

Component Hi-Fi Stereo System

Operating Instructions



LBT-XGR99AV

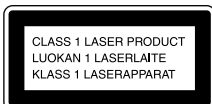
WARNING

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.



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

The following caution label is located inside the apparatus.



ENERGY STAR®



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 Pro Logic Surround System*.

* Manufactured under license from Dolby Laboratories.

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

How to use this manual

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

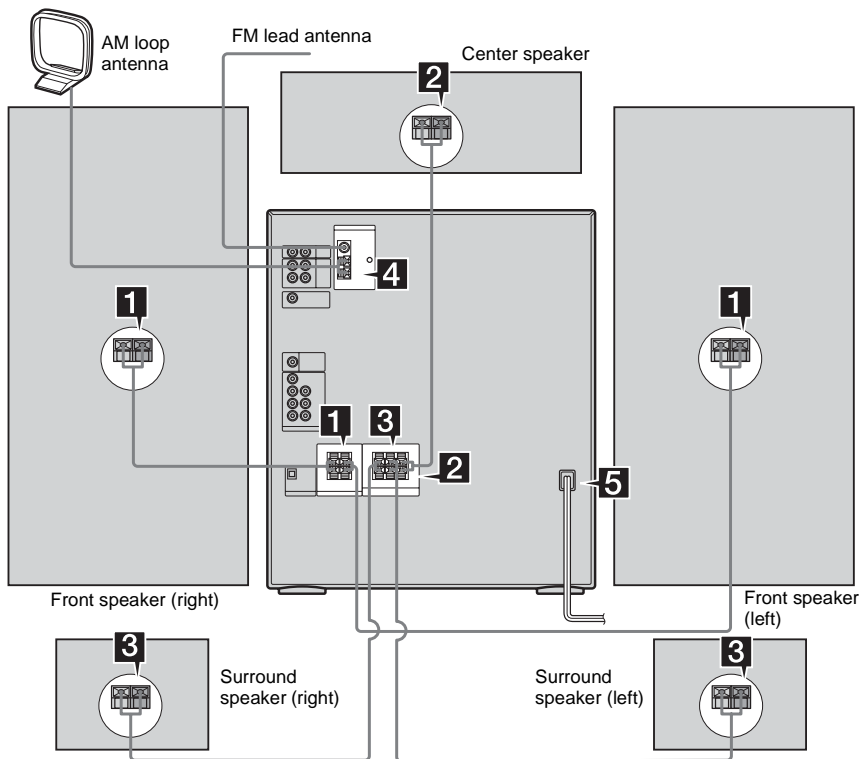
Table of Contents

How to use this manual.....	2	Enjoying Dolby Pro Logic Surround sound	20
Getting Started		Enhancing video game sound	20
Hooking up the system.....	4	— Game Sync	
Setting the speakers.....	6	Mixing video game sound with other sound source	21
Setting the clock.....	7	— Game Mixing	
CD – Play		Singing along.....	21
Loading a disc	8	Timer	
Playing a disc	8	Falling asleep to music	23
— Normal Play/Shuffle Play		— Sleep Timer	
Playing repeatedly.....	9	Waking up to music.....	23
— Repeat Play		— Daily Timer	
Creating your own program	10	Timer recording radio programs.....	24
— Program Play		Display	
Tuner		Turning off the display	25
Presetting radio stations	11	— Power Saving Mode	
Listening to the radio	12	Viewing information about the disc in the display	26
— Preset Tuning		Changing the Power illuminator.....	26
— Manual Tuning		Optional Components	
Tape – Play		Hooking up optional components.....	27
Loading a tape.....	14	Listening to audio from a connected component	29
Playing a tape.....	14	Recording audio from a connected component	30
Tape – Recording		Recording on a connected component	30
Recording your favorite CD tracks on a tape.....	15	Troubleshooting	
— CD Synchro Recording		Problems and remedies.....	31
Recording on a tape manually.....	16	Messages.....	33
— Manual Recording		Additional Information	
Sound Adjustment		Precautions.....	34
Adjusting the sound	17	Specifications.....	35
Making a personal audio emphasis file.....	18	List of button locations and reference pages.....	37
— Personal File			
Selecting the audio emphasis effect.....	18		
Enjoying sound while exchanging discs	19		
— Party Mode			
Selecting the surround effect	19		

Getting Started

Hooking up the system

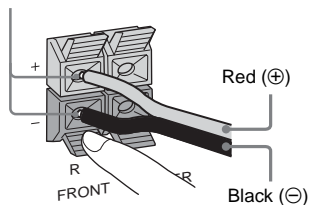
Perform the following procedures **1** to **5** to hook up your system using the supplied cords and accessories (page 36).



1 Connect the front speakers.

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

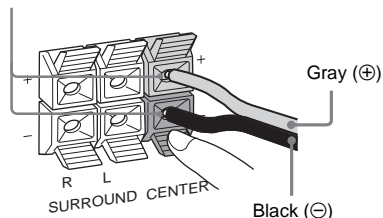
Insert only the stripped portion



2 Connect the center speaker.

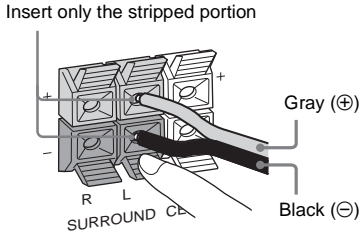
Connect the speaker cord to the CENTER SPEAKER jack as shown below.

