# SONY

# *Micro HiFi Component System*

#### **Operating Instructions**

### Owner's Record

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

Model No. \_\_\_\_\_ Serial No. \_\_\_\_\_





©1999 by Sony Corporation

#### WARNING

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

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

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



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

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





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



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

#### CAUTION

The use of optical instruments with this product will increase eye hazard.

#### Note on CATV system installer:

This reminder is provided to call CATV system installer's attention to Article 820-40 of the NEC that provides guidelines for proper grounding and, in particular, specifies that the cable ground shall be connected to the grounding system of the building, as close to the point of cable entry as practical.

#### INFORMATION

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

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

#### CAUTION

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

# NOTICE FOR THE CUSTOMERS IN CANADA

#### CAUTION

TO PREVENT ELECTRIC SHOCK, DO NOT USE THIS POLARIZED AC PLUG WITH AN EXTENSION CORD, RECEPTACLE OR OTHER OUTLET UNLESS THE BLADES CAN BE FULLY INSERTED TO PREVENT BLADE EXPOSURE.

This system is equipped with the Dolby\* B-type noise reduction system.

\* Dolby noise reduction manufactured under license from Dolby Laboratories Licensing Corporation. "DOLBY" and the double-D symbol DD are trademarks of Dolby Laboratories Licensing Corporation.



АЯ46

# Table of Contents

#### **Getting Started**

Step 1:	Hooking up the system 4
Step 2:	Setting the time7
Step 3:	Presetting radio stations - Preset 9
Connec	ting optional components 10

#### **Basic Operations**

Playing a CD — Normal Play 12	3
Recording from a CD to a tape	
- CD Synchro Recording 14	4
Listening to the radio — Preset Tuning 1	6
Recording from the radio 1'	7
Playing a tape 13	8

#### The CD Player

Checking the remaining playing time on the
CD 20
Playing CD tracks repeatedly
— Repeat Play 20
Playing CD tracks in random order
— Shuffle Play 21
Playing CD tracks in a favorite order
— Program Play 22

#### The Tape Deck

Recording to a tape manually	23
Recording your favorite CD tracks to	a tape
— Program Edit	24

#### **Sound Adjustment**

Generating a more dynamic sound 26	
Selecting the sound mode 26	

#### **Other Features**

Using the Radio Data System (RDS)* 27
Falling asleep to music — Sleep Timer 27
Waking up to music — Daily Timer 28
Timer-activated recording of radio
programs — REC Timer 29

#### **Additional Information**

Index Back cove	er
Parts identification for the remote 3	36
Specifications 3	34
Troubleshooting 3	32
Precautions	31

\* European model only

# Step 1: Hooking up the system

Follow steps 1 through 6 of the procedure below to hook up your system using the supplied cords and accessories.

The speaker grille design differs somewhat from that of the U.S. and other models. The U.S. model is used here for illustration purposes.





1 Remove the rear cover.



Push in on the tabs, pull downward, and then lift off

**2** Connect the speakers.

1 Connect the right and left speaker cords to the SPEAKER terminals as shown below.



#### Note

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

**2** Fasten the four screws to both sides of the unit.



3 Attach the speakers.

Facing the front of the unit, attach the speaker connected to the SPEAKER R terminals onto the right side of the unit and the speaker connected to the SPEAKER L terminals onto the left side of the unit.

Afterwards, push down on the speakers to make sure they are securely fastened to the unit.



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



4 After making sure that the cords are correctly and securely connected, reinstall the rear cover.

Pass the speaker cords through the holes on both sides of the rear cover.



**5** Turn the unit upside down while holding the glass door firmly with your hand, then set the speaker cord into the groove at the bottom of the unit.



\* This groove is used to hold the power cord when the optional stand is attached.

# Step 1: Hooking up the system (continued)

6 Connect the power cord to a wall outlet. If the plug does not fit the wall socket, detach the supplied plug adaptor (only for

models equipped with an adaptor).

#### Note

Do not attempt to lift up the system by the speakers. There is a chance the unit will detach and drop. To move the system, detach the speakers first and carry them separately.

# Note on the glass door of the CD player

The CD player door is made of tempered glass. Under normal conditions, this tempered glass is more shock resistant and able to bear more weight than ordinary glass. This glass, however, may shatter if it receives a sharp blow or if it is scratched.

#### To detach the speakers

- 1 Slide the speakers in the opposite direction of the arrows of the illustration in "Attach the speakers" (see step **2**-**3** on page 5).
- **2** After detaching the speakers, pass the speaker cords through the speaker cord slot at the bottom of the speaker to prevent them from being damaged.



#### Тір

If you use the system with the speakers detached, you may remove the four screws on the both sides of the unit. If you do, be sure to retain the screws for future use.



#### To replace the speaker grille

To remove the speaker grille, grasp one of the corners and lift the grille out towards you. You can replace the grille with one of the other supplied grilles of a different color.

Verify which sides of the grille are rounded, then attach the grille with the rounded sides on the top and the bottom.

#### To remove the AM antenna

If noise is heard while listening to an AM station, remove the AM antenna from the rear panel and place the antenna outside.

