disc and press ◀▶.**
The “PARENTAL CONTROL” display appears.
- Enter your 4-digit password using the number buttons, then press ENTER.**
Playback starts.

Notes

- When you play DVDs which do not have the Parental Control function, playback cannot be limited on this system.
- Depending on the DVD, 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 the Resume Play mode is canceled, the level returns to the original level.

Tip

If you forgot your password, remove the disc and repeat steps 1 to 3 of “Limiting playback by children (DVD only)” (page 33). When you are asked to enter your password, enter “199703” using the number buttons, then press ENTER. The display will ask you to enter a new 4-digit password. After you enter a new 4-digit password, replace the disc in the system and press ◀▶. When the “PARENTAL CONTROL” display appears, enter your new password.

Area code

Standard	Code number
Argentina	2044
Australia	2047
Austria	2046
Belgium	2057
Brazil	2070
Canada	2079
Chile	2090
China	2092
Denmark	2115
Finland	2165
France	2174
Germany	2109
Hong Kong	2219
India	2248
Indonesia	2238
Italy	2254
Japan	2276
Korea	2304
Malaysia	2363
Mexico	2362
Netherlands	2376
New Zealand	2390
Norway	2379
Pakistan	2427
Philippines	2424
Portugal	2436
Russia	2489
Singapore	2501
Spain	2149
Sweden	2499
Switzerland	2086
Taiwan	2543
Thailand	2528
United Kingdom	2184

Speaker settings

— SPEAKER SETUP

To obtain the best possible surround sound, set the speakers you have connected and their distance from your listening position. Then use the test tone to adjust the volume and the balance of the speakers to the same level.

Setting the speakers (BMZ-K7D only)

- 1 Press DVD SETUP in stop mode.**
The Setup Display appears.
- 2 Press \uparrow or \downarrow repeatedly to select "SPEAKER SETUP," then press ENTER.**
- 3 Press \uparrow or \downarrow repeatedly to select "SIZE," "DISTANCE," then press ENTER.**
- 4 Press \uparrow or \downarrow repeatedly to select the setup item, then press ENTER.**
- 5 Press \uparrow or \downarrow repeatedly to select or set a setting, then press ENTER.**

■ SIZE

When you do not connect center, surround speakers or sub woofer, or you move the surround speakers, set the parameters for CENTER, SURROUND and SUBWOOFER. Since the front speakers setting is fixed, you cannot change them.

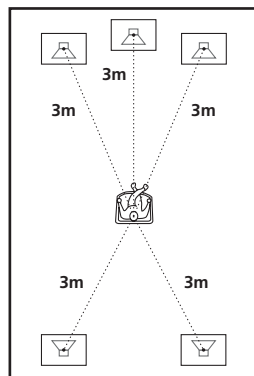
FRONT	<u>YES</u>
CENTER	<u>YES</u> : Normally select this position. NONE: Select this when a center speaker is not used.
SURROUND	<u>YES</u> : Normally select this position. NONE: Select this when surround speakers are not used.
SUBWOOFER	<u>NONE</u> : Select this when a subwoofer is not used. YES: Select this when a sub woofer is used.

Note

Depending on the settings of other speakers, the sub woofer may output excessive sound.

■ DISTANCE

The default distance setting for the speakers in relation to the listening position is shown below.



Be sure to change the value in the Setup Display when you move the speakers.

FRONT	Front speaker distance from the listening position can be set in 0.2 meter increments from 1.0 to 7.0 meters.
CENTER	Center speaker distance can be moved up to 1.6 meters closer to the listening position, from the front speakers in 0.2 meter increments.
SURROUND	Surround speaker distance can be moved up to 4.6 meters closer to the listening position, from the front speakers, in 0.2 meter increments.

Notes

- If each of the front and surround speakers are not placed at an equal distance from your listening position, set the distance of the closest speaker.
- Do not place the surround speakers farther away from your listening position than the front speakers.

Adjusting the speaker volume and level

- 1 Press DVD SETUP in stop mode.**
The Setup Display appears.
- 2 Press \uparrow or \downarrow repeatedly to select “SPEAKER SETUP,” then press ENTER.**
- 3 Press \uparrow or \downarrow repeatedly to select “TEST TONE,” then press ENTER.**
- 4 Press \uparrow or \downarrow repeatedly to select “ON,” then press ENTER.**
You will hear the test tone from each speaker in sequence.
- 5 From your listening position, adjust the value of “BALANCE” and “LEVEL” using $\uparrow/\downarrow/\leftarrow/\rightarrow$.**
The test tone is emitted from both left and right speakers simultaneously.
- 6 Press ENTER when you finish adjusting.**
- 7 Press \uparrow or \downarrow repeatedly to select “TEST TONE,” then press ENTER.**
- 8 Press \uparrow or \downarrow repeatedly to select “OFF,” then press ENTER.**

Tip

To adjust the balance or the level without listening to the test tone, select “BALANCE” or “LEVEL” in step 3 and press ENTER, then adjust the balance or level using \uparrow/\downarrow and press ENTER.

■ LEVEL (BMZ-K7D only)

You can vary the level of each speaker as follows. Be sure to set “TEST TONE” to “ON” for easy adjustment.

The default settings are underlined.

CENTER <u>0 dB</u>	Adjust the level of the center speaker (–6 dB to +6 dB, 1 dB increments).
SURROUND LEFT <u>0 dB</u>	Adjust the level of the surround speaker (–6 dB to +6 dB, 1 dB increments).
SURROUND RIGHT <u>0 dB</u>	
SUBWOOFER <u>0 dB</u>	Adjust the level of the sub woofer (–10 dB to +10 dB, 1 dB increments).

■ BALANCE (BMZ-K7D only)

You can vary the balance of the left and right speakers as follows. The default settings are underlined.

FRONT --- (<u>CENTER</u>)	Adjust the balance between the front left and right speakers (6 steps left or right).
--------------------------------	---

■ TEST TONE (BMZ-K7D only)

The speakers will emit a test tone to adjust “BALANCE” and “LEVEL.”

The default settings are underlined.

<u>OFF</u>	The test tone is not emitted from the speakers.
ON	The test tone is emitted from each speaker in sequence while adjusting balance or level. When you select one of the “SPEAKER SETUP” items, the test tone is emitted from both left and right speakers simultaneously.

■ LFE (BMZ-K5D only)

You can enjoy low frequency effect with LFE channel recorded on discs.

The default settings are underlined.

















<u>ON</u>	The LFE channel is output.
OFF	The LFE channel is not output.

Note

If there is excessive wow or flutter when recording audio from a DVD, set “LFE” to “OFF.”

List of items that can be displayed and selected by disc type

When you press DVD DISPLAY, the following control menu items are displayed.

	Control Menu items	Function
	DISC	Displays the disc name or disc type inserted into the system. Selects the disc to be played.
	TITLE (DVD only) SCENE (VIDEO CD in PBC playback only) TRACK (VIDEO CD)	Selects the title (DVD), the scene (VIDEO CD in PBC Playback), the track (VIDEO CD) to be played.
	CHAPTER (DVD only) INDEX (VIDEO CD only)	Selects the chapter (DVD) or the index (VIDEO CD) to be played.
	ALBUM (MP3 only)	Selects the album (MP3) to be played.
	TRACK (CD or MP3 only)	Selects the track (CD or MP3) to be played.
	INDEX (CD only)	Displays the index and selects the index (CD) to be played.
	TIME	Checks the elapsed time and the remaining playback time. Inputs the time code for picture and music searching.
	AUDIO (DVD only)	Changes the audio setting.
	SUBTITLE (DVD only)	Displays the subtitles. Changes the subtitle language.
	ALBUM (JPEG only)	Selects the album (JPEG) to be played.
	FILE (JPEG only)	Selects the file (JPEG) to be played.
	DATE (JPEG only)	Displays the date information.
	ANGLE (DVD only)	Changes the angle.
	PLAY MODE (VIDEO CD/ CD/MP3/JPEG* only)	Selects the play mode (Normal Play/Shuffle Play/Program Play) for the disc.
	REPEAT	Plays the entire disc (all titles/all tracks/all files), one title/chapter/album/track or contents of program repeatedly.
	CUSTOM PARENTAL CONTROL	Sets the disc to prohibit playback.

* For JPEG files, Normal Play mode only is available.

Tips

- Each time you press DVD DISPLAY, the Control Menu display changes cyclically as follows:
Control Menu display ↔ Control Menu display off
- The Control Menu items differ depending on the disc.
- The Control Menu icon indicator lights up in green when you select any item except "OFF" ("REPEAT" only).
- The "ANGLE" indicator lights up in green only when multiple angles are recorded on the disc.

System setup item list

When you press DVD SETUP, the following settings are displayed.

The default settings are underlined.

LANGUAGE SETUP (page 29)

OSD	Select the language you want to use from the displayed language list.
DVD MENU	Select the language you want to use from the displayed language list.
AUDIO	Select the language you want to use from the displayed language list.
SUBTITLE	Select the language you want to use from the displayed language list.

SCREEN SETUP (page 31)

TV TYPE	16:9 4:3 LETTER BOX 4:3 PAN SCAN
SCREEN SAVER	<u>ON</u> OFF
BACKGROUND	<u>JACKET PICTURE</u> GRAPHICS BLUE BLACK
COMPONENT OUT ^{*1}	<u>INTERLACE</u> PROGRESSIVE

CUSTOM SETUP (pages 29, 31, 33)

VCD COLOR SYSTEM ^{*2}	<u>AUTO</u> PAL NTSC
PARENTAL CONTROL→	
TRACK SELECTION	<u>OFF</u> AUTO
AUDIO DRC	OFF <u>STANDARD</u> MAX
DATA CD PRIORITY	<u>MP3</u> JPEG
JPEG DATE	<u>MM/DD/YYYY</u> YYYY/MM/DD DD/MM/YYYY YYYY/DD/MM

SPEAKER SETUP (page 36)

SIZE ^{*3}	FRONT	<u>YES</u>
	CENTER	<u>YES</u> NONE
	SURROUND	<u>YES</u> NONE
	SUBWOOFER	<u>NONE</u> YES
DISTANCE ^{*3}	FRONT	<u>3.0m</u> (1.0 m – 7.0 m)
	CENTER	<u>3.0m</u> (1.0 m – 7.0 m)
	SURROUND	<u>3.0m</u> (1.0 m – 7.0 m)
LEVEL ^{*3}	CENTER	<u>0 dB</u> (–6 dB – +6 dB)
	SURROUND- LEFT	<u>0 dB</u> (–6 dB – +6 dB)
	SURROUND- RIGHT	<u>0 dB</u> (–6 dB – +6 dB)
	SUBWOOFER	<u>0 dB</u> (–10 dB – +10 dB)
BALANCE	FRONT ^{*3}	--- (<u>CENTER</u>) (6 steps left or right)
TEST	<u>OFF</u>	
TONE ^{*3}	<u>ON</u>	
LFE ^{*4}	<u>ON</u> OFF	

RESET

YES
NO

*1 Except for Euro, UK, Russian models

*2 Except for Latin American and Euro/UK, Russian models

*3 BMZ-K7D only

*4 BMZ-K5D only

Tuner

Presetting radio stations

You can preset up to 32 stations. You can then tune in any of those stations simply by selecting the corresponding preset number.

Automatic tuning preset

You can automatically tune in all of the stations that can be received in your area and then store the radio frequency of the desired stations.

- 1 Press **TUNER/BAND** repeatedly to select “FM” or “AM.”
- 2 Press and hold **TUNING -/◀◀** or **TUNING +/▶▶** (or press and hold **◀◀/▶▶** or **▶▶/▶▶** on the unit) until the frequency indication starts to change, then release it.

The frequency changes as the system scans for a station. Scanning stops automatically when a station is tuned in. At that time, “TUNED” and **((Ⓞ))** (for a FM stereo program) appear.

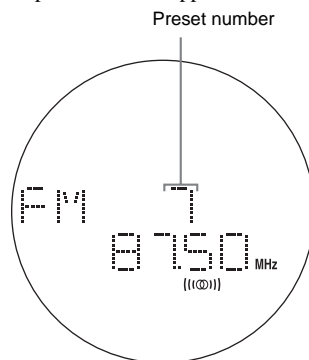


If “TUNED” does not appear and the scanning does not stop.