Insert only the stripped portion

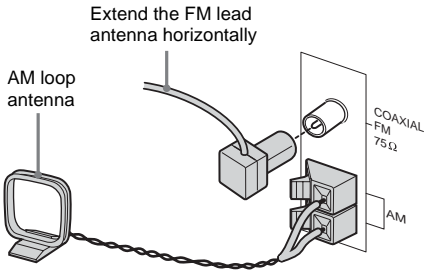
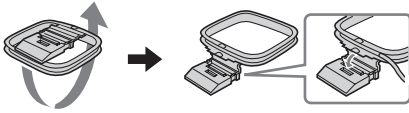


3 Connect the surround speakers.

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

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

Set up the AM loop antenna, then connect it.

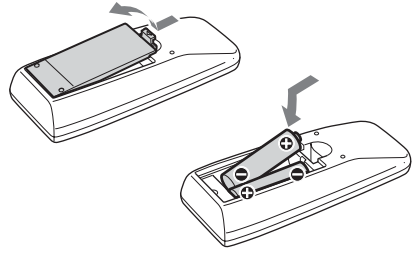
**Note**

Keep the antennas away from the speaker cords.

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 plug does not fit the wall socket, detach the supplied plug adaptor (only for models equipped with an adaptor). You can cancel the demonstration by pressing **DISPLAY** repeatedly (page 25).

Inserting 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.

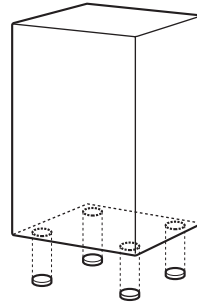
Tip

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

Attaching the speaker pads

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

Front speaker (Left (4)/Right (4))
Center speaker (4)



When carrying this system

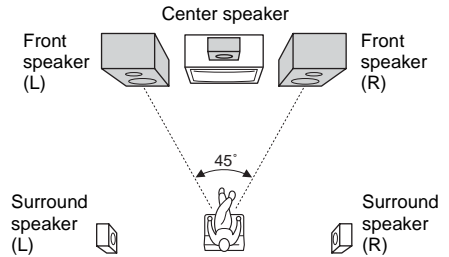
Perform the following procedure to protect the CD mechanism.

- 1 Make sure that all discs are removed from the system.
- 2 Press FUNCTION repeatedly until "CD" appears.
- 3 Hold down EDIT, then press I/⏻ until "LOCK" appears.
- 4 Unplug the power cord.

Setting the speakers

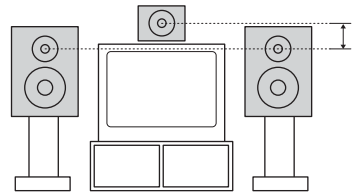
Positioning the speakers

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

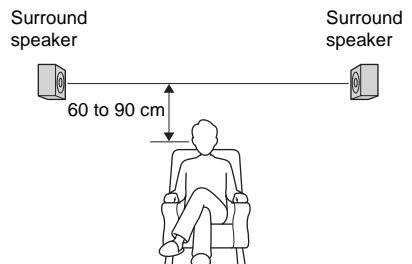


- 2 **Place the center speaker at about the same height as the front speakers.**

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.**



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 indicator 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) →

SURROUND (surround) → ...

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

To adjust	Do this
the volume of the center speaker	Press CENTER LEVEL +/- on the remote.
the volume of the surround speakers	Press SURR LEVEL +/- on the remote.

- 4 From your listening position, adjust the balance.

To adjust	Do this
the balance between the front left and front right speakers	Press ← or → while “LEFT”, “CENTER” or “RIGHT” appears.
the balance between the surround left and surround right speakers	Press ← or → while “SURROUND” appears.

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

The test tone is turned off.

Note

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

Tip

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

Setting the clock

- 1 Press **I/⏻** to turn on the system.
- 2 Press **⌚/CLOCK SET**.
- 3 Press **↑/↓** repeatedly to set the hour.
- 4 Press **ENTER**.
- 5 Press **↑/↓** repeatedly to set the minute.
- 6 Press **ENTER**.
The clock starts working.

To adjust the clock

- 1 Press **⌚/CLOCK SET**.
- 2 Press **↑/↓** to select “CLOCK SET”, then press **ENTER**.
- 3 Do the same procedures as step 3 to 6 above.

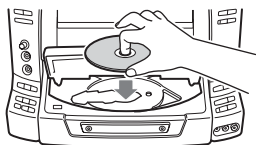
Notes

- The clock settings are canceled when you disconnect the power cord or if a power failure occurs.
- You cannot set the clock in Power Saving Mode (page 25).

CD – Play

Loading a disc

- 1 Press **PUSH OPEN** at left side of the front cover.
The front cover opens.
- 2 Place a disc with the label side up on the disc tray.



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

- 3 Close the front cover.

Note

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

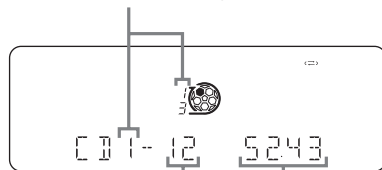
Playing a disc

— Normal Play/Shuffle Play

This system lets you play audio CDs in different play modes.

Example: When a disc is loaded

Disc number in the playing position



Total track number Total playing time

- 1 Press **FUNCTION** repeatedly until “**CD**” appears.
- 2 Press **PLAY MODE** in stop mode repeatedly until the mode you want appears.

Select	To play
ALL DISCS (Normal Play)	All discs in the disc tray continuously.
1DISC (Normal Play)	The tracks on the disc you have selected in original order.
ALL DISCS SHUFFLE (Shuffle Play)	The tracks on all discs in random order.
1DISC SHUFFLE (Shuffle Play)	The tracks on the disc you have selected in random order.
PROGRAM (Program Play)	The tracks on all discs in the order you want them to be played (see “Creating your own program” on page 10).