- 1 Remove the rear cover. (see step 1 on the page 4).
- 2 Remove the AM antenna.



**3** Reinstall the rear cover (see step **4** on the page 5).

You can hang the AM antenna on a wall as shown below.



If noise is heard while listening to an FM station, remove the FM antenna from the rear panel and place the antenna outside.

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



#### Тір

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.

#### Notes on batteries

- Make sure the battery poles (plus/minus) are properly oriented.
- Do not use a new battery with an old one.
- Do not use different types of batteries together.
- If you do not use the remote for a long period of time, remove the batteries to prevent possible damage from battery leakage and corrosion.
- Do not use a battery that is leaking.
- If a battery has leaked, clean the battery compartment and replace all the batteries.
- Do not place the remote in an extremely hot or humid place.
- Do not expose the remote sensor to direct sunlight or lighting apparatuses. Doing so may cause a malfunction.

# Step 2: Setting the time

Before you can use the system's timer functions, set the internal clock.

The clock uses a 24-hour system on the European model, and a 12-hour system on other models.

The 24-hour system is used here for illustration purposes.

To turn on the system, press I/O.





The clock on the display begins to flash. When "DAILY" or "④ REC" appears, press ☞
Implement of the state of the s



# Step 2: Setting the time (continued)

**2** Press ENTER.

The day of the week indication flashes.

000



Press  $\mathbb{N}$  presented by the vector of the vector.





Press ENTER.

The hour indication flashes.

FR QDO







Press ENTER.

The minute indication flashes.

FR13

**7** Press I⊲⊲/▷▷ repeatedly to set the minute.

FR13]



#### Press ENTER.

The clock will begin operating.

#### Тір

If you make a mistake, start over from step 1.

# Step 3: Presetting radio stations – Preset

The system can store a total of 30 preset stations (20 for FM and 10 for AM). This section explains how to tune in stations and preset them.

To turn on the system, press I/O.







- **1** Press FUNCTION on the unit repeatedly until "FM" or "AM" appears.
- **2** Press FM or AM on the unit to change the band, if necessary.
- **3** Press TUNING MODE repeatedly until "AUTO" appears.

#### **4** Press +/-.

The frequency changes as the system scans for a station. Scanning stops automatically when a station is tuned in. At that time, "TUNED" and "ST" (for stereo programs only) appear.



**5** Press MEMORY.

A preset number flashes.



#### Step 3: Presetting radio stations (continued)



**6** Press +/- repeatedly to select the preset number that you want.



#### Press ENTER.

The station is stored to the selected preset number.

8 Repeat steps 2 through 7 to preset other stations.

#### To tune in a weak station

In step 3, press TUNING MODE repeatedly until "MANUAL" appears, then press +/- repeatedly to tune in the station.

#### To change the preset number

Start over from step 2.

#### Tip

The preset stations are saved in the system's memory for about two days even if you disconnect the power cord or a power failure occurs.

#### To change the AM tuning interval (not applicable on the European model)

The AM tuning interval is factory-preset to 9 kHz (or 10 kHz on North American model). To switch the AM tuning interval, tune in any AM station first, then turn off the system. Pressing TUNING + on the unit down, turn the system back on. When you change the interval, all the AM preset stations are erased. To change back to the original interval, repeat the same procedure.

# **Connecting optional** components

This section explains how to connect a variety of components to your system in order to enhance it. Refer to the instructions included with each component for details.

#### **Connecting audio components**

#### Connecting an MD deck for analog recording

You can connect an MD deck to the system with commercially available audio cords. Be sure to match the color-coded pins to the appropriate jacks. To listen to the MD deck after connecting it, press FUNCTION repeatedly until "MD" appears.

> To the audio output jacks on the MD deck



To the audio input jacks on the MD deck

#### Connecting an MD deck for digital recording

By connecting an MD deck to the system with a commercially available optical cable, you can make a digital recording from a CD.

> To the digital input connector on the MD deck



#### **Connecting a VCR**

You can connect a VCR to the system with a commercially available audio cord. Be sure to match the color-coded pins to the appropriate jacks. To listen to the VCR after connecting it, press FUNCTION repeatedly until "MD" appears.



To the audio output jacks on the VCR

#### **Connecting headphones**

Connect headphones to the PHONES jack.



#### **Connecting external antennas**

You can connect an external antenna to your system to get better reception.

#### FM antenna

Connect a commercially available external FM antenna to the FM ANTENNA terminal as shown below. You may also connect a TV antenna for the same purpose.

Screw clamp



# Connecting optional components (continued)

#### AM antenna

For the AM antenna, use a 6- to 15-meter (20- to 50-foot), horizontally extended insulated wire, with one end connected to the AM ANTENNA terminals as shown below. Leave the supplied AM bar antenna connected.





#### Important

If you connect an external antenna, connect a ground wire to the h terminal with a screw clamp. To avoid causing a gas explosion, do not connect the ground wire to a gas pipe.

# Playing a CD – Normal Play

Do the procedure below to play a CD starting from the first track.

To turn on the system, press  $I/\bigcirc$ .





 Press ≙ (or OPEN/CLOSE on the remote) to open the glass door and place a CD on the disc tray.
 Fit the CD onto the spindle.