Set the frequency of the desired radio station as described in steps 1 through 3 of “Manual tuning preset.”

3 Press ENTER or ■.

A preset number appears.



- 4 Repeat steps 1 through 3 to store other stations.

Manual tuning preset

You can manually tune in and store the radio frequency of the desired stations.

- 1 Press **TUNER/BAND** repeatedly to select “FM” or “AM.”
- 2 Press **TUNING -/◀◀** or **TUNING +/▶▶** repeatedly to tune in the desired station.
- 3 Press **ENTER** or **■**.
A preset number appears.
- 4 Repeat steps 1 through 3 to store other stations.

Other Operation

To	Do this
Tune in a station with a weak signal	Follow the procedure described in “Manual tuning preset.”

To cancel a preset station

- 1 Tune in the preset station you want to cancel, then press **CLEAR** or **■**.
- 2 Within 6 seconds, press **ENTER**.

Tips

- On the unit, press **■**. Within 6 seconds, press **■** or **ENTER**.
- Preset station numbers are automatically sorted when a preset station is canceled.

To improve tuner reception

When tuner reception is poor, set DVD player power off by DVD power manage function. DVD power is factory set to on.

- 1 Press **I/⏻** to turn off the system.
- 2 Press **I/⏻** while holding **■**.
About 5 seconds later, turn on the system and “DVD PWR OFF” appears.

To set DVD power on

Repeat the procedure above and “DVD PWR ON” appears.

Note

When “DVD PWR OFF” is selected, DVD access time is increased.

To change the AM tuning interval (Singaporean, Oceanian, Korean, Latin American models only)

The AM tuning interval is factory-preset to 9 kHz (or 10 kHz for some areas). To change the AM tuning interval, tune in any AM station first, press and hold TUNER/BAND on the unit, and then press **I/⏻** on the unit. When you change the interval, all the FM and AM preset stations are erased. To reset the interval, repeat the same procedure. Use buttons on the unit.

Tips

- The preset stations are retained for about a day even if you disconnect the power cord or if a power failure occurs.
- To improve the reception, adjust the supplied antennas or connect an external antenna.

Listening to the radio

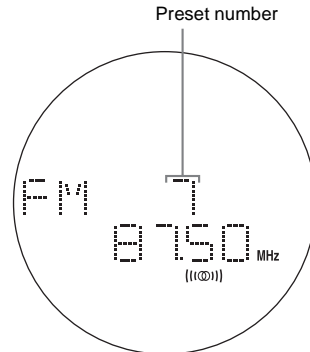
You can listen to a radio station either by selecting a preset station, or by manually tuning in the station.

Listening to a preset station

— Preset Tuning

Preset radio stations in the tuner’s memory first (see “Presetting radio stations” on page 40).

- 1 Press **TUNER/BAND** repeatedly to select “FM” or “AM.”
- 2 Press **PRESET -/I◀◀** or **PRESET +/▶▶** (or the **MULTI JOG** dial or **PLAY** on the unit) repeatedly to select the desired preset station.



Tip

You can also use the number buttons in step 2.

Example:

To choose the preset number 15, press **>10** and **1**, then **5**.

To choose the preset number 30, press **>10** and **3**, then **10/0**.

Listening to a non-preset radio station

— Manual Tuning

- 1 Press TUNER/BAND repeatedly to select “FM” or “AM.”**
- 2 Press TUNING -/◀◀ or TUNING +/▶▶ repeatedly to tune in the desired station.**

Tips

- To improve broadcast reception, adjust the supplied antennas, or connect a commercially available external antenna.
- When a FM stereo program has static noise, press FM MODE repeatedly until “MONO” appears. There will be no stereo effect, but the reception will improve.
- Press and hold TUNING -/◀◀ or TUNING +/▶▶. The frequency indication changes and scanning stops when the system tunes in a station (Automatic Tuning).
- To record the radio programs, use manual recording (page 46) or Timer Recording (page 59).

Notes

- The OSD does not appear on the screen except for DVD function.
- When “TUNER” is selected as the current function and FUNCTION is pressed to select “DVD” during “DVD PWR OFF,” it may take some time to switch the function.

RDS features (BMZ-K7D: Euro/ UK models only)

RDS (Radio Data System) is a broadcasting service which allows FM stations to send additional information along with the regular radio signal. The additional information is derived from the features of RDS described below.

Program Service station name (PS)

The station name is displayed automatically when an RDS station is tuned in.

Program Type (PTY)

This is an identification to specify the program being broadcast currently.

Press RDS on the unit repeatedly to display a program type when tuning in to a RDS station. The program type will be displayed for 6 seconds.

If no PTY data or undefined PTY data is being transmitted, “NO PTY” will be displayed.

The following PTYs can be received on the unit:

- * TRAFFIC, NEWS, AFFAIRS, INFO, SPORT, EDUCATE, DRAMA, CULTURE, SCIENCE, VARIED, POP M, ROCK M, EASY M (easy listening music), LIGHT M (light classical music), CLASSICS, OTHER M (other music), WEATHER, FINANCE, CHILDREN (children’s program), SOCIAL (social affairs), RELIGION, PHONE IN, TRAVEL, LEISURE, JAZZ, COUNTRY (country music), NATION M (national music), OLDIES, FOLK M, DOCUMENT, TEST (alarm test), ALARM.

* The unit identifies TRAFFIC with one of the PTYs.

Radio Text (RT)

You can show text information such as the title of a song on the display.

Press RDS on the unit repeatedly when tuning in to an RDS station.

If the tuned station is not transmitting text information, “NO RT” will be displayed.

To return to the regular display

Press RDS on the unit again.

Auto Preset

- 1 Press TUNER/BAND repeatedly to select "FM" or "AM."
- 2 Press and hold RDS on the unit. "PUSH SET" appears.
- 3 Press ENTER.

You can automatically preset the stations that can be received in your area.

PTY Search

The unit can search for a station broadcasting your desired PTY easily. To do so, you need to preset every available station in advance since the unit searches only the preset stations. (See "Auto Preset.")

- 1 Press RDS on the unit repeatedly until the program type of the currently tuned station is displayed.
- 2 Press ◀◀ or ▶▶ (or the MULTI JOG dial on the unit) to select a desired program type and then press ENTER.
The search begins, stops when a suitable station is detected, and the unit tunes it in. "NOT FOUND" is displayed if a suitable station is not found, and the unit returns to the previous station.
If there is no button input for 6 seconds in step 2, the search is not activated.

Tip

If TRAFFIC is selected, the unit searches for a station which regularly broadcasts traffic announcements. Therefore, a detected station may not be currently broadcasting traffic announcements. You will, however, be able to hear the announcements in a while.

INFO Search

The unit can leap to a station which has just started broadcasting your desired PTY. In INFO Search, the unit is in standby mode until the desired PTY begins. As soon as it begins, the unit "leaps to" another station with the PTY and returns to the previously tuned station when it ends. INFO Search makes the function above possible with the help of INFO which gives the receivers a cross reference to other stations. You need to preset every available station in advance since the unit searches only the preset stations. (See "Auto Preset.")

- 1 Press RDS on the unit repeatedly so that "INFO PTY" is displayed.
- 2 Press ◀◀ or ▶▶ (or the MULTI JOG dial on the unit) to select a desired program type and then press ENTER on the unit or the remote.
"INFO ON" is displayed for 2 seconds and then the unit enters the standby mode while "RDS" flashes. When the unit leaps to another station, "RDS" flashes rapidly. If there is no button input for 6 seconds in step 2, the search is not activated.

To stay in the "leaped to" station
Press ■ on the remote. The standby mode for INFO Search is also canceled.

To return to the previously tuned station from the "leaped to" station
Press RDS on the unit repeatedly so that "INFO PTY" and the specified PTY are displayed alternately. Then press ENTER.

To cancel the standby mode for INFO search
Press RDS on the unit repeatedly so that "INFO PTY" and the specified PTY are displayed alternately. Then press ■.

Tip

The standby mode for INFO Search will not be cancelled even if the unit is turned off.

Note on PTY & INFO Search
PTY & INFO Search do not function under the following conditions:

- FM stations are not preset.
- The signals of the station broadcasting the desired PTY are weak.
- FM RDS stations cannot be received.

Clock-time (CT)

You can automatically set and update the clock on the hour every hour just by tuning in an RDS station since RDS stations transmit clock signals.

- 1 Press DISPLAY on the remote to display the clock.
- 2 Press RDS on the unit repeatedly to select "CT ON."
- 3 Tune in an RDS station.

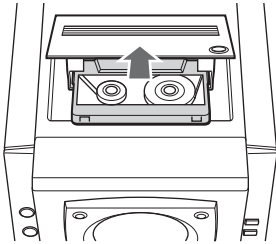
To deactivate CT function (if the clock is set wrongly due to an incorrect clock signal), repeat step 2 to select "CT OFF."

Note on RDS features

The RDS features described above may not function correctly if the RDS transmission data from the station contains too much interference or the reception signal is too weak.

Loading a tape

- 1 Press **▲** PUSH EJECT to open the cassette holder.
- 2 Insert the tape.
Insert with the exposed side down, and press **▲** PUSH EJECT to close the cassette holder.



Playing a tape

You can use TYPE I (normal) tape.

- 1 Load a tape.
- 2 Press **FUNCTION** repeatedly to select the tape function.
- 3 Select a reverse mode.
See “To select a reverse mode.”
- 4 Press **◀▶** to start play.

Reading the indicators

▶ and TAPE FW: The front side is being played (forward).

◀ and TAPE RV: The back side is being played (reverse).

To select a reverse mode

- 1 Press **MODE** on the main unit repeatedly until “REV MODE” is displayed.
- 2 Within 6 seconds, press **ENTER**.
- 3 Turn **MULTI JOG** to select the reverse mode.

The mode changes as follows;

“REV OFF”: Plays one side only.

“REV □ ;”: Plays the front side and then the rear side once.

“REV { □ ;”: Plays both sides repeatedly.

Other operations

To	Do this
Stop play	Press ■ .
Pause	Press ⏸ . Press ⏸ (or ◀▶) to resume play.
Fast-forward or rewind	Press ⏩ or ⏮ on the remote or ⏩/⏮ or ⏭/⏪ on the unit.
Remove a tape	Press ▲ PUSH EJECT on the unit.
Change the playback side	Press ◀▶ in playback mode.

To reset the tape counter

Press **■** in stop mode, and the tape counter in the display is reset to “0000.”

Opening and closing the cassette holder will also reset the tape counter.

Recording your favorite CD tracks on a tape

— CD-TAPE Synchro Recording

You can record a whole CD on a tape. You can use TYPE I (normal) tape. The recording level is adjusted automatically.

- 1 Load a recordable tape into the deck.**
- 2 Press FUNCTION repeatedly to switch the function to DVD and load a disc you want to record.**
- 3 Press CD SYNC on the unit.**
Stands by for recording.
“REC” flashes.
- 4 Press MODE on the unit repeatedly to select “REV MODE,” then press ENTER.**
- 5 Turn the MULTI JOG dial on the unit to select REV OFF to record on one side. Select REV { □ } (or REV □) to record on both sides.**
- 6 Press ENTER.**
- 7 Press REC PAUSE/START on the unit.**
Recording starts.

To stop recording

Press ■.

To record a disc by specifying track order

You can record only your favorite CD tracks using Program Play. Between steps 2 and 3, perform steps 2 to 6 of “Creating your own program” (page 23).

Notes

- CD Synchro Recording is not available with DVDs and JPEG files.
- You cannot listen to other sources while recording.
- When you press CD SYNC in step 3, the surround effect may automatically change (see “Selecting the surround effect” on page 55).

Recording on a tape manually

— Manual Recording

You can record just the portions you like from a CD, USB (BMZ-K7D only) or radio program on a tape.

You can also record from connected components (see “Hooking up optional components” on page 65).