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

Other operations

To	Do this
Stop play	Press ■.
Pause	Press ► (or on the remote). Press again to resume play.
Select a track	During play or pause, press ◀◀ or ▶▶ repeatedly.
Find a point in a track	Keep pressing ◀◀ or ▶▶ during playback and release it at the desired point.
Select a disc	Press DISC 1 – 5 or DISC SKIP.
Switch to CD function from another source	Press DISC 1 – 5 or ► (or CD ► on the remote) (Automatic Source Selection).
Remove a disc	Press PUSH OPEN, then press DISC SKIP until the disc comes to the front.
Adjust the volume	Turn VOLUME (or press VOL +/- on the remote).

Note

You cannot change the play mode during playback.

Tip

When switching to CD function from tuner, a longer time may be required to access the disc. In this case, set “CD POWER ON” by CD power manage function (page 12).

Playing repeatedly

— Repeat Play

You can play all the tracks or a single track on a disc repeatedly.

Press REPEAT during playback until “REPEAT” or “REPEAT1” appears.

REPEAT: For all the tracks on the disc up to five times.

REPEAT1: For a single track only.

To cancel Repeat Play

Press REPEAT repeatedly until both “REPEAT” and “REPEAT1” disappear.

Note

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

Creating your own program

— Program Play

You can make a program of up to 25 steps from all the discs in the order you want to play them. You can synchro record the programmed tracks onto a cassette tape (page 15).

- 1 Press FUNCTION repeatedly until “CD” appears, then load a disc.**
- 2 Press PLAY MODE in stop mode repeatedly until “PROGRAM” appears.**
- 3 Press one of DISC 1 – 5 or DISC SKIP to select a disc.**
- 4 Press ◀◀ or ▶▶ repeatedly until the desired track number 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 Program additional discs or tracks.

To program	Repeat steps
Other tracks on the same disc	4 and 5
Other tracks on other discs	3 to 5

- 7 Press ▶|| (or CD ▶ on the remote).**
Program Play starts.

Other operations

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

Tips

- The program you made remains after Program Play finishes. To play the same program again, press ▶|| (or CD ▶ on the remote).
- “- - -” appears when the total CD program time exceeds 100 minutes, or when you select a CD track whose number is 21 or over.

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.

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 **TUNING MODE** repeatedly until “AUTO” appears.
- 3 Press **TUNING +/-**.

The frequency changes as the system scans for a station. Scanning stops automatically when a station is tuned in. At that time, “TUNED” and “STEREO” (for an 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 “Manual tuning preset”.

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



Preset number

- 6 Press **TUNER ENTER**.
“COMPLETE” appears.
- 7 Repeat steps 1 through 6 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 MODE** repeatedly until “MANUAL” appears.
- 3 Press **TUNING +/-** repeatedly to tune in the desired station.
- 4 Press **MEMORY**.
- 5 Press **TUNING +/-** repeatedly to select the desired preset number.



Preset number

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

Other Operations

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

To improve tuner reception

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

- 1 Press **FUNCTION** repeatedly until “CD” appears.
- 2 Press **I/⏻** to turn off the system.
- 3 Press **I/⏻** while holding **■**. “CD POWER OFF” appears.

To set CD power on

Repeat the procedure above and “CD POWER ON” appears.

Notes

- When “CD POWER OFF” is selected, CD access time is increased.
- You cannot change the setting in Power Saving Mode (page 25).

To change the AM tuning interval

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, then turn off the system. While holding **TUNER ENTER**, press **I/⏻** to turn the system back on. When you change the interval, all the AM preset stations are erased. To reset the interval, repeat the same procedure.

Note

You cannot change the AM tuning interval in Power Saving Mode (page 25).

Tips

- The preset stations are retained for half 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 11).

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

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.



Note

When switching to CD function from tuner, a longer time may be required to access the disc. In this case, set “CD POWER ON” by CD power manage function.

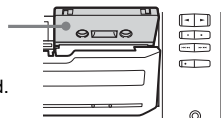
Tips

- 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 the radio programs, use manual recording (page 16).

Loading a tape








- 1 Press A EJECT  or  B EJECT.
- 2 Load a recorded/recordable tape in deck A or B.




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 “” to play one side. Select “” to play both sides. Select “RELAY” (Relay Play)* to play both decks in succession.
- 3 Press  (or TAPE A   or TAPE B   on the remote).

Press  (or TAPE A   on the remote again) to play the reverse side. The tape starts playing.






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

The tape deck stops automatically after repeating the sequence five times.

Other operations

To	Do this
Stop play	Press  .
Pause (deck B only)	Press  . Press again to resume play.
Fast-forward or rewind	Press    (or press  or  on the remote) in stop mode.
Remove a tape	Press A EJECT  (or  B EJECT) in stop mode.

Searching for the beginning of the current or the next track (AMS*)

During playback, press    (or  or  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

* AMS (Automatic Music Sensor)

Notes

- Do not press A EJECT  or  B EJECT while playing a tape, otherwise the tape could be damaged.
- 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 system is placed near a television.




Tape – Recording

Recording your favorite CD tracks on a tape

— CD 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 deck B.**
- 2 Press FUNCTION repeatedly until “CD” appears, then load a disc you want to record.**
- 3 Press CD SYNC.**

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.

To stop recording

Press .

To record a disc by specifying track order

You can record only your favorite disc tracks using Program Play. Between steps 2 and 3, perform steps 2 to 6 of “Creating your own program” (page 10).

Also, you can check the required tape length for recording a disc. Press EDIT after you have loaded a disc in CD function. The required tape length for the currently selected disc appears, followed by the total playing time for side A and side B respectively (Tape Select Edit).

Notes

- You cannot use Tape Select Edit when Program Play mode has been set. After clearing the entire program, follow the above procedure.
- You cannot use Tape Select Edit for discs containing over 20 tracks.

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.
- If you select both sides recording and the tape reaches the end of the front side part-way through a track, the entire track is recorded again from the beginning of the reverse side.

