

# *Compact Hi-Fi Component System*

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Operating Instructions



*CHC-TB20*

# Warning

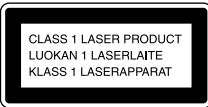
## To prevent fire or shock hazard, do not expose the unit to rain or moisture.

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

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 label is located on the rear exterior.

The following caution label is located inside the apparatus.



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



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.

# Table of Contents

## List of Button Locations and Reference Pages

Main unit .....	4
Remote control .....	5

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## Getting Started

Hooking up the system .....	6
Inserting two R6 (size AA) batteries into the remote .....	7
Attaching the speaker pads .....	7
Setting the clock .....	8

---

## CD

Loading a CD .....	8
Playing a CD — Normal Play/Shuffle Play/Repeat Play .....	9
Programing CD tracks — Program Play .....	10
Labeling a CD — Disc Memo .....	11

---

## Tuner

Presetting radio stations .....	13
Listening to the radio — Preset Tuning .....	15
— Manual Tuning .....	15
Labeling the preset stations — Station Name .....	16
Using the Radio Data System (RDS)* ....	17

---

## Tape

Loading a tape .....	18
Playing a tape .....	18
Recording to a tape — CD Synchro Recording/Recording Manually/Program Edit .....	19
Timer-recording radio programs .....	20

---

## Sound Adjustment

Adjusting the sound .....	21
Selecting the preset music menu .....	22
Adjusting the equalizer and storing .....	22

---

## Timer

Falling asleep to music — Sleep Timer .....	23
Waking up to music — Daily Timer .....	23

---

## Display

Turning off the display — Power Saving Mode .....	24
Adjusting the brightness of the display back light .....	24
Using the display .....	25

---

## Optional Components

Hooking up optional components .....	26
Listening to audio from a connected component .....	27
Recording on a connected digital component .....	27
Recording audio from a connected component .....	27

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## Troubleshooting

Problems and remedies .....	28
Messages .....	30

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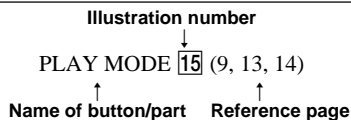
## Additional Information

Precautions .....	31
Specifications .....	33

\* European model only

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 - G

- CD disc tray **18** (8)
- CD SYNC **27** (19)
- CD **▶||** **29** (9)
- DBFB **22** (21)
- DIMMER **2** (24)
- DISC 1 - 3 **19** (10)
- DISC 1 - 3 **▲** **19** (8)
- DISPLAY **3** (24)
- Display window **5**
- EDIT **25** (20)
- ENTER/YES **13** (8, 10, 12, 13, 14, 21, 22, 23)
- EQ EDIT **17** (22)
- FUNCTION **15** (9, 18)
- GROOVE **21** (21)

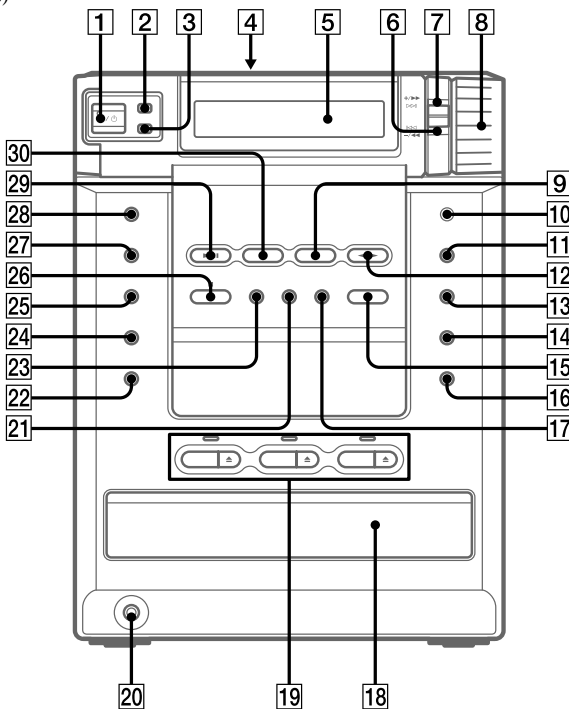
#### M - Z

- MD (VIDEO) **9** (27)
- MUSIC MENU **23** (22)
- PHONES jack **20**
- PLAY MODE/TUNING MODE **14** (9, 13, 15)
- REC PAUSE/START **28** (19)
- Remote sensor **10**
- REPEAT/FM MODE **16** (9, 15)
- SURROUND **24** (21)
- Tape deck lid **4** (18)
- TAPE **◀▶** **12** (18, 19)
- TUNER/BAND **30** (13, 15)

- TUNER MEMORY/DIRECTION **11** (14, 19)
- VOL **8**

### BUTTON DESCRIPTIONS

- I/⏻ **1**
- + / ▶▶▶▶ **7**
- **26**
- ◀◀◀ - / ▶▶▶ **6**



# Remote control

## ALPHABETICAL ORDER

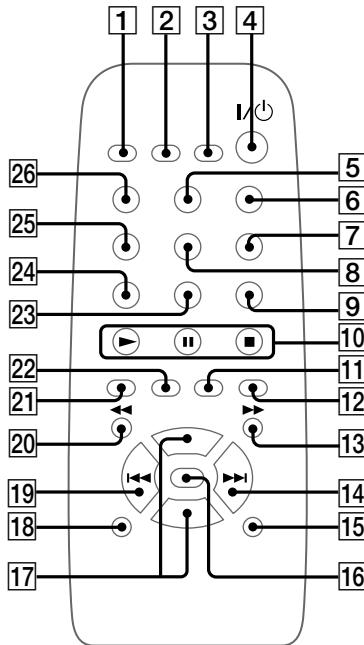
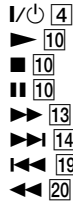
### A - G

- CHECK **8** (11)
- CLEAR **12** (11)
- CLOCK/TIMER SELECT **2**  
(21, 24)
- CLOCK/TIMER SET **3**  
(8, 20, 23)
- DBFB **26** (21)
- DIMMER **23** (24)
- DISC SKIP **9** (9, 11)
- DISPLAY **18** (24)
- ENTER/YES **11** (8, 10, 12, 13,  
14, 21, 22, 23)
- FUNCTION **15** (9, 18)
- GROOVE **16** (21)

