

Hard Disc Audio Recorder

Operating Instructions

Owner's Record

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

Model No. HAR-D1000 Serial No. _____

**HDD**

HAR-D1000

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.

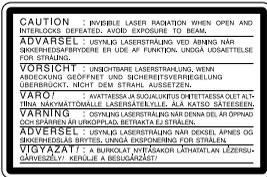


This appliance is classified as a **CLASS 1 LASER** product. The **CLASS 1 LASER PRODUCT MARKING** is located on the rear exterior.

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

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

The following caution label is located inside of the unit.



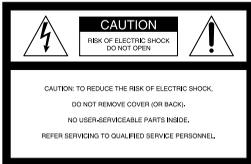
Don't throw away the battery with general house waste, dispose of it correctly as chemical waste.

IN NO EVENT SHALL SELLER BE LIABLE FOR ANY DIRECT, INCIDENTAL OR CONSEQUENTIAL DAMAGES OF ANY NATURE, OR LOSSES OR EXPENSES RESULTING FROM ANY DEFECTIVE PRODUCT OR THE USE OF ANY PRODUCT.

CAUTION

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

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

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

WARNING

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

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

The shielded interface cable recommended in this manual must be used with this equipment in order to comply with the Limits for a digital device pursuant to Subpart B of Part 15 of FCC Rules.

If you have any questions about this product, you may call; Sony customer Information Center 1-800-488-7669. The Number below is for the FCC related matters only.

Regulatory Information

Declaration of Conformity
 Trade name: SONY
 Model No.: HAR-D1000
 Responsible Party: Sony Electronics Inc.
 Address: 680 Kinderkamack Road, Oradell, NJ 07649 USA
 Telephone No.: 201-930-6972
 This device complies with Part 15 of the FCC Rules.
 Operation is subject to the following two conditions:
 (1) This device may not cause harmful interference, and
 (2) this device must accept any interference received, including interference that may cause undesired operation.

For the customers in Canada

This Class B digital apparatus complies With Canadian ICES-003.

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.

About this manual

The instructions in this manual is for HAR-D1000.

Tip

Instructions in this manual describe the controls on the recorder.

You can also use the controls on the remote if they have the same or similar names as those on the recorder.

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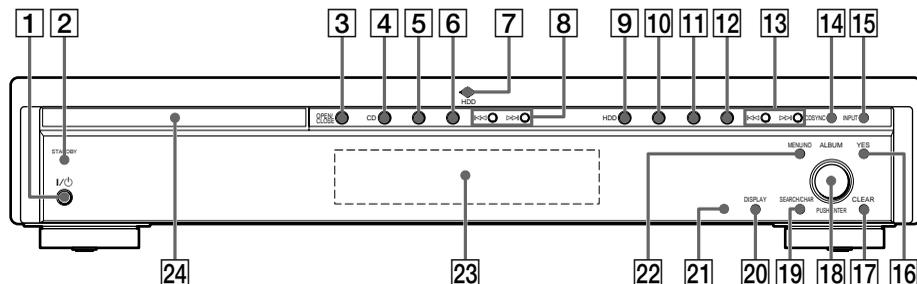
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Parts Identification

The items are arranged in alphabetical order.

Refer to the pages indicated in parentheses () for details.

Front Panel



ALBUM dial **18** (12 - 18, 20 - 27, 29 - 31)

CD SYNC **14** (13, 31)

CD ▷ **4** (9, 11, 14)

CD ■ **5** (9)

CD ■ **6** (8, 9, 13, 14)

CD ◀◀/▶▶ **8** (9, 10, 11)

CLEAR **17** (8, 16, 17, 28)

Disc tray **24** (9)

DISPLAY **20** (10, 19, 22)

Display **23** (10, 19, 21)

HDD indicator **7** (33)

HDD ▷ **9** (13, 14, 18, 21, 22, 31)

HDD ■ **10** (13, 14, 18, 31)

HDD ■ **11** (13, 14, 18, 23, 31)

HDD ◀◀/▶▶ **13** (18, 21, 22, 24, 27, 28, 31)

HDD ● **12** (14, 15)

INPUT **15** (8, 13)

MENU/NO **22** (12, 13, 15 - 17, 21, 23 - 27, 29 - 31)

OPEN/CLOSE **3** (9, 10)

Remote sensor **21** (7)

SEARCH/CHAR **19** (21, 22, 27)

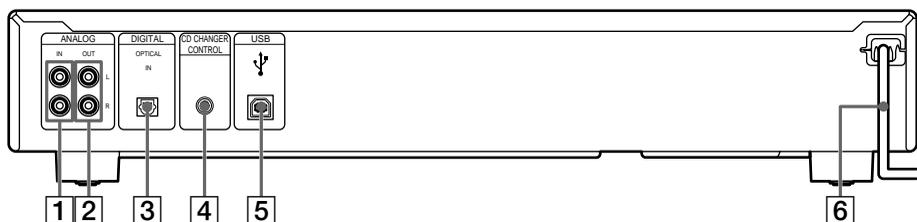
STANDBY indicator **2** (9, 12, 13, 18)

YES **16** (12, 15 - 17, 20 - 31)

BUTTON DESCRIPTIONS

⏻ (power) **1** (9, 12, 13, 18)

Rear Panel



ANALOG IN L/R jacks **1** (8)

ANALOG OUT L/R jacks **2** (7, 30)

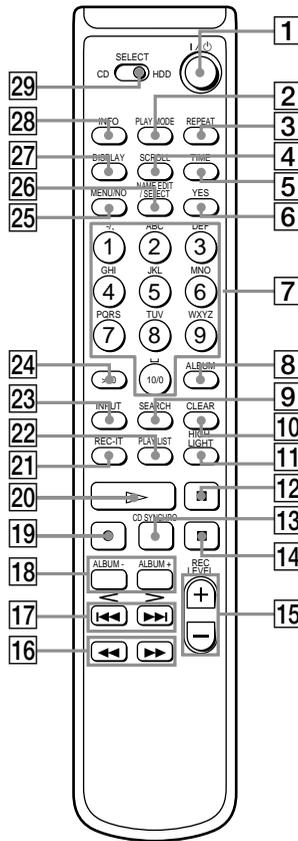
CD CHANGER CONTROL jack **4** (30)

DIGITAL OPTICAL IN connector **3** (7, 30)

Power cord **6** (7)

USB connector **5** (8)

Remote Control



ALBUM **8** (13, 14, 18, 19)
 ALBUM +/- **18** (12 - 18, 20 - 26, 28 - 31)
 CD SYNCHRO **13** (13, 31)
 CLEAR **10** (11, 16, 17, 28)
 DISPLAY **27** (10, 19, 22)
 HIGH-LIGHT **11** (22)
 INFO **28** (20)
 INPUT **23** (8, 13)
 Letter/Numeric buttons **7** (10, 11, 13, 14, 18, 19, 28)
 MENU/NO **25** (12, 13, 15 - 17, 21, 23 - 26, 29 - 31)

NAME EDIT/SELECT **26** (28)
 PLAY LIST **22** (20, 22)
 PLAY MODE **2** (9, 11, 18)
 REC-IT **21** (14)
 REC LEVEL +/- **15** (17)
 REPEAT **3** (9, 18)
 SCROLL **4** (10, 19)
 SEARCH **9** (21, 22)
 SELECT **29** (9 - 13, 15, 18 - 21, 23 - 27, 29)
 TIME **5** (10, 19, 20)
 YES **6** (12, 15 - 17, 20 - 26, 28 - 31)

BUTTON DESCRIPTIONS

I/O (power) **1** (9, 12, 13, 18)
 ▷ **20** (9, 11, 13, 14, 18, 21, 22, 31)
 ■ **14** (9, 13, 14, 18, 23, 31)
 ◀▶ **17** (9 - 11, 18, 21, 22, 24, 28, 31)
 ◀▶ **16** (10, 18)
 ● **19** (14, 15)
 >10 **24** (10, 11, 13, 14, 18, 19)

This recorder, with its internal hard disc, supports the following functions:

Recording

More than 600 hours of data can be recorded to the recorder's HDD. Up to 500 albums can be created on the HDD with each album containing up to 400 tracks for a total of 20,000 tracks. Like an MD deck, this recorder supports Synchro-Recording and the editing of recorded tracks.

Search

Specific tracks on the HDD can be easily found.

- **Keyword Search (page 21)**

A keyword can be entered to find a desired album or track. Keywords may be the name of the album, track or artist.

With the supplied M-crew for HAR-D1000 software, you can access CDDDB* from your computer to label albums and tracks automatically.

* A database containing information about CDs on the market

- **Highlight Play (page 22)**

This function allows you to listen to just a part of a single track in each album in order to find a specific album on the HDD.

Play list

You can create play lists containing only the tracks you want. Besides the 500 albums that you can create on the HDD, you can create up to 10 albums through play lists on the HDD, with each play list containing up to 400 tracks.

Notes

- The recorded music is limited to private use only. Use of the music beyond this limit requires permission of the copyright holders.
- Sony is not responsible for any loss that may arise from lost data.
- Recording to the hard disc should be considered as a temporary means of storing audio data. Be sure to retain the original sound source as backup.
- There is no service for the recovery of lost data.
- You may hear sounds as the recorder access the hard disc when you turn on the recorder, play an HDD track, record to the HDD, etc. These sounds are natural to the HDD and are not abnormal.
- The recorder may make sounds even when no operation is being performed. These sounds are produced by the recorder's self-maintenance functions and are not abnormal.
- You may also feel vibrations from the recorder, but this is not a malfunction.