- 1 Load a recordable tape into the deck.**
- 2 Press FUNCTION to select the desired source to record, then start playing the desired source to record.**
 - DVD: To record from this system’s DVD/CD player.
 - USB (BMZ-K7D only): To record from a connected personal computer.
 - Tuner: To record from this system’s tuner.
 - VIDEO/MD: To record from the connected MD or VCR to LINE IN or MD (AUX) IN jacks.
- 3 Press REC PAUSE/START on the unit.**
Stands by for recording.
“REC” flashes.
- 4 Press MODE on the unit repeatedly to select “REV MODE,” then press ENTER.**
- 5 Turn the MULTI JOG dial on the unit to select REV OFF to record on one side. Select REV { □ } (or REV □) to record on both sides.**
- 6 Press REC PAUSE/START on the unit.**
Recording starts.

To stop recording

Press ■.

Notes

- You cannot listen to other sources while recording.
- When you press REC PAUSE/START in step 3, the surround effect may automatically change (see “Selecting the surround effect” on page 55).

Tips

- If you want to record from the reverse side, press FUNCTION repeatedly to select TAPE function. And set the tape direction to REVERSE, then start recording.
- When you record on both sides, be sure to start from the FWD side. If you start from the reverse side, recording stops at the end of the reverse side.
- For recording from the tuner:
If noise is heard while recording from the tuner, move the respective antenna to reduce the noise.
- When there is severe noise, set “DVD PWR OFF” by DVD power manage function (page 41).

CONNECTING A PERSONAL COMPUTER (BMZ-K7D only)

Installing the Software on your PC

Before Starting the Installation

Before installing the software on the supplied BMZ USB Driver CD, check to be sure that your system meets the following system requirements.

PC	IBM PC/AT compatible
	Free hard disk space: At least 10 MB
	USB port
	CD-ROM drive
	Recommended CPU: MMX Technology Pentium processor, 266 MHz or greater
Operating System	Windows 98 Second Edition, Windows 2000 Professional, Windows Millennium Edition, or Windows XP Professional/Home Edition

The software is not guaranteed to function in the following system environments.

- Operating systems other than Windows, including the Macintosh
- Versions of Windows XP other than Professional or Home Edition
- Version of Windows 2000 other than Professional
- Versions of Windows 98 other than Second Edition
- Windows NT, Windows 95
- Systems in which a preinstalled Windows 3.1/95/98 operating system has been upgraded
- Connecting by way of the USB hub.

Notes

- The software is not guaranteed to function on all systems that meet the system requirements.
- This USB Driver installer and Winamp3 can be used only with an English-language system. If used in a different language environment, it may be not correctly displayed.

- IBM and PC/AT are registered trademarks of International Business Machines Corporation in the US.
- MMX and Pentium are trademarks or registered trademarks of Intel Corporation.
- Microsoft and Windows are trademarks of the US Microsoft Corporation registered in the US and other countries.
- The USB port of this unit is joint development of Sony Corporation and Micronas Semiconductor Holding AG.
- Other system names and product names mentioned herein are generally registered trademarks or trademarks of their respective owners. However, the™ and® marks are not used in this Installation Guide.

Tip

When you connect a personal computer, see also “Set up Manual” in the supplied CD-ROM.

Installing the USB Driver

First, install the USB driver. You must log in to Windows XP or Windows 2000 as a user with Administrator privileges in order to install the software.

- 1 Turn on the PC and start Windows.**
- 2 Turn on the unit.**
- 3 Insert the supplied BMZ USB Driver CD into the CD-ROM drive of your PC.**

The installer starts automatically, and the Installation Guide screen appears.

If the installer does not start automatically, locate the CD-ROM drive of your PC in the My Computer folder, and double click AIWAMENU on the CD-ROM.

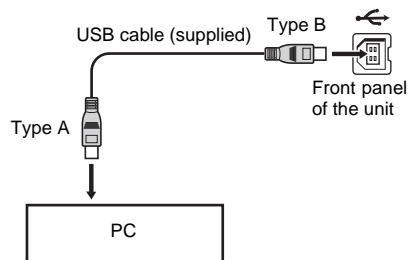
- 4 Click “BMZ USB Driver.”**
- 5 Select a display language to be used by the installer, and click “OK.”**

The explanations of step 5 and following assume that you have chosen English as the display language.

- 6 Read the license agreement, and click “I Agree.”**

A message appears asking you to connect a USB cable.

- 7 Connect this unit to the PC with a USB cable.**



- 8 Press FUNCTION repeatedly until “USB” appears in the display window of this unit.**

9 Complete the installation by following the instructions on the screen.

If your operating system is Windows XP, a message may appear to the effect that the software being installed has not been certified for the Windows logo mark. This message can be safely ignored. Click “Continue” and continue with the installation.

10 When a message appears to inform you that the installation is complete, click “Close.”

You are returned to the Installation Guide initial screen.

If your operating system is Windows 98 or Windows Me, restart your PC at this point. Depending on your computer, an operating system installation CD-ROM may be needed. In that case, insert it as instructed.

To check the installation of the USB driver

If your operating system is Windows 98 Second Edition or Windows Millennium Edition

- 1 Click “Start” > “Settings” > “Control Panel.”
- 2 In the “Control Panel” window, double click “System.”
- 3 In the “System Properties” window, double click “Device Manager.”
- 4 Check that the following devices are displayed under the following headings.
 - “Sound, video and game controllers” > “USB Audio Device”
 - “Universal Serial Bus controllers” > “AIWA BMZ USB-Device”

If these devices do not appear, the USB driver has not been recognized. Reinstall the USB driver.

If your operating system is Windows 2000 Professional or Windows XP Professional/Home Edition

- 1 Click “Start” > “Settings” > “Control Panel.”
- 2 In the “Control Panel” window, double click “System.”
- 3 In the “System Properties” window, click the “Hardware” tab.
- 4 Click “Device Manager” to open the “Device Manager” window.
- 5 Select “View” > “Devices by type.”
- 6 Check that the following devices are displayed under the following headings.
 - “Sound, video and game controllers” > “USB Audio Device”
 - “Universal Serial Bus controllers” > “AIWA BMZ USB-Device”

If these devices do not appear, the USB driver has not been recognized. Reinstall the USB driver.

Installing Winamp3

After you finish installing the USB driver, install Winamp3.

- 1 Click “Winamp3” on the Installation Guide screen.**
- 2 Read the license agreement, and click “I Agree.”**
- 3 Complete the installation by following the instructions on the screen.**

If the “Winamp Setup: User information” screen appears, click “Later.”

When the installation finishes, the message “Winamp Setup: Winamp successfully installed” appears.
- 4 Click “Run Winamp.”**

Winamp starts.

Note

Winamp3 is free software. Any version of Winamp other than Version 3.0 is not guaranteed to function with this unit. Even if you already have Winamp installed on your PC, it is recommended that you install it again from the supplied CD-ROM.

Installing the Winamp3 BMZ Plug-in

Finally, after you finish installing Winamp3, install the Winamp3 Plug-in.

- 1 Click “Winamp3 BMZ Plug-in” on the Installation Guide screen.**
- 2 Select a display language to be used by the installer, and click “OK.”**

The installer will use that language in the following steps.
- 3 Read the license agreement, and click “I Agree.”**
- 4 When a message appears to inform you that the installation has finished, click “Close.”**









You are returned to the Installation Guide screen. Click “EXIT” and remove the CD-ROM from the CD-ROM drive of your PC.

To hear the sound of a file which is played back with a personal computer

This unit can output the sound of an audio file which is played back by Winamp3 on your computer. Make sure to connect the computer to the USB terminal on the unit first.

- 1 Press FUNCTION repeatedly to display “USB.”**
- 2 Open Winamp3 on your computer.**
- 3 Operate your computer to play back audio file stored in it.**
- 4 Adjust the volume level with Winamp3 on your computer.**

Basic icons of Winamp3

Operation	Icon
Starts playback	
Pauses playback	
Stops playback	
Selects a track	 or 
Shuffle play	
Repeat play	
Adjust the volume	

When playing back with Winamp, it is possible to operate both with the main unit or remote. When you operate with either the main unit or the remote, see “Set up Manual” in the supplied CD-ROM.

To change play list on the unit
Press ALBUM/PLAY LIST – or + on the unit during playback.

Note
PLAYLIST EDITOR does not necessarily show the same play list that is currently selected by Winamp3.

To change the display on the unit
It is possible to display the current status on the display window of this unit.

Press DISPLAY on the remote repeatedly.
The display changes in the following order:

- Elapsed playing time of the current track
- Remaining time of the current track
- File name
- ID3_Track/ ID3_Artist*
- PLAYLIST name
- Clock display

* ID3_Track and ID3_Artist are not displayed if they are not registered.

Notes about Winamp3

- If sound is not generated, adjust the volume level in Winamp3. However, note that, do not adjust the “EQUALIZER” settings in Winamp3, as it may cause noise.
- Do not change the skin. It may not operate correctly.
- Winamp3 is freeware. We shall have no responsibility for any loss whatsoever after installing.
- The response rate differs depending on the performance of the PC, operating environment and the file being used.
- Do not disconnect the USB cable during playback.

To uninstall the software

Follow the procedure below to remove the software from your PC.

- 1** In the Control Panel, double-click “Add/Remove Programs.”
- 2** Click “Change or Remove Programs” (or the “Install/Uninstall” tab) to show the list of programs that can be removed automatically.
- 3** Click the program you want to remove.
- 4** Click “Change/Remove” (or “Add/Remove”).
- 5** Follow the instructions that appear on the screen to remove the program selected in step 3.

Frequently Asked Questions for USB function

Q. Compared to the volume of the unit CD player, the volume of the PC connected by USB is too small.

A. Adjust the volume setting on the PC. Open “Multimedia” or “Sound and Multimedia” on the Control Panel, and adjust “Sound volume” and “WAVE balance” in the Audio tab.

Q. Winamp starts, but the display on the unit shows only “USB.”

A. The Winamp3 BMZ Plug-in is not installed. Install the plugin.

Q. Winamp does not respond when I press buttons like ► and ■ on the unit.

A. The BMZ USB Driver may not be installed, or the Winamp3 BMZ Plug-in may not be installed, or another plug-in may be interfering with the BMZ Plug-in. Click the Add and Delete Applications icon in the Control Panel to delete the BMZ USB Driver and Winamp3, and install them again.

Q. The unit does not play sound from the PC.

A. The PC may not be connected with a USB cable, or FUNCTION may not be set to USB. Or, the PC speakers may be muted, or audio output may be set to a different device. Check under “Multimedia” or “Sound and Multimedia” on the Control Panel.

Q. I can’t install the USB driver in Windows 98.

A. The USB driver supports only Windows XP/2000/Me/98 Second Edition. It cannot be installed on Windows 98 except for Windows 98 Second Edition.

Q. When Winamp is playing, the sound fades out from one song and into the next song.

A. The Cross Fade button in Winamp is on. Turn the button off.

Q. Winamp3 becomes unplayable suddenly.

A. Install Microsoft DirectX[®] from the supplied CD-ROM.

Q. PLAYLIST EDITOR does not necessarily show the same play list that is currently selected by Winamp3.

A. During playback, the correct play list is shown.

Q. Winamp3 does not respond when I change the setting of the USB port.

A. Install the software in the supplied BMZ USB Driver CD again.

Q. PLAY LIST becomes unplayable suddenly.

A. Right-click the PLAY LIST EDITOR window.

Q. The LEVEL meter of this unit does not respond or playback does not stop Winamp3 is closed during CD playback by the CD-ROM drive on a PC.

A. The PC's CD-ROM drive may sometimes be incapable of performing intended operations. In this case, restart the unit and Winamp3. And if you playback an audio-CD, we recommend to use the disc player of this unit.

Q. How can I get Winamp information?

A. Refer to web site of Winamp (<http://www.winamp.com>).

Sound Adjustment

Adjusting the sound



You can reinforce the bass and create a more powerful sound.

BASS

Emphasizes low frequencies for a powerful sound.

Turn the BASS dial on the unit to adjust from -4 to +4.

Note

If the sound becomes distorted with higher levels of bass, turn the bass level down.

