

SONY[®]

4-238-409-13 (1)

Mini Hi-Fi Component System

Operating Instructions _____

GB

Owner's Record

The model and serial numbers are located on the rear panel. Record the serial number in the space provided below. Refer to them whenever you call upon your Sony dealer regarding this product.

Model No. _____ Serial No. _____



**MHC-GX8000/RG77
MHC-RG66T**

—
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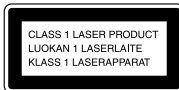
MHC-RG77 4-238-409-13 (1)

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.



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

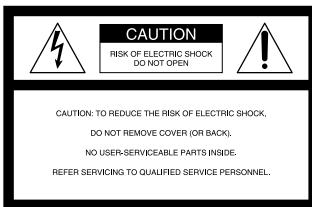
To prevent fire, do not cover the ventilation of the apparatus with news papers, table-cloths, curtains, etc. And don't place lighted candles on the apparatus.

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



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

NOTICE FOR THE CUSTOMERS IN THE U.S.A.



This symbol is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



This symbol is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

WARNING

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

CAUTION

You are cautioned that any changes or modifications not expressly approved in this manual could void your authority to operate this equipment.



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.

About this manual

The instructions in this manual are for model MHC-GX8000, MHC-RG77 and MHC-RG66T. In this manual, the MHC-RG77 is used for illustration purposes unless stated otherwise.

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Additional Information

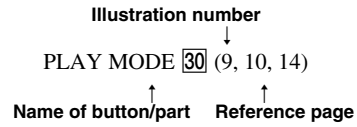
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3GB

List of Button Location 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 - D

CD 35 (7, 9, 10, 13, 14)
CD SYNC HI-DUB 14 (13, 14)
DECK A \triangle 26 (12-14)
DECK B \triangle 16 (12-15)
DIMMER 9 (18)
DIRECTION 10 (12-14)
DISC 1-3 4 (9, 10)
DISC SKIP EX-CHANGE 5 (9, 10)
Disc tray 3 (9)
DISPLAY 7 (21)

E - L

EDIT 10 (14)
EFFECT ON/OFF 42 (16)
ENTER 41 (10, 11, 14, 15, 17, 20, 25)
FM MODE 12 (11, 25)

GAME 31 (18, 22)
GAME EQ 43 (18)
GAME INPUT 23 (13, 18)
GAME MIXING 29 (13, 18)
GROOVE 44 (16)
IR (receptor) 2

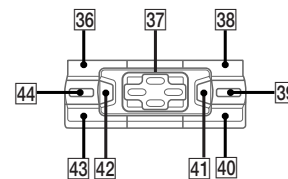
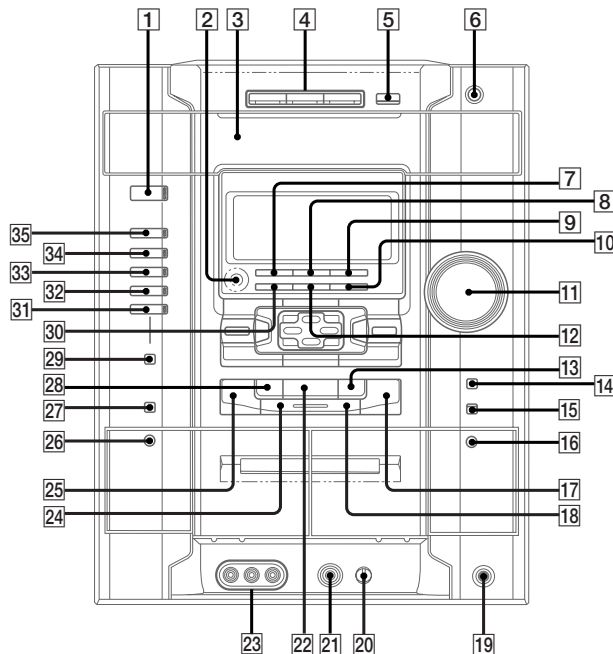
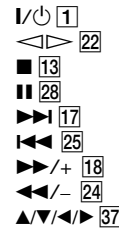
M - Q

MD (VIDEO) 32 (22, 24)
MIC 21 (19)
MIC LEVEL 20 (19)
MOVIE EQ 38 (16)
MUSIC EQ 36 (16)
OPEN/CLOSE \blacktriangle 6 (9, 10)
P FILE 40 (17)
PHONES (jack) 19 (24)
PLAY MODE 30 (9, 10, 14)

R - Z

REC PAUSE/START 15 (13, 14)
REPEAT 12 (10)
SPECTRUM 8 (18)
SURROUND 39 (17)
SURROUND SPEAKER MODE (MHC-GX8000/RG77 only) 27 (16)
TAPE A/B 33 (12, 13)
TUNER/BAND 34 (11)
TUNER MEMORY 30 (11)
VOLUME 11 (20)

BUTTON DESCRIPTIONS



Remote Control

ALPHABETICAL ORDER

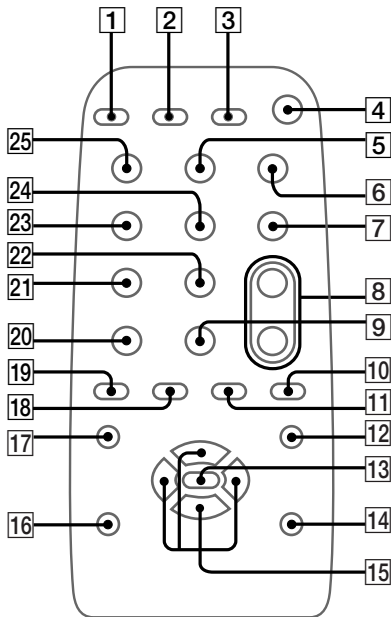
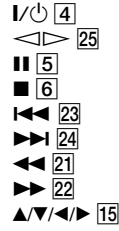
A - M

