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

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

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

This appliance is classified as a CLASS 1 LASER product.

This label is located on the rear exterior.

The following caution label is located inside the apparatus.

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

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.

About this manual
Conventions
Controls in these instructions are those on the deck; these may, however, be substituted by controls on the supplied remote that are similarly named, or, when different, appear in the instructions within parentheses.

Table of Contents

List of Button Locations and Reference Pages
Main unit........................................4
Remote control...............................5

Getting Started
Hooking up the audio components ..........6
Connecting a personal computer to the deck (Net MD)..............7

Recording to MDs
Recording to an MD............................9
Recording tracks in groups
—— Group Function.........................10
Notes on recording..........................12
Recording tips................................12
—— Recording for long times/Marking track numbers/Smart Space/Adjusting the recording level/Checking the remaining recordable time/Input monitor
Starting recording with 6 seconds of prestored audio data
—— Time Machine Recording..............16
Synchro-recording with the audio component of your choice
—— Music Synchro-recording...........17
Synchro-recording with a Sony CD player
—— CD Synchro-recording..............17

Playing MDs
Loading an MD................................19
Playing an MD — Normal Play/Shuffle Play/Repeat Play..............19
Playing only the tracks in the desired group..................................22
Creating your own programme
—— Programme Play........................23
Tips for recording from MDs to tape........................................24

Editing Recorded MDs
Before you start editing........................25
Erasing recordings
—— Erase Function.........................26

Dividing recorded tracks
—— Divide Function.........................28
Combining recorded tracks
—— Combine Function.....................29
Moving recorded tracks
—— Move Function..........................30
Naming a track or an MD
—— Name Function.........................30
Naming a group — Name Function ........33
Creating a new group and registering tracks — Create Function........34
Releasing group registrations
—— Release Function......................35
Changing the recorded level after recording — S.F. EDIT.............36
Undoing the last edit — UNDO.............38

Other Functions
Changing the Pitch
—— Pitch Control Function..............38
Fading in and fading out......................39
Falling asleep to music
—— Sleep Timer............................40
Using a timer................................41

Operating the MD Deck Using a Keyboard
Setting the keyboard........................42
Naming a track or MD using the keyboard......................43
Operating the deck using the keyboard........................43
Assigning characters to keyboard keys........................44

Additional Information
Precautions..................................45
Note on MDs..................................45
System limitations..........................45
Troubleshooting..............................47
Self-diagnosis function......................48
Display messages............................49
Setup menu table............................51
Specifications..............................51
Remote control

ALPHABETICAL ORDER

A - M
AMS 26 (13) (20) (26) (38) (42)
CLEAR 24 (23) (32) (42)
DISPLAY/CHAR 19 (9) (15) (20)
(33)
Display window 20
EJECT D 21 (9) (20) (25)
GROUP ON/OFF 4 (10) (22)
(33)
GROUP SKIP 5 (11) (23) (33)
INPUT 9 (9)
KEYBOARD jack 16 (42)
MD insert/eject 6 (6) (19)
MD LP indicator 7 (13) (20)
MENU/NO 23 (13) (20) (25) (38)
(42)

N - Y
NET MD 6 (8)
PHONE LEVEL 15 (20)
PHONES jack 14 (16) (20) (39)
PLAY MODE 7 (19) (41)
REC LEVEL 11 (13)
REC MODE 8 (12)
REC* 10 (9) (13) (16)
Remote sensor 2 (7)
REPEAT D 11 (9)
STANDBY indicator D 19 (19)
T.REC 17 (16)
YES D 18 (13) (24) (26) (38) (42)

BUTTON DESCRIPTIONS

1/0 D 1 (9) (19) (25)
7 D 9 (20) (43)
8 D 9 (20) (23) (41) (43)
9 D 9 (20) (27) (43)
10 D 15 (13) (20) (26) (38) (42)
11 D 9 (11) (16)
12 D 9 (19) (41) (43)
13 D 9 (20) (25)
Getting Started

Hooking up the audio components

1) Digital equipment with a DIGITAL OUT connector only
2) Digital equipment with both DIGITAL IN and OUT connectors

Required cords

A Audio connecting cords (2) (supplied)
When connecting an audio connecting cord, be sure to match the colour-coded pins to the appropriate jacks:
- white (L) to white and red (R) to red.
- Red (R)

B Optical cables (2) (only one supplied)
- When connecting an optical cable, insert the cable plugs straight in until they click into place.
- Do not bend or twist the optical cables.

C Coaxial digital connecting cable (1)
(not supplied)

Hookup considerations

- Turn off the power of all components before making any connections.
- Do not connect any mains lead until all the connections are completed.
- Be sure the connections are firm to prevent hum and noise.

Jacks (connectors) for connecting audio components

<table>
<thead>
<tr>
<th>Connect</th>
<th>To the</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amplifiers</td>
<td>ANALOG IN/OUT jacks</td>
</tr>
<tr>
<td>CD players or DBS tuners</td>
<td>DIGITAL COAXIAL IN jack or DIGITAL OPTICAL IN connector</td>
</tr>
<tr>
<td>Digital amplifiers, DAT, or another MD deck</td>
<td>DIGITAL OPTICAL IN/OUT connectors</td>
</tr>
</tbody>
</table>

To connect the mains lead
Connect the mains lead of the deck to mains.

Note
If you use a timer, connect the mains lead to the socket of the timer.

Inserting batteries into the remote

Insert two R6 (size-AA) batteries into the battery compartment with the + and − properly oriented to the markings. When using the remote, point it at the remote sensor on the deck.

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

Notes
- Do not leave the remote in an extremely hot or humid place.
- Do not expose the remote sensor to direct sunlight or lighting apparatus. Doing so may cause a malfunction.

Connecting a personal computer to the deck (Net MD)

By installing the supplied software OpenMG Jukebox onto your computer, you can transfer digital music contents saved on the hard disc of your computer (Check Out) and from (Check In) an MD. For details on the installation and operation of OpenMG Jukebox, refer to the instruction manual or the online help for OpenMG Jukebox.

Be sure to install the OpenMG Jukebox software to your computer before you connect the MD deck and your computer.

continued
Using the Net MD function

1. Turn on the computer.
2. Press I/O to turn on the deck. The STANDBY indicator turns off.
3. Load an MD into the slot.
4. Press NET MD. The Net MD function is activated. The NET MD button lights up and “Net MD” appears in the display.

Start up and operate OpenMG Jukebox on the computer.

5. Quit OpenMG Jukebox after use.
6. Press NET MD to turn off the Net MD function.

Notes
- When the Net MD function is on, only the following buttons on the MD deck can be operated:
  - EJECT
  - NET MD
  - I/O
- However, note that these buttons may not function when the deck is in certain statuses.
- When the Net MD function is turned on, the following functions are cancelled or the settings are cleared:
  - Repeat Play, Shuffle Play, Programme Play
  - Group function
  - Sleep Timer
  - Auto Space, Auto Pause
  - Pitch Control
- When “Check USB” appears in the display, check the USB connection of the deck and the computer.
- You cannot perform editing operations on the checked out tracks other than “Moving recorded tracks” on page 30 and “Renaming a track or an MD” on page 30 using this deck.

Recording to an MD

If the MD has been partially recorded, recording starts after the recorded tracks.

1. Turn on the amplifier and programme source, and select the source on the amplifier.
2. Press I/O to turn on the deck. The STANDBY indicator turns off.
3. Load a recordable MD into the slot (page 19).
4. Press INPUT repeatedly to select the input jacks (connector) connected to the programme source.

<table>
<thead>
<tr>
<th>When the source is connected to the</th>
<th>Set INPUT to</th>
</tr>
</thead>
<tbody>
<tr>
<td>DIGITAL/OPTICAL IN connector</td>
<td>OPT</td>
</tr>
<tr>
<td>DIGITAL/COAXIAL IN jack COAX</td>
<td></td>
</tr>
<tr>
<td>ANALOG IN jacks ANALOG</td>
<td></td>
</tr>
</tbody>
</table>

5. Press REC.

The deck changes to recording pause.

6. If necessary, adjust the recording level.
   For details, see “Adjusting the recording level” on page 15.

7. Press ▶ or ▷, then start playing the desired source to record.

Operations you may want to do during recording

<table>
<thead>
<tr>
<th>To</th>
<th>Press</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stop recording</td>
<td>❌</td>
</tr>
<tr>
<td>Pause recording</td>
<td>[</td>
</tr>
<tr>
<td>Resume recording after passing</td>
<td>[</td>
</tr>
<tr>
<td>Eject the MD</td>
<td>EJECT</td>
</tr>
<tr>
<td>Eject the MD after stopping</td>
<td>EJECT</td>
</tr>
</tbody>
</table>

1) The track number increases by one.

To change the display while recording

Press DISPLAY/CHAR (or DISPLAY) repeatedly to change the display.

Each press of the button changes the display cyclically as follows:

Note
- Note that, depending on the status of the deck, the display may not conform to the cycle shown below.
- Track number and recorded time of the current track → Track number and remaining record time2 on the MD → Level of the input signal (setting value of the recording level) → Sampling frequency indication1
- Time shown in the display differs depending on the setting of REC MODE.
- “FS - kHz” appears while the analogue signal is input.
Recording tracks in groups

Group Function

What is the Group function?
The Group function allows you to play, record, and edit the tracks on an MD in groups. It is convenient for managing multiple CD albums recorded in MDLP mode on a single MD. The Group function is turned on and off by pressing GROUP ON/OFF.

Group Function: Off

Disc

Track
1 2 3 4 5 6 7 8 9

Group Function: On

Disc

Group 1

Track
1 2 3 4 5

Group 2

Track
1 2 3 4

Operations using the Group function

- Playing only the tracks in the desired group (page 22)
- Naming a group (page 33)
- Creating a new group and registering tracks (page 34)
- Releasing group registrations (page 35)

Note

MDs recorded using the Group function of this deck can be used with other systems that support the Group function. However, note that the Group function operations of other systems may differ from the operations for this deck.

How is group information recorded?

When recording using the Group function, the group management information is automatically recorded on the MD as the disc name. Specifically, a character string such as the following is written in the disc name recording area.

Disc name recording area

Favorites / Rock / Pops / ...