### M - Z

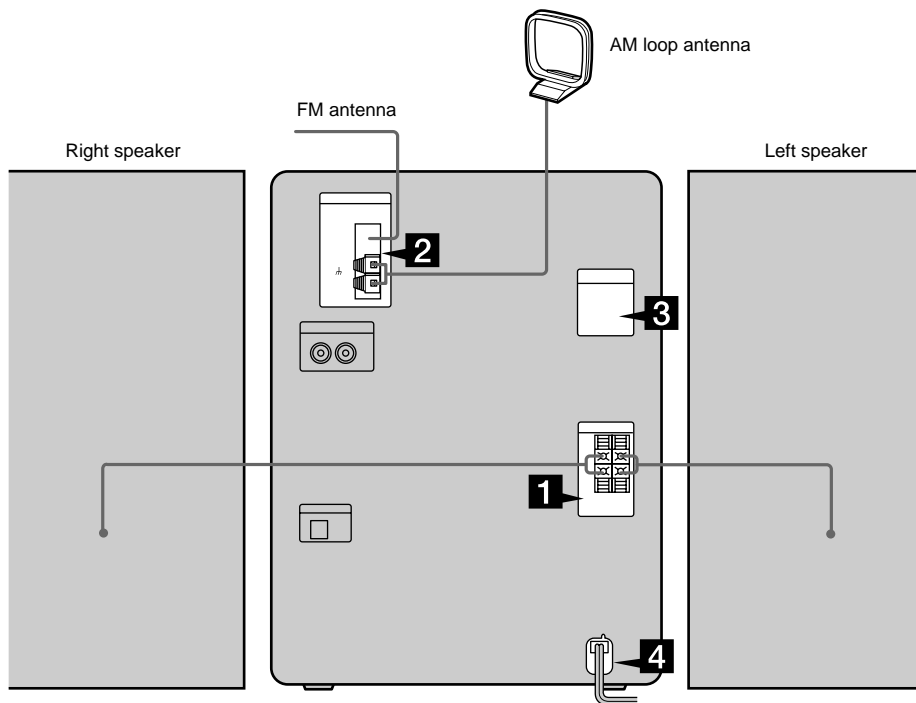
- MENU/NO **21** (13)
- MUSIC MENU **6** (22)
- NAME EDIT/CHARACTER **22**  
(11, 16)
- REPEAT **7** (9)
- SCROLL **25** (12, 25)
- SLEEP **1** (23)
- SURROUND **5** (21)
- TUNER/BAND **24** (13, 15)
- VOL +/- **17**

## BUTTON DESCRIPTIONS



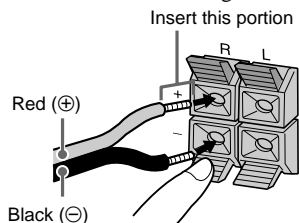
## Hooking up the system

Perform the following procedure **1** to **4** to hook up your system using the supplied cords and accessories.



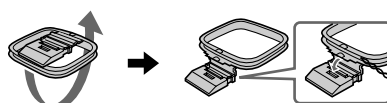
### 1 Connect the speakers.

Connect the speaker cords to the SPEAKER terminals as the following.



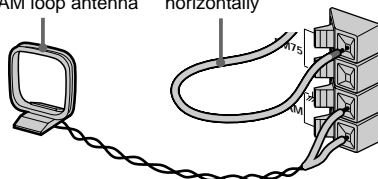
### 2 Connect the FM/AM antennas.

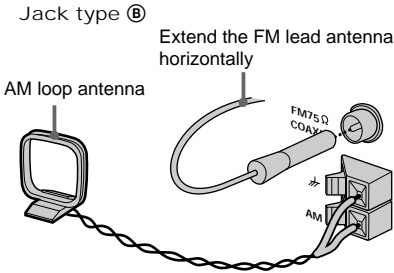
Set up the AM loop antenna, then connect it.



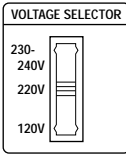
Jack type A

Extend the FM lead antenna horizontally





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



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

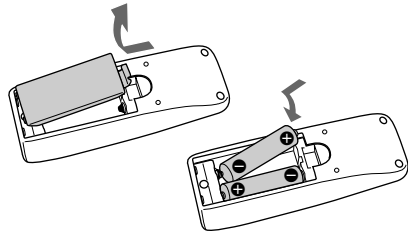
The demonstration appears in the display.

If the plug of the power cord does not fit your wall outlet, attach the supplied adapter on to the plug (for models with a plug adapter). To turn on the system, press I/⏻.

When carrying this system  
Perform the following procedure to protect the CD mechanism.

- 1** Make sure that all discs are removed from the system.
- 2** Press FUNCTION repeatedly until "CD" appears.
- 3** Press FUNCTION while holding down DISC 1 until "LOCK" appears.
- 4** Unplug the power cord.

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



### Tip

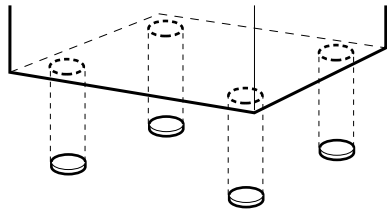
When the remote no longer operates the system, replace both batteries with new ones.

### Note

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

## Attaching the speaker pads

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



## Setting the clock

- 1 Turn on the system.
- 2 Press **CLOCK/TIMER SET** on the remote.
- 3 Press **◀◀** or **▶▶** on the remote to set the hour.
- 4 Press **ENTER/YES**.  
The minute indication flashes.
- 5 Press **◀◀** or **▶▶** on the remote to set the minute.
- 6 Press **ENTER/YES**.  
The clock starts working.

If you make a mistake

Press **◀◀** or **▶▶** on the remote repeatedly until the incorrect item flashes, then set it again.

To adjust the clock

- 1 Press **CLOCK/TIMER SET** on the remote.
- 2 Press **◀◀** or **▶▶** on the remote to select "CLOCK SET?", then press **ENTER/YES**.
- 3 Do the same procedures as step 3 to 6 above.

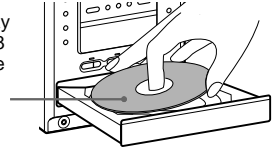
Note

You cannot set the clock in the Power Saving Mode.

## Loading a CD

- 1 Press **DISC 1 – 3 ▲**.  
The disc tray opens.
- 2 Place a CD with the label side up on the disc tray.

When you play a CD single (8 cm CD), place it on the inner circle of the tray.



To load other CDs, press a different **▲** and place the CD in the disc tray.

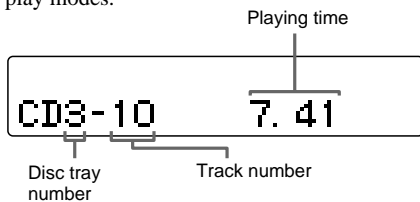
- 3 Press the same **▲** again to close the disc tray.



