

Compact Hi-Fi Stereo System

Operating Instructions



LBT-XGV10AV

WARNING

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

To avoid electrical shock, do not open the cabinet. Refer servicing to qualified personnel only.

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

CLASS 1 LASER PRODUCT
LUOKAN 1 LASERLAITE
KLASS 1 LASERAPPARAT

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

To prevent fire, do not cover the ventilation of the apparatus with newspapers, 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.

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.

This stereo system is equipped with the Dolby Pro Logic Surround decoder.*

* Manufactured under license from Dolby Laboratories.

"Dolby", "Pro Logic", and the double-D symbol are trademarks of Dolby laboratories. Confidential unpublished works. © 1992-1997 Dolby Laboratories. All rights reserved.



ENERGY STAR® is a U.S. registered mark.

As ENERGY STAR® Partner, Sony Corporation has determined that this product meets the ENERGY STAR® guidelines for energy efficiency.

This system can play the following discs

	VIDEO CDs	Audio CDs
Disc logo		
Contents	Audio + Video (moving pictures)	Audio
Disc size	12 cm/8 cm	12 cm/8 cm
Play time	74 min./20 min.	74 min./20 min.

Notes on VIDEO CDs

- This system conforms to VIDEO CDs without PBC functions (Ver. 1.1) and VIDEO CDs with PBC functions (Ver. 2.0) of VIDEO CD standards. You can enjoy two kinds of playback according to the disc type.

Disc type	You can
VIDEO CDs without PBC functions (Ver. 1.1 discs)	Enjoy video playback (moving pictures) as well as audio CDs.
VIDEO CDs with PBC functions (Ver. 2.0 discs)	Play interactive software using menu screens displayed on the TV screen (menu playback), in addition to the video playback function of VIDEO CDs without PBC functions. Moreover, you can play high or standard quality still picture.

PBC = Play Back Control

- VIDEO CDs with CD audio tracks may not play properly.

Notes on CD-R and CD-RW discs

This unit can play the following discs:

Type of discs	Label on the disc
Audio CDs	
MP3 files	

- Discs recorded on CD-R/CD-RW drives may not be played back because of scratches, dirt, recording condition or the drive's characteristics.
- You cannot also play a CD-R/CD-RW that is not finalized*.
- Playback of multi-session CD-R/CD-RWs is not supported.

*A process is necessary for a recorded CD-R/CD-RW disc to be played on the audio CD player.

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S - X

- SELECT **23** (13, 18)
- SLEEP **10** (28)
- SPECTRUM ANALYZER **4** (29)
- SUPER WOOFER **41** (25)
- SUPER WOOFER MODE **41** (25)
- TIMER SELECT **11** (25, 29)
- TUNER/BAND **9** (20, 21)
- TUNER ENTER **26** (20, 41)
- TUNER MEMORY **26** (20)
- TUNING MODE **8** (20, 21)
- TUNING +/- **9** (20, 21)
- VOLUME control **7**
- X-GROOVE **27** (25)

BUTTON DESCRIPTIONS

- I/⏻ **1**
- ⌚/CLOCK SET **12**
- ◀/▶ **17 39**
- **17 39**
- ◀◀◀/▶▶▶ **17 39**
- || **18**
- REC **18**
- ◀◀AMS▶▶ **21**
- ◻ || **22**
- **22**
- ◀◀▶▶ **22**
- ↑/↓/←/→ (cursor) **30**

Remote control

ALPHABETICAL ORDER

A-E

- ALBUM +/- **35** (17)
- CD ▶ **29** (11, 12, 14, 19)
- CENTER LEVEL +/- **20** (10)
- CLEAR **6** (15, 18)
- CLOCK/TIMER SELECT **40** (25, 29)
- CLOCK/TIMER SET **1** (10, 24, 28)
- DISC SKIP **34** (12, 14, 15, 17)
- DISPLAY **36** (32)
- DSP **26** (26)
- DVD 5.1CH **25** (37)
- EFFECT **10** (26, 27)
- ENTER **22** (10, 24, 25, 27-29, 33)

F-R

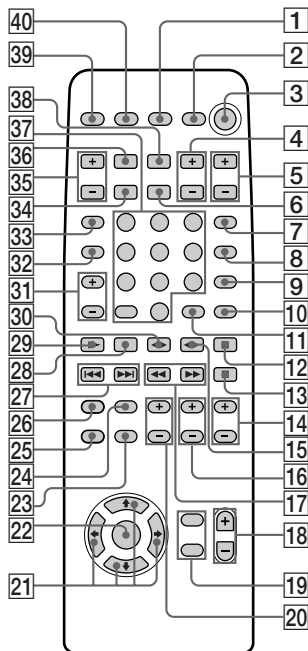
- FILE SELECT +/- **14** (26)
- FUNCTION +/- **31** (8, 11, 14, 15, 17, 23, 30, 31, 37)
- KEY CONTROL #/b **19** (30)
- NEXT **27** (13, 19)
- Numeric buttons **37** (12, 13, 18, 19)
- ON SCREEN **38** (33)
- PICTURE EFFECT **9** (33)
- PLAY MODE **33** (11, 14, 15, 17)
- PRESET +/- **27** (21)
- PREV **27** (13, 19)
- PRO LOGIC **24** (9, 27)
- REAR LEVEL +/- **16** (10)
- REPEAT **32** (12, 15, 17)
- RETURN ⏪ **11** (13)

S-V

- SELECT **29** (13, 18)
- SLEEP **39** (28)
- SPECIAL MENU **8** (18, 19)
- TAPE A ◀◀ **30** (22)
- TAPE B ◀◀ **15** (22)
- TEST TONE **23** (9)
- TUNER/BAND **28** (20, 21)
- TUNING +/- **17** (20, 21)
- TV CH +/- **5** (8)
- TV/VIDEO **7** (8)
- TV VOL +/- **4** (8)
- TV I/⏻ **2** (8)
- VOL +/- **18**

BUTTON DESCRIPTIONS

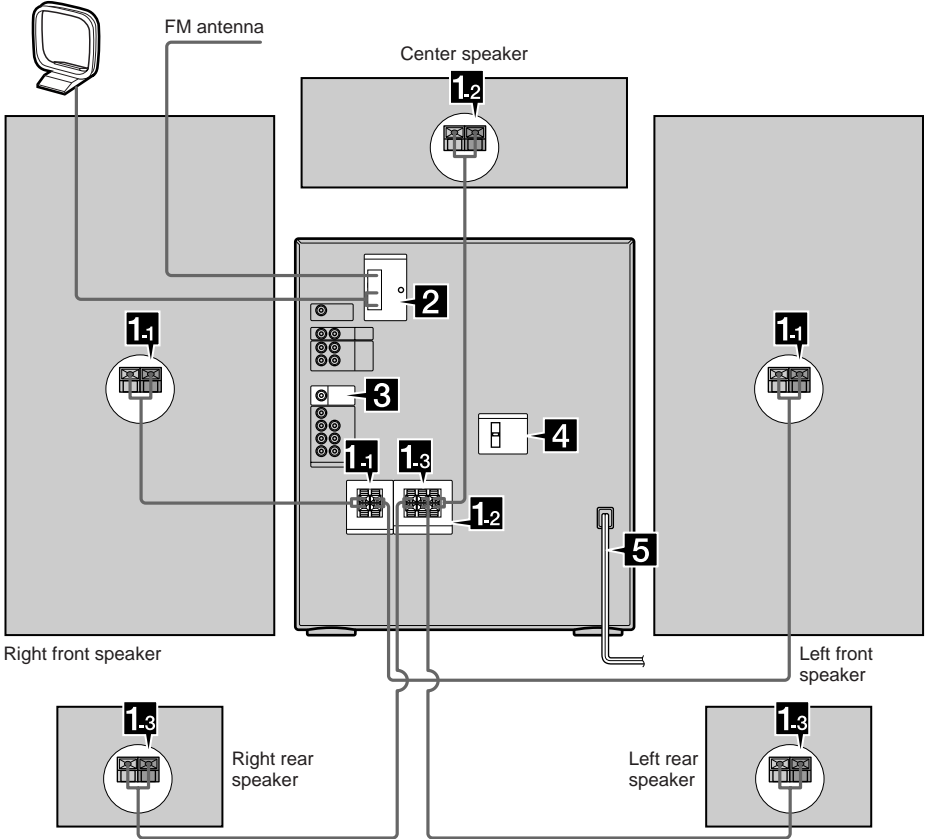
- I/⏻ **3**
- || **12**
- **13**
- ◀◀/▶▶ **17**
- ↑/↓/←/→ (cursor) **21**
- ◀◀▶▶ **27**



Hooking up the system

Do the following procedure **1** to **6** to hook up your system using the supplied cords and accessories.

AM loop antenna

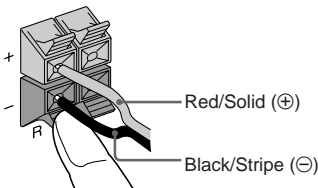


1 Connect the speakers.

1 Connecting the front speakers

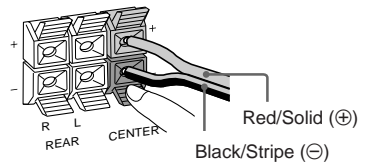
Connect the speaker cords to the FRONT SPEAKER jacks as below.

Insert only the stripped portion.



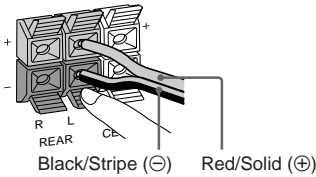
2 Connecting the center speaker

Connect the speaker cords to the SURROUND SPEAKER CENTER jack as below.



3 Connecting the rear speakers

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

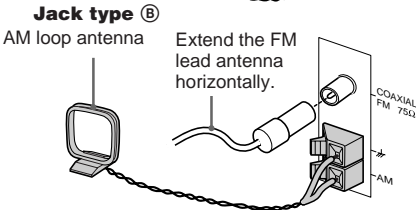
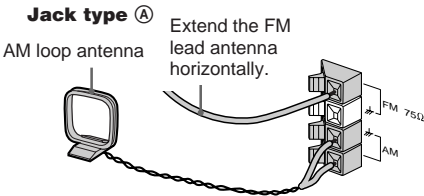
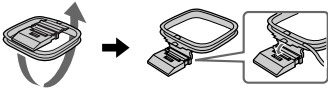


Note

Keep the speaker cords away from the antennas to prevent noise.

