

**SONY®**

# ***FM/AM MiniDisc Player***

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Operating Instructions \_\_\_\_\_

**US**

## **Owner's Record**

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

Model No. MDX-C7970 Serial No. \_\_\_\_\_

For installation and connections, see the supplied installation/connections manual.



***MDX-C7970***

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## 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.

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

### CAUTION

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

## Welcome !

Thank you for purchasing the Sony MiniDisc Player. This unit lets you enjoy a variety of features by using either a supplied rotary commander or an optional wireless remote.

In addition to the MD playback and the radio operations, you can expand your system by connecting an optional CD/MD unit\*<sup>1</sup>. When you operate this unit or a connected optional CD unit with the CD TEXT function, the CD TEXT information will appear in the display when you play a CD TEXT disc\*<sup>2</sup>.

\*<sup>1</sup> You can also connect to an MD changer, a CD changer, an MD player, or a CD player.

\*<sup>2</sup> A CD TEXT disc is an audio CD that includes information such as the disc name, artist name and track names. This information is recorded on the disc.

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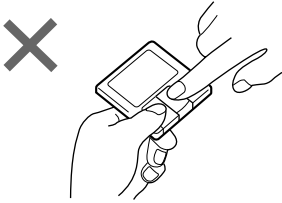
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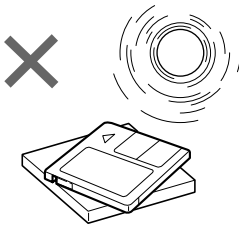
## Notes on MDs

Since an MD itself is housed in a cartridge, free from accidental contact with your fingers and dust etc., it can withstand a certain degree of the rough handling. However, dirt or dust on the surface of the cartridge or a warped cartridge may cause a malfunction quality, observe the following.

Never touch the surface of the MD itself by deliberately opening the shutter on the cartridge.



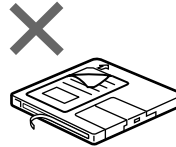
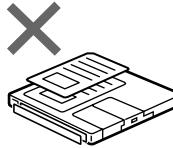
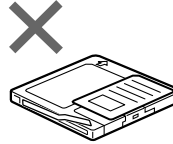
Do not expose the MD to direct sunlight or heat sources such as hot air-ducts. Do not leave it in a car parked in the direct sunlight where there can a considerable rise in temperature. Make sure that it is not left on the dashboard or rear tray of a car etc. where the temperature can also be excessive.



## Notes on mounting labels

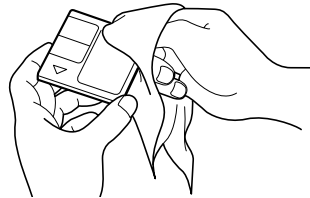
Be sure to mount labels on cartridges correctly, as failing to do so may cause an MD to become stuck in the unit.

- Mount the label in a suitable position.
- Remove old labels before putting new ones on.
- Replace labels that are beginning to peel away from the MD.

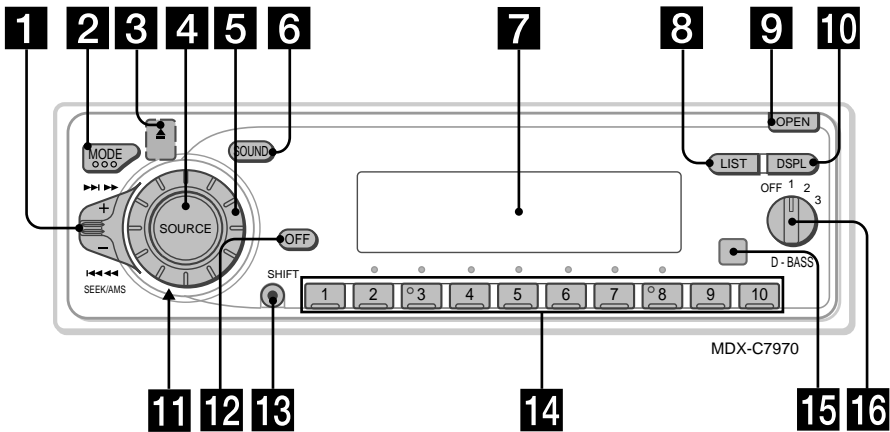


## Cleaning

Wipe the surface of the MD cartridge from time to time with a soft dry cloth.



# Location of controls

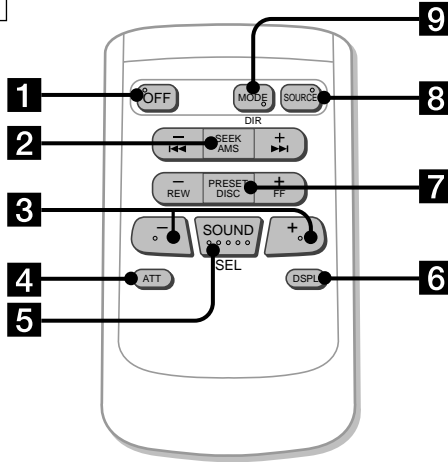


Refer to the pages for details.

- |   |  |
|---|--|
| <p><b>1</b> SEEK/AMS (seek/Automatic Music Sensor/manual search) control<br/>10, 11, 12, 17, 19, 20, 21</p> <p><b>2</b> MODE (band/unit select) button<br/>11, 16, 18, 20</p> <p><b>3</b> ▲ (eject) button (located on the front of the unit hidden by the front panel) 9</p> <p><b>4</b> SOURCE (source select) button<br/>9, 11, 16, 18, 20, 21, 22</p> <p><b>5</b> Dial (volume/subwoofer volume/bass/treble/left-right/rear-front control)<br/>8, 12, 13, 14, 18</p> <p><b>6</b> SOUND button 14</p> <p><b>7</b> Display window</p> <p><b>8</b> LIST button<br/>Station Memo 12, 13<br/>Disc Memo 18<br/>List-up 13, 19</p> <p><b>9</b> OPEN button 7, 9, 23</p> <p><b>10</b> DSPL (display mode change) button<br/>9, 10, 12, 13, 16, 19</p> | <p><b>11</b> Reset button (located on the front side of the unit behind the front panel) 7</p> <p><b>12</b> OFF button 7, 9</p> <p><b>13</b> SHIFT button<br/>SET UP 8, 10, 15, 16<br/>PLAY MODE 11, 12, 19, 20<br/>REP 10, 17<br/>SHUF 10, 17</p> <p><b>14</b> During radio reception:<br/>Number buttons 11<br/>During CD/MD playback:<br/>Direct disc selection buttons 17<br/>During TV reception:<br/>Number buttons 21</p> <p><b>15</b> Receptor for the optional wireless remote</p> <p><b>16</b> D-BASS control 15</p> |
|---|--|

# Location of controls

*Optional wireless remote (RM-X47)*



The buttons of the wireless remote work the same functions as those on this unit.