#### **2** Press ►.

The glass door closes automatically and playback starts.



То	Do this
Stop playback	Press .
Pause	Press <b>II</b> . Press again to resume playback.
Select a track	During playback or pause, press I I I I I I I I I I I I I I I I I I
Locate a desired point in a track	During playback, press down H◀◀◀/▶▶▶► (or ⊲⊲/▷▷ on the remote) until you find the desired point.
Remove or replace the CD	Press ≙ (or OPEN/CLOSE on the remote) to open the glass door.
Adjust the volume	Press VOLUME +/

#### To remove the CD

While pressing down on the spindle, lift up the disc by its edge as shown below.



#### Tips

- If you press CD ▷ on the remote when the power is off, the system automatically turns on and the CD starts playing if there is a CD on the disc tray (One Touch Play).
- To switch to the CD while listening to another source, press CD >> on the remote. The CD will automatically start playing (Automatic Source Selection).
- "NO DISC" appears in the display if there is no CD on the disc tray.

## Recording from a CD to a tape — CD Synchro Recording

The CD Synchro Recording function makes it easy to record from a CD to a tape. Both Type I (normal) and Type II (CrO<sub>2</sub>) tapes can be used. To record only the tracks that you want, it is convenient to use the Program Edit function (see page 24).

To turn on the system, press I/O.



1 Press ▲ PUSH and insert a recordable tape into the cassette holder.

With the side you want to record on facing towards you



Press ≙ (or OPEN/CLOSE on the remote) to open the glass door and place a CD on the disc tray.
 Fit the CD onto the spindle.



- 3 Press ≙ (or OPEN/CLOSE on the remote) again to close the glass door.
- 4 Press FUNCTION repeatedly until "CD" appears.
- 5 Press REC on the remote.
  The tape stands by for recording and the CD stands by for playback.
  "SYNCHRO" and "REC" appear.
- 6 Press DIR MODE on the remote to select "₩" to record on one side of the tape or "♥ to record on both sides.
- 7 Press II on the remote. Recording starts on the side of the tape facing towards you.

#### To stop recording

Press 
.

#### Тір

To record with the Dolby NR system on, press DOLBY NR on the remote before step 7. "DD" appears.

#### Notes

- You cannot listen to another source during CD Synchro Recording.
- You cannot start recording on the side facing away from you.

## Listening to the radio — Preset Tuning

Presetting radio stations in the system's memory in advance makes it easy to tune in those stations later (see "Step 3: Presetting radio stations" on page 9).

To turn on the system, press I/O.



- **1** Press TUNER/BAND repeatedly until "FM" or "AM" appears.
- 2 Press TUNING MODE repeatedly until "PRESET" appears.
- **3** Press +/- repeatedly to display the preset number of the desired station.



То	Do this
Turn off the radio	Press I/O.
Adjust the volume	Press VOL +/

# To tune in a non-preset radio station

In step 2, press TUNING MODE repeatedly until "MANUAL" appears, then press +/- repeatedly to tune in the desired station (Manual Tuning).

#### Tips

- If you press TUNER/BAND when the power is off, the system automatically turns on and tunes in the station last received (One Touch Play).
- To switch to the radio while listening to another source, press TUNER/BAND (Automatic Source Selection).
- If there is static during an FM broadcast, press STEREO/MONO until "MONO" appears. The broadcast will no longer be in stereo, but the reception will improve. Press this button again to restore the broadcast to stereo.
- For better reception, remove the rear cover and place the antenna outside (see "To remove the AM antenna" on page 6).

# **Basic Operations**

# Recording from the radio

Do the procedure below to tune in a preset station (see page 16) and record from the radio to a tape. Both Type I (normal) and Type II (CrO<sub>2</sub>) tapes can be used.

To turn on the system, press I/O.



- **1** Press TUNER/BAND repeatedly until "FM" or "AM" appears.
- **2** Press TUNING MODE repeatedly until "PRESET" appears.
- **3** Press +/- repeatedly to display the preset number of the desired station.



4 Press ▲ PUSH on the unit and insert a recordable tape into the cassette holder.

With the side you want to record on facing towards you



**5** Press • REC.

The tape stands by for recording. "REC" appears.

#### Recording from the radio (continued)



**6** Press DIR MODE to select " $\rightleftharpoons$ " to record on one side of the tape or " $( \downarrow)$ " to record on both sides.

#### 7 Press III.

Recording starts on the side of the tape facing towards you.

#### To stop recording

Press  $\Box$ .

#### Tips

- To record from a non-preset station, press TUNING MODE repeatedly in step 2 until "MANUAL" appears, then press +/- repeatedly to tune in the desired station.
- · To record with the Dolby NR system on, press DOLBY NR before step 7. "DD" appears.
- · If you hear static while you are recording an AM radio program, remove the rear cover and place the antenna outside (see "To remove the AM antenna" on page 6).

#### Note

You cannot start recording on the side facing away from you.

# Playing a tape

The system can play three types of tapes: Type I (normal), Type II (CrO<sub>2</sub>) and Type IV (metal). The system automatically detects the tape type so there is no need to specify it.

To turn on the system, press  $I/\bigcirc$ .