2 Connect the FM/AM antennas.

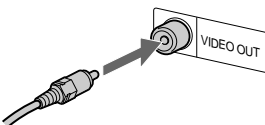
Set up the AM loop antenna, then connect it.



Note

Keep the speaker cords away from the antennas to prevent noise.

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

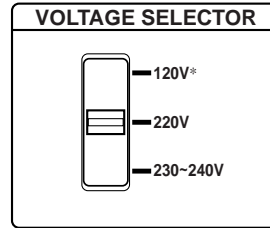


When using a TV

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

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

Refer to the print on your system's VOLTAGE SELECTOR for available setting.



* Saudi Arabian model : 120 – 127 V

5 Connect the power cord to a wall outlet.

The demonstration appears in the display. When you press I/⏻, the system turns on and the demonstration automatically ends.

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

6 Set the color system according to your TV while the power is off.

The color system of your TV	Do this
NTSC	While holding down DANCE, press I/⏻.
PAL	While holding down ROCK, press I/⏻.
AUTO*	While holding down JAZZ, press I/⏻.

* When your TV automatically changes the color system according to the input signal.

Notes

- When you play a VIDEO CD recorded in the different color system from the one you set to the unit, the picture image may be distorted.
- You cannot set the color system in the Power Saving Mode.

continued

Hooking up the system (continued)

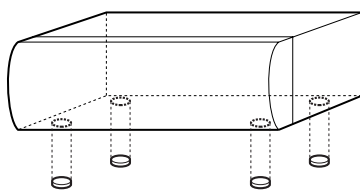
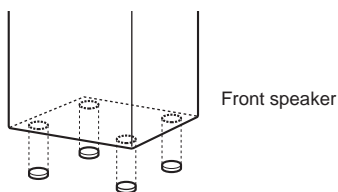
When carrying this system

Do the following to protect the CD mechanism.

- 1 Make sure that all discs are removed from the unit.
- 2 Press FUNCTION (or FUNCTION +/- on the remote) repeatedly until "CD" appears.
- 3 Hold down EDIT and then press I/⏻ until "LOCK" appears.
- 4 Unplug the AC power cord.

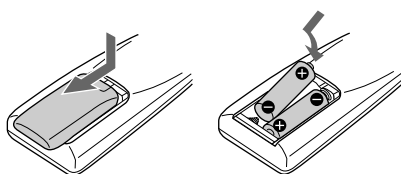
Before connecting the Center and Front speakers

Stick the supplied speaker pads to the bottom of the center speaker and front speakers to stabilize the speakers and prevent them from slipping.



Center speaker

Inserting two size AA (R6) batteries into the remote



Tip

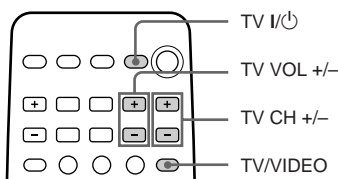
When the remote no longer operates the system, replace both batteries with new ones.

Note

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

Using the remote

You can control Sony TVs using the buttons below.



By pressing	You can
TV I/⏻	Turn on or off the TV
TV/VIDEO	Select the input source for the TV
TV VOL +/-	Adjust the volume of the TV
TV CH +/-	Change the channel of the TV

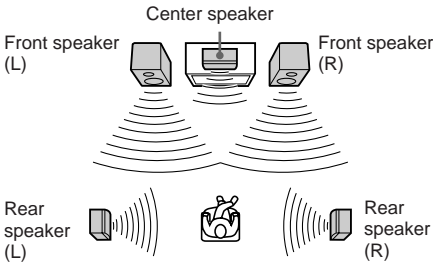
Note

Depending on the TV, you may not be able to control your TV or to use some of the buttons above.

Setting up the speakers for Dolby Pro Logic

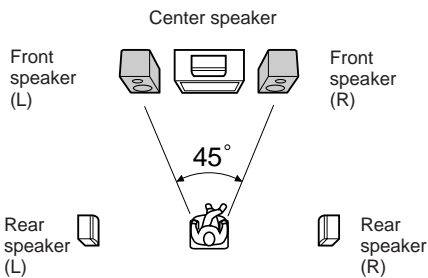
Dolby Pro Logic Surround improves the sound image by using four separate channels. These channels manipulate the sound to enhance the action as it happens on the screen.

Since the center speaker cannot produce enough bass, the bass sound of the center channel is output from the front speakers.

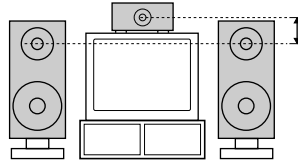


Positioning the center and rear speakers

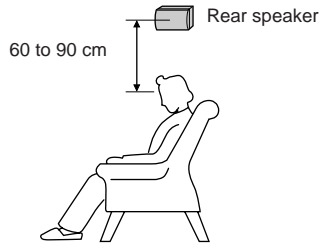
- 1 Place the front speakers at an angle of 45 degrees from your listening position.



- 2 Place the center speaker so it is placed at about the same height as the front speakers. Align the center speaker with the front speakers or place it a little behind the front speakers' position.



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



Adjusting the speaker volume of each speaker (Test Tone)

To enjoy Dolby Pro Logic Surround sound, adjust the volume of each speaker using the test tone that the system provides.

- 1 Press **PRO LOGIC** when the power is on.

The button lights up.

- 2 Press **TEST TONE** on the remote.

The test tone is heard from the speakers in the following order.

LEFT (front left) → CENTER (center) →
RIGHT (front right) →
REAR (rear) →

continued

Setting up the speakers for Dolby Pro Logic (continued)

- 3** From your listening position, adjust the volume until the volume level of the test tone from each speaker sounds the same.

To adjust	Press
the volume of the center speaker	CENTER LEVEL +/- on the remote.
the volume of the rear speakers	REAR LEVEL +/- on the remote.

- 4** From your listening position, adjust the balance.

To adjust	Press
the balance between the front left and front right speakers	← or → while “LEFT”, “CENTER”, or “RIGHT” appears.
the balance between the rear left and rear right speakers	← or → while “REAR” appears.

- 5** Press **TEST TONE** when you are done adjusting.

The test tone is turned off.

Tip

If you turn **VOLUME** (or press **VOL+** or **-** on the remote) all the speaker volume changes.

Note

The test tone feature works only for Dolby Pro Logic Surround sound.

Setting the clock

- 1 Turn on the system.
- 2 Press **⏰/CLOCK SET** (or **CLOCK/TIMER SET** on the remote).
- 3 Press **↑/↓** repeatedly to set the hour.
- 4 Press **ENTER**.
The minute indication flashes.
- 5 Press **↑/↓** repeatedly to set the minute.
- 6 Press **ENTER**.
The clock starts working.

If you make a mistake

Press **←/→** repeatedly until the incorrect item flashes, then set it again.

To adjust the clock

- 1 Press **⏰/CLOCK SET** (or **CLOCK/TIMER SET** on the remote).
- 2 Press **↑/↓** to select “**CLOCK SET**,” then press **ENTER**.
- 3 Do the same procedures as step 3 to 6 above.

Notes

- The clock settings are canceled when you disconnect the power cord or if a power failure occurs.
- You cannot set the clock in the Power Saving Mode.

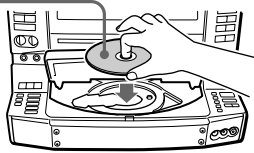
Loading a disc

1 Press PUSH OPEN.

The front cover opens.

2 Place a disc with the label side up on the disc tray.

When you play a CD single, place it on the inner circle of the tray.



To insert additional discs, press DISC SKIP to rotate the disc tray.

3 Close the front cover.

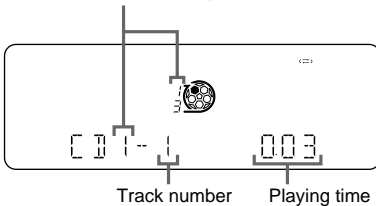
Playing a VIDEO CD

—Normal Play/Shuffle Play/Repeat Play

You can play both VIDEO CDs without PBC functions (Ver.1.1) and VIDEO CDs with PBC functions (Ver.2.0).

This unit lets you play the VIDEO CD in different play modes.

Disc number in the playing position



1 Turn on your TV and select the video input.

Refer to the instructions included with your TV for details.

2 Press FUNCTION (or FUNCTION +/- on the remote) repeatedly until "CD" appears.

3 Press PLAY MODE repeatedly in stop mode until the mode you want appears.

Select	To play
ALL DISCS* (Normal Play)	All VIDEO CDs in the disc tray continuously.
1 DISC/ALBUM (Normal Play)	The VIDEO CD you selected in the original order.
ALL DISCS SHUFFLE (Shuffle Play)	The tracks on all VIDEO CDs in random order.
1 DISC SHUFFLE/ALBUM SHUFFLE (Shuffle Play)	The tracks on the VIDEO CD you selected in random order.
PROGRAM (Program Play)	The tracks on all VIDEO CDs in the order you want them to be played (see "Programming the VIDEO CD/CD tracks" on page 15).

* Depending on VIDEO CDs with PBC function (Ver.2.0), the disc does not change.

4 Press (or CD on the remote).

continued

Playing a VIDEO CD (continued)

Other Operations

To	Do this
Stop playback	Press ■.
Pause	Press ▷ (or on the remote)* ¹ . Press again to resume play (or CD ► on the remote).
Select a track	Turn ◀◀ AMS ▶▶ clockwise (to go forward) or counterclockwise (to go backward) and release it when you reach the desired track. (Or press ▶▶ (to go forward) or ◀◀ (to go backward) on the remote.)* ²
Find a point in a track or scene (Lock Search function)	Press ▶▶ or ◀◀ during playback. ① Press once to start searching. ② Press again to increase the search speed. Each time you press the button, the speed changes as follows: 1 (slow) → 2 (normal) → 3 (high) → 1 (slow)... ③ Press ▷ at the desired point to stop searching.
Select a VIDEO CD in stop mode	Press one of the DISC 1 to 5* ³ or DISC SKIP.
Switch to VIDEO CD function from another source	Press any of the buttons, DISC 1 to 5 or ▷ (or CD ► on the remote) (Automatic Source Selection).
Play repeatedly (Repeat Play)	Press REPEAT during playback until "REPEAT" or "REPEAT1" appears. REPEAT* ⁴ : For all the tracks on the VIDEO CD up to five times. REPEAT1* ² : For a single track only. To cancel playing repeatedly, press REPEAT until "REPEAT" or "REPEAT1" disappears.
Remove the VIDEO CD	Press PUSH OPEN.