- 1** OFF button
- 2** SEEK/AMS button
- 3** buttons
- 4** ATT button
- 5** SOUND/SEL button

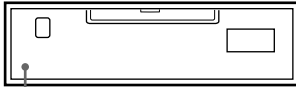
- 6** DSPL button
- 7** PRESET/DISC button  
*You cannot do manual search and manual tuning with the remote.*
- 8** SOURCE button
- 9** MODE/DIR button  
 controls the same function on this unit.

# Getting Started

## Resetting the unit

Before operating the unit for the first time or after replacing the car battery, you must reset the unit.

Remove the front panel and press the reset button with a pointed object, such as a ballpoint pen.



Reset button

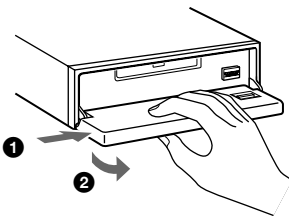
### Note

Pressing the reset button will erase the clock setting and some memorised functions.

## Detaching the front panel

You can detach the front panel of this unit to protect the unit from being stolen.

- 1 Press **OFF**.
- 2 Press **OPEN**, then slide the front panel to the right side, and pull out the left side of the front panel.

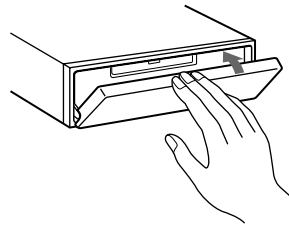
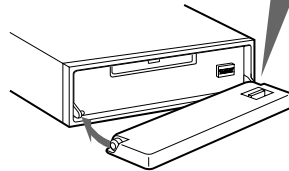
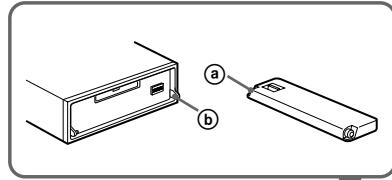


### Notes

- Do not put anything on the inner surface of the front panel.
- Be sure not to drop the panel when detaching it from the unit.
- If you detach the panel while the unit is still turned on, the power will turn off automatically to prevent the speakers from being damaged.
- When carrying the front panel with you, use the supplied front panel case.

## Attaching the front panel

Place the hole (a) in the front panel onto the spindle (b) on the unit as illustrated, then push the left side in.



### Notes

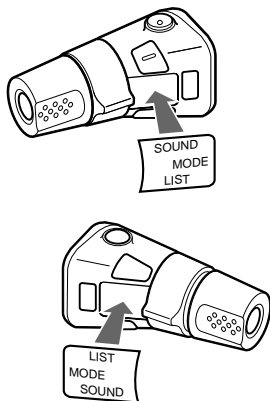
- Be sure not to attach the front panel upside down.
- Do not press the front panel too hard against the unit when attaching it.
- Do not press too hard or put excessive pressure on the display window of the front panel.
- Do not expose the front panel to direct sunlight or heat sources such as hot air ducts, and do not leave it in a humid place. Never leave it on the dashboard of a car parked in direct sunlight or where there may be a considerable rise in temperature.

### Caution alarm

If you turn the ignition key switch to the OFF position without removing the front panel, the caution alarm will beep for a few seconds.

## Preparing the rotary commander

When you mount the rotary commander, attach the label in the illustration below.

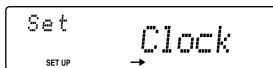


## Setting the clock

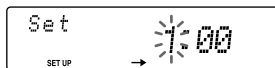
The clock has a 12-hour digital indication.

Example: Set the clock to 10:08

- 1 Press **(SHIFT)**, then press **(3)** (SET UP) repeatedly until "Clock" appears.



- 1 Press **(5)** (→).

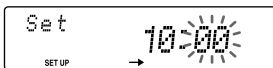


The hour indication flashes.

- 2 Set the hour.

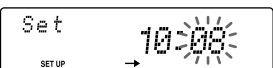


- 3 Press **(5)** (→).

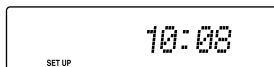


The minutes indication flashes.

- 4 Set the minutes.



- 2 Press **(SHIFT)**.



The clock starts.

- 3 Press **(SHIFT)**.

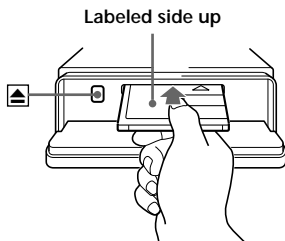
When the mode setting is complete, the normal playback mode appears.



# MD Player

## Listening to an MD

- 1 Press **OPEN** and insert the MD.

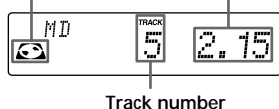


- 2 Close the front panel.  
Playback starts automatically.

If an MD is already inserted, press **SOURCE** repeatedly until "MD" appears to start playback.

The title of the MD\* and the track title will be displayed on the display window, then the playing time will appear.

MD indication      Elapsed playing time



\* Only if these titles are prerecorded on the MD.

**Tip**  
If the name of the MD is too long, you can scroll it across the display window by pressing **SHIFT**, then **←** (←) while the disc name or track name is displayed.

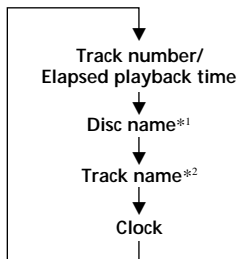
### When the last track on the MD is over

The track number indication will return to "1," and the playback will restart from the first track of the MD.

To	Press
Stop playback	<b>OFF</b>
Eject the MD	<b>OPEN</b> then ▲

## Changing the display item

Each time you press **DSPL**, the item changes as follows:



\*1 If there is no prerecorded title for a disc "NO D.Name" will appear on the display.

\*2 If a track title is not prerecorded, "NO T.Name" will be displayed.

After you select the desired item, the display will automatically change to the Motion Display mode after a few seconds. In the Motion Display mode, all the above items are scrolled in the display one by one in order.

**Tip**  
The Motion Display mode can be turned off. (See "Changing the sound and display settings" on page 15.)

### Automatically scrolling a disc name — Auto Scroll

If the disc name or track name on an MD exceeds 10 characters and the Auto Scroll function is on, information automatically scrolls across the display as follows:

- The disc name appears when the disc has changed (if the disc name is selected).
- The track name appears when the track has changed (if the track name is selected).
- The disc or track name appears depending on the setting when you press **SOURCE** to select an MD.

continue to next page →

If you press **(DSPL)** to change the display item, the disc or track name of the MD is scrolled automatically whether you set the function on or off.