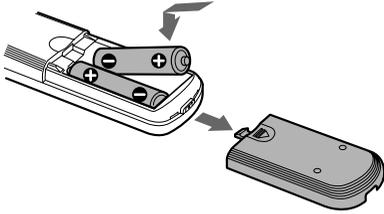
Music recognition technology and related data are provided by Gracenote and the Gracenote CDDDB® Music Recognition ServiceSM. Gracenote is the industry standard in music recognition technology and related content delivery. For more information go to www.gracenote.com.

Gracenote is CDDDB, Inc. d/b/a "Gracenote." CD and music related data from Gracenote CDDDB® Music Recognition ServiceSM © 2000, 2001 Gracenote. Gracenote CDDDB Client Software © 2000, 2001 Gracenote. U.S. Patents Numbers #5,987,525; #6,061,680; #6,154,773, and other patents issued or pending.

CDDDB is a registered trademark of Gracenote. CDDDB-Enabled, the Gracenote logo, the CDDDB Logo, and the "Powered by Gracenote CDDDB" logo are trademarks of Gracenote. Music Recognition Service and MRS are service marks of Gracenote.

- Gracenote CDDDB® or Gracenote CDDDB® Music Recognition ServiceSM
- Powered by Gracenote CDDDB®

Inserting batteries into the remote



You can control the recorder using the supplied remote.

Insert two R6 (size AA) batteries by matching the + and – on the batteries to the diagram inside the battery compartment.

Insert the negative (–) end first, then push in and down until the positive (+) end clicks into position. When using the remote, point it at the remote sensor **R** on the recorder.

Tip

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

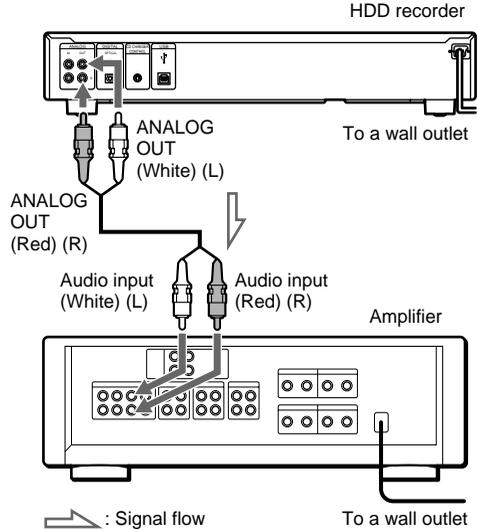
Notes

- Do not leave the remote near an extremely hot or humid place.
- Do not drop any foreign object into the remote casing, particularly when replacing the batteries.
- Do not expose the remote sensor to direct sunlight or lighting apparatuses. Doing so may cause a malfunction.
- If you do not use the remote for an extended period of time, remove the batteries to avoid possible damage from battery leakage and corrosion.

Hooking up the system

Hookups

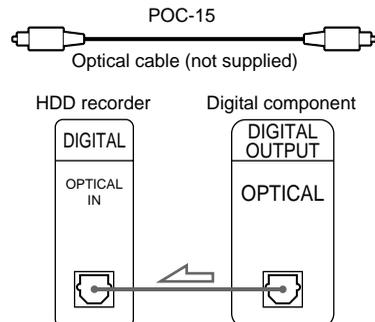
This section describes how to hook up the HDD recorder to an amplifier. Be sure to turn off each component before making the connections.



Making digital hookups

If you have a digital component such as a digital amplifier, D/A converter, DAT, or MD, connect the component via the DIGITAL OPTICAL IN connector using the optical cable (not supplied). Take off the cap and plug in the optical cable.

Be sure not to bend or tie the optical cable.



Hooking up the system (continued)

Notes

- When you connect via the DIGITAL OPTICAL IN connector, noise may occur when you play CD software other than music, such as a CD-ROM.
- If “Din Unlock” or “Cannot Copy” flashes in the display, recording via the DIGITAL OPTICAL IN connector is not possible. In this case, record the sound source via the ANALOG IN jacks with “ANLG” selected by the INPUT button.
- Do not place heavy objects such as an amplifier, deck, etc. on top of the recorder.

Connecting a computer

Use the supplied USB cable to connect a computer to the recorder. By connecting the recorder to a computer, you will be able to select and play the tracks and do various HDD editing operations from the computer. For details, refer to the supplied “M-Crew for HAR-D1000 Operating Instructions”.

Demonstration mode

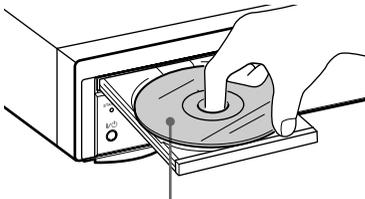
When you turn on the recorder and there is no CD in the recorder, demonstration mode is activated automatically when the recorder is stopped for about 10 minutes. To deactivate the demonstration mode, press any button on the recorder or on the remote.

Tip

By pressing the CD ■ and CLEAR buttons at the same time, you can turn off the demonstration mode. Demonstration mode is turned off until you disconnect the power cord of the recorder and reconnect it.

Loading a CD

- 1 Turn on the amplifier and set the source selector to the position for this recorder.
- 2 Press I/⏻ to turn on the recorder. The STANDBY indicator turns off.
- 3 Press OPEN/CLOSE ⏏. The disc tray slides out.
- 4 Load a disc on the disc tray with the label side up.



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

- 5 Press OPEN/CLOSE ⏏ again to close the disc tray.

Playing a CD

—Normal Play/Shuffle Play/Repeat Play

This recorder lets you play CDs in different play modes.

When using the remote, set SELECT to CD.

- 1 While the recorder is stopped, press PLAY MODE on the remote repeatedly to select the play mode.

To play	Select
The disc in original order	No display.
The tracks on the CD in random order	SHUFFLE.
The tracks on the CD in any order that you want (see “Programming the CD tracks” on page 11)	PROGRAM.

2 Press CD ▷.

Repeat Play Operations

You can play the CD tracks repeatedly in any play modes.

To activate the Repeat Play function, press REPEAT on the remote repeatedly until “REPEAT” or “REPEAT 1” appears in the display.

To	Select
Repeat all tracks	REPEAT.
Repeat only one track	REPEAT 1.
Cancel Repeat Play	No display.

The recorder repeats the tracks as follows:

When the CD is played in	The recorder repeats
Normal Play	All the tracks.
Shuffle Play	All the tracks in random order.
Program Play (page 11)	The same program.

Other Operations

To	Do this
Stop playback	Press CD ■.
Pause	Press CD ⏸. Press CD ⏸ again or CD ▷ to resume playback.
Select a track	During playback or pause, press CD ▷ repeatedly (to go forward) or CD ◀ repeatedly (to go backward).

continued

Playing a CD (continued)

To	Do this
Select a track directly*	Press the numeric button(s) on the remote.
Find a point in a track	Press and hold down ◀◀/▶▶ on the remote during playback, and release it at the desired point.
Remove the CD	Press OPEN/CLOSE ☰.

* When you directly locate a track numbered over 10, press >10 before entering a two-digit track number. When you press the >10 button, two bars appear if the CD contains 10 to 99 tracks. Press 10/0 for "0".

Example: To enter track number 30 for a CD containing 99 tracks

1 Press >10.

"- -" appears in the display.

2 Press 3 and 10/0.

Tip

If there is no CD in the recorder, "No Disc" appears in the display.

Note

If "- Over -" appears in the display, the CD has reached the end while you are pressing and holding down the ▶▶ button on the remote. Press and hold down ◀◀ on the remote, or press CD ◀◀ repeatedly to go back.

Using the CD display

You can check information about the CD using the display.

When using the remote, set SELECT to CD.

Changing the display

Press DISPLAY while the recorder is stopped or playing.

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

CD/HDD divided display → Detailed display for CD player section → Detailed display for HDD recorder section 1 → Detailed display for HDD recorder section 2

Tips

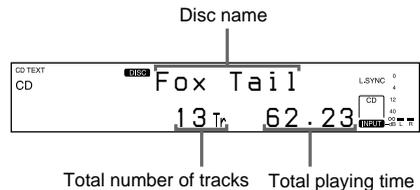
- When you load a CD containing CD TEXT data, "CD TEXT" lights up in the display.
- When the detailed display is selected, the disc name appears while the recorder is stopped and the track name appears while a track is playing. If the CD has no text information, "No Name" appears instead of the disc name or track name.
- When the detailed display for HDD recorder section 1 is selected, the album name appears while the recorder is stopped and the track name appears while a track is playing. When the detailed display for HDD recorder section 2 is selected, the album name appears at all times.
- You can scroll a title of 12 or more characters by pressing the SCROLL button on the remote. Press the button again to pause scrolling, and again to resume scrolling.

Note

If you perform an HDD operation while the detailed display for CD player section appears, the display will change to the CD/HDD divided display.

Detailed display for CD player section

In the stop mode



The information also appears when you press the OPEN/CLOSE ☰ button to close the disc tray.

When Program Play is selected, the total number of tracks in the program and the total playing time of the program are displayed.

Tip

By pressing the TIME button on the remote when Program Play is selected, you can check the last track number in the program and the selection number.

During normal playback

Press TIME on the remote repeatedly.

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

Current track number and elapsed playing time of the track → Current track number and remaining time of the track → Remaining time of the entire CD

Programming the CD tracks

You can specify the playback order of the tracks on a CD and create your own programs containing up to 25 tracks.

When using the remote, set SELECT to CD.

1 While the recorder is stopped, press PLAY MODE on the remote repeatedly until “PROGRAM” appears in the display.

2 Press CD  repeatedly until the desired track appears and press PLAY MODE on the remote to program the track.

The last programmed track number appears, followed by the total playing time of the program.

Tip

You can select the track using the numeric buttons on the remote. To select a track numbered over 10, use >10 (see page 10).