*¹ There may be some disturbance in the paused video image.

*² Only when PBC function is set to off or when playing VIDEO CDs without PBC functions (Ver. 1.1).

*³ DISC 1 to 5 are not available when "ALL DISCS SHUFFLE" is selected.

*⁴ You cannot select "REPEAT" and "ALL DISCS SHUFFLE" at the same time.

Tip

You can change the VIDEO CD in the loading position during playback of the VIDEO CD in the playing position.

To enter a track number using the remote

You can also select the desired track using the remote during Normal Play.

Press the numeric buttons. The playback automatically starts.

To enter a track number over 10

1 Press >10.

2 Enter the corresponding digits.

To enter 0, press 10/0 instead.

Example:

To enter track number 30, press >10, then 3 and 10/0.

Playing a VIDEO CD with the PBC functions (Ver. 2.0)

— PBC Play


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

1 Start playing a VIDEO CD with PBC functions (Ver. 2.0).

A PBC menu appears on your TV and "PBC" appears in the display.


2 Turn **◀◀ AMS ▶▶** to select a number from the menu, then press **SELECT** (or press numeric buttons on the remote).

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

To	Do this
Stop play	Press ■ .
Go to the next menu page or scene	Press NEXT .
Go back to the previous menu page or scene	Press PREV.
Go back to the previous menu	Press RETURN (or RETURN  on the remote).

To	Do this
Cancel playback with PBC functions (Ver.2.0)	In the stop mode, turn ◀◀ AMS ▶▶ (or press ◀◀/▶▶ on the remote) to select the desired track, then press ▷ (or press the numeric buttons on the remote). The PBC OFF indicator lights up and playback begins from the selected track. Still images such as menu screens will not be shown.
Play with PBC functions (Ver.2.0) following the cancellation above	In stop mode, press ■ .
Select a menu number using the remote	Press numeric buttons (see "To enter a track number using the remote" on page 12).

Tips

- When  appears on the TV screen, you have pressed an invalid button. Press a button indicated by the instructions on the menu screen.
- When you press **NEXT** during menu playback or while playing moving pictures, the next scene on the disc appears. Also refer to the instructions supplied with the disc.
- "PBC" appears for the disc with PBC functions, and "PBC OFF" appears when its function is canceled.

Note

Depending on the disc, the player may not be able to advance to the next disc during playback even when "ALL DISCS" is selected.

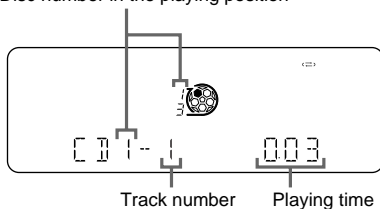
Press **DISC SKIP** to go to the next disc.

Playing a CD

— Normal Play/Shuffle Play/Repeat Play

This unit lets you play the CD in different play modes.

Disc number in the playing position



- 1 Press **FUNCTION** (or **FUNCTION +/-** on the remote) repeatedly until “CD” appears.
- 2 Press **PLAY MODE** repeatedly in stop mode until the mode you want appears.

Select	To play
ALL DISCS (Normal Play)	All CDs in the disc tray continuously.
1 DISC/ALBUM (Normal Play)	The CD you selected in the original order.
ALL DISCS SHUFFLE (Shuffle Play)	The tracks on all CDs in random order.
1 DISC SHUFFLE/ ALBUM SHUFFLE (Shuffle Play)	The tracks on the CD you selected in random order.
PROGRAM (Program Play)	The tracks on all CDs in the order you want them to be played (see “Programming the VIDEO CD/CD tracks” on page 15).

- 3 Press **▷||** (or **CD ▶** on the remote).

Other Operations

To	Do this
Stop playback	Press ■ .
Pause	Press ▷ (or on the remote). Press again to resume play.
Select a track	During play or pause, turn ◀◀ AMS ▶▶ clockwise (to go forward) or counterclockwise (to go backward) (or press ▶▶ (to go forward) or ◀◀ (to go backward) on the remote).
Find a point in a track (Lock Search function)	Press ▶▶ or ◀◀ during playback. At the desired point, press ▷ to stop searching.
Select a CD	Press DISC 1 to 5*1 or DISC SKIP .
Switch to CD function from another source	Press DISC 1 to 5 or ▷ (or CD ▶ on the remote) (Automatic Source Selection).

To	Do this
Play repeatedly (Repeat Play)	Press REPEAT during playback until "REPEAT" or "REPEAT1" appears. REPEAT*2: For all the tracks on the CD up to five times. REPEAT1: For a single track only. To cancel playing repeatedly, press REPEAT until "REPEAT" or "REPEAT1" disappears.
Remove the CD	Press PUSH OPEN.

*1 DISC 1 to 5 are not available when "ALL DISCS SHUFFLE" is selected.

*2 You cannot select "REPEAT" and "ALL DISCS SHUFFLE" at the same time.

Tip

You can change the CD in the loading position during playback of the CD in the playing position.

Programming the VIDEO CD/CD tracks

— Program Play

You can make a program of up to 25 tracks from all the VIDEO CD/CDs in the order you want them to be played.

- 1 Press FUNCTION (or FUNCTION +/- on the remote) repeatedly until "CD" appears, then load a CD.**
- 2 Press PLAY MODE repeatedly until "PROGRAM" appears.**
- 3 Press one of DISC 1 to 5 to select a disc.**
- 4 Turn ◀◀ AMS ▶▶ until the track you want appears.**
- 5 Press PLAY MODE once.**
The track is programmed. First the programmed playing order and "STEP" appear, then the total playing time appears.
- 6 To program additional tracks, repeat steps 3 to 5.**
Skip step 3 to select tracks from the same disc.
- 7 Press ▷ II.**

To	Press
Cancel Program Play	PLAY MODE repeatedly until "PROGRAM," "ALL DISCS SHUFFLE," "ALBUM SHUFFLE," or "1 DISC SHUFFLE" disappears.
Clear a track from the end	CLEAR on the remote in stop mode.
Add a track to the end of the program in stop mode	Perform step 3 to 5.


continued

Programming the VIDEO CD/CD tracks (continued)

To program the MP3 files

After step 3, press ALBUM +/- repeatedly until the folder you want appears, and then go to step 4.

Tips

- The program you made remains in the CD player after it has been played back. Press  to play the same program again.
- “-.-.-” appears when the total CD program time exceeds 100 minutes, when you select a CD track whose number is 21 or over or when you programmed MP3 files.

Playing a disc with MP3 files

About MP3 files

MP3 (MPEG 1 Audio Layer-3) is a standard technology and format for compressing a sound sequence. The file is compressed to about 1/10 of its original size. Sounds outside the range of human hearing are compressed while the sounds we can hear are not compressed.

Notes on discs

You can play MP3 files recorded on CD-ROMs, CD-Rs (recordable CDs), and CD-RWs (rewritable CDs).

The disc must be in the ISO 9660* level 1 or level 2 format.

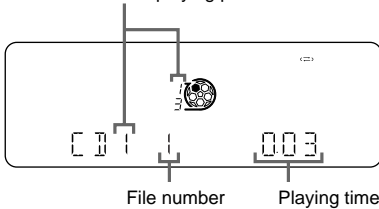
***ISO 9660 Format**

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”) 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.

—Normal Play/Shuffle Play/Repeat Play

This unit lets you play a disc with MP3 files in different play modes.

Disc number in the playing position



1 Press FUNCTION (or FUNCTION +/- on the remote) repeatedly until “CD” appears.

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

Select	To play
ALL DISCS (Normal Play)	All discs in the disc tray continuously.
1 DISC (Normal Play)	The disc you selected in the original order.
ALBUM (Normal Play)	The folder you selected in the original order.
ALL DISCS SHUFFLE (Shuffle Play)	The files on all discs in random order.
1 DISC SHUFFLE (Shuffle Play)	The files on the disc you selected in random order.
ALBUM SHUFFLE (Shuffle Play)	The files in the folder you selected in random order.
PROGRAM (Program Play)	The files on all discs in the order you want them to be played (see “Programming the VIDEO CD/CD tracks” on page 15).

3 Press >|| (or CD ► on the remote).

Other Operations

To	Do this
Stop playback	Press ■.
Pause	Press > (or on the remote). Press again to resume play.
Select a file	During play or pause, turn ◀◀ AMS ▶▶ clockwise (to go forward) or counterclockwise (to go backward) (or press ▶▶ (to go forward) or ◀◀ (to go backward) on the remote).
Select a folder* ¹	Press ALBUM +/- after step 2.
Find a point in a file* ² (Lock Search function)	Press ▶▶ or ◀◀ during playback. At the desired point, press > to stop searching.
Select a disc	Press DISC 1 to 5* ³ or DISC SKIP.
Switch to disc function from another source	Press DISC 1 to 5 or > (or CD ► on the remote) (Automatic Source Selection).
Play repeatedly (Repeat Play)	Press REPEAT during playback until “REPEAT” or “REPEAT1” appears. REPEAT* ⁴ : For all the files on the disc up to five times. REPEAT1: For a single file only. To cancel playing repeatedly, press REPEAT until “REPEAT” or “REPEAT1” disappears.
Remove the disc	Press PUSH OPEN.

*¹ You cannot select a folder during “ALL DISCS SHUFFLE” or “1 DISC SHUFFLE.”

*² The search function works only for the currently playing MP3 file. Searching for a point over two or more MP3 files is therefore not possible. Furthermore, the playing time may not be displayed correctly depending on the MP3 file.

*³ DISC 1 to 5 are not available when “ALL DISCS SHUFFLE” is selected.

*⁴ You cannot select “REPEAT” and “ALL DISCS SHUFFLE” at the same time.

continued

Playing a disc with MP3 files (continued)

Tips

- To select a file number with the remote, press the numeric buttons after step 3.
Example:
To play file number 100 in a folder containing 100 files or more, press >10, then 1, and 10/0 twice.
- You can change the disc in the loading position during playback of the disc in the playing position.

