

# ***FM/AM Compact Disc Player***

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

EN

## **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. CDX-C510    Serial No. \_\_\_\_\_

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



## ***CDX-C510***

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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 Compact Disc Player. This unit lets you enjoy a variety of features by using either a rotary remote or a wireless remote.

In addition to the CD playback and the radio operations, you can expand your system by connecting an optional CD/MD changer and digital preamplifier.

EN

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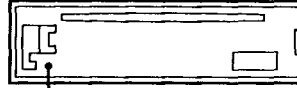
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# Getting Started

## Resetting the unit

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

Press the reset button with a pointed object, such as a ball-point pen.



Reset button

### Note

When you connect the power supply cord to the unit or reset the unit, wait for about 10 seconds before you insert a disc. Do not insert a disc within these 10 seconds, otherwise, the unit will not be reset.

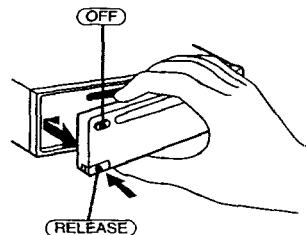
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## Detaching the front panel

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

1 Press **(OFF)**.

2 Press **(RELEASE)** to open up the front panel. Then slide the front panel a little to the left, and pull it off towards you.

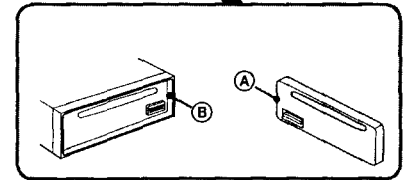
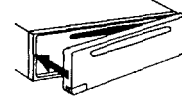


### Notes

- Be sure not to drop the panel when detaching it from the unit.
- If you press **(RELEASE)** to detach the panel while the unit is still on, the unit will turn off automatically to prevent the speakers from being damaged.

## Attaching the front panel

Align part **(A)** of the front panel to part **(B)** of the unit as illustrated, and push until it clicks.



### Notes

- Be sure not to attach the front panel upside down.
- Do not press the front panel hard against the unit when attaching it. Press it lightly against the unit.
- When you carry the front panel with you, put it in the supplied front panel case.
- Do not press hard or put excessive pressure on the display windows of the front panel.
- Do not expose the front panel to direct sunlight, 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 where there may be a considerable rise in temperature.

## Caution alarm

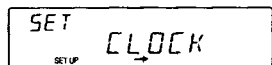
If you turn the ignition key switch to the OFF position without removing the front panel, the caution alarm will beep for a few seconds (only when the POWER SELECT switch is set to the **(A)** position).

## Setting the clock

The clock has a 12-hour digital indication.

Example: Set the clock to 10:08

- 1 Press **(SHIFT)**, then press **(2)** (SET UP).

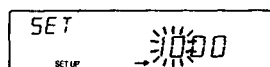
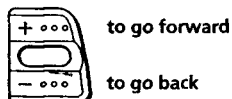


- 1 Press **(4)** (→).

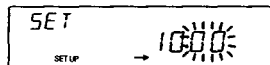


The hour digit flashes.

- 2 Set the hour.

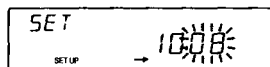


- 3 Press **(4)** (→).

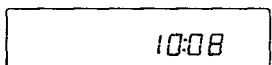


The minute digits flash.

- 4 Set the minute.



- 2 Press **(SHIFT)**.



The clock starts.

### Note

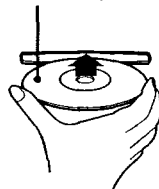
If the POWER SELECT switch on the bottom of the unit is set to the **(B)** position, turn the power on first, then set the clock.

## CD Player

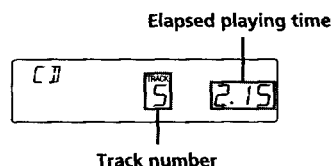
## Listening to a CD

Simply insert the CD.  
Playback starts automatically.

Labeled side up



If a CD is already inserted, press **(SOURCE)** repeatedly until "CD" appears.



### Note

To play back an 8 cm (3 in.) CD, use the optional Sony compact disc single adapter (CSA-8).

To	Press
Stop playback	<b>(▲)</b> or <b>(OFF)</b>
Eject the CD	<b>(▲)</b>

## Changing the displayed items

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

Track number ↔ Clock

## Locating a specific track

— Automatic Music Sensor (AMS)

During playback, press either side of **(SEEK/AMS)** momentarily.



To locate succeeding tracks

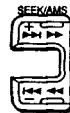
To locate previous tracks

EN

Getting Started/CD Player

## Locating a specific point in a track — Manual Search

During playback, press and hold either side of **(SEEK/AMS)**. Release the button when you have found the desired point.



To search forward

To search backward

### Note

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

## Playing a CD in various modes

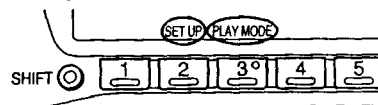
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You can play CDs in various modes:

- **INTRO** (Intro Scan) lets you play the first 10 seconds of all the tracks.
- **REP** (Repeat Play) repeats the current track.
- **SHUF** (Shuffle Play) plays all the tracks in random order.