The disc name is "Favorites." Tracks 1 to 5 are registered in the "Rock" group. Tracks 6 to 9 are registered in the "Pops" group.

Therefore, when an MD recorded using the Group function is loaded on a system that does not support the Group function or on this deck with the Group function turned off, the above character string is displayed in its entirety as the disc name.

Note that if you perform the procedure for "Renaming a track or an MD" on page 32 and rewrite this character string by mistake, you may be unable to use the Group function of that MD.1)

1) The GROUP ON/OFF button flashes. To use the Group function again, first perform the procedure for "Renaming a track or an MD" on page 32 and rewrite this character string by mistake, you may be unable to use the Group function of that MD.

Notes

- The Group function setting is stored even if you eject the MD or turn off the deck.
- When the Group function is activated, tracks which are not registered to a group are not displayed and cannot be played.
- You cannot change the group order.
- If you load a disc with group management information written in other than the proper format, the GROUP ON/OFF button flashes. In this case, you cannot use the Group function.

Recording into a new group

You can create new groups by CD album or artist, etc.

1) Do steps 1 to 4 of "Recording to an MD" on page 9.

2) Press GROUP ON/OFF. The GROUP ON/OFF button lights up.

3) Press REC. "New Group" flashes and the deck changes to recording pause.

4) Do steps 6 to 7 of "Recording to an MD" on page 9.

To continue and record into another new group, press · repeatedly after the recording to display the disc name and the total number of groups, then do steps 3 and 4.

If "Group Full!" appears when you press REC to start recording

You cannot start recording because there is insufficient character space for group management.

Delete unnecessary characters (disc name or track names) until group recording is possible (see "Erasing a track or disc name" on page 32).

Notes

- The recorded track is added to the end of the group.
- When you newly record a track into an existing group, the track numbers following the newly recorded track may change when the Group function is turned off.
- If "Group Full!" appears while recording, track numbers are not marked.

Recording into an existing group

You can add tracks to an existing group.

1) Do steps 1 to 4 of "Recording to an MD" on page 9.

2) Press GROUP ON/OFF. The GROUP ON/OFF button lights up.

3) Press GROUP SKIP repeatedly until the group you want to record in appears.

4) Press REC. "New Track" flashes and the deck changes to recording pause.

5) Do steps 6 to 7 of "Recording to an MD" on page 9.

If "Group Full!" appears when you press REC to start recording

You cannot start recording because there is insufficient character space for group management.

Delete unnecessary characters (disc name or track names) until group recording is possible (see "Erasing a track or disc name" on page 32).

Notes

- The recorded track is added to the end of the group.
- When you newly record a track into an existing group, the track numbers following the newly recorded track may change when the Group function is turned off.
- If "Group Full!" appears while recording, track numbers are not marked.
Notes on recording

After recording
Press EJECT @ to remove the MD or press I/O) to turn off the deck.
“TOC” or “TOC Writing” starts flashing. The TOC is updated and recording is completed.

Before disconnecting the mains lead
MD recording is completed when the MD Table of Contents (TOC) is updated. The TOC is updated when you eject the MD or press I/O to turn off the deck. Do not disconnect the mains lead before updating the TOC (while “TOC” is lit) or while updating the TOC (while “TOC Writing” is flashing) to ensure a complete recording.

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 MD deck. This allows you to monitor and record sources such as 32- or 44.1-kHz DAT tape or satellite broadcasts, as well as the CDs and MDs.

To prevent accidental erasure of the recorded material
To protect an MD recording, slide the record-protect tab in the direction of the arrow (see illustration below) to open the slot. To enable re-recording, close the slot.

Recording tips

Recording for long times/Marking track numbers/Smart Space/Adjusting the recording level/Checking the remaining recordable time/input monitor

All of the functions described here can be used even when the Group function is on. For a detailed description of the Group function, see page 10.

Recording for long times
This deck has two long time recording modes: LP2 and LP4 (MDLP recording). When recording in LP2 Stereo mode, you can record 2 times the normal recordable time, and in LP4 Stereo mode, you can record 4 times the normal recordable time. In addition, the recordable time for monaural recording is approximately double the stereo recording time.
LP4 Stereo mode (4x long time recording mode) achieves a long stereo recording time by use of a special compression system. When placed emphasis on sound quality, Stereo recording or LP2 Stereo recording (2x long time recording mode) is recommended.

1. Do steps 1 to 4 of “Recording to an MD” on page 9.
2. Press REC MODE repeatedly to select the recording mode.

<table>
<thead>
<tr>
<th>To record in</th>
<th>Set REC MODE to</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stereo</td>
<td>Blank (No indicator)</td>
</tr>
<tr>
<td>LP2 Stereo</td>
<td>LP2</td>
</tr>
<tr>
<td>LP4 Stereo</td>
<td>LP4</td>
</tr>
<tr>
<td>Monaural</td>
<td>MONO</td>
</tr>
</tbody>
</table>

3. Do steps 5 to 7 of “Recording to an MD” on page 9.

Tips
- The MDLP indicator lights up when you select LP2 or LP4 in step 2 above.
- The deck is set at the factory to add “LP” at the beginning of a track name automatically.
- This indication is displayed when the track is played on a deck that does not support long-time recording.
To turn off this function, do the following procedure.
1. While the deck is stopped, pressing, or paused, press MENU/NO.
2. Turn AMS (or press [ ] [ ] [ ] repeatedly) until “Setup?” appears, then press AMS or YES.
3. Turn AMS (or press [ ] [ ] [ ] repeatedly) until “LPstamp On” (factory setting) appears, then press AMS or YES.
4. Turn AMS (or press [ ] [ ] [ ] repeatedly) to select “LPstamp Off”, and then press AMS or YES.
5. Press MENU/NO.

Marking track numbers while recording
— Manual/Automatic Track Marking
You can mark 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 MD easily.

Marking track numbers manually (Manual Track Marking)
While recording, press REC at the point where you want to add a track number.

Marking track numbers automatically (Automatic Track Marking)
When recording from a CD player or MD deck connected to a DIGITAL IN connector, the deck marks track numbers in the same sequence as the source.
When recording from other sources connected to the DIGITAL IN connector or a 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 source sound to be recorded is noisy (e.g., tapes or radio programmes).

1. While the deck is stopped, press MENU/NO.
2. Turn AMS (or press [ ] [ ] [ ] repeatedly) until “Setup?” appears, then press AMS or YES.
3. Turn AMS (or press [ ] [ ] [ ] repeatedly) until “TMark LSync(c)” appears, then press AMS or YES.
4. Turn AMS (or press [ ] [ ] [ ] repeatedly) to select the setting, then press AMS or YES.

<table>
<thead>
<tr>
<th>To</th>
<th>Select</th>
</tr>
</thead>
<tbody>
<tr>
<td>Turn on Automatic Track Marking</td>
<td>T.Mark LSync(c) (factory setting)</td>
</tr>
<tr>
<td>Turn off Automatic Track Marking</td>
<td>T.Mark Off</td>
</tr>
</tbody>
</table>

When you select “T.Mark LSync(c)”, “LSYNC” lights up.

5. Press MENU/NO.
To change the trigger level for Automatic Track Marking
Do the procedure below to change the signal level that triggers Automatic Track Marking.

1. While the deck is stopped, press MENU/NO.
2. Turn AMS (or press [◄/►]) repeatedly until "Setup?" appears, then press AMS or YES.
3. Turn AMS (or press [◄/►]) repeatedly until "LS(T)" appears, then press AMS or YES.
4. Turn AMS (or press [◄/►]) repeatedly to select the level, then press AMS 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 automatic track marking
- When recording from a CD player or an MD deck connected to the DIGITAL 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.
- A track number might not be marked for tracks less than 4 seconds long (in Stereo mode, Monoaural mode, and LP2 Stereo mode) or 8 seconds long (in LP4 Stereo mode) during recording.
- When recording from a component connected to the ANALOG IN jacks with "T.Mark Off" selected or when recording from a DAT deck or DSS tuner connected to the DIGITAL IN connector, the entire material may be recorded as a single track.
- When recording from a DAT deck or DSS tuner connected to the DIGITAL IN connector, the deck will mark a track number whenever the sampling frequency of the input signal changes, regardless of the track marking parameter setting ("T.Mark LSyn(c)" or "T.Mark Off").

Tip
You can mark track numbers even after recording has finished. See "Dividing recorded tracks" on page 28.

---

Erasing blank portions automatically (Smart Space/Auto Cut)
The Smart Space function lets you make the blank spaces between tracks 3 seconds 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) while recording, the deck replaces this silence with a blank of about 3 seconds and continues recording.

<table>
<thead>
<tr>
<th>No sound input for less than 30 seconds</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image" alt="Diagram" /></td>
</tr>
<tr>
<td>Replaced with a blank of 3 seconds and recording continues</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Auto Cut</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>When the Smart Space function is on, if there is no sound input for 30 seconds or more, the deck replaces this silence with a blank of about 3 seconds and enters recording pause.</td>
<td></td>
</tr>
</tbody>
</table>

| ![Diagram](image) |

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

1. Do steps 1 to 5 of "Recording to an MD" on page 9.
2. Play the portion of the programme source with the strongest output.
3. Press DISPLAY/CHAR (or DISPLAY) repeatedly until the level of the input signal appears.
4. While monitoring the sound, turn REC LEVEL (or press LEVEL +/- repeatedly) to raise the recording level to its highest level without turning on the two rightmost indicators on the peak level meters.

<table>
<thead>
<tr>
<th><img src="image" alt="Peak Level Meters" /></th>
</tr>
</thead>
<tbody>
<tr>
<td>Avoid turning on these indicators</td>
</tr>
</tbody>
</table>

5. Stop playing the programme source.
6. To start recording, continue from step 7 of "Recording to an MD" on page 9.

---

Tips
- You can adjust the recording level without changing the display. In this case, skip steps 3 to 5 above. While adjusting the recording level, the level of the input signal appears for about three seconds.
- You can adjust the recording level by pressing LEVEL +/- on the remote repeatedly during recording or recording pause.
- Peak hold function freezes the peak level meters at the highest level reached by the input signal.