Tips

- You cannot adjust the Bass setting when i-Bass is activated.
- You can also adjust the sound by using the MULTI JOG dial and TREBLE/MIDDLE dial on the unit (page 14).

TREBLE/MIDDLE

TREBLE enhances high frequency for sound clarity and MIDDLE enhances mid frequency for presence.

Turn the TREBLE/MIDDLE dial on the unit to adjust from -4 to +4.

Tip

You can also adjust BASS, MIDDLE, and TREBLE by the AMP MENU button. Press AMP MENU repeatedly to select BASS, MIDDLE or TREBLE.

Press ◀◀ or ▶▶ to set the level you want, and then press ENTER.

i-Bass

Produces a rich and clear low-frequency sound besides BASS effect.

- 1 Press i-Bass on the unit.**
“I-BASS ON” is displayed.
- 2 Turn the BASS dial on the unit to adjust i-Bass from +1 to +4 and MAX.**

Select an i-Bass frequency

- 1 Press i-Bass on the unit to turn i-Bass on.**
- 2 Press MODE on the unit repeatedly until “FREQ” is displayed and then press ENTER.**
- 3 Within 6 seconds, turn the MULTI JOG dial on the unit to select one of the three frequency ranges and then press ENTER.**
 - FREQ 1: Low range
 - FREQ 2: Mid range
 - FREQ 3: High rangeAfter step3, adjust the i-Bass level by turning BASS if needed.

To cancel i-Bass

Press i-Bass on the unit to select “I-BASS OFF.”

Graphic equalizer

Selects a sound equalization curve to match the music type.

Press AMP MENU repeatedly to select GEQ MENU.

Then press ◀◀ or ▶▶ to select the setting you want.

There are seven kinds of GEQ MENU:

HEAVY, VOCAL, SALSA, TECHNO, HIP HOP, USER and GEQ OFF.

Tip

USER is a customized curve (see “Setting a curve manually”).

To cancel equalization, select “GEQ OFF.”

Setting a curve manually

- 1 Turn TREBLE/MIDDLE and BASS on the unit to adjust the sound level.**
On the remote, press AMP MENU repeatedly to select “BASS,” “MIDDLE” and “TREBLE,” and then press ◀◀ or ▶▶ to adjust the level.

- 2 Hold down ENTER for 2 seconds.**

- 3 Within 4 seconds, press ENTER.**

Notes

- You cannot set the equalization curve when “I-BASS ON” is selected.
- Licensed by BBE Sound, Inc. under USP4638258, 5510752 and 5736897.

Selecting the surround effect

Press **SOUND FIELD** to display the current sound field, then press **SOUND FIELD** repeatedly to select the desired effect.

■ For BMZ-K7D

When function DVD and the headphones are not connected:

SBS MULTI → A.F.D. AUTO →
DOLBY PL → PLII MOVIE →
PLII MUSIC → LINK → LINK SURR →
2CH SURR → 2CH ST

When function except for DVD and the headphones are not connected:

LINK → LINK SURR → 2CH SURR →
2CH ST

When function DVD and the headphones are connected:

2CH HP → SURROUND HP →
VIRTUAL HP

When function except for DVD and the headphones are connected:

2CH HP → SURROUND HP

When function DVD is in standby for recording or is recording, and the pitch of the music is adjusted with **KEY CONTROL #/b**, Karaoke mode is selected, and a microphone is connected:

LINK → LINK SURR → 2CH SURR →
2CH ST

■ For BMZ-K5D

When function DVD:

2CH ST → 2CH SURR → VIRTUAL

When function except for DVD:

2CH ST → 2CH SURR

When function DVD is in standby for recording or is recording:

2CH ST only

When function DVD, and the pitch of the music is adjusted with **KEY CONTROL #/b**, Karaoke mode is selected, and a microphone is connected:

2CH ST → 2CH SURR

- A.F.D. AUTO: Auto Format Direct Auto
- PRO LOGIC: Performs Pro Logic decoding. The source recorded in 2 channels is decoded into 4.1 channels.
- PL II MUSIC: Performs the Pro Logic II music mode decoding. This setting is ideal for normal stereo sources such as CDs.
- PL II MOVIE: Performs Pro Logic II movie mode decoding. This setting is ideal for movies encoded in Dolby Surround. In addition, this mode can reproduce sound in 5.1 channels when watching videos of overdubbed or old movies.
- SBS MULTI: Sound Broad System Multi mode. This mode lets you enjoy audio playback of all types of discs from multiple speakers. Select A.F.D. AUTO when you enjoy audio playback of DTS-CD from multiple speakers.
- LINK: Reproduces the same sound with different output levels.
- SURR: Surround
- ST: Stereo
- HP: Headphone

Singing along: Karaoke



You can sing along by turning down the singer's voice. You need to connect an optional microphone. Use buttons on the unit for the operation.

- 1 Turn MIC LEVEL to MIN to turn down the microphone control level.**
- 2 Connect an optional microphone to MIC.**
- 3 Press KARAOKE on the remote repeatedly to obtain the karaoke effect you desire.**
Each time you press the button, the display changes cyclically as follows:
VF → MPX L*¹ →
MPX R*¹ → VF/MPX OFF*²
To sing karaoke of multiplex CD, select "MPX R*¹" or "MPX L*¹."
- 4 Start playing the music.**
- 5 Adjust the microphone volume by turning MIC LEVEL.**

Other operations

To	Do this
Use VIDEO CDs or DVDs	Turn on your TV and switch it to the appropriate video input.
Cancel karaoke mode	Turn MIC LEVEL to MIN and disconnect the microphone from MIC, then press KARAOKE on the remote repeatedly until "🎤" disappears.
Adjust the microphone echo	Press ECHO on the remote repeatedly to select the echo effect. To cancel the echoing, select "ECHO OFF."
Adjust the key	Press KEY CONTROL # or ♭ on the remote to suit your vocal range. You can adjust the key higher or lower in 13 halftone steps (♭6 – #6).

*¹ VIDEO CD/CD/MP3 only

*² KARAOKE mode is canceled.

Notes

- The instrumental sound may be reduced as well as the singer's voice when the sound is recorded in monaural.
- The singer's voice may not be reduced when:
 - only a few instruments are playing.
 - a duet is being played.
 - the source has strong echoes or chorus.
 - the singer's voice deviates from the center.
 - the voice on the source is singing in high soprano or tenor.
- If you connect the microphone while playing a 5.1 channel, the sound switches to 2 channel.
- If the disc changes, karaoke mode is canceled.
- With some songs, vocals may not be canceled when you select "VF."

Tip

When you set VF mode, 🎤 appears. When you set MPXL, MPXR, 🎤 blinks.

Mixing and recording sounds

You can "mix" sounds by playing one of the components and singing or speaking into a microphone (not supplied).

The mixed sound can be recorded on a tape.

- 1 Prepare the source you want to mix. Then, load a recordable tape in the deck.**
- 2 Press the function button of the source you want to record (e.g., DVD: Press FUNCTION repeatedly to switch the function to DVD.), then playing the desired source.**
- 3 Press REC PAUSE/START on the unit.**
Stands by for recording.
"REC" flashes.
- 4 Turn the MULTI JOG dial on the unit to select REV OFF to record on one side. Select REV { } (or REV []) to record on both sides.**
- 5 Press REC PAUSE/START on the unit, and then start singing, speaking.**
Recording starts.

To stop recording

Press ■.

Tips

- If acoustic feedback (howling) occurs, move the microphone away from the speakers or change the direction of the microphone.
- If you want to record your voice through the microphone only, you can do so by selecting the DVD function and not playing a disc.
- When high level sound signals are input, the system automatically adjusts the recording level to prevent distortion of the recorded sound signal (Auto Level Control function).

Falling asleep to music

— Sleep Timer

You can set the system to turn off after a certain time, so that you can fall asleep to music.

- 1 Press **MODE** repeatedly on the unit to select “SLEEP,” and then press **ENTER**.
- 2 Turn the **MULTI JOG** dial on the unit to select the setting you want, and then press **ENTER**.

The timer duration changes as follows:

OFF ↔ AUTO ↔ 90 ↔ 80 ↔ 70...10

If you set to “AUTO,” the unit turns off automatically when the current CD or tape finishes playback or elapsed 100 minutes.

To check the remaining time until the unit turns off

Press **MODE** repeatedly on the unit to select “SLEEP,” and then press **ENTER**. The remaining time is displayed for 6 seconds.

To cancel the sleep timer

Press **MODE** repeatedly on the unit to select “SLEEP,” and then press **ENTER**. Turn the **MULTI JOG** dial on the unit to select “OFF,” and then press **ENTER**.

Note

Do not set to “AUTO” during Synchro Recording on a tape.

Tip

You can use the Sleep Timer, even if you have not set the clock.

Waking up to music

— Daily Timer

You can wake up to music at a preset time. Make sure you have set the clock (see “Setting the clock” on page 13).

- 1 **Prepare the sound source you want to play.**
 - DVD: Load a disc. To start from a specific track, make a program (see “Creating your own program” on page 23).
 - Tape: Load a tape.
 - Tuner: Tune in the preset radio station (see “Listening to the radio” on page 41).
- 2 **Press VOL +/- (or turn VOLUME control on the unit) to adjust the volume.**
- 3 **Press CLOCK/TIMER SET.**
“DAILY” appears.
- 4 **Press ENTER.**
“ON” appears and the hour indication flashes.
- 5 **Set the time to start playing.**
Press **◀◀** or **▶▶** repeatedly to set the hour, then press **ENTER**.
The minute indication flashes.
Press **◀◀** or **▶▶** repeatedly to set the minute, then press **ENTER**.
- 6 **Set the time to stop playing following the same procedure as step 5.**
- 7 **Press ◀◀ or ▶▶ repeatedly until the desired sound source appears.**
Each time you press the button, the display changes cyclically as follows:

→ DVD ↔ TAPE ←
 → TUNER ←
- 8 **Press ENTER.**
The type of timer (“DAILY”), the start time, the stop time, and the sound source appear in turn, before the original display returns.
- 9 **Press I/⏻ to turn off the system.**

Other operations

To	Do this
Check the setting	Press CLOCK/TIMER SELECT repeatedly until "DAILY" appears.
Change the setting	Start over from step 1.
Cancel the timer	Press CLOCK/TIMER SELECT repeatedly until "OFF" appears.

Notes

- You cannot activate the Daily Timer and Timer Recording at the same time.
- If you use the Daily Timer and the Sleep Timer at the same time, the Sleep Timer has priority.
- If the system is on at the preset time, the Daily Timer will not be activated.
- You cannot use the optional component connected to LINE IN or MD (AUX) jacks as the sound source for Daily Timer.

Tip

The system turns on 15 seconds before the preset time.

Timer Recording radio programs

You can record a radio station from a specified time.

To set the timer record, make sure you have set the clock (see "Setting the clock" on page 13).

- 1 Tune in the radio station (see "Listening to the radio" on page 41).**
- 2 Press CLOCK/TIMER SET.**
"DAILY" appears.
- 3 Press ◀◀ or ▶▶ repeatedly to select "REC," then press ENTER.**
"ON" appears. Then the hour indication flashes.
- 4 Set the time to start recording.**
Press ◀◀ or ▶▶ repeatedly to set the hour, then press ENTER.
The minute indication flashes.
Press ◀◀ or ▶▶ repeatedly to set the minute, then press ENTER.
- 5 Set the time to stop recording following the same procedure as step 4.**
The start time, the stop time, and "TUNER" appear in turn, before the original display returns.
- 6 Load a recordable tape into the deck.**
- 7 Press I/⏻ to turn off the system.**

Other operations

To	Do this
Check the setting	Press CLOCK/TIMER SELECT repeatedly until "REC" appears.
Change the setting	Start over from step 1.
Cancel the timer	Press CLOCK/TIMER SELECT repeatedly until "OFF" appears.

Notes

- You cannot activate the Daily Timer and Timer Recording at the same time.
- If you use the Timer Recording, and the Sleep Timer at the same time, the Sleep Timer has priority.