CD **19** (7, 9, 10, 13, 14)
 CLEAR **7** (10, 14)
 CLOCK/TIMER SELECT **2**
 (15, 20)
 CLOCK/TIMER SET **3** (8, 14,
 20)
 D.SKIP **9** (9)
 ENTER **13** (8, 10, 11, 14, 15, 17,
 20)
 EFFECT ON/OFF **14** (16)
 GAME **20** (18, 22)
 MD (VIDEO) **10** (22)

P - Z

PRESET - **23** (11)
 PRESET + **24** (11)
 PRESET EQ **17** (16)
 P FILE **16** (17)
 SURROUND SPEAKER MODE
 (MHC-GX8000/RG77 only) **12**
 (16)
 SURROUND **12** (17)
 SLEEP **1** (19)
 TAPE A/B **11** (12, 13)
 TUNER/BAND **18** (11)
 TUNING - **21** (11)
 TUNING + **22** (11)
 VOL +/- **8** (20)

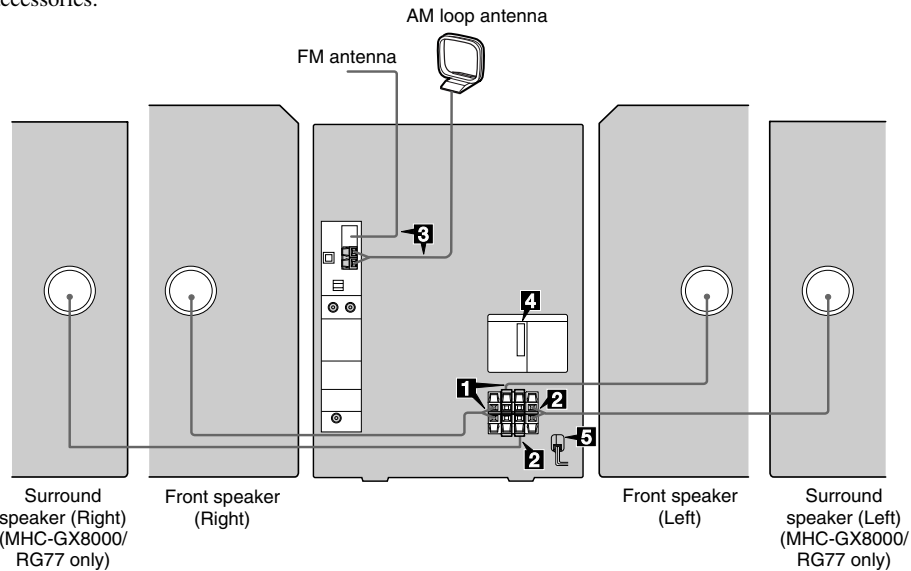
BUTTON DESCRIPTIONS



Getting Started

Hooking up the system

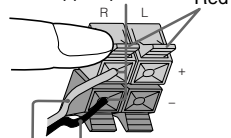
Do the following procedure **1** to **5** to hook up your system using the supplied cords and accessories.



1 Connect the front speakers.

Connect the speaker cords to the SPEAKER (MHC-RG66T)/FRONT SPEAKER (MHC-GX8000/RG77) jacks.

Insert only the stripped portion.

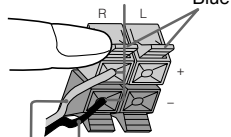


Red/Solid (+) Black/Stripe (-)

2 Connect the surround speaker (MHC-GX8000/RG77 only).

Connect the speaker cords to SURROUND SPEAKER jacks.

Insert only the stripped portion.



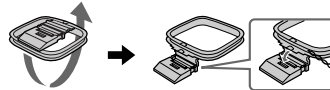
Blue/Solid (+) Black/Stripe (-)

Note

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

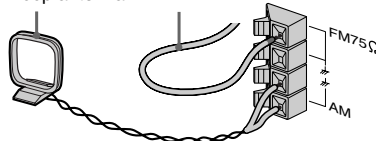
3 Connect the FM and AM antennas.

Set up the AM loop antenna, then connect it.



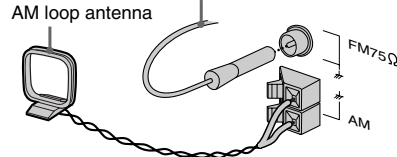
Jack type ④

Extend the FM lead antenna horizontally.

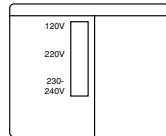


Jack type ⑤

Extend the FM lead antenna horizontally.



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



- 5** Connect the power cord to a wall outlet.

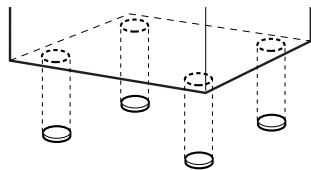
The demonstration appears in the display.
When you press **I/⏻**, the system turns on and the demonstration automatically ends.
If the supplied adaptor on the plug does not fit your wall outlet, detach it from the plug (only for models equipped with an adaptor).

To connect optional components

See page 22.

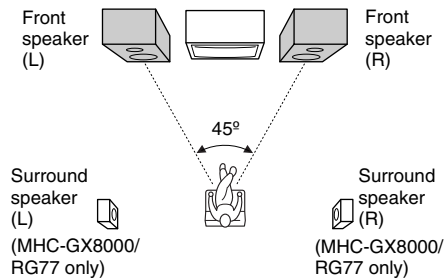
To attach the speaker pads

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



Positioning the speakers

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

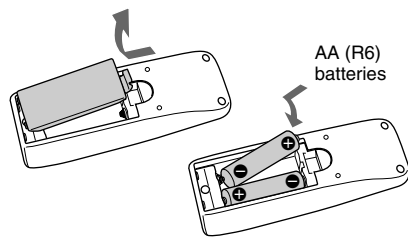


Notice for carrying this system

Do the following to protect the CD mechanism.