- 1 During playback, press **(SHIFT)**.
- 2 Press **(3)** (SET UP) repeatedly until "A.Scr1" appears.
- 3 Press **(5)** (→) to select "A.Scr1 on."
- 4 Press **(SHIFT)**.

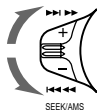
To cancel Auto Scroll, select "A.Scr1 off" in step 3 above.

## Locating a specific track

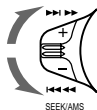
### — Automatic Music Sensor (AMS)

During playback, push the SEEK/AMS control up or down and release for each track you want to skip.

To locate succeeding tracks



To locate preceding tracks



## Locating a specific point in a track

### — Manual Search

During playback, push the SEEK/AMS control up or down and hold. Release when you have found the desired point.

To search forward



To search backward



#### Note

If "-----" or "-----" appears in the display, that means you have reached the beginning or the end of the disc and you cannot go any further.

## Playing an MD in various modes

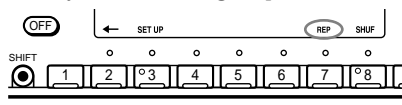
You can play MDs in various modes:

- Repeat (Repeat Play) repeats the current track.
- Shuf (Shuffle Play) plays all the tracks in random order.

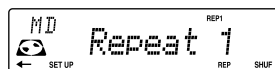
## Playing tracks repeatedly

### — Repeat Play

- 1 During playback, press **(SHIFT)**. Each time you press **(SHIFT)**, only the items you can select light up.



- 2 Press **(7)** (REP) repeatedly until "Repeat 1" appears.



Repeat Play starts.

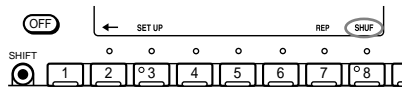
- 3 Press **(SHIFT)**.

To return to the normal playback mode, select "Repeat off" in step 2 above.

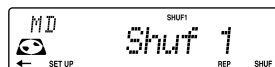
## Playing tracks in random order

### — Shuffle Play

- 1 During playback, press **(SHIFT)**. Each time you press **(SHIFT)**, only the items you can select light up.



- 2 Press **(8)** (SHUF) repeatedly until "Shuf 1" appears.



Shuffle Play starts.

- 3 Press **(SHIFT)**.

To return to the normal playback mode, select "Shuf off" in step 2 above.

# Radio

## Memorizing stations automatically

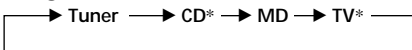
—Best Tuning Memory (BTM)

The unit selects the stations with the strongest signals and memorizes them in the order of their frequencies. You can store up to 10 stations on each band (FM1, FM2 and AM).

### Caution

When tuning in a station while driving, use Best Tuning Memory to prevent accidents.

- 1 Press **(SOURCE)** repeatedly to select the tuner.  
Each time you press **(SOURCE)**, the source changes as follows:



\* If the corresponding optional equipment is not connected, this item will not appear.

- 2 Press **(MODE)** repeatedly to select the band.  
Each time you press **(MODE)**, the band changes as follows:
- 
- ```
graph LR; A[FM1] --> B[FM2]; B --> C[AM];
```
- 3 Press **(SHIFT)**, then press **(4) (PLAY MODE)** repeatedly until "B.T.M" appears.
  - 4 Press **(5) (→)**.  
The unit stores stations in the order of their frequencies on the number buttons. A beep sounds when the setting is stored.
  - 5 Press **(SHIFT)**.

### Notes

- The unit does not store stations with weak signals. If only a few stations can be received, some number buttons will retain their former setting.
- When a number is indicated in the display, the unit starts storing stations from the one currently displayed.
- If an MD is not in the unit, only the tuner band appears even if you press **(SOURCE)**.

## Memorizing only the desired stations

You can preset up to 20 FM stations (10 each for FM1 and FM2), up to 10 AM stations in the order of your choice.

- 1 Press **(SOURCE)** repeatedly to select the tuner.
- 2 Press **(MODE)** repeatedly to select the band.
- 3 Push the SEEK/AMS control up or down to tune in the station you want to store on the number button.
- 4 Press and hold the desired number button (**(1)** to **(10)**) until "MEM" appears.  
The number button indication appears in the display.

### Note

If you try to store another station on the same number button, the previously stored station will be erased.

## Receiving the memorized stations

- 1 Press **(SOURCE)** repeatedly to select the tuner.
- 2 Press **(MODE)** repeatedly to select the band.
- 3 Press the number button (**(1)** to **(10)**) on which the desired station is stored.

## If you cannot tune in a preset station

Push the SEEK/AMS control up or down and release to search for the station (automatic tuning). Scanning stops when the unit receives a station. Push the SEEK/AMS control up or down repeatedly until the desired station is received.

### Note

If the automatic tuning stops too frequently, press (SHIFT), then press (4) (PLAY MODE) repeatedly until "Local" (local seek mode) is displayed. Then press (5) (→) to select "Local on." Press (SHIFT). Only the stations with relatively strong signals will be tuned in.

### Tip

If you know the frequency of the station you want to listen to, push the SEEK/AMS control up or down and hold until the desired frequency appears (manual tuning).

## If FM stereo reception is poor

### —Monaural Mode

1 During radio reception, press (SHIFT), then press (4) (PLAY MODE) repeatedly until "Mono" appears.

2 Press (5) (→) repeatedly until "Mono on" appears. The sound improves, but becomes monaural ("ST" disappears).

3 Press (SHIFT).

To go back to the normal mode, select "Mono off" in step 2 above.

## Changing the display item

Each time you press (DSPL), the item changes as follows:

Frequency ↔ Clock

After you select the desired item, the display will automatically change to the Motion Display mode after a few seconds. In the Motion Display mode, all the above items are scrolled in the display one by one in order.

### Tip

The Motion Display mode can be turned off. (See "Changing the sound and display settings" on page 15.)

## Storing the station names

### —Station Memo

You can assign a name to each radio station and store it in memory. The name of the station currently tuned in appears in the display. You can assign a name of up to eight characters for a station.

## Storing the station names

1 Tune in a station whose name you want to store.

2 Press (LIST) for two seconds.



3 Enter the characters.

1 Rotate the dial clockwise to select the desired characters.

(A) (B) (C) (Z) (0) (1) (2) (→)  
(.9) (→) (→) (→) (\*) (→) (→) (→) (←)  
(→) (←)

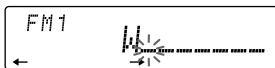


If you rotate the dial counterclockwise, the characters appear in the reverse order.

If you want to put a blank space between characters, select "\_" (under-bar).

2 Press (5) (→) after locating the desired character.

The flashing cursor moves to the next space.



If you press (2) (←), the flashing cursor moves to the left.