3 To program additional tracks, repeat step 2.

4 Press CD  to start Program Play.

To cancel Program Play

While the recorder is stopped, press PLAY MODE on the remote repeatedly until “PROGRAM” disappears.

Tip

The program remains even after the Program Play ends. When you press the CD  button, you can play the same program again.

Notes

- The total playing time of the program does not appear when it exceeds 100 minutes.
- “Step Full!” appears when you program over 25 tracks. Erase the unnecessary tracks to enter other tracks.
- The program is erased when you disconnect the power cord.

Changing the track order

You can change your program while the recorder is stopped.

To	You need to
Erase the last track in the program	Press CLEAR on the remote. Each time you press the button, the last programmed track is cleared.
Add tracks to the end of the program	Follow step 2 of the programming procedure.

Notes on recording

Before recording

- You cannot select a play list as the recording destination.
- You cannot record over an existing track. If you select an album with existing tracks as the recording destination, the recorder automatically starts recording from the end of the existing tracks.

After recording

The HDD play mode automatically switches to Normal Play.

Automatic conversion of digital sampling rates

A built-in sampling rate converter automatically converts the sampling frequency of various digital sources to the 44.1 kHz sampling rate of the recorder. This allows you to monitor and record sources such as 32- or 48-kHz DAT tape or satellite broadcasts, as well as the CDs and HDD.

Maximum number of recordable tracks

Total number of the tracks recorded on the HDD cannot exceed 20,000, not counting the tracks in play lists.

If "Track Full!" appears in the display when you select the recording destination

The album already contains 400 tracks, the maximum number of tracks that can be recorded to a single album. Select another album. When using the REC-IT function, the recording will be cancelled automatically.

If "Drive Full!" appears in the display while recording to the HDD

Further recording is impossible because there is not enough recordable space on the HDD or the maximum number of recordable tracks has been attained on the HDD. Erase any unnecessary albums or tracks to continue recording to the HDD.

Recording a CD to the HDD

— *CD-HDD Synchro-Recording/ High-Speed CD-HDD Synchro-Recording*

When using the remote, set SELECT to HDD.

- 1 Turn on the amplifier and set the source selector to the position for this recorder.
- 2 Press **I/⏻** to turn on the recorder. The STANDBY indicator turns off.
- 3 Load a CD on the disc tray.
- 4 Press **MENU/NO**.
"Edit Menu" appears in the display.
- 5 Turn **ALBUM** dial (or press **ALBUM +/-** on the remote repeatedly) until "Setup?" flashes in the display, then press **ALBUM** dial or **YES**.
"Setup Menu" appears in the display.
- 6 Turn **ALBUM** dial (or press **ALBUM +/-** on the remote repeatedly) until "Sync Normal" (or "Sync High" or "SyncChanger") appears in the display, then press **ALBUM** dial or **YES**.
- 7 Turn **ALBUM** dial (or press **ALBUM +/-** on the remote repeatedly) to select the recording speed, then press **ALBUM** dial or **YES**.

To	Select
Perform the normal-speed Synchro-Recording	Sync Normal. (factory setting)
Perform the high-speed Synchro-Recording	Sync High.

8 Press MENU/NO.

9 Press CD SYNC.

When “Sync Normal” was selected, “CD SYNCHRO – Normal –” appears in the display.

When “Sync High” was selected, “CD SYNCHRO – High –” appears in the display.

The HDD stands by for recording and the CD stands by for playback.

To change the album position, turn ALBUM dial (or press ALBUM +/- on the remote repeatedly). When using the remote, press ALBUM and the numeric button(s) to enter the position directly (see page 19).

10 After “CD SYNCHRO – Normal –” (or “CD SYNCHRO – High –”) disappears, press HDD ▷ or HDD ■.

Recording starts.

Track playback is not audible during high-speed Synchro-Recording.

To stop recording

Press CD ■ or HDD ■.

Tips

- You can use Program Play to specify only the CD tracks you want to record. After loading a CD, do the procedure of “Programming the CD tracks” on page 11. Then do the Synchro-Recording procedure afterwards.
- If you set “TxtSave” to “On” in the setup menu, CD text (track name only) can be saved to the HDD automatically.
- Synchro-Recording enables the assignment of album and track names from the CDDDB2. For details on the CDDDB2, refer to the Help for “M-crew for HAR-D1000”.

Notes

- If the HDD becomes full during recording, recording ends automatically.
- You cannot pause recording during Synchro-Recording.
- If the CD play mode is set to Repeat Play or Shuffle Play, it automatically switches to Normal Play.
- The HDD play mode automatically switches to Normal Play.
- Sound input automatically switches to “CD” during Synchro-Recording.
- The recording level changes to 0.0 dB automatically during CD-HDD Synchro Recording no matter what the setting in the setup menu is.
- CD text may not be saved for short tracks.

If “Retry” flashes in the display after you press the CD SYNC button

A reading failure has occurred, and the recorder is trying to read the data again.

- If the retry was successful, the recorder continues with High-Speed CD-HDD Synchro-Recording.
- If the condition of the loaded CD or the system is poor, and retry fails, High-Speed CD-HDD Synchro-Recording is disabled. In this case, “x2” flashes in the display and the recorder automatically starts recording in normal CD-HDD Synchro-Recording. Note that monitoring of the recorded signal is not possible when this occurs.

Recording to the HDD

When using the remote, set SELECT to HDD.

1 Turn on the amplifier and set the source selector to the position for this recorder.

2 Press I/⏻ to turn on the recorder.

The STANDBY indicator turns off.

3 Press INPUT repeatedly to select the sound source

Sound source	Select
The CD in the recorder	CD.
The component connected to the DIGITAL OPTICAL IN connector	OPT.
The component connected to the ANALOG IN jacks	ANLG.

continued

Recording to the HDD (continued)

4 Press **HDD ●**.

“REC” appears in the display.

The HDD stands by for recording.

To change the album position, turn

ALBUM dial (or press ALBUM +/- on the remote repeatedly). When using the remote, press ALBUM and the numeric button(s) to enter the position directly (see page 19).

5 If necessary, adjust the recording level (see “Adjusting the recording level” on page 17).

6 Press **HDD ▷** or **HDD ▨**.

Recording starts.

7 Start playing the sound source.

Other operations during recording

To	Press
Stop recording	HDD ■.
Pause recording	HDD ▨.
Resume recording after recording pause*	HDD ▷ or HDD ▨.
Add a track number	HDD ●.

* Track number increases by one.

Notes

- If you change to another sound source while recording from the CD in the recorder, CD playback stops.
- If you change the sound source during recording, track number increases by one automatically. If the track number cannot be incremented, recording ends.
- Tracks longer than 120 minutes cannot be recorded. If the recording time has reached 120 minutes, the track number increases by one automatically. If the track number cannot be incremented, recording ends.
- If the selected album is one that contains 400 tracks at the time you press the HDD ● button, the sound source is recorded to the album that is closest in number with recording space.
- When recording a CD with “CD” selected as the sound source, CD text will not be saved even if “TxtSave” is set to “On”.

If “Din Unlock” flashes in the display

- The digital sound source is not connected as you selected with the INPUT button. Connect the sound source properly.
- The sound source is not turned on. Turn on the sound source.

Recording the current CD track

—REC-IT Function

You can record the currently playing CD track.

1 Press **CD ▷**.

2 Press **REC-IT** on the remote when the desired track is being played.

Playback returns to the beginning of the track and recording starts. Recording stops at the end of the track, but CD playback continues.

To stop recording

Press **CD ■** or **HDD ■**.

Tip

If you set “TxtSave” to “On” in the setup menu, CD text (track name only) can be saved to the HDD automatically.

Notes

- You cannot select an album that already contains recorded tracks. The previously displayed album is automatically selected.
- The HDD play mode automatically switches to Normal Play.
- Sound input automatically switches to “CD” during Synchro-Recording.
- The recording level changes to 0.0 dB automatically during CD-HDD Synchro Recording no matter what the setting in the setup menu is.
- CD text may not be saved for short tracks.

Recording tips

— Marking track numbers/Smart Space/Adjusting the recording level

When using the remote, set SELECT to HDD.

Marking track numbers while recording

You can marking track numbers either manually or automatically while recording. By marking track numbers at specific points, you can quickly locate the points later or edit the HDD easily.

Marking track numbers manually (Track Mark)

During manual recording, press HDD ● at the point where you want to add a track number.

Marking track numbers automatically (Level Synchro Recording)

When recording from a CD player or MD deck connected to the DIGITAL OPTICAL IN connector, the recorder automatically marks track numbers in the same sequence as the sound source. When recording from other sound sources connected to the DIGITAL OPTICAL IN connector or a sound source connected to the ANALOG IN jacks, do the procedure below to mark track numbers automatically. However, you cannot mark track numbers automatically if the sound source you want to record is noisy (e.g., tapes or radio programmes).

1 While the recorder is stopped or recording pause, press MENU/NO.

“Edit Menu” appears in the display.

2 Turn ALBUM dial (or press ALBUM +/- on the remote repeatedly) until “Setup?” flashes in the display, then press ALBUM dial or YES.

“Setup Menu” appears in the display.

3 Turn ALBUM dial (or press ALBUM +/- on the remote repeatedly) until “T.Mark Lsyn” (or “T.Mark Off”) appears in the display, then press ALBUM dial or YES.

4 Turn ALBUM dial (or press ALBUM +/- on the remote) to select the setting, then press ALBUM dial or YES.

To	Select
Turn on the Level Synchro Recording function	T.Mark Lsyn. (factory setting)
Turn off the Level Synchro Recording function	T.Mark Off.

5 Press MENU/NO.

When you set Level Synchro Recording to on, “L.SYNC” appears in the display.

The recorder marks a track number whenever the input signal level drop to the trigger level for Level Synchro Recording or below for at least 1.5 seconds.