- 1 Make sure that all discs are removed from the unit.
- 2 Hold down CD and then press **I/⏻** until "LOCK" appears.
- 3 Release **I/⏻** first, then release CD.
- 4 Unplug the AC power cord.

Inserting two size AA (R6) batteries into the remote



Tip

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

Note

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

Setting the clock

- 1 Turn on the system.**
- 2 Press CLOCK/TIMER SET on the remote.**
When you set the time for the first time, proceed to step 5.
- 3 Press ▼ or ▲ repeatedly to select CLOCK SET.**
- 4 Press ENTER.**
- 5 Press ▼ or ▲ repeatedly to set the hour.**
- 6 Press ENTER.**
- 7 Press ▼ or ▲ repeatedly to set the minute.**
- 8 Press ENTER.**

The clock starts functioning.

Tip

If you have made a mistake or want to change the time, start over from step 2.

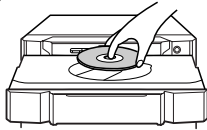
Note

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

CD

Loading the CD

- 1 Press **OPEN/CLOSE** \blacktriangle .
The CD compartment slides out.
- 2 Place a CD with the label side up on the disc tray.



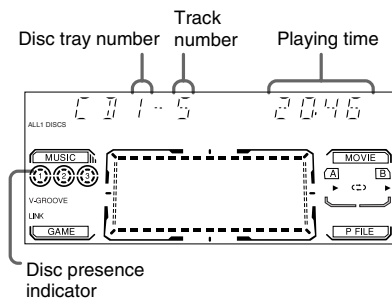
To insert additional discs, press **DISC SKIP EX-CHANGE** to rotate the disc tray.

- 3 Press **OPEN/CLOSE** \blacktriangle to close the CD compartment.

Playing the CD

—Normal Play/Shuffle Play/Repeat Play

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



- 1 When playback is stopped, press **PLAY MODE** repeatedly until the mode you want appears in the display.

Select	To play
ALL DISCS	All CDs in the disc tray continuously.
1 DISC	The CD you have selected in the original order.
SHUFFLE ALL DISCS	The tracks on all CDs in random order.
SHUFFLE 1 DISC	The tracks on the CD you have selected in random order.
PROGRAM	The tracks on all CDs in the order you want them to be played (see "Programming the CD tracks" on page 10).

- 2 Press one of the **DISC 1-3** buttons.

If you press \blacktriangleleft when CD is selected as the function (press CD) and the disc tray is closed, playback starts from the selected CD.

Tip

You cannot change the play mode during playback.

Other Operations

To	Do this
Stop playback	Press \blacksquare .
Pause playback	Press II . Press again to resume playback.
Select a track	During playback or pause, press \blacktriangleright (to go forward) or \blacktriangleleft (to go back).
Find a point in a track	Press and hold down \blacktriangleright or \blacktriangleleft during playback and release it at the point you want.
Select a CD when playback is stopped	Press one of the DISC 1-3 buttons or DISC SKIP EX-CHANGE (or D. SKIP on the remote).
Switch to CD function from another source	Press CD or one of the DISC 1-3 buttons (Automatic Source Selection).

continued

Playing the CD (continued)

To	Do this
Play repeatedly (Repeat Play)	Press REPEAT repeatedly to select "REPEAT" ^{*1} or "REPEAT 1" ^{*2} .
Cancel Repeat Play	Press REPEAT until "REPEAT" or "REPEAT 1" disappears from the display.
Exchange other CDs while playing	Press DISC SKIP EX-CHANGE.
Remove the CD	Press OPEN/CLOSE ▲.

^{*1} All the tracks repeated up to five times.
You cannot use this function during SHUFFLE ALL DISCS.

^{*2} To repeat the current track you are playing.

Tip

Pressing the CD while the power is off automatically turns the power on and CD is selected as a function.

Programming the CD tracks

— Program Play

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

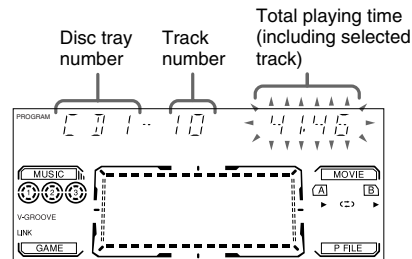
1 Press CD.

2 Press PLAY MODE repeatedly until "PROGRAM" appears in the display.

3 Press one of the DISC 1~3 to select a CD.

To program all the tracks on a CD at once, proceed to step 5 while "AL" appears on the display.

4 Press ◀◀ or ▶▶ repeatedly until the track you want appears in the display.



5 Press ENTER.

The track(s) is (are) programmed. The program step number appears, followed by the total playing time.

6 To program additional tracks, repeat steps 3 to 5.

Skip step 3 to select tracks from the same disc.

7 Press ◀▶.

To	Do this
Cancel Program Play	Press PLAY MODE repeatedly until "1 DISC" or "ALL DISCS" appears in the display.
Clear a track from the end	Press CLEAR on the remote when playback is stopped.
Add a track to the program when playback is stopped	1 Press one of the DISC 1~3 buttons to select a CD. 2 Press ◀◀ or ▶▶ repeatedly to select the track. 3 Press ENTER.

Tips

- The program you made remains in the system's memory even after it has been played back. Press ◀▶ to play the same program again.
- If "--.--" appears instead of the total playing time during programming, this means:
 - you have programmed a track number which exceeds 20.
 - the total playing time has exceeded 100 minutes.

Tuner

Presetting radio stations

You can preset 20 stations for FM and 10 stations for AM.