3 Repeat steps 1 and 2 to enter the entire name.

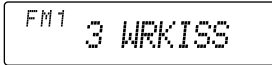
4 To return to the normal radio reception, press (LIST) for two seconds.

### Tip

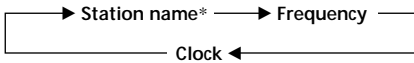
To erase or correct a name, enter "\_" (under-bar) for each character.

## Displaying the station name

Press **(DSPL)** during radio reception.



Each time you press **(DSPL)**, the item changes as follows:



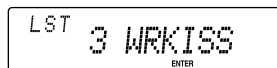
\* If the station name of a station is not stored, "NO Name" appears in the display for one second.

## Erasing the station name

- 1 Tune in a station and press **(LIST)** for two seconds.
- 2 Press **(DSPL)** for two seconds.
- 3 Rotate the dial to select the name that you want to erase.
- 4 Press **(ENTER)** for two seconds. The name is erased. Repeat steps 3 and 4 if you want to erase other names.
- 5 Press **(LIST)** for two seconds. The unit returns to the normal radio reception mode.

## Locating a station by name —List-up

- 1 Press **(LIST)** momentarily. The name assigned to the station currently playing appears in the display.



- 2 Press **(LIST)** repeatedly until you find the desired station.
- 3 Press **(ENTER)** to tune in the desired station.

### Note

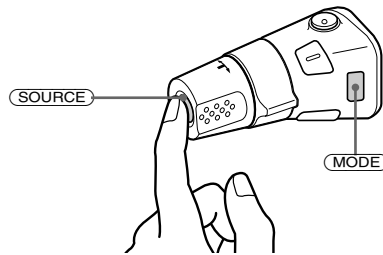
Once the station name or frequency has been displayed for five seconds, the display goes back to its normal mode. To turn off the display, press **(DSPL)**.

## Other Functions

### Using the rotary commander

The rotary commander works by pressing buttons and/or rotating controls. You can control the optional CD or MD unit with the rotary commander.

### By pressing the button (the SOURCE and MODE buttons)



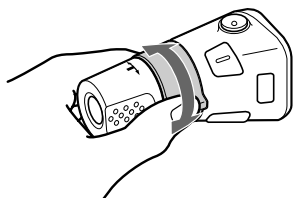
Each time you press **(SOURCE)**, the source changes as follows:  
Tuner → CD\* → MD → TV\*

\* If the corresponding optional equipment is not connected, this item will not appear.

Pressing **(MODE)** changes the operation in the following ways:

- Tuner : FM1 → FM2 → AM
- CD unit : CD1 → CD2 → ...
- MD unit : MD1 → MD2 → ...
- TV/Video : TV → Video1 → Video2

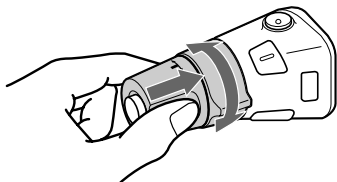
## By rotating the control (the SEEK/AMS control)



Rotate the control and release it to:

- Locate a specific track on a disc. Rotate and hold the control until you locate the specific point in a track, then release it to start playback.
- Tune in the stations automatically. Rotate and hold the control to find a specific station.

## By pressing in and rotating the control (the PRESET/DISC control)

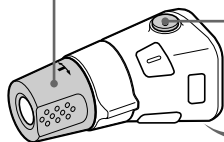


Push in and rotate the control to:

- Receive the stations memorized on the number buttons.
- Change the disc.

## Other operations

Rotate the VOL control to adjust the volume.

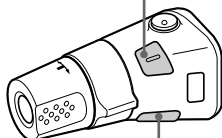


Press **(ATT)** to attenuate the sound.



Press **(OFF)** to turn off the unit.

Press **(SOUND)** to adjust the volume and sound menu.

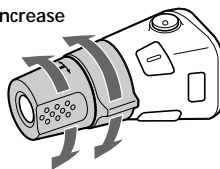


Press **(LIST)** to display the memorized names.

## Changing the operative direction

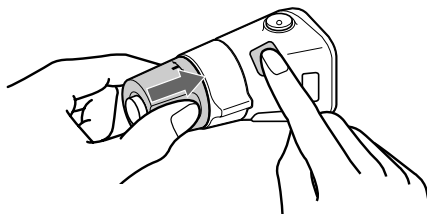
The operative direction of controls is factory-set as in the illustration below.

To increase



To decrease

If you need to mount the rotary commander on the right hand side of the steering column, you can reverse the operative direction.



Press **(SOUND)** for two seconds while pushing the VOL control.

### Tip

You can also change the operative direction of these controls with the unit (page 15).

## Adjusting the sound characteristics

You can adjust the bass, treble, balance and fader. Each source can store the bass and treble levels independently.

- 1 Select the item you want to adjust by pressing **(SOUND)** repeatedly. Each time you press **(SOUND)**, the item changes as follows:

VOL (volume) → BAS (bass) → TRE (treble) → BAL (left-right) → FAD (front-rear)

- 2 Adjust the selected item by rotating the dial. Adjust within three seconds after selecting the item. (After three seconds, the dial functions reverts to volume control.)

## Attenuating the sound

Press **(ATT)** on the rotary commander or optional wireless remote.  
“ATT on” flashes momentarily.

To restore the previous volume level, press **(ATT)** again.

### Tip

The unit decreases the volume automatically when a telephone call comes in (Telephone ATT function).

## Changing the sound and display settings

You can set:

- Clock (page 8)
- D.Info (dual information) to display the clock and the play mode at the same time (on) or to display the information alternately (off).
- Amber/Green to change the illumination color to amber or green.
- Dimmer to change the brightness of the display.
  - Select “on” to dim the display.
- Contrast to adjust the contrast if the indications in the display are not recognizable because of the unit’s installed position.
- Beep to turn on or off the beeps.
- RM (Rotary Commander) to change the operative direction of the controls of the rotary commander.
  - Select “norm” to use the rotary commander as the factory-set position.
  - Select “rev” when you mount the rotary commander on the right side of the steering column.
- M.dspl (Motion display) to turn the motion display on or off.
- A.Scr1 (Auto Scroll) (page 9, 16)

1 Press **(SHIFT)**.

2 Press **(3)(SETUP)** repeatedly until the desired setting mode appears.  
Each time you press **(3)(SET UP)**, the item changes as follows:

Clock → D.Info\* → Amber/Green → Dimmer → Contrast → Beep → RM → M.dspl → A.Scr1\*

\* When no MD or CD is playing, this item will not appear.

### Note

The displayed item will differ depending on the source.

3 Press **(5) (→)** to select the desired setting (Example: on or off).  
For the “Contrast” setting, pressing **(5)** (→) makes the contrast higher, and pressing **(2) (←)** makes the contrast lower.