1. While the deck is stopped, press MENU/NO.
2. Turn AMS (or press [◄/►]) repeatedly until "Setup?" appears, then press AMS or YES.
3. Turn AMS (or press [◄/►]) repeatedly until "PHold Off" (factory setting) appears, then press AMS or YES.
4. Turn AMS (or press [◄/►]) repeatedly to select "PHold On", then press AMS or YES.
5. Press MENU/NO.

**Note**
The recording level can only be increased up to +12.0 dB (for analogue recording) or +18.0 dB (for digital recording) (0.0 dB is the factory setting). Therefore, if the output level of the connected component is low, it may not be possible to set the recording level to maximum.

continued
Monitoring the input signal
(Input Monitor)

You can monitor the selected input signal even when you are not recording it.

1 Press EJECT to eject the MD.
2 Press INPUT repeatedly to select the jacks (connector) where the signal you want to monitor is being input.
3 Press REC.

When an analogue input is selected

The analogue signal input from the ANALOG IN jacks is output to the DIGITAL OUT connector after A/D conversion, and then to the ANALOG OUT jacks and PHONES jack after D/A conversion. “AD – DA” appears in the display during this time.

When a digital input is selected

The digital signal input from the DIGITAL IN connector is output to the DIGITAL OUT connector after passing through the sampling rate converter, and then to the ANALOG OUT jacks and PHONES jack after D/A conversion. “ – DA” appears in the display during this time.

To stop Input Monitor

Press ■.

Starting recording with 6 seconds of prestored audio data

— Time Machine Recording

When recording from an FM or satellite broadcast, the first few seconds of material are often lost due to the time it takes you to ascertain the contents and press the record button. To prevent the loss of this material, the Time Machine Recording feature constantly stores the most recent audio data in a buffer memory. This lets you record the sound from 6 seconds before starting recording, as shown in the illustration below:

When you press AMS

6 seconds

End of the source to be recorded

Time

Recorded portion

Beginning of the source to be recorded

1 Do steps 1 to 5 of “Recording to an MD” on page 9.

2 Start playing the programme source.

3 Press AMS (or T.REC) at the point where you want to start recording.

Recording starts with the six seconds of prestored data in the buffer memory, then continues recording via the buffer memory thereafter.

Note

In step 3 above, recording starts using the audio data accumulated in the buffer memory. Therefore, when the recording pause mode or sound source playback has lasted for less than 6 seconds, less than 6 seconds of audio data are stored in the buffer memory, so the sound from 6 seconds before cannot be recorded.

Synchro-recording with the audio component of your choice

— Music Synchro-recording

The Music Synchro-recording allows you to automatically synchronize recording to the MD deck with the playing of the selected programme source. The Track Marking Function, however, will differ according to the programme source. For details, see “Marking track numbers while recording” on page 13.

1 Do steps 1 to 4 of “Recording to an MD” on page 9.

2 Press MUSIC SYNC on the remote.

The deck changes to recording pause.

3 Start playing the programme source.

Recording starts automatically.

Note

During Music Synchro-recording, Smart Space and Auto Cut will operate regardless of their setting (“S.Space On” or “S.Space Off”).

Synchro-recording with a Sony CD player

— CD Synchro-recording

When the deck is connected to a Sony CD player or Hi-Fi component system, you can easily copy the contents of CDs to the MD using the deck’s remote. Because the MD remote operates both the MD deck and the CD player or CD player section of the component system, make sure to place the MD deck and the CD player as close together as possible.

1 Turn on the amplifier and the CD player, and select CD on the amplifier.

2 Do steps 2 to 4 of “Recording to an MD” on page 9.

3 Insert a CD into the CD player and select the playing mode (Shuffle Play, Programme Play, etc.) on the CD player.

4 Press CD SYNCHRO STANDBY on the remote.

The CD player changes to play standby and the MD deck changes to recording standby.

5 Press CD SYNCHRO START on the remote.

The deck starts recording and the CD player starts to play.

The track number and elapsed recording time of the track appear in the display.
If the CD player does not start playing

Some CD players may not respond when you press CD SYNCHRO START on the remote. Press II on the CD player's remote instead to start play on the CD player.

Operations you may want to do during CD Synchro-recording

<table>
<thead>
<tr>
<th>To do</th>
<th>Press</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stop recording</td>
<td>CD SYNCHRO STOP on the remote</td>
<td>CD STOP starts</td>
</tr>
<tr>
<td>Pause recording</td>
<td>CD SYNCHRO STANDBY on the remote</td>
<td>CD PAUSE on the CD player</td>
</tr>
<tr>
<td>Resume recording after pausing</td>
<td>CD SYNCHRO START on the remote</td>
<td>CD START on the CD player</td>
</tr>
</tbody>
</table>

Tips

- You can use the remote of the CD player during CD Synchro-recording.
- You can change the CD during CD Synchro-recording.
  1. Press  or  on the CD player's remote.
  2. Change the CD.
  3. Press  on the CD player's remote.

- The MD deck resume recording.
  4. By reprogramming the MD's remote, you can use the procedure above to perform synchro-recording with a Sony video CD player.

- Press number button 2 on the remote while pressing down I/O on the remote. You can now operate the MD deck and the video CD player with the remote.
- To control the CD player again, press number button 1 on the remote while pressing down I/O on the remote.

Notes

- When performing CD Synchro-recording with a CD player with a mode selector, be sure to set the selector to CD1.
- When you record tracks from certain CD or multi-disc players, the entire material may be recorded as a single track.

Playing an MD

1. Turn on the amplifier and select MD on the amplifier.
2. Press I/O to turn on the deck.
3. Load an MD.
4. Press PLAY MODE repeatedly until the mode you want appears in the display.
5. Press  The deck starts to play.
6. Adjust the volume on the amplifier.

Repeat Play Operations

To | Do the following:
---|-----------------------------------------|
Repeat only one track | Press REPEAT repeatedly until the track number in the display.
Repeat all tracks | Press REPEAT repeatedly until “REP” lights up in the display.
Cancel Repeat Play | Press REPEAT repeatedly until “REP” or “REP” disappears.
Repeat a specific portion within a track (Repeat A-B Play) | 1. While the deck is playing, press A→B on the remote at the starting point (point A) of the portion to be played repeatedly.
2. Continue playing the track or press to locate the ending point (point B), then press A→B on the remote.

Cancel Repeat A-B Play | Press REPEAT or CLEAR.
**Other Operations**

To Do the following:

- **Stop play** Press II.
- **Pause play** Press II.
- **Resume play after pausing** Press II or II.
- **Go to the next or a succeeding track during play** Turn AMS 1 clockwise (or press ▶️ repeatedly).
- **Go to a preceding track during play** Turn AMS counterclockwise (or press ◀️ repeatedly).
- **Go to the beginning of the current track during play** Turn AMS counterclockwise (or press ◀️ once).
- **Go to a specific track while the deck is stopped** Turn AMS (or press ◀️/▶️ repeatedly) until the track number you want to go to flashes in the display; then press AMS or ◀.
- **Press a point in a track** Press down ◀/▶ during play or play pause; release it when you reach the desired point.
- **Eject the MD** Press EJECT 1 after stopping play.

1) Automatic Music Sensor
2) When you locate a point while monitoring the sound.
3) When you locate by observing the time indication.

**Tips**

- The MDLP indicator lights up when you select a track recorded in LP2 or LP4 Stereo mode.
- To use headphones, connect them to the PHONES jack. Turn PHONE LEVEL to adjust the headphone level.
- When "−" appears in the display, the MD has reached the end while you're pressing ◀. Turn AMS counterclockwise (or press ◀) or press ◀ to go back.

---

**Using the MD display**

Press DISPLAY/CHAR (or DISPLAY) repeatedly.

The display changes cyclically as follows:

**Note**

Note that, depending on the status of the deck, the display may not conform with the cycle shown below.

**During playing**

- Track name, track number and elapsed time of the current track → Track name 2, track number and remaining time of the current track → Track name 2 and remaining time of all recorded tracks → Disc name and track name → Level of the output signal → Pitch, track number and elapsed time of the current track → When the Group function is on, the remaining time of all tracks within the group is displayed.
- "No Name" appears when the disc or track has no name. When the Group function is on, the disc name and the total number of groups (when no group is selected) or the group name and the total number of tracks and recorded time within the group (when a group is selected) are displayed.

When the display differs depending on the setting of REC MODE.

**Playing a track by entering the track number**

Press the number button(s) on the remote to enter the track number of the track you want to play.

**To enter a track number over 10**

2. Enter the corresponding digits.

**Examples:**

- To select track number 30 on an MD recorded with 50 tracks, press >10, then 3 and 100.
- To select track number 30 on an MD recorded with 200 tracks, press >10, then 100, 3 and 10.

---

**In stop mode**

Disc name 1, total number of tracks and total recorded time → Disc name 1, total number of tracks and remaining recordable time 2 on the MD (recordable MDs only) → Level of the input signal (setting value of the recording level) → Pitch, total number of tracks and total recorded time

1) “No Name” appears when the disc or track has no name. When the Group function is on, the disc name and the total number of groups (when no group is selected) or the group name and the total number of tracks and recorded time within the group (when a group is selected) are displayed.
2) Time shown in the display differs depending on the setting of REC MODE.
Playing only the tracks in the desired group

This function allows you to listen only to your favorite tracks which you have registered into a group.

1. Do steps 1 to 3 of “Playing an MD” on page 19.
2. Press GROUP ON/OFF.
   The GROUP ON/OFF button lights up. The disc name and the total number of groups appears.
3. Press PLAY MODE repeatedly until the mode you want appears.

<table>
<thead>
<tr>
<th>Select</th>
<th>To play</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blank (no PLAY MODE indication)</td>
<td>The tracks in the group in the original order.</td>
</tr>
<tr>
<td>SHUF</td>
<td>The tracks in the group in random order.</td>
</tr>
<tr>
<td>PGM</td>
<td>The tracks in the group in the order you want (see “Creating your own programme” on page 23).</td>
</tr>
</tbody>
</table>

4. Press GROUP SKIP repeatedly until the group you want to play appears.
5. Press ▶.
6. Adjust the volume on the amplifier.
   The deck stops when playback of the last track in the group ends.

Tip
You can perform the operations described under Repeat Play (page 19), Other Operations (page 20) and Programme Play (page 23) only for the tracks in the group.