- If the system is on at the preset time, the Timer Recording will not be activated.
- The volume is reduced to minimum during recording.
- Do not operate the system from the time the system turns on until the recording starts (about 15 seconds before the preset time).
- Note that if the Timer Recording is set at the same time as the Daily Timer sound source is set to tape, the Timer Recording sound may be recorded onto the tape.

Display

Turning off the display

— ECO MODE

The demonstration display (display window and buttons lighting and flashing even when the system power is off) and the clock display can be turned off to minimize the amount of power consumed during standby (ECO MODE).

Press MODE on the unit when the unit is turned off.

Each press of the button changes the mode as follows;

ECO ON: Power economizing mode is activated.

When the unit turns off, everything on the display clears and only the red indicator above POWER lights to show that the power is being supplied.

ECO OFF: Power economizing mode is cancelled.

When the unit turns off, the clock display appears.

Initial mode is ECO OFF.

Tips

- The timer continues to operate in ECO MODE.
- I/⏻ indicator lights up even in ECO MODE.

— DEMO MODE

You can switch DEMO ON or OFF by pressing PLAYMODE when the unit is turned off.

Viewing information about the disc in the display

You can check the playing time and remaining time of the current track or that of the disc. When a DVD/CD-TEXT disc or a disc with MP3 audio tracks or JPEG image file is loaded, you can also check the information recorded on disc, such as the titles.

Checking the remaining time and titles (DVD/VIDEO CD/CD/MP3/JPEG)

Press DISPLAY during Normal Play.

Each time you press the button, the display changes cyclically as follows:

■ When playing a DVD

Elapsed playing time of the current title →
Remaining time of the current title →
Elapsed playing time of the current chapter →
Remaining time of the current chapter →
Title*1 → Clock display (for 6 seconds)

■ When playing a CD/VIDEO CD without PBC function.

Elapsed playing time of the current track →
Remaining time of the current track →
Elapsed playing time of the disc →
Remaining time of the disc → Track title*1 →
Clock display (for 6 seconds)

■ When playing a VIDEO CD with PBC (Ver.2.0)

Elapsed playing time on the current scene*2 →
Clock display (for 6 seconds)

■ When playing an MP3

Elapsed playing time of the current track →
Remaining time of the current track → Track
title^{*1*} → Album name^{*1} → Clock display (for
6 seconds)

■ When playing a JPEG

Current file number → File name^{*1} → Album
name^{*1} → Clock display (for 6 seconds)

^{*1} Only alphabetical letters and numbers can be
displayed. In addition, nothing is displayed for discs
without DVD/CD text and file/album name.

^{*2} This is not displayed during Shuffle Play or
Program Play and may not appear with still images.

^{*3} When you play back a track with an ID3 tag ver. 1,
the ID3 tag appears. The ID3 tag displays the track
title information.

Checking the total playing time and titles (DVD/VIDEO CD/CD/MP3/JPEG)

Press DISPLAY in stop mode.

Each time you press the button, the display
changes cyclically as follows:

■ When a DVD/VIDEO CD/CD/MP3/JPEG is in Normal Play mode

TOC display^{*1} or total album number of the
disc^{*2} or total track number of the current
album^{*3} or total title number of the disc (DVD
only) → Disc title^{*4} or volume label^{*5} or album
name^{*5} → Clock display (for 6 seconds)

^{*1} TOC = Table of Contents; Displays total number of
tracks on the disc and total playing time of the disc

^{*2} For discs with MP3 audio tracks or JPEG image
files in Normal Play or Shuffle Play mode

^{*3} For discs with MP3 audio tracks or JPEG image
files in Album Play or Album Shuffle Play mode

^{*4} For discs with DVD/CD text

^{*5} For discs with MP3 audio tracks or JPEG image
files, album titles or volume label may not be
displayed depending on the play mode

Depending on the disc, some DVD/CD-TEXT
information may not appear.

■ When a VIDEO CD/CD/MP3 is in Program Play mode

The total number of the program → Clock
display (for 6 seconds)

Note

Depending on the DVD, the disc information may not
be displayed.

Tip

You can check the playing time of the disc using the
Control Menu (see “Viewing information about the
disc in the on-screen display” on page 63).

Viewing information about the disc in the on-screen display

You can check the playing time and remaining time of the current title, chapter, or track, and the total playing time of the disc.

You can also check the DVD/CD text and file/album name recorded on the disc.

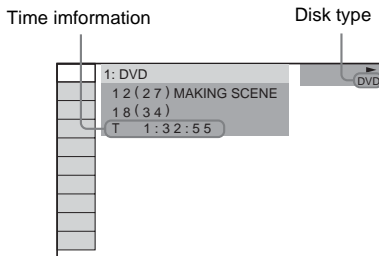
1 Press DVD DISPLAY during play.

The Control Menu appears.

2 Press \uparrow or \downarrow repeatedly to select "TIME," then press ENTER.

3 Press DISPLAY to change the time information.

The display and the kinds of time that you can change depend on the disc you are playing.



■ When playing a DVD

- T **:**:**
Elapsed playing time of the current title
- T_**:**:**
Remaining time of the current title
- C **:**:**
Elapsed playing time of the current chapter
- C_**:**:**
Remaining time of the current chapter
- **:**:**
Playing time of the menu or current title without chapter

■ When playing a VIDEO CD (with PBC function)

- **:**:**
Elapsed playing time of the current scene

■ When playing a VIDEO CD (without PBC function) or CD

- T **:**:**
Elapsed playing time of the current track
- T_**:**:**
Remaining time of the current track
- D **:**:**
Elapsed playing time of the current disc
- D_**:**:**
Remaining time of the current disc

■ When playing an MP3

- T **:**:**
Elapsed playing time of the current track
- T_**:**:**
Remaining time of the current track

To turn off the Control Menu
Press DVD DISPLAY repeatedly until the Control Menu disappears.

Notes

- Only alphabet letters and numbers can be displayed.
- Depending on the disc being played, the system can only display a limited number of characters. Also, depending on the disc, all text characters are not displayed.

Checking the date information

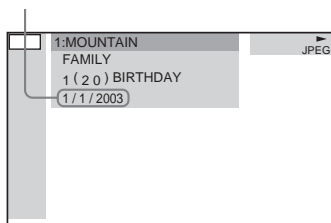
(JPEG only)

You can check the date information during play when the Exif* tag is recorded in the JPEG image data.

Press DVD DISPLAY during play.

The Control Menu appears.

Date information



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

Note

If there is no date information or data is damaged on the disc, the system cannot display the date information.

Tip

You can change the date information order by selecting "JPEG DATE" setting in "CUSTOM SETUP" (see page 30).

A MD (AUX) IN L/R jacks

Use audio cords (not supplied) to connect an optional analog component (MD deck or VCR, etc.) to these jacks. You can then record or listen to from the component through this system.

B MD (AUX) OUT L/R jacks

Use audio cords (not supplied) to connect an optional analog component (MD deck or VCR, etc.) to these jacks. You can then output audio to the component from this system.

C SUB WOOFER OUT jack (BMZ-K7D only)

Use an audio cord (not supplied) to connect an optional sub woofer to this jack. You can then output audio to the component from this system.

Notes

- The effects may be limited or noise may occur depending on the connected sub woofer or the type of music being played. For details, consult your nearest Aiwa dealer.
- When connecting a sub woofer, refer to the SPEAKER SETUP item in the operating instructions, and set the SUB WOOFER setting to “YES.”

D DIGITAL OUT jack (BMZ-K7D:Euro/UK, Russian models only, BMZ-K5D:all models)

Use a digital optical cable (square, not supplied) to connect the audio input of the optional digital component to this jack. You can then record digital audio from this system.

Note

Digital output is only possible from the following sources:

BMZ-K7D-CD

BMZ-K5D-DVD/CD

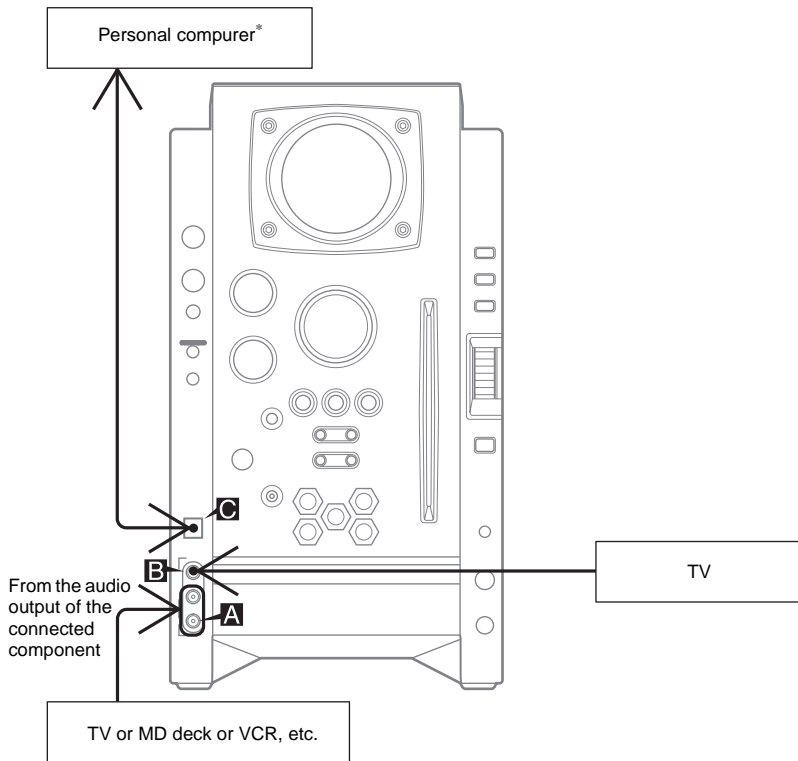
E COMPONENT VIDEO OUT jacks

Use an optional video cord to connect a TV. If your TV accept progressive format file signals, you must use this connection and set “COMPONENT OUT” to “PROGRESSIVE” in “Adjusting the TV screen” (page 31).

F S VIDEO OUT jack

Use an S video cord (not supplied) to connect an optional TV to this jack. You can enjoy higher quality video images.

— Front panel



* BMZ-K7D only

A LINE IN AUDIO jacks

Use audio cords (not supplied) to connect an optional analog component (TV or MD deck or VCR, etc.) to these jacks. You can then record or listen to from the component through this system.

B LINE IN VIDEO jack

Use an optional video cord to connect the video output of a TV or video game to this jack.

C USB jack (BMZ-K7D only)

Use the supplied USB cable to connect your personal computer to this jack.

Listening to audio from a connected component

Use buttons on the unit for the operation.

- 1 Connect the audio cords.**
See “Hooking up optional components” on page 65.
- 2 Press FUNCTION to switch the function to VIDEO or MD.**
Start playing the connected component.

Note

If the sound is distorted or too loud when VIDEO is selected, or you want to listen to MD, change the connection to MD (AUX) IN jacks, and then the function to MD.

Recording audio from a connected component

- 1 Connect audio cords.**
See “Hooking up optional components” on page 65.
- 2 Start recording manually.**
See “Recording on a tape manually” on page 46.

Recording on a connected component

Making a digital recording on an MD (BMZ-K7D: Euro/UK, Russian models only, BMZ-K5D: all models)

1 Connect an optical cable.

See “Hooking up optional components” on page 65.

2 Start recording.

Refer to the operating instructions provided with the connected component.

Making an analog recording

1 Connect the audio cords.

See “Hooking up optional components” on page 65.

2 Start recording.

Refer to the operating instructions provided with the connected component.

Making an analog recording from a VIDEO CD to a video tape

1 Connect optional audio cords from the MD (AUX) OUT jacks and the supplied video cable from the VIDEO OUT jack to your VCR.

2 Start recording.

Refer to the operating instructions provided with the connected component.

Note

You cannot record from a VIDEO CD to an MD digitally. When you record from a VIDEO CD to an MD, make an analog recording on MD.

Troubleshooting

Problems and remedies

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

- 1 Make sure the power cord and speaker cords are correctly and firmly connected.
- 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 Aiwa dealer.

General

The display starts flashing as soon as you plug in the power cord even though you have not turned on the system (see step 7 of “Hooking up the system” (page 8)).