1 Press ▲ PUSH and insert a recorded tape into the cassette holder.

With the side you want to play facing towards you



**2** Press FUNCTION repeatedly until "TAPE" appears.

3 Press DIR MODE on the remote to select "→" to play one side of the tape or " ↔"\* to play both sides repeatedly.

\* The tape automatically stops after playing back five times.

#### 4 Press $\blacktriangleright$ .

To start playing the reverse side, press ◀. The tape starts playing.

То	Do this
Stop playback	Press .
Pause	Press II. Press again to resume playback.
Fast-forward or rewind	With the tape stopped, press Idd Idd (or Idd Idd (or) Idd
Locate the begining of the current or next track	During playback, press I ← ← ← ← ← ← ← ← ← ← ← ← ← ← ← ← ← ← ←
Remove or replace the tape	Press 📥 PUSH.
Adjust the volume	Press VOLUME +/

#### Tips

- If you press TAPE ◀► on the remote when the power is off, the system automatically turns on and starts playing the tape if there is a tape in the holder (One Touch Play).
- To switch to the tape while listening to another source, press TAPE on the remote while the tape is stopped. The tape will automatically start playing (Automatic Source Selection).
- To play a tape recorded with the Dolby NR system, press DOLBY NR on the remote before step 4. "DO" appears.

The CD Player

# Checking the remaining playing time on the CD

Do the procedure below to check the remaining playing time of the current track or the entire CD.



#### Press DISPLAY.

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

#### **During playback**

→ Current track number and elapsed playing time of the track

↓ Current track number and remaining playing time of the track

Remaining playing time of the entire CD

#### Тір

Each time you press DISPLAY while the CD is stopped, the display changes as follows:

Clock display

¢

Current source display and total playing time

# Playing CD tracks repeatedly – Repeat Play

The Repeat Play function lets you playback a single track or all the tracks on a CD repeatedly in Normal Play. You can also use Repeat Play function while in Shuffle Play or Program Play.



 Press CD REPEAT repeatedly during playback until "REPEAT" appears.
 Repeat Play starts. The following table describes the two repeat modes.

To repeat	Press
All the tracks on the CD	CD REPEAT repeatedly until "REPEAT" appears.
Only the currently playing track*	CD REPEAT repeatedly until "REPEAT 1" appears.

\* This function does not work during Shuffle Play or Program Play.

#### **To cancel Repeat Play**

Press CD REPEAT repeatedly until "REPEAT" and "REPEAT 1" disappear.

# The CD Player

# Playing CD tracks in random order — Shuffle Play

You can use this function to playback all the tracks on a CD in random order.



- **1** Press FUNCTION on the unit repeatedly until "CD" appears.
- **2** Press PLAY MODE repeatedly until "SHUFFLE" appears.

#### **3** Press CD $\triangleright$ .

Shuffle Play starts. "[]" appears while the next track is being selected, and all the tracks play in random order.

#### **To cancel Shuffle Play**

Press PLAY MODE repeatedly until "SHUFFLE" disappears.

#### Tips

- You can also start Shuffle Play during Normal Play by selecting "SHUFFLE".
- To skip a track, press ▷▷.

#### Note

You cannot go back to the preceding track by pressing  $\mathbb{M}$ .

# Playing CD tracks in a favorite order

-- Program Play

You can make a program of up to 24 tracks on a CD in any order that you want.



- **1** Press FUNCTION on the unit repeatedly until "CD" appears.
- **2** Press PLAY MODE repeatedly until "PROGRAM" appears.

**3** Press I⊲⊲ or ▷⊳I repeatedly until the desired track number appears.



#### 4 Press ENTER.

The selected track is programmed. The number of the selection just programmed appears, followed by the total playing time of the program.

**5** To program additional tracks, repeat steps 3 and 4.

#### **6** Press CD $\triangleright$ .

Program Play starts. The tracks play in the order that they were programmed.

#### To cancel Program Play

Press PLAY MODE repeatedly until "PROGRAM" disappears.

То	Do this
Add a track to the end of the program	Do steps 3 and 4 with Program Play stopped.
Erase the entire program	Press  with Program Play stopped.

#### Tips

- The program you made remains in the system's memory until you turn off the system or remove the CD. After the program finishes, press CD >> to play the program again.
- When the total playing time of the programmed tracks exceeds 100 minutes, "- - -" appears in the display.
- If you try to program more than 24 tracks, "FULL" appears in the display.

# Recording to a tape manually

Do the procedure below to manually record from any source to a tape. For example, tracks from a CD, the radio, or from any of the connected components. This lets you record just the songs that you want from a CD.





- **1** Insert a recordable tape.
- **2** Press FUNCTION repeatedly until the source you want to record from appears.
- 3 Press REC on the remote. The tape stands by for recording. "REC" appears.
- 4 Press DIR MODE on the remote to select "→" to record on one side of the tape or "↔" to record on both sides.

#### 5 Press II.

Recording starts on the side of the tape facing towards you.

**6** Start playing the source you want to record from.

То	Press
Stop recording	■. Press ■ again to stop playing the CD.*
Pause recording	11.