Notes

- With formats other than ISO 9660 level 1 and 2, folder names or file names may not be displayed correctly.
- When naming, be sure to add the file extension “.MP3” to the file name.
- If you up the extension “.MP3” to a file other than MP3, the unit cannot recognize the file properly and will generate random noise that could damage your speakers.
- The following discs take a longer time to start playback.
 - a disc recorded with complicated tree structure.
- When the disc is inserted, the player reads all the files on that disc. If there are many folders or non-MP3 files on the disc, it may take a long time for play to begin or for the next MP3 files to start play.
- Do not save unnecessary folders or files other than MP3 ones in the disc to be used for MP3 listening. We recommend that you do not save other types files or unnecessary folders on a disc that has MP3 files.
- A folder that does not include an MP3 files is skipped.
- Maximum folder number: 255
(The maximum number of MP3 files and folders that can be contained on a single disc is 512.)
- Playback is possible up to 8 levels. The MP3 files are played in the order that they were recorded on the disc.
- There may be exceptions to these rules depending on the disc.
- Depending on the encoding/writing software, recording device, or the recording media used at the time an MP3 file is recorded, you may encounter such problems as disabled playback, sound interruptions, and noise.

Locating a specific part on a VIDEO CD

— Time Search/Disc Digest

The TV screen must be ON to use these functions.

Use the remote for the operation.

Tips

- When you stop playback, press ■.
- When you use VIDEO CDs with PBC functions (Ver.2.0), cancel the PBC functions (see “Cancel playback with PBC functions (Ver. 2.0)” on page 13).

Note

When the Time Search or Disc Digest function is activated, Shuffle Play mode (SHUFFLE) or Program Play mode (PROGRAM) automatically changes to Normal Play mode (ALL DISCS).

Locating by elapsed time

— Time Search

- 1 Press SPECIAL MENU in stop mode.**
- 2 Press 1 to select “1) TIME SEARCH.”**
- 3 Press the numeric buttons to enter the time (in minutes) for the desired section.**
The selected elapsed time appears on the TV screen.
To reenter the time, press CLEAR, and then press the numeric buttons again.
- 4 Press SELECT.**
Playback starts from the selected time.

Locating the desired track

— Disc Digest

You can select the desired track by viewing the first frame of each track. 9 different tracks can be displayed on the TV screen at one time.

1 Press **SPECIAL MENU** in stop mode.

2 Press **2** to select “2) DISC DIGEST.”

The first frame of tracks 1 through 9 on the current disc appear.

3 Press the numeric buttons to select the desired track.

To display the next 9 tracks

Press **NEXT**. The first frame of tracks 10 through 18 appear.

When there are more tracks in the disc, “▶▶” appears in the upper right corner of the TV screen.

To display previous tracks, press **PREV**.

Resuming playback from the point you stopped a VIDEO CD

— Resume Play

The system memorizes the point where you stopped the VIDEO CD so you can resume from that point.

Note that resume play is not available when playing an audio CD and a disc with MP3 files.

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

“RESUME” appears on your TV screen. If “RESUME” does not appear, Resume Play is not available.

2 Press **▷||** (or **CD ▷** on the remote).

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

To view from the beginning of the VIDEO CD

When “RESUME” appears on your TV screen, press **■**, then press **▷||** (or **CD ▷** on the remote).

Notes

- Resume Play is not available in the Digest, Shuffle, or Program Play modes.
- Depending on where you stopped the VIDEO CD, the player may resume playback from a different point.
- Resume play is cleared when:
 - you press numeric buttons, **PLAY MODE**, **■** or **DISC SKIP** or turn **◀◀ AMS ▶▶**.
 - you remove the VIDEO CD.
 - you unplug the system’s AC power cord.
 - you turn off the system.
 - you change the function.

Presetting radio stations

You can preset up to 20 FM stations and 10 AM stations. You can then tune in any of those stations simply by selecting the corresponding preset number.

There are two ways to store the station presets.

To	Method
Automatically tune in all of the stations that can be received in your area and then store them manually	Automatic Tuning preset
Manually tune in and store the radio frequency of your favorite stations	Manual Tuning Preset

Setting presets through automatic tuning

- 1 Press **TUNER/BAND** repeatedly to select “FM” or “AM.”
- 2 Press **TUNING MODE** repeatedly until “AUTO” appears.
- 3 Press **TUNING –/+**.

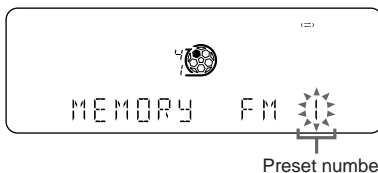
The frequency indication changes and the scanning stops when the system tunes in a station. “TUNED” and “STEREO” (for a FM stereo program) appear.

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

Set the frequency of the desired radio station as described in steps 2 through 6 of “Setting presets through manual tuning.”

- 4 Press **TUNER MEMORY**.

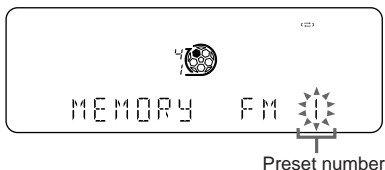
- 5 Press **TUNING –/+** repeatedly to select the desired preset number.



- 6 Press **TUNER ENTER**.
“COMPLETE” appears.
- 7 Repeat steps 1 to 6 to store other stations.

Setting presets through manual tuning

- 1 Press **TUNER/BAND** repeatedly to select “FM” or “AM.”
- 2 Press **TUNING MODE** repeatedly until “MANUAL” appears.
- 3 Press **TUNING –/+** repeatedly to tune in the desired station.
- 4 Press **TUNER MEMORY**.
- 5 Press **TUNING –/+** repeatedly to select the desired preset number.



- 6 Press **TUNER ENTER**.
“COMPLETE” appears.
- 7 Repeat steps 1 to 6 to store other stations.

Other Operations

To	Do this
Tune in a station with a weak signal	Follow the procedure described in “Setting presets through manual tuning.”
Stop scanning	Press TUNING MODE.
Change the preset number	Start over from step 1.
Change the preset station	Start over from step 1.
Cancel presetting	Press TUNER MEMORY.

To change the AM tuning interval (Except for the Middle Eastern model)

The AM tuning interval is factory-set to 9 kHz (10 kHz in some areas). To change the AM tuning interval, tune in any AM station first, then turn off the system. While holding down TUNER ENTER, press I/⏻ to turn the system back on. When you change the interval, all the AM preset stations will be erased. To reset the interval, repeat the same procedure.

Note

You cannot change the AM tuning interval in the Power Saving Mode.

Tips

- The preset stations are retained for half a day even if you unplug the power cord or if a power failure occurs.
- To improve broadcast reception, reorient or move the supplied antennas near a window or outdoors.

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 20).

- 1** Press TUNER/BAND repeatedly to select “FM” or “AM.”
- 2** Press TUNING MODE repeatedly until “PRESET” appears.
- 3** Press TUNING $-/+$ repeatedly to select the desired preset station.

Tip

You can also select the desired preset station by pressing PRESET $-/+$ on the remote after step 1.

Listening to non-preset radio station

— Manual Tuning

- 1** Press TUNER/BAND repeatedly to select “FM” or “AM.”
- 2** Press TUNING MODE repeatedly until “MANUAL” appears.
- 3** Press TUNING $-/+$ repeatedly to tune in the desired station.

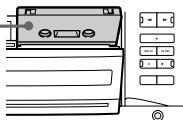
Tips

- To improve broadcast reception, adjust the supplied antennas, or connect a commercially available external antenna.
- When an 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 TUNING MODE repeatedly until “AUTO” appears in step 2 above, then press TUNING $-/+$. The frequency indication changes and scanning stops when the system tunes in a station (Automatic Tuning).
- To record from the radio, see “Recording to a tape” on page 23.

Loading a tape

- 1 Press A EJECT \blacktriangle or \blacktriangle B EJECT.
- 2 Insert a tape in deck A or B.

Insert with the side you want to play/record facing forward.



Playing a tape

You can use TYPE I (normal) tape.

- 1 Load a recorded tape.
- 2 Press DIRECTION repeatedly to select \rightleftarrows to play one side. Select \leftrightarrow to play both sides. Select RELAY (Relay Play)* to play both decks in succession.
- 3 Press \triangleright (or TAPE A/TAPE B $\blacktriangleleft\blacktriangleright$ on the remote).
Press \triangleleft (or TAPE A/TAPE B $\blacktriangleleft\blacktriangleright$ on the remote again) to play the reverse side.
The tape starts playing.

* Relay Play always follow this cyclic sequence:
Deck A (front side) \rightarrow Deck A (reverse side) \rightarrow
Deck B (front side) \rightarrow Deck B (reverse side)

To	Do this
Stop play	Press \blacksquare .
Pause (deck B only)	Press \mathbb{I} . Press again to resume play.
Fast-forward	Press $\blacktriangleright\blacktriangleright\blacktriangleright\blacktriangleright$ or $\blacktriangleleft\blacktriangleleft\blacktriangleleft\blacktriangleleft$ (or press $\blacktriangleright\blacktriangleright$ or $\blacktriangleleft\blacktriangleleft$ on the remote) in stop mode.
Rewind	Press $\blacktriangleleft\blacktriangleleft\blacktriangleleft\blacktriangleleft$ or $\blacktriangleright\blacktriangleright\blacktriangleright\blacktriangleright$ (or press $\blacktriangleleft\blacktriangleleft$ or $\blacktriangleright\blacktriangleright$ on the remote) in stop mode.
Remove the cassette	Press A EJECT \blacktriangle (or \blacktriangle B EJECT) in stop mode.

Tip

The deck stops automatically after repeating the sequence five times.

Searching for the beginning of a track (AMS)

During playback, press $\blacktriangleleft\blacktriangleleft\blacktriangleleft$ or $\blacktriangleright\blacktriangleright\blacktriangleright\blacktriangleright$ (or press $\blacktriangleleft\blacktriangleleft$ or $\blacktriangleright\blacktriangleright$ on the remote) repeatedly for the number of songs you want to skip forward (or backward).

The search direction, + (forward) or - (back), and number of songs being skipped (1 to 9) appear.

Example: searching forward 2 songs

TAPE A))) +2

Note

The AMS function may not operate correctly under the following circumstances:

- When the unrecorded space between songs is less than 4 seconds long.
- When the unit is placed near a television.

Note on the tape decks

Do not press A EJECT \blacktriangle or \blacktriangle B EJECT while playing a tape, otherwise the tape could be damaged.