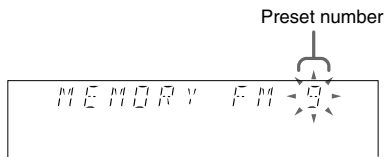
- 1 Press **TUNER/BAND** repeatedly to select **FM** or **AM**.
- 2 Press and hold **▶▶** or **◀◀** (or **TUNING +/-** on the remote) until **"AUTO"** appears in the display and the frequency indication starts to change, then release.

Scanning stops when the system tunes in a station. **"TUNED"** and **"STEREO"** (for a stereo program) appear.



- 3 Press **TUNER MEMORY**.

A preset number appears in the display.



- 4 Press **◀◀** or **▶▶** to select the preset number you want to store.
- 5 Press **ENTER**.
"COMPLETE" appears in the display.
The station is stored.
- 6 Repeat steps 1 to 5 to store other stations.

To tune in a station with a weak signal (Manual Tuning)

Press **▶▶** or **◀◀** (**TUNING +/-** on the remote) repeatedly to tune in the station manually.

To change the AM tuning interval (Except Middle Eastern models)

The AM tuning interval is factory set to 9 kHz (10 kHz in some areas). To change the AM tuning interval, select any AM station first, then turn off the power. While holding down the **ENTER** button, turn the power back on. When you change the interval, AM preset stations will be erased. To reset the interval, repeat the same procedure.

Tips

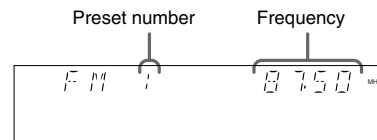
- The preset stations are retained for half a day even if you unplug the power cord or if a power failure occurs.
- Pressing **TUNER/BAND** while the power is off automatically turns the power on and **TUNER** is selected as a function.

Listening to the radio

— Preset Tuning

Preset radio stations in the tuner's memory first (see "Presetting radio stations").

- 1 Press **TUNER/BAND** repeatedly to select **FM** or **AM**.
- 2 Press **◀◀** or **▶▶** (or press **PRESET +/-** on the remote) to tune in the preset station you want.



To listen to non-preset radio stations

Press **▶▶** or **◀◀** (or **TUNING +/-** on the remote) repeatedly (Manual Tuning) or press and hold **▶▶** or **◀◀** (or **TUNING +/-** on the remote) (Automatic Tuning).

Tips

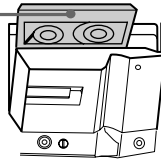
- When an FM program is noisy, press **FM MODE** so that **"MONO"** appears in the display. There will be no stereo effect, but the reception will improve.
- To improve broadcast reception, reorient the antennas.

Tape

Loading a tape

- 1 Press **TAPE A/B** repeatedly to select **Deck A or B**.
- 2 Press **▲** on the selected deck.
- 3 Insert a tape in deck A or B.

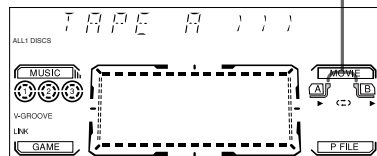
Insert with the side you want to play/record facing forward.



Playing a tape

- 1 Load a tape.
- 2 Press **DIRECTION** repeatedly to select **→** to play one side, **↔** to play both sides or **RELAY*** (Relay Play) to play both decks in succession.
- 3 Press **▶◀**. The tape starts playing.
Press **▶◀** again to play the reverse side.

Tape presence indicator



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

To	Do this
Stop playback	Press ■ .
Pause playback	Press ⏸ . Press again to resume playback.
Fast-forward	Press ▶▶ while playing the front side, or press ◀◀ while playing the reverse side.
Rewind	Press ◀◀ while playing the front side, or press ▶▶ while playing the reverse side.

Tips

- During **↔** or Relay Play, the deck stops automatically after repeating the sequence five times.
- Pressing **TAPE A/B** while the power is off automatically turns the power on and **TAPE** is selected as a function.
- When a tape (tapes) is (are) inserted, corresponding presence indicators light up.

Searching for the beginning of a track (AMS*)

During playback, press **◀◀** or **▶▶** 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 (1~9) appear in the display.

Example: searching forward 2 songs

TAP E A 1111+2

* AMS (Automatic Music Sensor)

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.

Recording to a tape

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

You can record from a CD, tape, radio or other connected component. The recording level is adjusted automatically.

Steps	Recording from a CD (CD Synchro Recording)	Recording from a tape (High-Speed Dubbing)	Recording Manually
1	Insert a recordable tape into deck B.		
2	Press CD.	Press TAPE A/B repeatedly to select TAPE A.	Press a function button for the recording source.
3	Load the CD you want to record.	Load the tape you want to record into deck A.	Load the CD or tape (or other audio sources), or tune to the station you want to record.
4	Press CD SYNC HI-DUB. DECK B stands by for recording. REC PAUSE/START indicator flashes.		Press REC PAUSE/START.
5	Press DIRECTION repeatedly to select ⇄ to record on one side. Select ⇄⇄ (or RELAY) to record on both sides.		
6	Press REC PAUSE/START. If you are recording manually, press <◁▷ to start playing the source (for CD or Tape). Recording starts.		
7	Press ■ to stop recording.		

Tape

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 reverse side:
After step 1, press TAPE A/B to select deck B and press <◁▷ twice to start playback of the reverse side. Press ■ at the point where you want to start recording. The TAPE B reverse side indicator lights up.
- (High-Speed Dubbing only)
If you set direction to ⇄⇄ when the tapes you use have different lengths, the tapes in each deck reverse 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.