To change the trigger level for Level Synchro Recording

Do the procedure below to change the signal level that triggers Level Synchro Recording.

1 While the recorder is stopped or recording pause, press MENU/NO.

“Edit Menu” appears in the display.

2 Turn ALBUM dial (or press ALBUM +/- on the remote repeatedly) until “Setup?” flashes in the display, then press ALBUM dial or YES.

“Setup Menu” appears in the display.

continued

Recording tips (continued)

3 Turn ALBUM dial (or press ALBUM +/- on the remote repeatedly) until “LS(T) -XXdB” appears in the display, then press ALBUM dial or YES.

4 Turn ALBUM dial (or press ALBUM +/- on the remote repeatedly) to select the level, then press ALBUM dial or YES.

You can set the level at any value between -72 dB and 0 dB, in 2 dB increments (-50 dB is the factory setting).

5 Press MENU/NO.

Tips for Level Synchro Recording

- When recording from a CD player or an MD deck connected to the DIGITAL OPTICAL IN connector, the entire material might be recorded as a single track in the following cases:
 - When you consecutively record the same track two or more times using single-track repeat play.
 - When you consecutively record two or more tracks with the same track number but from different CDs or MDs.
 - When you record tracks from certain CD or multi-disc players.
- When recording from a component connected to the ANALOG IN jacks with “T.Mark Off” selected or when recording from a DAT deck or DBS tuner connected to the DIGITAL OPTICAL IN connector, the entire material may be recorded as a single track.

Tips

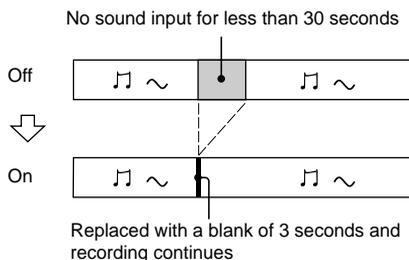
- You can mark track numbers even after recording has finished. (see “Dividing Recorded Tracks” on page 24)
- To restore the factory setting, press CLEAR while setting the trigger level in step 4.

Notes

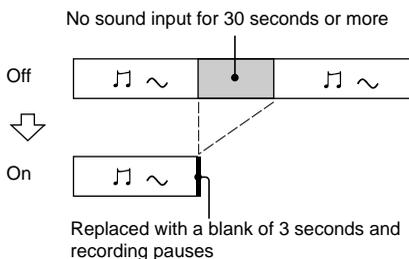
- If this function is activated when the 400th track is reached, recording stop.
- When recording from a CD, a track number might not be marked for tracks less than 4 seconds in length.

Erasing blank portions automatically (Smart Space/Auto Cut)

The Smart Space function lets you make the blank spaces between tracks 3 second long automatically. If the Smart Space function is on and there is no sound input for about 3 seconds or more (but less than 30 seconds) during recording, the recorder replaces this silence with a blank of about 3 seconds and continues recording:



Auto Cut: When the Smart Space function is on, if there is no sound input for 30 seconds or more, the recorder replaces this silence with a blank of about 3 seconds and enters recording pause.



- 1 While the recorder is stopped or recording pause, press MENU/NO.** “Edit Menu” appears in the display.
- 2 Turn ALBUM dial (or press ALBUM +/- on the remote repeatedly) until “Setup?” flashes in the display, then press ALBUM dial or YES.** “Setup Menu” appears in the display.

3 Turn ALBUM dial (or press ALBUM +/- on the remote repeatedly) until “S.Space On” (or “S.Space Off”) appears in the display, then press ALBUM dial or YES.

4 Turn ALBUM dial (or press ALBUM +/- on the remote) to select the setting, then press ALBUM dial or YES.

To	Select
Turn on the Smart Space and Auto Cut functions	S.Space On. (factory setting)
Turn off the Smart Space and Auto Cut functions	S.Space Off.

5 Press MENU/NO.

Notes

- When you record from a CD, Smart Space does not affect the order of the track numbers being recorded, even if the blank space occurs in the middle of a track.
- Auto Cut is automatically turned on or off in tandem with Smart Space.
- If the recorder continues recording pause for about 10 minutes after Auto Cut activated, recording stops automatically.
- If this function is activated when the 400th track is reached, recording stop.

Adjusting the recording level

You can adjust the recording level for both analog and digital recordings.

1 Do steps 1 through 4 of “Recording to the HDD” on page 13.

2 Play the portion of the sound source with the strongest output.

3 Press MENU/NO.

“Setup?” appears in the display.

4 Press ALBUM dial or YES.

“Setup Menu” appears in the display.

5 Turn ALBUM dial (or press ALBUM +/- on the remote repeatedly) until “CD X.XdB” (or “Opt X.XdB” or “Anlg X.XdB”) appears in the display, then press ALBUM dial or YES.

6 While monitoring the sound, turn ALBUM dial (or press ALBUM +/- on the remote repeatedly) to adjust the recording level so that the OVER indicator on the peak level meters does not turn on.

Avoid turning on this indicator



7 Press ALBUM dial or YES.

8 Press MENU/NO.

9 Stop playing the sound source.

10 Do steps 6 and 7 of “Recording to the HDD” on page 13.

Tips

- You can adjust the recording level by pressing the REC LEVEL +/- buttons on the remote repeatedly during recording or recording pause.
- To restore the factory setting, press CLEAR while adjusting the recording level in step 6.

Notes

- The recording level can only be increased up to +12 dB (for analog recording) or +18 dB (for digital recording) (0.0 dB is the factory setting). Therefore, if the output level of the connected components is low, it may not be possible to set the recording level to maximum.
- The monitor sound is not affected when you adjust the recording level during recording.

Playing the HDD

— Normal Play/Shuffle Play/Repeat Play

This recorder lets you play the HDD in different play modes.

When using the remote, set SELECT to HDD.

- 1 **Turn on the amplifier and set the source selector to the position for this recorder.**
- 2 **Press I/⏻ to turn on the recorder.**
The STANDBY indicator turns off.
- 3 **While the recorder is stopped, press PLAY MODE on the remote repeatedly to select the play mode.**

When you select	Result
ALL ALBUM only	All the albums in the recorder are played back consecutively in the order of album number.
1ALBUM only	Only the current album is played back.
ALL ALBUM and SHUFFLE	An album* is selected at random and the tracks in that album are played back in random order. After all the tracks have been played, another album is selected in the same manner. (Shuffle Play continues until all the tracks* in the recorder have been played.)
1ALBUM and SHUFFLE	All the tracks in the current album are played back in random order.

* Except for the play lists (see page 20)

- 4 **Press HDD ▷.**

Repeat Play Operations

You can play the HDD tracks repeatedly in any play modes.

To activate the Repeat Play function, press REPEAT on the remote repeatedly until “REPEAT” or “REPEAT 1” appears in the display.

To	Select
Repeat all tracks	REPEAT.
Repeat only one track	REPEAT 1.
Cancel Repeat Play	No display.

The recorder repeats the tracks as follows:

When the HDD is played in	The recorder repeats
Normal Play (ALL ALBUM)	All the tracks on the HDD.
Normal Play (1ALBUM)	All the tracks in the current album.
Shuffle Play (ALL ALBUM)	All the tracks (except for the play lists (see page 20)) on the HDD in random order.
Shuffle Play (1ALBUM)	All the tracks in the current album in random order.

Other Operations

To	Do this
Stop playback	Press HDD ■.
Pause	Press HDD ■■. Press HDD ■■ again or HDD ▷ to resume playback.
Select a track	During playback or pause, press HDD ▷>> repeatedly (to go forward) or HDD <<< repeatedly (to go backward).
Select a track directly* ¹	Press the numeric button(s) on the remote.
Select an album* ²	During playback or pause, turn ALBUM dial clockwise (to go forward) or counterclockwise (to go backward) (or press ALBUM + (to go forward) or ALBUM - (to go backward) on the remote repeatedly).
Select an album directly* ³	Press ALBUM on the remote first, then press the numeric button(s) on the remote.
Find a point in a track* ⁴	Press and hold down <<<▶▶ on the remote during playback, and release it at the desired point.

*1 When you directly locate a track numbered over 10, press >10 before entering a two-digit or three-digit track number. When you press the >10 button, two bars appear if the album contains 10 to 99 tracks or three bars appear if the album contains 100 or more tracks. Press 10/0 for "0".

Example: To enter track number 30 in an album containing 100 tracks
1 Press >10.
 "--" appears in the display.
2 Press 10/0.
 The flashing bar shifts to the right.
3 Press 3 and 10/0.

*2 The playback starts from the first track in the specified album. You cannot select the album containing no track.

*3 Press 10/0 for "0".

Example: To enter album number 30 when the HDD contains albums numbered 100 or more
1 Press ALBUM.
 "--" appears in the display.
2 Press 10/0.
 The flashing bar shifts to the right.
3 Press 3 and 10/0.

*4 You can locate a point only within the current album.

Using the HDD display

You can check information about the HDD using the display.

When using the remote, set SELECT to HDD.

Changing the display

Press DISPLAY while the recorder is stopped or playing.

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

CD/HDD divided display → Detailed display for CD player section → Detailed display for HDD recorder section 1 → Detailed display for HDD recorder section 2

Tips

- When the detailed display for HDD recorder section 1 is selected, the album name appears while the recorder is stopped and the track name appears while a track is playing. When the detailed display for HDD recorder section 2 is selected, the album name appears at all times.
- You can scroll a title of 12 or more characters by pressing the SCROLL button on the remote. Press the button again to pause scrolling, and again to resume scrolling.

Note

If you perform a CD operation while detailed display for HDD recorder section appears, the display will change to the CD/HDD divided display.