Recording to a tape

— CD Synchro Recording/High Speed Dubbing/Recording Manually/ Program Edit

You can record from a VIDEO CD/CD/a disc with MP3 files, tape (or connected components) or radio. You can use TYPE I (normal) tape. The recording level is adjusted automatically.

Steps	Recording from a disc (CD Synchro Recording)	Recording from a tape (High-Speed Dubbing)	Recording Manually
1	Insert a recordable tape into deck B.		
2	Press FUNCTION (or FUNCTION +/- on the remote) repeatedly until "CD" appears, and then insert the VIDEO CD/CD you want to record.	Insert the tape you want to record into deck A.	Press FUNCTION (or FUNCTION +/- on the remote) or TUNER/BAND repeatedly until the source or band you want to record appears, and then load the VIDEO CD/CD/tape (or other audio source), or tune in the station you want to record.
3	Press CD SYNC.	Press H SPEED DUB.	Press ● REC.
	Deck B stands by for recording. When you want to record on the reverse side, press ◀.		
4	Press DIRECTION repeatedly to select ⇌ to record on one side. Select ⇔ (or RELAY) to record on both sides.		
5	Press II . Recording starts.	Press II , then start playing the source to be recorded.	

Tape

To stop recording

Press **■**.

Tips

- When you record on both sides, be sure to start from the front side. If you start from the reverse side, recording stops at the end of the reverse side.
- For recording from the tape:

If you set the direction to ⇔ when the tapes you use have different lengths, the tapes in each deck reverses independently. If you select **RELAY**, the tapes in both decks reverse together.

- For recording from the radio:
If noise is heard while recording from the radio, move the respective antenna to reduce the noise.

continued

Recording a CD by specifying track order

— Program Edit

- 1** Load VIDEO CD/CDs and a recordable tape.
- 2** Program VIDEO CD/CD and tracks following step 1 to 6 in “Programming the VIDEO CD/CD tracks” on page 15.
- 3** Press CD SYNC.
Deck B stands by for recording.
- 4** Press DIRECTION repeatedly to select \rightleftarrows to record on one side.
Select \leftrightarrow (or RELAY) to record on both sides.
- 5** Press II.
Recording starts.

To record a disc with MP3 files by specifying file order

After step 1, program the MP3 files following the procedures in “To program the MP3 files” on page 16, then proceed to step 3 above.

Tip

To check the required tape length for recording a VIDEO CD/CD, press EDIT after you have loaded a VIDEO CD/CD and switched function to CD. The required tape length for the currently selected VIDEO CD/CD appears, followed by the total playing time for side A and side B respectively (Tape Select Edit).

Note

You cannot use Tape Select Edit for discs containing over 20 tracks or MP3 files.

Timer-recording radio programs

To timer-record, you must preset the radio station (see “Presetting radio stations” on page 20) and set the clock (see “Setting the clock” on page 10) beforehand.

- 1** Tune in the preset radio station (see “Listening to the radio” on page 21).
- 2** Press \odot /CLOCK SET (or CLOCK/TIMER SET on the remote).
- 3** Press \uparrow/\downarrow repeatedly to select “REC SET,” then press ENTER.
“ON” appears and the hour indication flashes in the display.
- 4** Set the time to start recording.
Press \uparrow/\downarrow to set the hour, then press ENTER.
The minute indication starts flashing.
Press \uparrow/\downarrow to set the minute, then press ENTER.
- 5** Set the time to stop recording following the above procedure.
The start time appears, followed by the stop time, the preset radio station to be recorded (e.g., “TUNER FM 5”), then the original display appears.
- 6** Insert a recordable tape into deck B.

7 Turn off the power.

When the recording starts, the volume level is set to the minimum.

To	Do this
Check the setting	Press TIMER SELECT (or CLOCK/TIMER SELECT on the remote). Press ↑/↓ to select "REC SELECT." Then, press ENTER. To change the setting, start over from step 1.
Cancel timer operation	Press TIMER SELECT (or CLOCK/TIMER SELECT on the remote). Press ↑/↓ to select "TIMER OFF." Then, press ENTER.

Notes

- The system turns on 15 seconds before the preset time.
- If the system is on at the preset time, the Timer recording will not be made.
- When you use the Sleep Timer, Timer recording will not turn on the system until the Sleep Timer turns it off.
- Recording starts from the front side.

Adjusting the sound

To reinforce lower bass sound (SUPER WOOFER)

Press SUPER WOOFER.

Each time you press this button, the super woofer level display changes cyclically as follows:

SUPER WOOFER FLAT → LOW → HIGH

Tip

SUPER WOOFER button lights up when super woofer mode is activated.

To select the super woofer mode

Press SUPER WOOFER MODE while the super woofer is on.

Each time you press this button, the super woofer mode display changes as follows:

MODE MOVIE ↔ MODE MUSIC

For a powerful sound (GROOVE)

The volume switches to power mode and the equalizer curve changes.

Press GROOVE.

Press GROOVE again to return to the previous volume.

For a powerful and vivid sound (X-GROOVE)

The middle frequency of the music you are listening to is powerfully reinforced, the equalizer curve changes and loudness is increased.

Press X-GROOVE.

Press X-GROOVE again to cancel the reinforcement.

Note

Canceling the Groove mode cancels the equalizer curve and super woofer level. Adjust the equalizer settings to obtain the desired effect.

Selecting the audio emphasis effect

Selecting the preset effect from the music menu

Press a direct equalizer button you want.

The preset effect name appears.

See the chart “Music menu options.”

Music menu options

“SUR (((((●))))))” appears if you select an effect with surround effects.

Effect	For
POP	standard music sources
REGGAE	
TANGO	
SAMBA	
SALSA	
MOVIE	
ROCK	
JAZZ	
DANCE	
GAME	soundtracks and special listening situations

Other operations

To	Press
Select a personal file	P FILE.
Cancel the effect	EFFECT repeatedly until “EFFECT OFF” appears.

Tip

You can also select the preset effect including the P FILE by pressing FILE SELECT +/- on the remote repeatedly.

Selecting the surround effect

Press DSP until the desired DSP mode appears in the display.

Each time you press this button, the menu changes as follows:

DSP OFF: Deactivates the DSP mode.

SURROUND ON: Reproduces stereo sources in surround sound.

HALL: Reproduces the acoustics of a concert hall.

THEATER: Reproduces the acoustics of a movie theater.

E. (enhanced) THEATER: Reproduces the acoustics of a large movie theater.

Note

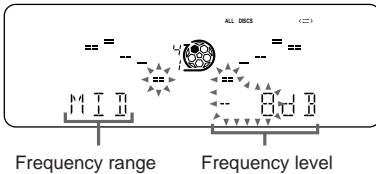
If you choose other sound effects, the surround effect will be canceled. To retain the effect, store it in a personal file (see “Making a personal audio emphasis file” on page 27).

Making a personal audio emphasis file

— Personal File

You can create a personal file of audio patterns (surround effect and graphic equalizer) and store them in the system's memory. Later, you can call up an audio pattern when playing a favorite tape, VIDEO CD/CD, or radio program. Before operating, first select the basic audio emphasis you want for your sound.

- 1 Press ←/→ to select the frequency range, and then press ↑/↓ to adjust the level.



- 2 Press ENTER.

This setting is automatically stored as P FILE.

The setting previously stored at this memory location is erased and replaced by the new settings.

To	Press
Call up a personal file	P FILE.
Cancel a personal file	EFFECT repeatedly until "EFFECT OFF" appears.

Enjoying Dolby Pro Logic Surround sound

You can enjoy the Dolby Pro Logic Surround sound of Dolby Surround-encoded (DOLBY SURROUND) videos and TV programs. Complete the setup and speaker adjustments first (see "Setting up the speakers for Dolby Pro Logic" on page 9).

- 1 Press PRO LOGIC so the indicator lights up.
- 2 Play a program source.

To turn off the Dolby Pro Logic Surround sound

Press PRO LOGIC so the indicator goes off.

Notes

- You cannot use the Dolby Pro Logic Surround sound and Surround Menu functions at the same time.
- When you record the sound, turn off the Dolby Pro Logic Surround sound.
- The audio emphasis setting will be canceled when you turn on the Dolby Pro Logic Surround sound.

Falling asleep to music

— Sleep Timer

You can have the system turn off at a preset time, so you can fall asleep to music.

Press SLEEP.

Each time you press the button, the minute display (the turn-off time) changes as follows:

AUTO → 90 → 80 → 70 → ... → 10 →

OFF → AUTO* ...

* The power turns off when the current CD or tape finishes playback (for up to 100 minutes).

To	Press
Check the remaining time**	SLEEP once.
Change the time to turn off	SLEEP to select the time you want.
Cancel the Sleep Timer function	SLEEP repeatedly until "SLEEP OFF" appears.

** You cannot check the remaining time when AUTO is selected.

Waking up to music

— Daily Timer

You can wake up to music at a preset time every day. Make sure you have set the clock (see "Setting the clock" on page 10).

1 Prepare the music source you want to play.

- VIDEO CD/CD: Load a VIDEO CD/CD. To start from a specific track, make a program (see "Programming the VIDEO CD/CD tracks" on page 15).
- Tape: Load a tape with the side you want to play facing forward.
- Radio: Tune in the preset station you want (see "Presetting radio stations" on page 20).

2 Adjust the volume.



3 Press /CLOCK SET (or CLOCK/TIMER SET on the remote).

"SET" appears and "DAILY SET" flashes in the display.



4 Press ENTER.

"ON" appears and the hour digits flash in the display.

5 Set the time to start playback.

Press / repeatedly to set the hour, then press ENTER.

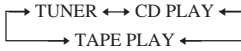
The minute indication starts flashing.

Press / repeatedly to set the minute, then press ENTER.

6 Set the time to stop playback following the above procedure.

7 Press \uparrow/\downarrow repeatedly until the music source you want appears.

The indication changes as follows:



8 Press ENTER.

The start time, stop time, and the music source appear, then the original display appears.

9 Turn off the system.

To	Do this
Check the setting	Press TIMER SELECT (or CLOCK/TIMER SELECT on the remote). Press \uparrow/\downarrow to select "DAILY SELECT." Then, press ENTER.
Change the setting	Start from step 1.
Cancel the timer operation	Press TIMER SELECT (or CLOCK/TIMER SELECT on the remote). Press \uparrow/\downarrow to select "TIMER OFF." Then, press ENTER.

