

# ***Mini Hi-Fi Component System***

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Operating Instructions



***MHC-GNX660/  
MHC-GNX600***

## WARNING

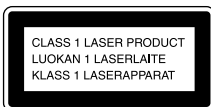
**To reduce the risk of fire or electric shock, do not expose this apparatus to rain or moisture.**

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

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

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

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 marking is located on the rear exterior.



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

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## About this manual

- The instructions in this manual are for models MHC-GNX660 and MHC-GNX600. In this manual, the MHC-GNX660 is used for illustration purposes unless stated otherwise.
- This manual mainly explains operations using the buttons on the unit, but the same operations can also be performed using the buttons on the remote having the same or similar names or symbols.
- MPEG Layer-3 audio coding technology and patents licensed from Fraunhofer IIS and Thomson.

## Playable discs

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

### List of playable discs

Format of discs	Disc logo	Contents
AUDIO CDs		Audio
CD-R/CD-RW (AUDIO CDs/ Discs with MP3 audio tracks)	 	Audio
CD Graphics (CDG)*	 	Audio + Video

\* MHC-GNX660 only

## Discs that this system cannot play back

- CD-ROMs other than those has MP3 audio tracks in the format of MPEG 1 Audio Layer 3, MPEG 2 Audio Layer 3 and MPEG 2.5 Audio Layer 3 that conforms to ISO 9660<sup>a)</sup> Level 1, Level 2 or Joliet in expansion format.
  - CD-Rs/CD-RWs other than those recorded in the following formats:
    - AUDIO CD format.
    - data CD format with MP3 audio tracks in the format of MPEG 1 Audio Layer 3, MPEG 2 Audio Layer 3 and MPEG 2.5 Audio Layer 3 that conforms to ISO 9660<sup>a)</sup> Level 1, Level 2 or Joliet in expansion format or Multi Session<sup>b)</sup>.
  - Data part of CD-Extras.
  - Data part of Mixed CDs.
  - A disc that has a non-standard shape (e.g., card, heart).
  - CD-R and CD-RW discs that have not been correctly finalized (processing to allow play back by a normal CD player).
  - CD-R and CD-RW discs recorded in multi-session that have not ended by “closing the session”.
  - A disc recorded in packet write format.
  - A disc that has the adhesive, cellophane tape, or a sticker still left on it.
  - Audio side of a DualDisc.
- a) A logical format of files and folders on a CD-ROMs, defined by ISO (International Organization for Standardization).
- b) Multi Session  
This is a recording method that enables adding of data using the Track-At-Once method. Conventional discs begin at a disc control area called the Lead-in and end at an area called Lead-out. A Multi Session disc is a disc having multiple sessions, with each segment from Lead-in to Lead-out regarded as a single session.

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## Notes on CD-R and CD-RW

- This system can play back CD-R/CD-RW discs edited by the user. However, note that playback of some discs may not be possible depending on the recording device used for recording or the disc condition.
- Discs recorded on CD-R/CD-RW drives may not be played back because of scratches, dirt, recording condition or the driver's characteristics.

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## Note on DualDiscs

This product is designed to play back discs that conform to the Compact Disc (CD) standard. A DualDisc is a two sided disc product which mates DVD recorded material on one side with digital audio material on the other side. Please be aware that the audio side of a DualDisc may not be played back on this product because these discs do not conform to the CD standard. "DualDisc" is a trademark of the Recording Industry Association of America (RIAA).

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## Music discs encoded with copyright protection technologies

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

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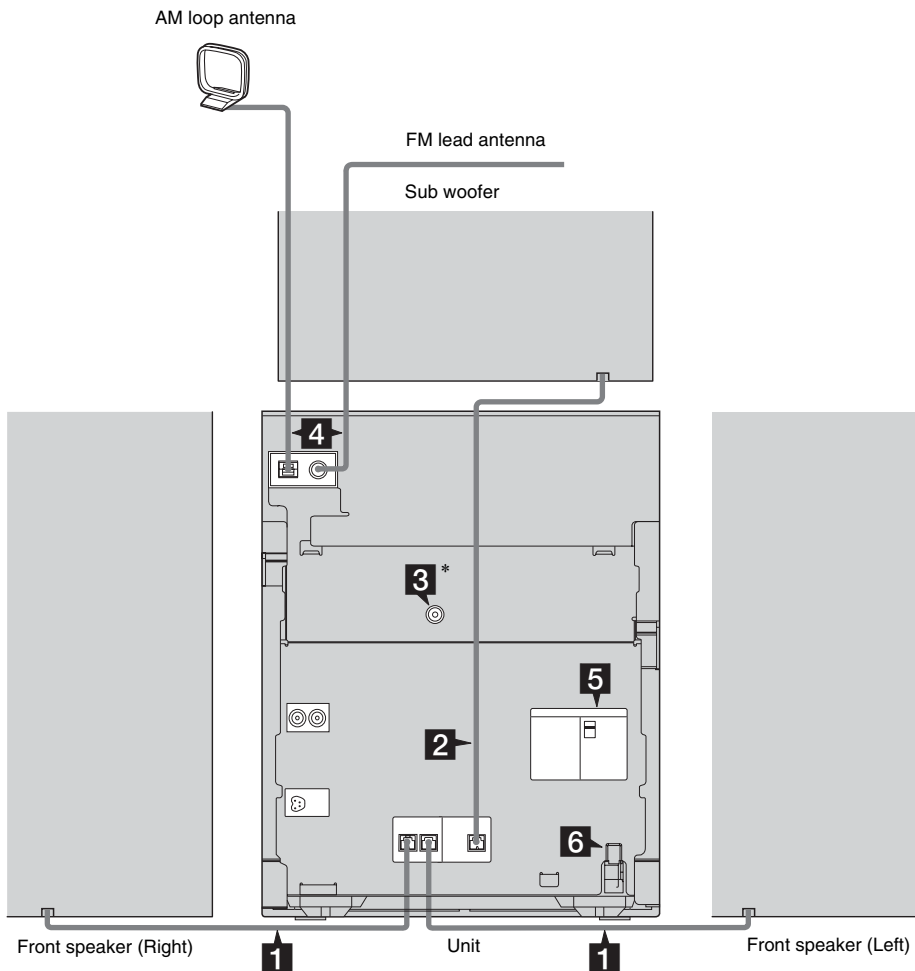
## Cautions when playing a disc that is recorded in Multi Session

- This system can play back Multi Session discs when an MP3 audio track is contained in the first session. Any subsequent MP3 audio tracks recorded in later sessions can also be played back.
- When you play back Multi Session discs with different formats for each session, the format of the first session is recognized as the disc type. Tracks in the second and subsequent sessions are played back if they are the same formats as the first session.

## Getting Started

# Hooking up the system

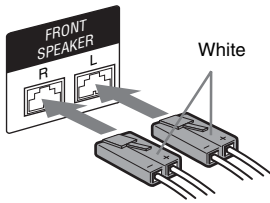
Do the following procedures **1** to **6** to hook up your system using the supplied cords and accessories (page 35).



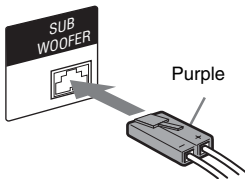
\* MHC-GNX660 only

**1 Connect the front speakers.**

Connect the speaker cords of the front speakers to the FRONT SPEAKER terminals as shown below.

**2 Connect the sub woofer.**

Connect the sub woofer cord of the sub woofer to the SUB WOOFER terminal as shown below.

**Note**

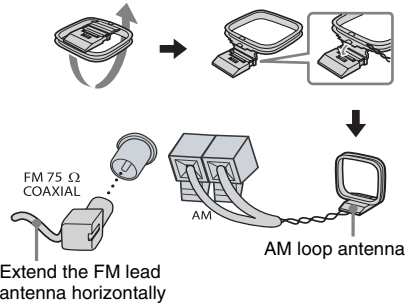
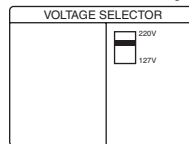
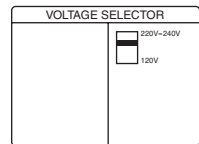
Be sure to make this connection before you connect the unit's power cord to a wall outlet.

**3 Connect the video input jack of your TV to the VIDEO OUT jack with the supplied video cord. (MHC-GNX660 only)****When using a TV**

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

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

Set up the AM loop antenna, then connect it.