\* When recording from a CD only

#### Tips

- To record with the Dolby NR system on, press DOLBY NR on the remote before step 5. "DD" appears.
- When recording from a CD, CD synchro recording starts (see "Recording from a CD to a tape" on page 14).

## Recording your favorite CD tracks to a tape — Program Edit

With Program Edit function, you can select only the CD tracks that you want using the Program Play function, then record the programmed tracks to a tape using the CD Synchro Recording function.





- **1** Place a CD.
- **2** Insert a recordable tape.
- **3** Press FUNCTION on the unit repeatedly until "CD" appears.
- **4** Press PLAY MODE repeatedly until "PROGRAM" appears.
- **5** Press ⊮⊲ or ▷⊳ repeatedly until the desired track number appears.



- **6** Press ENTER.
- 7 Repeat steps 5 and 6 to add more tracks to be recorded on side A.
- **8** Press II where you want the system to begin recording on side B.
- **9** Repeat steps 5 and 6 to select tracks to be recorded on side B.

#### **10** Press ● REC.

The tape stands by for recording and the CD stands by for playback. "SYNCHRO" and "REC" appear.

11 Press DIR MODE to select "↔" to record on one side of the tape or "<↔" to record on both sides.

#### **12** Press 00.

Recording starts on the side of the tape facing towards you.

#### To stop recording

Press □.

#### To cancel Program Edit

Press PLAY MODE repeatedly until "PROGRAM" disappears.

#### Тір

To record with the Dolby NR system on, press DOLBY NR on the remote before step 12. "DD" appears.

**Sound Adjustment** 

# Generating a more dynamic sound

The Dynamic Sound Generator (DSG) automatically enhances your music to produce a more powerful sound.



Press DSG.

#### To cancel the DSG

Press DSG again.

# Selecting the sound mode

You can enjoy simulated surround stereo effects when you listen to the music near the unit.



Press SURROUND.
 "SURR" appears.

#### To cancel the Surround

Press SURROUND again.

# 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.

#### Note

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

\* Not all FM stations provide RDS service, nor do they all 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 on the remote, the display changes as follows:

```
Station name*

↓

Clock display (Frequency**)
```

- \* If the RDS broadcast is not properly received, the station name may not appear in the display.
- \*\*Pressing DISPLAY on the remote again causes the frequency to appear in the display.

#### Falling asleep to music - Sleep Timer

The Sleep Timer function lets you specify a sleep time, after which the system stops playing and turns off automatically. You can thus fall asleep to music.



#### ➡ Press SLEEP.

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

 $\begin{array}{ccc} \text{AUTO} \rightarrow 90\text{min} \rightarrow 80\text{min} \rightarrow 70\text{min} \\ \uparrow & & \downarrow \\ \text{OFF} \leftarrow 10\text{min} \dots \leftarrow 60\text{min} \end{array}$ 

#### When you choose "AUTO"

The system turns off after the current CD or tape finishes playing (up to 100 minutes). The system also turns off when you manually stop the CD or tape.

# To check the remaining sleep time

Press SLEEP once.

#### To change the sleep time

Press SLEEP repeatedly until the time you want appears.

# To cancel the Sleep Timer function

Press SLEEP repeatedly until "OFF" appears.

## Waking up to music — Daily Timer

By setting the Daily Timer, you can make the system automatically turn on and off at specified times. To use this function, make sure that you have set the system clock correctly (see "Step 2: Setting the time" on page 7).



- **1** Prepare the music source you want to listen to when the system turns on.
  - CD: Place a CD. To start playing from a specific track, make a program (see "Playing CD tracks in a favorite order" on page 22).
  - Tape: Insert a tape with the side you want to play on facing towards you.
  - Radio: Tune in the preset radio station that you want (see "Listening to the radio" on page 16).
- **2** Press VOL +/- to adjust the volume.
- **3** Press TIMER SET.

**4** Press I⊲⊲ or ▷⊳I repeatedly until "DAILY" apperars.

#### **5** Press ENTER.

"ON" appears, then the hour indication flashes.



6 Set the starting time. Press ⊮⊲ or ▷▷⊮ repeatedly to set the hour, then press ENTER. The minute indication begins flashing next.



Press III or DDI repeatedly to set the minute, then press ENTER. "OF" appears, then the hour indication

flashes again.



**7** Set the stopping time by repeating step 6.

**8** Press  $\bowtie$  or  $\bowtie$  repeatedly until the music source vou want appears.

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

FM/AM • CD TAPE

#### 9 Press ENTER.

The starting time, the stopping time, and the music source appear in turn, then the original display returns.

**10** Press  $I/\bigcirc$  to turn off the system.

#### To check the settings

Press TIMER SELECT repeatedly until "DAILY" and "O REC" disappear, then press TIMER SELECT repeatedly until "DAILY" appears again.

The preset items appear in turn.

#### To turn off the Daily Timer

Press TIMER SELECT repeatedly until "OFF" appears.

#### To turn the timer on again

Press TIMER SELECT repeatedly until "DAILY" appears, then press  $I/\bigcirc$  to turn off the system.

#### Tip

Once you set the Daily Timer, the time settings will remain in the system's memory until you change them, even when you turn the system or the Daily Timer off. The settings that were last used will be in effect when you turn the timer on again.