### 1 Press **(SHIFT)**.

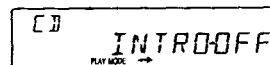
Every time you press **(SHIFT)**, only the items you can select light up.



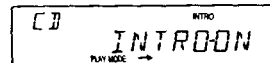
### 2 Press **(3)** (**PLAY MODE**) repeatedly until the desired play mode appears.

Each time you press **(3)** (**PLAY MODE**), the item changes as follows:

INTRO → REP → SHUF



### 3 Press **(4)** (**→**) to select "ON."



Playback starts.

To go back to the normal playback mode, select "OFF" in step 3 above.

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## 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 the station while driving, use Best Tuning Memory to prevent accidents.

### 1 Press **(SOURCE)** repeatedly to select the desired band (FM1, FM2 or AM).

### 2 Press **(SHIFT)**, then press **(6)** (**BTM**).

The unit stores stations in the order of their frequencies on the number buttons.

### Notes

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

## Memorizing only the desired stations

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

### 1 Press **(SOURCE)** repeatedly to select the desired band.

### 2 Press either side of **(SEEK/AMS)** to tune in the station that you want to store on the number button.

### 3 Keep the desired number button (**(1)** to **(10)**) pressed for two seconds until you hear a beep tone.

The number button indication appears in the display.

### Note

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

#### Note

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

## Receiving the memorized stations

- 1 Press **(SOURCE)** repeatedly to select the desired band.
- 2 Press the number button (**(1)** to **(10)**) momentarily where the desired station is stored.

### If you cannot tune in a preset station

Press either side of **(SEEK/AMS)** momentarily for the station (automatic tuning).

Scanning stops when the unit receives a station. Press either side of **(SEEK/AMS)** repeatedly until the desired station is received.

#### Note

If the automatic tuning stops too frequently, press **(SHIFT)**, then press **(3)** (PLAY MODE) repeatedly until "LOCAL" (local seek mode) is displayed. Then press **(4)** (→) to select "ON."

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, press and hold either side of **(SEEK/AMS)** for two seconds until the desired frequency appears (manual tuning).

### If FM stereo reception is poor — Monaural Mode

- 1 Press **(SHIFT)**, then press **(3)** (PLAY MODE) repeatedly until "MONO" appears.
- 2 Press **(4)** (→) repeatedly until "MONO-ON" appears.  
The sound improves, but becomes monaural ("ST" disappears).

To go back to the normal mode, select "MONO-OFF" in step 2 above.

### Changing the displayed items

Each time you press **(DSPL)**, the items alternate between the frequency and time.

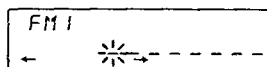
## Storing the station names

### —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 store up to eight characters for a station.

### Storing the station names

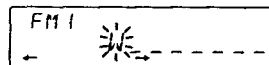
- 1 Tune in a station whose name you want to store.
- 2 Press **(LIST)** for two seconds.



- 3 Enter the characters.

- 1 Press **(+)** to select the desired characters.

(A → B → C → ... Z → 0 → 1 → 2 → ... 9 → + → - → \* → / → \ → > → < → . → \_)

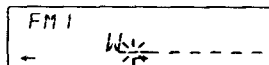


If you press **(-)**, the characters appear in the reverse order.

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

- 2 Press **(4)** (→) after locating the desired character.

The flashing cursor moves to the next space.



If you press **(1)** (←), 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/correct a name, enter "\_" (under-bar) for each character.

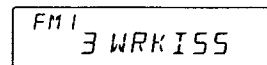
continue to next page →

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CD Player/Radio

## Displaying the station name

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



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

→ Station name\* → Frequency → Clock

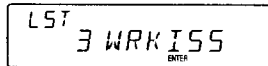
\* If the station name of a station is not stored, "NO NAME" appears in the display for one second.

## Erasing the station name

- 1 Tune in any station and press **(LIST)** for two seconds.
- 2 Press **(DSPL)** for two seconds.
- 3 Press **(+)** or **(-)** to select the name that you want to erase.
- 4 Press **(5)** (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.

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## 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 **(5)** (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

### Adjusting the sound characteristics

You can adjust bass, treble, balance and fader. Each source can store the bass and treble level respectively.

- 1 Select the item you want to adjust by pressing **(SOUND)** repeatedly.  
VOL (volume) → BAS (bass) → TRE (treble) → BAL (balance) → FAD (fader)
- 2 Adjust the selected item by pressing **(+)** or **(-)**.  
Adjust within three seconds after selecting. (After three seconds, the buttons work as volume control buttons.)

### Muting the sound

Press **(MUTE)**.  
"MUTE-ON" flashes.

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



## Changing the sound and display settings

You can set:

- BEEP to turn on or off the beeps.
- DIM (Dimmer) to change the brightness of the display.
- D.INFO (dual information) to display the clock and the play mode at the same time (ON) or to display the information alternately (OFF).
- LOUD (Loudness) to enjoy bass and treble even at low volume. Bass and treble will be reinforced.
- RM (Rotary Remote) to change the operative direction of the controls of the optional rotary remote.
  - Select "NORM" to use the rotary remote as the factory preset position.
  - Select "REV" when you mount the rotary remote on the right of the steering column.

