

# FM/AM Compact Disc Player

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Operating Instructions \_\_\_\_\_ **US**

Mode d'emploi \_\_\_\_\_ **FR**

Manual de instrucciones \_\_\_\_\_ **ES**

## Owner's Record

The model and serial numbers are located on the bottom of the unit.

Record these numbers in the space provided below.

Refer to these numbers whenever you call upon your Sony dealer regarding this product.

Model No. CDX-MP70 Serial No. \_\_\_\_\_

For installation and connections, see the supplied installation/connections manual.  
 En ce qui concerne l'installation et les connexions, consulter le manuel  
 d'installation/raccordement fourni.  
 Para obtener información sobre la instalación y las conexiones, consulte el manual  
 de instalación/conexiones suministrado.



## CDX-MP70

## 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 this Sony Compact Disc Player. You can enjoy its various features even more with:

- MP3 file playback.
- Non-finalized CD-R/CD-RW disc playback capability (page 7).
- Discs recorded in Multi Session (CD-Extra, Mixed CD, etc.) can be played, depending on the recording method (page 8).
- Optional CD/MD units (both changers and players)\*1.
- ID3 tag\*2 version 1 information (displayed when an MP3 file is played).
- CD TEXT information (displayed when a CD TEXT disc\*3 is played).
- 7 color display (you can select from a range of 7 colors).
- **Supplied controller accessory**  
Card remote commander RM-X112
- **Optional controller accessory**  
Wireless rotary commander RM-X5S

\*1 *This unit works with Sony products only.*

\*2 *ID3 tag is an MP3 file that contains information about album name, artist name, track name, etc.*

\*3 *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.*



The “XM Ready” logo indicates that this product will control a Sony XM tuner module (sold separately).

Please see your nearest authorized Sony dealer for details on the XM tuner module.

For instructions on XM tuner operation, please refer to the XM tuner module’s included instruction manual.

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## CD Player

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\* Functions available with optional CD/MD unit

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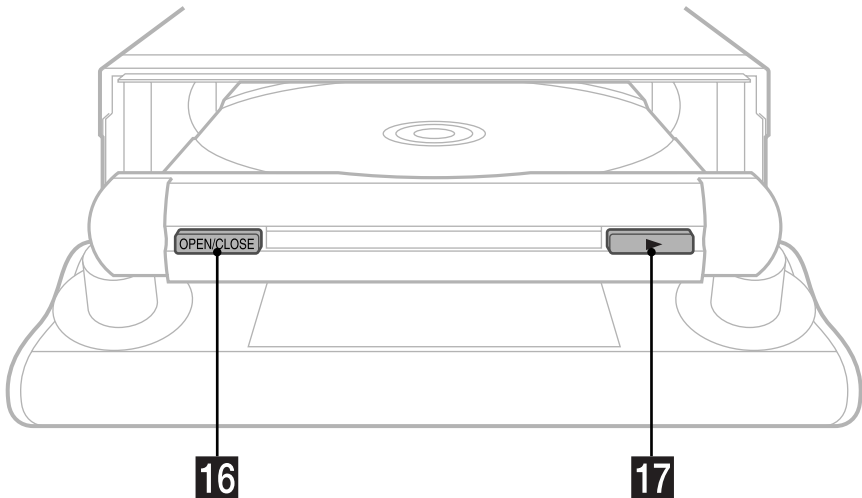
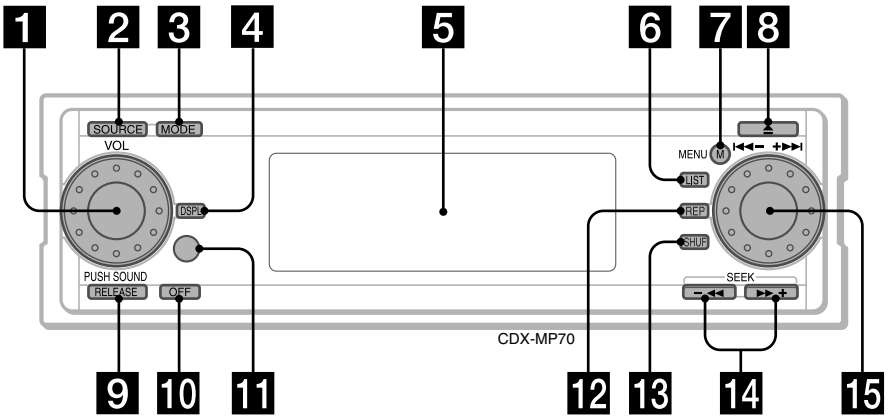
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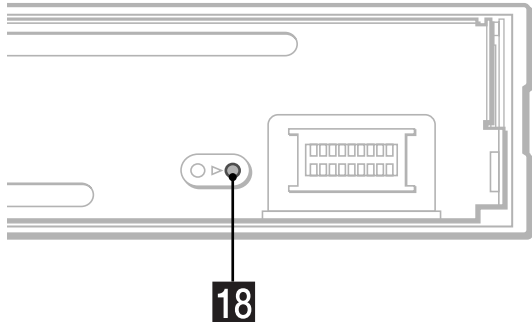
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# Location of controls



## Behind the front panel



Refer to the pages listed for details.

**1 VOL (volume) control dial/SOUND button**

Rotate to:

- Adjust the volume.
- Adjust the sound setting.

Press to:

- Select the sound setting.

**2 SOURCE button**

To select the source.

**3 MODE button**

To change the operation.

**4 DSPL button** 13, 14, 26

**5 Display window**

**6 LIST button** 12, 14, 15, 15 17, 18

**7 MENU button**

To display the menus.

**8 ▲ (eject) button** 11, 12, 12

**9 RELEASE button** 10

**10 OFF (Stop/Power off) button\*** 10, 12, 25, 26

**11 Receptor for the card remote commander and wireless rotary commander**

**12 REP button** 13

**13 SHUF button** 13

**14 ◀▶/▶▶ (SEEK -/+ ) buttons**

To fast-forward, reverse a track, tune in stations automatically, find a station manually, and select a setting.

**15 ◀▶▶▶ (SEEK -/+ ) control dial**

Rotate to:

- Receive preset stations.
- Skip tracks.
- Select a menu.

Press to:

- Enter a setting.

**16 OPEN/CLOSE button** 10, 11

**17 ▶ (play) button** 11

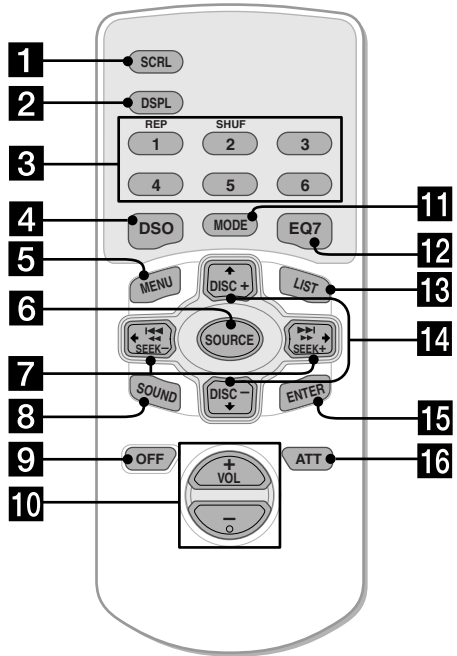
**18 RESET button** 9

**\* Warning when installing in a car without an ACC (accessory) position on the ignition switch**

After turning off the ignition, be sure to press (OFF) on the unit for 2 seconds to turn off the clock display.

Otherwise, the clock display does not turn off and causes battery drain.

**Card remote commander RM-X112**



The corresponding buttons of the card remote commander control the same functions as those on this unit.