**5 For models equipped with a voltage selector, set VOLTAGE SELECTOR to the position of your local power line voltage.****Brazil model only****Other models****6 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).

**Note**

Install this system so that the power cord can be unplugged from the wall socket immediately in the event of trouble.

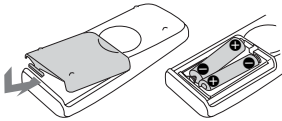
## Notes

- Keep the speaker cords away from the antennas to prevent noise.
- Be sure to match the color of the speaker terminals on the unit and the connectors.
- Be sure to connect the speakers securely and correctly. When connecting speaker cords, insert the connectors straight into the terminals.

## To connect optional components

See “Hooking up optional components” on page 26.

## Inserting two R6 (size AA) batteries into the remote



### Note

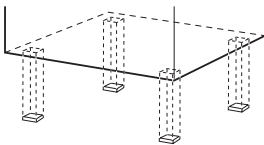
If you do not use the remote for a long period of time, remove the batteries to avoid possible damage from battery leakage and corrosion.

### Tip

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.

## Attaching the speaker pads

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



## When carrying this unit

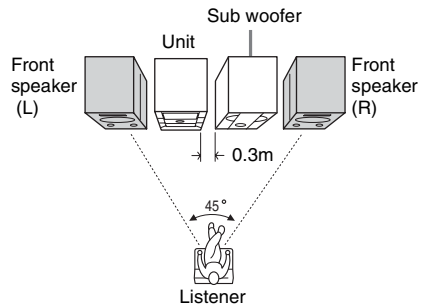
Do the following procedure to protect the disc mechanism.

Use buttons on the unit for the operation.

- 1 Press I/⏻ to turn on the system.
- 2 Press CD.
- 3 Make sure that all discs are removed from the unit.
- 4 Hold down CD, then press I/⏻ until “MECHA LOCK” appears in the display.
- 5 Release I/⏻ first, then release CD.
- 6 Unplug the AC power cord.

## Positioning the speakers

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



### Note

Place the sub woofer at least 0.3 meters away from the unit.



## Setting the clock

Use buttons on the remote for the operation.

- 1 Press I/⏻ to turn on the system.**
- 2 Press CLOCK/TIMER SET.**  
“CLOCK” appears in the display. Then, the hour indication flashes in the display.
- 3 Press -I◀◀ or ▶▶I+ repeatedly to set the hour.**
- 4 Press ENTER.**  
The minute indication flashes in the display.
- 5 Press -I◀◀ or ▶▶I+ repeatedly to set the minute.**
- 6 Press ENTER.**  
The clock starts functioning.

### To adjust the clock

- 1 Press CLOCK/TIMER SET.**  
“SET” appears in the display, then “PLAY SET” flashes in the display.
- 2 Press -I◀◀ or ▶▶I+ repeatedly to select “CLOCK SET”, then press ENTER.**  
The hour indication flashes in the display.
- 3 Do the same procedures as step 3 to 6 above.**

#### Notes

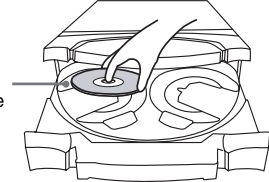
- The clock settings are canceled when you disconnect the power cord or if a power failure occurs.
- You cannot set the clock in Power Saving Mode (page 23).

## Disc – Playback

### Loading a disc

- 1 Press ▲ OPEN/CLOSE.**  
The disc tray slides out.
- 2 Load a disc with the label side facing up on the disc tray.**

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



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

- 3 Press ▲ OPEN/CLOSE to close the disc tray.**

#### Notes

- Do not push the disc tray when closing it as this may cause malfunction. Press ▲ OPEN/CLOSE to close the disc tray.
- Do not use a disc with cellophane tape, seals or paste on it as this may cause malfunction.

## Playing a disc

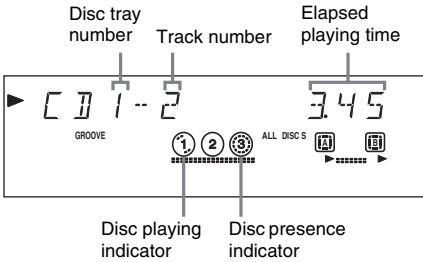
### — Normal Play/Shuffle Play

This system lets you play back CDGs\*, AUDIO CDs and discs with MP3 audio tracks in different play modes.

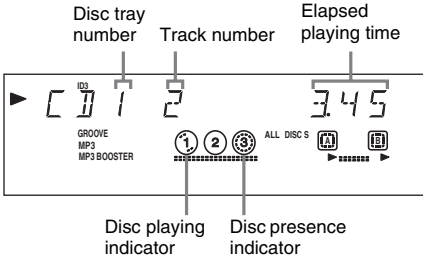
Before playing a CDG\*, turn on your TV and select the video input.

\* MHC-GNX660 only

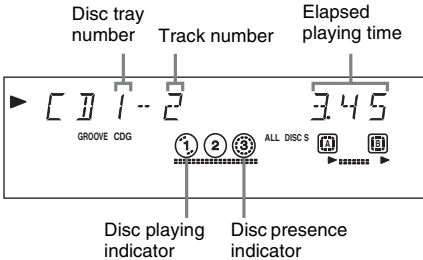
### When playing an AUDIO CD



### When playing an MP3 audio track



### When playing a CDG (MHC-GNX660 only)



## 1 Press CD.

## 2 When playback is stopped, press PLAY MODE on the remote repeatedly until the indication of the play mode you want lights up in the display.

Select	To play back
ALL DISC S (Normal Play)	The tracks on all discs in the disc tray continuously.
1 DISC (Normal Play)	The tracks on the disc you have selected in original order.

Select	To play back
ALBM (Normal Play)	The MP3 audio tracks in the album on the disc you have selected in original order. For discs other than discs with MP3 audio tracks, "ALBM" play mode performs the same operation as "1 DISC" play mode.
ALL DISC S SHUF (Shuffle Play)	The tracks on all discs in random order.
1 DISC SHUF (Shuffle Play)	The tracks on the disc you have selected in random order.
ALBM SHUF (Shuffle Play)	The MP3 audio tracks in the album on the disc you have selected in random order. For discs other than discs with MP3 audio tracks, "ALBM SHUF" play mode performs the same operation as "1 DISC SHUF" play mode.
PGM (Program Play)	The tracks on all discs in the order you want them to be played back (see "Creating your own program" on page 12).

## 3 Press ►.

### Other operations

To	Do this
Stop playback	Press ■.
Pause playback	Press ■. Press ■ again to resume playback.
Select a track	Turn and hold ◀◀ OPERATION DIAL ▶▶ clockwise or counterclockwise and release it when you reach the track you want (or press ◀◀ or ▶▶+ on the remote repeatedly).
Select an album of MP3 audio tracks	Press ALBUM +/- repeatedly to select the album you want.
Find a point in a track <sup>1)2)</sup>	For AUDIO CD, press ◀◀ or ▶▶ repeatedly. For MP3 audio track, press ◀◀ or ▶▶ repeatedly on the remote.

To	Do this
Select a disc when playback is stopped	Press one of the DISC 1 ~ 3 buttons or DISC SKIP/EX-CHANGE (or DISC SKIP on the remote).
Switch to CD function from another source	Press one of the DISC 1 ~ 3 buttons (Automatic Source Selection).
Exchange other discs while playing	Press DISC SKIP/EX-CHANGE.
Remove a disc	Press ▲ OPEN/CLOSE.

<sup>1)</sup>The elapsed playing time may not be displayed correctly depending on the MP3 audio tracks.

<sup>2)</sup>(MHC-GNX660 only)

You cannot find a point in a track when playing a CDG.

### Notes

- You cannot change the play mode during playback.
- The following discs with MP3 audio tracks take a longer time to start playback.
  - a disc recorded with complicated tree structure.
  - a disc recorded in Multi Session.
  - a disc to which data can be added (non-finalized disc).
- When the disc with MP3 audio tracks is loaded, the system reads all the tracks on that disc. If there are many albums or non-MP3 audio tracks on the disc, it may take a longer time for playback to begin or for the next MP3 audio tracks to start playback.
- You are recommended not to save other types of tracks or unnecessary albums on a disc that has MP3 audio tracks.
- Attempting to play back non-MP3 format files that have the extension “.MP3” may result in noise or malfunction.
- The system can play back to a depth of 8 folders only.
- When naming the MP3 audio tracks, be sure to add the file extension “.MP3” to the file name.
- An album that does not include an MP3 audio track is skipped.
- The maximum number of albums on a disc which can be recognize by this system is 150 (including root album).
- The maximum number of MP3 audio tracks and albums on a disc which can be recognize by this system is 300.
- Depending on the encoding/writing software, recording device, or the recording media used at the time an MP3 audio track is recorded, you may encounter problems such as cannot play back, sound interruptions and noise.