**1** Press **(SHIFT)**, then press **(2)** (SET UP).

**2** Press **(2)** (SET UP) repeatedly until the desired setting mode appears.

Each time you press **(2)** (SET UP), the item changes as follows:

CLOCK → BEEP → DIM → D.INFO\* → LOUD\* → RM

\* When you have not tune the station or there is no CD/MD being played, these items will not appear.

**3** Press **(4)** (→) to select the desired setting (for example: ON or OFF).

**4** Press **(SHIFT)**.

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

## With Optional Equipment CD/MD Changer

You can control up to 10 CD changers and MD changers with this unit.

## Playing a CD or MD

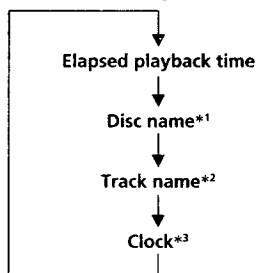
Press **(SOURCE)** until the desired changer appears.

CD/MD playback starts.

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

## Changing the displayed items

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



\*1 If there is no prerecorded name for a CD or MD, "NO NAME" appears in the display.

\*2 If the track name of an MD is not prerecorded, "NO NAME" appears in the display.

\*3 If the dual information is on, clock does not appear in the display.

### Tip

If the name of the MD is too long, you can scroll it across the display window by pressing **(SHIFT)**, then **(1)** (←).

## Automatically scrolling a disc name

### — Auto Scroll

The Auto Scroll function automatically scrolls the disc or track name of the MD when you press **(DSPL)** and the title length exceeds eight characters.

**1** Press **(SHIFT)**, then press **(2)** (SET UP) repeatedly until "A.SCRL" appears.

**2** Press **(4)** (→) to select "A.SCRL-ON."

To cancel Auto Scroll, select "A.SCRL-OFF" in step 2 above.

EN

Radio/Other Functions/CD/MD Changer

## Displaying the recording date of the currently selected MD

Press **(DSPL)** for two seconds during MD playback.

The recording date of the track is displayed for about three seconds.

## Locating a specific track

### — Automatic Music Sensor (AMS)

During playback, press either side of **(SEEK/AMS)** once for each track you want to skip.



To locate succeeding tracks

To locate previous tracks

## Locating a specific point in a track

### — Manual Search

During playback, press and hold either side of **(SEEK/AMS)**. Release the button when you have found the desired part.



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 currently selected changer begins playback.

## Scanning the tracks

### — Intro Scan

You can play the first 10 seconds of all the tracks on the currently selected disc.

**1** During playback, press **(SHIFT)**, then press **(3)** (PLAY MODE) repeatedly until "INTRO" appears.

**2** Press **(4)** (→) to select "INTRO-ON."  
Intro Scan starts.

To go back to the normal playback mode, select "INTRO-OFF" in step 2 above.

## Playing tracks repeatedly

### — Repeat Play

You can select:

- REP 1 to repeat a track.
- REP 2 to repeat a disc.
- REP 3 to repeat all the discs in the current changer.

**1** During playback, press **(SHIFT)**. Then press **(3)** (PLAY MODE) repeatedly until "REP" appears.

**2** Press **(4)** (→) repeatedly until the desired setting appears.

→ REP-1 → REP-2 → REP-3 → REP-OFF

Repeat Play starts.

To go back to the normal playback mode, select "REP-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 a random order.
- SHUF 2 to play the tracks in the current changer in a random order.
- SHUF 3 to play all the tracks in a random order.

**1** During playback, press **(SHIFT)**, then press **(3)** (PLAY MODE) repeatedly until "SHUF" appears.

**2** Press **(4)** (→) repeatedly until the desired setting appears.

→ SHUF-1 → SHUF-2 → SHUF-3

SHUF-OFF ←

Shuffle Play starts.

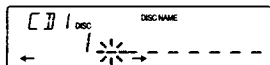
To go back to the normal playback mode, select "SHUF-OFF" in step 2 above.

## Labeling a CD — Disc Memo

(CD changer with 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 a disc by name and select the specific tracks for playback (page 12).

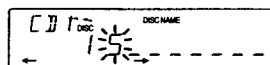
- 1 Play the CD and press **(LIST)** for two seconds.



- 2 Enter the characters.

- 1 Press **(+)** to select the desired characters.

(A → B → C → ... Z → 0 → 1 → 2 → ... 9 → + → - → \* → / → \ → > → < → . → \_)

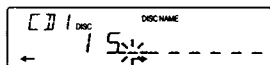


If you press **(-)**, the characters appear in the reverse order.

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

- 2 Press **(4) (→)** after locating the desired character.

The flashing cursor moves to the next space.



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

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

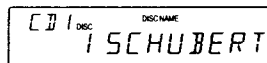
- 3 To return to the normal CD playback mode, press **(LIST)** for two seconds.

### Tip

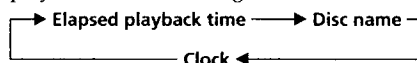
To erase/correct a name, enter “\_” (under-bar) for each character.

## Displaying the disc memo

Press **(DSPL)** during CD playback.



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



## Erasing the disc memo

- 1 Press **(SOURCE)** to select the CD changer (for example CD2 or CD3).

- 2 Press **(LIST)** for two seconds.

- 3 Press **(DSPL)** for two seconds.

- 4 Press **(+)** or **(-)** to select the name that you want to erase.