- 1** SCRL button
- 2** DSPL button
- 3** Number buttons
- 4** DSO button
- 5** MENU button
- 6** SOURCE button
- 7** SEEK (◀/▶) buttons
- 8** SOUND button
- 9** OFF button
- 10** VOL (+/-) buttons
- 11** MODE button
- 12** EQ7 button
- 13** LIST button
- 14** DISC/ALBUM (↑/↓) buttons
- 15** ENTER button
- 16** ATT button

continue to next page →

**Note**

If the unit is turned off by pressing **(OFF)** for 2 seconds, it cannot be operated with the card remote commander unless **(SOURCE)** on the unit is pressed to reactivate the unit first.

**Tip**

See "Replacing the lithium battery" on page 27 for details on how to replace the batteries.

## Selecting a disc and album with the card remote commander

Disc and album can be skipped using the DISC/ALBUM (**↑/↓**) buttons on the card remote commander.

### (With this unit)

To	Press
Skip albums* – Album selection	<b>↑</b> or <b>↓</b> [once for each album] To continuously skip albums, press and hold either button.

### (With optional unit)

To	Press
Skip discs – Disc selection	<b>↑</b> or <b>↓</b> [once for each disc] To continuously skip discs, press once and press again within 1 second (and hold) either button.
Skip albums* – Album selection	<b>↑</b> or <b>↓</b> [hold for a moment] and release To continuously skip albums, press (and hold) within 1 second of first releasing the button.

\* Available only when an MP3 file is played.

## Skipping tracks continuously

Press once either SEEK/AMS (**←** or **→**) button on the card remote commander, then press again within 1 second and hold.

## Precautions

- If your car was parked in direct sunlight, allow the unit to cool off before operating it.
- Power antennas will extend automatically while the unit is operating.
- Do not use the CUSTOM FILE feature while driving, or perform any other function which could divert your attention from the road.

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 condensation may occur inside the lenses and display of the unit. Should this occur, the unit will not operate properly. In such a case, remove the disc and wait for about an hour until the moisture has evaporated.

## To maintain high sound quality

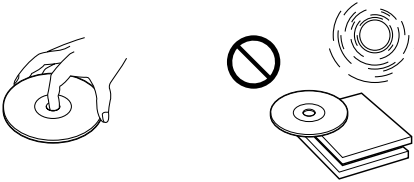
Be careful not to splash juice or other soft drinks onto the unit or discs.

## Notes on CD lens

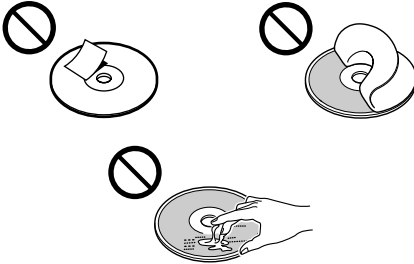
- Do not touch the lens in the disc tray.
- Do not use a commercially available lens cleaner.

## Notes on discs

- To keep the disc clean, do not touch the surface. Handle the disc by its edge.
- Keep your discs in their cases or disc magazines when not in use.
- Do not subject the discs to heat/high temperature. Avoid leaving them in parked cars or on dashboards/rear trays.



- Do not attach labels, or use discs with sticky ink/residue. Such discs may stop spinning when used, causing a malfunction, or may ruin the disc.









- Do not use any discs with labels or stickers attached as this may cause inability to read audio data correctly (e.g., playback skipping, or no playback) due to heat shrinking of a sticker or label causing a disc to warp.
- Discs with non-standard shapes (e.g., heart, square, star) cannot be played on this unit. Attempting to do so may damage the unit. Do not use such discs.
- Before playing, clean discs with a commercially available cleaning cloth. Wipe each disc from the center out. Do not use solvents such as benzene, thinner, commercially available cleaners, or antistatic spray intended for analog discs.



## Notes on CD-Rs (recordable CDs)/CD-RWs (rewritable CDs)

This unit can play the following discs:

Type of discs	Label on the disc
Audio CD	 
MP3 files	   

- Some CD-Rs/CD-RWs (depending on the equipment used for its recording or the condition of the disc) may not play on this unit.
- You can play a CD-R/CD-RW that is not finalized\*.
- You can play MP3 files recorded on CD-ROMs, CD-Rs, and CD-RWs.

\* A process necessary for a recorded CD-R/CD-RW disc to be played on the audio CD player.

## About MP3 files

MP3 (MPEG 1 Audio Layer-3) is a standard technology and format for compressing a sound sequence. The file is compressed to about 1/10 of its original size. Sounds outside the range of human hearing are compressed while the sounds we can hear are not compressed.

### Notes on discs

You can play MP3 files recorded on CD-ROMs, CD-Rs, and CD-RWs.

The disc must be in the ISO 9660\*1 level 1 or level 2 format, or Joliet or Romeo in the expansion format.

You can use a disc recorded in Multi Session\*2.

#### \*1 ISO 9660 Format

The most common international standard for the logical format of files and folders on a CD-ROM.

There are several specification levels. In Level 1, file names must be in the 8.3 format (no more than 8 characters in the name, no more than 3 characters in the extension “.MP3”) and in capital letters. Folder names can be no longer than 8 characters. There can be no more than 8 nested folder levels. Level 2 specifications allow file names up to 31 characters long.

Each folder can have up to 8 trees.

For Joliet or Romeo in the expansion format, make sure of the contents of the writing software, etc.

#### \*2 Multi Session

This is a recording method that enables adding of data using the Track-At-Once method. Conventional CDs begin at a CD control area called the Lead-in and end at an area called Lead-out. A Multi Session CD is a CD having multiple sessions, with each segment from Lead-in to Lead-out regarded as a single session.

CD-Extra: The format which records audio (audio CD data) as tracks on session 1, and records data as tracks on session 2.

Mixed CD: In this format, data is recorded as track 1, and audio (audio CD data) is recorded as track 2.

### Notes

- With formats other than ISO 9660 level 1 and level 2, folder names or file names may not be displayed correctly.
- When naming, be sure to add the file extension “.MP3” to the file name.
- If you put the extension “.MP3” to a file other than MP3, the unit cannot recognize the file properly and will generate random noise that could damage your speakers.
- The following discs take a longer time to start playback.
  - a disc recorded with complicated tree structure.
  - a disc recorded in Multi Session.
  - a disc to which data can be added (non-finalized disc).

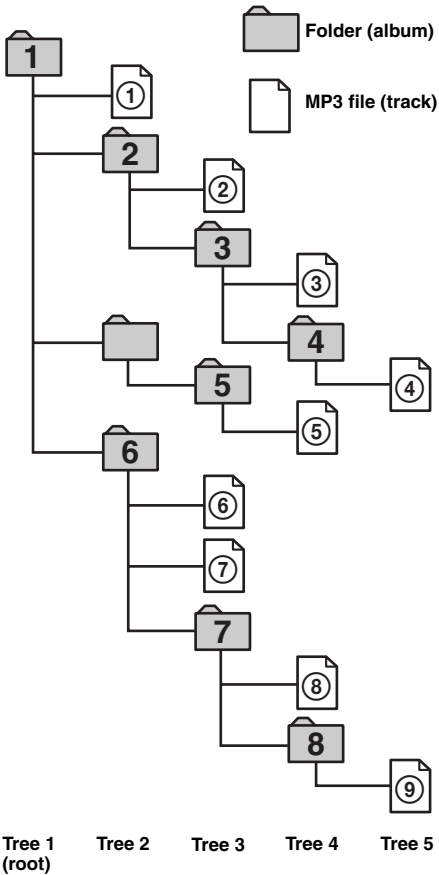
### Cautions when playing a disc that is recorded in Multi Session

- When the first track of the first session is audio CD data:
  - Non-audio CD data information (track number, time, etc.) is displayed with no sound.
- When the first track of the first session is not audio CD data:
  - If an MP3 file is in the disc, only MP3 file(s) play back and other data is skipped. (Audio CD data is not recognized.)
  - If no MP3 file is in the disc, “NO Music” is displayed and nothing is played back. (Audio CD data is not recognized.)



## The playback order of the MP3 files

The playback order of the folders and files is as follows:



### Notes

- A folder that does not include an MP3 file is skipped.
- Maximum folder number: 255 (including root folder and empty folders)
- The maximum number of MP3 files and folders that can be contained in a disc: 512  
When a file/folder name contains many characters, this number may become less than 512.
- The maximum number of trees which can be played is 8.