### Tips

- When you press CD or one of the DISC 1 ~ 3 buttons to switch to “CD” function from “TUNER” function, you may require a longer time to access the disc. In this case, set the CD power manage function to “CD POWER ON” (page 14).
- If you press CD while the system is turned off, the system turns on automatically and “CD” is selected as the function.
- You can also press FUNCTION on the remote repeatedly to select “CD”.
- (MHC-GNX660 only)  
When you play back a CDG, some operation may cause image distortion on the video output.
- During Shuffle Play, some tracks may be played back repeatedly.

## Playing repeatedly

### — Repeat Play

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

Use buttons on the remote for the operation.

**Press REPEAT repeatedly during playback until “REP” or “REP1” lights up in the display.**

REP: All the tracks on the disc(s), or all the tracks in the album<sup>1)</sup> are played back repeatedly up to five times<sup>2)</sup>.

REP1: A single track is played back repeatedly until “REP1” is cancelled.

<sup>1)</sup>When “ALBM” is selected for MP3 audio tracks.

<sup>2)</sup>For MP3 audio tracks, the play back is endless when the play mode is “1 DISC SHUF” or “ALBM SHUF”.

### To cancel Repeat Play

Press REPEAT repeatedly until both “REP” and “REP1” disappear from the display.

### Note

You cannot select “REP” and “ALL DISC S SHUF” at the same time.

### Tip

You can change the Repeat Play setting when the playback is stopped.

# 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 back. You can synchro record the programmed tracks into a tape (page 16).

Use buttons on the remote for the operation.

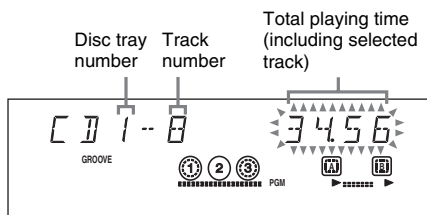
- 1 Press CD.**
- 2 When playback is stopped, press PLAY MODE repeatedly until “PGM” lights up in the display.**
- 3 Press DISC SKIP repeatedly to select a disc you want.**

To program all the tracks on a disc at once, proceed to step 5 while “AL” appears in the display.

To program all the MP3 audio tracks on an album at once, press ALBUM +/- repeatedly until the album you want appears in the display, then proceed to step 5.

- 4 Press -<<< or >>>+ repeatedly until the track number you want appears in the display.**

The total playing time flashes in the display. When programming an MP3 audio track, press ALBUM +/- repeatedly until the album you want appears in the display, then press -<<< or >>>+ repeatedly until the track number you want appears in the display.



- 5 Press ENTER.**

The track(s) is(are) programmed.

The program step number appears in the display.

- 6 To program additional discs or tracks.**

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

- 7 Press ►.**

Program Play starts.

## Other operations

To	Do this
Cancel Program Play	When playback is stopped, press PLAY MODE repeatedly until “PGM” disappear from the display.
Clear a track from the end of program	Press CLEAR when playback is stopped.

## Tips

- The program you made remains in the system’s memory even after it has been played back. Press ► to play back 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.
  - you have programmed an MP3 audio track.

## Presetting radio stations

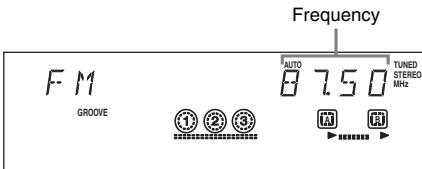
You can preset up to 20 FM stations and 10 AM stations. You can then tune in any of those stations simply by selecting the corresponding preset number.

### Automatic tuning preset

You can automatically tune in all of the stations that can be received in your area and then store the frequency of your favourite stations. Use buttons on the remote for the operation.

- 1 Press **TUNER/BAND** repeatedly to select “FM” or “AM”.
- 2 Press **TUNING MODE** repeatedly until “AUTO” lights up in the display.
- 3 Press **–|◀◀** or **▶▶|+** (or turn **◀◀ OPERATION DIAL ▶▶** on the unit **clockwise or counterclockwise**).

The frequency changes as the system scans for a station. Scanning stops automatically when a station is tuned in. “TUNED” lights up in the display. When a FM stereo program is tuned in, “STEREO” lights up in the display.

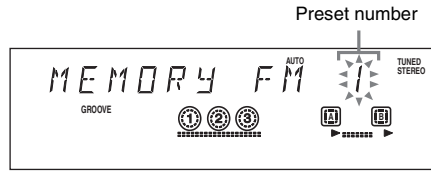


**If “TUNED” does not lights up and the scanning does not stop.**

Set the frequency of the radio station you want as described in steps 2 and 3 of “Manual tuning preset”.

### 4 Press **TUNER MEMORY**.

A preset number flashes in the display. The stations are stored from preset number 1.



### 5 Press **–|◀◀** or **▶▶|+** repeatedly to select the preset number you want.

### 6 Press **ENTER**.

“COMPLETE” appears in the display. The station is stored.

### 7 Repeat steps 1 to 6 to store other stations.

### Manual tuning preset

You can manually tune in and store the frequency of your favourite stations. Use buttons on the remote for the operation.

### 1 Press **TUNER/BAND** repeatedly to select “FM” or “AM”.

### 2 Press **TUNING MODE** repeatedly until “MANUAL” lights up in the display.

### 3 Press **–|◀◀** or **▶▶|+** repeatedly to tune in the radio station you want (or turn and hold **◀◀ OPERATION DIAL ▶▶** on the unit **clockwise or counterclockwise** and release it when you reach the radio station you want).

### 4 Press **TUNER MEMORY**.

A preset number flashes in the display. The stations are stored from preset number 1.

### 5 Press **–|◀◀** or **▶▶|+** repeatedly to select the preset number you want.

### 6 Press **ENTER**.

“COMPLETE” appears in the display. The station is stored.

### 7 Repeat steps 1 to 6 to store other stations.

## Other operations

To	Do this
Tune in a station with a weak signal	Follow the procedure described in “Manual tuning preset” on page 13.
Stop scanning during automatic tuning	Press ■.
Cancel presetting	Press TUNER MEMORY.

## To improve tuner reception

When tuner reception is poor, set the CD power manage function to “CD POWER OFF”. The default setting is “CD POWER ON”.

Use buttons on the unit for the operation.

**1** Press CD.

**2** Press I/⏻ to turn off the system.

**3** Press I/⏻ while holding ■.

The system turns on automatically. “CD POWER OFF” appears in the display.

## To set to “CD POWER ON”

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

### Notes

- When “CD POWER OFF” is selected, disc access time is increased.
- You cannot change the CD power manage function setting in the Power Saving Mode (page 23).

## To change the AM tuning interval

Use buttons on the unit for the operation.

The factory settings for AM tuning interval is 9 kHz (or 10 kHz for some areas). To change the AM tuning interval, select any AM station first, then turn off the system. While holding down ILLUMINATION, press I/⏻. The system turns on automatically and “AM 10K STEP” or “AM 9K STEP” appears in the display. 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 the Power Saving Mode (page 23).

### Tips

- The preset stations are retained for half a day even if you unplug the power cord or if a power failure occurs.
- If you press TUNER/BAND while the system is turned off, the system turns on automatically and “TUNER” is selected as the function.
- You can also press FUNCTION on the remote repeatedly to select “TUNER”.

## Listening to the radio

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

## Listening to a preset station

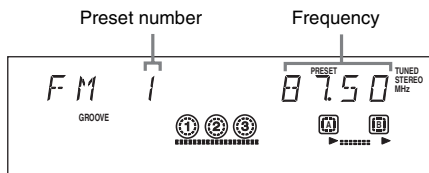
### — Preset Tuning

Before tuning to preset stations, be sure to preset them (see “Presetting radio stations” on page 13).