Recording on a tape manually

— Manual Recording

You can record just the portions you like from a CD, tape or radio program on a tape. You can also record from connected components (see “Recording audio from a connected component” on page 30).

- 1 Load a recordable tape into deck B.**
- 2 Press FUNCTION or TUNER/BAND repeatedly to select the desired source to record.**

- CD: To record from this system’s CD player.
- TAPE A: To record from this system’s tape deck A.
- TUNER: To record from this system’s tuner.
- GAME: To record from the connected video game machine to GAME INPUT AUDIO L/R jacks.
- MD or VIDEO: To record from the connected optional component to MD (VIDEO) IN L/R jacks.
- PHONO: To record from the connected optional component to PHONO IN L/R jacks.

- 3 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, then start playing the desired source to record.**

Recording starts.


To stop recording

Press ■.

Note

You cannot listen to other sources while recording.

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  (or RELAY) when the tapes you use have different lengths, the tapes in each deck reverse independently.
- For recording from the radio:
If noise is heard while recording from the radio, move the respective antenna to reduce the noise.

Sound Adjustment

Adjusting the sound

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

Press X-GROOVE.

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

X-GROOVE ON (on)



X-GROOVE OFF (off)

Tip

Factory set to “X-GROOVE ON”.

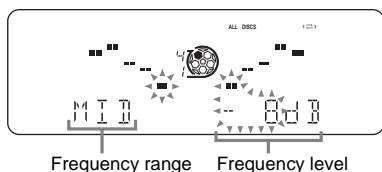
Making a personal audio emphasis file

— 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, 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 and hold **P FILE** until **"MEMORY"** appears.

- 3 Press **ENTER**.

This setting is automatically stored as a personal file.

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

Other operations

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

Selecting the audio emphasis effect

Selecting the preset effect from the music menu

Press the **PRESET EQ** 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	
SALSA	Standard music sources
REGGAE	
TANGO	
MOVIE	Soundtracks and special listening situations
GAME	PlayStation 1, 2 and other video game music sources

Other operations

To	Do this
Select a personal file	Press P FILE .
Cancel the effect	Press EFFECT repeatedly until "EFFECT OFF" appears.

Tip

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

Enjoying sound while exchanging discs

— Party Mode

You can have the built-in sound play while exchanging discs during CD playback.

- 1 Press **PARTY**.
- 2 Press the **PARTY MODE** button you want.

You can select from **SAMBA**, **ROCK**, **DISCO**, **BALLAD** and **TECHNO**.

To adjust the sound level

- 1 Press and hold down **PARTY** while Party Mode is activated.
- 2 Press **↑/↓** to adjust the sound level.
- 3 Press **ENTER**.

To cancel Party Mode

Press **PARTY** again.

Tips

- You can activate Party Mode in other functions.
- You can listen to a single bar during CD playback.
- You can activate Party Mode directly by pressing the **PARTY MODE** button.

Selecting the surround effect

Press **SURROUND** repeatedly to select the surround mode you want.

The surround effect name appears. See the chart “Surround effect options”.

Surround effect options


Effect

SURROUND OFF	Deactivates the surround 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 “Selecting the audio emphasis effect” on page 18).

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 the speakers” on page 6).

1 Press PRO LOGIC.

The indicator lights up.

2 Play a program source.

To turn off the Dolby Pro Logic Surround sound

Press PRO LOGIC until 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.

Enhancing video game sound

— Game Sync

You need to connect a video game machine (see “Hooking up optional components” on page 27).

Press GAME in the left corner of the front panel.

Tips

- In the standby mode, the system automatically turns on.
- The equalizer automatically switches to the GAME.
- These operations cannot be performed in Power Saving Mode (page 25).

Mixing video game sound with other sound source

— Game Mixing

- 1 Press FUNCTION repeatedly to select the desired sound source.**
- 2 Press GAME MIXING.**
Each time you press the button, the display changes cyclically as follows:
MIXING LOW → MIXING MID → MIXING HIGH → MIXING OFF

Note

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 on a tape manually” on page 16, and then press **II** to start the recording.

Tips

- The GAME MIXING indicator lights up while Game Mixing is activated.
- Once Game Mixing is activated, it will remain active while the power is on even if the sound source is changed.

Singing along

You can sing along by connecting an optional microphone.

Enjoying Karaoke

- 1 Turn MIC LEVEL to MIN to turn down the microphone control level.**
- 2 Connect an optional microphone to MIC1 or MIC2.**
- 3 Start playing the music.**
- 4 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.

Mixing and recording sounds

- 1 Prepare the sound source you want to mix. Then, load a recordable tape in deck B.**
- 2 Press FUNCTION 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 (or CD ► on the remote) to start playing the disc or press ◀/▷ on deck A (or TAPE A ◀► on the remote) 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 disc function and not playing a disc.
- 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).

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.

Press SLEEP.

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

AUTO* → 90 → 80 → 70 → ... → 10 → OFF

* The system automatically turns off in 100 minutes or after the current disc or tape finishes playing (for up to 100 minutes).

Other operations

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

** You cannot check the remaining time if you select "AUTO".

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 7).

1 Prepare the sound source you want to play.

- CD: Load a disc. To start from a specific track, make a program (see "Creating your own program" on page 10).
- Tape: Load a tape.
- Tuner: Tune in the preset radio station (see "Listening to the radio" on page 12).

2 Turn VOLUME (or press VOL +/- on the remote) to adjust the volume.

3 Press \odot /CLOCK SET.

"SET" appears and "DAILY SET" flashes.

4 Press ENTER.

"ON" appears and the hour indication flashes.

5 Set the time to start playing.

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

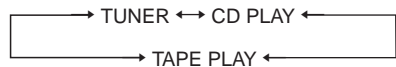
The minute indication flashes.