#### Notes

- The system will turn on 15 seconds before the specified starting time.
- · The timer will not operate if the starting time and the stopping time are the same.
- When you have set the Sleep Timer, the Daily Timer will not operate until the Sleep Timer function is turned off.
- · You cannot operate the Daily Timer and the REC Timer (see this page) at the same time.

## Timer-activated recording of radio programs - REC Timer

Set the REC Timer to make the system start recording from a preset radio station at a specified time (see "Step 3: Presetting radio stations" on page 9). To use this function, make sure that you have set the system clock correctly (see "Step 2: Setting the time" on page 7).



- 1 Tune in the preset radio station that you want to record from (see "Listening to the radio" on page 16).
- **2** Press TIMER SET.
- 3 Press I or I repeatedly until "<sup>(2)</sup> REC" appears.

#### Timer-activated recording of radio programs (continued)

#### **4** Press ENTER.

"ON" appears, then the hour indication flashes.



**5** Set the starting time. Press  $\bowtie$  or  $\bowtie$  repeatedly to set the hour, then press ENTER.

The minute indication begins flashing next.



Press III or III repeatedly to set the minute, then press ENTER.

"OF" appears, then the hour indication flashes again.



**6** Set the stopping time by repeating step 5.

> The starting time, the stopping time, the recorded source, and the preset station appear in turn, then the original display returns.

- 7 Insert a recordable tape with the side you want to record on facing towards you.
- **8** Press  $I/\bigcirc$  to turn off the system. When recording starts, the volume level is automatically set to the minimum.

#### To check the settings

Press TIMER SELECT repeatedly until "@ REC" disappears, then press TIMER SELECT repeatedly until "@ REC" appears again.

The preset items appear in turn.

#### To turn off the REC Timer

Press TIMER SELECT repeatedly until "OFF" appears.

#### To turn the timer on again

Press TIMER SELECT repeatedly until "@ REC" appears, then press  $I/\bigcirc$  to turn off the system.

#### Tip

Once you set the REC Timer, the time settings will remain in the system's memory until you change them, even when you turn the system or the REC Timer off. The settings that were last used will be in effect when you turn the timer on again.

#### Notes

- The system will turn on 15 seconds before the specified starting time.
- · If the power is on at the specified starting time, recording will not occur.
- · The timer will not operate if the starting time and the stopping time are the same.
- When you have set the Sleep Timer, the REC Timer will not operate until the Sleep Timer function is turned off.
- · You cannot operate the Daily Timer and the REC Timer at the same time.

# 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 CD player door of the main unit is made of tempered glass. Under normal conditions, this tempered glass is more shock resistant and able to bear more weight than ordinary glass. This glass, however, may shatter if it receives a sharp blow or if it is scratched.
- The unit is not disconnected from the AC power source (mains) as long as it is connected to the wall outlet, even if the unit itself has been turned off.
- Unplug the system from the wall outlet (mains) if it will not 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**

- Place the system in a location with adequate ventilation to prevent heat build-up in the system.
- Do not place the unit in an inclined position.
- Do not place the unit in locations where it is:
  - Extremely hot or cold
  - Dusty or dirty
  - Very humid
  - Subject to vibrations
  - Subject to direct sunlight

#### **On operation**

- If the system is brought directly from a cold place to a warm place, 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 moving the unit, remove any disc that may be on the disc tray.

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

#### Notes on CDs

- Before playing a CD, clean the CD surface with a cleaning cloth. Wipe the CD from the center out.
- Do not play a CD with tape, stickers, or adhesives on any of its surfaces as this may damage the system.
- Do not clean CDs with solvents such as benzene, thinner, commercially available cleaners or antistatic sprays intended for vinyl LPs.
- Do not expose CDs to direct sunlight or heat sources such as hot air ducts, or leave it in a car parked in direct sunlight.

#### To save a tape permanently

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





If you later want to reuse the tape for recording, cover the broken tab with adhesive tape. However, be careful not to cover the detector slots which allow the tape player to automatically detect the type of tape.



Detector slots

# Before placing a cassette in the tape deck

Take up any slack in the tape. Otherwise the tape may get entangled in the tape deck's playing mechanism and become damaged.

# When using a tape longer than 90 minutes

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

#### Cleaning the tape heads

Clean the tape heads after every 10 hours of use. When the tape heads become dirty

- the sound becomes distorted
- the sound level decreases
- the sound drops out
- the tape does not erase completely
- the tape does not record

Make sure to clean the tape heads before making an important recording or after playing an old tape. Use a commercially available 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 commercially available demagnetizing cassette. For details, refer to the instructions of the demagnetizing cassette.

#### 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.

## Troubleshooting

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

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

If the problem persists after doing all of the above, consult your nearest Sony dealer.

#### General

#### There is no sound from the speakers.

- Press VOLUME +.
- The headphones are connected.
- · Check the speaker connections.

#### 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.

# "SU 0:00 " (or "SU12:00AM") flashes in the display.

• A power interruption has occurred. Set the clock (see page 7) and timer settings (see pages 28 and 29) again.

#### The timer does not function.

• Make sure the clock is correctly set (see page 7).