## Playing a CD

### — Normal Play/Shuffle Play/Repeat Play

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



**1 Press FUNCTION repeatedly to switch the function to CD.**

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

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

**3 Press CD ►|| (or ► on the remote).**

## Other Operations

To	Do this
Stop play	Press ■.
Pause	Press CD ►   (or    on the remote). Press again to resume play.
Select a track	Slide the knob to ►   (to go forward) or   ◄ (to go back) and release it when you locate the desired track (or press ◄◄ or ►► on the remote).
Find a point in a track	Slide and hold the knob to ◄◄ or ►► during play and release it at the desired point (or keep pressing ◄◄ or ►► on the remote).
Select a CD	<ul style="list-style-type: none"> <li>• Press DISC 1 – 3 and play starts automatically.</li> <li>• Press DISC SKIP on the remote repeatedly so that DISC 1 – 3 appears. Press CD ►   (or ► on the remote) to play the selected CD.</li> </ul> <p>If you press DISC 1 – 3 during play, the selected CD changes and the new CD starts playing.</p>
Remove a CD	Press one of DISC 1 – 3 ▲ to open the tray that contains the CD you want to remove.
Play repeatedly (Repeat Play)	<p>Press REPEAT/FM MODE during play until "REPEAT" or "REPEAT 1" appears.</p> <p>REPEAT*: For all the tracks on the CD up to five times.</p> <p>REPEAT 1: For a single track only.</p> <p>To cancel playing repeatedly, press REPEAT/FM MODE until "REPEAT" or "REPEAT 1" disappears.</p>

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

**continued**

## Playing a CD (continued)

### Tips

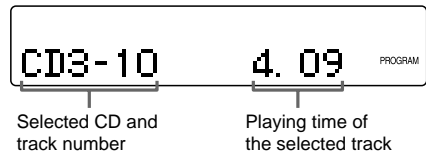
- You can start playing from the desired track in Normal Play or Program Play. Slide the knob to ◀◀◀ or to ▶▶▶ (or press ◀◀◀ or ▶▶▶ on the remote) until the desired track number appears after step 1.
- The DISC 1 – 3 button indicator lights orange when a CD is loaded on the tray.  
All of the DISC 1 – 3 button indicators light orange for the first time you turn on the system, and then go out if the system determines that a CD is not loaded after the CD tray is closed, etc.

## Programing CD tracks

### — Program Play

You can make a program of up to 25 tracks.

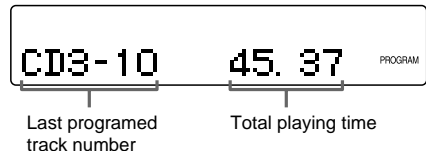
- 1 Press FUNCTION repeatedly to switch the function to CD.**
- 2 Press PLAY MODE/TUNING MODE repeatedly until “PROGRAM” appears.**
- 3 Press DISC 1 – 3 to select a CD.**  
To program all the tracks on a CD at once, proceed to step 5 with “AL” displayed.
- 4 Slide the knob to ◀◀◀ or to ▶▶▶ (or press ◀◀◀ or ▶▶▶ on the remote) until the desired track number appears.**



- 5 Press ENTER/YES.**

The track is programmed.

“STEP” appears, followed by the number of the track in the programmed sequence. The number of the last programmed track appears, followed by the total playing time of the program.



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

7 Press CD ►►II (or ►► on the remote).

To	Do this
Cancel Program Play	Press PLAY MODE/TUNING MODE repeatedly until "PROGRAM" and "SHUFFLE" disappear.
Check the program	Press CHECK on the remote repeatedly in stop mode. After the last track, "Check End" appears.
Clear a track from the end	Press CLEAR on the remote in stop mode.
Clear a specific track	Press CHECK on the remote repeatedly in stop mode until the number of the track to be erased appears, then press CLEAR.
Add a track to the end of the program in stop mode	Perform steps 3 to 5.

#### Tips

- The program you made remains after Program Play finishes. To play the same program again, press CD ►►II.
- "- - -" appears when the total CD program time exceeds 100 minutes, or when you select a CD track whose number is 21 or over.

## Labeling a CD

### — Disc Memo

You can label up to 50 CDs with titles of up to 20 symbols and characters. Whenever you load a labeled CD, the title appears in the display.

#### Notes

- You cannot label a CD for which "CD-TEXT" appears in the display.
- **When labeling CDs for the first time, be sure to erase all disc titles stored in the system memory (see "Erasing a disc title" on page 13).**
- To ensure that disc titles are not erased from memory, have the system connected to a wall outlet at least once a day.

**1 Press FUNCTION repeatedly to switch the function to CD.**

**2 Press DISC SKIP on the remote repeatedly until the desired CD appears.**

If "SHUFFLE" or "PROGRAM" appears in the display, press PLAY MODE/TUNING MODE repeatedly until both disappear.

**3 Press NAME EDIT/CHARACTER on the remote.**

The cursor starts flashing.

**4 Press NAME EDIT/CHARACTER on the remote to select the desired type of character.**

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

□ (Blank space) → A (Upper cases) → a (Lower cases) → 0 (Numbers) → ' (Symbols)

continued

## Labeling a CD (continued)

- 5 Press ◀◀ or ▶▶ on the remote to select the desired character.**

You can also select the following symbols.

' - / , . ( ) : ! ? & + < > \_ = " ; # \$ % @ \* `

### To enter a blank space

Press ▶▶ on the remote.

- 6 Press ▶▶ on the remote.**

The character you selected in step 5 stops flashing and the cursor shifts to the right.

- 7 Repeat steps 4 to 6 to complete the entire title.**

- 8 Press ENTER/YES to complete the labeling procedure.**

If you make a mistake

During step 4 to 6, press ◀◀ or ▶▶ on the remote until the character you want to change flashes, then repeat steps 4 to 6.

To erase a character

During step 4 to 6, press ◀◀ or ▶▶ on the remote until the cursor shifts to the character you want to erase, then press CLEAR on the remote while the character is flashing. You cannot insert characters.

To cancel labeling

Press MENU/NO on the remote.

## Checking the disc titles

- 1 Press FUNCTION repeatedly to switch the function to CD.**
- 2 Press DISC SKIP on the remote repeatedly until the desired CD appears.**
- 3 Press MENU/NO on the remote in stop mode.**
- 4 Press ◀◀ or ▶▶ on the remote until "Name Check?" appears, then press ENTER/YES on the remote.**
- 5 Press ◀◀ or ▶▶ on the remote to select the disc titles stored in the system memory between 01 and 50.**

To check the current disc title

Press SCROLL on the remote in stop mode.

## Erasing a disc title

- 1 Press **FUNCTION** repeatedly to switch the function to CD.
- 2 Press **DISC SKIP** on the remote repeatedly until the desired CD appears.
- 3 Press **MENU/NO** on the remote in stop mode.
- 4 Press **◀◀** or **▶▶** on the remote until “Name Erase?” appears, then press **ENTER/YES**.
- 5 Press **◀◀** or **▶▶** on the remote to select the disc title you want to erase.  
The disc title appears scrolling in the display. “No Name” appears if no disc title is labeled.
- 6 Press **ENTER/YES**.  
“Complete!” appears.