**1** Press TUNER/BAND repeatedly to select “FM” or “AM”.

**2** Press TUNING MODE on the remote repeatedly until “PRESET” lights up in the display.

- 3** Turn and hold **◀◀ OPERATION DIAL ▶▶** clockwise or counterclockwise and release it when you reach the preset station you want (or press **-◀◀** or **▶▶+** on the remote repeatedly to select the preset station you want).



## Listening to a non-preset radio station

### — Manual Tuning

- 1** Press **TUNER/BAND** repeatedly to select “FM” or “AM”.
- 2** Press **TUNING MODE** on the remote repeatedly until “MANUAL” lights up in the display.
- 3** Turn and hold **◀◀ OPERATION DIAL ▶▶** clockwise or counterclockwise and release it when you reach the radio station you want (or press **-◀◀** or **▶▶+** on the remote repeatedly to tune in the radio station you want).

### Tips

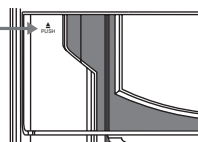
- When an FM stereo program has static noise, press **FM MODE** on the remote repeatedly until “MONO” lights up in the display. There will be no stereo effect, but the reception will improve.
- To record the radio programs, see “Recording on a tape manually” (page 17) or “Timer recording radio programs” (page 22).
- You can also press **FUNCTION** on the remote repeatedly to select “TUNER”.
- To improve broadcast reception, adjust the supplied antennas, or connect an external antenna.

## Tape – Playback

### Loading a tape

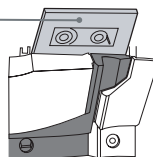
- 1** Press **▲ PUSH (Deck A)** or **▲ PUSH (Deck B)** on the selected deck.

Push here to eject the tape deck



- 2** Load a tape into Deck A or B.

With the side you want to play back or record facing forward



- 3** Push the center of the tape lid to close the deck.

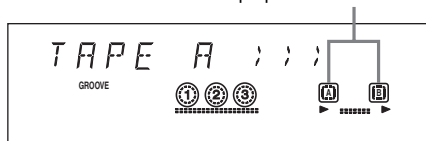
### Playing a tape

You can use TYPE I (normal) tape.

- 1** Load a tape.
- 2** Press **TAPE A/B** (or **TAPE** on the remote) repeatedly until “TAPE A” or “TAPE B” appears in the display.
- 3** Press **DIRECTION** repeatedly to select **One Way Play** to play back the front side of the selected deck or **Relay Play\*** to play back both decks in succession.
- 4** Press **▶**.

The tape starts playing.

Tape presence indicator



\* “RELAY” lights up in the display. Relay Play follows this sequence, then stops:  
Deck A (front side) → Deck B (front side)

*continued*

## Other operations

To	Do this
Stop playback	Press ■.
Pause playback	Press ■. Press ■ again to resume playback.
Fast-forward or rewind	Press ◀◀ or ▶▶. To back to normal playback, press ▶.
Remove a tape	Press ▲ PUSH (Deck A) or ▲ PUSH (Deck B) when playback is stopped.

### Note

Do not press ▲ PUSH (Deck A) or ▲ PUSH (Deck B) while playing a tape, otherwise the tape could be damaged.

### Tips

- When a tape is inserted, corresponding presence indicator lights up in the display.
- If you press TAPE A/B (or TAPE on the remote) while the system is turned off, the system turns on automatically and “TAPE A” or “TAPE B” is selected as the function.
- If you press ▶ during “TAPE A” function and there is no tape in Deck A, the system automatically switches to “TAPE B” function when there is a tape in Deck B. Then, playback will start and vice versa.
- You can also press FUNCTION on the remote repeatedly to select “TAPE A” or “TAPE B”.

## Tape – Recording

# Recording your favorite tracks on a disc into a tape

### — CD Synchro Recording

You can record an AUDIO CD or an album of MP3 audio tracks into 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 CD and load a disc you want to record.**

When you want to record an album of MP3 audio tracks, press PLAY MODE on the remote repeatedly until “ALBM” lights up in the display. Then press ALBUM +/- repeatedly to select the album you want.

- 3 Press CD SYNC.**

“SYNC” lights up in the display.  
“REC” flashes in the display.  
Deck B standby for recording.

- 4 Press REC PAUSE/START.**

“REC” lights up in the display.  
Recording starts.

### To stop recording

Press ■.

### To record a disc by specifying track order

#### — Program Edit

You can record tracks on all the discs in the order you want using Program Play. Between steps 2 and step 3 of “CD Synchro Recording” (page 16), do steps 2 to 6 of “Creating your own program” (page 12). When programming, make sure the playing times do not exceed the length of one side of the tape.

### Note

You cannot listen to other sources while recording.



# Recording on a tape manually

## — Manual Recording

You can record just the portions you like from a disc, tape or radio program on a tape.

You can also record from connected components (see “Hooking up optional components” on page 26).

- 1 Load a recordable tape into Deck B.**
- 2 Press CD, TAPE A/B, TUNER/BAND or TV (or FUNCTION on the remote repeatedly) to select the source you want to record.**
- 3 Load the disc, tape or tune to the preset radio station you want to record. To record from the connected component, connect the external audio sources.**
- 4 Press REC PAUSE/START.**  
“REC” flashes in the display.  
Deck B standby for recording.
- 5 Press REC PAUSE/START again.**  
“REC” lights up in the display.  
Recording starts.
- 6 Start playing the source to be recorded.**

### To stop recording

Press ■.

#### Note

You cannot listen to other sources while recording.

#### Tips

- 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 disc to a tape manually:  
You can turn and hold ◀◀ OPERATION DIAL ▶▶ clockwise or counterclockwise and release it when you reach the track you want (or press -◀◀ or ▶▶+ on the remote repeatedly to select tracks) during recording pause (after step 4 of “Recording on a tape manually”).
- For recording an album of MP3 audio tracks:  
Press PLAY MODE on the remote repeatedly until “ALBM” lights up in the display. Then press ALBUM +/- repeatedly to select the album you want after step 4 of “Recording on a tape manually”.

## Sound Adjustment

### Adjusting the sound

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

#### Press GROOVE repeatedly.

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

GROOVE ON\* → GROOVE OFF

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

#### Tips

- The default setting is “GROOVE ON”.
- When “GROOVE ON” is selected, “GROOVE” lights up in the display.

### Selecting the preset effect

Press PRESET EQ (or EQ on the remote) repeatedly to select one of the following preset effect.

Effect	Category
ROCK	Standard music sources
POP	
JAZZ	
DANCE	
SOUL	
TECHNO	
HIP HOP	
REGGAE	
SAMBA	
CLASSICAL	
FLAT	Original music source
USER EQ 1	User equalizer setting
USER EQ 2	
USER EQ 3	

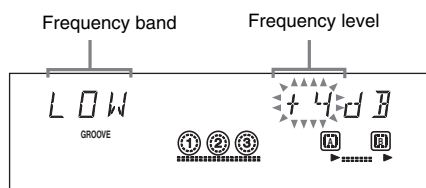
#### To cancel the preset effect

Press PRESET EQ (or EQ on the remote) repeatedly until “FLAT” appears in the display.

### Adjusting the graphic equalizer or selecting the surround effect

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

#### 1 Press EQ BAND/MEMORY.



#### 2 Turn and hold I◀◀ OPERATION DIAL ▶▶I clockwise or counterclockwise and release it when you reach the level or surround effect you want.

#### 3 Repeat step 1 and 2 to adjust the level of frequency band “MID”.

#### 4 Repeat step 1 and 2 to adjust the level of frequency band “HIGH”.

#### 5 Repeat step 1 and 2 to select the surround effect.

#### 6 Press EQ BAND/MEMORY.

“MEMORY EQ-1” appears in the display.

#### 7 Turn and hold I◀◀ OPERATION DIAL ▶▶I clockwise or counterclockwise and release it when you reach the user equalizer number (1~3) you want to store the equalizer setting.

#### 8 Press EQ BAND/MEMORY.

This setting is automatically stored as the user equalizer setting you selected in step 7. The previous setting stored at this memory location is erased and replaced by the new setting.

#### Tip

If you do not want to store the equalizer setting, select “EXIT” in step 7.

## Other operations

To	Do this
Call up a user equalizer setting	Press PRESET EQ (or EQ on the remote) repeatedly until the user equalizer number you want appears in the display.

## Selecting the MP3 Booster effect

You can improve the sound quality of MP3 audio tracks during playback.