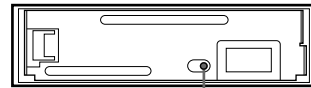
### Tip

To specify a desired playback order, before the folder or file name, input the order by number (e.g., "01," "02"), then record contents onto a disc. (The order differs depending on the writing software.)

# Getting Started

## Resetting the unit

Before operating the unit for the first time, or after replacing the car battery or changing the connections, you must reset the unit. Remove the front panel and press the RESET button with a pointed object, such as a ball-point pen.



RESET button

### Note

Pressing the RESET button will erase the clock setting and some stored contents.

## Detaching the front panel

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

### Caution alarm

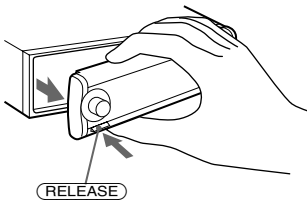
If you turn the ignition switch to the OFF position without removing the front panel, the caution alarm will beep for a few seconds.

#### 1 Press **(OFF)** \*.

CD/MD playback or radio reception stops (the key illumination and display remain on).

\* If your car has no ACC position on the ignition switch, be sure to turn the unit off by pressing **(OFF)** for 2 seconds to avoid car battery drain.

#### 2 Press **(RELEASE)** to open up the front panel and pull it off towards you.



### Notes

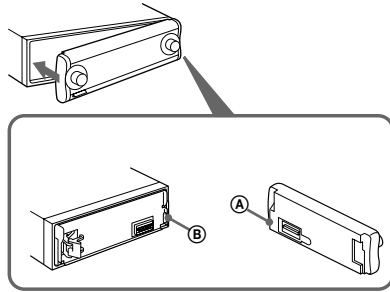
- If you detach the panel while the unit is still turned on, the power will turn off automatically to prevent the speakers from being damaged.
- Do not drop or put excessive pressure on the front panel and its display window.
- Close the front panel before you detach it.
- Do not subject the front panel to heat/high temperature or moisture. Avoid leaving it in parked cars or on dashboards/rear trays.

### Tip

When carrying the front panel with you, use the supplied front panel case.

## Attaching the front panel

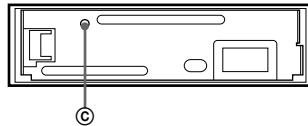
Attach part **(A)** of the front panel to part **(B)** of the unit as illustrated and push the left side into position until it clicks.



### Notes

- Do not put anything on the inner surface of the front panel.
- Do not detach the front panel during the eject operation. If the front panel is detached during eject, operation will stop.

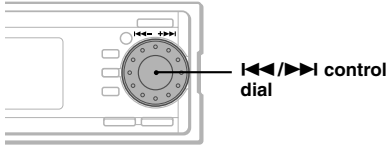
To eject the disc when you do not have the front panel attached, press **(OPEN/CLOSE)** inside the unit through hole **(C)** with a pointed object, such as a ballpoint pen.



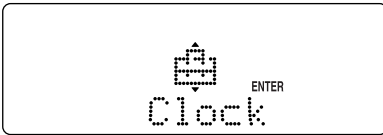
## Setting the clock

The clock uses a 12-hour digital indication.

Example: To set the clock to 10:08

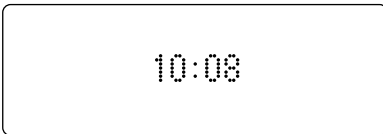


- 1 Press **(MENU)**, then rotate the **◀▶/▶▶** control dial until “Clock” appears.



- 1 Press the **◀▶/▶▶** control dial.  
The hour indication flashes.
- 2 Rotate the **◀▶/▶▶** control dial to set the hour.
- 3 Press the **▶▶+** button.  
The minute indication flashes.
- 4 Rotate the **◀▶/▶▶** control dial to set the minute.

- 2 Press the **◀▶/▶▶** control dial.



The clock starts. After the clock setting is completed, the display returns to normal play mode.

### Tip

When D.Info mode is set to on, the time is always displayed (page 21).

## CD Player CD/MD Unit (optional)

In addition to playing a CD with this unit, you can also control external CD/MD units.

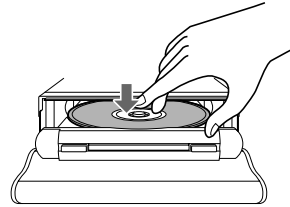
### Note

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 disc

(With this unit)

- 1 Press **▲**.  
The disc compartment slides out.
- 2 Place a disc on the disc tray with the label side up.  
Insert the disc until it clicks.



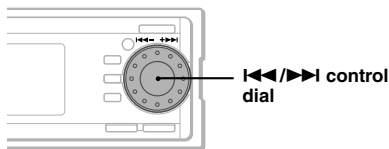
- 3 Press **▶**.  
The disc compartment closes and playback starts.

If a disc is already inserted, press **(SOURCE)** repeatedly until “CD” appears in the display, and playback starts. (If you press **(OPEN/CLOSE)**, the disc compartment closes but playback does not start.)

### Notes

- Do not place more than 1 disc on the disc tray.
- The disc compartment closes automatically after 30 seconds.

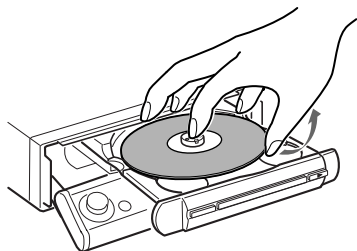
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To	Do this
Stop playback	Press (OFF).
Eject the disc	Press $\blacktriangle$ .
Skip tracks – Automatic Music Sensor	Rotate the $\blacktriangleleft/\blacktriangleright$ control dial.
Fast-forward/ reverse – Manual Search	Press and hold the $\blacktriangleleft$ or $\blacktriangleright$ + button, and release at the desired point.
Skip albums* – Album selection	Press (LIST), then rotate the $\blacktriangleleft/\blacktriangleright$ control dial.

\* Available only when an MP3 file is played.

To remove the disc, press down the center spindle, and lift up the edge of the disc from the relief in the disc tray.



#### Notes

- Depending on the recording method used on the disc, it may take a minute or more before playing the first track.
- Depending on the condition of the disc, it may not play back (page 7, 8).
- Such discs should be finalized.
- While the first/last track on the disc is playing, if the  $\blacktriangleleft/\blacktriangleright$  control dial is rotated, playback skips to the last/first track of the disc.
- When the last track on the disc is over, playback restarts from the first track of the disc.
- With optional unit connected, playback of the same source will continue on to the optional CD/MD unit.
- There is a delay for a few seconds after pressing  $\blacktriangle$  before the disc tray is ejected, after reading the data in the disc.)

#### (With optional unit)

- 1 Press (SOURCE) repeatedly to select “CD” or “MD (MS\*).”
- 2 Press (MODE) repeatedly until the desired unit appears.  
Playback starts.

\* MS: MG Memory Stick System-up Player MGS-X1.

**Cautions when connecting MGS-X1 and MD unit(s)**  
This unit recognizes MGS-X1 as an MD unit.

- When you want to play MGS-X1, press (SOURCE) to select “MS” or “MD.” If “MS” appears in the source display, MGS-X1 starts to play. If “MD” appears in the source display, press (MODE) to select “MS,” to start playback.
- When you want to play an MD unit, press (SOURCE) to select “MD” or “MS.” If your desired MD unit appears in the source display, it starts to play. If “MS” or another MD unit appears in the source display, press (MODE) to select your desired MD unit, to start playback.

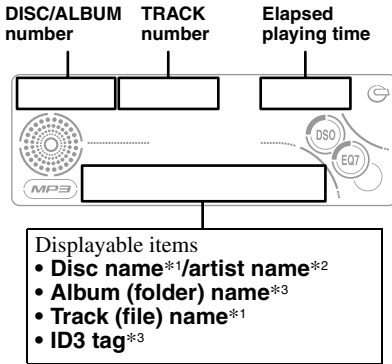
#### Locating a disc

##### — Disc selection

See “Locating a disc by name” on page 15.