To erase all disc titles

Press **◀◀** or **▶▶** on the remote until “All Erase?” appears in step 4, then press **ENTER/YES** twice.

To cancel erasing

Press **MENU/NO** on the remote.

## Presetting radio stations

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

There are two ways to store the station presets.

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

## Setting presets through automatic tuning

- 1 Press **TUNER/BAND** repeatedly to select “FM” or “AM”.
- 2 Press **PLAY MODE/TUNING MODE** until “AUTO” appears.
- 3 Slide the knob to **◀◀** or to **▶▶** (or press **◀◀** or **▶▶** on the remote).

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

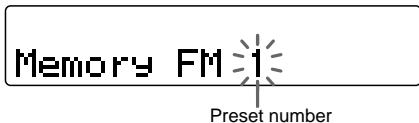
### If “TUNED” does not appear and the scanning does not stop

Set the frequency of the desired radio station as described in step 2 through 7 of “Setting presets through manual tuning” on page 14.

continued

## Presetting radio stations (continued)

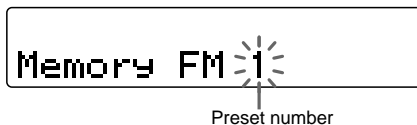
- 4 Press TUNER MEMORY/DIRECTION.
- 5 Slide the knob to  $\lll$  or to  $\ggg$  (or press  $\lll$  or  $\ggg$  on the remote) repeatedly to select the desired preset number.



- 6 Press ENTER/YES.  
"Complete!" appears, and the station is stored.
- 7 Repeat steps 1 to 6 to store other stations.

## Setting presets through manual tuning

- 1 Press TUNER/BAND repeatedly to select "FM" or "AM".
- 2 Press PLAY MODE/TUNING MODE until "AUTO" and "PRESET" disappear.
- 3 Slide the knob to  $\lll$  or to  $\ggg$  (or press  $\lll$  or  $\ggg$  on the remote) repeatedly to tune in the desired station.
- 4 Press TUNER MEMORY/DIRECTION.
- 5 Slide the knob to  $\lll$  or to  $\ggg$  (or press  $\lll$  or  $\ggg$  on the remote) repeatedly to select the desired preset number.



- 6 Press ENTER/YES.  
"Complete!" appears, and 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 "Setting presets through manual tuning".
Stop setting presets	Press MENU/NO on the remote.
Stop scanning	Press PLAY MODE/TUNING MODE.
Change the preset station	Start over from step 1.
Change the preset number	Start over from step 1.

To change the AM tuning interval (except for the European model)

The AM tuning interval is factory-set to 9 kHz (10 kHz in some areas). To change the AM tuning interval, tune in any AM station first, then turn off the system. While holding REPEAT/FM MODE, turn the system back on. When you change the interval, all the AM preset stations are erased. To reset the interval, repeat the same procedure.

#### Note

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

#### Tips

- The preset stations are retained for about a day even if you disconnect the power cord or if a power failure occurs.
- You can label the preset stations (see page 16).
- To improve broadcast reception, reorient or move the supplied antennas near a window or outdoors.

## Listening to the radio

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

### Listening to a preset station

#### — *Preset Tuning*

Preset radio stations in the tuner's memory first (see "Presetting radio stations" on page 13).

- 1 Press **TUNER/BAND** repeatedly to select "FM" or "AM".
- 2 Press **PLAY MODE/TUNING MODE** until "PRESET" appears.
- 3 Slide the knob to ◀◀ or to ▶▶ (or press ◀◀ or ▶▶ on the remote) to select the desired preset station (or station name\* or RDS station name\*\*).

\* The station name appears only if you have labeled the station (see "Labeling the preset stations" on page 16).

\*\* European model only.

### Listening to a non-preset radio station

#### — *Manual Tuning*

- 1 Press **TUNER/BAND** repeatedly to select "FM" or "AM".
- 2 Press **PLAY MODE/TUNING MODE** until "PRESET" and "AUTO" disappear.
- 3 Slide the knob to ◀◀ or to ▶▶ (or press ◀◀ or ▶▶ on the remote) to tune in the desired station.

continued

## Listening to the radio (continued)

### Tips

- To improve broadcast reception, adjust the supplied antennas, or connect a commercially available external antenna.
- When an FM stereo program has static noise, press REPEAT/FM MODE repeatedly until “MONO” appears. There will be no stereo effect, but the reception will improve.
- To tune in automatically, press PLAY MODE/TUNING MODE repeatedly until “AUTO” appears in step 2 above, then slide the knob to ◀◀ or to ▶▶ (or press ◀◀ or ▶▶ on the remote). The frequency indication changes and scanning stops when the system tunes in a station (Automatic Tuning).

## Labeling the preset stations

### — Station Name

You can label each preset station with up to 14 characters (Station Name).

- 1** Tune in the preset radio station you want to label (see “Listening to the radio” on page 15).
- 2** Follow the same procedures as from step 3 to 8 of “Labeling a CD” on page 11.

To cancel labeling

Press MENU/NO on the remote.

To erase the name

- 1** Tune in the station.
- 2** Press NAME EDIT/CHARACTER on the remote.
- 3** Press CLEAR on the remote repeatedly to erase the name.
- 4** Press ENTER/YES.



# Using the Radio Data System (RDS)

(European model only)

## What is the Radio Data System?

Radio Data System (RDS) is a broadcasting service that allows radio stations to send additional information along with the regular program signal. This tuner offers convenient RDS features like station name and program type\* display. RDS is available only on FM stations.\*\*

### Note

RDS may not work properly if the station you tuned in is not transmitting the RDS signal properly or if the signal is weak.

\* The types of programs include NEWS, AFFAIRS (current news), INFO, SPORT, EDUCATE (education programs), DRAMA, CULTURE, SCIENCE, VARIED (interviews, games and comedy), POP M, ROCK M, EASY M, LIGHT M, CLASSICS, OTHER M, WEATHER, FINANCE, CHILDREN, SOCIAL, RELIGION, PHONE IN, TRAVEL, LEISURE, JAZZ, COUNTRY (country music), NATION M (nation's popular music), OLDIES, FOLK M, DOCUMENT (investigative features), TEST (test signal for emergency broadcast), ALARM (emergency broadcast) and NONE (any programs not defined above).

\*\*Not all FM stations provide RDS service, nor do they provide the same types of services. If you are not familiar with the RDS system, check with your local radio stations for details on RDS services in your area.

## Receiving RDS broadcasts

### Simply select a station from the FM band.

When you tune in a station that provides RDS services, the station name appears in the display.