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

6 Set the time to stop playing following the same procedure as step 5.

7 Press \uparrow / \downarrow repeatedly until the desired sound source appears.

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



8 Press ENTER.

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	<ol style="list-style-type: none">1 Press TIMER SELECT.2 Press \uparrow/\downarrow repeatedly until "DAILY SELECT" appears, then press ENTER.
Change the setting	Start over from step 1.
Cancel the timer	<ol style="list-style-type: none">1 Press TIMER SELECT.2 Press \uparrow/\downarrow repeatedly until "TIMER OFF" appears, then press ENTER.

Notes

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

Tip

The system turns on 15 seconds before the preset time.

Timer recording radio programs

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

To timer record, you must first preset the radio station (see "Presetting radio stations" on page 11) and set the clock (see "Setting the clock" on page 7).

- 1 Tune in the preset radio station (see "Listening to a preset station" on page 12).**
- 2 Press \odot /CLOCK SET.**
- 3 Press \uparrow/\downarrow repeatedly to select "REC SET", then press ENTER.**
"ON" appears and the hour indication flashes.
- 4 Set the time to start recording.**
Press \uparrow/\downarrow repeatedly to set the hour, then press ENTER.
The minute indication flashes.
Press \uparrow/\downarrow 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 the preset radio station to be recorded (e.g., "TUNER FM 5") appear in turn, before the original display returns.
- 6 Load a recordable tape into deck B.**
- 7 Press I/ \odot to turn off the system.**

Other operations

To	Do this
Check the setting	<ol style="list-style-type: none">1 Press TIMER SELECT.2 Press ↑/↓ repeatedly until “REC SELECT” appears, then press ENTER.
Change the setting	Start over from step 1.
Cancel the timer	<ol style="list-style-type: none">1 Press TIMER SELECT.2 Press ↑/↓ repeatedly until “TIMER OFF” appears, then press ENTER.

Notes

- You cannot activate the Daily Timer and Timer Recording at the same time.
- If you use the Timer Recording and 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 when Timer Recording starts.

Tip

The system turns on 15 seconds before the preset time.

Display

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 DISPLAY repeatedly while the system is off until the demonstration display and the clock display disappears.

To cancel Power Saving Mode

Press DISPLAY while the system is off. Each time you press the button, the display switches cyclically as follows:

Demonstration display → Clock display* → No display (Power Saving Mode)

* “-:-” is displayed if you do not set the clock.

Note

You cannot perform the following operations in Power Saving Mode.

- setting the clock (page 7)
- changing the AM tuning interval (page 12)
- turning on the system by pressing the function buttons (e.g., CD: **▶||** (or CD **▶** on the remote))
- changing the CD power manage function (page 12)
- switching the MD (VIDEO) function (page 29)

Tip

The timer continues to operate in Power Saving Mode.

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.

Checking the remaining time and titles (CD)

Press DISPLAY during Normal Play.

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

Elapsed playing time of the current track →
Remaining time of the current track →
Remaining time of the current disc*¹ →
Title name of the current track*² →
Clock display (for a few seconds) →
Effect status

Checking the total playing time and titles (CD)

Press DISPLAY in stop mode.

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

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

*¹ “- - - -” appears in ALL DISCS, SHUFFLE play mode or when playing the program containing more than 20 tracks or 100 minutes.

*² With CD TEXT discs only (certain characters cannot be displayed). When the CD contains more than 20 tracks, CD TEXT is not displayed from track 21 on.

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.

Changing the Power illuminator

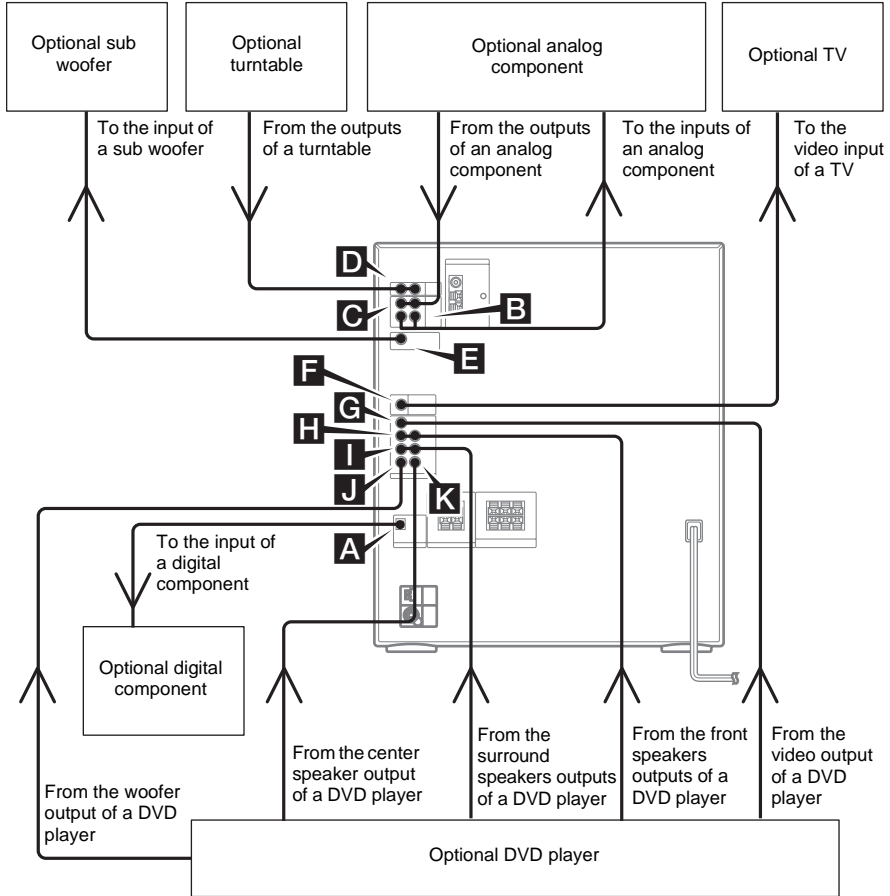
Press ILLUMINATION.