## Display items

When the disc/album/track changes, any prerecorded title\*1 of the new disc/album/track is automatically displayed (if the Auto Scroll function is set to “on,” names exceeding 9 characters will be scrolled (page 21)).



To	Press
Switch display item	(DSPL)
Scroll display item	(DSPL) for 2 seconds

\*1 When pressing (DSPL), “NO D.Name” or “NO T.Name” indicates that there is no Disc Memo (page 14) or prerecorded name to display.

\*2 Only for CD TEXT discs with the artist name.

\*3 Only for MP3 files.

Only track name/artist name/album name in ID3 tag is displayed.

When pressing (DSPL), “NO ID3 Tag” indicates that there is no ID3 tag to display.

### Notes

- Some characters cannot be displayed.
- For some CD TEXT discs with very many characters, information may not scroll.
- This unit cannot display the artist name for each track of a CD TEXT disc.

### Notes on MP3

- ID3 tag applies only to version 1.
- The ID3 tag character codes comply with ASCII and ISO 8859-1 standards. Joliet format discs can only be displayed in ASCII. Incompatible characters will be displayed as “\*.”
- In the following cases, elapsed playing time may not be displayed accurately.
  - when an MP3 file of VBR (variable bit rate) is played.
  - during fast-forward/reverse.

### Tip

When Auto scroll is set to off and the disc/album/track name is changed, the disc/album/track name does not scroll.

## Playing tracks repeatedly

### — Repeat Play

The disc in the main unit will repeat a track, the entire album, or the entire disc when it reaches the end. For repeat play, you can select:

- REP TRACK — to repeat a track.
- REP ALBUM\*1 — to repeat an album.
- REP DISC\*2 — to repeat a disc.

\*1 Available only for MP3 files.

\*2 Available only when one or more optional CD/MD units are connected.

During playback, press (REP) repeatedly until the desired setting appears in the display.

Repeat Play starts.

To return to normal play mode, select “REP off.”

## Playing tracks in random order

### — Shuffle Play

You can select:

- SHUF ALBUM\*1 — to play the tracks in the current album in random order.
- SHUF DISC — to play the tracks on the current disc in random order.
- SHUF CHNGR\*2 — to play the tracks in the current optional CD (MD) unit in random order.
- SHUF ALL\*3 — to play all the tracks in all the connected CD (MD) units (including this unit) in random order.

\*1 Available only for MP3 files.

\*2 Available only when one or more optional CD (MD) units are connected.

\*3 Available only when one or more optional CD units, or two or more optional MD units are connected.

During playback, press (SHUF) repeatedly until the desired setting appears in the display.

Shuffle Play starts.

To return to normal play mode, select “SHUF off.”

### Note

“SHUF ALL” will not shuffle tracks between CD units and MD units.

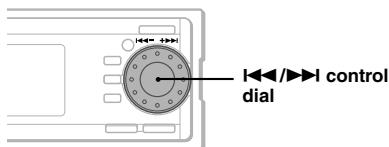
## Labeling a CD

### — Disc Memo (For a CD unit with the CUSTOM FILE function)

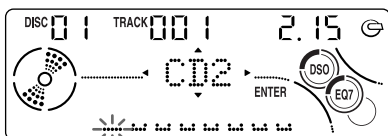
You can label each disc with a custom name (Disc Memo). You can enter up to 8 characters for a disc. If you label a CD, you can locate the disc by name (page 15).

#### Caution

Do not use the CUSTOM FILE feature while driving, or perform any other function which could divert your attention from the road.



- 1 Start playing the disc you want to label in a CD unit with the CUSTOM FILE function.
- 2 Press **(MENU)**, then rotate the **◀▶** control dial until "Name Edit" appears.
- 3 Press the **◀▶** control dial.



The unit will repeat the disc during the labeling procedure.

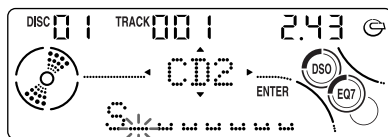
#### 4 Enter the characters.

- 1 Rotate the **◀▶** control dial to select the desired character.

A ↔ B ↔ C ... ↔ 0 ↔ 1 ↔ 2 ... ↔  
+ ↔ - ↔ \* ... ↔ . \* ↔ A

\* (blank space)

- 2 Press the **▶+** button after locating the desired character.



If you press the **◀** button, you can move back to the left.

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

#### 5 To return to normal CD play mode, press the **◀▶** control dial.

#### Tips

- Simply overwrite or enter " " to correct or erase a name.
- There is another way to start labeling a CD: Press **(LIST)** for 2 seconds instead of performing steps 2 and 3. You can also complete the operation by pressing **(LIST)** for 2 seconds instead of step 5.
- You can label CDs on a unit without the CUSTOM FILE function if that unit is connected along with a CD unit that has the function. The Disc Memo will be stored in the memory of the CD unit with the CUSTOM FILE function.

#### Note

Repeat/shuffle play is suspended until the Name Edit is complete.

## Viewing the Disc Memo

As a display item, the Disc Memo always takes priority over any original CD TEXT information.

To	Press
View	<b>(DSPL)</b> during CD/CD TEXT disc playback

#### Tip

To find out about other items that can be displayed, see page 13.

## Erasing the Disc Memo

- 1 Press **(SOURCE)** repeatedly to select “CD.”
- 2 Press **(MODE)** repeatedly to select the CD unit storing the Disc Memo.
- 3 Press **(MENU)**, then rotate the **◀◀/▶▶** control dial until “Name Del” appears.
- 4 Press the **◀◀/▶▶** control dial.  
The stored names will appear.
- 5 Rotate the **◀◀/▶▶** control dial to select the disc name you want to erase.
- 6 Press the **◀◀/▶▶** control dial for 2 seconds.  
The name is erased.  
Repeat steps 5 and 6 if you want to erase other names.
- 7 Press **(MENU)** twice.  
The unit returns to normal CD play mode.

### Notes

- When the Disc Memo for a CD TEXT disc is erased, the original CD TEXT information is displayed.
- If you cannot find the Disc Memo you want to erase, try selecting a different CD unit in step 2.

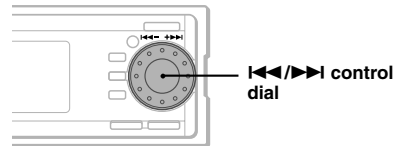
## Locating a disc by name

— List-up (For a CD unit with the CD TEXT/CUSTOM FILE function, or an MD unit)

You can use this function for discs that have been assigned custom names\*1 or for CD TEXT discs\*2.

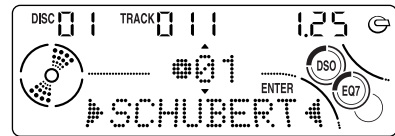
\*1 Locating a disc by its custom name: when you assign a name for a CD (page 14) or an MD.

\*2 Locating discs by the CD TEXT information: when you play a CD TEXT disc on a CD unit with the CD TEXT function.



- 1 Press **(LIST)**.

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



- 2 Rotate the **◀◀/▶▶** control dial until you find the desired disc.
- 3 Press the **◀◀/▶▶** control dial to play the disc.

### Note

In the case of CD TEXT discs and MDs, some letters cannot be displayed.

## Locating an album or track by name

When a name is assigned to an album\*3, or track\*4, you can locate it by name.

- 1 Press **(LIST)** repeatedly until album/track name appears in the display.

Each time you press **(LIST)**, the display will change in order of disc name, album name, and track name.

After 5 seconds, the display returns to the normal playback mode.

- 2 Rotate the **◀◀/▶▶** control dial until you find the desired album/track.  
Playback starts.

\*3 Available only for MP3 files.

\*4 Available only for MP3 files, CD TEXT disc, and MD.

# Radio

The unit can store up to 6 stations per band (FM1, FM2, FM3, AM1, and AM2).