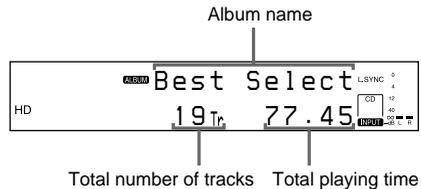
Detailed display for HDD recorder section

In the stop mode

Press TIME on the remote.

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

Total number of tracks and total playing time of the album → Percentage of the HDD area used as a total recorded time



Note

The percentage of the HDD area used will never be 0% even when no tracks have been recorded to the HDD. This is because the HDD contains information other than music data; for example, track names and information about the music, etc.

continued

Using the HDD display (continued)

During normal playback

Press **TIME** on the remote repeatedly.

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

Current track number and elapsed playing time of the track → Current track number and remaining time of the track → Remaining time of the entire album (Normal Play only)

Tip

When you press the **INFO** button on the remote, the display changes to the album number of the album containing the current track. If you press the button while the album number is displayed, the display changes to the artist name for the current track.

Note

“- - - - -” appears when the remaining time of the album exceeds 1,000 minutes.

During recording

Press **TIME** on the remote.

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

Track number and elapsed recording time of the current track → Percentage of the HDD area used as a total recorded time

Notes

- The total recorded time is first displayed as a percentage. When the remaining recordable time reaches “999 . 59” (999 minutes and 59 seconds), the display changes to a time display.
- The percentage of the HDD area used will never be 0% even when no tracks have been recorded to the HDD.

Playing a track in a play list

— *Play List Play*

By registering tracks on the HDD to a play list, you can play back only the tracks you want to listen to. Up to 10 play lists can be created and each play list can contain up to 400 tracks. On this recorder, album numbers 501 to 510 correspond to the play lists.

When using the remote, set **SELECT** to **HDD**.

- 1 **During the playback or play pause of the desired track, press **PLAY LIST** on the remote.**
- 2 **Turn **ALBUM** dial (or press **ALBUM +/-** on the remote repeatedly) until the desired play list appears, then press **YES**.**
“Complete!” appears for a few seconds.
- 3 **Do the procedure of “Playing the HDD” on page 18 to play the play list.**

Tip

When you press the **PLAY LIST** button on the remote while the recorder is stopped, all the tracks in the current album are registered to a play list.

Notes

- If you edit a track in an album that is registered to one or more play lists, the track is erased from all the play lists automatically. (except for the Name function)
- During the playback of a track in a play list, you cannot press the **PLAY LIST** button on the remote to register the track to a play list.

Locating a desired album or track

— Keyword Search/Highlight Play

When using the remote, set SELECT to HDD.

Searching by keywords (Keyword Search)

You can easily find desired albums or tracks on the HDD if they have been named.

- 1 While the recorder is stopped, press **SEARCH/CHAR** (or **SEARCH** on the remote).
- 2 Turn **ALBUM** dial (or press **ALBUM +/-** on the remote) to select the target level, then press **ALBUM** dial or **YES**.

To	Select
Search for an album	For Album?.
Search for a track	For Track?.

- 3 Turn **ALBUM** dial (or press **ALBUM +/-** on the remote) to select the keyword type, then press **ALBUM** dial or **YES**.

To	Select
Search by an album or track name	By Title?.
Search by an artist name	By Artist?.

“Keyword In” appears in the display.

- 4 Enter the keyword (see “Assigning a title or artist name to a track, album or play list” on page 27).

Up to 10 characters can be entered.

5 Press YES.

When the corresponding item is found, playback of the item starts.

If you selected	The recorder plays
For Album?	the Highlight positions of all tracks in the album.
For Track?	the track repeatedly.

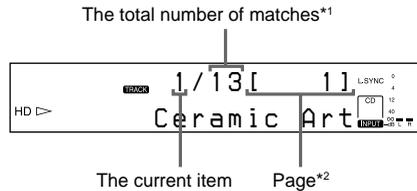
If there are multiple matches, turn **ALBUM** dial (or press **ALBUM +/-** on the remote repeatedly) to select the desired album or track.

If there are no matches, “Not Found” appears in the display.

To cancel Keyword Search
Press **MENU/NO**.

If you press the **HDD** \triangleright button during Keyword Search, the search is cancelled and the HDD play mode returns to Normal Play. When an album match is made, playback starts from the first track in the album. When a track match is made, playback starts from the beginning of the track.

To check information about the matches



*1 Even if there are 21 or more matches, the display shows “X/20”.

*2 Each page contains up to 20 items.

To	Press
Go ahead	HDD \triangleright
Go back	HDD \triangleleft

continued

Locating a desired album or track (continued)

By pressing the DISPLAY button, you can check more information about the current item. Each time you press the button, the lower part of the display changes as follows:

Album or track name → Album (and track) number

Tips

- When you press the SEARCH/CHAR button (or the SEARCH button on the remote) while the current item is displayed, the display for entering a keyword appears again. This allows you to do another search with another keyword under the same condition as the previous keyword.
- In step 5, you can register the track to a play list by pressing the PLAY LIST button on the remote. (see “Playing a track in a play list” on page 20).

Searching by playback (Highlight Play)

This function allows you to easily locate an album on the HDD by playing back a part of a representative track in each album.

To register a representative track for Highlight Play

1 While the recorder is playing or paused in Normal Play, press HIGH-LIGHT on the remote.

Rehearsal playback starts from the point where you pressed the button.

2 While monitoring the sound, turn ALBUM dial (or press ALBUM +/- on the remote repeatedly) to adjust the starting point of Highlight Play.

You can shift the starting point in 1-frame (f) intervals (1 frame = 1/43 second).

The time indication (minute, second and frame) of the current point is displayed

To find a point quickly

Specify the unit (minute, second or frame) by pressing the HDD \lll/\ggg buttons repeatedly. The selected unit flashes in the display.

3 Press ALBUM dial or YES.

“Complete!” appears in the display and the Highlight position of the representative track in the album is registered for Highlight Play.

The Highlight position plays for 10 seconds.

Notes

- If the registration of the Highlight position has not been performed, the beginning of the first track in the album becomes the Highlight position of the album.
- Only one track can be selected as the representative track for each album. The Highlight position can be registered for any of the tracks. However, if you register more than two Highlight positions in the same album, the last track with the Highlight position registered becomes the representative track for that album.
- During Highlight Play, you cannot:
 - register a Highlight position
 - register a track to a play list
- You cannot register a Highlight position to a play list (album numbers 501 to 510).

To play an album found through Highlight Play

1 While the recorder is stopped, press HIGH-LIGHT on the remote.

Highlight Play starts and HDD's \triangleright flashes in the display.

2 While monitoring the sound, turn ALBUM dial (or press ALBUM +/- on the remote repeatedly) to locate the desired album.

3 Press HDD \triangleright .

Playback starts from the first track in the selected album.

Note

If you perform Highlight Play when Shuffle Play is selected, the HDD play mode automatically switches to Normal Play.

Before editing

You can edit an HDD track only when the HDD play mode is Normal Play.

To cancel the last edit

Use Undo function to cancel the last edit and restore the contents of the HDD to the condition before the edit.

To quit while editing

Press MENU/NO or HDD ■.

Erasing recordings

—Erase Function

The HDD recorder lets you erase unwanted tracks quickly and easily.

The two options for erasing recordings are:

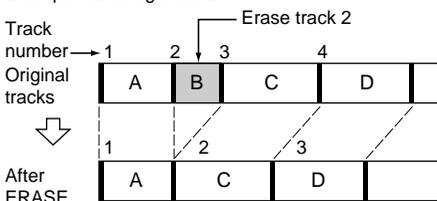
- Erasing a single track (Track Erase)
- Erasing all tracks in an album (Album Erase)

When using the remote, set SELECT to HDD.

Erasing a single track (Track Erase)

You can erase a track simply by selecting its track number. When you erase a track, the total number of tracks in the album decreases by one and all the tracks following the erased one are renumbered.

Example: Erasing track 2



1 While the recorder is stopped, playing or paused, press MENU/NO after selecting the album you want to edit.
“Edit Menu” appears in the display.

2 Turn ALBUM dial (or press ALBUM +/- on the remote repeatedly) until “Tr Erase?” flashes in the display, then press ALBUM dial or YES.
The display for erasing tracks appears and playback of the displayed track starts.

3 Turn ALBUM dial (or press ALBUM +/- on the remote repeatedly) until the track number you want to erase flashes.

4 Press ALBUM dial or YES.

“Complete!” appears for a few seconds.

The track following the erased track starts playing. If you erase the last track in the album, the track preceding the erased track starts playing.

Notes

- If erasing a track causes an album or play list to become empty, the album or the play list will be also erased.
- If you erase a track that is registered to a play list, the track is erased from the play list also. Afterwards, the contents of the play list cannot be restored to the condition before the edit even if you use the Undo function.
- If you erase a track containing a registered Highlight position (for Highlight Play), the track following the erased one becomes the registered track instead. After the erasure of such a track, the Highlight Play registration cannot be restored to the condition before the edit, even if you use the Undo function.

continued

Erasing recordings (continued)

Erasing all tracks in an album (Album Erase)

Do the procedure below to erase all tracks, track names, album name and artist name at once.

1 While the recorder is stopped, playing or paused, press MENU/NO after selecting the album you want to edit.

“Edit Menu” appears in the display.

2 Turn ALBUM dial (or press ALBUM +/- on the remote repeatedly) until “Album Ers?” flashes in the display, then press ALBUM dial or YES.

“Album Ers??” flashes in the display.

3 Press ALBUM dial or YES.

“Complete!” appears for a few seconds.

Notes

- Once an album is erased by the Album Erase function, it cannot be restored, even if you use Undo function.
- Do not turn off the recorder while “Erasing” appears in the display.