To check the RDS information

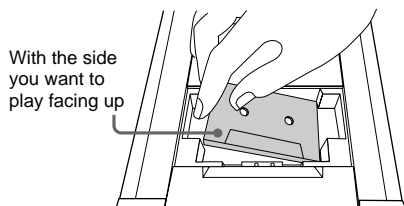
Each time you press DISPLAY, the display changes cyclically as follows:

Station name\* → Frequency → Program type\* → Clock display → Effect name

\* If the RDS broadcast is not received, the station name and program type may not appear in the display.

## Loading a tape

- 1 **Open the lid with your hand and insert a tape.**



To remove the tape, lift up the tape from the side as shown in the illustration.

- 2 **Close the lid with your hand.**

## Playing a tape

You can use TYPE I (normal) tape.

- 1 **Press FUNCTION repeatedly to switch the function to TAPE.**
- 2 **Press TUNER MEMORY/DIRECTION repeatedly until  $\rightleftarrows$  appears to play one side or  $\rightleftarrows$  (or  $\rightleftarrows$ \*) to play both sides.**
- 3 **Press TAPE  $\blacktriangleleft\blacktriangleright$  (or  $\blacktriangleright$  on the remote).**  
Press TAPE  $\blacktriangleleft\blacktriangleright$  (or  $\blacktriangleright$  on the remote) again to play the bottom side.

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

To	Do this
Stop play	Press ■.
Pause	Press <b>  </b> on the remote. Press again to resume play.
Fast-forward or rewind	Slide the knob to $\blacktriangleleft$ or to $\blacktriangleright$ (Press $\blacktriangleleft$ or $\blacktriangleright$ on the remote).

### Notes

- If you do not close the lid, you cannot start playing the tape.
- If you open the lid while playing a tape, the deck stops playing.

# Recording to a tape

## — CD Synchro Recording/Recording Manually/Program Edit

You can record from a CD, radio or connected components. You can use TYPE I (normal) tapes. The recording level is adjusted automatically.

Steps	Recording from a CD (CD Synchro Recording)	Recording from a CD (or connected components)/radio manually
1	Load a recordable tape.	
2	Press DISC 1 – 3 ▲.	Press FUNCTION repeatedly to select the desired source to record.
3	Load the CD you want to record.	Load the CD (or other audio source), or tune in the station you want to record.
4	Press CD SYNC.	Press REC PAUSE/START.
	The tape deck stands by for recording. When you want to record on the bottom side, press TAPE ◀▶.	
5	Press TUNER MEMORY/DIRECTION repeatedly to select ⇌ to record on one side. Select ⇌ (or ⇌) to record on both sides.	
6	Press REC PAUSE/START.	Press REC PAUSE/START, and then start playing the desired source.

To stop recording

Press ■.

Tips

- When you record on both sides, be sure to start from the top side. If you start from the bottom side, recording stops at the end of the bottom side.
- For CD Synchro Recording:  
If you select both sides recording and the tape reaches the end of the top side part-way through a track, the entire track is recorded again from the beginning of the bottom side.
- For recording from the radio:  
If noise is heard while recording from the radio, move the respective antenna to reduce the noise.

continued

## Recording to a tape (continued)

Recording a CD by specifying track order

### — Program Edit

- 1 Load a CD and load a recordable tape.
- 2 Program CD tracks following step 2 to 6 in “Programing CD tracks” on page 10.
- 3 Press CD SYNC.  
The tape deck stands by to record. The CD player stands by for playback.
- 4 Press TUNER MEMORY/DIRECTION repeatedly to select  $\rightleftarrows$  to record on one side. Select  $\leftrightarrow$  (or  $\leftarrow\rightarrow$ ) to record on both sides.

### 5 Press REC PAUSE/START.

Recording starts.

#### Tip

To check the required tape length for recording a CD, press EDIT after you have loaded a 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 first preset the radio station (see “Presetting radio stations” on page 13) and set the clock (see “Setting the clock” on page 8).

- 1 Tune in the preset radio station (see “Listening to the radio” on page 15).
- 2 Press CLOCK/TIMER SET on the remote.  
“DAILY SET?” appears.
- 3 Press  $\lll$  or  $\ggg$  on the remote to select “REC SET?”, then press ENTER/YES.  
“ON” appears and the hour indication flashes.
- 4 Set the time to start recording.  
Press  $\lll$  or  $\ggg$  on the remote to set the hour, then press ENTER/YES.  
The minute indication flashes.  
Press  $\lll$  or  $\ggg$  on the remote to set the minute, then press ENTER/YES.
- 5 Set the time to stop recording following the procedure in step 4.
- 6 Insert a recordable tape.  
Recording starts from the top side. Insert a tape with the side you want to record on facing up.
- 7 Press I/⏻ to turn off the system.

To	Do this
Activate/check the setting	Press CLOCK/TIMER SELECT on the remote and press ◀◀ or ▶▶ on the remote to select “REC SELECT?”, then press ENTER/YES.
Change the setting	Start over from step 1.
Cancel the timer	Press CLOCK/TIMER SELECT on the remote and press ◀◀ or ▶▶ on the remote to select “TIMER OFF”, then press ENTER/YES.

### Notes

- When you use the recording timer at the same time as the Sleep Timer, the Sleep Timer setting has priority.
- You cannot activate the Daily Timer and the recording timer at the same time.
- The system automatically turned on about 30 seconds before the preset time. Do not operate the system until the recording starts.
- If the system is on about 30 seconds before the preset time, the timer-recording will not be activated.
- The volume is reduced to minimum during recording.

## Adjusting the sound

### Enjoying the powerful sound

#### — GROOVE

You can listen to music with more powerful sound.

#### Press GROOVE.

“GROOVE” appears in the display and the volume switches to power mode (DBFB is also turned on).

Press again to cancel GROOVE.

DBFB is also canceled.

Tip

GROOVE is factory set to on.

### Reinforcing the bass sound

#### — DBFB

You can listen to music with stronger bass tones.

#### Press DBFB\*.

“DBFB” appears in the display and the bass is reinforced.

Press again to cancel DBFB.

\* DBFB: Dynamic Bass Feedback

Tip

DBFB is factory set to on.

### Selecting the surround effect

#### Press SURROUND.

“SURROUND” appears in the display.

Press again to cancel SURROUND.

## Selecting the preset music menu

The audio emphasis menu lets you select the sound characteristics according to the sound you are listening to.

**Press MUSIC MENU repeatedly to select the preset you want.**

The preset name appears in the display. See the chart “Music menu options”.

Music menu options

“SURROUND” appears if you select an effect with surround effects.

Effect	Recommended for
ROCK	Standard music sources
POP	
JAZZ	
DANCE	
SOUL	
ACTION	Soundtracks and special listening situations
DRAMA	
GAME	
SF	
FLAT	Canceling the effect
P FILE	See “Adjusting the equalizer and storing” to the right.