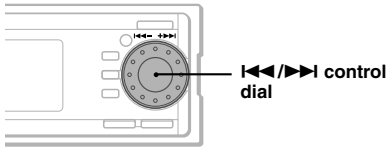
## Caution

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

## Storing stations automatically

### — Best Tuning Memory (BTM)

The unit selects the stations with the strongest signals within the selected band, and stores them in the order of their frequency.

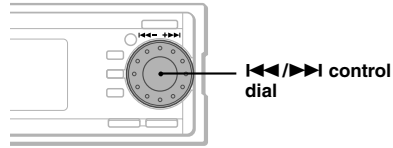


- 1 Press **(SOURCE)** repeatedly to select the radio.
- 2 Press **(MODE)** repeatedly to select the band.
- 3 Press **(MENU)**, then rotate the **◀▶** control dial until “BTM” appears.
- 4 Press the **◀▶** control dial.  
A beep sounds when the setting is stored.

### Notes

- If only a few stations can be received due to weak signals, some stored numbers will retain their former settings.
- When a number is indicated in the display, the unit starts storing stations from the one currently displayed.

## Receiving the stored stations



- 1 Press **(SOURCE)** repeatedly to select the radio.
- 2 Press **(MODE)** repeatedly to select the band.
- 3 Rotate the **◀▶** control dial until you find the desired station.

### Tip

Press the number button (1 to 6) on the card remote commander to select the stored station directly.

### If preset tuning does not work

Press the **◀◀** or **▶▶** button to search for the station (automatic tuning).

Scanning stops when the unit receives a station. Repeat until the desired station is received.

### Tips

- If automatic tuning stops too frequently, turn on the Local Seek to limit seek to stations with stronger signals (see “Changing the sound and display settings” on page 21).
- If you know the frequency of the station you want to listen to, press and hold the **◀◀** or **▶▶** button to locate the approximate frequency, then press the **◀◀** or **▶▶** button repeatedly to fine adjust to the desired frequency (manual tuning).

### If FM stereo reception is poor

#### Select monaural reception mode

(see “Changing the sound and display settings” on page 21).

The sound improves, but becomes monaural (“ST” disappears).

### Note

If interference occurs, this unit will automatically narrow the reception frequency to eliminate noise (IF Auto function). In such cases, some FM stereo broadcasts may become monaural while in the stereo reception mode.

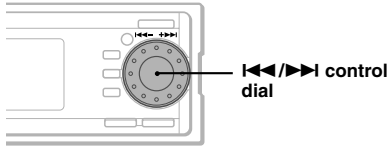
### Tips

- To always hear FM stereo broadcasts in stereo, you can change the IF Auto setting and widen the frequency signal reception (see “Changing the sound and display settings” on page 21). Note that some interference may occur in this setting.
- If FM broadcasts are difficult to hear, set DSO to off (page 22).



## Storing only desired stations

You can manually preset desired stations.



- 1 Press **(SOURCE)** repeatedly to select the radio.
- 2 Press **(MODE)** repeatedly to select the band.
- 3 Press the **-◀** or **▶+** button to tune in the station that you want to store.
- 4 Press **(MENU)**, then rotate the **◀▶** control dial until “Preset Edit” appears.
- 5 Press the **◀▶** control dial.
- 6 Rotate the **◀▶** control dial to select the number that you want to store.
- 7 Press the **◀▶** control dial.  
The stored station indication appears in the display.
- 8 Press **(MENU)** twice.

### Note

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

## Operating with the card remote commander

- 1 Press **(SOURCE)** repeatedly to select the radio.
- 2 Press **(MODE)** repeatedly to select the band.
- 3 Press **(SEEK-)** or **(SEEK+)** to tune in the station that you want to store.
- 4 Press the desired number button (**1** to **6**) until “MEM” appears.

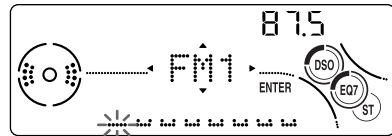
## Storing station names

### — 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 using up to 8 characters for a station.

### Storing the station names

- 1 Tune in a station whose name you want to store.
- 2 Press **(MENU)**, then rotate the **◀▶** control dial until “Name Edit” appears.
- 3 Press the **◀▶** control dial.



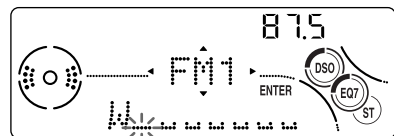
- 4 Enter the characters.

- 1 Rotate the **◀▶** control dial to select the desired character.

A ↔ B ↔ C ... ↔ 0 ↔ 1 ↔ 2 ... ↔  
+ ↔ - ↔ \* ... ↔ . ↔ \*

\* (blank space)

- 2 Press the **▶+** button after locating the desired character.



If you press the **-◀** button, you can move back to the left.

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

- 5 Press the **◀▶** control dial.

### Tips

- Simply overwrite or enter “ ” to correct or erase a name.
- There is another way to start storing station names: Press **(LIST)** for 2 seconds instead of performing steps 2 and 3. You can also complete the operation by pressing **(LIST)** for 2 seconds instead of step 5.
- If no memory is remaining, “Mem Full” appears in the display, and you cannot assign a station name.

## Erasing the station name

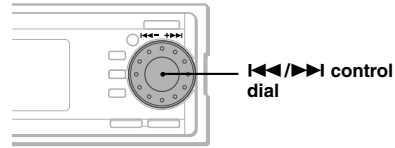
- 1** During radio reception, press **(MENU)**, then rotate the **◀◀/▶▶** control dial until “Name Del” appears.
- 2** Press the **◀◀/▶▶** control dial.
- 3** Rotate the **◀◀/▶▶** control dial to select the station whose name you want to erase.
- 4** Press the **◀◀/▶▶** control dial for 2 seconds.  
The name is erased.  
Repeat steps 3 to 4 if you want to erase other names.
- 5** Press **(MENU)** twice.  
The unit returns to normal radio reception mode.

### Note

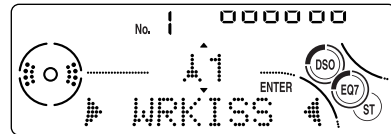
If you have already erased all of the station names, “NO Data” appears in step 4.

## Tuning in a station through a list

### — List-up



- 1** During radio reception, press **(LIST)** momentarily.  
The frequency or the name assigned to the current station appears in the display.  
After 5 seconds, the display returns to the normal playback mode.



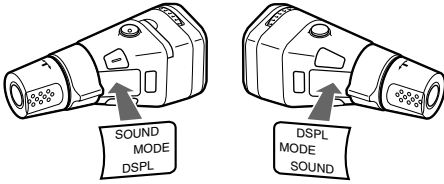
- 2** Rotate the **◀◀/▶▶** control dial until you find the desired station.  
If no name is assigned to the selected station, the frequency appears in the display.
- 3** Press the **◀◀/▶▶** control dial to tune in the desired station.

# Other Functions

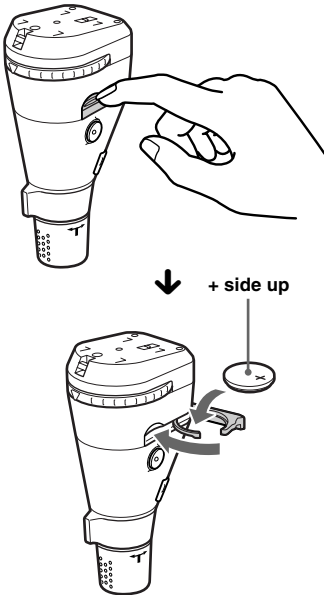
You can also control the unit (and optional CD/MD units) with a rotary commander (optional).

## Using the rotary commander

First, attach the appropriate label depending on how you want to mount the rotary commander. The rotary commander works by pressing buttons and/or rotating controls.