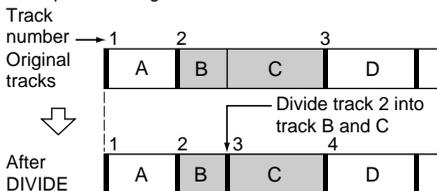
Dividing recorded tracks

— Divide Function

You can use this function to mark numbers after recording. The total number of tracks in the album increases by one and all the tracks following the divided one are renumbered.

When using the remote, set SELECT to HDD.

Example: Dividing track 2 into two tracks



1 While the recorder is stopped, playing or paused, press MENU/NO after selecting the album you want to edit.

“Edit Menu” appears in the display.

2 Turn ALBUM dial (or press ALBUM +/- on the remote repeatedly) until “Divide?” flashes in the display, then press ALBUM dial or YES.

3 Turn ALBUM dial (or press ALBUM +/- on the remote repeatedly) until the track number you want to divide flashes, then press ALBUM dial or YES at the dividing point.

“– Rehearsal –” appears and the recorder repeatedly plays several seconds of the track from the point where you pressed the ALBUM dial or the YES button.

4 While monitoring the sound, turn ALBUM dial (or press ALBUM +/- on the remote repeatedly) to locate the dividing point.

You can shift the starting point in 1-frame (f) intervals (1 frame = 1/43 second)

The time indication (minute, second and frame) of the current point is displayed and the recorder plays several seconds of the track from that point repeatedly.

To find a point quickly

Specify the unit (minute, second or frame) by pressing the HDD ◀◀/▶▶ buttons repeatedly. The selected unit flashes in the display.

5 Press ALBUM dial or YES.

“Complete!” appears for a few seconds.

The newly created track starts playing.

Note that new track has no name.

Tips

- You can divide a track while recording. For details, see “Marking track numbers while recording” on page 15.
- If you divide a track with a Highlight position, the track with the Highlight position becomes the representative track. If you divide a track in the middle of the Highlight position, the 10 seconds up to the dividing point automatically become the new Highlight position, and the track containing the Highlight position becomes the new representative track of the album.

Notes

- You cannot divide a track at its beginning or end.
- You cannot divide a track if the total number of tracks in the album will exceed 400 after the division.
- You cannot divide a track if the total number of tracks on the HDD will exceed 20,000 after the division.
- You cannot divide tracks in a play list.

Combining recorded tracks

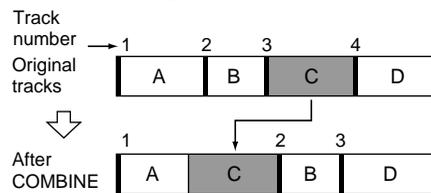
— Combine Function

You can use this function to combine 2 tracks into a single track. The total number of tracks in the album decreases by one and all the tracks following the combined ones are renumbered.

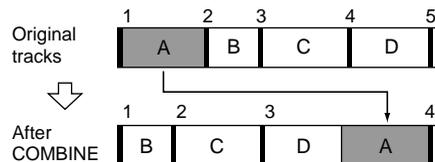
You can also use this function to erase unnecessary track numbers.

When using the remote, set SELECT to HDD.

Example: Combining track 3 to track 1



Example: Combining track 1 to track 4



1 While the recorder is stopped, playing or paused, press MENU/NO after selecting the album you want to edit.
“Edit Menu” appears in the display.

2 Turn ALBUM dial (or press ALBUM +/- on the remote repeatedly) until “Combine?” flashes in the display, then press ALBUM dial or YES.

3 Turn ALBUM dial (or press ALBUM +/- on the remote repeatedly) until the track number of the first track you want to combine flashes, then press ALBUM dial or YES.

The display for selecting a second track appears and the recorder plays the portion where joining will occur (the end of the first track and the beginning of the second track following it) repeatedly.

4 Turn ALBUM dial (or press ALBUM +/- on the remote repeatedly) until the track number of the second track you want to combine flashes, then press ALBUM dial or YES.

“Complete!” appears for a few seconds.

The combined track starts playing.

Notes

- If both of the combined tracks have track names, the name of the second track is erased.
- If “Impossible” appears in the display, the tracks cannot be combined because repeated editing has been done to the track(s). This is a technical limitation of the HDD system and is not a mechanical error.
- You cannot combine tracks if the total playing time of the tracks will exceed 120 minutes after the combination.
- You cannot combine tracks in a play list.

Moving recorded tracks or albums

— Move Function

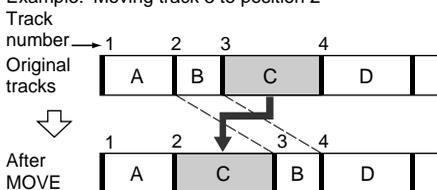
You can use this function to change the order of any track or album on the HDD.

When using the remote, set SELECT to HDD.

Moving recorded tracks

When you move tracks, the tracks are automatically renumbered.

Example: Moving track 3 to position 2



- 1 While the recorder is stopped, playing or paused, press MENU/NO after selecting the album you want to edit. “Edit Menu” appears in the display.
- 2 Turn ALBUM dial (or press ALBUM +/- on the remote repeatedly) until “Move?” flashes in the display, then press ALBUM dial or YES.
- 3 Turn ALBUM dial (or press ALBUM +/- on the remote repeatedly) until the track number you want to move flashes, then press ALBUM dial or YES.
- 4 Turn ALBUM dial (or press ALBUM +/- on the remote repeatedly) until the new track position flashes, then press ALBUM dial or YES.

“Complete!” appears for a few seconds.
The moved track starts playing.

Moving recorded albums

You can change the order of album numbers 1 to 500. (album numbers 501 to 510 in the case of play lists)

All tracks in an album can be simultaneously moved to an album that contains no tracks.

- 1 While the recorder is stopped, playing or paused, press MENU/NO after selecting the album you want to edit. “Edit Menu” appears in the display.
- 2 Turn ALBUM dial (or press ALBUM +/- on the remote repeatedly) until “Move?” flashes in the display, then press ALBUM dial or YES.
- 3 Turn ALBUM dial (or press ALBUM +/- on the remote repeatedly) until “Album” flashes, then press ALBUM dial or YES.
- 4 Turn ALBUM dial (or press ALBUM +/- on the remote repeatedly) until the new album position flashes, then press ALBUM dial or YES.
“Complete!” appears for a few seconds.
The album after being moved becomes the current album.

Notes

- You cannot move a track in an album to a play list, or a track in a play list to an album.
- It is not possible to move an album numbered 1 to 500 to produce an album with a number of 501 to 510 (a play list number). It is not possible to move an album numbered 501 to 510 to produce an album with a number of 1 to 500.
- It is not possible to move an album (or play list) when there is no album (or play list) that contains no tracks.
- Moving an album does not affect the order of its tracks.

Assigning a title or artist name to a track, album or play list

—Name Function

You can enter a title or artist name for albums and play lists as well as for individual tracks. Name can consist of uppercase and lowercase letters, numbers and symbols. Up to 127 characters can be entered for each name.

When using the remote, set SELECT to HDD.

Notes

- If you name a track while it is being recorded, be sure to finish the naming operation before the track ends. If the track ends before you have completed the naming operation, the entered character data will be discarded and track will remain unnamed.
- You cannot name an album during recording.
- You cannot name tracks in a play list. Track names in a play list cannot be erased or changed.

Assigning a title or artist name using the controls on the recorder

1 While the recorder is stopped, playing or paused, press MENU/NO after selecting the album you want to edit.

“Edit Menu” appears in the display.

2 Turn ALBUM dial until “Name In?” flashes in the display, then press ALBUM dial or YES.

3 Turn ALBUM dial to select the item, then press ALBUM dial or YES.

To	Select
Assign a title to a track, album or play list	Nm Title?.
Assign an artist name to a track, album or play list	Nm Artist?.

While the recorder is recording, a flashing cursor appears in the display and you can enter a name of the track being recorded. In this case, go to step 5.

4 Turn ALBUM dial to select the item, then press ALBUM dial or YES.

To	Select
Name a track	A track number.
Name an album or play list	Album.

A flashing cursor appears.

The recorder starts playing and you can assign a title or artist name while monitoring the sound. (for track only)

5 Press SEARCH/CHAR repeatedly to select the character type.

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

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

To enter a space

Press HDD ▷▷| while the cursor is flashing.

6 Turn ALBUM dial to select the character.

The selected character flashes.

To enter a symbol

You can use the following symbols in names:

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

To change a selected character

Repeat steps 5 and 6.

7 Press ALBUM dial.

The selected character is entered and lights continuously. The cursor shifts to the right, flashes and waits for the input of the next character.

continued

Assigning a title or artist name to a track, album or play list (continued)

8 Repeat steps 5 through 7 to enter the rest of the name.

To change a character

Press HDD **◀◀/▶▶** repeatedly until the character you want to change flashes, then repeat steps 5 and 6.

To erase a character

Press HDD **◀◀/▶▶** repeatedly until the character you want to erase flashes, then press CLEAR.

9 Press YES.

“Complete!” appears for a few seconds.

Assigning a title using the remote

1 After selecting the album you want to edit, press NAME EDIT/SELECT depending on what you want to name.

To name	Press while
A track	The recorder is playing or recording. (the track number is displayed)
An album or play list	The recorder is stopped with the total number of tracks displayed.

A flashing cursor appears in the display.

Note

You cannot assign an artist name using the remote.

2 Press NAME EDIT/SELECT repeatedly to select the character type.

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

“Selected AB” (Upper cases or symbols*)

→ “Selected ab” (Lower cases or symbols*)

→ “Selected 12” (Numbers)

* Only ‘ - / . () : ! ? can be selected.