- For recording from a CD to a tape manually:
You can press ◀◀ or ▶▶ to select tracks during recording pause mode (after step 4 and before step 6).
- You can mix the sound from the component connected to the GAME INPUT jacks with another function such as CD, tape, radio or an MD connected to this system. To record the mixed sound, press GAME MIXING after step 4 of "Recording Manually" and then press REC PAUSE/START to start recording. Game Mixing does not function during High-Speed Dubbing and CD Synchro Recording.

Note

You cannot listen to other sources while recording.

continued

13^{GB}

Recording to a tape (continued)

Recording a CD by specifying track order

— Program Edit

You can record tracks from all the CDs in the order you want. When programing, make sure the playing times for each side do not exceed the length of one side of the tape.

- 1 Insert a recordable tape into deck B, then press CD.**
- 2 Press PLAY MODE repeatedly until “PROGRAM” appears in the display.**
- 3 Press one of the DISC 1–3 button to select a CD.**

To program all the tracks on a CD at once, proceed to step 6 while “AL” appears in the display.
- 4 Press ◀◀ or ▶▶ repeatedly until the tracks you want appears in the display.**
- 5 Press ENTER.**

The track(s) is (are) programmed. The program step number appears, followed by the total playing time.
- 6 To program additional tracks, repeat steps 3 to 5.**

Skip step 3 to select tracks from the same disc.
- 7 Press CD SYNC HI-DUB.**

Deck B standby for recording. The REC PAUSE/START indicator flashes.
- 8 Press DIRECTION repeatedly to select ⇌ to record on one side. Select ⇔ (or RELAY) to record on both sides.**
- 9 Press REC PAUSE/START.**

Recording starts.

To	Do This
Cancel Program Edit	Press PLAY MODE repeatedly until “1 DISC” or “ALL DISCS” appears in the display.
Clear a track from the end	Press CLEAR on the remote when playback is stopped.

Tip

To check the required tape length for recording a CD, press EDIT after you have loaded a CD and pressed CD. The required tape length for the currently selected 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.

Timer-recording radio programs

To timer-record, you must preset the radio station (see “Presetting radio stations” on page 11) and set the clock (see “Setting the clock” on page 8) beforehand.

- 1 Tune in the preset radio station (see “Listening to the radio” on page 11).**
- 2 Press CLOCK/TIMER SET on the remote.**

“DAILY1 SET” appears.
- 3 Press ▼ or ▲ repeatedly to select “REC SET”, then press ENTER.**

“ON” appears and the hour indication flash in the display.
- 4 Set the time to start recording.**

Press ▼ or ▲ repeatedly to set the hour, then press ENTER.
The minute indication starts flashing.
Press ▼ or ▲ repeatedly to set the minute, then press ENTER.
The hour indication flashes again.

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.

Make sure the tape is in forward direction.

7 Turn off the power.

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

To	Do this
Check the setting	Press CLOCK/TIMER SELECT on the remote and press ▼ or ▲ repeatedly to select "REC SEL". Then, press ENTER.
Change the setting	Start from step 1.
Cancel timer operation	Press CLOCK/TIMER SELECT on the remote and press ▼ or ▲ repeatedly to select "TIMER OFF". Then, press ENTER.

Notes

- If the power is on at the preset time, the Timer recording does not work.
- The power turns on 15 seconds before the preset time.



Tape

Sound Adjustment

Adjusting the sound

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

Press GROOVE.

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

GROOVE → V-GROOVE → GROOVE OFF

GROOVE

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

V-GROOVE

The volume switches to power mode, the low base frequencies are powerfully reinforced, and the equalizer curve changes.

Selecting the speaker system

(MHC-GX8000/RG77 only)

You can enjoy different sounds when you select the surround speaker mode.

Press SURROUND SPEAKER MODE to select the surround speaker mode you want.

LINK : Reproduces the same sound with the different output level.

MATRIX SUR : Reproduces a wide range of sound that actually can sense the size of the room.

Selecting the preset effect

Press MUSIC EQ, MOVIE EQ or GAME EQ (or PRESET EQ on the remote) repeatedly to select the preset effect you want.

The preset effect name appears in the display. See the chart "Preset effect options".

To cancel the effect

Press EFFECT ON/OFF repeatedly until "EFFECT OFF" appears.

Preset effect options

"SUR" appears if you select an effect with surround effects.

MENU button	Effect	For
MUSIC EQ	ROCK POP JAZZ DANCE SOUL ORIENTAL*	standard music sources.
MOVIE EQ	ACTION DRAMA MUSICAL	soundtracks and special listening situations.
GAME EQ	ARCADE RACING ADVENTURE	Play station 1, 2 and other video game music sources.

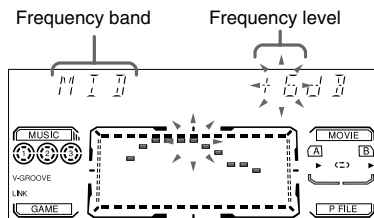
* CLASSIC for Latin and North American models only.

Adjusting the graphic equalizer and storing a personal file

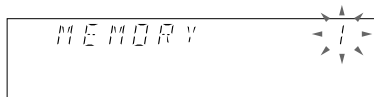
You can adjust the sound by raising or lowering the level of specific frequency band, then store up to three personal files (P FILE) in the memory.

Before operation, select the preset effect you want for your basic sound.

- 1 Press ◀ or ▶ repeatedly to select a frequency band or surround, then press ▲ or ▼ to adjust the level or select the surround effect.



- 2 Press and hold P FILE until the personal file number appears in the display.



- 3 Press ▲ or ▼ or ▶ or ◀ to select the personal file number (P FILE) where you want to store the equalizer setting.
- 4 Press ENTER.

The setting is automatically stored as the personal file you selected in step 3. The previous setting stored at this memory location is erased and replaced by the new setting.

To call up the personal file

Press P FILE repeatedly until the personal file number you want appears in the display.