### Press MP3 BOOSTER repeatedly.

Each time you press the button, the display changes cyclically as follows:  
BOOSTER ON → BOOSTER OFF

#### Tips

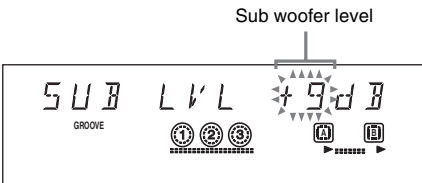
- The default setting is “BOOSTER ON”.
- When “BOOSTER ON” is selected, “MP3 BOOSTER” lights up in the display.
- MP3 Booster setting only can be changed when disc with MP3 audio tracks is selected during “CD” function.

## Using the sub woofer

You can use the sound of the sub woofer to enhance the bass.

**1** Press SUB WOOFER ON/OFF repeatedly until the indicator lights up.  
The sub woofer is turned on.

**2** Press ILLUMINATION/SUB WOOFER LEVEL repeatedly to select the sub woofer level setting.



**3** Turn and hold **◀◀ OPERATION DIAL ▶▶** clockwise or counterclockwise and release it when you reach the sub woofer level you want.

The sub woofer level changes as below:  
0 dB ↔ +3 dB ↔ +6 dB ↔ +9 dB

**4** Press ILLUMINATION/SUB WOOFER LEVEL again to exit the sub woofer level setting.

### To turn off the sub woofer

Press SUB WOOFER ON/OFF repeatedly until the indicator turns off.

#### Note

If you turn MASTER VOLUME (or press VOLUME +/- on the remote), the volume for all speakers will change.

#### Tip

You can turn MASTER VOLUME (or press VOLUME +/- on the remote) to adjust the volume of the sub woofer linked to the front speakers.

## Singing karaoke by reducing the vocal or selecting the audio channel


### (MHC-GNX660 only)

When playing a multiplex AUDIO CD or multiplex CDG (disc with the vocals on one channel and the instruments on the other channel), you can switch the sound to cancel the vocals and listen only to the instruments from both speakers. Beside this, you can cancel the vocal of the stereo disc by using the KARAOKE PON function.

### Press KARAOKE repeatedly.

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

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

The “” lights up in the display when a karaoke mode is activated.


To sing karaoke of multiplex CD or CDG, select “MPX R” or “MPX L”.

- \* – When a disc with MP3 audio tracks is selected, you cannot select “MPX L” or “MPX R”.
  - With some songs, vocals may not be cancelled when you select “KARAOKE PON”.

### Notes

- The karaoke setting is automatically changed to “KARAOKE OFF” if the disc is changed or the function is changed.
- When karaoke mode is activated, the equalizer and surround effect settings cannot be changed.
- The instrumental sound may be reduced as well as the singer’s voice when the sound is recorded in monaural.
- Karaoke can be used during CD function only. You cannot change the KARAOKE setting when the disc tray is opened or when “READING” appears in the display.
- The singer voice may not be reduced during KARAOKE PON is selected when:
  - only a few instruments are playing.
  - a duet is being played back.
  - the source has strong echoes or chorus.
  - the singer voices deviates from the center.
  - the voice on the source is singing in high soprano or tenor.

### To cancel the karaoke mode

Press KARAOKE repeatedly until “” disappears.

## Singing along

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


- 1** Turn MIC 1 LEVEL and MIC 2 LEVEL to “MIN” to turn down the microphone volume.
- 2** Connect an optional microphone to the MIC 1 or MIC 2 jack.
- 3** Start playing the music and adjust the volume.
- 4** Start singing along with the music and turn MIC 1 LEVEL or MIC 2 LEVEL to adjust the microphone volume.

### Other operations

To	Do this
Sing along with CDGs*	Turn on your TV and select the video input.
Adjust the microphone echo	Turn ECHO LEVEL to adjust the echo effect. To cancel the echo effect, turn ECHO LEVEL to “MIN”.
Sing along with Karaoke*	Press KARAOKE repeatedly. (see “Singing Karaoke by reducing the vocal or selecting the audio channel” on page 19).

\* MHC-GNX660 only

### Tips

- You can mix and record sound from microphone after step 4. To record the sound, see “Recording on a tape manually” on page 17. 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 disc.
- When high level sound signals are input, the system automatically adjusts the recording level to prevent distortion of the recorded sound signal (Auto Level Control function).

## Falling asleep to music

### — Sleep Timer

You can set the system to turn off at a preset time, so that you can fall asleep to music. Use buttons on the remote for the operation.

#### Press SLEEP repeatedly.

Each time you press the button, the minute display changes cyclically as follows:  
 AUTO\* → 90MIN → 80MIN → 70MIN  
 → ... → 10MIN → OFF

\* The system automatically turns off in 100 minutes or after the current disc or tape finishes playing.

#### Other operations

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 in the display.

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

#### Notes

- During CD Synchro Recording, do not set the Sleep Timer to "AUTO".
- When the Sleep Timer is activated, "SLEEP" lights up in the display.

#### Tip

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

## Waking up to music

### — Play Timer

You can wake up to music at a preset time. Make sure you have set the clock (see "Setting the clock" on page 9).

Use buttons on the remote for the operation.

#### 1 Prepare the music source you want to play back.

- Disc: Load a disc. To start from a specific track, make a program (see "Creating your own program" on page 12).
- Tape: Load a tape with the side you want to play back facing forward.
- Radio: Tune in the preset station you want (see "Listening to the radio" on page 14).

#### 2 Press VOLUME +/- to adjust the volume.

#### 3 Press CLOCK/TIMER SET.

"SET" appears in the display, then "PLAY SET" flashes in the display.

#### 4 Press ENTER.

"ON" appears and the hour indication flashes in the display.

#### 5 Set the time to start playback.

Press **←|←|** or **▶|▶|+** repeatedly to set the hour, then press ENTER.

The minute indication flashes in the display.

Press **←|←|** or **▶|▶|+** repeatedly to set the minute, then press ENTER.

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

#### 7 Press **←|←|** or **▶|▶|+** repeatedly until the music source you want appears in the display.

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

TUNER ↔ CD PLAY ↔ TAPE PLAY

## 8 Press ENTER.

The type of timer (“PLAY TIMER”), followed by the start time, the stop time and the music source appears in the display.

## 9 Press I/⏻ to turn off the system.

### Other operations

To	Do this
Check the setting	<ol style="list-style-type: none"><li>1 Press CLOCK/TIMER SELECT. “SELECT” appears in the display.</li><li>2 Press -◀◀ or ▶▶+ repeatedly to select “PLAY SELECT”, then press ENTER.</li></ol>
Change the setting	Start from step 1.
Cancel the timer	<ol style="list-style-type: none"><li>1 Press CLOCK/TIMER SELECT. “SELECT” appears in the display.</li><li>2 Press -◀◀ or ▶▶+ repeatedly to select “TIMER OFF”, then press ENTER.</li></ol>

### Notes

- You cannot select the Play Timer and Timer Recording at the same time.
- If you use the Play Timer and the Sleep Timer at the same time, the Sleep Timer has priority.
- The Play Timer will not be activated if the system is turned on.

### Tips

- The system turns on 15 seconds before the preset time.
- When the Play Timer is selected, “PLAY” lights up in the display.

## Timer recording radio programs

### — Record Timer

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

To make a timer recording, you must first preset the radio station (see “Presetting radio stations” on page 13) and set the clock (see “Setting the clock” on page 9).

Use buttons on the remote for the operation.

**1 Tune in the preset radio station (see “Listening to the radio” on page 14).**

**2 Press CLOCK/TIMER SET.**

“SET” appears in the display, then “PLAY SET” flashes in the display.

**3 Press -◀◀ or ▶▶+ repeatedly to select “REC SET”, then press ENTER.**

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

**4 Set the time to start recording.**

Press -◀◀ or ▶▶+ repeatedly to set the hour, then press ENTER.

The minute indication flashes in the display.

Press -◀◀ or ▶▶+ repeatedly to set the minute, then press ENTER.

**5 Set the time to stop recording following the same procedure as step 4.**

The type of timer (“REC”), followed by the start time, the stop time and the preset radio station to be recorded (e.g., “FM 5 TAPE”) appears in the display.