Note
If you select and play a group that does not have any tracks registered, play starts from the first track of the first group on the MD.

Notes when using a remote (RM-TP501, RM-TP502, RM-TP503, RM-TP504) supplied with a Sony amplifier or tuner
- When the Group function is on, if you select and play a track using any of the above remotes, the Group function automatically turns off.
- When the Group function is on, the remote display for the track number being played may differ from the deck display.

Creating your own programme

— Programme Play

You can pick out the tracks that you like and specify the playing order in a programme containing up to 25 tracks.

Programming the tracks

1. While the deck is stopped, press PLAY MODE repeatedly until “PGM” lights up in the display.
2. Turn AMS (or press ▼/◀/▶/► repeatedly) until the track number you want to add to the programme appears, then press AMS or YES.
   The total number of programmed steps appears, followed by the last programmed track number and the total playing time of the programme.

Tip
You can use the number button(s) on the remote to enter the track directly. To enter a track number over 10, use ▼/ ◀/▶/►. For details, see page 20.
3. Repeat step 2 to enter other tracks.
4. Press ▶.
   Programme Play starts.

To stop Programme Play
Press ■.

To check the total number of programmed tracks
While the deck is stopped and “PGM” lights up, press DISPLAY/CHAR (or DISPLAY) repeatedly.

To check the programme order
Turn AMS (or press ▼/◀/▶/► repeatedly) during Programme Play.

To erase a programmed track
While the deck is stopped, press CLEAR. Each time you press CLEAR, the last programmed track is erased.

To cancel Programme Play
While the deck is stopped, press PLAY MODE repeatedly until “PGM” disappears.

Tip
The programme you made remains after Programme Play finishes.
To play the same programme again, press ▶.

Notes
- If you perform any of the following operations, the programme will be lost:
  — Eject the MD
  — Press GROUP ON/OFF
  — Turn the Net MD function on
- The display shows “...” when the total playing time of the programme exceeds 999 minutes.
- “Step Full?” appears when you try to programme the 26th track.
Tips for recording from MDs to tape

Inserting blanks between tracks during play (Auto Space)

The MD deck can be set to automatically insert a three-second blank between tracks during play. This function is useful when you are recording from an MD to an analogue tape. The three-second blank enables you to use the Multi-AMS function later to locate the beginning of tracks on the tape.

1. While the deck is stopped, press MENU/NO.
2. Turn AMS (or press ⬅️/➡️/➤️/➤️️ repeatedly) until “Setup?” appears, then press AMS or YES.
3. Turn AMS (or press ⬅️/➡️/➤️/➤️️ repeatedly) until “Auto Off” appears, then press AMS or YES.
4. Turn AMS (or press ⬅️/➡️/➤️/➤️️ repeatedly) to select the setting, then press AMS or YES.

To Select
Turn on Auto Space
Turn off Auto Space
Auto Space
Auto Off (factory setting)

5. Press MENU/NO.

To resume play after pausing
Press ➤️.

Tip
When you turn on Auto Space, “Auto Space” appears when the deck is inserting a blank between tracks.

Note
If you select “Auto Space” and record a selection containing multiple track numbers (for example, a medley or symphony), blank spaces will be created on the tape between the various sections.

Pausing after each track (Auto Pause)

You can set the MD deck so that it pauses after each track to give you time to locate the next track to be recorded.

1. While the deck is stopped, press MENU/NO.
2. Turn AMS (or press ⬅️/➡️/➤️/➤️️ repeatedly) until “Setup?” appears, then press AMS or YES.
3. Turn AMS (or press ⬅️/➡️/➤️/➤️️ repeatedly) until “Auto Off” appears, then press AMS or YES.
4. Turn AMS (or press ⬅️/➡️/➤️/➤️️ repeatedly) to select the setting, then press AMS or YES.

To Select
Turn on Auto Pause
Turn off Auto Pause
Auto Pause
Auto Off (factory setting)

5. Press MENU/NO.

To resume play after pausing
Press ➤️.

Tip
When you turn on Auto Pause, “Auto Pause” appears during pause and disappears when the deck resumes play.

Editing Recorded MDs

Before you start editing

You can edit an MD only when:
- The MD is recordable.
- The MD play mode is normal play.

Note
When the Group function is on, editing can be performed only for the tracks registered into the selected group.

To cancel the last edit
Use Undo Function to cancel the last edit and restore the contents of the MD to the condition before the edit.

To quit while editing
Press MENU/NO or ■.

About indications which appear while editing

When “C11/Protected” appears in the display
The MD is record-protected. Slide the record-protect tab and close the slot. For details, see “To prevent accidental erasure of the recorded material” on page 12.

When “TrProtected” appears in the display
You cannot perform editing operations on protected tracks (tracks checked out from a USB connected computer, etc.) other than “Moving recorded tracks” on page 30 and “Naming a track or an MD” on page 30 using this deck.

When “Cannot Edit” appears in the display
You cannot edit the MD in Shuffle or Programme Play mode. Press PLAY MODE repeatedly until both “PGM” and “SHUF” disappear.

After editing
Press EJECT △️ to remove the MD or press 1/0 to turn off the deck.
“TOC” or “TOC Writing” starts flashing. The TOC is updated and recording is completed.

Before disconnecting the mains lead
MD editing is completed when the MD Table of Contents (TOC) is updated. The TOC is updated when you eject the MD or press 1/0 to turn off the deck. Do not disconnect the mains lead before updating the TOC (while “TOC” is lit) or while updating the TOC (while “TOC Writing” is flashing) to ensure a complete editing.
Erasing recordings

Erase Function

The MD deck lets you erase unwanted tracks quickly and easily.
The three options for erasing recordings are:
- Erasing a single track (Track Erase Function)
- Erasing all tracks (All Erase Function)
- Erasing a portion of a track (A-B Erase Function)

Erasing a single track

Track Erase Function

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

Example: Erasing track 2.

<table>
<thead>
<tr>
<th>Track number</th>
<th>Original tracks</th>
<th>After ERASE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1A</td>
<td>A</td>
<td>A</td>
</tr>
<tr>
<td>2A</td>
<td>B</td>
<td>B</td>
</tr>
<tr>
<td>3A</td>
<td>C</td>
<td>C</td>
</tr>
<tr>
<td>4A</td>
<td>D</td>
<td>D</td>
</tr>
</tbody>
</table>

3 Turn AMS (or press \(\text{\textless}\text{\textgreater}/\text{\textgtr}\) repeatedly) until the track number you want to erase appears.
4 Press AMS or YES.
   “Complete!” appears. The track following the erased track starts to play. If the erased track is the last one on the MD, the track preceding the erased track starts to play.

Tips
- To avoid confusion when erasing more than one track, start erasing from the highest numbered track.
- This way you will avoid renumbering the tracks that you plan to erase.
- If you erase all the tracks within a group, the group is also erased at the same time as all the tracks within that group.

Erasing all the tracks

All Erase Function

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

1 While the deck is stopped, playing, or paused, press MENU/NO.
   “Edit Menu” appears in the display.
2 Turn AMS (or press \(\text{\textless}\text{\textgreater}/\text{\textgtr}\) repeatedly) until “All Erase?” appears, then press AMS or YES.
   “All Erase?” appears in the display.
3 Press AMS or YES.
   “Complete!” appears.

Note
If you perform the above operations when the Group function is on, not only the tracks within the group, but all the tracks on the MD will be erased.

Example: Erasing a portion of track 2.

<table>
<thead>
<tr>
<th>Track number</th>
<th>Original tracks</th>
<th>After A-B ERASE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1A</td>
<td>A</td>
<td>A</td>
</tr>
<tr>
<td>2A</td>
<td>B-(\textcircled{A})</td>
<td>B-(\textcircled{A})</td>
</tr>
<tr>
<td>3A</td>
<td>C</td>
<td>C</td>
</tr>
</tbody>
</table>

5 Press AMS or YES again if point A is correct.
   “Point B set” appears in the display and playback for setting the ending point of the portion to be erased (point B) starts.

If point A is not correct
Adjust point A by turning AMS (or by pressing \(\text{\textless}\text{\textgreater}/\text{\textgtr}\) repeatedly) while monitoring the sound, and then press AMS or YES when you locate the desired starting point. You can shift the point by 1-frame intervals (1 frame = 1/86 second).

6 Continue playing the track or press \(\text{\textless}\text{\textgreater}/\text{\textgtr}\) to locate the ending point of the portion to be erased (point B), then press AMS or YES.
   “A-B Erase” and “Point B ok?” alternate in the display and a few seconds of the track before point A and after point B play back repeatedly.

7 Press AMS or YES again if point B is correct.
   “Complete!” appears in the display and playback for a few seconds, the portion between point A and point B is erased, and then playback begins at the start of the track.

If point B is not correct
Adjust point B by turning AMS (or by pressing \(\text{\textless}\text{\textgreater}/\text{\textgtr}\) repeatedly) while monitoring the sound, and then press AMS or YES when you locate the desired ending point. You can shift the point by 1-frame intervals (1 frame = 1/86 second).
2) You can shift the point by 2-frame intervals on the track recorded in Monoaural mode or LP2 Stereo mode, and by 4-frame intervals on the track recorded in LP4 Stereo mode.

Tip
In steps 5 and 7, if you want to shift point A or point B by a certain number of seconds or minutes, press \(\text{\textless}\text{\textgreater}/\text{\textgtr}\) repeatedly. You can change the unit by which the counter advances when you turn AMS (or press \(\text{\textless}\text{\textgreater}/\text{\textgtr}\) repeatedly).

Note
If “impossible” appears in the display, you cannot erase a portion of a track. This happens when you have edited the same track many times.
This is due to a technical limitation of the MD system and is not a mechanical error.
Dividing recorded tracks

— Divide Function

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

Example: Dividing track 2 into two tracks.