Tip

If you do not want to store a personal file, press ENTER after step 1.

Selecting the surround effect

Press SURROUND.

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

SURROUND ON (SUR)
↑
SURROUND OFF

Note

When you choose other sound effects, the surround effect may be cancelled.

Other Features

Changing the spectrum analyzer display

Press SPECTRUM.

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

SPECTRUM 1 → SPECTRUM 2 →
SPECTRUM 3 → PATTERN 1 →
PATTERN 2 → PATTERN 3 →
PATTERN OFF

Adjusting the brightness of the display

Press DIMMER.

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

DIMMER 1 → DIMMER 2 → DIMMER 3

Enhancing the video game sound

— Game Sync

You need to connect a video game player (see “Connecting a Video Game Player” on page 22).

Press GAME.

Tips

- In standby mode, the system automatically turns on.
- The previously selected GAME EQ is automatically selected.
- This operation cannot be performed in the Power Saving Mode.

Mixing the sound

— Game Mixing

You can mix the sound from the component connected to the GAME INPUT jacks with another function such as CD, tape, radio or an MD connected to this system.

1 Select source sound you want.

2 Press GAME MIXING.

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

MIXING LOW → MIXING MID →
MIXING HIGH → MIXING OFF

Tips

- To record the mixed sound, press GAME MIXING after step 4 of “Recording Manually” on page 13 and then press REC PAUSE/START to start recording.
- The GAME MIXING indicator lights up while Game Mixing is activated and it will remain active while the power is on even if the function is changed.

Notes

- Game Mixing is cancelled when you press REC PAUSE/START.
- Game Mixing does not function during High Speed Dubbing and CD Synchro Recording.

Singing along

You can sing along with any stereo CD or Tape. You need to connect an optional microphone.

- 1 Turn MIC LEVEL to MIN to turn down the microphone volume.**
- 2 Connect an optional microphone to MIC jack.**
- 3 Start playing the music and adjust the volume.**
- 4 Adjust the microphone volume by turning MIC LEVEL.**

After you have finished.

Turn MIC LEVEL to MIN and disconnect the microphone from MIC jack.

Tips

- You can mix and record sound from microphone after step 2. To record the sound see “Recording Manually” on page 13. To stop recording, press ■.
- 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 CD.
- When high level sound signals are input, the unit automatically adjust the recording level to prevent distortion of the recorded sound signals (Auto Level/ Control Function).

Note

The microphone does not function during High Speed Dubbing.

Falling asleep to music

— Sleep Timer

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

Press SLEEP on the remote.

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

AUTO* → 90 → 80 → 70 → ... → 10 → OFF

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

To	Do this
Check the remaining time	Press SLEEP once.
Change the time to turn off	Press SLEEP repeatedly to select the time you want.
Cancel the Sleep Timer	Press SLEEP repeatedly until “SLEEP OFF” appears.

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 8).

1 Prepare the music source you want to play.

- CD: Load a CD. To start from a specific track, make a program (see “Programming the CD tracks” on page 10).
- Tape: Load a tape with the side you want to play facing forward.
- Radio: Tune in the preset station you want (see “Listening to the radio” on page 11).

2 Adjust the volume.

3 Press CLOCK/TIMER SET on the remote.

“DAILY1 SET” appears.

4 Press ▼ or ▲ repeatedly to select “DAILY1 SET (or DAILY2 SET)”, then press ENTER.

“ON” appears and the hour digits flash in the display.

5 Set the time to start playback.

Press ▼ or ▲ repeatedly to set the hour, then press ENTER.

The minute indication flashes.

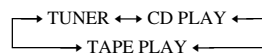
Press ▼ or ▲ repeatedly on the remote to set the minute, then press ENTER.

The hour indication flashes again.

6 Set the time to stop playback following step 5 above.

7 Press ▼ or ▲ repeatedly until the music source you want appears.

The indications change as follows:



8 Press ENTER.

The type of timer (“DAILY1” or “DAILY2”), followed by the start time, stop time and the music source appears, then the original display appears.

9 Turn off the power.

To	Do this
Check the setting	Press CLOCK/TIMER SELECT on the remote and press ▼ or ▲ repeatedly to select the respective mode (“DAILY1” or “DAILY2”), then press ENTER.
Change the setting	Start from step 1.
Cancel the timer operation	Press CLOCK/TIMER SELECT on the remote and press ▼ or ▲ repeatedly to select “TIMER OFF”, then press ENTER.

Tip

The power turns on 15 seconds before the preset time.

Note

If the power is on at the preset time, the Daily Timer does not work.

Display

Turning off the display

— Power Saving Mode

The demonstration display (the display changes and the indicators flash even when the system is turned off) and the clock display can be turned off to minimize the amount of power consumed during standby mode (Power Saving Mode).

Press DISPLAY repeatedly while the system is turned off until the demonstration display or the clock display disappears.

To cancel Power Saving Mode


Press DISPLAY once to show the demonstration, twice to show the clock display.

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

Demonstration → Clock* → Power Saving Mode

* “--:--” appears in the display if you have not set the clock.

Tips

- The  indicator lights up even in Power Saving Mode.
- The timer continues to operate in Power Saving Mode.
- During Power Saving Mode, the following functions do not work:
 - Setting the time.
 - Changing the AM tuning interval.
 - Pressing a function button to turn the power on.
 - Switching the function of MD (VIDEO).

Using the display

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

When a CD TEXT disc 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 in the display.

Press DISPLAY.