- 5 Press **(5) (ENTER)** for two seconds.

The name is erased.

Repeat steps 4 and 5 if you want to erase other names.

- 6 Press **(LIST)** for two seconds.

The unit returns to the normal CD playback mode.

EN

CD/MD Changer

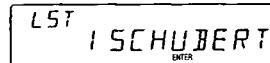
## Locating a disc by name

— List-up (CD changer with custom file function or MD changer)

You can use this function for the discs that have been assigned a custom name. For more information on disc names, refer to "Labeling a CD."

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

The name assigned to the disc currently playing appears in the display.



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

### 3 Press **(5)** (ENTER) to play back the disc.

#### Notes

- Once a disc name has been displayed for five seconds, the display goes back to its normal playback mode. To turn off the display, press **(DSPL)**.
- The track names are not displayed during MD 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, "NOT READ" appears in the display. To load the disc, first press the number button, then choose the disc that has not been loaded.
- The information appears only in upper cases. There are also some letters which cannot be displayed (during MD playback).

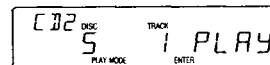
## Selecting the specific tracks for playback

— Bank  
(CD changer with custom file function)

If you label the disc, you can set the unit to skip tracks and play only the tracks you want.

### 1 Start playing the disc and press **(SHIFT)**. Then press **(3)** (PLAY MODE) for two seconds.

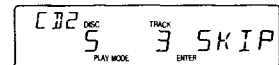
Bank edit mode



#### Note

If you have not labeled the disc, the bank edit mode does not appear.

### 2 Press either side of **(SEEK/AMS)** to select the track number you want to skip and press **(5)** (ENTER).



The indication changes from "PLAY" to "SKIP." If you want to return to "PLAY," press **(5)** (ENTER) again.

### 3 Repeat step 2 to set the "PLAY" or "SKIP" mode on all the tracks.

### 4 Press **(3)** (PLAY MODE) for two seconds. The unit returns to the normal CD playback mode.

#### Notes

- You can set the "PLAY" and "SKIP" mode on up to 24 tracks.
- You cannot set the "SKIP" mode on all the tracks.

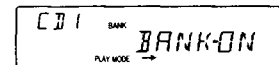
## Playing the specific tracks only

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 **(3)** (PLAY MODE) repeatedly until "BANK" appears.

### 2 Press **(4)** (→) repeatedly until the desired setting appears.



Playback starts from the track following the current one.

To go back to the normal playing mode, select "BANK-OFF" in step 2 above.

# DSP

## With the optional XDP-U50D connected

The optional XDP-U50D lets you add some effects to the sound field of the currently selected source.

## Selecting a surround menu

You can select a desired surround menu to best fit the audio source. The following menus can simulate different sound fields and enhance the sound so that you can feel as if you are in a live concert.

### Surround menu

HALL	Concert hall
JAZZ	Jazz club
DISCO	Disco with thick walls
THEATER	Movie theater
PARK	Big open space
LIVE	Live concert
OPERA	Opera house
CHURCH	Church/chapel with a lot of reverberation
STADIUM	Open-air concert in a stadium
CELLAR	Cellar with a lot of reverberation
DEFEAT	Normal sound without any DSP effects

1 Press **(SOURCE)** to select a source (radio, CD or MD).

2 Press **(SOUND)** repeatedly until "SUR" appears.

SUR - DEFEAT -

3 Press **(+)** or **(-)** to select the desired surround menu.

The surround menu appears in the order shown above.

After three seconds, the display goes back to the normal playback mode.

## Adjusting the effect level

1 Press **(SOURCE)** to select a source (radio, CD or MD).

2 Press **(SOUND)** for two seconds.

SUR - DEFEAT -

3 Press **(+)** or **(-)** repeatedly until the desired surround menu appears.

SUR HALL

4 Press **(4) (→)**.

SUR EFFECT 0

5 Press **(+)** or **(-)** to adjust the level. You can adjust the level from 0 to 10. Increase the level to enjoy more enhanced effects.

SUR EFFECT 8

6 Press **(SOUND)** for two seconds.

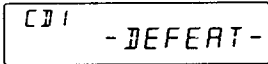
EN

CD/MD Changer/DSP

## Storing the surround effect onto CDs

— Digital Signal Processor (DSP) Custom File (CD changer with custom file function)

Once you have registered the desired surround menu onto the discs, you can enjoy the same surround menu every time you play them. (Only when you have labeled the disc by the Custom File function.)

- 1 Press **LIST** for two seconds.
- 2 Press **LIST** until the surround menu appears.  
DSP custom file mode  

- 3 Press **+** or **-** to select the desired surround menu.
- 4 Press **LIST** for two seconds.  
When the effect setting is complete, the display goes back to the normal playback mode.

### Playing the disc with the stored surround menu

- 1 Press **SHIFT**, then press **3** (PLAY MODE) repeatedly until "D.FILE" appears.
- 2 Press **4** (→) to select the "D.FILE-ON."  
After five seconds, the display goes back to the normal playback mode.

To cancel to play the disc with stored surround menu, select "D.FILE-OFF" in step 2.

### Changing the stored surround effect

Play the disc whose surround mode you want to change, and follow the steps of "Storing the surround effect onto CDs."