**6 Load a recordable tape into Deck B.**

**7 Press I/⏻ to turn off the system.**

## Other operations

To	Do this
Check the setting	<ol style="list-style-type: none"><li>1 Press CLOCK/TIMER SELECT. “SELECT” appears in the display.</li><li>2 Press <b>← ← ← </b> or <b>▶ ▶ ▶ </b> repeatedly to select “REC SELECT”, then press ENTER.</li></ol>
Change the setting	Start from step 1.
Cancel the timer	<ol style="list-style-type: none"><li>1 Press CLOCK/TIMER SELECT. “SELECT” appears in the display.</li><li>2 Press <b>← ← ← </b> or <b>▶ ▶ ▶ </b> repeatedly to select “TIMER OFF”, then press ENTER.</li></ol>

### Notes

- You cannot select the Play Timer and Timer Recording at the same time.
- If you use the Timer Recording and the Sleep Timer at the same time, the Sleep Timer has priority.
- The Timer Recording will not be activated if the system is turned on.
- The volume is reduced to minimum during Timer Recording.
- Do not operate the system from the time the system turns on until the recording starts (about 15 seconds before the preset time).

### Tips

- The system turns on 15 seconds before the preset time.
- When the Timer Recording is selected, “REC” lights up in the display.

## Display

### Turning off the display

#### — Power Saving Mode

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

**Press DISPLAY repeatedly while the system is turned off until the demonstration display and the clock display disappears from the display.**

#### To cancel Power Saving Mode

Press DISPLAY repeatedly while the system is turned off. Each time you press the button, the display changes cyclically as follows: Demonstration<sup>1)</sup> → Clock<sup>2)</sup> → No display (Power Saving Mode)

<sup>1)</sup> The display changes and the indicators flashes even when the system is turned off.

<sup>2)</sup> “--:--” appears in the display if you have not set the clock.

### Note

You cannot do the following operations during Power Saving Mode:

- Setting the clock (page 9).
- Changing the AM tuning interval (page 14).
- Turning on the system by pressing the function buttons (CD, TAPE A/B, TUNER/BAND or TV).
- Changing CD power manage setting (page 14).

### Tips

- The timer continues to operate in Power Saving Mode.
- **I/⏻** indicator lights up even in the Power Saving Mode.

## Changing the pattern of power illuminator

You can select the pattern of power illuminator as you want.

- 1 Press ILLUMINATION/SUB WOOFER LEVEL to select the pattern of power illuminator.**
- 2 Turn and hold ◀◀ OPERATION DIAL ▶▶ clockwise or counterclockwise and release it when you reach the pattern of power illuminator you want.**

The pattern of power illuminator changes as below:

PATTERN OFF ↔ PATTERN 1 ↔  
PATTERN 2 ↔ PATTERN 3

- 3 Press ILLUMINATION/SUB WOOFER LEVEL until the original display returns.**

### Notes

- When you turn MASTER VOLUME (or press VOLUME +/- on the remote), power illuminator shows the current volume level.
- During the demonstration display, you can turn on or off power illuminator by pressing ILLUMINATION/SUB WOOFER LEVEL.

## Viewing information about the disc in the display

You can check the elapsed playing time and remaining time of the current track or current disc.

When a CD-TEXT disc or a disc with MP3 audio tracks is loaded, you can also check the information recorded on disc, such as the titles. When the system detects CD-TEXT discs, "CD TEXT" lights up in the display.

---

### Checking the elapsed playing time, remaining time and titles

**Press DISPLAY repeatedly during playback.**

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<sup>1)</sup> →  
Remaining time of the current disc<sup>2)</sup> → Title of the current track<sup>3)</sup> → Title of the current album<sup>4)</sup>  
(for a few seconds) → Clock display<sup>5)</sup> (for 8 seconds) → Effect status or karaoke status<sup>6)</sup> (for 8 seconds)

- <sup>1)</sup> "--:--" appears while an MP3 audio track is played back.
- <sup>2)</sup> "--:--" appears in the following cases:
  - While an MP3 audio track is played back.
  - All play modes except "1 DISC" or "ALBM".
- <sup>3)</sup> Only for CD-TEXT discs and a discs with MP3 audio tracks.

When the CD-TEXT disc contains more than 20 tracks, the title of current track is not displayed from track 21 onwards.
- <sup>4)</sup> Only for discs with MP3 audio tracks.
- <sup>5)</sup> "--:--" appears in the display if you have not set the clock.
- <sup>6)</sup> When karaoke mode is activated (MHC-GNX660 only).



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## Checking the total playing time and titles

Press **DISPLAY** repeatedly when playback is stopped.

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

### ■ When the play mode is other than “PGM”

Total number of tracks<sup>1)</sup> or albums<sup>2)</sup> or the total playing time<sup>3)</sup> → Title of current disc<sup>4)</sup> or current album<sup>1)</sup> → Clock display<sup>5)</sup> (for 8 seconds) → Effect status or karaoke status<sup>6)</sup> (for 8 seconds)

- 1) For discs with MP3 audio tracks in “ALBM” and “ALBM SHUF” modes.
- 2) For discs with MP3 audio tracks in play modes other than “ALBM” and “ALBM SHUF”.
- 3) For AUDIO CDs and CDGs\*.  
\* MHC-GNX660 only
- 4) For CD-TEXT disc and discs with MP3 audio tracks in play modes other than “ALBM” and “ALBM SHUF”.
- 5) “--:--” appears in the display if you have not set the clock.
- 6) When karaoke mode is activated (MHC-GNX660 only).

### ■ When the play mode is “PGM”

The last track number of the program and the total playing time<sup>1)</sup> → Total number of programmed tracks<sup>2)</sup> (for 8 seconds) → Title of current disc<sup>3)</sup> → Clock display<sup>4)</sup> (for 8 seconds) → Effect status or karaoke status<sup>5)</sup> (for 8 seconds)

- 1) “--:--” appears in the following cases:
  - When the AUDIO CD or CDG\* contains 21 tracks or more, and the track number which exceeds 20 is selected.  
\* MHC-GNX660 only
  - When the total program exceeds 100 minutes.
  - When the program list contains MP3 audio tracks.
- 2) “NO STEP” appears in the display if there is no program.
- 3) Only for CD-TEXT discs and discs with MP3 audio tracks.
- 4) “--:--” appears in the display if you have not set the clock.
- 5) When karaoke mode is activated (MHC-GNX660 only).

### Note

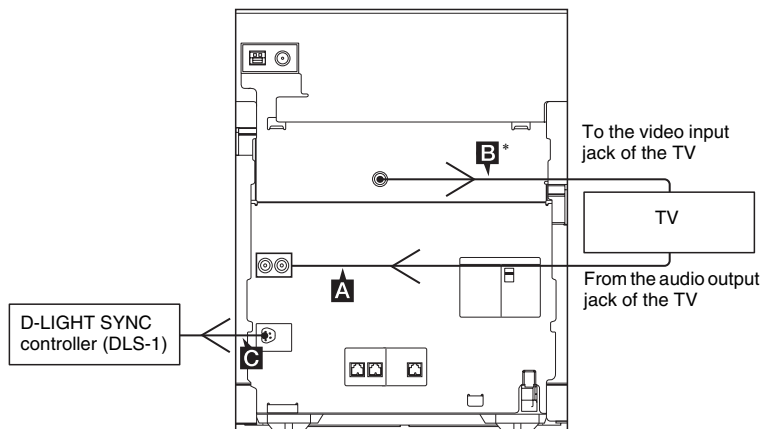
Some characters may not be displayed for track title, album title or disc title.

## Optional Components

### Hooking up optional components

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

\* MHC-GNX660 only



#### **A** TV (AUDIO IN) L/R jacks

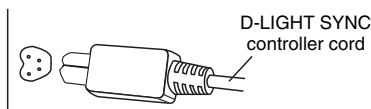
Use audio cords (not supplied) to connect the audio output jacks of a TV to these jacks. Then, you can output audio signal through this system.

#### **B** VIDEO OUT jack (MHC-GNX660 only)

Use a video cord (supplied) to connect the video input jack of a TV to this jack.

#### **C** D-LIGHT SYNC OUT jack

Connect the D-LIGHT SYNC controller to this jack. You need to connect the D-LIGHT SYNC controller to the lighting device\* (not supplied). The lighting device will react according to control signals transmitted by the D-LIGHT SYNC controller upon receiving music source from the system. For details on the use of D-LIGHT SYNC controller and lighting device, refer to the respective operating instructions supplied with the respective device.



\* Refer to the D-LIGHT SYNC controller operating instructions for the recommended lighting device.

#### **Note**

The lighting effect may be different depending on the connected lighting device or the type of music being played back.