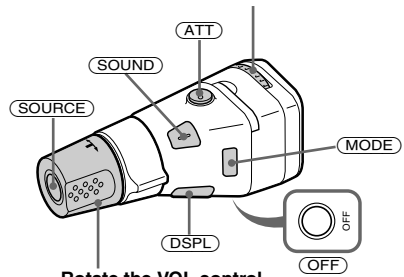
## Inserting the supplied lithium battery



**Tip**  
See "Notes on lithium battery" on page 27 for information on lithium battery.

## By pressing buttons

Turn the dial to change the direction of infrared rays.



Rotate the VOL control to adjust the volume.

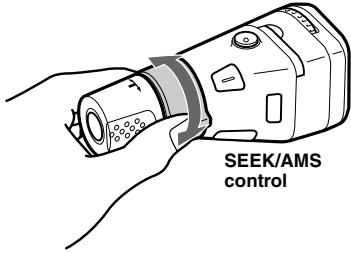
Press	To
<b>(SOURCE)</b>	Change source (radio/CD/MD* <sup>1</sup> /AUX)/Power on
<b>(MODE)</b>	Change operation (radio band/CD unit/MD* <sup>1</sup> unit)
<b>(ATT)</b>	Attenuate sound
<b>(OFF)</b> * <sup>2</sup>	Stop playback or radio reception/Power off
<b>(SOUND)</b>	Select the sound menu
<b>(DSPL)</b>	Change the display item (For 2 seconds to scroll the display item)

\*<sup>1</sup> Only if the corresponding optional equipment is connected.

\*<sup>2</sup> If your car has no ACC (accessory) position on the ignition key switch, be sure to press **(OFF)** for 2 seconds to turn off the clock indication after turning off the ignition.

continue to next page →

## By rotating the control



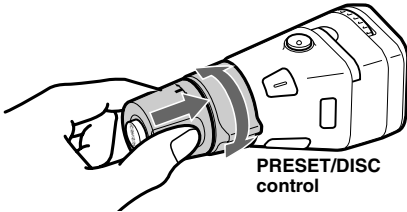
### Rotate and release to:

- Skip tracks.
- To continuously skip tracks, rotate once and rotate again within 1 second and hold the control.
- Tune in stations automatically.

### Rotate, hold, and release to:

- Fast-forward/reverse a track.
- Find a station manually.

## By pushing in and rotating the control



### Push in and rotate the control to:

- Receive preset stations.
- Change the disc.\*1
- Change the album.\*2

\*1 When an optional CD/MD unit is connected.

\*2 When an MP3 file is played.

When an MP3 file is played, you can select an album using the rotary commander.

## (With this unit)

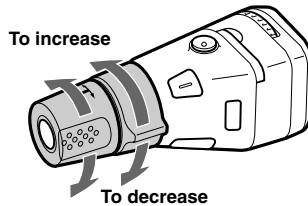
To	Do this
Skip albums - Album selection	Push in and rotate [once for each album] the control. To continuously skip albums, push in and rotate (and hold) the control.

## (With optional unit)

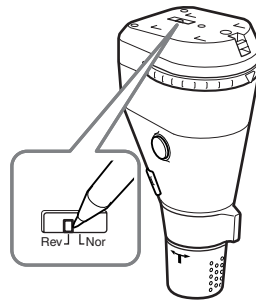
To	Do this
Skip discs - Disc selection	Push in and rotate [once for each disc] the control. To continuously skip discs, push in and rotate once and rotate again within 1 second (and hold) the control.
Skip albums - Album selection	Push in and rotate the control [hold for a moment] and release. To continuously skip albums, push in and rotate again (and hold) within 1 second of first releasing the control.

## Changing the operative direction

The operative direction of controls is factory-set as shown below.



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

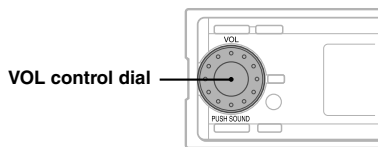


Set the Rev/Nor-select switch to "Rev."

## Adjusting the sound characteristics

You can adjust the bass, treble, balance, fader, and subwoofer volume.

The bass and treble levels and subwoofer volume can be stored independently for each source.



- 1 Press **(SOURCE)** to select a source (radio, CD, MD, or AUX).
- 2 Press the VOL control dial repeatedly to select the item you want to adjust. Each time you press the VOL control dial, the item changes as follows:  
**DSO** → **EQ7** → **BAS** (bass)  
→ **TRE** (treble) → **BAL** (left-right)  
→ **FAD** (front-rear)  
→ **SUB** (subwoofer volume)
- 3 Rotate the VOL control dial to adjust the selected item.

### Note

Adjust within 3 seconds after selecting the item.

## Quickly attenuating the sound

(With the rotary commander or the card remote commander)

Press **(ATT)** on the rotary commander or card remote commander.

“ATT on” appears in the display momentarily.

To restore the previous volume level, press

**(ATT)** again.

### Tip

When the interface cable of a car telephone is connected to the ATT lead, the unit decreases the volume automatically when a telephone call comes in (Telephone ATT function).

## Changing the sound and display settings

### — Menu

The following items can be set:

### Set Up

- Clock (page 11)
- Beep — to turn the beeps on or off.
- AUX-A (page 26) — to turn the AUX source display on or off.

### Display

- D.Info (Dual Information) — to display the clock and the play mode at the same time (on). Functions only when SA is not set to B-1 – B-5.
- SA (Spectrum Analyzer) (page 25) — to change the display pattern of the equalizer display.
- Demo
  - Select “on” to activate the Demo display. The Demo display will appear about 10 seconds after the unit is turned off.
- Dimmer — to change the brightness of the display.
  - Select “Auto” to dim the display only when you turn the lights on.
  - Select “on” to dim the display.
  - Select “off” to deactivate the Dimmer.
- Contrast — to adjust the contrast if the indications on the display are not recognizable because of the unit’s installation position.
- Color — to select from a range of 7 display colors.
- A.Scrl (Auto Scroll)
  - Select “on” to scroll all automatically displayed names exceeding 9 characters.
  - When Auto scroll is set to off and the disc/track name is changed, the disc/track name does not scroll.

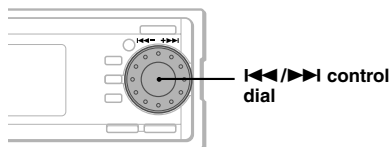
### Play Mode

- Local on/off (Local seek mode) (page 16)
  - Select “on” to only tune into stations with stronger signals.
- Mono on/off (Monaural mode) (page 16)
  - Select “on” to hear FM stereo broadcast in monaural. Select “off” to return to normal mode.
- IF Auto/Wide (page 16)

continue to next page →

## Sound

- EQ7 Tune (page 23) — to adjust the equalizer curve.
- HPF (High pass filter) (page 24)
- LPF (Low pass filter) (page 25)
- Loud (Loudness) — to enjoy bass and treble even at low volumes. The bass and treble will be reinforced.
- AUX Level (page 26) — to adjust the volume level of connected auxiliary equipment.



- 1 Press **(MENU)**.  
To set A.Scr1, press **(MENU)** during CD/MD playback.
- 2 Rotate the **◀◀/▶▶** control dial until the desired item appears.
- 3 Press the **◀◀** or **▶▶** button to select the desired setting (Example: “on” or “off”).
- 4 Press the **◀◀/▶▶** control dial.  
After the mode setting is completed, the display returns to normal play mode.

### Note

The displayed item will differ depending on the source.

### Tip

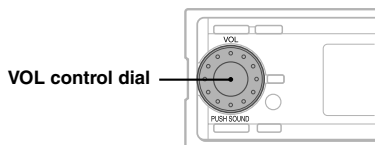
You can easily switch among categories by pressing **(DISC+)** or **(DISC-)** on the card remote commander for 2 seconds.

## Setting the Dynamic Soundstage Organizer (DSO)

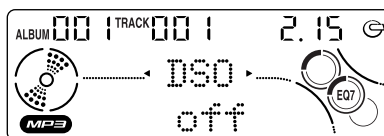
If your speakers are installed into the lower part of the doors, the sound will come from below and may not be clear.

The DSO (Dynamic Soundstage Organizer) function creates a more ambient sound as if there were speakers in the dashboard (virtual speakers).