- Press PLAYMODE on the unit once while the system is off. The demonstration disappears.

“--:--” appears in the display.

- A power interruption has occurred. Set the clock (page 13) and timer settings (pages 58 and 59) again.

The clock setting/radio presetting/timer is canceled.

- Redo the following:
 - “Setting the clock” (page 13)
 - “Presetting radio stations” (page 40)
 - “Check the setting” (page 59)
 - “Timer Recording radio programs” (page 59)

There is no sound.

- Press VOL +/- or turn VOLUME control on the unit clockwise.
- Make sure the headphones are not connected.
- Check the speaker connections (page 9).
- There is no audio output during Timer Recording.
- The system is in Pause mode or in Slow-motion play mode. Press ◀▶ to return to Normal Play mode.

There is severe hum or noise.

- Move the system away from the source of noise.
- Connect the system to a different wall outlet.
- Install a noise filter (commercially available) to the power cord.

The timer cannot be set.

- Set the clock again (page 13).

The timer does not function.

- Check the timer settings and set the correct time (pages 58 and 59).
- Cancel the Sleep Timer (page 58).

The remote does not function.

- Remove the obstacle.
- Move the remote closer to the system.
- Point the remote at the system’s sensor.
- Replace the batteries (R6/size AA).
- Locate the system 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 a 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 connected source is distorted.

- If “VIDEO” appears in the display when you press FUNCTION repeatedly, switch the display to “MD” (see “Listening to audio from a connected component” on page 68) and change the connection to MD (AUX) IN jacks.

Speakers

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

- Check the speaker connection and speaker placement.
- The source being played back is monaural.
- Adjust the balance parameters (page 37).

The sound comes from the center speaker only (BMZ-K7D only).

- Depending on the disc, the sound may come from the center speaker only.

There is no sound from the center speaker (BMZ-K7D only).

- Set the center speaker level to the appropriate level.

There is no sound from the surround speakers (BMZ-K7D only).

- Set the surround speakers level to the appropriate level.
- The software being played back has limited sound effects. Check the volume with the test tone.

Sound lacks bass.

- Check that the speaker's + and – jacks are connected correctly.

DVD/VIDEO CD/CD/MP3/JPEG player

The disc does not eject.

- You cannot eject the disc during CD Synchro Recording. Press ■ to cancel the CD Synchro Recording, then eject the disc.
- Consult your nearest Aiwa dealer.

Play does not start.

- Wipe the disc clean (page 77).
- Replace the disc.
- Insert a disc that this system can play (page 5).
- Insert a disc with its label facing the right of the disc slot.
- 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 ◀▶ to start play.
- The region code on the DVD does not match the system.
- Cancel the Custom Parental Control function (page 32).

Disc access takes a long time.

- Set “DVD PWR ON” by DVD power manage function (page 41).

The sound skips.

- Wipe the disc clean (page 77).
- Replace the disc.
- Try moving the system to a place without vibration (e.g., on top of a stable stand).
- Try moving the speakers away from the system, or placing them on separate stands. When you listen to a track with bass sounds at high volume, the speaker vibration may cause the sound to skip.

Play does not start from the first track.

- Press PLAY MODE repeatedly until both “PGM” and “SHUF” disappear to return to Normal Play.
- Resume Play has been selected. Press ■ in stop mode, then start playback (page 18).
- The title, DVD or PBC menu automatically appears on the screen.

Playback starts automatically.

- The DVD features an auto playback function.

The system turned off during DVD playback.

- If approximately one hour passes with DVD playback paused or with the DVD top menu or a DVD menu displayed during DVD playback, the system automatically turns off.

Playback stops automatically.

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

You cannot perform functions such as Stop, 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.

MP3 audio track cannot be played back.

- Recording was not performed according to the ISO9660 level 1 or level 2 format, or Joliet in the expansion format.
- The MP3 audio track does not have the extension “.MP3.”
- The data is not stored in MP3 format.
- Discs containing files other than MPEG 1 Audio Layer-3 files cannot be played.
- Playback is possible up to 8 levels.
- MP3 audio tracks in MP3PRO format cannot be played on this system.

MP3 audio tracks take longer to play back than others.

- After the system reads all tracks on the discs, playback may take more time than usual if:
 - the number of albums or tracks on the disc is very large.
 - the album and track organization structure is very complex.

JPEG image files cannot be played.

- The DATA CD is not recorded in JPEG format that conforms to ISO9660 Level 1/Level 2 or Joliet.
- The JPEG image file does not have the extension “.JPG” or “.JPEG.”
- The data is not formatted in JPEG even though it has the extension “.JPG” or “.JPEG.”
- Length or width of image is more than 4720 dots.
- Remove the disc and select “CUSTOM SETUP” from the setup items. Then select “DATA CD PRIORITY” and set to “JPEG” again (page 30).
- Playback is possible up to 8 levels.
- Progressive JPEG format files cannot be played on this system.

The album title, track title and ID3 tag do not appear correctly.

- Use a disc that conforms with ISO 9660 level 1, level 2, or Joliet in the expansion format.
- The ID3 tag displays only the track title information and applies only to version 1.

The disc title, album title, track title and ID3 tag appear as 1.1. The CD characters appear as 1.1.

- The character codes that can be displayed by this system are numbers and alphabet only. Other characters appear as 1.1.

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

- Select “VF/MPX OFF” in step 3 of “Singing along: Karaoke” (page 56)
- Make sure the system is connected appropriately.

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

- Make sure the SOUND FIELD function is on (page 55).
- Check the speaker connections and settings (pages 8 and 36).
- Depending on the DVD, 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 recording was not done properly when making a digital recording from the CD/DVD player of this system to an optional component connected to the DIGITAL OUT jack.

- Audio data is output from the DIGITAL OUT jack without any surround effects or other sound processing, so that the audio data is output slightly ahead of the sound from the speakers. Therefore, start the optional component recording in advance when making a digital recording to a connected optional component (MD deck, etc.).

Picture

There is no picture.

- Press FUNCTION repeatedly to switch the function to DVD.
- Check that the system is connected securely.
- The video cable is damaged. Replace it with a new one.
- Make sure you connect the system to the video input jack of your TV (page 9).
- 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 (color) system.

Picture noise appears.

- Clean the disc.
- If video from your DVD player has to go through your VCR to get to your TV, the copy-protection applied to some DVD programs could affect picture quality. If you still experience problems after checking your connections, please try connecting your DVD player directly to your TV's S video-input, if your TV is equipped with this input (page 9).
- The color system is different. Set the color system to match your TV (page 32).

The aspect ratio of the screen cannot be changed even though you set “TV TYPE” in “SCREEN SETUP” in the Setup Display when you play a wide picture.

- The aspect ratio is fixed on your DVD.
- If you connect the system with the S-video cable, connect directly to the TV. Otherwise, you may not change the aspect ratio.
- Depending on the TV, you may not change the aspect ratio.

Messages do not appear on the screen in the language you want.

- Select the language you want for the on-screen display in “OSD” under “LANGUAGE SETUP” in the Setup Display (page 29).

The language for the sound track cannot be changed.

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

The subtitle language cannot be changed.

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

The subtitle cannot be turned off.

- The DVD prohibits turning off subtitles.

The angles cannot be changed.

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

Tuner

Severe hum or noise/stations cannot be received. (“TUNED” or “{((⊕))}” flashes in the display)

- Set the proper band and frequency (page 40).
- Connect the antenna properly (page 9).
- Find a place and an orientation that provides good reception, then set up the antenna again. If you cannot obtain good reception, we recommend you to 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 as possible.
- Consult your nearest Aiwa dealer if the supplied AM antenna has come off the plastic stand.
- Try turning off surrounding electrical equipment.
- Set “DVD PWR OFF” by the DVD power manage function (page 41).

A stereo FM program cannot be received in stereo.

- Press FM MODE until “MONO” disappears.

Tape deck

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

- The heads are dirty. Clean them (page 77).
- The record/playback heads are magnetised. Demagnetise them (page 77).

The tape does not erase completely.

- The record/playback heads are magnetised. Demagnetise them (page 77).

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

- The capstans or pinch rollers are dirty. Clean them (page 77).

Noise increases or the high frequencies are erased.

- The record/playback heads are magnetised. Demagnetise them (page 77).

The tape does not record.

- No cassette is loaded. Load a cassette.
- The tab has been removed from the cassette. Cover the broken tab with adhesive tape (page 77).
- The tape has wound to the end.

Optional components

There is no sound.

- Refer to General item “There is no sound.” (page 70) and check the condition of the system.
- Connect the component properly (page 65) 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 playing.

If the system still does not operate properly after performing the above measures, reset the system as follows:

Use buttons on the unit for these operations.

- 1 Disconnect the power cord.
- 2 Reconnect the power cord.
- 3 Press **■**, **ENTER** and **FUNCTION** at the same time.
- 4 Press **I/⏻** to turn on the system.

The system is reset to the factory settings except for DVD settings. You should set the settings you made, such as the preset stations, clock, and timer.

To return the DVD setup to the default settings, perform reset as follows:

- 1 Press **DVD SETUP** in stop mode.
- 2 Press **↑** or **↓** repeatedly to select "RESET," then press **ENTER**.
- 3 Press **↑** or **↓** repeatedly to select "YES," then press **ENTER**.
It takes a few seconds to complete. Do not press **I/⏻** when resetting the system.

Note

Turn off the sub woofer before you reset the system.

Messages

One of the following messages may appear or flash in the display during operation.

DVD/VIDEO CD/CD/MP3/JPEG

CANNOT PLAY

- A disc that cannot be played was inserted.
- A disc with an unsupported region code was inserted.

DATA ERROR

The JPEG file is an unsupported format.

NO DISC

There is no disc in the unit.

NOT IN USE

You pressed an invalid button.

PLAY LIMIT

The MP3 file cannot be played.

PUSH STOP

You pressed **PLAY MODE** during play.

STEP FULL

You tried to program 26 or more tracks (steps).

READING

The system is reading TOC information of the disc. Some buttons are not available.

DISC ERROR

You cannot play an 8cm disc.

MECHA ERROR

The disc is an incompatible format.

TAKE DISC

Take out the loaded disc.

Tape

NO TAB

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

NO TAPE

There is no tape in the tape deck.

Tuner

FULL

You tried to preset more than 32 stations.

USB

USB NOPC

There is no connection between your personal computer and the main unit.

OTHER

SETTING

The clock has not been set, therefore the timer setting is unavailable. Set the clock to the correct time, then set the timer.

Additional Information

Precautions

On operating voltage

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

On safety

- The unit is not disconnected from the AC power source (mains) as long as it is connected to the wall outlet, even if the unit itself has been turned off.
- Unplug the system from the wall outlet (mains) if it is not to be used for an extended period of time. To disconnect the power cord (mains lead), pull it out by the plug. Never pull the cord itself.
- Should any solid object or liquid fall into the system, unplug the system and have it checked by qualified personnel before operating it any further.
- AC power cord must be changed only at the qualified service shop.

On placement

- Do not place the system in an inclined position.
- Do not place the system in locations where it is;
 - Extremely hot or cold
 - Dusty or dirty
 - Very humid
 - Subject to vibrations
 - Subject to direct sunlight.
- Use caution when placing the unit or speakers on surfaces that have been specially treated (with wax, oil, polish, etc.) as staining or discoloration of the surface may result.

On heat buildup

- Although the system heats up during operation, this is not a malfunction.
- Place the system in a location with adequate ventilation to prevent heat buildup in the system.
- If you continuously use this system at a high volume, the cabinet temperature of the top, side and bottom rises considerably. To avoid burning yourself, do not touch the cabinet.
- To prevent a malfunction, do not cover the ventilation hole for the cooling fan.

In case color irregularity is observed on a nearby TV screen

With the magnetically shielded type of speaker system, the speakers can be installed near a TV set. However, color irregularity may still be observed on the TV screen depending on your TV set type.

If color irregularity is observed...

Turn off the TV set once, then turn it on after 15 to 30 minutes.

If color irregularity is observed again...

Place the speakers farther away from the TV set.