4 Press **(SHIFT)**.

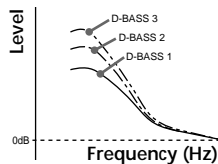
After the mode setting is complete, the display returns to normal playback mode.

## Boosting bass sound

—D-bass

You can enjoy a clear and powerful bass sound. The D-bass function boosts the low frequency signal with a sharper curve than conventional bass boost.

You can hear the bass line more clearly even while the vocal volume remains the same. You can emphasize and adjust the bass sound easily with the D-BASS control.



### Adjusting the bass curve

Turn the D-BASS control to adjust the bass level (1 to 3).

“D-BASS” appears in the display.

To cancel, turn the dial to OFF.

### Note

If the bass sound becomes distorted, adjust the D-BASS control or volume.

## With Optional Equipment

# CD/MD Unit

This unit can control a maximum of seven external CD/MD units in this configuration:

CD unit – maximum of five

MD unit – maximum of five.

Any combination up to seven will work.

If you connect an optional CD unit with the CD TEXT function, the CD TEXT information will appear in the display when you play a CD TEXT disc.

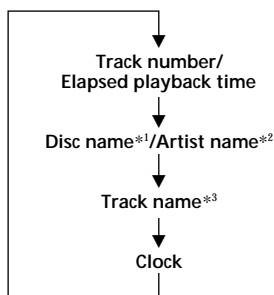
## Playing a CD or MD

- 1 Press **(SOURCE)** repeatedly to select CD or MD.
- 2 Press **(MODE)** until the desired unit appears.  
CD/MD playback starts.

When a CD or MD unit is connected, all the tracks play from the beginning.

## Changing the displayed items

Each time you press **(DSPL)** during CD, CD TEXT disc, or MD playback, the item changes as follows:



\*1 If you have not labeled the disc or if there is no disc name prerecorded on the MD, "NO D.Name" appears in the display.

\*2 If you play a CD TEXT disc, the artist name appears in the display after the disc name. (Only for CD TEXT discs with the artist name.)

\*3 If the track name of a CD TEXT or MD is not prerecorded, "NO T.Name" appears in the display.

You can label CD and CD TEXT discs with a personalized name using the disc memo function. Refer to "Labeling a CD" (page 18). However, if you use personalized labels, they will always take priority over the original CD TEXT information when such information is displayed.

### Tip

If you want to display the original CD TEXT information after labeling the CD TEXT disc with a personalized name, press **(SHIFT)**, then **(5)** (→).

After you select the desired item, the display will automatically change to the Motion Display mode after a few seconds. In the Motion Display mode, all the above items are scrolled in the display one by one in order.

### Tip

The Motion Display mode can be turned off. (See "Changing the sound and display settings" on page 15.)

## Automatically scrolling a disc name — Auto Scroll

If the disc name, artist name, or track name on a CD TEXT disc or MD exceeds 10 characters and the Auto Scroll function is on, information automatically scrolls across the display as follows:

- The disc name appears when the disc has changed (if the disc name is selected).
- The track name appears when the track has changed (if the track name is selected).
- The disc or track name appears depending on the setting when you press **(SOURCE)** to select an MD.

If you press **(DSPL)** to change the display item, the disc or track name of the MD or CD TEXT disc is scrolled automatically whether you set the function on or off.

- 1 During playback, press **(SHIFT)**.
- 2 Press **(3)(SETUP)** repeatedly until "A.Scr1" appears.
- 3 Press **(5)** → to select "A.Scrbn."
- 4 Press **(SHIFT)**.

To cancel Auto Scroll, select "A.Scr1 off" in step 3 above.



### Note

For some CD TEXT discs with very many characters, the following cases may happen:

- Some of the characters are not displayed
- Auto Scroll does not work.

### Tip

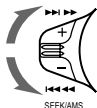
To manually scroll the long name of an MD or CD TEXT disc after activating the Auto Scroll function, press **(SHIFT)**, then **(2) (←)** (manual scroll).

## Locating a specific track

### — Automatic Music Sensor (AMS)

During playback, push the SEEK/AMS control up or down and release for each track you want to skip.

To locate succeeding tracks



To locate preceding tracks



## Locating a specific point in a track

### — Manual Search

During playback, push the SEEK/AMS control up or down and hold. Release when you have found the desired point.

To search forward



To search backward



## Locating a disc by disc number

### — Direct Disc Selection

Press the number button that corresponds with the desired disc number. The desired disc in the current unit begins playback.

## Playing tracks repeatedly

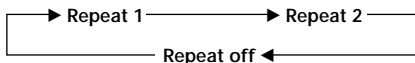
### — Repeat Play

You can select:

- Repeat 1 to repeat a track.
- Repeat 2 to repeat a disc.

1 During playback, press **(SHIFT)**.

2 Press **(7) (REP)** repeatedly until the desired setting appears.



Repeat Play starts.

3 Press **(SHIFT)**.

To return to the normal playback mode, select "Repeat off" in step 2 above.

## Playing tracks in random order

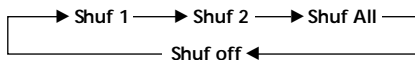
### — Shuffle Play

You can select:

- Shuf 1 to play the tracks on the current disc in random order.
- Shuf 2 to play the tracks in the current unit in random order.
- Shuf All to play all the tracks in all units in random order.

1 During playback, press **(SHIFT)**.

2 Press **(8) (SHUF)** repeatedly until the desired setting appears.



Shuffle Play starts.

3 Press **(SHIFT)**.

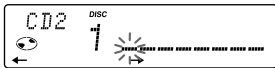
To return to the normal playback mode, select "Shuf off" in step 2 above.

## Labeling a CD — Disc Memo

(For a CD unit with the custom file function)

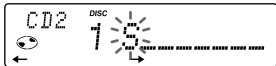
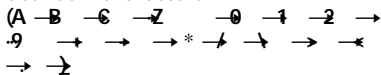
You can label each disc with a personalized name. You can enter up to eight characters for a disc. If you label a CD, you can locate the disc by name and select the specific tracks for playback (page 19).

- 1 Play the CD and press **(LIST)** for two seconds.



- 2 Enter the characters.

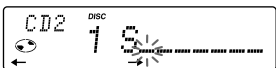
- 1 Rotate the dial clockwise to select the desired characters.



If you rotate the dial counterclockwise, the characters will appear in reverse order.

If you want to put a blank space between characters, select “\_” (under-bar).

- 2 Press **(5)** (→) after locating the desired character. The flashing cursor moves to the next space.



If you press **(2)** (←), the flashing cursor moves to the left.

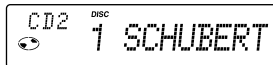
- 3 Repeat steps 1 and 2 to enter the entire name.
- 3 To return to normal CD playback mode, press **(LIST)** for two seconds.