You can enter a space by pressing the 10/0 button.

3 Enter a character using letter/numeric buttons.

If you have selected upper cases or lower cases

1 Press corresponding letter/numeric button repeatedly until the character you want to enter flashes.

Or press ALBUM +/- repeatedly.

2 Press **▶▶**.

The flashing character is entered and lights continuously and the cursor shifts to the right.

4 Repeat steps 2 and 3 to enter the rest of the name.

To change a character

Press **◀◀/▶▶** repeatedly until the character you want to change flashes, press CLEAR to erase the character, then repeat steps 2 and 3.

5 Press YES.

“Complete!” appears for a few seconds.

Renaming a track, album or play list

1 Do steps 1 through 4 of “Assigning a title or artist name using the controls on the recorder” on page 27 or step 1 of “Assigning a title using the remote” on this page.

A title or artist name appears in the display.

Note

You cannot reassign an artist name using the remote.

2 Press and hold down CLEAR until the selected name is erased completely.

3 Do steps 5 through 8 of “Assigning a title or artist name using the controls on the recorder” on page 27 or steps 2 through 4 of “Assigning a title using the remote” on this page.

4 Press YES.

“Complete!” appears for a few seconds.

Erasing a title or artist name

You can use this function to erase a title or artist name.

- 1 **While the recorder is stopped, playing or paused, press MENU/NO after selecting the album you want to edit.**
“Edit Menu” appears in the display.
- 2 **Turn ALBUM dial (or press ALBUM +/- on the remote repeatedly) until “Name Erase?” flashes in the display, then press ALBUM dial or YES.**
- 3 **Turn ALBUM dial (or press ALBUM +/- on the remote) to select the item, then press ALBUM dial or YES.**

To	Select
Erase a title	Ers Title?.
Erase an artist name	Ers Artist?.

While the recorder is recording, “Complete!” appears for a few seconds and the name of the track being recorded is erased.

- 4 **Turn ALBUM dial (or press ALBUM +/- on the remote repeatedly) to select the item, then press ALBUM dial or YES.**

To	Select
Erase a name of a track	A track number.
Erase a name of an album or play list	Album.

“Complete!” appears for a few seconds.

Undoing the last edit

—Undo Function

You can undo the last edit operation and restore the contents of the HDD to the condition that existed before the operation. Note, however, that you cannot undo an edit operation if you perform any of the following operation after the edit:

- Do another edit.
- Start recording.
- Perform a play list or Highlight Play registration.
- Turn off the recorder.
- Disconnect the power cord.

When using the remote, set SELECT to HDD.

- 1 **While the recorder is stopped, playing or paused, press MENU/NO.**
“Edit Menu” appears in the display.
- 2 **Turn ALBUM dial (or press ALBUM +/- on the remote repeatedly) until “Undo?” flashes in the display.**
“Undo” does not appear if no editing has been done.
- 3 **Press ALBUM dial or YES.**
One of the messages appears depending on the last edit operation.
- 4 **Press ALBUM dial or YES.**
“Complete!” appears for a few seconds.

Falling asleep to music

— Sleep Timer

You can set the recorder so that it turns off automatically after a specified duration.

1 Press MENU/NO.

“Edit Menu” appears in the display.

2 Turn ALBUM dial (or press ALBUM +/- on the remote repeatedly) until “Setup?” flashes in the display, then press ALBUM dial or YES.

“Setup Menu” appears in the display.

3 Turn ALBUM dial (or press ALBUM +/- on the remote repeatedly) until “Sleep Off” (or “Sleep XXmin”) appears in the display, then press ALBUM dial or YES.

“Setup Menu” appears in the display.

4 Turn ALBUM dial (or press ALBUM +/- on the remote repeatedly) to select a desired time (“Off”, “30min”, “60min”, “90min”, “120min”), then press ALBUM dial or YES.

“SLEEP” appears in the display.

5 Press MENU/NO.

Tip

You can check the remaining time.

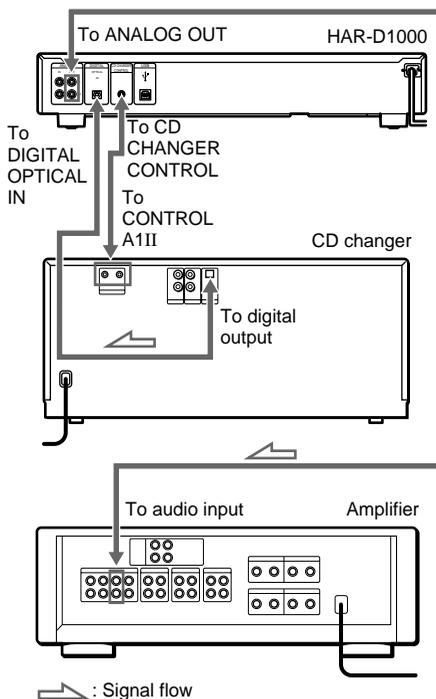
Once you turn on Sleep Timer, the remaining time is displayed when you select “Sleep” in Setup Menu.

Recording from a CD changer

If you have a Sony CD changer in which 200, 300 or 400 CDs can be inserted and which is equipped with the CONTROL A1II (or CONTROL A1) jack, after connecting the changer and an amplifier, follow the procedure below. For details on CD changer operations, refer to the instructions included with the CD changer.

This function is not supported by all Sony CD changers. The following CD changers are recommended:

CDP-CX235, CDP-CX335, CDP-CX400, CDP-CX450, CDP-CX333ES, CDP-M333ES, CDP-CX555ES, CDP-M555ES, CDP-CX230, CDP-CX300, CDP-CX350



1 Connect components to the recorder. (see also “Hooking up the system” on page 7)

After turning on the CD changer, load the desired CDs into the CD changer.

2 Press MENU/NO.

“Edit Menu” appears in the display.

3 Turn ALBUM dial (or press ALBUM +/- on the remote repeatedly) until “Setup?” flashes in the display, then press ALBUM dial or YES.

“Setup Menu” appears in the display.

4 Turn ALBUM dial (or press ALBUM +/- on the remote repeatedly) until “Sync Normal” (or “Sync High” or “SyncChanger”) appears in the display, then press ALBUM dial or YES.

5 Turn ALBUM dial (or press ALBUM +/- on the remote repeatedly) to select “SyncChanger”, then press ALBUM dial or YES.

6 Press MENU/NO.

7 Press CD SYNC.

“CD SYNCHRO – Changer –” appears in the display.

8 When “Start Disc” appears in the display, turn ALBUM dial (or press ALBUM +/- on the remote repeatedly) to select the starting disc among those loaded in step 1.

9 Press ALBUM dial or YES.

“End Disc” appears in the display.

10 Turn ALBUM dial (or press ALBUM +/- on the remote repeatedly) to select the ending disc among those loaded in step 1.

11 Press ALBUM dial or YES.

The HDD stands by for recording and the CD changer stands by for playback.

In the albums containing no tracks, the one with the smallest album number is automatically set as the recording destination. If you want to change an album position, turn ALBUM dial (or press ALBUM +/- on the remote repeatedly) to select the desired position.

12 After “CD SYNCHRO – Changer –” disappears, press HDD ▷ or HDD ■.

Recording starts.

To stop recording

Press HDD ■.

Tips

- In steps 8 and 10, you can use the HDD ◀◀|▶▶ buttons to select the disc number. In this case, only disc numbers that are multiples of 10 can be selected.
- In step 10, you can press the MENU/NO button to return to the display for selecting the starting disc.
- If you set “TxtSave” to “On” in the setup menu, CD text (track name only) can be saved to the HDD automatically.
- When using a CD changer that holds 300 or more CDs, set the CONTROL A1 setting on the CD changer to “CONTROL A1II”.
- Synchro-Recording enables the assignment of album and track names from the Cddb2. For details on the Cddb2, refer to the Help for “M-crew for HAR-D1000”.

Notes

- Do not turn off the CD changer during recording.
- Do not disconnect the optical cable and the CONTROL A1 cable during recording.
- The time and text information on the current CD do not appear in the recorder’s display.
- If the HDD becomes full during recording, recording ends automatically.
- You cannot pause recording during Synchro-Recording.
- Depending on the condition of the CD changer, some CDs may not be recorded or recording may have stopped in the middle of some CD. Check the condition of the CD changer and record the CDs again.
- Depending on the way your CD changer operates, a short track with no sound may be recorded in some cases.
- The CD changer’s play mode automatically switches to Normal Play.
- The HDD play mode automatically switches to Normal Play.
- Sound input automatically switches to “OPT” during Synchro-Recording.
- The recording level changes to 0.0 dB automatically during CD-HDD Synchro Recording no matter what the setting in the setup menu is.
- While “Remote” appears in the CD changer’s display, most of the controls and buttons for the CD changer are inoperative.
- CD text may not be saved for short tracks.
- The supplied M-crew for HAR-D1000 does not support Synchro-Recording from a CD changer.

Precautions

On safety

- Caution — The use of optical instruments with this product will increase eye hazard.
- Should any solid object or liquid fall into the cabinet, unplug the recorder and have it checked by qualified personnel before operating it any further.
- Discs with non-standard shapes (e.g., heart, square, star) cannot be played on this unit. Attempting to do so may damage the unit. Do not use such discs.

On power sources

- Before operating the recorder, check that the operating voltage of the recorder is identical with your local power supply. The operating voltage is indicated on the nameplate at the rear of the recorder.
- 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.
- Be sure to turn off the recorder before disconnecting the power cord.
- If you are not going to use the recorder for a long time, be sure to disconnect the recorder from the wall outlet. To disconnect the AC power cord (mains lead), grasp the plug itself; never pull the cord.
- AC power cord must be changed only at the qualified service shop.