Each time you press the button, the Power illuminator changes cyclically as follows:
PATTERN 1 → PATTERN 2 → PATTERN 3
→ PATTERN OFF (off)

Optional Components

Hooking up optional components

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



A CD DIGITAL OUT jack

Use a digital optical cable (square, not supplied) to connect an optional digital component (such as an MD deck) to this jack. You can then output digital audio to that component from this system.

B MD (VIDEO) OUT L/R 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.

C MD (VIDEO) IN L/R 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.

D PHONO IN L/R 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.

E SUB WOOFER OUT jack

Use an audio cord (not supplied) to connect an optional sub woofer to this jack.

F VIDEO OUT jack

Use a video cord (not 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.

You can control a Sony TV using the remote as below:

To	Do this
Turn on or off the TV	Press TV I/⏻ on the remote repeatedly.
Select the input source for the TV	Press TV/VIDEO on the remote repeatedly.
Change the channel of the TV	Press TV CH +/- on the remote repeatedly.
Adjust the volume of the TV	Press TV VOL +/- on the remote repeatedly.

Note

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

G 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 to from that component.

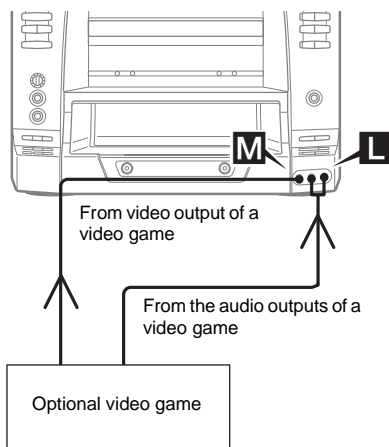
H DVD FRONT INPUT jacks

I DVD REAR INPUT jacks

J DVD WOOFER INPUT jack

K DVD CENTER INPUT jack

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



L 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.

M 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.
- See “Selecting the audio emphasis effect” on page 18 for video game sound effects.
- If you press GAME in the left corner of the front panel while the system is off, the system turns on, the function switches to GAME, and the equalizer also switches to the GAME.
- If you press GAME in the left corner of the front panel while the system is on, the function switches to GAME and the equalizer automatically switches to the GAME in the same manner.
- 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:
 - Keep some distance from speakers to the turntable.
 - Stop using the surround effect.
 - Install the speakers or the turntable on a firm and stable surface.

Tip

You can enjoy 5.1 channel surround sound while playing a DVD (page 30).

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 27.

2 Press FUNCTION 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 27.

2 Press FUNCTION 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 27.
- 2 Press FUNCTION repeatedly until “GAME” appears or press GAME in the left 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 27.
- 2 Press FUNCTION 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 analog recording from an analog component on a tape

- 1 Connect the audio cords.**
See “Hooking up optional components” on page 27.
- 2 Start recording manually.**
See “Recording on a tape manually” on page 16.

Recording on a connected component

Making a digital recording

- 1 Connect the digital optical cable.**
See “Hooking up optional components” on page 27.
- 2 Start recording.**
Refer to the operating instructions provided with connected component.

Making an analog recording

- 1 Connect the audio cords.**
See “Hooking up optional components” on page 27.
- 2 Start recording.**
Refer to the operating instructions provided with connected component.

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 Sony dealer.

When the I/⏻ indicator flashes

Immediately unplug the power cord and check the following items.

- Is the voltage selector set to the correct voltage?
Check the voltage for your region, then make sure the voltage selector is set correctly.
- Are the + and – speaker cords short-circuited?
- Are you using only the prescribed speakers?
- Is anything blocking the ventilation holes on the rear of the system?

Check all the above items and fix any problems found. After I/⏻ indicator stops flashing, reconnect the power cord and turn on the system. If the indicator still flashes, or if the cause of the problem cannot be found even after checking all the above items, consult your nearest Sony dealer.

General

The display starts flashing as soon as you plug in the power cord even though you have not turned on the system (see step 5 of “Hooking up the system” (page 5)).

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

“- -: -” appears in the display.

- A power interruption has occurred. Set the clock (page 7) and timer settings (pages 23 and 24) again.

The clock setting/radio presetting/timer is canceled.

- Redo the following:
 - “Setting the clock” (page 7)
 - “Presetting radio stations” (page 11)
 - “Waking up to music” (page 23)
 - “Timer recording radio programs” (page 24)

There is no sound.

- Turn VOLUME control clockwise or press VOL + on the remote.
- Make sure the headphones are not connected.
- Check the speaker connections (page 4).
- There is no audio output when Timer recording starts.

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.

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

- Place the speakers as symmetrically as possible.
- Connect the supplied speakers.

Sound lacks bass.

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

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 7).

The timer does not function.

- Check the timer setting and set the correct time (pages 24 and 25).
- Cancel the Sleep Timer Function (page 23).

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.

CD

The disc tray does not rotate.

- Place the disc correctly.

Play does not start.

- Open the disc tray and check whether a disc is loaded.
- Wipe the disc clean (page 34).
- Replace the disc.
- Place the disc that this system can play.
- Place the disc correctly.
- Place the disc in the tray with the label side up.
- Remove the disc and wipe away the moisture on the disc, then leave the system turned on for a few hours until the moisture evaporates.
- Press ►|| (or CD ► on the remote) to start play.

Disc access takes a long time.

- Set "CD POWER ON" by CD power manage function (page 12).

The sound skips.