# "DAILY" and "<sup>(2)</sup> REC" do not appear when you press TIMER SET on the remote.

- Make sure each timer is correctly set (see pages 28 and 29).
- Make sure the clock is correctly set (see page 7).

#### The color on the TV screen is irregular.

• Move the speakers farther away from the TV set.

#### The remote does not work.

- There is an obstacle between the remote and the unit.
- You are not pointing the remote in the direction of the system's sensor.
- The batteries in the remote have run down. Replace the batteries.
- Make sure that the batteries are inserted correctly.

#### **Speakers**

# Sound comes from only one channel, or the left and right volumes are unbalanced.

• Check the speaker connections and placement.

#### **CD Player**

#### The CD will not play.

- The CD is dirty.
- The surface of the CD is scratched. Replace the CD.
- The CD is inserted with the label side down.
- Condensation has built up in the system. Remove the CD and leave the system turned on for about an hour until the moisture evaporates.

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

• The player is in Program or Shuffle Play. Press PLAY MODE on the remote repeatedly until "PROGRAM" and "SHUFFLE" disappear.

#### **Tape Deck**

#### Recording cannot be done.

- There is no tape in the cassette holder.
- The record protect tab has been removed from the cassette (see page 31).
- The tape has come to the end.

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

- The heads are dirty. Clean them (see page 32).
- 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 or pinch rollers are dirty. Clean them (see page 32).

# Noise increases or the high frequencies are missing.

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

#### Tuner

# There is a severe hum or noise ("TUNED" or "ST" flashes).

- · Adjust the antenna.
- The signal strength is too weak. Connect an external antenna (see page 11).
- Make sure that the antenna is connected properly.
- Do not bend or roll up the antenna.
- The two wires comprising the FM antenna have been pulled further apart since the system was first purchased. Repair or replace with a new one.

# A stereo FM program cannot be received in stereo.

• Press STEREO/MONO on the remote until "ST" appears in the display.

#### **Resetting the system**

- 1 Disconnect the power cord from the wall outlet.
- **2** Press  $I/\bigcirc$  down and connect the power cord to the wall outlet again.

The system is reset to the factory settings. All previous settings such as the preset stations, clock, and timers are cleared and must be set again.

# **Specifications**

#### **Amplifier section**

#### For the U.S. model

#### AUDIO POWER SPECIFICATIONS

POWER OUTPUT AND TOTAL HARMONIC DISTORTION

With 8-ohm loads both channels driven, from 90 - 15,000 Hz; rated 15 watts per channel minimum RMS power, with no more than 0.9% total harmonic distortion from 250 milliwatts to rated output.

North American model: Continuous RMS power output (reference): 17 + 17 W(8 ohms at 1 kHz, 10% THD)

European model: DIN power output (rated): 15 + 15 W(8 ohms at 1 kHz, DIN) Continuous RMS power output (reference): 17 + 17 W(8 ohms at 1 kHz, 10% THD) Music power output (reference): 35 + 35 W

Other models: The following measured at 230 V AC, 60 Hz DIN power output (rated): 15 + 15 W (8 ohms at 1 kHz, DIN) Continuous RMS power output (reference): 17 + 17 W(8 ohms at 1 kHz, 10% THD)

#### Inputs

MD IN (phono jacks): Sensitivity 1,000 mV, impedance 47 kilohms

#### Outputs

Sensitivity 500 mV, impedance MD OUT (phono jacks): 1 kilohm CD DIGITAL OUT OPTICAL: Optical PHONES (stereo phone jack): Accepts headphones with an impedance of 8 ohms or more SPEAKER: Accepts impedance of 8 to 16 ohms

#### **CD** player section

System	Compact disc and digital audio system
Laser	Semiconductor laser ( $\lambda = 780 \text{ nm}$ ) Emission duration: continuous
Laser output	MAX 44.6 μW*
	* This output is the value measured at a distance of 200 mm from the objective lens surface on the Optical Pick-up Block with 7 mm aperture.
Wavelength	780 - 790 nm
Frequency response	2 Hz - 20 kHz (±0.5 dB)

#### Tape player section

Recording system	4-track 2-channel stereo
Frequency response (DOL	BY NR OFF)
	50 - 13,000 Hz (±3 dB), using a
	Sony TYPE I cassette
	50 - 14,000 Hz (±3 dB),
	using a Sony TYPE II cassette
Wow and flutter	±0.15% W. Peak (IEC)
	0.1% W. RMS (NAB)
	±0.2% W. Peak (DIN)

#### Tuner section

FM stereo, FM/AM superheterodyne tuner

#### FM tuner section

Tuning range	
North American model:	87.5 - 108.0 MHz
	(100-kHz step)
Other models:	87.5 - 108.0 MHz
	(50-kHz step)
Antenna	FM wire antenna
Antenna terminals	75 ohms unbalanced
Intermediate frequency	10.7 MHz
AM tuner section	

Tuning range	
North American model:	530 - 1,710 kHz (with the tuning interval set at 10 kHz) 531 - 1,710 kHz (with the tuning interval set at 9 kHz)
European model:	531 - 1,602 kHz (with the tuning interval set at 9 kHz)
Other models:	530 - 1,710 kHz (with the tuning interval set at 10 kHz) 531 - 1,602 kHz (with the tuning interval set at 9 kHz)
Antenna	AM bar antenna, external antenna terminal
Intermediate frequency	450 kHz