To cancel the effect

Press MUSIC MENU repeatedly until “FLAT” appears.

## Adjusting the equalizer and storing

You can adjust the sound by raising or lowering the levels of specific frequency ranges, then store the personal file (P FILE) in the memory.

Select the audio emphasis you want for your basic sound first.

### 1 Press EQ EDIT.

“LOW” appears and you can adjust the low frequency band.

### 2 Slide the knob to ◀◀ or to ▶▶ to adjust the level, then press EQ EDIT.

The low frequency band is set and “MID” appears.

### 3 Slide the knob to ◀◀ or to ▶▶ to adjust the level, then press EQ EDIT.

The middle frequency band is set and “HIGH” appears.

### 4 Slide the knob to ◀◀ or to ▶▶ to adjust the level.

### 5 Press ENTER/YES.

The setting is automatically stored as the personal file (P FILE in the music menu).

To cancel storing the adjustment

Press EQ EDIT again after step 4.

Note

When you store a new setting, the previous setting will be canceled.

## Falling asleep to music

### — Sleep Timer

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

#### Press SLEEP on the remote.

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

AUTO\* → 90min → 80min → ... → 10min → OFF

\* The system automatically turns off after the current CD or tape finishes playing (up to 100 minutes). When the function is TUNER, the system turns off after 100 minutes.

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

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

## Waking up to music

### — Daily Timer

You can wake up to music at a preset time. Make sure you have set the clock (see "Setting the clock" on page 8).

#### 1 Prepare the sound source you want to play.

- CD: Place a CD. To start from a specific track, make a program (see "Programing CD tracks" on page 10).
- Tape: Insert a tape.
- Radio: Tune in a station (see "Listening to the radio" on page 15).

#### 2 Press VOL + or – on the remote to adjust the volume.

#### 3 Press CLOCK/TIMER SET on the remote.

"DAILY SET?" appears.

#### 4 Press ENTER/YES.

"ON" appears and the hour indication flashes.

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

Press ◀◀ or ▶▶ on the remote to set the hour, then press ENTER/YES.

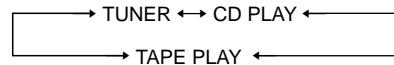
The minute indication flashes.

Press ◀◀ or ▶▶ on the remote to set the minute, then press ENTER/YES.

#### 6 Set the time to stop playing following the procedure in step 5.

#### 7 Press ◀◀ or ▶▶ on the remote to select the desired sound source.

The indication changes as follows:



continued

**Waking up to music (continued)****8 Press ENTER/YES.**

The start time, the stop time, and the sound source appear in turn, then the original display returns.

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

To	Do this
Activate/check the setting	Press CLOCK/TIMER SELECT on the remote, then press ◀◀ or ▶▶ on the remote until "DAILY SELECT?" appears. Then, press ENTER/YES.
Change the setting	Start over from step 1.
Cancel the timer	Press CLOCK/TIMER SELECT on the remote, then press ◀◀ or ▶▶ on the remote until "TIMER OFF" appears. Then, press ENTER/YES.

**Notes**

- If the system is on about 30 seconds before the preset time, the Daily Timer will not be activated.
- The system automatically turns on about 30 seconds before the preset time. Do not operate the system until the play starts.
- You cannot activate the Daily Timer and the recording timer at the same time.

**Turning off the display****— Power Saving Mode**

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

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

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

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

\* "--:--" is displayed if you do not set the clock.

**Tips**

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

**Adjusting the brightness of the display back light**

- 1 Press DIMMER while the system is on.**
- 2 Slide the knob to ◀◀ or to ▶▶ (or press ◀◀ or ▶▶ on the remote) to adjust the back light brightness.**

You can adjust the back light brightness in 11 steps from 0 to 10.



## Using the display

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

When a CD TEXT disc is loaded, you can check the information recorded on the disc, such as the titles.

### Checking the remaining time and track title (CD)

#### Press DISPLAY during play.

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

Elapsed playing time on the current track →

Remaining time on the current track →

Remaining time on the CD (“1DISC” mode) or “--.--” display (“ALL DISCS” mode) → Track

title of the current track\* → Clock display → Effect name

\* Displayed only when track title is labeled. Nothing appears when this information is not labeled. When the CD contains more than 20 tracks, CD TEXT is not displayed from track 21 on.

### Checking the total playing time and disc title (CD)

#### Press DISPLAY in stop mode.

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

Total number of tracks and total playing time → CD disc title\* → Clock display → Effect name

\* Displayed only when CD title is labeled. Nothing appears when this information is not labeled.

### Checking the station name (Tuner)

#### Press DISPLAY.

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

Station name\* → Frequency → Program type\* → Clock display → Effect name

\* Displayed only when radio station name or other name information (see “Using the Radio Data System (RDS)” on page 17) is labeled. Nothing appears when this information is not labeled.

To scroll a long name

Press SCROLL on the remote.

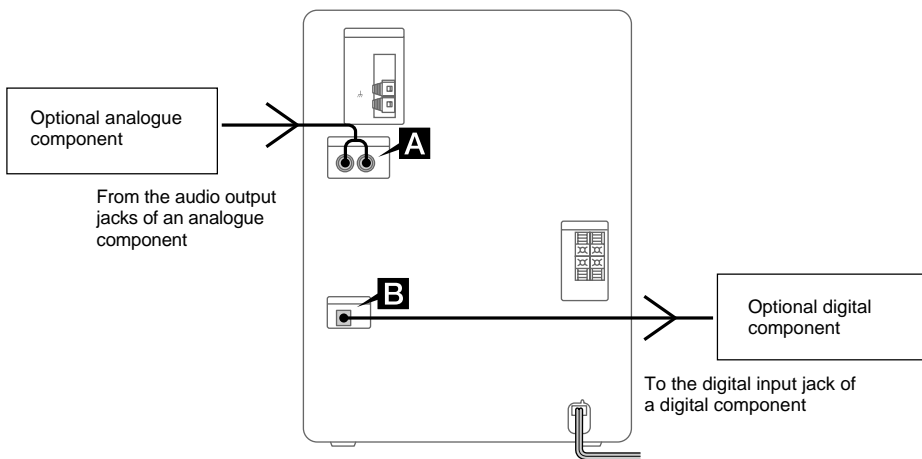
The title appears scrolling in the display.

Tips

- To label a disc title, see “Labeling a CD” on page 11.
- To label a station name on a preset station, see “Labeling the preset stations” on page 16.

## Hooking up optional components

You can connect a digital or an analogue component to this system.