Notes

- When you use the Sleep Timer, Daily Timer will not turn on the system until the Sleep Timer turns it off.
- You cannot activate the Daily Timer and the recording timer at the same time.

Tip

The power turns on 15 seconds before the preset time.

Changing the spectrum analyzer display

Press SPECTRUM ANALYZER.

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

PATTERN1 → PATTERN2 →
PATTERN3 → PATTERN4

Singing along: Karaoke

You can sing along with any stereo CD by turning down the singer's voice. You need to connect an optional microphone.

- 1 Turn MIC LEVEL to MIN to turn down the microphone control level.**
- 2 Connect an optional microphone to MIC1 or MIC2.**
- 3 Press KARAOKE PON/ MPX repeatedly to obtain the karaoke effect you desire.**

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

KARAOKE PON → MPX R* →
MPX L* → KARAOKE OFF

* To sing karaoke of multiplex CD, select "MPX R" or "MPX L."

The indicator appears when karaoke mode is activated.

- 4 Start playing the music.**
- 5 Adjust the microphone volume by turning MIC LEVEL.**

After you have finished

Turn MIC LEVEL to MIN and disconnect the microphone from MIC1 or MIC2, then press KARAOKE PON/MPX repeatedly until disappears.

continued

Singing along: Karaoke (continued)

To	Do this
Use VIDEO CDs	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 MIC1 or MIC2, then press KARAOKE PON/ MPX repeatedly until "🎤" disappears.
Adjust the microphone echo	Turn ECHO LEVEL to adjust the echo effect. To cancel the echoing, turn ECHO LEVEL to MIN.
Adjust the key*	Press KEY CONTROL #/b to suit your vocal range. You can adjust the key higher or lower in 13 halftone steps (b 6 to # 6). This function can be used with the CD player only. To cancel the key adjustment, press KEY CONTROL #/b until "KEYCON OFF" appears.

* This function cannot be used with MP3 files.

Tip

You can connect two microphones to MIC1 and MIC2 at the same time.

Notes

- With some songs, vocals may not be canceled when you select "KARAOKE PON."
- During KARAOKE PON, equalizer and surround settings cannot be changed.
- If you select a sound effect, the karaoke mode is canceled.
- The instrumental sound may be reduced as well as the singer's voice when the sound is recorded in monaural.
- Karaoke mode is available only when the CD function is selected.
- 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.

Mixing and recording sounds

- 1** Do the procedure for "Singing along" (steps 1 through 5). Then, load a recordable tape in deck B.
- 2** Press FUNCTION (or FUNCTION +/- on the remote) repeatedly to select the source you want to record and set it to pause mode.
- 3** Press ● REC.
- 4** Press DIRECTION repeatedly to select ⇐ to record on one side. Select ⇔ (or RELAY) to record on both sides.
- 5** Press II.
- 6** Press ▷ II to start playing the VIDEO CD/CD (or ▷ on deck A to start playing the tape).
Start singing along with the music.

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 CD function and not playing a VIDEO CD/CD.
- When high level sound signals are input, the unit automatically adjusts the recording level to prevent distortion of the recorded sound signal (Auto Level Control Function).

Enhancing video game sound

— Game Sync

You can enjoy the sound effect of video games.

- 1** Connect a video game player (see “Hooking up optional components” on page 35).
- 2** Press GAME in the upper-right corner on the front panel (see [14], “List of Button Locations and Reference Pages” on page 4).

Mixing video game sound with other sound source

— Game Mixing

- 1** Connect a video game player (see “Hooking up optional components” on page 35).
- 2** Press FUNCTION (or FUNCTION +/- on the remote) repeatedly to select your desired sound source.
- 3** Press GAME MIXING.

Each time you press this button, the level of the game sound changes cyclically as follows:

MIXING LOW → MIXING MID →
MIXING HIGH → MIXING OFF

Tips

- The indicator on the GAME MIXING button lights up when GAME MIXING is activated.
- Once GAME MIXING is activated, it will remain active while the power is on even if the function is changed.

Notes

- If you start recording while GAME MIXING is activated, GAME MIXING is canceled. To record the mixed sound, press GAME MIXING after step 4 of “Recording Manually” on page 23, and then press **II** to start recording.
- This system outputs video from GAME INPUT jack while GAME MIXING is activated.

Turning off the display

— Power Saving 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 (Power Saving Mode).

Press POWER SAVE/DEMO (STANDBY) repeatedly while the system is off until the demonstration display disappears.

To cancel Power Saving Mode

Press POWER SAVE/DEMO (STANDBY) repeatedly while the system is off. Each time you press the button, the display switches as follows:

Demonstration display ↔ No display (Power Saving Mode)

Tips

- I/⏻ indicator lights up even in the Power Saving Mode.
- The timer continues to operate in Power Saving Mode.
- Each time you press DISPLAY while the system is off, the display switches as follows:

Demonstration display ↔ Clock display*

* The clock is displayed only if you set the clock.

Using the display

You can check the remaining time of the current track or that of the CD.

When a CD TEXT disc or a disc with MP3 files is loaded, you can check the information stored on the disc, such as the titles. When the unit detects CD TEXT discs, the “CD-TEXT” indication appears.

Checking the remaining time

Press DISPLAY repeatedly during Normal Play.

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

CD/VIDEO CD without PBC function (Ver. 1.0)

Playing time on the current track →
 Remaining time on the current track or “--:--” display (while MP3 file is playing) →
 Remaining time on current CD (1 DISC or ALBUM mode) or “--:--” display (ALL DISCS mode or while MP3 file is playing) →
 Title name of the current track*¹ → Title name of the current folder*² → Clock display (for a few seconds) → Effect status

VIDEO CD with PBC (Ver. 2.0)

Playing time on the current track*³ → Clock display (for eight seconds) → Effect status

Checking the total playing time

Press DISPLAY repeatedly in stop mode.

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

Total number of tracks or folder*² and total playing time → Disc title*¹ or title name of the current folder*² → Clock display (for a few seconds) → Effect status

*¹ With CD TEXT discs (certain characters cannot be displayed), or a disc with MP3 files. When the CD contains more than 20 tracks, CD TEXT is not displayed from track 21 on.

*² Only for MP3 files.

*³ May not appear with still images, etc.

Notes

- The display may not show all the characters depending on the disc.
- This player can only display the disc titles and track titles from CD TEXT discs. Other information cannot be displayed.

Adjusting the VCD picture

— Picture Effect

You can adjust the hue and sharpness of the VCD picture.

- 1** Press **PICTURE EFFECT** during playback.
- 2** Press ← or → repeatedly to adjust the hue.
- 3** Press ↑ or ↓ repeatedly to adjust the sharpness.
- 4** Press **ENTER**.

Tip

The hue and sharpness can be adjusted in 11 steps (from -5 to +5).

Using the on-screen display

You can check the current operating status and disc information of VIDEO CDs or audio CDs during playback or in stop mode. Depending on condition some items are displayed and others are not.

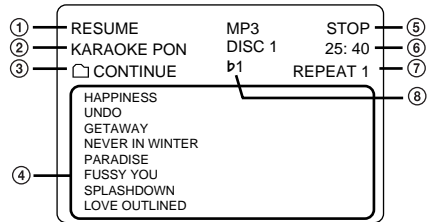
Press **ON SCREEN** on the remote.

Each time you press this button, the on-screen display changes cyclically as follows:

ON SCREEN 1 → ON SCREEN 2 → ON SCREEN OFF*

* No display (except for Time Search/Disc Digest)

ON SCREEN 1, 2 display



Display

① When	The display shows:
In stop mode	“RESUME” or no display
During playback	Current disc and track number

② KARAOKE effect status

③ Play mode or “AUTO PBC”*

* “AUTO PBC” appears for a VIDEO CD with PBC functions.

continued

Using the on-screen display (continued)

④ When	The display shows:
In stop mode of a disc with MP3 files	Folder name
During playback of a disc with MP3 files*	Current folder name and file name
In Program Play mode	Programmed disc and track number
Other condition	No display

* When an MP3 file containing ID3 tags is played, the information that appears on the on-screen display consists of file names, and may thus differ from the ID3 tag information shown on the system's display.

⑤ When	The display shows:
During playback	Elapsed time of current track
In stop mode	“STOP”

⑥ When	The display shows:
In stop mode	Total playing time of the current disc*

* In Program Play mode, total playing time of the program appears.

⑦ “REPEAT,” “REPEAT1” or no display

⑧ Key control level or no display

Tip

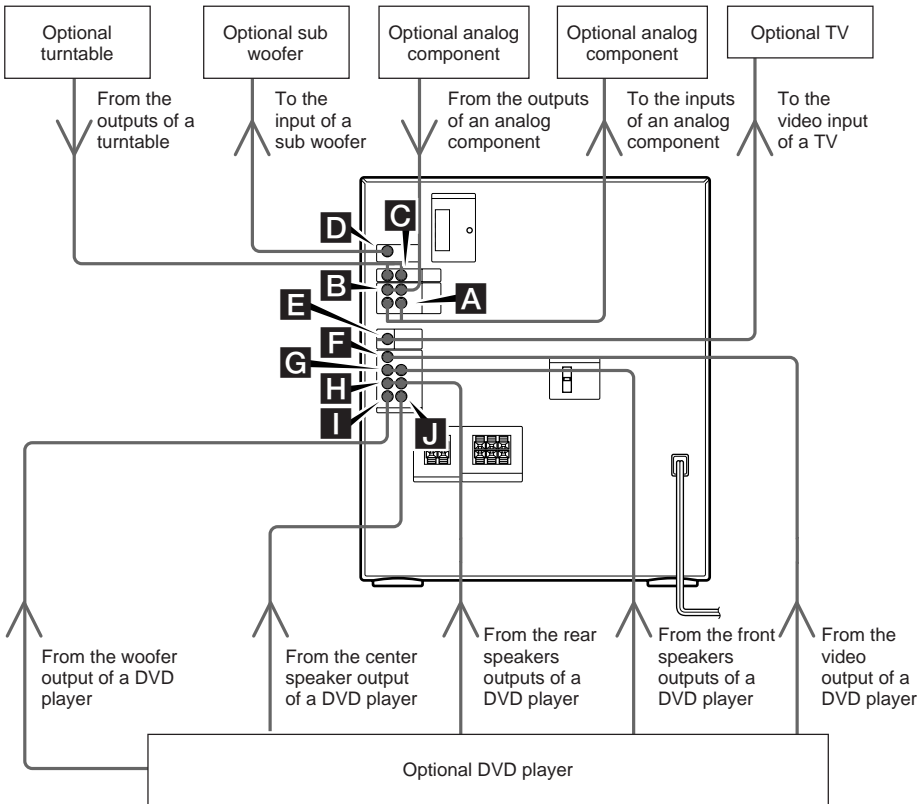
Depending on conditions, some items are displayed and others are not.