### Tip

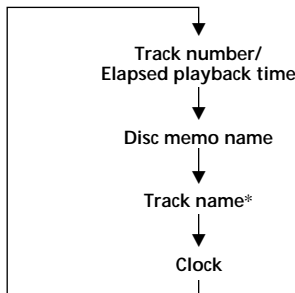
To erase or correct a name, enter “\_” (under-bar) for each character.

## Displaying the disc memo

Press **(DSPL)** during CD or CDTEXT disc playback.



Each time you press **(DSPL)** during CD or CDTEXT disc playback, the item changes as follows:



\* If you connect an optional CD unit with the CD TEXT function, the CD TEXT information will appear in the display when you play a CD TEXT disc.

## Erasing the disc memo

- 1 Press **(SOURCE)** repeatedly to select CD.
- 2 Press **(MODE)** repeatedly to select the CD unit.
- 3 Press **(LIST)** for two seconds.
- 4 Press **(DSPL)** for two seconds.
- 5 Rotate the dial to select the name you want to erase.
- 6 Press **(6)** (ENTER) for two seconds. The name is erased. Repeat steps 5 and 6 if you want to erase other names.
- 7 Press **(LIST)** for two seconds. The unit returns to normal CD playback mode.

### Note

When a personalized label is erased, the original CD TEXT information will appear in the display.

## Locating a disc by name

— List-up (For a CD unit with the custom file function or an MD unit)

You can use this function for discs that have been assigned a custom name. For more information on disc names, refer to “Labeling a CD” (page 18).

### 1 Press **(LIST)**.

The name assigned to the current disc appears in the display.



When you assign a disc memo label to a CD TEXT disc, it takes priority over the original CD TEXT information.

### 2 Press **(LIST)** repeatedly until you find the desired disc.

### 3 Press **(ENTER)** to play the disc.

#### Notes

- After a disc name has been displayed for five seconds, the display returns to normal playback mode. To turn off the display, press **(DSPL)**.
- The track names are not displayed during MD or CD TEXT disc playback.
- If there are no discs in the magazine, “NO Disc” appears in the display.
- If a disc has not been assigned a custom file, “\*\*\*\*\*” appears in the display.
- If the disc information has not been read by the unit, “?” appears in the display. To load a disc, first press the number button, then choose the disc that has not been loaded.
- There are also some letters which cannot be displayed (during MD or CD TEXT disc playback).

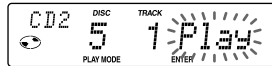
## Selecting specific tracks for playback

— Bank (For a CD unit with the custom file function)

If you label the disc, you can set the unit to skip or play the tracks of your choice.

### 1 Start playing the disc and press **(SHIFT)**, then press **(4)** (PLAY MODE) for two seconds.

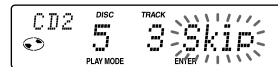
Bank edit mode



#### Note

If you have not labeled the disc, the bank edit mode does not appear. To go back to normal playback mode, press **(SHIFT)**.

### 2 Push the SEEK/AMS control up or down to select the track number you want to skip and press **(ENTER)**.



The indication changes from “Play” to “Skip.” To return the indication to “Play,” press **(ENTER)** again.

### 3 Repeat step 2 to set “Play” or “Skip” for all the tracks.

### 4 Press **(4)** (PLAY MODE) for two seconds. The unit returns to normal CD playback mode.

### 5 Press **(SHIFT)**.

#### Notes

- You can set “Play” or “Skip” for up to 24 tracks.
- You cannot set “Skip” for all the tracks on a CD.

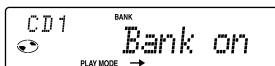
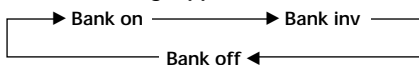
## Playing specific tracks only

You can select:

- Bank on to play the tracks with the “Play” setting.
- Bank inv (Inverse) to play the tracks with the “Skip” setting.

1 During playback, press **(SHIFT)**, then press **(4) (PLAY MODE)** repeatedly until “Bank” appears.

2 Press **(5) (→)** repeatedly until the desired setting appears.



Playback starts from the track following the current one.

3 Press **(SHIFT)**.

To return to normal playing mode, select “Bank off” in step 2 above.

## TV/Video

You can connect an optional TV tuner and TV monitor to this unit.

### Watching the TV

1 Press **(SOURCE)** repeatedly until “TV” appears.

2 Push the SEEK/AMS control up or down to select the desired TV band.

### Watching a video

1 Press **(SOURCE)** repeatedly until “TV” appears.

2 Press **(MODE)** repeatedly to select “Video1.”  
Playback the video.

#### Note

“Video 2” appears if the VIDEO 2 terminal of the TV monitor is selected.

### Memorizing TV channels automatically

The unit selects the TV channels with the strongest signals and memorizes them in the order of their frequency.

#### Caution

When tuning in a station while driving, use Best Tuning Memory to prevent accidents.

1 Press **(SOURCE)** repeatedly until “TV” appears.

2 Press **(SHIFT)**, then press **(4) (PLAY MODE)** repeatedly until “Auto mem” appears.

### 3 Press (5) (→).

The unit stores TV channels in the order of their frequencies on the number buttons. A beep sounds when the setting is stored.

### 4 Press (SHIFT).

#### Notes

- The unit does not store TV channels with weak signals. If only a few TV channels can be received, some number buttons will remain empty.
- When a preset number is indicated in the display, the unit starts storing TV channels from the one currently displayed.

## Memorizing only the desired TV channels

You can store up to 10 channels on the number buttons in the order of your choice.

### 1 Press (SOURCE) repeatedly until "TV" appears.

### 2 Push the SEEK/AMS control up or down to tune in the TV channel you want to store on each number button.

### 3 Press and hold the desired number button (1 to 10) until you hear a beep sound.

The number button indication appears in the display.

#### Note

If you try to store another channel on the same number button, the previously stored channel will be erased.

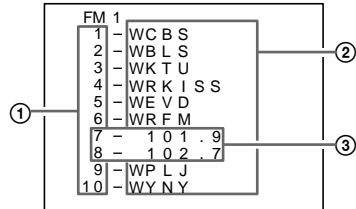
## Storing the TV channel names

Follow the steps in "Storing the station names" (page 12).

## Displaying the TV or radio station names

Press (LIST) during TV or radio reception.

Example: When receiving the FM1 band



#### ① Preset number

#### ② Stored station names

#### ③ Frequencies\*

\* If the name of a station is not stored, the frequency of that station will be displayed instead.

#### Notes

- It may take some time before all indications appear in the display.
- The TV channel does not appear during list display.
- The contents of the preset memory cannot be listed when the unit is in simultaneous play mode (page 22).