### **A** MD (VIDEO) IN jacks

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

### **B** CD DIGITAL OUT jack

Use a digital cable (square, not supplied) to connect an optional digital component (such as an MD recorder) to this jack. You can then make a digital recording from this system to that digital component.

## Listening to audio from a connected component

- 1 Connect the audio cords.**  
See “Hooking up optional components” on page 26.
- 2 Press MD (VIDEO) to switch the function to MD or VIDEO.**  
Start playing the connected component.

### Notes

- Pressing FUNCTION and I/⏻ while the power is off automatically turns the power on and “VIDEO” is selected as a function. When the system is in the Power Saving Mode, this function does not work.
- If the sound is distorted or too loud when selecting “VIDEO,” or you want to switch back to “MD,” repeat the operation described above to switch to “MD.”

## Recording on a connected digital component

- 1 Connect the digital cable.**  
See “Hooking up optional components” on page 26.
- 2 Start recording.**  
Refer to the operating instructions provided with the connected component.

## Recording audio from a connected component

- 1 Connect the audio cords.**  
See “Hooking up optional components” on page 26.
- 2 Start recording manually.**  
See “Recording to a tape” on page 19.

### Notes

- Pressing FUNCTION and I/⏻ while the power is off automatically turns the power on and “VIDEO” is selected as a function. When the system is in the Power Saving Mode, this function does not work.
- If the sound is distorted or too loud when selecting “VIDEO,” or you want to switch back to “MD,” repeat the operation described above to switch to “MD.”

## Problems and remedies

If you have any problem using this system, use the following checklist.

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

Should any problem persist, consult your nearest Sony dealer.

### General

#### The display window and buttons keep on or flashing even the power is turned off.

- When the power is off, press DISPLAY on the remote repeatedly and select the clock display or Power Saving Mode (no display) (see page 24).

#### “--:--” appears in the display.

- Set the clock again (see page 8).

#### There is no sound.

- Turn VOL upward (or press VOL+ on the remote).
- Make sure the headphones are not connected.
- Check the speaker connections (see page 6).

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

- Connect the speaker cords properly (see page 6).
- Place the speakers as symmetrically as possible.
- Connect only one of the supplied speakers to each set of speaker terminals.
- Connect the supplied speakers.

#### There is severe hum or noise.

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

#### The timer cannot be set.

- Set the clock again (see page 8).

#### The timer does not function.

- Press CLOCK/TIMER SELECT on the remote to set the timer and light up “DAILY” or “REC” in the display (see page 21, 24).
- Check the set contents and set the correct time (see page 21, 24).

#### The remote does not function.

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

#### “PROTECT” and “PUSH POWER” appear alternately.

- Press I/⏻ (power) to turn off the system. Turn on the system again after a while.
- Check the speaker connections (see page 6).

### CD Player

#### The CD tray does not close.

- Place the CD correctly in the center of the tray.
- Always close the tray by pressing DISC 1 – 3 ▲. Trying to close the tray by pushing with your fingers may cause a malfunction to the CD player.

#### The CD does not eject.

- Consult your nearest Sony dealer.

#### Play does not start.

- Open the CD tray and check whether a CD is loaded.
- Wipe the CD clean (see page 32).
- Replace the CD.
- Place the CD correctly in the center of the tray.
- Place the CD in the tray with the label side up.
- Remove the CD and wipe away the moisture on the CD, then leave the system turned on for a few hours until the moisture evaporates.
- Press CD ▶▶ to start play.

---

**The sound skips.**

- Wipe the CD clean (see page 32).
- Replace the CD.
- Try moving the system to a place without vibration (e.g., on top of a stable stand).
- Try moving the speakers away from the system, or placing them on separate stands.
- When you listen to a track with bass sounds at high volume, the speaker vibration may cause the sound to skip.

---

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

- Press PLAY MODE/TUNING MODE in stop mode repeatedly until “PROGRAM” or “SHUFFLE” disappears to return to normal play.

---

**The disc tray does not open and “LOCKED” appears.**

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

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**Tape Deck**

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**The tape does not record.**

- The tab has been removed from the cassette. Cover the broken tab with adhesive tape (see page 32).
- The tape has wound to the end.

---

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

- The heads are dirty. Clean them.
- The record/playback heads are magnetized. Demagnetize them (see page 32).

---

**The tape does not erase completely.**

- The record/playback heads are magnetized. Demagnetize them (see page 32).

---

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

- The capstans in the tape deck are dirty. Clean them using a cleaning cassette.

---

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

- The record/playback heads are magnetized. Demagnetize them (see page 32).
- 

---

**Optional components**

---

**There is no sound.**

- Refer to General item “There is no sound.” on page 28 and check the condition of the system.
- Connect the component properly (see page 26) while checking:
  - if the cords are connected properly.
  - if the cord plugs are firmly inserted all the way.
- Turn on the connected component.
- Refer to the operating instructions provided with the connected component and start playing.

---

**The sound is distorted.**

- Set the volume of the connected component lower.
- 

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**Tuner**

---

**Severe hum or noise/stations cannot be received.**

- Set the proper band and frequency (see page 13).
- Connect the antenna properly (see page 6).
- Find a place and an orientation that provide good reception, then set up the antenna again. If you cannot obtain good reception, we recommend you connect a commercially available external antenna.
- The supplied FM lead antenna receives signals along its entire length, so make sure you extend it fully.
- Locate the antennas as far away from the speaker cords as possible.
- Consult your nearest Sony dealer if the supplied AM antenna has come off the plastic stand.
- Try turning off surrounding electrical equipment.

---

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

- Press REPEAT/FM MODE until “STEREO” appears in the display.
  - See “Severe hum or noise/stations cannot be received.”, and check the antenna condition.
- 

**continued**

## Problems and remedies (continued)

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

- 1 Unplug the power cord.
- 2 Plug the power cord back into the wall outlet.
- 3 Press I/⏻ to turn on the system.
- 4 Press ■, I/⏻ and ENTER/YES at the same time.
- 5 Unplug the power cord.
- 6 Plug the power cord back into the wall outlet, then press I/⏻ to turn on the system.

The system is reset to the factory settings. All the settings you made such as the preset stations, clock, timer and CD disc titles are cleared and must be set again.

Note

You cannot reset the system in the Power Saving Mode.

## Messages

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

CD

---

### Cannot Edit

- You tried to label a CD TEXT disc.
  - You tried to use Tape Select Edit for discs containing over 20 tracks.
- 

### Name Full

There are already 50 disc titles stored in the system.

---

### No Disc

There is no CD in any of DISC 1 – 3.

---

### NO STEP

You have cleared all the tracks you programmed.

---

### OVER

You have reached the end of the CD while pressing ►► during play or pause.

---

### Push STOP!

You pressed PLAY MODE/TUNING MODE during play.

---

### Step Full!

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

---

TAPE

---

### No Tab

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

---

### No Tape

There is no tape in the tape deck.