On placement

- Place the recorder in a location with adequate ventilation to prevent heat build-up in the recorder.
- Do not place the recorder on a soft surface such as a rug that might block the ventilation holes on the bottom.
- Do not place the recorder in a location near heat sources, or in a place subject to direct sunlight, excessive dust or mechanical shock.
- Do not place heavy objects such as an amplifier, deck, etc. on top of the recorder.

On operation

- If the recorder is brought directly from a cold to a warm location, or is placed in a very damp room, moisture may condense on the lenses inside the recorder. Should this occur, the recorder may not operate properly. In this case, remove the CD and leave the recorder turned on for about an hour until the moisture evaporates.

On cleaning

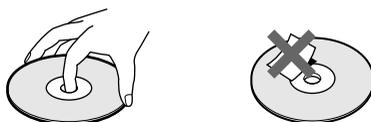
- Clean the cabinet, panel and controls with a soft cloth slightly moistened with a mild detergent solution. Do not use any type of abrasive pad, scouring powder, or solvent such as alcohol or benzene.

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

Notes on CDs

On handling CDs

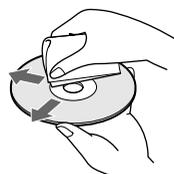
- To keep the CD clean, handle the CD by its edge. Do not touch the surface.
- Do not stick paper or tape on the CD.



- Do not expose the CD to direct sunlight or heat source such as hot air ducts, nor leave it in a car parked in direct sunlight as there can be a considerable rise in temperature inside the car.
- If there is glue or a similar substance on the CD, remove it completely before using the CD.
- After playing, store the CD in its case.

On cleaning

- Fingerprint or dust on the CD may cause poor sound reproduction or sound dropout.
- Before playing, clean the CD with a cleaning cloth. Wipe the CD from the centre out.



- If the CD is still dirty after being wiped with a cleaning cloth, wipe it again with a slightly moistened cloth. Then wipe off the residual moisture with a dry cloth.
- Do not use solvents such as benzene, thinner, commercially available cleaners or anti-static spray intended for vinyl LPs.

On CD-R/CD-RW discs

- This recorder does not support the use of CD-R/CD-RW discs.

Note on High-Speed CD-HDD Synchro-Recording

Certain CD conditions may cause sound dropout or noise in the recording results, or even create unwanted tracks on the HDD. If this happens, clean the CD as instructed on “On cleaning” on page 32, and record material to the HDD using normal-speed CD-HDD Synchro-Recording only.

Notes on handling the hard disc

The hard disc has a high storage density and reads or writes data in a short time with compared to the floppy disk. On the other hand, it may be easily damaged by mechanical vibration, shock or dust. Keep the hard disc away from magnets.

Although the hard disc has safety devices to prevent losing data due to mechanical vibration, shock or dust, you should be careful when handling the recorder. Avoid damaging your data:

- Do not cause a shock or strong vibration to the recorder.
- Do not place the recorder in a location subject to mechanical vibration or in unstable location.
- Do not move the recorder while the power is on.
- Do not turn off the recorder while the HDD indicator lights up blue.
- Do not use the recorder in a place subject to extreme changes in temperature (temperature gradient less than 18 °F (10 °C)/ hour).
- Keep any magnetic objects, including a TV set, speaker, magnet, and magnetic bracelet, away from the recorder.

If the hard disc is damaged, data cannot be restored or recovered.

Troubleshooting

If you experience any of the following difficulties while using the recorder, use this troubleshooting guide to help you remedy the problem. Should any problem persist, consult your nearest Sony dealer.

General

There is no sound.

- Check that the recorder is connected securely.
- Make sure you have operated the amplifier correctly.

The remote does not function.

- Remove the obstacles in the path of the remote and the recorder.
- Point the remote at the remote sensor  on the recorder.
- Replace all the batteries in the remote with new ones if they are weak.

The recorder functions incorrectly.

- The microcomputer chips may be operating incorrectly. Turn the recorder off, then turn it back on to reset the recorder.

CD

The CD does not play.

- There is no CD inside the recorder. “No Disc” appears. Load a CD.
- Load the CD with the label side up on the disc tray correctly.
- Clean the CD (see page 32).
- Moisture has condensed inside the recorder. Remove the CD and leave the recorder turned on for about an hour.
- Load the CD in the correct position on the disc tray.

continued

Troubleshooting (continued)

HDD

The HDD does not play.

- Moisture has condensed inside the recorder. Leave the recorder turned on for about an hour.
 - Press **I/⏻** to turn the recorder on.
-

The HDD does not record.

- Make connections properly to the sound source.
 - The sound source is not connected to the selected input connector. Select the correct input connector using the INPUT button.
 - The recording level is not adjusted properly. Adjust the recording level properly (see page 17).
 - There has been a power failure or the power cord has been disconnected during recording. Data recorded to that point may be lost. Repair the recording procedure.
 - Recording to play lists (album numbers 501 to 510) is not possible. Make sure a play list is not displayed.
-

The HDD does not edit.

- Press PLAY MODE on the remote repeatedly until "SHUFFLE" disappears.
-

The sound has a lot of static.

- Strong magnetism from a television or similar device is interfering with operations. Move the recorder away from the source of strong magnetism.

Display Messages

One of the following messages may appear or flash in the display during operations. Also, the recorder has a Self-Diagnosis Function.

Album Full!

There are no more albums containing no tracks on the HDD. It is not possible to record tracks to create a new album.

Auto Cut

The recorder is pausing the recording because silence continued for 30 seconds or more during digital recording.

Blank Disc

There is no track on the HDD.

Cannot Copy

You tried to play a CD with a format that the recorder does not support, such as a CD-ROM. The sound source is a copy of commercially available music software.

Cannot Edit

You tried to edit in Shuffle Play, or you tried to register a track to a play list that already contains 400 tracks.

Cannot Play

The recorder cannot play the track because of damage to the audio data.

Cannot Rec

You tried to record a track while a play list was displayed.

CD Error!

An operational error has occurred in the recorder. Wait a few seconds, and then try the operation again.

Changer Err

The CD changer malfunctioned. Check the power of the CD changer or status of the disc.

Din Unlock

A moment's lighting is due to the signals of the digital program being recorded. This does not affect the recorded material.

While recording from a digital component connected through the DIGITAL OPTICAL IN connector, the digital connecting cable was unplugged or the digital component turned off.

Drive Error

Consult your nearest Sony dealer.

Drive Full!

Recording tracks is not possible because there is not enough recordable space on the HDD or the maximum number of recordable tracks has been reached.

Erasing

The recorder is erasing data from the HDD. Do not disconnect the power cord.

Format Error

Consult your nearest Sony dealer.

Impossible

You tried to make an impossible editing or recording operation.

Name Full!

The naming capacity of the HDD has reached its limit (about 127 characters).

No Artist

You tried to show the name of a non-labeled artist.

No Disc

There is no CD on the disc tray.

No Name

You tried to show the title of a non-labeled CD, album or track.

No Signal

The recorder has detected a silent portion during recording.

Not Connect

During Synchro Recording from a CD changer, the CD changer does not respond due to a bad cable connection or another problem.

The CD changer does not respond because Synchro Recording from the CD changer is not supported by this recorder.

Reading

The recorder is reading data from the HDD.

Rec Error

Proper recording is not possible.

REMOTE

The recorder is being connected to your computer.*

– Retry –

The recorder is retrying reading data from the CD during the High-speed Synchro Recording.

Smart Space

The signal was input again after silence continued for 3 or more but less than 30 seconds during digital recording.

Step Full!

The program contains the maximum number of tracks. You cannot set additional tracks.

TOC Reading

The recorder is reading the TOC information of the CD.

Track Full!

Recording tracks is not possible because there are 400 tracks in the album. Select another album for recording.

* If "REMOTE" appears under other circumstances, turn off the recorder, then turn on it again.

Setup menu table

Menu item	Reference page
T.Mark	15
LS(T)	15
S.Space	16
CD	17
Opt	17
Anlg	17
Sleep	30
TxtSave	13, 14, 31
Sync Normal	12
Sync High	12
SyncChanger	30

Specifications

CD player section

System	Compact disc and digital audio system
Laser	Semiconductor laser ($\lambda = 780 \text{ nm}$) Emission duration: continuous
Frequency response	5 Hz – 20 kHz ($\pm 0.5 \text{ dB}$)
Signal-to-noise ratio	More than 95 dB
Wow and flutter	Below measurable limit

HDD section

Capacity	40 GB
Recording system	ATRAC 3
Transfer rate	132 kbps
Maximum recording time	About 600 h
Maximum number of albums	500
Maximum number of tracks	20,000
Maximum number of tracks per album	400
Maximum CD-HDD ripping speed	Max. $\times 2$

Input

	Jack type	Input impedance	Rated input	Minimum input
ANALOG IN	Phono jacks	47 kilohms	500 mVrms	125 mVrms
DIGITAL OPTICAL IN	Square optical connector jack	Optical wave length: 660 nm	—	—

Output

	Jack type	Rated output	Load impedance
ANALOG OUT	Phono jacks	2 Vrms (at 50 kilohms)	Over 10 kilohms

General

Power requirements	
North American model:	120 V AC, 60 Hz
European model:	230 V AC, 50/60 Hz
Power consumption	25 W
Dimensions (Approx.) (w/h/d)	430 \times 82.5 \times 285 mm incl. projecting parts and controls
Mass (Approx.)	3.9 kg

Supplied accessories

Audio connecting cord (2)
Remote commander (remote) (1)
Sony R6 (size AA) battery (2)
USB cable (1)

Be sure to use the supplied USB cable with ferrite cores when connecting to a computer.
“M-crew for HAR-D1000” CD-ROM (1)
“M-crew for HAR-D1000” operating instructions (1)

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