Notes

- Normally, leave the display mode set to either ON SCREEN 1 or 2. When you select ON SCREEN OFF, you cannot check the operating status while operating the CD player. In this case, check the information on the front panel display.
- When you record video signals played back from this system onto a video tape (,etc.), be sure to select ON SCREEN OFF. Otherwise, the display information will also be recorded on the video tape.
- You may hear some noise when you change the on-screen display.

Hooking up optional components

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



A MD (VIDEO) OUT jacks

Use audio cords (not supplied) to connect an optional component (such as an MD deck or a VCR) to these jacks. You can then output audio to that component from this system.

B MD (VIDEO) IN jacks

Use audio cords (not supplied) to connect an optional component (such as an MD deck or a VCR) to these jacks. You can then record or listen to analogue audio from that component through this system.

C PHONO IN jacks

Use audio cords (not supplied) to connect an optional component (such as a turntable) to these jacks. You can then record or listen to analogue audio from that component through this system.

D SUB WOOFER OUT jack

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

continued

Hooking up optional components (continued)

E VIDEO OUT jack

Use a video cord (supplied) to connect an optional component (such as a TV) to this jack. You can then output video to that component from the connected video game through this system.

F DVD VIDEO INPUT jack

Use a video cord (not supplied) to connect an optional component (such as a DVD player) to this jack. You can then input video from that component.

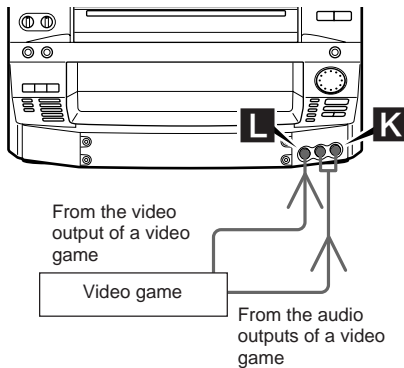
G DVD FRONT INPUT jacks

H DVD REAR INPUT jacks

I DVD WOOFER INPUT jacks

J DVD CENTER INPUT jacks

Use audio cords (not supplied) to connect a DVD player to these jacks. You can then record or listen to analogue audio from that component through this system.



K GAME INPUT AUDIO L/R jacks

Use audio cords (not supplied) to connect an optional component (such as a video game or camcorder, etc.) to these jacks. You can then record or listen to analogue audio from that component through this system.

L GAME INPUT VIDEO jack

Use video cord (not supplied) to connect an optional component (such as a video game or camcorder, etc.) to this jack. You can then output video to the connected TV from that component through this system.

Notes

- Be sure to match the color of the plugs and the connectors.
- Using a turntable at high volume may cause distortion or howling. This is often caused by the bass sound from the speakers. The bass sound may produce the distortion or howling. To avoid this, do the following:
 - 1 Keep some distance from speakers to the turntable.
 - 2 Stop using the surround effect.
 - 3 Install the speakers or the turntable on a firm and stable surface.
 - 4 Press SUPER WOOFER repeatedly until the indicator on this button goes off.

Listening to audio from a connected component

Listening to an MD deck or VCR, etc.

1 Connect the audio cords.

See “Hooking up optional components” on page 35.

2 Press FUNCTION (or FUNCTION +/- on the remote) repeatedly until “MD” or “VIDEO” appears.

Start playing the connected component.

Notes

- Holding down FUNCTION, and then pressing I/⏻ while the power is off automatically turns the power on and selects “VIDEO” as the function. When the system is in power saving mode, this function does not work.
- If the sound is distorted or too loud when “VIDEO” is selected or you want to switch back to “MD,” repeat the operation described above to switch to “MD.”

Listening to a turntable, etc.

1 Connect the audio cords.

See “Hooking up optional components” on page 35.

2 Press FUNCTION (or FUNCTION +/- on the remote) repeatedly until “PHONO” appears.

Start playing the connected component.

Listening to a video game or camcorder, etc.

1 Connect the audio cords.

See “Hooking up optional components” on page 35.

2 Press FUNCTION (or FUNCTION +/- on the remote) repeatedly until “GAME” appears or press GAME in the right corner of the front panel.

Start playing the connected component.

Listening to a DVD player

1 Connect the audio cords.

See “Hooking up optional components” on page 35.

2 Press FUNCTION (or FUNCTION +/- on the remote) repeatedly until “DVD” appears.

Start playing the connected component.

To	Do this
Listen to 5.1CH analog audio	Press DVD 5.1CH repeatedly until the indicator of the button lights up.
Listen to stereo analog audio	Press DVD 5.1CH repeatedly until the indicator of the button goes off.

Notes

- Each time you press DVD 5.1CH, the function changes as follows:
DVD 5.1CH (indicator on) ↔ DVD (2 channel) (indicator off)
- You cannot enjoy the 5.1 channel surround sound if you connect a DVD player which does not have the 5.1 channel analog outputs.

Recording audio from a connected component

Making an analogue recording from an analogue component on a tape

1 Connect the audio cords.

See “Hooking up optional components” on page 35.

2 Start recording manually.

See “Recording to a tape” on page 23.

Recording on a connected component

1 Connect the audio cords.

See “Hooking up optional components” on page 35.

2 Start recording.

Refer to the operating instructions provided with connected component.

Problems and remedies

If you run into any problem using this unit, use the following check list.

First, check that the power cord is connected firmly and the speakers are connected correctly and firmly.

Should any problem persist, consult your nearest Sony dealer.

General

“--:--” appears in the display.

- A power interruption occurred. Set the clock and timer settings again.

The display starts flashing as soon as you plug in the power cord even though you haven't turned on the power.

- Refer to demonstration (see page 32).

The clock setting is canceled.

- The power cord is disconnected or a power failure occurs. Redo “Setting the clock” (on page 10). If you have set the timer, redo “Waking up to music” (on page 28) and “Timer-recording radio programs” (on page 24).

The radio presetting/timer setting is canceled.

- The power cord is disconnected or a power failure occurs for longer than half a day. Redo “Presetting radio stations” (on page 20).
-

There is no sound.

- Turn VOLUME clockwise.
- The headphones are connected.
- Insert only the stripped portion of the speaker cord into the SPEAKER jack. Inserting the vinyl portion of the speaker cord will obstruct the speaker connections.
- The protective device on the amplifier has been activated because of a short circuit. (“PROTECT” and “PUSH POWER” flash alternately.) Turn off the unit, eliminate the short-circuit problem and turn on the power again.
- There is no audio output during timer recording.

There is no microphone sound.

- Turn VOLUME or MIC LEVEL to adjust the microphone volume.
- Make sure the microphone is connected to the MIC1 or MIC2 jack correctly.

There is severe hum or noise.

- A TV or VCR is placed too close to the stereo system. Move the stereo system away from the TV or VCR.

The sound from the connected source is distorted.

- If “VIDEO” appears in the display when you press FUNCTION (or FUNCTION +/- on the remote) repeatedly, switch the display to “MD” (see “Notes” in “Listening to audio from a connected component” on page 37).

The timer does not function.

- Set the clock correctly.
- Set the timer correctly.

DAILY and REC do not appear when you press the ☺/CLOCK SET button.

- Set the timer correctly.
- Set the clock.

The remote does not function.

- There is an obstacle between the remote and the system.
 - The remote is not pointing in the direction of the system’s sensor.
 - The batteries have run down. Replace the batteries.
-

There is acoustic feedback.

- Decrease the volume level.
- 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.
-

Speakers

“PROTECT” and “PUSH POWER” appear alternately.

- A strong signal was input. Press I/⏻ to turn off the power, leave the system turned off for a while, then press I/⏻ again to turn on the power.
- Check the speaker cables in case “PROTECT” and “PUSH POWER” appear alternately again after you turn the system on.

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

- Check the speaker connection and speaker placement.

Sound lacks bass.

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

continued

Problems and remedies (continued)

VIDEO CD/CD/MP3 Player

There is no picture.

- Check that the player is connected correctly and securely.
- Make sure you operate the TV correctly.
- Make sure you set the SYSTEM SELECT correctly, according to your TV (color) system.
- Press FUNCTION (or FUNCTION +/- on the remote) repeatedly until “CD” appears in the display.
- Make sure that GAME MIXING is canceled.

The CD tray does not close.

- The VIDEO CD/CD is not placed properly.

The VIDEO CD/CD will not play.

- The VIDEO CD/CD is not lying flat in the disc tray.
- The VIDEO CD/CD is dirty (see “Notes on VIDEO CD/CDs” on page 42).
- The VIDEO CD/CD is inserted label side down.
- The VIDEO CD/CD is moist.

Play does not start from the first track.

- The player is in program or shuffle mode. Press PLAY MODE repeatedly until “PROGRAM,” “ALL DISCS SHUFFLE,” or “1 DISC SHUFFLE” disappears.

MP3 files cannot be played back.

- Recording was not performed according to the ISO 9660 level 1 or level 2 format.
- The file extension “.MP3” is not added to the file name.
- Files are not stored in MP3 format.
- Discs containing files other than MPEG 1 Audio Layer-3 files cannot be played.
- Files that are 64 kB or smaller cannot be played.

MP3 files take longer to play back than others.

- After the unit read all files on the disc, playback may take more time than usual if:
 - the number of folders or files on the disc is very large.
 - the folder and file organization structure is very complex.

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

- The disc was not recorded in conformance with ISO 9660 level 1 or level 2. Use a disc that conforms with ISO 9660 level 1 or level 2.
- The disc ID3 tag is not ver. 1 (ver.1.0 or 1.1).

The folder title, track title, ID3 tag, and the CD TEXT characters don't appear properly.

- The characters that can be displayed by this unit are as follows:
 - Upper cases (A to Z)
 - Numbers (0 to 9)
 - Symbols (< > * + , - / [] \ _)
- Other characters may not be displayed correctly.