You can store the DSO setting for each source.



- 1 Press **(SOURCE)** to select a source (radio, CD, MD, or AUX).
- 2 Press the VOL control dial repeatedly until “DSO” appears.



- 3 Rotate the VOL control dial to select “DSO on” or “DSO off.”  
Turn the VOL control dial clockwise for “on,” and counterclockwise for “off.”  
To cancel the DSO function, select “DSO off.”  
After 3 seconds, the display returns to the normal playback mode.

### Notes

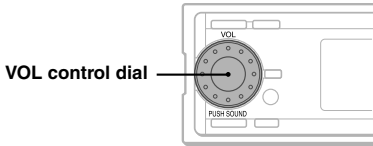
- Depending on the type of car interior or type of music, DSO may not have a desirable affect.
- If FM broadcasts are difficult to hear, set DSO to off.

# Setting the equalizer

You can select an equalizer curve for 7 music types (Xplod, Vocal, Club, Jazz, New Age, Rock, and Custom).

You can store a different equalizer setting for each source.

## Selecting the equalizer curve



- 1 Press **(SOURCE)** to select a source (radio, CD, MD, or AUX).
- 2 Press the VOL control dial repeatedly until “EQ7” appears.



- 3 Rotate the VOL control dial to select the desired equalizer curve.

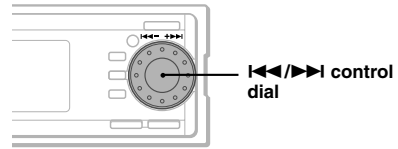
To cancel the equalizing effect, select “off.” After 3 seconds, the display returns to the normal playback mode.

### Note

When DSO is set to on, equalizer settings are automatically adjusted for best overall effect.

## Adjusting the equalizer curve

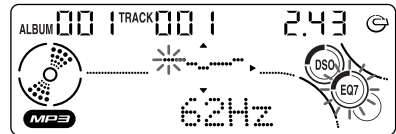
You can store and adjust the equalizer settings for frequency and level.



- 1 Press **(SOURCE)** to select a source (radio, CD, MD, or AUX).
- 2 Press **(MENU)**, then rotate the **◀/▶** control dial until “EQ7 Tune” appears.
- 3 Press the **◀/▶** control dial.
- 4 Press the **◀◀** or **▶▶** button to select the desired equalizer curve, then press the **◀/▶** control dial. Each time you press the **◀◀** or **▶▶** button, the item changes.
- 5 Select the desired frequency and level.

- 1 Press the **◀◀** or **▶▶** button to select the desired frequency. Each time you press the **◀◀** or **▶▶** button, the frequency changes.

62 Hz ↔ 157 Hz ↔ 396 Hz ↔ 1.0 kHz  
↔ 2.5 kHz ↔ 6.3 kHz ↔ 16 kHz



- 2 Rotate the **◀/▶** control dial to adjust the desired level.

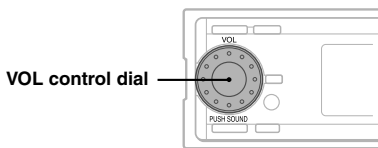
The level is adjustable by 1 dB steps from -10 dB to +10 dB.



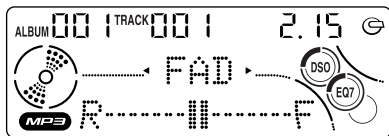
To restore the factory-set equalizer curve, press the **◀/▶** control dial for 2 seconds.

- 6 Press the **◀/▶** control dial. After the effect setting is complete, the display returns to the normal playback mode.

## Adjusting the front and rear volume



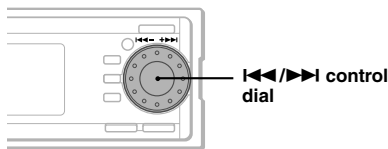
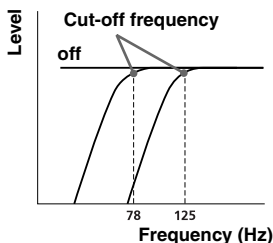
- 1 Press **(SOURCE)** to select a source (radio, CD, MD, or AUX).
- 2 Press the VOL control dial repeatedly until “FAD” appears.



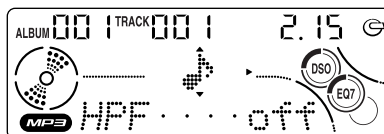
- 3 Rotate the VOL control dial to adjust the volume of front/rear speakers. After 3 seconds, the display returns to the normal playback mode.

## Adjusting the cut-off frequency for the front/rear speakers

To match the characteristics of the installed speaker system, you can select the cut-off frequency of the speakers.

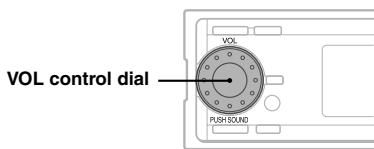


- 1 During playback or radio reception, press **(MENU)**.
- 2 Rotate the **I◀▶** control dial until “HPF” appears.

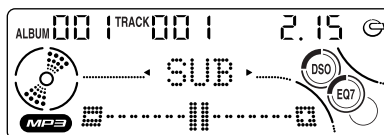


- 3 Press the **-◀◀** or **▶▶+** button to select the cut-off frequency. Each time you press the **-◀◀** or **▶▶+** button, the frequency changes as follows:  
off (default setting) ↔ 78 Hz ↔ 125 Hz
- 4 Press the **I◀▶** control dial. After the frequency setting is complete, the display returns to the normal playback mode.

## Adjusting the volume of the subwoofer(s)



- 1 Press **(SOURCE)** to select a source (radio, CD, MD, or AUX).
- 2 Press the VOL control dial repeatedly until “SUB” appears.



- 3 Rotate the VOL control dial to adjust the volume. After 3 seconds, the display returns to the normal playback mode.

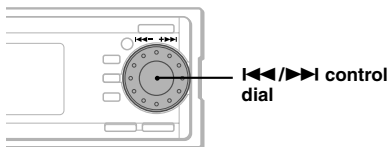
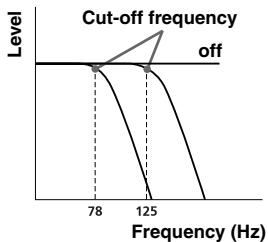


**Tip**

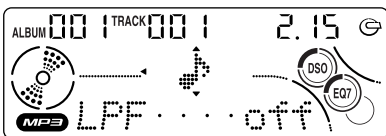
The volume level is adjustable from -10 dB to +10 dB. (Below -10 dB, “-∞ dB” is displayed.)

### Adjusting the cut-off frequency for the subwoofer(s)

To match the characteristics of the connected subwoofer(s), you can cut out 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 you can get a clearer sound image.



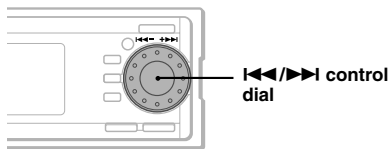
- 1 During playback or radio reception, press **(MENU)**.
- 2 Rotate the **◀▶** control dial until “LPF” appears.



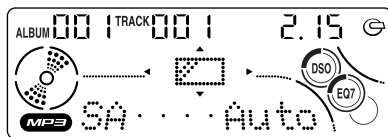
- 3 Press the **-◀** or **▶+** button to select the cut-off frequency. Each time you press the **-◀** or **▶+** button, the frequency changes as follows:  
**off** (default setting) ↔ 125 Hz ↔ 78 Hz
- 4 Press the **◀▶** control dial. After the frequency setting is complete, the display returns to the normal playback mode.

## Selecting the spectrum analyzer

The sound signal level is displayed on a spectrum analyzer. You can select a display for ten patterns (A-1 to A-5 or B-1 to B-5), or the automatic display mode where all the patterns appear.



- 1 Press **(SOURCE)** to select a source (radio, CD, MD, or AUX).
- 2 Press **(MENU)**.
- 3 Rotate the **◀▶** control dial until “SA” appears.