IMPORTANT NOTICE

Caution: This system is capable of holding a still video image or on-screen display image on your television screen indefinitely. If you leave a still video image or on-screen display image displayed on your TV for an extended period of time you risk permanent damage to your television screen. Projection televisions are especially susceptible to this.

On operation

- 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 CD player. Should this occur, the system will not operate properly. Remove the disc and leave the system turned on for about an hour until the moisture evaporates.
- When you move the system, take out any disc.

If you have any questions or problems concerning your system, please consult your nearest Aiwa dealer.

Notes on discs

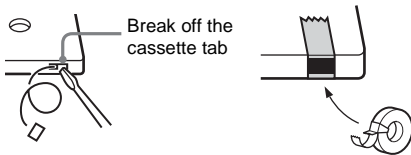
- Before playing, clean the disc with a cleaning cloth. Wipe the disc from the center out.
- Do not use solvents such as benzene, thinner, commercially available cleaners or anti-static spray intended for vinyl LPs.
- Do not expose the disc to direct sunlight or heat sources such as hot air ducts, or leave it in a car parked in direct sunlight.
- Do not use a disc with a stabilizing ring. This may cause a malfunction to the system.
- When using discs that have glue or similar tacky substances on the label side of the disc or that uses a special ink for the label, there is a chance that the disc or label may become attached to parts inside this unit. If this occurs, it may not be possible to remove the disc, and may also cause this unit to malfunction. Be sure to check that the label side of the disc is not sticky before using.
The following types of disc should not be used:
 - Rental or used discs with attached seals where the glue extends beyond the seal. The perimeter of the seal on the disc is tacky.
 - Discs that have labels printed using a special ink that feels sticky when touched.
- Discs with non-standard shapes (e.g., heart, square, star) cannot be played on this unit. Attempting to do so may damage the unit. Do not use such discs.

Cleaning the cabinet

Clean the cabinet, panel and controls with a soft cloth slightly moistened with mild detergent solution. Do not use any type of abrasive pad, scouring powder or solvent such as thinner, benzene or alcohol.

To save a tape permanently

To prevent a tape from being accidentally recorded over, break off the cassette tab from side A or B as illustrated.



If you later want to reuse the tape for recording, cover the broken tab with adhesive tape.

Before placing a cassette in the tape deck

Take up any slack in the tape. Otherwise, the tape may get entangled in parts of the tape deck and become damaged.

When using a tape longer than 90 minutes

The tape is very elastic. Do not change the tape operations such as play, stop, and fast-winding frequently. The tape may get entangled in the tape deck.

Cleaning the tape heads

Clean the tape heads after every 10 hours of use. Be sure to clean the tape heads before you start an important recording or after playing an old tape. Use a separately sold dry-type or wet-type cleaning cassette. For details, refer to the instructions of the cleaning cassette.

Demagnetising the tape heads

Demagnetise the tape heads and the metal parts that have contact with the tape after every 20 to 30 hours of use with a separately sold demagnetising cassette. For details, refer to the instructions of the demagnetising cassette.

Specifications

Amplifier section

The following measured at AC 120, 127, 220, 240 V, 50/60 Hz

Rated Power Output at Stereo mode (BMZ-K7D only)
Continuous RMS power output (reference)

Front speaker:	BMZ-K7D: 150 + 150 watts (6 ohms at 1 kHz, 10% THD)
	BMZ-K5D: 120 + 120 watts (6 ohms at 1 kHz, 10% THD)
Center speaker*:	50 watts (8 ohms at 1 kHz, 10% THD)
Surround speaker*:	50 watts (8 ohms at 1 kHz, 10% THD)

Inputs

LINE IN AUDIO (phono jacks):
voltage 1.1V, impedance
47 kilohms

LINE IN VIDEO (phono jack):
max. input level 1Vp-p,
unbalanced, Sync
negative, impedance
75 ohms

MD (AUX) IN (phono jacks):
voltage 1.1V, impedance
47 kilohms

MIC (phone jack):
sensitivity 1 mV,
impedance 10 kilohms

Outputs

MD (AUX) OUT (phono jacks):
voltage 500 mV,
impedance 4.7 kilohms

VIDEO OUT (phono jack):
max. output level
1 Vp-p, unbalanced, Sync
negative, load impedance
75 ohms

S-VIDEO OUT (4-pin/mini-DIN jack):
Y: 1 Vp-p, unbalanced,
Sync negative,
C: 0.286 Vp-p, load
impedance 75 ohms

COMPONENT VIDEO OUT:
Y: 1 Vp-p, 75 ohms
PB, PR: 0.7 Vp-p, 75 ohms

PHONES (stereo mini jack):
accepts headphones of
32 ohms or more

Front speaker:	Use only the supplied speaker BMZ-K7D: SX-BK7 BMZ-K5D: SX-BK5
Surround speaker*:	Use only the supplied speaker SX-BK7R
Center speaker*:	Use only the supplied speaker SX-BK7C
SUB WOOFER OUT*:	voltage 1 V, impedance 1 kilohm

* BMZ-K7D only

Disc player section

System	Compact disc and digital audio and video system
Laser	Semiconductor laser (DVD: $\lambda=657$ nm, CD: $\lambda=793$ nm)
	Emission duration: continuous
Frequency response	DVD (PCM 48 kHz): 2 Hz – 22 kHz (± 1 dB) CD: 2 Hz – 20 kHz (± 1 dB)

Video color system format

NTSC, PAL
OPTICAL DIGITAL OUT (BMZ-K7D: Euro/UK, Russian models only, BMZ-K5D: all models)

(Square optical connector jack, rear panel)

Wavelength 660 nm

Tape deck section

Recording system	4-track 2-channel stereo
Frequency response	100 – 10,000 Hz (± 3 dB), using Sony TYPE I cassette

Tuner section

FM stereo, FM/AM superheterodyne tuner

FM tuner section

Tuning range	
Russian model:	65.0 – 74.0 MHz 87.5 – 108.0 MHz
Other models:	87.5 – 108.0 MHz
Antenna	FM lead antenna
Antenna terminals	75 ohm unbalanced
Intermediate frequency	10.7 MHz

AM tuner section

Tuning range	
Latin American models:	530 – 1,710 kHz (with the interval set at 10 kHz) 531 – 1,710 kHz (with the interval set at 9 kHz)
Saudi Arabian model:	531 – 1,602 kHz (with the interval set at 9 kHz)

Other models:	531 – 1,602 kHz (with the interval set at 9 kHz) 530 – 1,710 kHz (with the interval set at 10 kHz)
Antenna	AM loop antenna
Antenna terminals	External antenna terminal
Intermediate frequency	450 kHz

Speaker

Front speaker SX-BK7 (BMZ-K7D only)

Speaker system	4-way, 5-unit, bass-reflex type, magnetically shielded type
Speaker units	
Subwoofer:	16 cm, cone type × 1
Woofer:	14 cm, cone type × 2
Tweeter:	6.0 cm, cone type
Super Tweeter:	2 cm, ceramic type
Nominal impedance	6 ohms
Dimensions (w/h/d)	274 × 455 × 384 mm
Mass	Approx. 7.6 kg net per speaker

Front speaker SX-BK5 (BMZ-K5D only)

Speaker system	3-way, 4-unit, bass-reflex type, magnetically shielded type
Speaker units	
Woofer:	14 cm, cone type × 2
Tweeter:	6 cm, cone type
Super Tweeter:	2 cm, ceramic type
Nominal impedance	6 ohms
Dimensions(w/h/d)	266 × 455 × 384 mm
Mass	Approx. 6.7 kg net per speaker

Surround speaker SX-BK7R (BMZ-K7D only)

Speaker system	1-way, 1-unit, closed type
Speaker units	
Full-range:	8 cm, cone type
Nominal impedance	8 ohms
Dimensions (w/h/d)	Approx. 114 × 160 × 129 mm
Mass	Approx. 0.7 kg net per speaker

Center speaker SX-BK7C (BMZ-K7D only)

Speaker system	1-way, 1-unit, closed type, magnetically shielded type
Speaker units	
Full-range:	8 cm, cone type
Nominal impedance	8 ohms
Dimensions (w/h/d)	Approx. 160 × 114 × 129 mm

Mass	Approx. 0.7 kg net per speaker
------	--------------------------------

General

Power requirements

Euro/UK, Russian models:	230 V AC, 50/60 Hz
Australian model:	230 – 240 V AC, 50/60 Hz
Saudi Arabian model:	120 – 127 V, 220 V AC, 50/60 Hz

Adjustable with voltage selector

Other models:

120 V, 220 V or 230 – 240 V AC, 50/60 Hz
Adjustable with voltage selector

Power consumption

BMZ-K7D	250 watts 0.4 watts (in ECO MODE)
BMZ-K5D	150 watts 0.4 watts (in ECO MODE)

Dimensions (w/h/d)

BMZ-K7D/K5D	Approx. 211 × 379 × 419 mm
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Mass

BMZ-K7D	Approx. 10.8 kg
BMZ-K5D	Approx. 9.8 kg

Supplied accessories:

FM lead antenna (1)
AM loop antenna (1)
BMZ-K7D: Speaker cords (5)
BMZ-K5D: Speaker cords (2)
BMZ-K7D: USB cable (1)
Remote commander (1)
Batteries (2)
BMZ-K7D: Application CD-ROM (1)
Video cable (1)
EURO AV adapter (1)
(Euro/UK, Russian models only)

Design and specifications are subject to change without notice.

Language code list

For details, see pages 27 and 28.

The language spellings conform to the ISO639: 1988 (E/F) standard.

Code	Language	Code	Language	Code	Language
1027	Afar	1245	Inupiak	1489	Russian
1028	Abkhazian	1248	Indonesian	1491	Kinyarwanda
1032	Afrikaans	1253	Icelandic	1495	Sanskrit
1039	Amharic	1254	Italian	1498	Sindhi
1044	Arabic	1257	Hebrew	1501	Sangho
1045	Assamese	1261	Japanese	1502	Serbo-Croatian
1051	Aymara	1269	Yiddish	1503	Singhalese
1052	Azerbaijani	1283	Javanese	1505	Slovak
1053	Bashkir	1287	Georgian	1506	Slovenian
1057	Byelorussian	1297	Kazakh	1507	Samoan
1059	Bulgarian	1298	Greenlandic	1508	Shona
1060	Bihari	1299	Cambodian	1509	Somali
1061	Bislama	1300	Kannada	1511	Albanian
1066	Bengali; Bangla	1301	Korean	1512	Serbian
1067	Tibetan	1305	Kashmiri	1513	Siswati
1070	Breton	1307	Kurdish	1514	Sesotho
1079	Catalan	1311	Kirghiz	1515	Sundanese
1093	Corsican	1313	Latin	1516	Swedish
1097	Czech	1326	Lingala	1517	Swahili
1103	Welsh	1327	Laothian	1521	Tamil
1105	Danish	1332	Lithuanian	1525	Telugu
1109	German	1334	Latvian; Lettish	1527	Tajik
1130	Bhutani	1345	Malagasy	1528	Thai
1142	Greek	1347	Maori	1529	Tigrinya
1144	English	1349	Macedonian	1531	Turkmen
1145	Esperanto	1350	Malayalam	1532	Tagalog
1149	Spanish	1352	Mongolian	1534	Setswana
1150	Estonian	1353	Moldavian	1535	Tonga
1151	Basque	1356	Marathi	1538	Turkish
1157	Persian	1357	Malay	1539	Tsonga
1165	Finnish	1358	Maltese	1540	Tatar
1166	Fiji	1363	Burmese	1543	Twi
1171	Faroese	1365	Nauru	1557	Ukrainian
1174	French	1369	Nepali	1564	Urdu
1181	Frisian	1376	Dutch	1572	Uzbek
1183	Irish	1379	Norwegian	1581	Vietnamese
1186	Scots Gaelic	1393	Occitan	1587	Volapük
1194	Galician	1403	(Afan) Oromo	1613	Wolof
1196	Guarani	1408	Oriya	1632	Xhosa
1203	Gujarati	1417	Punjabi	1665	Yoruba
1209	Hausa	1428	Polish	1684	Chinese
1217	Hindi	1435	Pashto; Pushto	1697	Zulu
1226	Croatian	1436	Portuguese		
1229	Hungarian	1463	Quechua	1703	Not specified
1233	Armenian	1481	Rhaeto-Romance		
1235	Interlingua	1482	Kirundi		
1239	Interlingue	1483	Romanian		

Glossary

Album

Section of a music piece on a data CD containing MP3 audio tracks or JPEG image files.