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

During normal playback

Playing time of the current track → Remaining time of the current track → Remaining time of the current CD (“1 DISC” mode) or “--:--” display (“ALL DISCS” mode) → Title name of the current track¹⁾ → Clock display (for eight seconds) → Effect status

When playback is stopped

When the CD player is in program mode and there is a program:

The last track number of the program and the total playing time²⁾ → Total number of programmed tracks (for eight seconds)³⁾ → Title name of the CD¹⁾ → Clock display (for eight seconds) → Effect status

In other conditions:

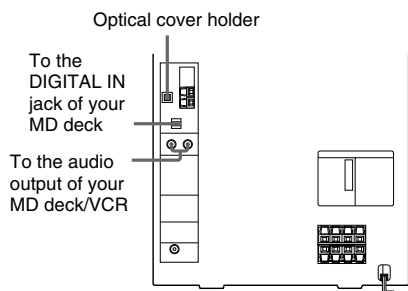
Total number of tracks and the total playing time → Title name of the CD¹⁾ → Clock display (for eight seconds) → Effect status

- ¹⁾ With CD TEXT discs only (certain characters cannot be displayed). Depending on the disc, some CD TEXT information may not appear.
- ²⁾ “--:--” appears in the following cases:
 - when the CD contains 21 tracks or more, and the track number which exceeds 20 is selected.
 - when the program time exceeds 100 minutes.
- ³⁾ “CD NO STEP” appears in the display if there is no program track.

Hooking Up the Optional Components

Connecting an MD deck or VCR

You can connect your MD deck or VCR to this system. Be sure to match the color of the plugs and the connectors.



To	Do This
Make a digital recording from CD to MD	Connect an optional optical cable.
Listen to the analog sound of a connected MD deck	Press MD (VIDEO).
Listen to the connected VCR	Hold down MD (VIDEO) and press ⏏ while the power is on. Release ⏏ first, then release MD (VIDEO). This switches the function from MD to VIDEO. Once you switched to the VIDEO function, just press MD (VIDEO).

Tip

When you remove the optical cover, keep it at the optical cover holder provided.

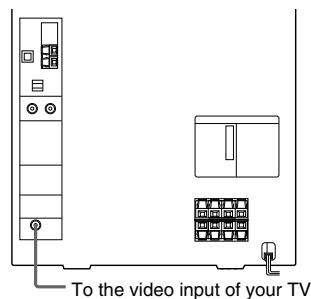
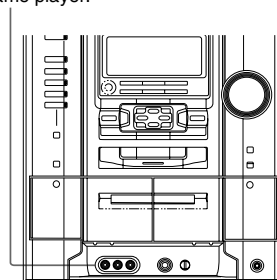
Notes

- Pressing the MD (VIDEO) while the power is off automatically turns the power on and MD is selected as a function.
- If the sound is distorted or too loud when VIDEO function is selected, or you want to switch back to MD function, repeat the operation described above to switch to MD function.

Connecting a Video Game Player

You can enjoy the video games with audio emphasis by connecting a video game player.

To the audio and video output of your video game player.



To	Do this
Listen to the sound of a connected video game player	Press GAME (or GAME on the remote).
Select the preset effect	(See "Selecting the preset effect" on page 16)

Note

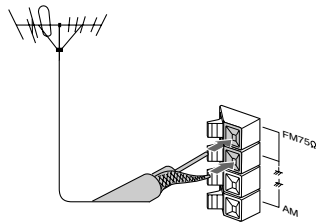
Pressing GAME while the power is off automatically turns the power on and GAME is selected as a function. The equalizer also switches to GAME EQ and the previously selected effect is restored.

Connecting external antennas

Connect an external antenna to improve the reception.

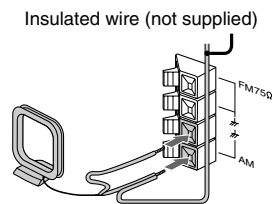
FM antenna

Connect an optional FM external antenna. You can also use the TV antenna instead.



AM antenna

Connect a 6 to 15 meter (20 to 50 feet) insulated wire to the AM antenna terminal. Leave the supplied AM loop antenna connected.



Troubleshooting

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

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

The demonstration mode started. Press **1/⏻**. (see step 5 on page 7)

The clock/timer setting is canceled.

- The power cord is disconnected or a power failure occurs. Redo "Setting the clock" (on page 8). If you have set the timer, redo "Waking up to music" (on page 20) and "Timer-recording radio programs" (on page 14).

The radio presetting is canceled.

- The power cord is disconnected or a power failure occurs for longer than half a day. Redo "Presetting radio stations" (on page 11).

There is no sound.

- Turn VOLUME clockwise.
- The headphones are connected to the PHONES jack.
- 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 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 severe hum or noise.

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

The sound from the component connected to the MD (VIDEO) jacks is distorted.

- If "VIDEO" appears in the display when you press MD (VIDEO), switch to "MD" function (see "Note: Connecting an MD deck/VCR" on page 22).

"--:--:" appears in the display.

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

The timer does not function.

- Set the clock correctly.
- You cannot activate the Daily timer and Timer-recording simultaneously.

"DAILY1 SET", "DAILY2 SET", and "REC SET" do not appear when you press the CLOCK/TIMER 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 unit'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.

"PROTECT" and "PUSH POWER" appear alternately.

- A strong signal is input. Turn off the power, leave the system turned off for a while, then turn on the power again. If "PROTECT" and "PUSH POWER" still appear alternately check the speaker cords.

Speakers

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

- Check the speaker connection and speaker placement.

Sound lacks bass.

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

CD Player

The disc tray does not open and “LOCKED” appears on the front panel display.

- Contact your Sony dealer or local authorized Sony service facility.

The disc tray does not close.

- The CD is not placed properly.

The CD does not play.

- The CD is not lying flat in the disc tray.
- The CD is dirty.
- The CD is inserted label side down.
- Moisture condensation has built up. Remove the CD and leave the system turned on for about an hour until the moisture evaporates.

Playback does not start from the first track.