- Wipe the disc clean (page 34).
- 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 "PROGRAM" and "SHUFFLE" disappear to return to Normal Play.

Tuner

Severe hum or noise/stations cannot be received.

- Set the proper band and frequency (page 11).
- Connect the antenna properly (page 5).
- Find a place and an orientation that provide good reception, then set up the antenna again. If you cannot obtain good reception, we recommend you connect a commercially available external antenna.
- The supplied FM lead antenna receives signals along its entire length, so make sure you extend it fully.
- Locate the antennas as far away from the speaker cords as possible.
- Try turning off surrounding electrical equipment.
- Set "CD POWER OFF" by CD power manage function (page 12).

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 35).
- The record/playback heads are magnetised. Demagnetise them (page 35).

The tape does not erase completely.

- The record/playback heads are magnetised. Demagnetise them (page 35).

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

- The capstans or pinch rollers are dirty. Clean them (page 35).

Noise increases or the high frequencies are erased.

- The record/playback heads are magnetised. Demagnetise them (page 35).

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 35).
 - The tape has wound to the end.
-

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

- 1 Press **■** on deck B, TUNER ENTER and **I/⏻** at the same time.
- 2 Unplug the power cord.
- 3 Plug the power cord back in.
- 4 Press **I/⏻** to turn on the system.

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

Messages

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

CD

CANNOT EDIT

The selected disc contains more than 20 tracks or Program Play mode has been set.

NO STEP

You have cleared all the tracks you programmed.

OVER

You have reached the end of the disc while pressing **▶▶** during playback or pause.

PUSH STOP

You have pressed PLAY MODE during playback.

STEP FULL

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

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.

Timer

OFF TIME NG

The Daily Timer or Timer Recording start and end times are set to the same time.

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.

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 Sony 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, nor leave it in a car parked in direct sunlight.
- Do not use discs encircled with a protection ring. This may cause a malfunction to the system.
- When using discs that have glue or similar tacky substance on the label side of the disc or that used a special ink when the label was printed, there is a chance that the disc or label may become attached to parts inside this unit. When 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 tacky 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.

Note on CD-R/CD-RW playback

Discs recorded on CD-R/CD-RW drives may not be played back because of scratches, dirt, recording conditions or the drive's characteristics. Besides, the discs, which are not yet finalized at the end of recording, cannot be played back.

Music discs encoded with copyright protection technologies

This product is designed to playback discs that conform to the Compact Disc (CD) standard.

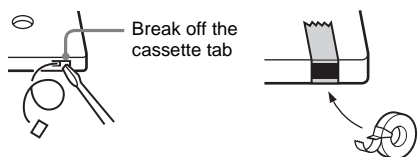
Recently, various music discs encoded with copyright protection technologies are marketed by some record companies. Please be aware that among those discs, there are some that do not conform to the CD standard and may not be playable by this product.

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 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 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

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)

Surround 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 AUDIO (phono jacks):

sensitivity 250 mV,

impedance 47 kilohms

GAME INPUT VIDEO (phono jack):

1 Vp-p, 75 ohms

MD (VIDEO) IN (phono jacks):

sensitivity 450 mV

(250 mV), impedance

47 kilohms

DVD INPUT

FRONT, REAR, CENTER, WOOFER (phono jacks):

sensitivity 450 mV,

impedance 47 kilohms

DVD VIDEO INPUT (phono jack):

1 Vp-p, 75 ohms

Outputs

PHONES (stereo phone jack):

accepts headphones of

8 ohms or more

MD (VIDEO) OUT (phono jacks):

voltage 250 mV,

impedance 1 kilohms

VIDEO OUT (phono jack):	max. output level 1Vp-p, load impedance 75 ohms
SUB 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
SURROUND SPEAKER:	accepts impedance of 8 to 16 ohms

CD player section

System	Compact disc digital audio system
Laser	Semiconductor laser ($\lambda=795$ 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
CD OPTICAL DIGITAL OUT (square optical connector jack, rear panel)	
Wavelength	660 nm
Output level	-18 dBm

Tape deck section

Recording system	4-track 2-channel, stereo
Frequency response	40 – 13,000 Hz (± 3 dB), using Sony TYPE I cassettes
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:	530 – 1,710 kHz (with the tuning interval set at 10 kHz) 531 – 1,602 kHz (with the tuning interval set at 9 kHz)
Antenna	AM loop antenna
Antenna terminals	External antenna terminal
Intermediate frequency	450 kHz

Speaker

Front speaker: SS-XGR99AV

Speaker system	3-way BUILT IN SW, magnetically shielded type
Speaker units	
Super Woofer/Woofers:	22 cm/20 cm dia., cone type
Tweeter:	2.5 cm dia., horn type
Rated impedance	6 ohms
Dimensions (w/h/d)	Approx. 290 × 615 × 440 mm
Mass	Approx. 16 kg net per speaker

Center speaker: SS-CT388/M

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

Surround speaker: SS-RS388/M

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

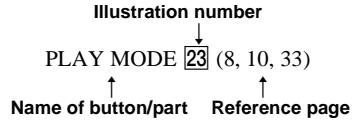
Power requirements	230 – 240 V AC, 50/60 Hz
Power consumption	230 watts
Dimensions (w/h/d)	Approx. 355 × 425 × 451 mm
Mass	Approx. 15.4 kg
Supplied accessories:	AM loop antenna (1) FM lead antenna (1) Speaker cords (5) Speaker pads (12) Remote Commander (1) Batteries (2)

Design and specifications are subject to change without notice.