Speakers
----------

#### SS-CED2: Speaker sy

Mass

Speaker system	Full range bass-reflex type
Speaker units	10 cm dia., cone type
Rated impedance	8 ohms
Dimensions (w/h/d)	Approx. $210 \times 200 \times 130$ mm
Mass	Approx. 1.3 kg net per speaker
SS-CED2U:	
Speaker system	Full range bass-reflex type
Speaker units	10 cm dia., cone type

10 cm dia., cone type 8 ohms Approx.  $195 \times 205 \times 120 \text{ mm}$ Dimensions (w/h/d) Approx. 1.3 kg net per speaker

#### General

Rated impedance

Power requirements North American model: European model: Australian model: Other models:	120 V AC, 60 Hz 230 V AC, 50/60 Hz 220 - 240 V AC, 50/60 Hz 110 - 120 V or 220 - 240 V AC , 50/60 Hz Adjustable with voltage selector
Power consumption	55 W
Dimensions (w/h/d)	Approx. $130 \times 212 \times 240$ mm incl. projecting parts and controls
Mass	Approx. 4.0 kg
Supplied accessories	Remote commander (1) AM bar antenna (1) FM wire antenna (1) Batteries (2) Speaker grilles (2) Screws (for attaching the speakers) (4)
Optional accessories	For CMT-ED2 AV Stand SU-EMD2 AV Stand Kit PK-ED2 Speaker Grille Net SSN-ED2 For CMT-ED2U AV Stand SU-EMD2 Speaker Grille Net SSN-ED1

Design and specifications are subject to change without notice.

# Parts identification for the remote

You can also operate the system with the supplied remote.

Buttons marked with "\*" are provided only on the remote.

#### TUNER

Remote Button(s)	Function
TUNER/BAND	Selects FM or AM.
TUNING MODE*	Selects "AUTO", "PRESET" or "MANUAL".
MEMORY*	Presets a station.
STEREO/MONO*	Selects "STEREO" or "MONO".
+/	Scans for a station or selects a preset station.

#### CD

Remote Button(s)	Function
OPEN/CLOSE	Opens or closes the glass door.
CD 🗁	Starts playback.
	Stops playback.
00	Pauses playback.
	Selects a track (AMS: Automatic Music Sensor).
	Locates a desired point in a track.
CD REPEAT*	Repeats playback.
PLAY MODE*	Selects Shuffle, Program or Normal Play.
DISPLAY*	Changes the front panel display.

#### TAPE

Remote Button(s)	Function
TAPE	Starts playback. Each time you press this button the tape reverses direction.
	Stops playback.
00	Pauses playback.
	Locates the begining of the current or next track (AMS: Automatic Music Sensor).
	Fast-forwards or rewinds.
• REC*	Records to tapes.
DIR MODE*	Selects " $\rightleftharpoons$ " or " $\rightleftharpoons$ ".
DOLBY NR*	Turns on or off the Dolby NR system.

#### TIMER

Remote Button(s)	Function
SLEEP*	Selects a sleep time.
TIMER SET*	Sets the time, Daily Timer or REC Timer.
TIMER SELECT*	Checks the settings and turns on or off the timer.

#### OTHERS

Remote Button(s)	For operating the	Function
νq	Amplifier	Turns on or off the system.
VOL +/-	Amplifier	Adjusts the volume.
DSG*	Amplifier	Generates a more dynamic sound.
SURROUND*	Amplifier	Creates simulated surround stereo effects.

## Index

#### Α

Adjusting the volume 13, 16, 19 Antennas 6, 11 Automatic Source Selection 14, 16, 19

#### В

Batteries 7

#### С

CD player 13, 14, 20, 24 Clock setting 7 Connecting. *See* Hooking up

#### D, E, F

Daily Timer 28

#### G

Generating a more dynamic sound 26

#### H, I, J, K, L, M

Hooking up optional components 10 the antenna 6, 11 the power 6 the system 4

#### Ν

Normal Play 13

#### 0

One Touch Play 14, 16, 19

#### P, Q

Playing a CD 13 a tape 18 tracks in random order (Shuffle Play) 21 tracks in the desired order (Program Play) 22 tracks repeatedly (Repeat Play) 20 Presetting radio stations 9 Preset Tuning 16 Program Edit 24 Program Play 22

#### R

Radio stations presetting 9 tuning in 16 Recording a CD 14 a radio program 17 a tape manually 23 CDs by specifying the track order 24 timer-activated recording 29 Repeat Play 20 Resetting the system 33

#### S

Saving recordings 31 Setting the time 7 Shuffle Play 21 Sleep Timer 27 Sound mode 26 Speakers 4, 6



Tape deck 14, 17, 18, 23, 29 Timer falling asleep to music 27 timer-activated recording 29 waking up to music 28 Troubleshooting 32 Tuner 9, 16, 17, 27, 29

#### U, V, W, X, Y, Z

Using the display 20 Using the RDS 27