## Turning off the display

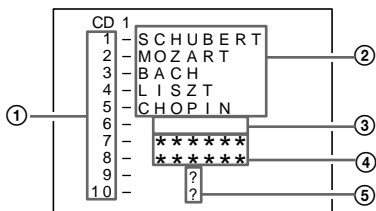
During radio reception, press (LIST) again.

During TV reception, the list display on the TV monitor will automatically turn off after a few seconds.

## Displaying the information stored on discs

Press **(LIST)** during CD/MD playback.

*Example: When CD unit 1 is selected.*



- ① Disc numbers
- ② Titles stored as custom files
- ③ No disc is loaded\*1
- ④ No stored titles\*2
- ⑤ TOC information has not been identified yet\*3

\*1 A blank space is displayed next to a disc number represents empty slots in the disc magazine.

\*2 If a title is not registered in the custom file, "\*\*\*\*\*" is displayed.

\*3 If the disc information has not been read yet, "?" is displayed.

### Notes

- It may take some time until all indications appear in the display.
- The TV channel does not appear during list display.
- The contents of the preset memory cannot be listed when the unit is in the simultaneous play mode.

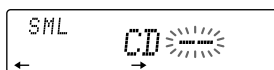
## Turning off the display

Press **(LIST)** again.

## Watching the TV or video while listening to a CD or MD — Simultaneous Play

The simultaneous play function does not work while you are listening to the radio.

- 1 Press **(SOURCE)** for two seconds.



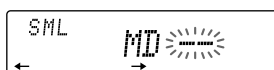
- 2 Press **(2)** (←).



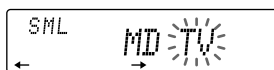
- 3 Press **(SOURCE)** repeatedly to select a CD or MD.



- 4 Press **(5)** (→).



- 5 Press **(SOURCE)** repeatedly to select a TV or video.



- 6 Press **(SOURCE)** for two seconds. Simultaneous Play starts.

If you are already watching the TV or video and want to begin listening to a CD or MD as well follow the same steps above except press **(5)** (→) in step 2 and press **(2)** (←) in step 4.

## Returning to normal mode

To cancel the CD or MD, follow the steps above and select "--" in step 3.

To cancel the TV or video, follow the steps above and select "--" in step 5.

### Note

If you press the EJECT button on a CD/MD unit while the unit is in simultaneous play mode, Simultaneous Play is canceled.

# Additional Information

## Precautions

- If your car was parked in direct sunlight resulting in a considerable rise in temperature inside the car, allow the unit to cool off before operating it.
- If no power is being supplied to the unit, check the connections first. If everything is in order, check the fuse.
- If no sound comes from the speakers of 2-speaker systems, set the fader control to the center position.
- If your car is equipped with a power aerial, it will extend automatically while the unit is operating.
- Connecting this unit may cause some car battery wear when your car has no ACC (accessory) position on the ignition key switch.

If you have any questions or problems concerning your unit that are not covered in this manual, please consult your nearest Sony dealer.

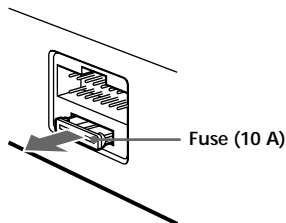
## Moisture condensation

On a rainy day or in a very damp area, moisture may condense on the lenses inside the MD player. Should this occur, the unit will not operate properly. In this case, remove the disc and wait for about an hour until the moisture evaporates.

## Maintenance

### Fuse replacement

When replacing the fuse, be sure to use one matching the amperage rating started on the original fuse. If the fuse blows, check the power connection and replace the fuse. If the fuse blows again after replacement, there may be an internal malfunction. In such a case, consult your nearest Sony dealer.

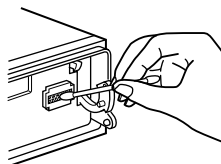


### Warning

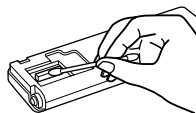
Never use a fuse with an amperage rating exceeding the one supplied with the unit as this could damage the unit.

### Cleaning the connectors

The unit may not function properly if the connectors between the unit and the front panel are not clean. In order to prevent this, open the front panel by pressing **(OPEN)**, then detach it and clean the connectors with a cotton swab dipped in alcohol. Do not apply too much force. Otherwise, the connectors may be damaged.



Main unit



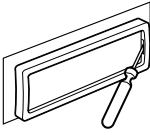
Back of the front panel

### Notes

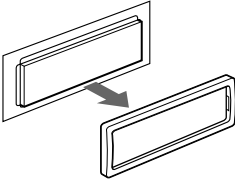
- For safety, turn off the engine before cleaning the connectors and remove the key from the ignition switch.
- Never touch the connectors directly with your fingers or any metal device.

# Dismounting the unit

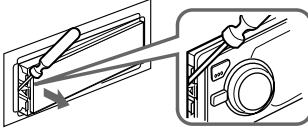
- 1 Press the clip inside the front cover with a thin screwdriver, and lever the front cover free.



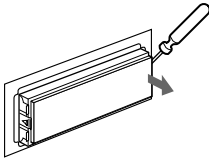
- 2 Repeat step 1 on the left side. The front cover is removed.



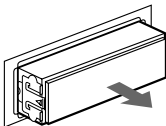
- 3 Use a thin screwdriver to push in the clip on the left side of the unit, then pull out the left side of the unit until the catch clears the mounting.



- 4 Repeat step 3 on the right side.



- 5 Slide the unit out of the mounting.





# Specifications

## AUDIO POWER SPECIFICATIONS

### POWER OUTPUT AND TOTAL HARMONIC DISTORTION

17 watts per channel minimum continuous average power into 4 ohms, 4 channels driven from 20 Hz to 20 kHz with no more than 1% total harmonic distortion.

## Other specifications

### MD player section

|                        |                        |
|------------------------|------------------------|
| Signal-to-noise ratio  | 90 dB                  |
| Frequency response     | 10 – 20,000 Hz         |
| Wow and flutter        | Below measurable limit |
| Laser Diode Properties |                        |
| Material               | GaAlAs                 |
| Wavelength             | 780 nm                 |
| Emission Duration      | Continuous             |
| Laser output power     | Less than 44.6 W*      |

\* This output is the value measured at a distance of 200 mm from the objective lens surface on the Optical Pick-up Block.