Auto Pause

An automatical pauses according to the signal encoded on the disc while playing a VIDEO CD. If the CD player does not resume play for a long time, press ◀▶ to resume play manually.

Chapter

Subdivision of a title on a DVD. A title is composed of several chapters.

Dolby Digital

This sound format for movie theatres is more advanced than Dolby Pro Logic Surround. In this format, the surround speakers output stereo sound with an expanded frequency range and a sub woofer channel for deep bass is independently provided. This format is also called "5.1" because the sub woofer 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 to realize superior channel separation. Furthermore, since all the signals are processed digitally, less signal degradation occurs.

Dolby Pro Logic Surround

As one method of decoding Dolby Surround, Dolby Pro Logic Surround produces four channels from two-channel sound. Compared with the former Dolby Surround system, Dolby Pro Logic Surround reproduces left-to-right panning more naturally and localizes sounds more precisely. To take full advantage of Dolby Pro Logic Surround, you should have one pair of surround speakers and a center speaker. The surround speakers output monaural sound.

Dolby Pro Logic II

Dolby Pro Logic II creates five full-band width output channels from two-channel sources. This is done using an advanced, high-purity matrix surround decoder that extracts the spatial properties of the original recording without adding any new sounds or tonal colorations.

- **Dolby Pro Logic II Movie**

The Movie mode is for use with stereo television shows and all programmes encoded in Dolby Surround. The result is enhanced soundfield directionality that approaches the quality of discrete 5.1-channel sound.

- **Dolby Pro Logic II Music**

The Music mode is for use with any stereo music recordings, and provides a wide and deep sound space.

DTS

Digital audio compression technology that the Digital Theater Systems, Inc. developed. This technology conforms to 5.1-channel surround. The rear channel is stereo and there is discrete sub woofer channel in this format. DTS provides the same 5.1 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

A disc that contains up to 8 hours of moving pictures even though its diameter is the same as a CD.

The data capacity of a single-layer and single-sided DVD, at 4.7 GB (Giga Byte), is 7 times that of a CD. Furthermore, the data capacity of a dual-layer and single-sided DVD is 8.5 GB, a single-layer and double-sided DVD 9.4 GB, and a dual-layer and double-sided DVD 17 GB. The picture data uses the MPEG 2 format, a worldwide standards of digital compression technology. The picture data is compressed to about 1/40 of its original size. The DVD also uses the 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.

File

Section of a picture on a data CD containing JPEG image files.

Film based software, Video based software

DVDs can be classified as Film based or Video based software. Film based DVDs contain the same images (24 frames per second) that are shown at movie theatres. Video based DVDs, such as television dramas or sit-coms, displays images at 30 frames (or 60 fields) per second.

ID3 TAG

ID3 TAG determines the data format for the text to be added to an MP3 file, mainly used to indicate a track title or an artist's name, etc.

Index (CD) / Video Index (VIDEO CD)

A number that divides a track into sections to easily locate the point you want on a VIDEO CD or a CD. Depending on the disc, no indexes may be recorded.

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 DVDs.

Multilingual function

Several languages for the sound or subtitles in a picture are recorded on some DVDs.

Parental Control

A function of the DVD to limit playback of the disc by the age of the users according to the limitation level in each country/region. The limitation varies from disc to disc; when it is activated, playback is completely prohibited, violent scenes are skipped or replaced with other scenes, etc.

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.

This system conforms to Ver. 1.1 and Ver. 2.0 of VIDEO CD standards. You can enjoy two kinds of playback depending on the disc type.

VIDEO CDs without PBC functions (Ver. 1.1 discs)

Enjoy video playback (moving pictures) as well as music.


VIDEO CDs with PBC functions (Ver. 2.0 discs)

Play interactive software using menu screens displayed on the TV screen (PBC Playback), in addition to the video playback functions of Ver. 1.1 discs. Moreover, you can play high-resolution still pictures, if they are included on the disc.

Progressive format

Compared to the Interlace format that alternately shows every other line of an image (field) to create one frame, the Progressive format shows the entire image at once as a single frame. This means that while the Interlace format can show 30 frames (60 fields) in one second, the Progressive format can show 60 frames in one second. The overall picture quality increases and still images, text, and horizontal lines appear sharper. This player is compatible with 525 progressive format.

Region Code

This system is used to protect copyrights. A region number is allocated on each DVD system or DVD disc according to the sales region. Each region code is shown on the system as well as on the disc packaging. The system can play the discs that match its region code. The system can also play discs with the “” mark. Even when the region code is not shown on the DVD, the region limit may still be activated.

Scene

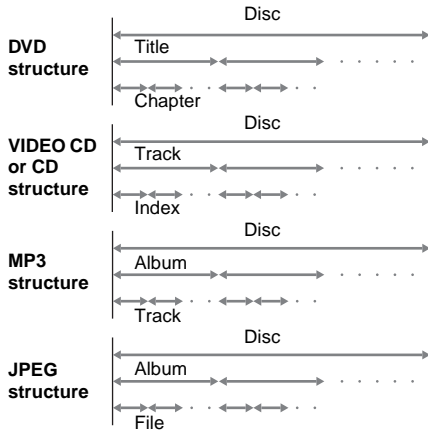
On a VIDEO CD with PBC functions (page 20), the menu screens, moving pictures, and still pictures are divided into sections called “scenes.” Each scene is assigned a scene number enabling you to locate the scene you want.

Title

The longest sections of a picture or a music piece on a DVD; a movie, etc., for a picture piece on video software; or an album, etc., for a music piece on audio software. Each title is assigned a title number enabling you to locate the title you want.

Track

Sections of a picture or a music piece on a CD, VIDEO CD or MP3. Each track is assigned a track number enabling you to locate the track you want.



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.

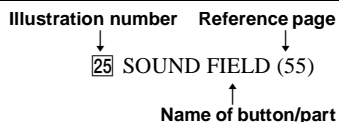
- Version 1.1: You can play only moving pictures and sounds.
- Version 2.0: You can play high-resolution still pictures and enjoy PBC functions.

This system conforms to both versions.

List of button locations and reference pages

How to use this page

Use this page to find the location of buttons and other parts of the system that are mentioned in the text.



Main unit

- 1 Display window (14)
- 2 VOLUME control (58)
- 3 PLAY MODE (16, 23)
- 4 DISPLAY*¹ (43, 61, 62)
- 4 RDS*¹ (42)
- 5 MODE (14, 54, 58, 61)
- 6 TUNER PRESET CLEAR
- 7 Disc slot (15)
- 8 MULTI JOG (14, 45, 46, 56, 58)
- 9 ENTER (13, 14, 19, 22, 23, 25, 30, 32, 40, 54, 58, 59)
- 10 PHONES jack
- 11 MIC LEVEL (56)
- 12 MIC jack (56)
- 13 SELECT DIRECTION
◀▶ (17, 20, 20)
- 14 TUNING - ◀◀/◀ (40, 42)
- 14 TUNING + ▶▶/▶ (40, 42)
- 15 DISC SELECT (15, 23)
- 16 LINE IN (67)
- 17 USB jack*² (48, 67)
- 18 ▲ EJECT/DISC CHANGE (17)
- 19 ALBUM/PLAY LIST +/- (17, 21, 23)
- 20 (Remote sensor)
- 21 CD SYNC (46)
- 21 REC PAUSE/START (46, 56)
- 22 TUNER PRESET SET
- 23 i-Bass (54)
- 24 BASS (54)
- 25 SOUND FIELD (55)
- 26 TUNER/BAND (40, 41)
- 27 TREBLE/MIDDLE (54)
- 28 FUNCTION (13, 23, 45, 46, 56, 68)
- 29 (power) (10, 13, 41, 58, 61, 68)

BUTTON DESCRIPTIONS

(power) 29 (10, 13, 41, 58, 61, 68)

(pause) 22 (10, 17, 45)

(eject) 18 (17)

(stop) 6 (17, 45, 46, 56)

(fast forward/TUNING +) 14 (17, 21, 40, 45)

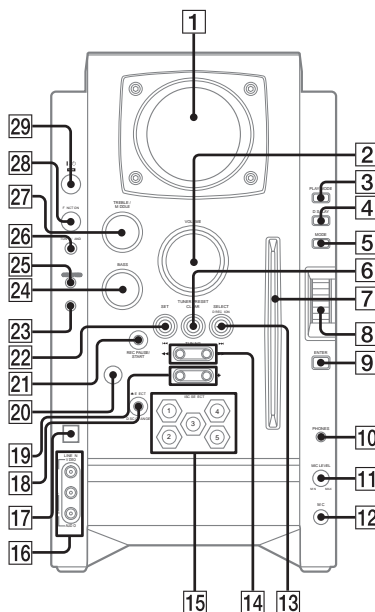
SELECT DIRECTION 13 (17, 20)

(rewind/TUNING -) 14 (17, 40, 45)

(Remote sensor) 20

*¹ BMZ-K7D/K5D (except Euro/UK models): DISPLAY
BMZ-K7D (Euro/UK models): RDS function

*² BMZ-K7D only



Remote control

- 1** FUNCTION* (13, 23, 45, 46, 56, 68)
- 2** I/⏻ (10, 13, 41, 58)
- 3** REPEAT (22)
- 4** SOUND FIELD (55)
- 5** AUDIO (27)
- 6** SUBTITLE (28)
- 7** ANGLE (30)
- 8** DVD SETUP (13, 29, 33, 39)
- 9** DISC SKIP (17, 23)
- 10** DVD MENU (19)
- 11** ↑/↓/←/→ (13, 17, 27)
- 12** DVD DISPLAY (17, 20, 22, 25, 27, 30, 32, 38, 63, 64)
- 13** VOL +/- (58)
- 14** FM MODE (42)
- 15** TUNER/BAND (40, 41)
- 16** ECHO (56)
- 17** KARAOKE (56)
- 18** CLEAR (22, 23, 26)
- 19** AMP MENU (54)
- 20** CLOCK/TIMER SELECT (59)
- 21** CLOCK/TIMER SET (13, 58, 59)

- 22** KEY CONTROL #/b (56)
- 23** ALBUM +/- (17,21)
- 24** SLOW +/- (17)
- 25** || (pause) (17, 45)
- 26** TUNING +/- (17, 40, 42)
- 27** ■ (stop) (17, 45, 46, 56)
- 28** PRESET -/PREV ◀◀ (17, 20, 23, 41, 45)
- 28** PRESET +/NEXT ▶▶ (17, 20, 23, 41, 45)
- 29** SELECT ◀▶ (17, 20)
- 30** ↻ RETURN (20, 21, 25, 33)
- 31** ENTER (13, 19, 22, 23, 25, 30, 32, 40, 54, 58, 59)
- 32** DVD TOP MENU (19)
- 33** Number buttons (19, 26)
- 34** DISPLAY (61)
- 35** PLAY MODE (16, 23)

BUTTON DESCRIPTIONS

- I/⏻ **2** (10, 13, 41, 58)
- (stop) **27** (17, 45, 46, 56)
- ◀▶ (SELECT) **29** (17, 20)
- || (pause) **25** (17, 45)
- ↑/↓/←/→ **11** (13, 17, 27)
- ◀◀ (TUNING -) **28** (17, 40, 42)
- ▶▶ (TUNING +) **26** (17, 21, 40, 42)
- ◀◀ (PRESET -/PREV) **28** (17, 20, 23, 41)
- ▶▶ (PRESET +/NEXT) **28** (17, 20, 23, 41)
- ◀ (SLOW -) **24** (17)
- ▶ (SLOW +) **24** (17)
- # (KEY CONTROL) **22** (56)
- b (KEY CONTROL) **22** (56)

* Switches the active function: DVD, USB (BMZ-K7D only), TAPE, TUNER, VIDEO, MD.