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

ALPHABETICAL ORDER

A - E

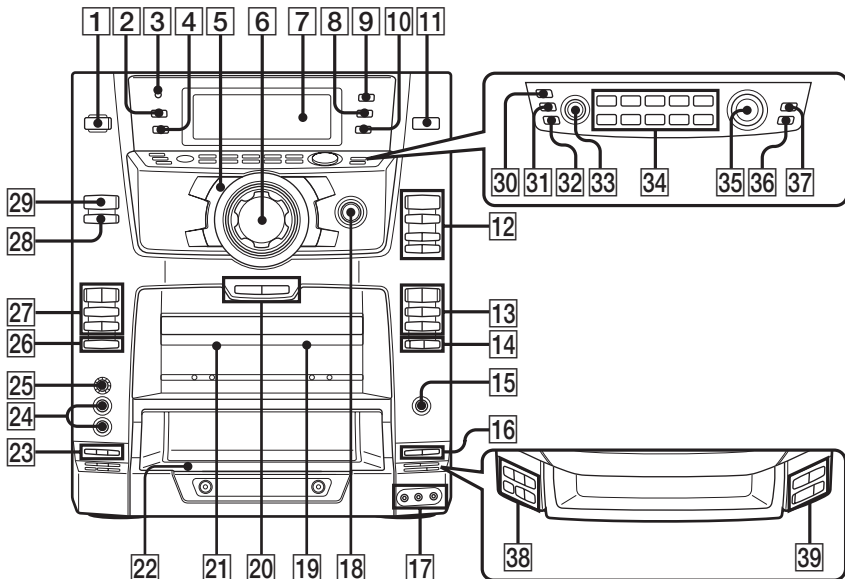
- CD SYNC **14** (15)
- Deck A **21** (14)
- Deck B **19** (14, 15, 16, 21)
- DIRECTION **26** (14, 15, 16, 21)
- DISC 1 - 5 **38** (9, 10)
- DISC SKIP **38** (8, 9, 10)
- Disc tray **22** (8)
- DISPLAY **2** (5, 25, 26)
- Display window **7**
- DVD 5.1CH **30** (30)
- EDIT **23** (6, 15)
- EFFECT **37** (18)
- ENTER **35** (7, 18, 19, 23, 24)

F - O

- FM MODE **12** (13)
- FUNCTION **11** (6, 8, 10, 12, 15, 16, 21, 29)
- GAME **29** (20, 29, 30)
- GAME INPUT AUDIO L/R jacks **17** (28)
- GAME INPUT VIDEO jack **17** (28)
- GAME MIXING **28** (21)
- ILLUMINATION **4** (26)
- MEMORY **12** (11)
- MIC1/MIC2 jacks **24** (21)
- MIC LEVEL **25** (21)

P - R

- PARTY **33** (19)
- PARTY MODE **34** (19)
- SAMBA/ROCK/DISCO/
BALLAD/TECHNO
- P FILE **36** (18)
- PHONES jack **15**
- PLAY MODE **23** (8, 10, 33)
- Power illuminator **5**
- PRESET EQ **34** (18)
- SALSA/REGGAE/TANGO/
MOVIE/GAME
- PRO LOGIC **32** (7, 20)
- PUSH OPEN **22** (8, 9)
- Remote sensor **3**
- REPEAT **23** (9)



continued

S - Z

SLEEP **9** (23)
SURROUND **31** (19)
TIMER SELECT **8** (24, 25)
TUNER ENTER **12** (11, 12, 33)
TUNER/BAND **12** (11, 12, 16)
TUNING +/- **12** (11, 12)
TUNING MODE **12** (11, 12)
VOLUME control **6** (7, 9, 23)
X-GROOVE **18** (17)

BUTTON DESCRIPTIONS

I/⏻ (power) **1** (5, 12, 23, 29, 33)
⌚/CLOCK SET **10** (7, 23)
● REC **14** (16, 21)
■ (stop) **39** (9, 12)
◀◀/▶▶ (rewind/fast forward) **39** (9, 33)
▶|| (play/pause) **39** (8, 9, 21)
◀/▶ (play) **13 27** (14, 15, 21)
■ (stop) **13 27** (14, 15, 21, 33)
|| (pause) **13** (14, 15, 21)
◀◀◀◀/▶▶▶▶ (rewind/fast forward) **13 27** (14)
◀◀/▶▶ (go back/go forward) **16** (9)
↑/↓/←/→ **35** (7, 18, 19, 23)
A EJECT▲/▲ B EJECT (eject) **20** (14)

Remote control

ALPHABETICAL ORDER

A - P

- CENTER LEVEL +/- **5** (7)
- CLEAR **23** (10)
- DISC SKIP **22** (8, 9, 10)
- EFFECT **11** (18)
- FILE SELECT +/- **9** (18)
- FUNCTION **10** (6, 8, 10, 12, 15, 16, 21, 29)
- PRESET +/- **21** (12)
- PRO LOGIC **15** (7, 20)

Q - Z

- SLEEP **24** (23)
- SURR **12** (19)
- SURR LEVEL +/- **6** (7)
- TEST TONE **14** (7)
- TUNER/BAND **16** (11, 12, 16)
- TUNING +/- **20** (11, 12)
- TV CH +/- **4** (28)
- TV/VIDEO **25** (28)
- TV VOL +/- **3** (28)
- VOL +/- **13** (7, 9, 23)

BUTTON DESCRIPTIONS

- I/⏻ (power) **2** (5, 12, 23, 29, 33)
- ◀▶ (rewind/fast forward) **20** (9, 14, 33)
- ◀▶▶▶ (go back/go forward) **21** (9, 14)
- ⏸ (pause) **19** (9, 14, 15, 21)
- (stop) **18** (9, 12, 14, 15, 21)
- CD ▶ (play) **17** (8, 21)
- TAPE A ◀▶▶▶ (play) **7** (14, 21)
- TAPE B ▶▶▶▶ (play) **8** (14, 15)
- TV I/⏻ (power) **1** (28)