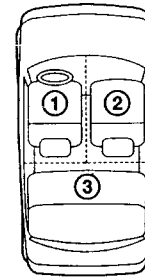
### Erasing the stored surround effect

Select "DEFEAT" in step 3 of "Storing the surround effect onto CDs."

## Selecting the listening position

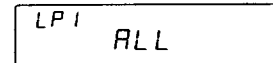
You can set the time for the sound to reach the listeners from the speakers.

The unit can simulate a natural sound field so that you can feel as if you are in the center of the sound field wherever you sit in the car.



Display window	Center of soundfield
LP1 ALL	Normal setting (① + ② + ③)
LP2 FRONT	Front part (① + ②)
LP3 FRONT R	Right front (②)
LP4 FRONT L	Left front (①)
LP5 REAR	Rear part (③)

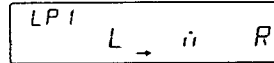
- 1 Press **SOUND** momentarily until "LP1" appears.

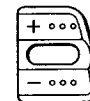


- 2 Press **+** or **-** to select the desired listening position.  
The listening positions appear in the order shown above.

After three seconds, the display goes back to the normal playback mode.

### Adjusting the listening position

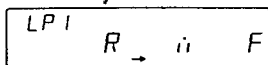
- 1 Press **SOUND** for two seconds.
- 2 Press **SOUND** repeatedly until the desired listening position appears.
- 3 Press **4** (→).  

- 4 Press **+** or **-** to adjust the center of the sound field to the left or right. Then set the center of the sound field.



Center moves to the R (right).

Center moves to the L (left).

- 5 Press **(4)** (**→**).



- 6 Press **(+)** or **(-)** to adjust the center of the sound field to the front or rear.



Center moves to the F (front).

Center moves to the R (rear).

- 7 Press **(SOUND)** for two seconds.  
When the effect setting is complete, the normal playback mode appears.

## Adjusting the fader (FAD)

Normally, with the DSP mode on, the volume of the output sound from the rear speakers is lowered automatically to improve the efficiency of the listening position setting. If you want to raise the rear speaker volume, adjust the fader.

- Follow steps 1 to 3 of "Selecting a surround menu" (page 13).
- Press **(SOUND)** repeatedly until "FAD" appears.
- Press **(+)** or **(-)** to adjust the fader.



Increases front speaker volume

Decreases front speaker volume

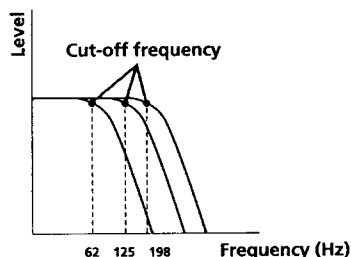
After three seconds, the display goes back to the normal playback mode.

## Adjusting the volume of the subwoofer(s)

- Press **(SOURCE)** to select a source (radio, CD or MD).
- Press **(SOUND)** repeatedly until "SUB" appears.
- Press **(+)** or **(-)** to adjust the volume.  
After three seconds, the display goes back to the normal playback mode.

## Adjusting the frequency of the subwoofer(s)

To match the characteristics of the connected subwoofer(s), you can cut the unwanted high and middle frequency signals entering the subwoofer(s). By setting the cut-off frequency (see the diagram below), the subwoofer(s) will output only low frequency signals so that you can get a clearer sound image.



- Press **(SOURCE)** to select a source (radio, CD or MD).
  - Press **(SOUND)** for two seconds.
  - Press **(SOUND)** repeatedly until "SUB" appears.
- 
- Press **(+)** or **(-)** to select the desired cut-off frequency.  
The cut-off frequency in the display changes.
  - Press **(SOUND)** for two seconds.  
When the frequency setting is complete, the display goes back to the normal playback mode.

EN

DSP

## Adjusting the volume of the bass and treble

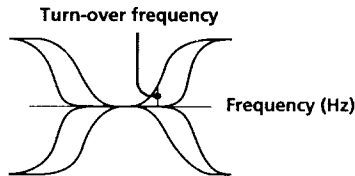
You can adjust the volume of the bass and treble to best fit the acoustic characteristics inside your car.

- 1 Press **(SOURCE)** to select a source (radio, CD or MD).
- 2 Press **(SOUND)** repeatedly until "BAS" or "TRE" appears.
- 3 Press **(+)** or **(-)** to adjust the volume.  
After three seconds, the display goes back to the normal playback mode.

### Adjusting the turn-over frequency

You can adjust the bass and treble turn-over frequencies.

EN



- 1 Press **(SOURCE)** to select a source (radio, CD or MD).
- 2 Press **(SOUND)** for two seconds.
- 3 Press **(SOUND)** repeatedly until "BAS" or "TRE" appears.

Bass adjusting mode

BAS → 314

Treble adjusting mode

TRE → 3.1K

- 4 Press **(+)** or **(-)** to select the turn-over frequency.

The turn-over frequencies change as follows:

Bass:  
198 Hz → 250 Hz → 314 Hz\* → 396 Hz

Treble:  
2.0 kHz → 3.1 kHz\* → 4.0 kHz → 5.0 kHz

\* Factory-set frequency

- 5 Press **(SOUND)** for two seconds.

The display goes back to the normal playback mode.