<table>
<thead>
<tr>
<th>Track number</th>
<th>Original tracks</th>
<th>After DIVIDE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>A</td>
<td>A</td>
</tr>
<tr>
<td>2</td>
<td>B</td>
<td>B</td>
</tr>
<tr>
<td>3</td>
<td>C</td>
<td>C</td>
</tr>
<tr>
<td>4</td>
<td>D</td>
<td>D</td>
</tr>
</tbody>
</table>

Dividing a track after selecting the track

1. While the deck is stopped, playing, or paused, press MENU/NO. “Edit Menu” appears in the display.
2. Turn AMS (or press [ [ ] ] [ ] repeatedly) until “Divide?” appears. Then press AMS or YES.
3. Turn AMS (or press [ [ ] ] [ ] repeatedly) until the number of the track you want to divide appears.
4. While monitoring the sound, press AMS or YES at the dividing point.
5. Press AMS or YES again if the dividing point is correct.

If the point is not correct

Adjust the point by turning AMS (or pressing [ [ ] ] [ ] repeatedly) while monitoring the sound, and then press AMS or YES when you locate the desired point. You can shift the point by 1-frame intervals (1 frame = 1/16 second).

1) You can shift the point by 2-frame intervals on the track recorded in Mono mode or LP2 Stereo mode, and by 4-frame intervals on the track recorded in LP4 Stereo mode.

Tips

- In step 5, if you want to shift the dividing point by a certain number of seconds or minutes, press [ [ ] ] [ ] repeatedly. You can change the unit by which the counter advances when you turn AMS (or press [ [ ] ] [ ] repeatedly).
- You can divide tracks while recording. For details, see “Marking track numbers while recording” on page 13.

Combining recorded tracks

— Combine Function

You can use this function to combine two tracks into a single track. The total number of tracks decreases by one and all tracks following the combined ones are renumbered. You can also use this function to erase unnecessary track numbers.

Example: Combining track 3 to track 1.

<table>
<thead>
<tr>
<th>Track number</th>
<th>Original tracks</th>
<th>After COMBINE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>A</td>
<td>A</td>
</tr>
<tr>
<td>2</td>
<td>B</td>
<td>C</td>
</tr>
<tr>
<td>3</td>
<td>C</td>
<td>B</td>
</tr>
<tr>
<td>4</td>
<td>D</td>
<td>D</td>
</tr>
</tbody>
</table>

Notes

- When you combine two tracks that are registered into different groups, the second track is re-registered into the group containing the first track. In addition, if you combine a track that is registered to a group with a track that is not registered to a group, the second track takes the same registration setting as the first track. However, when the Group function is on, you can only combine tracks within the selected group.
- Tracks recorded in different modes (Stereo, MONO, LP2 or LP4) cannot be combined.
- If both of the combined tracks have a track name, 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 MD system and is not a mechanical error.

1. While the deck is stopped, playing, or paused, press MENU/NO. “Edit Menu” appears in the display.
2. Turn AMS (or press [ [ ] ] [ ] repeatedly) until “Combine?” appears, then press AMS or YES.
3. Turn AMS (or press [ [ ] ] [ ] repeatedly) until the number of the first track of the two to be combined appears, then press AMS or YES. The display for selecting a second track appears and the deck 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 AMS (or press [ [ ] ] [ ] repeatedly) until the number of the second track of the two to be combined appears, then press AMS or YES. “Complete!” appears and the deck starts to play the combined track.
Moving recorded tracks

— Move Function

You can use this function to change the order of any track on the disc. When you move tracks, the tracks are automatically renumbered.

Example: Moving track 3 to position 2.

<table>
<thead>
<tr>
<th>Original tracks</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>After MOVE</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
</tr>
</tbody>
</table>

1. While the deck is stopped, playing, or paused, press MENU/NO.
   “Edit Menu” appears in the display.

2. Turn AMS (or press << / >> repeatedly) until “Move?” appears, then press AMS or YES.

3. Turn AMS (or press << / >> repeatedly) until the number of the track to be moved appears, then press AMS or YES.

4. Turn AMS (or press << / >> repeatedly) until the new track position appears, then press AMS or YES.
   “Complete!” appears and the deck starts to play the moved track.

Naming a track or an MD

— Name Function

You can enter a name for a recorded MD as well as for individual tracks. Names can consist of uppercase and lowercase letters, numbers, and symbols. A total number of about 1,700 characters can be stored for all the names on the MD.

The following procedure is for entering names when the Group function is off. To name a group, see “Naming a group” on page 23. However, when naming an MD recorded using the Group function, be sure to name the disc with the Group function on so as not to rewrite the group management information by mistake.

For details on the group management information, see page 10.

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 finish, the entered character data will be discarded and the track will remain unnamed.

- If you enter the symbol “?” between the characters in disc names such as “the/old”, you may be unable to use the Group function.

Naming a track or an MD using the controls on the deck

1. While the deck is stopped, playing, recording, or paused, press MENU/NO.
   “Edit Menu” appears in the display.

2. Turn AMS until “Nm In?” appears, then press AMS or YES.
   While the deck is recording, a flashing cursor appears in the display and you can enter a name for the track being recorded. In this case, go to step 4.

3. Turn AMS until the track number (when naming a track) or “Disc” (when naming the MD) flashes, then press AMS or YES.
   A flashing cursor appears.
   When naming a track, the deck starts playing and you can name a track while monitoring the sound.

4. Press DISPLAY/CHAR repeatedly to select the character type.
   Each time you press the button, the display changes cyclically as follows:
   (Blank space) → A (Upper cases) → a (Lower cases) → 0 (Numbers) → . (Symbols)

   To enter a space
   Press ▶ until the cursor is flashing. You cannot enter a space as the first character.

5. Turn AMS to select the character.
   The selected character flashes.

   To enter a symbol
   You can use the following symbols in titles:
   ^ ! / . : ! ? & + < > _ = ; # $ @ *

   To change a selected character
   Repeat steps 4 and 5.

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

7. Repeat steps 4 to 6 to enter the rest of the name.

   To change a character
   Press << / >> repeatedly until the character to be changed flashes, then repeat steps 4 to 6.

   To erase a character
   Press << / >> repeatedly until the character to be erased flashes, then press CLEAR.

8. Press YES.
   The whole name appears in the display, followed by “Complete!”.

Naming a track or an MD using the remote

1. Press NAME EDIT/SELECT depending on what you want to name:

<table>
<thead>
<tr>
<th>To name</th>
<th>Press while</th>
</tr>
</thead>
<tbody>
<tr>
<td>A track</td>
<td>The track number is displayed</td>
</tr>
<tr>
<td>The MD</td>
<td>The deck is stopped with total number of tracks (or groups when the Group function is on) displayed</td>
</tr>
</tbody>
</table>

   A flashing cursor appears in the display.

2. Press NAME EDIT/SELECT repeatedly to select the character type.
   Each time you press the button, the display changes cyclically as follows:
   "Selected AB" (Upper cases or symbols) → "Selected ab" (Lower cases or symbols) → "Selected 12" (Numbers)
3 Enter a character using letter/number buttons.
   If you have selected upper cases or lower cases
   1 Press the corresponding letter/number button repeatedly until the character to
     be entered flashes.
   Or, press the button once and press
     \(\ll/\ll/\ll/\ll\) repeatedly.
   To select the following symbols, press the number 1 button repeatedly.
     \\
     \(\sim - / \dots / \div / \times \) : ?
   In addition, when the symbols above appear in the display, press
     \(1\ll/\ll/\ll/\ll\) repeatedly to display the following symbols.
     \(\& < > \equiv \neq ; \# \% \& \ast \cdot \ast \ast \)

2 Press \(\ll/\ll/\ll/\ll\).
   The flashing character is entered and
   the cursor shifts to the right.

   If you have selected numbers
   Press the corresponding number button. The number is entered 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 \(\ll/\ll/\ll/\ll\) repeatedly until the character to be changed flashes, press
   CLEAR to erase the character, then repeat
   steps 2 and 3.

5 Press YES.
   The whole name appears in the display, followed by “Complete!”

---

Renaming a track or an MD

1 Press NAME EDIT/SELECT on the remote depending on what you want to
   rename:

<table>
<thead>
<tr>
<th>To rename</th>
<th>Press while</th>
</tr>
</thead>
<tbody>
<tr>
<td>A track</td>
<td>The track number is displayed</td>
</tr>
<tr>
<td>The MD</td>
<td>The deck is stopped with total number of tracks (or groups when the Group function is on) displayed</td>
</tr>
</tbody>
</table>

A track or disc name appears in the display.

2 Press CLEAR until the selected name is erased completely.

3 Do steps 4 to 7 of “Renaming a track or an MD using the controls on the deck” on
   page 31 or steps 2 to 4 of “Naming a track or an MD using the remote” on page 31.

4 Press YES.
   The whole name appears in the display, followed by “Complete!”

---

Erasing a track or disc name

Use this function to erase the name of a track or disc.

1 While the dock is stopped, playing, recording, or paused, press MENU/NO.
   “Edit Menu” appears in the display.

2 Turn AMS (or press \(1\ll/\ll/\ll/\ll\)) repeatedly until “Nm Erase?” appears,
   then press AMS or YES.

3 Turn AMS (or press \(1\ll/\ll/\ll/\ll\)) repeatedly until the number of the track
   (when erasing the track name) or “Disc”
   (when erasing the disc name) flashes,
   then press AMS or YES.
   “Complete!” appears.

---

Naming a group

— Name Function

You can enter a name for a group. Names can consist of uppercase and lowercase letters,
numbers, and symbols. A total number of about 1,700 characters can be stored for all the names
on the MD.

Note

If you enter the symbol “/” between the characters in group names such as “abc/def”, you may be unable to
use the Group function.

---

Naming a group using the controls on the deck

1 While the deck is stopped, press
   GROUP ON/OFF.
   The GROUP ON/OFF button lights up.

2 Press GROUP SKIP repeatedly until the group you want appears.

3 Press NAME EDIT/SELECT while the deck is stopped with total number of
   tracks in the selected group displayed.
   A flashing cursor appears.

4 Do steps 2 to 5 of “Naming a track or an MD using the remote” on page 31.

---

Renaming a group using the remote

1 While the deck is stopped, press
   GROUP ON/OFF.
   The GROUP ON/OFF button lights up.

2 Press GROUP SKIP repeatedly until the group you want appears.

3 Press NAME EDIT/SELECT on the remote while the deck is stopped with
   total number of tracks in the selected group displayed.
   A group name appears in the display.

4 Do steps 2 to 4 of “Renaming a track or an MD on the deck” on page 31.
Erasing a group name
Use this function to erase the name of a group.