---

### Open

You performed a tape operation with the tape deck lid not completely shut.

---

## Precautions

### On operating voltage

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

### On safety

- The unit is not disconnected from the AC power source (mains) as long as it is connected to the wall outlet, even if the unit itself has been turned off.
- Unplug the system from the wall outlet if it is not to be used for an extended period of time.  
To disconnect the power cord, 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

- Make sure the system fan is on during use.  
Place the system in a location with adequate air circulation, and do not place anything on top of the system.
- Do not place the system in an inclined position.
- Do not place the system in locations where it is:
  - Extremely hot or cold
  - Dusty or dirty
  - Very humid
  - Subject to vibrations
  - Subject to direct sunlight.
- Use caution when placing the unit or speakers on surfaces that have been specially treated (with wax, oil, polish, etc.) as staining or discoloration of the surface may result.

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

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

### On the speaker system

This speaker system is not magnetically shielded and the picture on TV sets may become magnetically distorted. In such a case, turn off the power of the TV set once, and after 15 to 30 minutes turn it on again. If there seems to be no improvement, locate the speaker system further away from the TV set. Also, be sure not to place objects in which magnets are attached or used near the speaker system, such as audio racks, TV stands, and toys. These may cause magnetic distortion to the picture due to their interaction with the system.

continued

## Precautions (continued)

### Notes on CDs

- Before playing, clean the CD with a cleaning cloth. Wipe the CD from the center out.
- Do not use a CD with tape, seals, or paste on it as this may damage the player.
- 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 system. Attempting to do so may damage the system. 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 condition 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.

### Before placing a cassette in the tape deck

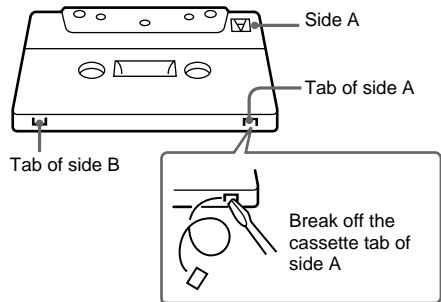
Take up any slack in the tape. Otherwise, the tape may get entangled in the parts of the tape deck and become damaged.

### When using a tape longer than 90 minutes

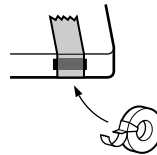
The tape is very elastic. Do not change the tape operations such as play, stop, and fast-winding frequently. The tape may get entangled in the tape deck.

### To save a tape permanently

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



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



### Cleaning the tape heads

Clean the tape heads after every 10 hours of use.

Be sure to clean the tape heads before you start an important recording or after playing an old tape.

Use a separately sold dry-type or wet-type cleaning cassette. For details, refer to the instructions of the cleaning cassette.

### 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 cassette. For details, refer to the instructions of the demagnetizing cassette.



# Specifications

## Main Unit (HCD-TB20)

### Amplifier section

#### European models

DIN power output (Rated): 45 + 45 watts  
(6 ohms at 1 kHz, DIN)

Continuous RMS power output (Reference):  
60 + 60 watts  
(6 ohms at 1 kHz, 10% THD)

Music power output (Reference):  
120 + 120 watts  
(6 ohms at 1 kHz, 10% THD)

#### Other models

Measured at AC 120/220/240 V, 50/60 Hz:  
DIN power output (Rated): 40 + 40 watts  
(6 ohms at 1 kHz, DIN)

Continuous RMS power output (Reference):  
50 + 50 watts  
(6 ohms at 1 kHz, 10% THD)

#### Inputs

MD (VIDEO) IN (phono jacks):  
voltage 450 mV (250 mV), impedance 47 kilohms

#### Outputs

PHONES (stereo minijack):  
accepts headphones of 8 ohms or more.

SPEAKER:  
accepts impedance of 6 to 16 ohms.

## CD player section

System Compact disc and digital audio system  
Laser Semiconductor laser ( $\lambda=795$  nm)  
Emission duration: continuous  
Frequency response 2 Hz – 20 kHz ( $\pm 0.5$  dB)  
CD DIGITAL OUT (Square optical connector jack, rear panel)  
Wavelength 660 nm

## Tape deck section

Recording system 4-track 2-channel stereo  
Frequency response 50 – 13,000 Hz ( $\pm 3$  dB), using Sony TYPE I cassettes  
Wow and flutter  $\pm 0.15\%$  W. Peak (IEC)  
0.1% W. RMS (NAB)  
 $\pm 0.2\%$  W. Peak (DIN)

## Tuner section

FM stereo, FM/AM superheterodyne tuner

### FM tuner section

Tuning range 87.5 – 108.0 MHz (50 kHz step)  
Antenna FM lead antenna  
Antenna terminals 75 ohms unbalanced  
Intermediate frequency 10.7 MHz

### AM tuner section

Tuning range  
European models: 531 – 1,602 kHz (with the interval set at 9 kHz)

Pan-American models: 531 – 1,710 kHz (with the interval set at 9 kHz)  
530 – 1,710 kHz (with the interval set at 10 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  
External antenna terminals  
Intermediate frequency 450 kHz

continued

## Specifications (continued)

### Speaker

#### European models (SS-TB20)

Speaker system	2-way, bass-reflex type
Speaker units	
Woofer:	15 cm dia., cone type
Tweeter:	5 cm dia., cone type
Nominal impedance	6 ohms

#### Other models (SS-TB50)

Speaker system	2-way, bass-reflex type
Speaker units	
Woofer:	15 cm dia., cone type
Tweeter:	5 cm dia., cone type
Nominal impedance	6 ohms

### General

#### Power requirements

European models:	230 V AC, 50/60 Hz
Mexican model:	120 V AC, 60 Hz
Korean model:	220 V AC, 60 Hz
Other models:	120 V, 220 V, 230 – 240 V AC, 50/60 Hz Adjustable with voltage selector

#### Power consumption

European models:	120 watts 0.5 watts (at the Power Saving Mode)
Other models:	100 watts

#### Dimensions (w/h/d) incl. projecting parts and controls

Amplifier/Tuner/Tape/CD section:	Approx. 215 × 285 × 386 mm
Speaker SS-TB20:	Approx. 205 × 285 × 220 mm
Speaker SS-TB50:	Approx. 205 × 285 × 240 mm

#### Mass

Amplifier/Tuner/Tape/CD section:	Approx. 7.7 kg
Speakers SS-TB20:	Approx. 3.0 kg net per speaker
Speakers SS-TB50:	Approx. 3.5 kg net per speaker

Supplied accessories	Remote (1) R6 (size AA) batteries (2) AM loop antenna (1) FM lead antenna (1) Speaker pads (8)
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Design and specifications are subject to change without notice.