## Listening to each program source in its registered surround menu

— Source Sound Memory

You can listen to the same source always in the same surround menu even after changing the program source or turning the unit on and off again.

**Note**

"LSM" (Last Sound Memory) appears on the TV display when you have selected a surround menu.

## Changing the line output level

- 1 Press **(SHIFT)**, then press **(2)** (SET UP) until "L.OUT" appears.
- 2 Press **(4)** (→) to select the desired setting (-10 dB or -16 dB).



## TV/Video

With the optional TV tuner and TV monitor connected

### Watching the TV

- 1 Press **(SOURCE)** repeatedly until "TV" appears.
- 2 Press either side of **(SEEK/AMS)** to select the desired TV band.

### Watching the video

Press **(SOURCE)** repeatedly until "VIDEO 1" appears.  
Play back the video.

**Note**  
"VIDEO 2" appears if the VIDEO 2 terminal of the TV monitor is selected.

## Memorizing TV channels automatically

— Best Tuning Memory (BTM)

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

#### Caution

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

- 1 Press **(SOURCE)** repeatedly until "TV" appears.
- 2 Press **(SHIFT)**, then press **(6)** (BTM).  
The unit stores TV channels in the order of their frequencies on the number buttons.

#### Notes

- The unit does not store TV channels with weak signals. If only a few TV channels are 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 Press either side of **(SEEK/AMS)** to tune in the TV channel that you want to store on the number button.
- 3 Keep the desired number button (**(1)** to **(10)**) pressed for two seconds until you hear a beep tone.  
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.

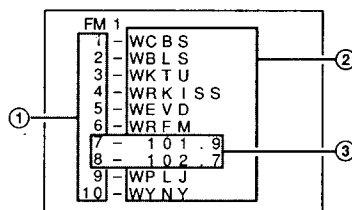
## Storing the TV channel names

Do the steps in "Storing the station names" (page 7).

### Displaying the TV or radio station names

Press **(LIST)** momentarily 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.

continue to next page →

EN

DSP/TV/Video

#### Notes

- It may take some time before all indications appear in the display.
- The TV program does not appear during list display.
- The contents of the preset memory cannot be listed when the unit is in the simultaneous play mode (page 19).

#### Turning off the display

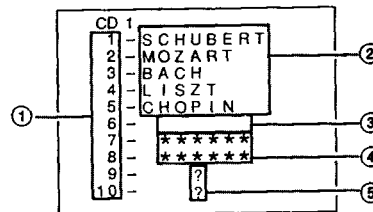
During radio reception, press **(LIST)** again.

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)** momentarily during CD/MD playback.

Example: When CD changer 1 is selected.



- ① Disc numbers
- ② Titles stored on the custom file
- 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 if there is a disc number representing an empty slot 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 program does not appear during list display.
- The contents of the preset memory cannot be listed when the unit is in the simultaneous play mode.

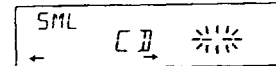
#### Turning off the display

Press **(LIST)** again.

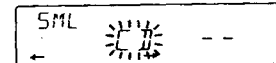
## Watching the TV or video while listening to a CD or MD — Simultaneous Play

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

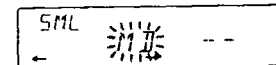
- 1 Press **(SOURCE)** for two seconds.



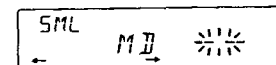
- 2 Press **(1) (←)**.



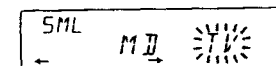
- 3 Press **(SOURCE)** repeatedly to select a CD or MD.



- 4 Press **(4) (→)**.



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



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

#### Returning to the normal mode

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

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

#### Note

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

## Additional Information

### Precautions

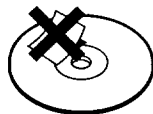
- If your car was parked in direct sunlight resulting in a considerable rise in temperature inside the car, allow the unit to cool off before operating it.
- If no power is being supplied to the unit, check the connections first. If everything is in order, check the fuse.
- If no sound comes from the speakers of two-speaker systems, set the fader control to the center position.
- If your car is equipped with a power antenna, note that it will extend automatically while the unit is operating.

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

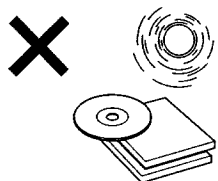
### Notes on handling CDs



A dirty or defective disc may cause sound dropouts while playing. To enjoy optimum sound, handle the disc as follows. Handle the disc by its edge. To keep the disc clean, do not touch the surface.



Do not stick paper or tape on the labeled surface.



Do not expose the discs to direct sunlight or heat sources such as hot air-ducts, or leave them in a car parked in direct sunlight where there can be a considerable rise in the temperature inside the car.



Before playing, clean the discs with an optional cleaning cloth. Wipe each disc from the center out.

Do not use solvents such as benzine, thinner, commercially available cleaners or antistatic spray intended for analog discs.

### Notes on moisture condensation

On a rainy day or in a very damp area, moisture may condense on the lenses inside the CD 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.

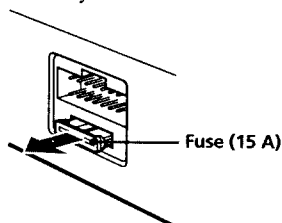
### When you play 8 cm (3 in.) CDs

Use the optional Sony compact disc single adapter (CSA-8) to protect the CD player from being damaged.