1. While the deck is stopped, press GROUP ON/OFF.
   The GROUP ON/OFF button lights up.
2. Press GROUP SKIP repeatedly until the group you want appears.
3. Press MENU/NO.
   "Edit Menu" appears in the display.
4. Turn AMS (or press ⬅️/➡️ repeatedly) until "Nm Erase?" appears, then press AMS or YES.
5. Turn AMS (or press ⬅️/➡️ repeatedly) until "Gp ** (selected group number)" flashes, then press AMS or YES.
   "Complete!" appears.

Note
You cannot erase the name of a group that does not have any tracks registered.

Creating a new group and registering tracks

— Create Function
This function allows you to create a new group and register a track or consecutive tracks which are not already registered into that group. You can also create groups without registering any tracks.

1. While the deck is stopped, press GROUP ON/OFF.
   The GROUP ON/OFF button lights up.
2. Press MENU/NO.
   "Edit Menu" appears in the display.
3. Turn AMS (or press ⬅️/➡️ repeatedly) until "Gp Create?" appears, then press AMS or YES.
4. Do steps 4 to 8 of "Naming a track or an MD using the controls on the deck" on page 31 or steps 2 to 5 of "Naming a track or an MD using the remote" on page 31.
5. Turn AMS (or press ⬅️/➡️ repeatedly) to select the first track you want to register, then press AMS or YES.
6. Turn AMS (or press ⬅️/➡️ repeatedly) to select the last track you want to register, then press AMS or YES. (When registering only one track, simply press AMS or YES again without performing any other operations.)
   "Complete!" appears for a few seconds and the tracks are registered into the new group.

Tips
- To create a group without registering any tracks, turn AMS (or press ⬅️/➡️ repeatedly) until "None" appears, then press AMS or YES.
   "Complete!" appears for a few seconds and a new group is created.
- You can also register tracks that were recorded on a system that does not support the Group function.

Notes
- You cannot register the same track to multiple groups.
- If all the tracks on an MD are registered into groups, "Assign None" appears after step 4 and you cannot register tracks.
- When creating a group without registering any tracks, you must enter the group name.
- If you do not enter a group name in step 4, "Group ** (group number)" appears instead of the group name.

Releasing group registrations

— Release Function
These functions allow you to release group registrations simply by specifying the group for which you want to release the registrations. In addition, you can also release the group registrations of all tracks on an MD at once.

Releasing a single group
— Group Release Function
You can release the group registrations of all tracks within the specified group and erase that group. (However, note that the tracks are not erased.)

1. While the deck is stopped, press GROUP ON/OFF.
   The GROUP ON/OFF button lights up.
2. Press GROUP SKIP repeatedly until the group you want to release appears.
3. Press MENU/NO.
   "Edit Menu" appears in the display.
4. Turn AMS (or press ⬅️/➡️ repeatedly) until "Gp Release?" appears.
5. Press AMS or YES.
   "REL Gp ** (selected group number) ?" and the group name appears.
6. Press AMS or YES again.
   "Complete!" appears.

continued
Changing the recorded level after recording

-S.F EDIT-

You can change the volume of recorded tracks using S.F (Scale Factor) Edit. The original track is recorded over at the new recording level. When changing the recording level, you can select Fade-in Recording to gradually increase the signal level at the start of recording, or Fade-out Recording to gradually decrease the signal level at the end of recording.

Changing the overall recording level

1. While the deck is stopped, playing, or paused, press MENU/NO.
   “Edit Menu” appears in the display.
2. Turn AMS or press <</>> repeatedly until “Gp All REL?” appears, then press AMS or YES.
   “All REL?” appears.
3. Press AMS or YES again.
   “Complete!” appears.

6. Press AMS or YES.
   “(S.F) Edit OK?” appears in the display.
7. Press AMS or YES again.
   The deck starts recording over the existing track. “S.F Edit(*) ** %” appears while the track is being recorded. An amount of time that is roughly equal or longer than the playback time of the track is required when recording over the track. When the recording finishes, “Complete!” appears.

To cancel the operation
Press MENU/NO or in steps 1 to 6. If you press AMS or YES in step 7 and recording starts, you cannot interrupt the operation.

Notes
- Do not disconnect the mains lead or move the deck while recording is in progress. This may damage the recording data preventing recording from being performed properly.
- You cannot change the recorded level of a track recorded in LP2 or LP4 Stereo mode.
- Do not use an MD that is damaged or dirty. This may prevent recording data from being recorded properly.
- Repeatedly changing the recording level results in poor sound quality.
- The recording level will not return to the exact original level once the recording level has been changed even if it returned to the original level.
- You cannot undo any S.F edit operation with the Undo Function.

Fade-in and Fade-out Recording

1. While the deck is stopped, playing, or paused, press MENU/NO.
   “Edit Menu” appears in the display.
2. Turn AMS or press <</>> repeatedly until “S.F Edit?” appears, then press AMS or YES.
3. Turn AMS or press <</>> repeatedly until “Fade In?” or “Fade Out?” appears, then press AMS or YES.
4. Turn AMS or press <</>> repeatedly until the track number you want to change the recording level appears, then press AMS or YES.
   “Time **” appears in the display.
5. While monitoring the sound, turn AMS or press <</>> repeatedly to change the Fade-in or Fade-out Recording time.
   The deck plays the portion that will be recorded over using Fade-in or Fade-out Recording.
   You can set the time at any value between 1 second and 15 seconds, in 0.1 second increments. You cannot set the time longer than the track.
Undoing the last edit
— UNDO

You can undo the last edit operation and restore the contents of the MD to the condition that existed before the operation. Note, however, that you cannot undo an edit operation if you perform any of the following operations after the edit:
- Perform recording operation by pressing REC, etc.
- Perform another editing operation.
- Turn the M.D function on.
- Change the recording level after recording (S.F. Edit).
- Turn off the deck or eject the MD.
- Disconnect the mains lead.
1. While the deck is stopped, playing, or paused, press MENU/NO.
   “Edit Menu” appears in the display.
2. Press AMS or YES.
   One of the messages appears depending on the last edit operation.
3. While the deck is stopped, playing, or paused, press MENU/NO.
   “Edit Menu” appears in the display.
4. Turn AMS (or press  or repeatedly) until “Undo?” appears.
   “Undo?” does not appear if no editing has been done.
5. Press AMS or YES.
   “Complete!” appears.

Changing the Pitch
— Pitch Control Function

You can change the MD playback speed (pitch). The tone falls at lower pitches.

Setting the pitch automatically in steps (Auto Step Control Function)

You can lower the pitch by up to 36 steps from the factory setting (“Off”).
1) One octave equals 12 steps.
1. While the deck is stopped, playing, or paused, press MENU/NO.
2. Turn AMS (or press or repeatedly) until “Setup?” appears, then press AMS or YES.
3. Turn AMS (or press or repeatedly) until “Pitch” appears, then press AMS or YES.
4. Turn AMS (or press or repeatedly) to adjust the pitch, then press AMS or YES.
5. Press MENU/NO.

Finely controlling the pitch (Fine Control Function)

You can fine control the playback speed in 0.1% increments from the factory setting (Off) to -87.5%.
1. While the deck is stopped, playing, or paused, press MENU/NO.
2. Turn AMS (or press or repeatedly) until “Setup?” appears, then press AMS or YES.
3. Turn AMS (or press or repeatedly) until “Phine” appears, then press AMS or YES.
4. Turn AMS (or press or repeatedly) to adjust the pitch, then press AMS or YES.
5. Press MENU/NO.

To recall the factory setting

Press CLEAR while setting the value.

Notes
- When you change the step value, the playback sound drops out momentarily.
- The playback sound may be interrupted when you adjust the pitch from “Off” or return the pitch to “Off.”
- The fine control value turns to “Off” (factory setting) when you turn off the deck or eject the MD.
- The step and fine control values are linked; changing one value also changes the other.

Fading in and fading out

You can use Fade-in Play to gradually increase the signal level to the ANALOG OUT jacks and the PHONES jack at the start of playing. Fade-out Play gradually decreases the signal level at the end of playing.

Fade-in Recording gradually increases the signal level at the start of recording. Fade-out Recording gradually decreases the signal level at the end of recording.

Note:
The level of the signal output from the DIGITAL OUT connector does not change during Fade-in Play or Fade-out Play.

Fade-in Play and Fade-in Recording

During play pause (for Fade-in Play) or recording pause (for Fade-in Recording), press FADER on the remote.

Fades in the display and the deck performs Fade-in Play or Fade-in Recording for five seconds (factory setting) until the counter reaches “0.0s.”

Fade-out Play and Fade-out Recording

During play (for Fade-out Play) or recording (for Fade-out Recording), press FADER on the remote.

Fades in the display and the deck performs Fade-out Play or Fade-out Recording for five seconds (factory setting) until the counter reaches “0.0s,” then pauses.
Falling asleep to music

— Sleep Timer
You can set the deck so that it turns off automatically after a specified duration.
1 While the deck is stopped or playing, press MENU/NO.
2 Turn AMS (or press ▶▶/◀◀ repeatedly) until “Setup?” appears, then press AMS or YES.
3 Turn AMS (or press ▶▶/◀◀ repeatedly) to select the setting, then press AMS or YES.
4 Turn AMS (or press ▶▶/◀◀ repeatedly) to select the duration, then press AMS or YES.

To change the duration of
Fade-in Play/Recording 5 sec
Fade-out Play/Recording 4 min

Both the Fade-in and Fade-out durations can be set in 0.1 second steps.
5 Press MENU/NO.

Using a timer

By connecting a timer (not supplied) to the deck, you can start and stop playing/recording operations at specified times. For further information on connecting the timer or setting the starting and ending times, refer to the instructions that came with the timer.

Playing an MD using a timer

1 Do steps 1 to 3 of “Playing an MD” on page 19.
2 Press PLAY MODE repeatedly to select the play mode you want.
3 To play only specific tracks, create a programme (see “Creating your own programme” on page 23).
4 To specify the time for the end of playing, press ◄► to start playing, then go to step 3.
5 Set TIMER on the deck to PLAY.
6 Set the timer as required.
7 After you have finished using the timer, set TIMER on the deck to OFF.