# Listening to audio from a connected component

## Listening to a connected TV

### 1 Connect the audio cords.

See “Hooking up optional components” on page 26.

### 2 Press TV.

#### Tip

You can press FUNCTION on the remote repeatedly to select “TV”.

## Troubleshooting

### Problems and remedies

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

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

If the problem persists after doing all of the above, consult your nearest Sony dealer. Note that if service personnel changes some parts during repair, these parts may be retained.

#### When the I/⏻ indicator flashes

Immediately unplug the power cord and check the following items.

- Are you using the supplied speakers?
- Is anything blocking the ventilation holes on the rear of the unit?

After checking the above items and fixing any problem, plug in the power cord again and turn on the system. If the I/⏻ 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.**

- The demonstration mode started. Press I/⏻ (see step 6 of “Hooking up the system” on page 6).

---

**The clock/timer setting is canceled.**

- The power cord is disconnected or a power failure occurred. Redo “Setting the clock” (page 9). If you have set the timer, redo “Waking up to music” (page 21) and “Timer recording radio programs” (page 22).

---

**The radio presetting is canceled.**

- The power cord is disconnected or a power failure occurred for longer than half a day. Redo “Presetting radio stations” (page 13).

---

**“-- --” appears in the display.**

- A power failure occurred. Set the clock (page 9) and timer settings (page 21 to 23) again.

---

**There is no sound.**

- Turn MASTER VOLUME clockwise (or press VOLUME + on the remote).
- Make sure the headphones are not connected to the PHONES jack.
- Check the speaker connections (page 6).
- There is no audio output during Timer Recording.

---

**There is no microphone sound.**

- Turn MASTER VOLUME (or press VOLUME +/- on the remote repeatedly) or MIC 1/2 LEVEL to adjust the microphone volume.
- Make sure the microphone is connected to the MIC 1 or MIC 2 jack correctly.

---

**There is severe hum or noise.**

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

---

**The timer cannot be set.**

- Set the clock again (page 9).

---

**The timer does not function.**

- Check the timer setting and set the correct time (pages 21 to 23).
- Cancel the Sleep Timer function (page 21).
- You cannot select the Play Timer and Timer Recording simultaneously.

---

**The remote does not function.**

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

---

**There is acoustic feedback.**

- Decrease 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.

---

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

- Place the speakers as symmetrically as possible.
- Check that the speakers are connected securely and correctly.
- The source being played back is monaural.
- Press KARAOKE repeatedly until "🎤" disappears from the display.\*

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\* MHC-GNX660 only

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**Disc player**

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**The disc tray does not open and "LOCKED" appears in the display.**

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

---

**The disc tray does not close.**

- Load the disc correctly.
- Always close the tray by pressing ▲ OPEN/CLOSE. Trying to push the tray closed with your fingers may cause problems with the system.

---

**The disc does not eject.**

- You cannot eject the disc during CD Synchro Recording. Press ■ to cancel the CD Synchro Recording, then press ▲ OPEN/CLOSE to eject the disc.
- Consult your nearest Sony dealer.

---

**Playback does not start.**

- Open the disc tray and check whether a disc is loaded.
- Wipe the disc clean (page 32).
- Reload the disc.
- Load the disc that this system can play back (page 4).
- Load the disc correctly.
- Load 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 ► to start playback.

---

**Disc access takes a longer time.**

- Set CD power manage function to "CD POWER ON" (page 14).

---

**The sound skips.**

- Wipe the disc clean (page 32).
- Reload 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 unit, 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.

---

**Playback does not start from the first track.**

- The system is in Program Play or Shuffle Play mode. Press ■ to stop playback. Then, press PLAY MODE on the remote repeatedly until "ALL DISC S", "1 DISC" or "ALBM" lights up in the display.

---

**MP3 audio track cannot be played back.**

- Recording was not performed according to the ISO 9660 level 1, level 2 or Joliet in the expansion format.
- The MP3 audio track does not have the extension “.MP3”.
- The data is not stored in MP3 format even though it has extension “.MP3”.
- The MP3 audio tracks in format other than MPEG 1, 2 and 2.5 Audio Layer 3 cannot be played back.
- The system can play back to a depth of 8 folders only.
- MP3 audio tracks in MP3 PRO format cannot be played back on this system.

---

**MP3 audio tracks take longer time to play back than others.**

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

---

**The album title, track title, ID3 tag and the CD-TEXT characters do not appear properly.**

- Use a disc that conforms with ISO 9660 level 1, level 2 or Joliet in the expansion format.
  - The ID3 tag is not version 1 or version 2.
  - The character code that can be displayed by this system are as follow:
    - Upper cases (A to Z)
    - Numbers (0 to 9)
    - Symbols (<> \* +, - / [ ] \ \_)
- Other characters may not be displayed correctly.

---

**When you press ◀◀ or ▶▶, “NOT IN USE” flashes in the display.\***

- The CDG is played back. This is not a malfunction.

---

\* MHC-GNX660 only

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**Tuner**

---

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

- Set the proper band and frequency (page 13).
- Connect the antenna properly (page 7).
- 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 an 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 manage function to “CD POWER OFF” (page 14).

---

**A stereo FM program cannot be received in stereo.**

- Press FM MODE on the remote repeatedly until “MONO” disappears in the display.

---

**Tape deck**

---

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

- The tape heads are dirty (see “Cleaning the tape heads” on page 33).
- The record/playback heads are magnetized (see “Demagnetizing the tape heads” on page 33).

---

**The tape does not erase completely.**

- The record/playback heads are magnetized (see “Demagnetizing the tape heads” on page 33).

---

**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 33).

---

**Noise increases or the high frequencies are erased.**

- The record/playback heads are magnetized (see “Demagnetizing the tape heads” on page 33).

---

### The tape does not record.

- No tape is loaded. Load a tape.
- The tab has been removed from the tape. Cover the broken tab with adhesive tape (page 33).
- The tape has reeled to the end.

---

### The system cannot play back the reverse side of the tape in Deck A or Deck B.

- The system only can play back the front side of the tape in Deck A and Deck B. This is not a malfunction.

---

### The system cannot record the reverse side of the tape in Deck B.

- The system only can record the front side of the tape in Deck B. This is not a malfunction.
- 

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

Use buttons on the unit for the operation.

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

“COLD RESET” appears in the display.

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.

### Disc

---

#### NO STEP

You have cleared all the steps you programmed.

---

#### OVER

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

---

#### NO DISC

There is no disc on the disc tray.

---

### PUSH STOP

You have pressed PLAY MODE on the remote during playback.

---

### STEP FULL

You tried to program more than 25 steps.

---

### READING

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

---

## Tape

---

### NO TAB

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

---

### NO TAPE

There is no tape in the tape deck.

---

## Timer

---

### OFF TIME NG

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

---

### SET CLOCK

You pressed CLOCK/TIMER SELECT on the remote before the clock is set.

---

### SET TIMER

You pressed CLOCK/TIMER SELECT on the remote before Play Timer or Timer Recording is set.

---

### PUSH SELECT

You tried to set the clock or timer during timer operation.

---

## Others

---

### NOT IN USE

You have pressed a button those operations is not allowed or invalid at that 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 system is not disconnected from the AC power source (mains) as long as it is connected to the wall outlet, even if the system 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 system 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 build-up

- Although the system heats up during operation, this is not a malfunction.
- Place the system in a location with adequate ventilation to prevent heat build-up in the system.
- If you continuously use this system 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 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 system. 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 system. When this occurs, it may not be possible to remove the disc, and may also cause this system 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 back on this system. Attempting to do so may damage the system. Do not use such discs.

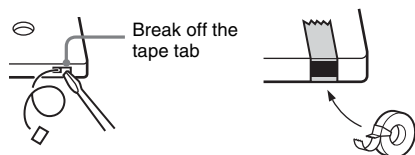
#### Cleaning the cabinet

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



## To save a tape permanently

To prevent a tape from being accidentally recorded over, break off the tape 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 tape in the tape deck

Take up any slack in the tape deck. 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 playback, 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. 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 tape. For details, refer to the instructions of the cleaning tape.

## Demagnetizing the tape heads

Demagnetize 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 demagnetizing tape. For details, refer to the instructions of the demagnetizing tape.