## Maintenance

### Fuse replacement

When replacing the fuse, be sure to use one that matches the amperage described on the 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

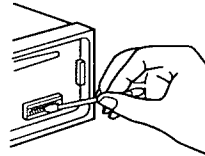
Never use a fuse with an amperage rating exceeding the one supplied with the unit as this could damage the unit.

EN

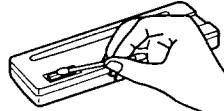
TV/Video/Additional Information

### Cleaning the connectors

The unit may not function properly if the connectors between the unit and the front panel are not clean. To prevent this, open the front panel by pressing **RELEASE** 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.



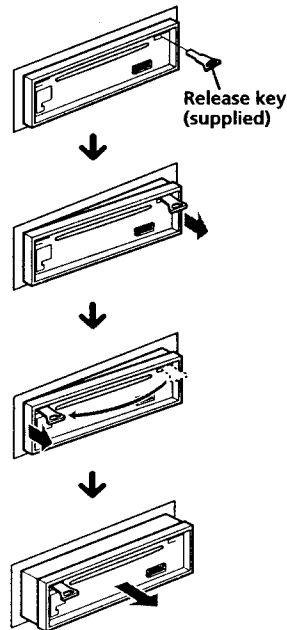
Main unit



Back of the front panel

EN

### Dismounting the unit



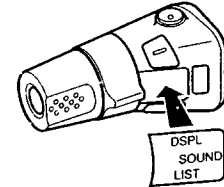
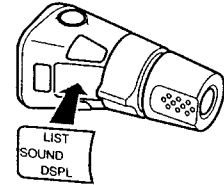
Release key  
(supplied)

### Attaching the label to the rotary remote

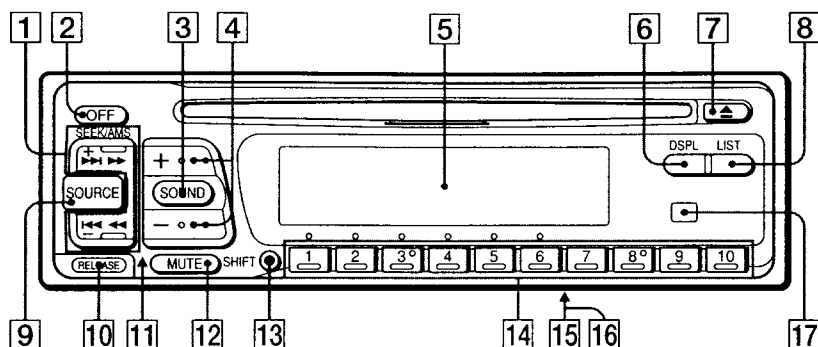
You can control this unit with the optional rotary remote (RM-X2S).

Several labels are supplied with the rotary remote. Attach the label that match the functions of this unit and the mounting position of the rotary remote.

After you mount the rotary remote, attach the label in the illustration below.



## Location of controls



Refer to the pages for details.

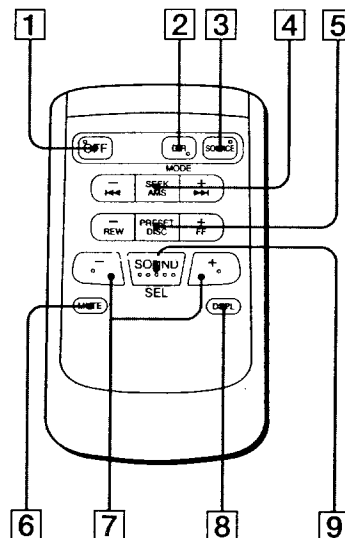
- 1** SEEK/AMS (seek/Automatic Music Sensor/manual search) button 5, 6, 7, 10, 12, 17
- 2** OFF button 4, 5
- 3** SOUND button 8, 13, 14, 15
- 4**  $\oplus$   $\ominus$  (volume/sub output level/bass/treble/balance/fader control) buttons 5, 7, 8, 11, 13, 14, 15, 16
- 5** Display window
- 6** DSPL (display mode change) button 5, 7, 8, 9, 10, 11, 12
- 7**  $\blacktriangle$  (eject) button 5
- 8** LIST button
  - Disc Memo 11
  - DSP Custom File 14
  - List-up 8, 12, 17, 18
  - Station Memo 7, 8
- 9** SOURCE (source select) button 5, 6, 7, 11, 13, 15, 16, 17, 18
- 10** RELEASE (front panel release) button 4, 20
- 11** Reset button (located on the front side of the unit hidden by the front panel) 4
- 12** MUTE button 8
- 13** SHIFT button
  - BTM 6, 17
  - PLAY MODE 7, 10, 12, 14, 15
  - SET UP 5, 9, 16
- 14** During radio/TV reception:
  - Number buttons 6, 7, 17
 During CD/MD playback:
  - Direct disc selection button 10
- 15** POWER SELECT switch (located on the bottom of the unit)
  - See "POWER SELECT Switch" in the Installation/Connections manual.
- 16** LINE-OUT/IN SELECT switch (located on the bottom of the unit)
  - See "LINE-OUT/IN SELECT Switch" in the Installation/Connections manual.
- 17** Receptor for the optional wireless remote

EN

Additional Information

## Location of controls

**Optional wireless remote (RM-X41)**



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

**1 OFF button**

**2 DIR button**

*(DIR) does not work with this unit.*

**3 SOURCE button**

**4 SEEK/AMS button**

**5 PRESET/DISC button**

*You cannot do the manual search and manual tuning with the remote.*

**6 MUTE button**

**7 - + buttons**

**8 DSPL button**

**9 SOUND button**

When the POWER SELECT switch is set to the **B** position, the unit cannot be operated with the wireless remote unless **(SOURCE)** on the unit is pressed or a CD is inserted to activate the unit first.