Recording to an MD using a timer

1 Do steps 1 to 6 of “Recording to an MD” on page 9.
2 Press ■.
3 Turn AMS (or press ▶▶/◀◀ repeatedly) until “Sleep 60min” appears in the display, then press AMS or YES.
4 When AMS (or press ▶▶/◀◀ repeatedly) to select the time to be turned off (“30min,” “60min,” “90min,” or “120min”), then press AMS or YES.
5 Press MENU/NO.
6 Tip
You can check the remaining time until the power turns off.
1 With the Sleep Timer turned on, perform steps 1 and 2 of the above procedure.
2 Turn AMS (or press ▶▶/◀◀ repeatedly) until “Sleep 0min” appears.

Note
When you turn on the MD Function, the Sleep Timer is automatically set to “Sleep Off.”

Make sure to change the deck to standby mode within a week after timer recording is completed.
The TOC on the MD is updated and recorded contents are written to the MD when you turn on the deck. If the recorded contents have disappeared, “Initialize” flashes when you turn on the deck.

Notes
• It may take about 30 seconds after the deck is turned on until recording starts. When recording at a specified time using the timer, be sure to take this time into account when setting the recording start time.
• Contents recorded by timer recording are recorded to the MD the next time you turn on the deck. At this time, “TOC” flashes. Do not unplugging the mains lead or move the MD deck while “TOC” is flashing in order to ensure the correct recording.
• When the remaining time on the MD runs out during timer recording, the recording stops at that point and the MD deck switches to stop mode.
• During timer recording, new material is recorded from the end of the recorded portion on the MD. However, when timer recording is set with the Group function on but no group is specified, the material is recorded into a new group.
Operating the MD Deck Using a Keyboard

Setting the keyboard

You can use any IBM®-compatible keyboard with a PS/2 interface. You can select a keyboard with either an English or Japanese keyboard layout. When you use a keyboard with a different layout, you need to assign characters to the keys. For details, see “Assigning characters to keyboard keys” on page 44.
1) IBM is the registered trademark of International Business Machines Corporation.
2) Power consumption must be 120 mA or less.

Connecting a keyboard to the MD deck

Connect the keyboard connector to the KEYBOARD jack on the front panel of the deck.

You can connect or disconnect the keyboard at any time regardless of whether the deck is turned on or off.

Selecting keyboard type

The first time you connect a keyboard, you need to select the keyboard type.

1) While the deck is stopped, press MENU/NO.

2) Turn AMS (or press [◄/►] repeatedly) until “Setup?” appears, then press AMS or YES.

3) Turn AMS (or press [◄/►] repeatedly) until “Keyboard?” appears, then press AMS or YES.

4) Turn AMS (or press [◄/►] repeatedly) until “Type” appears, then press AMS or YES.

5) Turn AMS (or press [◄/►] repeatedly) to select the setting, then press AMS or YES.

6) Press MENU/NO.

Naming a track or MD using the keyboard

If you use a keyboard, you can quickly enter or edit names. While editing a name, you can move the cursor in jumps or scroll the name.

Shortcut to the naming procedure

1) Press [Enter] while the deck is in one of the operating modes listed below, depending on what you want to name:

   - To name a track
     A track is the track number is displayed.
     The MD is stopped with total number of tracks (or groups when the Group function is on) displayed.
     A flashing cursor appears in the display.

   - Enter a name.
     In addition to letter keys, you can also use the keys shown in the following table.

3) Press [Enter].
   The whole name appears in the display.

Operations you may want to do while naming a track or MD

<table>
<thead>
<tr>
<th>To</th>
<th>Press on the keyboard</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cancel the operation</td>
<td>[Esc]</td>
</tr>
<tr>
<td>Switch between uppercase and lowercase letters</td>
<td>[Caps Lock]</td>
</tr>
<tr>
<td>Move the cursor</td>
<td>[←] or [→]</td>
</tr>
<tr>
<td>Scroll the name</td>
<td>[Page Up] or [Page Down]</td>
</tr>
<tr>
<td>Erase the character at the cursor position</td>
<td>[Delete]</td>
</tr>
<tr>
<td>Erase the character preceding the cursor</td>
<td>[Back Space]</td>
</tr>
</tbody>
</table>

Tip
You can name a group while the Group function is on. To name a group, press [Enter] while the deck is stopped with the group you want to name selected in step 1.

Operations while the deck is stopped and a track is selected

<table>
<thead>
<tr>
<th>To</th>
<th>Press</th>
</tr>
</thead>
<tbody>
<tr>
<td>Move the track</td>
<td>[↑]</td>
</tr>
<tr>
<td>Erase the track</td>
<td>[←]</td>
</tr>
<tr>
<td>Combine tracks</td>
<td>[+</td>
</tr>
</tbody>
</table>

Operations during play

<table>
<thead>
<tr>
<th>To</th>
<th>Press</th>
</tr>
</thead>
<tbody>
<tr>
<td>Divide the track</td>
<td>[/]</td>
</tr>
</tbody>
</table>

1) This lets you erase all tracks while the deck is stopped and no track is selected.
Assigning characters to keyboard keys

Assigning a character
If your keyboard layout does not match the system settings, the display may show the wrong characters or no characters at all when you press the keys. In this case, you need to assign characters to the keys.

1. While the deck is stopped, press [Esc].
5. Press [F10]/[F11] repeatedly until the character you want to assign appears.
6. Press [F12].
7. Press the key to be assigned to on the keyboard.

Clearing key assignments
You can clear key assignments one at a time or all at once.

To clear a key assignment
1. Do steps 1 to 4 of “Assigning a character” on page 44.
2. Press [F10]/[F11] repeatedly until the character you want to clear appears, then press [F12].
3. Press [Delete].
4. “Key Clear” appears in the display.

To clear all key assignments
1. Do steps 1 to 4 of “Assigning a character” on page 44.
2. Press [Ctrl], [Alt], and [Delete] simultaneously.
3. “All Reset?” appears in the display.
4. Press [F12].
5. “Complete!” appears and all assignments are cleared.

To cancel the operation
Press [Esc].

Notes
- You can assign a character using [Shift] only for symbol and number keys.

Additional Information

Precautions
On safety
Should any solid object or liquid fall into the cabinet, unplug the deck and have it checked by qualified personnel before operating it any further.

On power sources
- Before operating the deck, check that the operating voltage of the deck is identical with your local power supply. The operating voltage is indicated on the nameplate at the rear of the deck.
- The unit is not disconnected from the AC power source (mains) as long as it is connected to the mains, even if the unit itself has been turned off.
- If you are not going to use the deck for a long time, be sure to disconnect the deck from the mains. To disconnect the mains lead, grasp the plug itself, never pull the cord.
- Mains lead must be changed only at the qualified service shop.

On condensation in the deck
If the deck 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 deck. Should this occur, the deck may not operate properly. In this case, remove the MD and leave the deck turned on for several hours 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 benzine.

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

Note on MDs
- Do not touch the internal disc directly. Forcing the shutter open may damage the internal disc.
- Be sure to stick the labels supplied with the MD to the appropriate positions. The shape of the labels may vary depending on the MD brand.

Where to keep the MDs
Do not place the cartridge where it may be exposed to direct sunlight or extremely high heat and humidity.

Regular maintenance
Wipe dust and debris from the surface of the cartridge with a dry cloth.

System limitations
The recording system in your deck is radically different from those used in cassette and DAT decks and is characterized by the limitations described below. Note, however, that these limitations are due to the inherent nature of the MD recording system itself and not to mechanical causes.

“Disc Full!” appears in the display even before the MD has reached the maximum recording time
When 255 tracks have been recorded to the MD, “Disc Full!” appears regardless of the total recorded time. More than 255 tracks cannot be recorded to the MD. To continue recording, erase unnecessary tracks or use another recordable MD.
The total recorded time and the remaining recordable time on the MD may not total the maximum recording time.

Recording is done in minimum units of 2 seconds each, no matter how short the material is. The contents recorded may thus be shorter than the maximum recording capacity. Disc space may also be further reduced by scratches.

1) During stereo recording.
   - In Mono or LP2 mode: about 4 seconds
   - In LP4 mode: about 8 seconds

Tracks created through editing may exhibit sound dropout as you are searching for a point while monitoring the sound.

Track numbers are not marked correctly.

Incorrect assignment or marking of track numbers may result when CD tracks are divided into several smaller tracks during digital recording. Also, when the Automatic Track Marking is activated during recording, track numbers may not be marked as in the original, depending on the programme source.

The correct recorded/playing time may not be displayed during play of MDs recorded in monaural mode.

Guide to the Serial Copy Management System

Digital audio components, such as CDs, MDs, and DATs, make it easy to produce high-quality copies of music by processing music as a digital signal.

To protect copyrighted music sources, this deck uses the Serial Copy Management System, which allows you to make only a single copy of a digitally recorded source through digital-to-digital connections.

You can make only a first-generation copy through a digital-to-digital connection.

Examples are as follows:

- You can make a copy of a commercially available digital sound programme (for example, a CD or MD), but you cannot make a second copy from the first-generation copy.
- You can make a copy of a digital signal from a digitally recorded analogue sound programme (for example, an analogue record or a music cassette tape) or from a digital satellite broadcast programme, but you cannot make a second copy from the first-generation copy.

A first-generation copy means the first recording of a digital audio source through the deck's digital input connector. For example, if you record from a CD player connected to the DIGITAL IN connector, that copy is a first-generation copy.

Note

The restrictions of the Serial Copy Management System do not apply when you make a recording through the analogue-to-analogue connections.

Troubleshooting

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

The deck does not operate or operates poorly.

- The MD may be dirty or damaged. Replace the MD.
- The MD function is on. When not using the MD function, press NET MD to turn it off.

The deck does not play.

- Moisture has formed inside the deck. Take the MD out and leave the deck in a warm place for several hours until the moisture evaporates.
- The deck is not on. Press I/C to turn on the deck.
- The deck may not be connected to the amplifier correctly. Check the connection (page 6).
- The MD is inserted in the wrong direction. Slide the MD into the disc slot with the label side up and the arrow pointing toward the slot (page 19).
- The MD may not be recorded. Replace the disc with one that has been recorded.
- You cannot play an MD with the Group function on if there are no tracks with group registrations.

The sound has a lot of static.