### Tuner section

|                              |                                 |
|------------------------------|---------------------------------|
| <b>FM</b>                    |                                 |
| Tuning range                 | 87.5 – 107.9 MHz                |
| Antenna terminal             | External antenna connector      |
| Intermediate frequency       | 10.7 MHz                        |
| Usable sensitivity           | 8 dBf                           |
| Selectivity                  | 75 dB at 400 kHz                |
| Signal-to-noise ratio        | 65 dB (stereo),<br>68 dB (mono) |
| Harmonic distortion at 1 kHz | 0.7 % (stereo),<br>0.4 % (mono) |
| Separation                   | 35 dB at 1 kHz                  |
| Frequency response           | 30 – 15,000 Hz                  |

|                        |                            |
|------------------------|----------------------------|
| <b>AM</b>              |                            |
| Tuning range           | 530 – 1,710 kHz            |
| Antenna terminal       | External antenna connector |
| Intermediate frequency | 10.71 MHz/450 kHz          |
| Sensitivity            | 30 $\mu$ V                 |

### Power amplifier section

|                      |                                           |
|----------------------|-------------------------------------------|
| Outputs              | Speaker outputs<br>(sure seal connectors) |
| Speaker impedance    | 4 – 8 ohms                                |
| Maximum power output | 40 W $\times$ 4 (at 4 ohms)               |

### General

|                      |                                                                                                                                                                                      |
|----------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Outputs              | Line outputs (2)<br>Power antenna relay control lead<br>Power amplifier control lead<br>Telephone ATT control lead<br>Illumination control lead                                      |
| Tone controls        | Bass $\pm$ 8 dB at 100 Hz<br>Treble $\pm$ 8 dB at 10 kHz                                                                                                                             |
| Power requirements   | 12 V DC car battery (negative ground)                                                                                                                                                |
| Dimensions           | Approx. 178 $\times$ 50 $\times$ 184 mm<br>(7 <sup>1</sup> / <sub>8</sub> $\times$ 2 $\times$ 7 <sup>1</sup> / <sub>4</sub> )<br>(w/h/d)                                             |
| Mounting dimensions  | Approx. 182 $\times$ 53 $\times$ 162 mm<br>(7 <sup>1</sup> / <sub>4</sub> $\times$ 2 <sup>1</sup> / <sub>8</sub> $\times$ 6 <sup>1</sup> / <sub>2</sub> )<br>(w/h/d)                 |
| Mass                 | Approx. 1.2 kg (2 lb 10 oz)                                                                                                                                                          |
| Supplied accessories | Rotary commander (1)<br>Parts for installation and connections (1 set)<br>Front panel case (1)                                                                                       |
| Optional accessories | Wireless remote RM-X47<br>BUS cable (supplied with an RCA pin cord)<br>RC-61 (1 m), RC-62 (2 m)                                                                                      |
| Optional equipment   | CD changer (10 discs)<br>CDX-828, CDX-727<br>MD changer (6 discs)<br>MDX-65<br>Other CD/MD changers with the Sony-BUS system<br>Source selector<br>XA-C30<br>TV tuner<br>XT-40V, etc |

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Design and specifications are subject to change without notice.

# Troubleshooting guide

The following checklist will help you remedy problems you may encounter with your unit. Before going through the checklist below, check the connection and operating procedures.

## General

| Problem                                      | Cause/Solution                                                                                                                                                                                                                      |
|----------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| No sound                                     | <ul style="list-style-type: none"><li>• Cancel the ATT function.</li><li>• Set the fader control to the center position for two-speaker systems.</li><li>• Rotate the dial in a clockwise direction to adjust the volume.</li></ul> |
| The contents of the memory have been erased. | <ul style="list-style-type: none"><li>• The power cord or battery has been disconnected.</li><li>• The reset button has been pressed.<br/>→ Store again into the memory.</li></ul>                                                  |
| Indications do not appear in the display.    | Remove the front panel and clean the connectors. See "Cleaning the connectors" (page 23) for details.                                                                                                                               |
| No beep sound.                               | The beep sound is canceled (page 15).                                                                                                                                                                                               |

## CD/MD playback

| Problem                                | Cause/Solution                                                                                                                                                         |
|----------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| A disc cannot be loaded.               | <ul style="list-style-type: none"><li>• Another MD is already loaded.</li><li>• The MD is forcibly inserted upside down or in the wrong way.</li></ul>                 |
| Playback does not begin.               | Defective MD or dirty CD.                                                                                                                                              |
| A disc is automatically ejected.       | The ambient temperature exceeds 50°C (122°F).                                                                                                                          |
| MD will not eject.                     | Press ▲ for two seconds.                                                                                                                                               |
| The operation buttons do not function. | Press the reset button.                                                                                                                                                |
| The sound skips due to vibration.      | <ul style="list-style-type: none"><li>• The unit is installed at an angle of more than 20°.</li><li>• The unit is not installed in a sturdy part of the car.</li></ul> |

## Radio reception

| Problem                           | Cause/Solution                                                                                                                                                       |
|-----------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Preset tuning is not possible.    | <ul style="list-style-type: none"><li>• Store the correct frequency in the memory.</li><li>• The broadcast signal is too weak.</li></ul>                             |
| Automatic tuning is not possible. | The broadcast signal is too weak.<br>→ Use manual tuning.                                                                                                            |
| The "ST" indication flashes.      | <ul style="list-style-type: none"><li>• Tune in the frequency precisely.</li><li>• The broadcast signal is too weak.<br/>→ Set to the Mono mode (page 12).</li></ul> |

## Error displays (when optional CD/MD unit is connected)

The following indications will flash for about five seconds, and an alarm sound will be heard.

| Display                    | Cause                                                            | Solution                                                 |
|----------------------------|------------------------------------------------------------------|----------------------------------------------------------|
| <b>NO Mag</b>              | The disc magazine is not inserted in the CD/MD unit.             | Insert the disc magazine with discs into the CD/MD unit. |
| <b>NO Disc</b>             | No disc is inserted in the CD/MD unit.                           | Insert discs in the CD/MD unit.                          |
| <b>NG Discs</b>            | A CD/MD cannot play because of some problem.                     | Insert another CD/MD.                                    |
| <b>Error</b> <sup>*1</sup> | A CD is dirty or inserted upside down.*2                         | Clean or insert the CD correctly.                        |
|                            | An MD does not play because of some problem.*2                   | Insert another MD.                                       |
| <b>Blank</b> <sup>*1</sup> | No tracks have been recorded on an MD.*2                         | Play an MD with tracks recorded on it.                   |
| <b>Push Reset</b>          | The CD/MD unit cannot be operated because of some problem.       | Press the reset button of the this unit.                 |
| <b>Not Ready</b>           | The lid of the MD unit is open or MDs are not inserted properly. | Close the lid or inserted the MDs properly.              |

<sup>\*1</sup> When an error occurs during playback of an MD or CD, the disc number of the MD or CD does not appear in the display.

<sup>\*2</sup> The disc number causing the error appears in the display.

If the above-mentioned solutions do not help improve the situation, consult your nearest Sony dealer.