About ID3 tag version 2

Although not a malfunction, the following occurs when an MP3 file containing ID3 tag ver. 2 is played:

- When skipping a portion of ID3 tag ver. 2 (at the beginning of the track), sound is not output. Skip time changes depending ID3 tag ver.2 capacity.

Example: At 64 kbytes, it is about 2 seconds (with RealJukebox*).

- The displayed elapsed playing time when skipping a portion of ID3 tag ver. 2 is inaccurate.

For MP3 files of a bit rate other than 128 kbps, time is not displayed accurately during playback.

- When an MP3 file is created with MP3 conversion software (ex. RealJukebox*), ID3 tag ver. 2 will automatically be written.

* “RealJukebox” is a registered trademark of RealNetworks, Inc.

As of December, 2001

Tape Deck

The tape does not record.

- The tab has been removed from the cassette (see “To save a tape permanently” on page 42).
- The tape has reeled to the end.

The tape does not record nor play, or there is a decrease in sound level.

- The heads are dirty (see “Cleaning the tape heads” on page 43).
- The record/playback heads are magnetized (see “Demagnetizing the tape heads” on page 43).

The tape does not erase completely.

- The record/playback heads are magnetized (see “Demagnetizing the tape heads” on page 43).

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

- The capstans or pinch rollers are dirty (see “Cleaning the tape heads” on page 43).

Noise increases or the high frequencies are erased.

- The record/playback heads are magnetized (see “Demagnetizing the tape heads” on page 43).

Tuner

Severe hum or noise (“TUNED” or “STEREO” flashes in the display).

- Adjust the antenna.
- The signal strength is too weak. Connect the external antenna.

A stereo FM program cannot be received in stereo.

- Press STEREO/MONO so that “STEREO” disappears.

If other troubles not described above occur, reset the system as follows:

- 1 Press \odot /CLOCK SET, TUNER ENTER and I/ \odot at the same time.
- 2 Unplug the power cord.
- 3 Plug the power cord back in.
- 4 Press I/ \odot to turn on the power.

The unit is reset to factory settings. All the settings you made are cleared.

Messages

VIDEO CD/CD

CANNOT EDIT

- You tried to use Tape Select Edit for discs containing over 20 tracks.

CANNOT USE

- You pressed an invalid button.

NO STEP

- You have cleared all the tracks you programmed.

OVER

- You have reached the end of the CD. Press \blacktriangleleft .
- The end of the MP3 file has been reached during a search.

PUSH STOP

- You pressed PLAY MODE during play.

STEP FULL

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

TOC READING

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

Precautions

On operating voltage

Before operating the unit, check that the operating voltage of your unit 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 unit from the wall outlet (mains) if it is not to be used for an extended period of time. To disconnect the cord (mains lead), pull it out by the plug. Never pull the cord itself.
- Should any solid object or liquid fall into the component, unplug the unit and have the component checked by qualified personnel before operating it any further.
- The AC power cord must be changed only at the qualified service shop.

On placement

- Do not place the unit in an inclined position.
- Do not place the unit in locations where it is:
 - extremely hot or cold
 - dusty or dirty
 - very humid
 - vibrating
 - 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 unit heats up during the operation, this is not the malfunction.
- Place the unit in a location with adequate ventilation to prevent heat build-up in the unit.

If you continuously use this unit at a large 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 cooling fan.

On operation

- If the unit 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 unit will not operate properly. Remove the CD and leave the unit turned on for about an hour until the moisture evaporates.
- When you move the unit, take out any discs.

If you have any questions or problems concerning your unit, please consult your nearest Sony dealer.

Notes on VIDEO CD/CDs

- Before playing, clean the VIDEO CD/CD with a cleaning cloth. Wipe the VIDEO CD/CD from the center out.
- Do not use solvents.
- Do not expose the VIDEO CD/CD to direct sunlight or heat sources.
- Discs with non- standard shapes (e.g., heart, square, star) cannot be played on this unit. Do not use such discs.

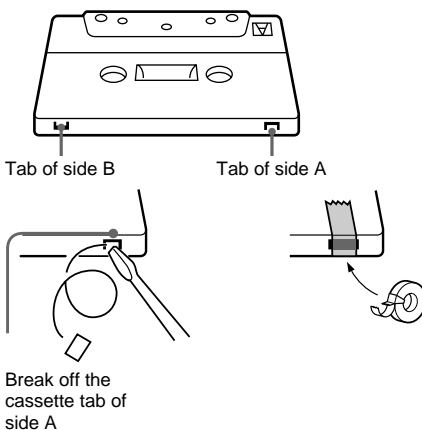
Cleaning the cabinet

Use a soft cloth slightly moistened with mild detergent solution.

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. However, be careful not to cover the detector slots which allow the tape player to automatically detect the type of tape.



Before placing a cassette in the tape deck

Take up any slack in the tape. Otherwise the tape may get entangled in the 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, etc. frequently. The tape may get entangled in the tape deck.

Cleaning the tape heads

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

Demagnetizing the tape heads

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

In case color irregularity is observed on nearby a 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 the type of your TV set.

If color irregularity 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.

Specifications

Amplifier section

Front Speaker:

The following measured at AC 120/220/240 V, 50 Hz
DIN power output (Rated)

150 + 150 watts
(6 ohms at 1 kHz, DIN)
Continuous RMS power output (Reference)
200 + 200 watts
(6 ohms at 1 kHz, 10% THD)

Center Speaker:

DIN power output (Rated)

35 watts
(8 ohms at 1 kHz, DIN)
Continuous RMS power output (Reference)
50 watts
(8 ohms at 1 kHz, 10% THD)

Rear Speaker:

DIN power output (Rated)

35 + 35 watts
(8 ohms at 1 kHz, DIN)
Continuous RMS power output (Reference)
50 + 50 watts
(8 ohms at 1 kHz, 10% THD)

Inputs

PHONO IN:
(phono jacks) sensitivity 3 mV,
impedance 47 kilohms

MIC1/2:
(phone jacks) sensitivity 1 mV,
impedance 10 kilohms

GAME INPUT:
(phono jacks) sensitivity 250 mV,
impedance 47 kilohms

MD (VIDEO) IN:
(phono jack) sensitivity 450 mV
(250 mV),
impedance 47 kilohms

DVD INPUT

FRONT, REAR, CENTER, WOOFER (phono jacks):
sensitivity 450 mV,
impedance 47 kilohms

continued

Specifications (continued)

Outputs

PHONES:

(stereo phone jack) accepts headphones of 8 ohms or more

MD (VIDEO) OUT:

(phono jacks) voltage 250 mV
impedance 1 kilohms

WOOFER OUT (phono jack):

voltage 1 V, impedance 1 kilohm

FRONT SPEAKER:

accepts impedance of 6 to 16 ohms

CENTER SPEAKER:

accepts impedance of 8 to 16 ohms

REAR SPEAKER:

accepts impedance of 8 to 16 ohms

Video section

Inputs

GAME INPUT (phono jack):

1 V p-p, 75 ohms

Outputs

VIDEO OUT (phono jack):

1 V p-p, 75 ohms

VIDEO CD/CD player section

System

Compact disc and digital audio system

Laser

Semiconductor laser ($\lambda=795\text{nm}$), Emission duration: continuous

Frequency response

2 Hz – 20 kHz (± 0.5 dB)

Signal-to-noise ratio

More than 90 dB

Dynamic range

More than 90 dB

Video color system format

NTSC, PAL

Tape player section

Recording system

4-track 2-channel stereo

Frequency response

40 – 13,000 Hz (± 3 dB), using Sony TYPE I cassette

Wow and flutter

$\pm 0.15\%$ W.Peak (IEC)

0.1% W.RMS (NAB)

$\pm 0.2\%$ W.Peak (DIN)

Tuner section

FM stereo, FM/AM superheterodyne tuner

FM tuner section

Tuning range

87.5 – 108.0 MHz
(50 kHz step)

Antenna

FM lead antenna

Antenna terminals

75 ohms unbalanced

Intermediate frequency

10.7 MHz

AM tuner section

Tuning range

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

Speakers

Front speaker:

SS-XGV10AV

Speaker system

3 way BUILT IN SW, magnetically shielded type

Speaker units

Super Woofer:

22 cm dia., cone type

Woofer:

20 cm dia., cone type

Low Tweeter:

2.5 cm dia., horn type

Rated impedance:

6 ohms

Dimensions (w/h/d)

Approx. 290 × 615 × 440 mm

Mass

Approx. 15.5 kg net per speaker

Glossary

Center speaker: SS-CT380

Speaker system	Full-range, bass-reflex type, magnetically shielded type
Speaker units	
Full range	10 cm dia., cone type (2)
Rated impedance	8 ohms
Dimensions (w/h/d)	Approx. 360 × 130 × 170 mm
Mass	Approx. 2.7 kg

Rear speaker: SS-RS380


Speaker system	Full-range, bass-reflex type
Speaker units	
Full range	10 cm dia., cone type
Rated impedance	8 ohms
Dimensions (w/h/d)	Approx. 180 × 130 × 170 mm
Mass	Approx. 1.5 kg net per speaker

General

Power requirements	
Saudi Arabian model:	120 – 127 V, 220 V or 230 – 240 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	230 watts
Dimensions (w/h/d)	Approx. 355 × 425 × 451 mm
Mass:	Approx. 15.4 kg
Supplied accessories:	AM loop antenna (1) FM lead antenna (1) Speaker cords (5) Speaker pads (12) Remote commander (1) Batteries (2) Video connecting cable (1)

Design and specifications are subject to change without notice.

Auto Pause

An automatic pause function which is activated 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.

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.

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 software, software with search functions, and so on.

Track

Sections of a picture or a music piece on disc. Each track is assigned a track number to help you locate the desired track.

continued

Glossary (continued)

VIDEO CD

A compact disc which contains moving pictures.

VIDEO CDs contain compact picture information using the MPEG 1 format, one of the world wide standards of digital compact technology. The picture information is compressed about 120 times. Consequently, a 12 cm VIDEO CD can contain up to 74 minutes of moving pictures.

VIDEO CDs also contain compact audio information. Sounds outside the range of human hearing are compressed while the sounds we can hear are not compressed. VIDEO CDs can hold six times the audio information of conventional audio CDs.

There are two versions for VIDEO CDs;

Version 1.1 (VIDEO CDs without PBC functions):

You can play only moving pictures and sounds.

Version 2.0 (VIDEO CDs with PBC functions):

You can play still pictures and enjoy PBC functions.

This player can play both versions.