- The player is in Program Play or Shuffle Play mode. Press PLAY MODE repeatedly until “1 DISC” or “ALL DISCS” appears.

“OVER” is displayed.

- You have reached the end of the CD. Press ◀◀.

Tape Deck

The tape does not record.

- The tab has been removed from the cassette, cover the broken tab with adhesive tape.
- 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 26).
- The record/playback heads are magnetized. (See “Demagnetizing the tape heads” on page 26).

The tape does not erase completely.

- The record/playback heads are magnetized. (See “Demagnetizing the tape heads” on page 26).

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 26).

Noise increases or the high frequencies are erased.

- The record/playback heads are magnetized. (See “Demagnetizing the tape heads” on page 26).

Tuner

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

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

A stereo FM program cannot be received in stereo.

- Press FM MODE so that “MONO” disappears.

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

- 1 Press ■, 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 power.

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

Additional Information

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

- Place the unit in a location with adequate ventilation to prevent heat build-up in the unit.
- 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 operation, this is not a malfunction.
- Place the unit in a location with adequate ventilation to prevent heat build-up in the unit.

If you 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 the 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 CDs

- Before playing, clean the CD with a cleaning cloth. Wipe the CD from the center out.
- Do not use solvents.
- Do not expose the CD to direct sunlight or heat sources.
- 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.

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. Refer to the instructions of the 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.

Specifications

AUDIO POWER SPECIFICATIONS

(MHC-GX8000 USA model only)

POWER OUTPUT AND TOTAL HARMONIC DISTORTION:

With 6-ohm loads, both channels driven, from 120 Hz - 10 kHz; rates 200 watts per channel minimum RMS power, with no more than 10% total harmonic distortion from 250 miliwatts to rated output.

Amplifier section

MHC-GX8000

Total harmonic distortion

Less than 0.1 % (6 ohms at 1 kHz, 100 W)

MHC-RG77

The following are measured at ca 120, 220, 240V 50/60 Hz

DIN power output (rated) 160 + 160 watts (6 ohms at 1 kHz, DIN)

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

MHC-RG66T

The following are measured at ca 120, 220, 240V 50/60 Hz

DIN power output (rated) 100 + 100 watts (6 ohms at 1 kHz, DIN)

Continuous RMS power output (reference) 145 + 145 watts (6 ohms at 1 kHz, 10% THD)

Inputs

GAME (VIDEO): 1 Vp-p, 75 ohms

(phono jack)

GAME (AUDIO): Voltage 250 mV, impedance 47 kilohms

(phono jacks)

MD/VIDEO (AUDIO) IN: voltage 450 mV/250 mV, impedance 47 kilohms

(phono jacks)

MIC: sensitivity 1 mV, impedance 10 kilohms

(phone jack)

Outputs

VIDEO OUT: max. output level 1 Vp-p, unbalanced, Sync.

(phono jacks)

negative load impedance 75 ohms

PHONES: accepts headphones of

(stereo mini jack)

8 ohms or more

FRONT SPEAKER:

accepts impedance of 6 to 16 ohms

SURROUND SPEAKER: accepts impedance of

(MHC-GX8000/RG77

24 ohms or more only)

CD player section

System	Compact disc and digital audio system
Laser	Semiconductor laser ($\lambda=795\text{nm}$)
Laser Output	Max. 44.6 μW * *This output is the value measured at a distance of 200 mm from the objective lens surface on the Optical Pick-up Block with 7 mm aperture.
Frequency response	2 Hz – 20 kHz (± 0.5 dB)
Wave length	795 nm
CD OPTICAL DIGITAL OUT	
(Square optical connector jack, rear panel)	
Wave length	660 nm
Output Level	-18 dBm

Tape player section

Recording system	4-track 2-channel stereo
Frequency response	50 – 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
Antenna	FM lead antenna
Antenna terminals	75 ohm unbalanced
Intermediate frequency	10.7 MHz

AM tuner section

Tuning range	Latin and North American models: 530 – 1,710 kHz (with the interval set at 10 kHz)
	531 – 1,710 kHz (with the interval set at 9 kHz)
Middle Eastern models:	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

continued

Additional Information

Specifications (continued)

Speaker

Front speaker SS-RG88

Speaker system	3-way, 3-unit, bass-reflex type
Speaker units	
Super Woofer:	15 cm, cone type
Woofer:	15 cm, cone type
Tweeter:	5 cm, cone type
Nominal impedance	6 ohms
Dimensions (w/h/d)	Approx. 250 x 395 x 310 mm
Mass	Approx. 6.2 kg net per speaker

Surround speaker SS-RS88 for MHC-GX8000/ RG77

Speaker system	2 way, 2 unit, bass-reflex type
Speaker units	
Woofer	13 cm, cone type
Tweeter	5 cm, cone type
Nominal impedance	24 ohms
Dimensions (w/h/d)	Approx. 175 x 360 x 260 mm
Mass	Approx. 3.4 kg net per speaker

General

Power requirements	
North America and Mexican models:	120 V AC, 60 Hz
Argentina/Thailand models:	220 V AC, 50/60 Hz
Other models:	120 V, 220 V or 230 - 240 V AC, 50/60 Hz Adjustable with voltage selector

Power consumption	
MHC-GX8000/RG77	240 watts
MHC-RG66T	230 watts

Dimensions (w/h/d)	
HCD-GX8000/RG77/RG66T	Approx. 280 x 360 x 445 mm

Mass :	
HCD-GX8000/RG77/RG66T	Approx. 11.0 kg

Supplied accessories:	AM loop antenna (1) Remote commander (1) Batteries (2) FM lead antenna (1) Front speaker pads (8) Surround speaker pads (8) (MHC-GX8000/RG77 only)
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Design and specifications are subject to change
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