# Specifications

## AUDIO POWER SPECIFICATIONS

### POWER OUTPUT AND TOTAL HARMONIC DISTORTION

15 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

### CD player section

System	Compact disc digital audio system
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 $\mu$ 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

#### FM

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	62 dB (stereo), 65 dB (mono)
Harmonic distortion at 1 kHz	0.9 % (stereo), 0.5 % (mono)
Separation	33 dB at 1 kHz
Frequency response	30 – 15,000 Hz
Capture ratio	2 dB

#### AM

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 (sure seal connectors)
Speaker impedance	4 – 8 ohms
Maximum power output	35 W $\times$ 4 (at 4 ohms)

### General

Output lead	Power antenna relay control lead Power amplifier control lead
Tone controls	Bass $\pm$ 8 dB at 100 Hz Treble $\pm$ 8 dB at 10 kHz
Power requirements	12 V DC car battery (negative ground)
Dimensions	Approx. 188 $\times$ 58 $\times$ 177 mm (7 <sup>1</sup> / <sub>2</sub> $\times$ 2 <sup>3</sup> / <sub>8</sub> $\times$ 7 in.) (w/h/d)
Mounting dimensions	Approx. 178 $\times$ 50 $\times$ 154 mm (7 <sup>1</sup> / <sub>8</sub> $\times$ 2 $\times$ 6 <sup>1</sup> / <sub>8</sub> in.) (w/h/d)
Mass	Approx. 1.5 kg (3 lb. 4.9 oz.)
Supplied accessories	Parts for installation and connections (1 set) Front panel case (1) Rotary remote RM-X2S Wireless remote RM-X41 BUS cable (supplied with an RCA pin cord) RC-61 (1 m), RC-62 (2 m) RCA pin cord RC-63 (1 m), RC-64 (2 m), RC-65 (5 m) Cleaning cloth XP-CD1 Compact disc single adapter CSA-8
Optional accessories	
Optional equipment	CD changer CDX-71 (10 discs), CDX-72 (10 discs), CDX-81 (10 discs), CDX-91 (10 discs), CDX-T60 (6 discs), CDX-T62 (6 discs) MD changer MDX-40, MDX-60 Source selector XA-U20, etc. Digital preamplifier XDP-U50D TV tuner XT-40V, etc.

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Additional Information

Design and specifications are subject to change without notice.

## Troubleshooting guide

The following check will help you remedy the problems that 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>• Adjust the volume with (+).</li><li>• Set the fader control to the center position for two-speaker systems.</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. → 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 20) for details.

### CD/MD playback

Problem	Cause/Solution
A disc cannot be loaded.	<ul style="list-style-type: none"><li>• Another CD is already loaded.</li><li>• The CD is forcibly inserted upside down or in the wrong way (MD).</li></ul>
Play does not begin.	Defective MD or dusty CD.
A disc is automatically ejected.	The ambient temperature exceeds 50°C (122°F).
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>• Memorize the correct frequency.</li><li>• The broadcast signal is too weak.</li></ul>
Automatic tuning is not possible.	The broadcast signal is too weak. → Use manual tuning.
The "ST" indication flashes.	<ul style="list-style-type: none"><li>• Tune in the frequency correctly.</li><li>• The broadcast signal is too weak. → Set to the MONO mode (page 7).</li></ul>

### DSP functions

Problem	Cause/Solution
No sound, or sound is too low.	The volume of the rear speakers may have been automatically lowered in order to maximize the effect of the listening position adjustment. → Press (+) to adjust the balance. The speaker balance can be set separately for the DSP on mode and DSP off mode (page 15).



**Error displays (when the optional CD/MD changer is connected)**

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

Display	Cause	Solution
NO MAG	The disc magazine is not inserted in the CD/MD changer.	Insert the disc magazine with discs into the CD/MD changer.
NO DISC	No disc is inserted in the CD/MD changer.	Insert the discs in the CD/MD changer.
ERROR <sup>*1</sup>	A CD is dirty or inserted upside down. <sup>*2</sup>	Clean or insert the CD correctly.
	An MD does not play because of some problem. <sup>*2</sup>	Insert another MD.
BLANK <sup>*1</sup>	No tracks have been recorded on an MD. <sup>*2</sup>	Play an MD with recorded tracks on it.
RESET	The CD/MD changer cannot be operated because of some problem.	Press the reset button of the unit.
NO READY	The lid of the MD changer is open or MDs are not inserted properly.	Close the lid or inserted the MDs properly.
HI TEMP	The ambient temperature is more than 50°C (122°F).	Wait until the temperature goes down below 50°C (122°F).

<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 of the disc causing the error appears in the display.

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

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