# Specifications

## Amplifier section

### MHC-GNX660 (HCD-GNX660)/ MHC-GNX600 (HCD-GNX600)

The following are measured at

Mexican model: 127 V AC, 60 Hz

Brazil model: 127 V or 220 V AC,  
50/60 Hz

Other models: 120 V, 220 V, 240 V AC,  
50/60 Hz

Front speakers

DIN power output (rated) 130 + 130 watts  
(6 ohms at 1 kHz, DIN)

Continuous RMS power output (reference)

160 + 160 watts  
(6 ohms at 1 kHz,  
10% THD)

Sub woofer

Continuous RMS power output (reference)

200 watts  
(4 ohms at 100 Hz,  
10% THD)

TV (AUDIO) IN (phono jack)

voltage 250 mV,  
impedance 47 kilohms

MIC (phone jack)

sensitivity 1 mV,  
impedance 10 kilohms

Outputs

VIDEO OUT (phono jack)  
(MHC-GNX660 only)

max. output level  
1 V<sub>p-p</sub>, unbalanced, Sync  
negative, load impedance  
75 ohms

PHONES (stereo mini jack)

accepts headphones of  
8 ohms or more

FRONT SPEAKER/SUB WOOFER OUT

Use only the supplied  
speaker

## Disc player section

System	Compact disc and digital audio system
Laser	Semiconductor laser ( $\lambda=780$ nm) Emission duration: continuous
Laser Output	Max. 44.6 $\mu$ W* * 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 ( $\pm 0.5$ dB)
Wave length	780 – 790 nm
Signal-to-noise ratio	More than 90 dB
Dynamic range	More than 90 dB

## Tape deck section

Recording system	4-track 2-channel stereo
Frequency response	50 – 13,000 Hz ( $\pm 3$ dB), using Sony TYPE I tape
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 American models:	530 – 1,710 kHz (with the interval set at 10 kHz) 531 – 1,710 kHz (with the interval set at 9 kHz)
Other models:	531 – 1,602 kHz (with the interval set at 9 kHz) 530 – 1,710 kHz (with the interval set at 10 kHz)
Antenna	AM loop antenna
Antenna terminals	External antenna terminal
Intermediate frequency	450 kHz

## Speakers section

### Front speakers

#### SS-GNX660 (MHC-GNX660)/

#### SS-GNX600 (MHC-GNX600)

Speaker system	2-way, 2-unit, bass-reflex type
Speaker units	
Woofer:	20 cm, cone type
Tweeter:	2.5 cm, horn type
Nominal impedance	6 ohms
Dimensions (w/h/d) (Approx.)	281 × 417 × 310.5 mm
Mass (Approx.)	7.0 kg net per speaker

### Sub woofer

#### SS-WGV660 (MHC-GNX660)/

#### SS-WG600 (MHC-GNX600)

Sub woofer system	1-way, 1-unit, bass-reflex type
Speaker units	
Sub woofer:	20 cm, cone type
Nominal impedance	4 ohms
Dimensions (w/h/d) (Approx.)	320 × 420 × 345 mm
Mass (Approx.)	8.0 kg

## General

### Power requirements

Australian model: 230 – 240 V AC, 50/60 Hz

Mexican model: 127 V AC, 60 Hz

Argentina model: 220 V AC, 50/60 Hz

Brazil model: 127 V or 220 V AC,  
50/60 Hz  
Adjustable with voltage  
selector

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

### Power consumption

MHC-GNX660/GNX600 110 watts

### Dimensions (w/h/d) (Approx.)

HCD-GNX660/GNX600 280 × 326 × 385.5 mm

### Mass (Approx.)

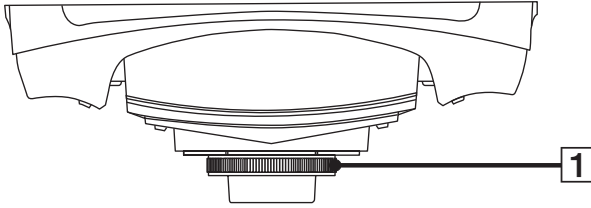
HCD-GNX660/GNX600 6.3 kg

Supplied accessories: Remote Commander (1)  
Batteries (2)  
AM loop antenna (1)  
FM lead antenna (1)  
Front speaker pads (8)  
Sub woofer pads (4)  
Video cord (1)  
(MHC-GNX660 only)

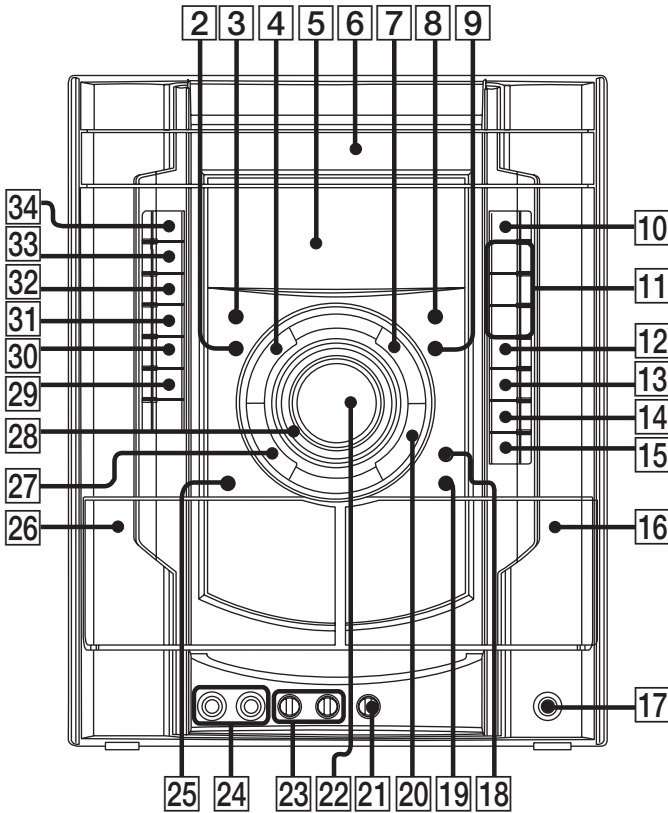
Design and specifications are subject to change  
without notice.



## Top Panel



## Front Panel



# Remote control

## ALPHABETICAL ORDER

### A - E

- ALBUM + **[14]** (10, 12, 16, 17)
- ALBUM - **[16]** (10, 12, 16, 17)
- CD **[24]** (10, 11, 12, 16)
- CLEAR **[18]** (12)
- CLOCK/TIMER SELECT **[2]**  
(22, 23, 31)
- CLOCK/TIMER SET **[4]** (9, 21, 22)
- DISC SKIP **[13]** (11, 12)
- DISPLAY **[26]** (23, 24, 25)
- ENTER **[12]** (9, 12, 13, 21, 22, 23)
- EQ **[17]** (18, 19)

### F - Z

- FM MODE **[6]** (15, 30)
- FUNCTION **[8]** (11, 14, 15, 16, 17, 27)
- PLAY MODE **[5]** (10, 12, 16, 17, 29, 31)
- REPEAT **[6]** (11)
- SLEEP **[1]** (21)

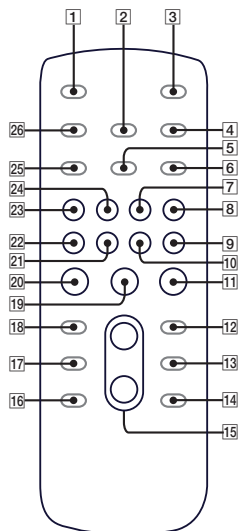
- TAPE **[23]** (15, 16)
- TUNER/BAND **[7]** (13, 14)
- TUNER MEMORY **[25]** (13, 14)
- TUNING MODE **[5]** (13, 14, 15)
- VOLUME +/- **[15]** (19, 21, 24, 28)

The + button has a tactile dot.\*

## SYMBOLS

- I/O (power) **[3]** (7, 22)
- (stop) **[11]** (10, 14, 16, 17, 20, 29, 31)
- || (pause) **[19]** (10, 16)
- ▶ (play) **[20]** (10, 12, 16, 29)
- ◀◀ (go backward) **[22]** (10, 12, 13, 17, 21, 22, 23)
- ▶▶+ (go forward) **[21]** (10, 12, 13, 17, 21, 22, 23)
- ◀◀ (rewind) **[10]** (10, 16, 30)
- ▶▶ (fast forward) **[9]** (10, 16, 30, 31)

\* Use the tactile dot as a reference when operating the system.







\* 2 6 7 0 3 3 1 1 2 \* (3)