Strong magnets from a television or a similar device is interfering with operations. Move the deck away from the source of strong magnets.

Sound is not produced from the headphones.

Adjust the headphones level with PHONE LEVEL (page 20).

continued
**Self-diagnosis function**

The deck’s self-diagnosis function automatically checks the condition of the MD deck when an error occurs, then issues a three- or five-digit code and an error message on the display. If the code and message alternate, find them in the following table and perform the indicated countermeasure. Should the problem persist, consult your nearest Sony dealer.

**C11/Protected**
- The inserted MD is record-protected.
  - Take out the MD and close the record-protect slot (page 12).

**C12/Cannot Copy**
- You tried to record a CD with a format that the external device connected to the deck does not support, such as CD-ROM or video CD.
  - Remove the disc and insert a music CD.

**C13/REC Error**
- The recording was not made properly.
  - Set the deck in a stable surface, and repeat the recording procedure.
  - The inserted MD is dirty (with smudges, fingerprints, etc.), scratched, or substandard in quality.
  - Replace the disc and repeat the recording procedure.

**C14/TOC Error**
- The deck could not read the TOC on the MD property.
  - Insert another disc.
  - If possible, erase all the tracks on the MD (page 26).

**C14/Cannot Copy**
- The sound source is a copy of commercially available music software, or you tried to record a CD-R (Recordable CD).
  - The Serial Copy Management System prevents making a digital copy (page 47). You cannot record a CD-R.

**C71/Din Unlock**
- The sporadic appearance of this message is caused by the digital signal being recorded. This will not affect the recording...
  - While recording from a digital component, the digital connecting cable may have been incompletely connected and come loose or the digital component was turned off.
  - Check the connection or turn the digital component back on.

**E0001/MEMORY NG**
- There is an error in the internal data that the deck needs in order to operate.
  - Consult your nearest Sony dealer.

**E0101/LASER NG**
- There is a problem with the optical pickup.
  - The optical pickup may have failed. Consult your nearest Sony dealer.

**E0201/LOADING NG**
- There is a problem with the loading.
  - The loading may have failed. Consult your nearest Sony dealer.

**Display messages**

The following table explains the various messages that appear in the display. Messages are also displayed by the deck’s Self-diagnosis function (see “Self-diagnosis function” on page 48).

- **Auto Cut**
  - The Auto Cut Function is on (page 14).

- **Blank Disc**
  - A new (blank) or erased MD has been inserted.

- **Busy NOW!**
  - You pressed NET MD during Check In or Check Out. Wait until the operation is completed.

- **Cannot Edit**
  - An attempt was made to edit the MD during Programme or Shuffle Play or to change the recording level of an MD recorded in LP2 or LP4 Stereo mode.

- **Check USB**
  - The USB cable is not connected properly. Check the connection.

- **CONNECT**
  - Check In or Check Out is underway. (If you attempt an invalid operation at this time, “CONNECT!” appears.)

- **Disc Full!**
  - The MD is full (page 46).

- **Group Full!**
  - An attempt was made to create a new group in excess of the maximum number of groups, or there are insufficient characters for updating the group management information.

- **Impossible**
  - The deck cannot do the recording or editing operation (page 27 and page 29).
Incomplete!
The S.F Edit (changing the recording level after recording, Fade-in, Fade-out) operation was performed properly because the deck was moved while recording was in progress or the MD is damaged or dirty.

Initialize (flashing)
The Setup Menu settings have been lost.
On the contents recorded by the timer have disappeared over time and are not available for saving to disc, or Programme Play could not be activated since the program has disappeared over time.
(The message flashes for about four seconds when you turn on the deck by pressing I/O.)

Name Full!
The naming capacity of the MD has reached its limit (about 1,700 characters).

Net MD
The Net MD function is on. (If you attempt an invalid operation at this time, "Net MD" appears.)

Net MD NOW
You pressed the I/O during Check In or Check Out execution. This may cause data damage, so be sure to wait for Check In or Check Out to finish before turning off the Net MD function and the MD deck.

No Change
While attempting to change the recording level after recording, you pressed AMS or YES without actually changing the recording level, so no change was made.

No Disc
There is no MD in the deck.

No Name
The track or disc has no name.

Premastered
An attempt was made to record or edit to a premastered MD.

Push Stop!
You pressed an invalid key during MD operation. Press ■ and perform the operation again.

S.F Edit
You attempted to perform another operation while in S.F Edit (changing the recording level after recording, Fade-in, Fade-out) mode.
You cannot perform any other operations while in S.F Edit mode.

(S.F) Edit NOW
You pressed I/O while in S.F Edit (changing the recording level after recording, Fade-in, Fade-out) mode.
If you turn off the deck while in S.F Edit mode, any changes that you have made will not be made properly. Finish the changes and leave S.F Edit mode before turning off the deck. If you accidentally turn off the deck while changes are being made, press I/O while the message is displayed.

Smart Space
The Smart Space Function is on (page 44).

Step Full!
The programme contains the maximum number of tracks. You cannot add any more tracks.

TOC Reading
The deck is checking the TOC (Table Of Contents) on the MD.

TrieProtected
You cannot perform editing operations on protected tracks (tracks checked out from a USB connected computer, etc.) other than "Moving recorded tracks" on page 30 and "Naming a track or an MD" on page 30 using this deck.

Setup menu table

<table>
<thead>
<tr>
<th>Menu Item</th>
<th>Reference page</th>
</tr>
</thead>
<tbody>
<tr>
<td>T.Mark</td>
<td>13</td>
</tr>
<tr>
<td>LS(T)</td>
<td>14</td>
</tr>
<tr>
<td>Auto</td>
<td>24</td>
</tr>
<tr>
<td>S.Space</td>
<td>14</td>
</tr>
<tr>
<td>P.Hold</td>
<td>15</td>
</tr>
<tr>
<td>Fix</td>
<td>39</td>
</tr>
<tr>
<td>Freq</td>
<td>39</td>
</tr>
<tr>
<td>Pitch</td>
<td>38</td>
</tr>
<tr>
<td>Volume</td>
<td>38</td>
</tr>
<tr>
<td>Acut</td>
<td>20</td>
</tr>
<tr>
<td>Sleep</td>
<td>40</td>
</tr>
<tr>
<td>Display</td>
<td>21</td>
</tr>
<tr>
<td>Keyboard?</td>
<td>42</td>
</tr>
<tr>
<td>LPstamp</td>
<td>12</td>
</tr>
</tbody>
</table>

Specifications

<table>
<thead>
<tr>
<th>System</th>
<th>MiniDisc digital audio system</th>
</tr>
</thead>
<tbody>
<tr>
<td>Disc</td>
<td>MiniDisc</td>
</tr>
<tr>
<td>Laser</td>
<td>Semiconductor laser (λ = 780 nm)</td>
</tr>
<tr>
<td>Emission duration: continuous</td>
<td>MAX 44.6 μW/η</td>
</tr>
<tr>
<td>Laser output</td>
<td>44.1 kHz</td>
</tr>
<tr>
<td>Coding</td>
<td>ATRAC/Adaptive Transform Acoustic Coding/ATRAC 3</td>
</tr>
<tr>
<td>Modulation system</td>
<td>EFM (Eight-to-Fourteen Modulation)</td>
</tr>
<tr>
<td>Number of channels</td>
<td>2 stereo channels</td>
</tr>
<tr>
<td>Frequency response</td>
<td>5 to 30,000 Hz ±0.5 dB</td>
</tr>
<tr>
<td>Signal-to-noise ratio</td>
<td>Over 100 dB during play</td>
</tr>
<tr>
<td>Wow and flutter</td>
<td>Below measurable limit</td>
</tr>
</tbody>
</table>

Inputs

<table>
<thead>
<tr>
<th>Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANALOG IN</td>
<td>Jack type: phone</td>
</tr>
<tr>
<td>Rated input</td>
<td>0.3 mV (1 kHz)</td>
</tr>
<tr>
<td>Impedance</td>
<td>1 kΩ</td>
</tr>
</tbody>
</table>

DIGITAL OPTICAL IN

<table>
<thead>
<tr>
<th>Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Connector type: square optical</td>
<td></td>
</tr>
<tr>
<td>Impedance</td>
<td>600 nΩ</td>
</tr>
</tbody>
</table>

DIGITAL COAXIAL IN

<table>
<thead>
<tr>
<th>Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Connector type: square optical</td>
<td></td>
</tr>
<tr>
<td>Impedance</td>
<td>Over 10 kΩ</td>
</tr>
</tbody>
</table>

Outputs

<table>
<thead>
<tr>
<th>Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHONES</td>
<td>Jack type: stereo phone</td>
</tr>
<tr>
<td>Rated output</td>
<td>25 mW</td>
</tr>
</tbody>
</table>

ANALOG OUT

<table>
<thead>
<tr>
<th>Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Connector type: square optical</td>
<td></td>
</tr>
<tr>
<td>Rated output</td>
<td>Over 50 kΩ</td>
</tr>
</tbody>
</table>

DIGITAL OPTICAL OUT

<table>
<thead>
<tr>
<th>Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Connector type: square optical</td>
<td></td>
</tr>
<tr>
<td>Rated output</td>
<td>18 dBm</td>
</tr>
</tbody>
</table>

General

<table>
<thead>
<tr>
<th>Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Power requirements</td>
<td>230 V AC, 50/60 Hz</td>
</tr>
<tr>
<td>Power consumption</td>
<td>0.45 W (in standby mode)</td>
</tr>
</tbody>
</table>

Dimensions (approx.)

<table>
<thead>
<tr>
<th>Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>430 x 111 x 286 mm</td>
<td></td>
</tr>
</tbody>
</table>

Mass (approx.)

<table>
<thead>
<tr>
<th>Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.5 kg</td>
<td></td>
</tr>
</tbody>
</table>

Supplied accessories

Audio connecting cords (2)
Optical cable (1)
OpenMG Jukebox CD-ROM (1)
Operating instructions for OpenMG Jukebox (1)
Remote commander (remote) (1)
50 (size-AA) batteries (2)
USB cable (1)

The optional accessories for this deck are subject to change without notice. For details, consult your nearest Sony dealer.

US and foreign patents licensed from Dolby Laboratories.
Design and specifications are subject to change without notice.