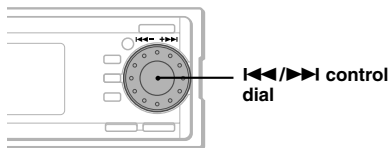


- 4 Press the **-◀** or **▶+** button to select the desired setting.
- 5 Press the **◀▶** control dial.

## Labeling a Demo display

### — Appearing Characters

You can label a Demo display with up to 64 characters to appear when the unit is turned off. Labels will scroll in the display with Demo set to “on.” (The display remains lit even when the power is off.)

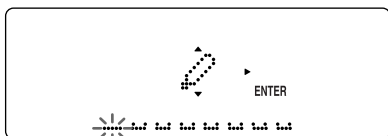


- 1 Press **(OFF)**. CD/MD playback or radio reception stops (the key illumination and display remain on).

continue to next page →

2 Press (MENU), then rotate the ◀▶ control dial until “Name Input” appears.

3 Press the ◀▶ control dial.



4 Enter the characters.

1 Press (DSPL) to select the character type.

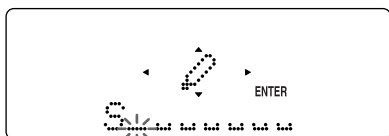
A → a → 0 → A

2 Rotate the ◀▶ control dial to select the desired character.

A ↔ B ↔ C ↔ ... X ↔ y ↔ z ↔ 0 ↔  
1 ↔ 2 ... ↔ ! ↔ “ ↔ # ... ↔ \_ \* ↔ A

\* (blank space)

3 Press the ▶+ button after locating the desired character.



If you press the ◀ button, you can move back to the left.

4 Repeat steps 1 to 3 to enter the entire sentence.

5 Press the ◀▶ control dial.

#### Tips

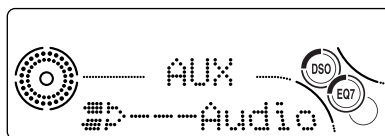
- Simply overwrite or enter “\_” to correct or erase a sentence.
- To erase all sentences, press the ◀▶ control dial for 2 seconds after step 3.

## Connecting auxiliary audio equipment

You can connect auxiliary audio equipment to this unit with the AUX IN connector.

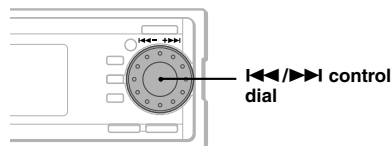
### Selecting auxiliary equipment

Press (SOURCE) repeatedly to select “AUX.”



### Adjusting the volume level

You can adjust the volume for each connected audio equipment.



1 Press (MENU), then rotate the ◀▶ control dial until “AUX Level” appears.

2 Press the ◀▶ control dial.

3 Rotate the ◀▶ control dial to select the desired volume level.

The volume level is adjustable in 1 dB steps from -6 dB to +6 dB.

4 Press the ◀▶ control dial.

### To deactivate “AUX-A” in the music source display

1 Press (OFF).  
CD/MD playback or radio reception stops (the key illumination and display remain on).

2 Press (MENU).

3 Rotate the ◀▶ control dial until “AUX-A on” appears.

4 Press the ▶+ button to select “AUX-A off.”

5 Press (MENU).

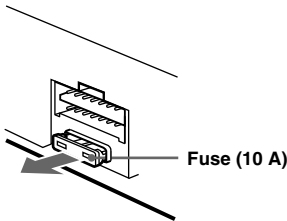
To restore the indication, select “AUX-A on.”

# Additional Information

## Maintenance

### Fuse replacement

When replacing the fuse, be sure to use one matching the amperage rating stated 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.

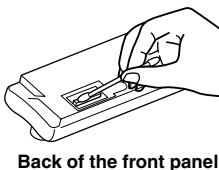
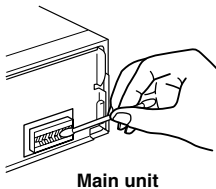


### Warning

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, detach the front panel (page 10) and clean the connectors with a cotton swab dipped in alcohol. Do not apply too much force. Otherwise, the connectors may be damaged.

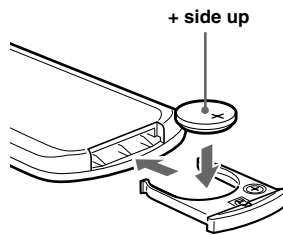
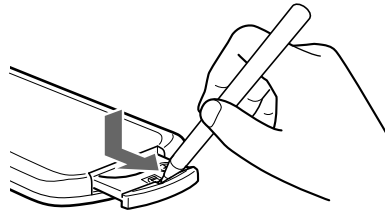


### Notes

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

### Replacing the lithium battery

Under normal conditions, batteries will last approximately 1 year. (The service life may be shorter, depending on the conditions of use.) When the battery becomes weak, the range of the card remote commander becomes shorter. Replace the battery with a new CR2025 lithium battery. Use of any other battery may present a risk of fire or explosion.



### Notes on lithium battery

- Keep the lithium battery out of the reach of children. Should the battery be swallowed, immediately consult a doctor.
- Wipe the battery with a dry cloth to assure a good contact.
- Be sure to observe the correct polarity when installing the battery.
- Do not hold the battery with metallic tweezers, otherwise a short-circuit may occur.

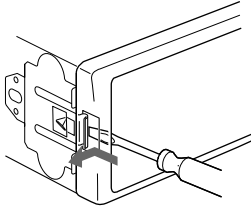
### WARNING

Battery may explode if mistreated. Do not recharge, disassemble, or dispose of in fire.

# Removing the unit

## 1 Remove the front cover

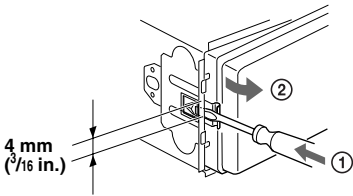
- 1 Detach the front panel (page 10).
- 2 Press the clip inside the front cover with a thin screwdriver.



- 3 Repeat step 2 for the other side.

## 2 Remove the unit

- 1 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.



- 2 Repeat step 1 for the right side.
- 3 Slide the unit out of its mounting.

# Specifications

## AUDIO POWER SPECIFICATIONS

### POWER OUTPUT AND TOTAL HARMONIC DISTORTION

23 watts per channel minimum continuous average power into 4 ohms, 4 channels driven from 20 Hz to 20 kHz with no more than 5% total harmonic distortion.

#### CD Player section

Signal-to-noise ratio	95 dB
Frequency response	10 – 20,000 Hz
Wow and flutter	Below measurable limit

#### Tuner section

##### FM

Tuning range	87.5 – 107.9 MHz
Antenna terminal	External antenna connector
Intermediate frequency	10.7 MHz/450 kHz
Usable sensitivity	8 dBf
Selectivity	75 dB at 400 kHz
Signal-to-noise ratio	66 dB (stereo), 72 dB (mono)
Harmonic distortion at 1 kHz	0.6 % (stereo), 0.3 % (mono)
Separation	35 dB at 1 kHz
Frequency response	30 – 15,000 Hz

##### AM

Tuning range	530 – 1,710 kHz
Antenna terminal	External antenna connector
Intermediate frequency	10.7 MHz/450 kHz
Sensitivity	30 $\mu$ V

#### Power amplifier section

Outputs	Speaker outputs (sure seal connectors)
Speaker impedance	4 – 8 ohms
Maximum power output	52 W $\times$ 4 (at 4 ohms)

#### General

Outputs	Audio outputs (front/rear) Subwoofer output (mono) Power antenna relay control terminal Power amplifier control terminal
---------	---

#### Inputs

Telephone ATT control terminal  
Illumination control terminal  
BUS control input terminal  
BUS audio input terminal  
AUX IN terminal  
Remote controller input terminal

#### Tone controls

Antenna input terminal  
Bass  $\pm$ 8 dB at 100 Hz  
Treble  $\pm$ 8 dB at 10 kHz  
+8 dB at 100 Hz  
+2 dB at 10 kHz

#### Loudness

#### Power requirements

12 V DC car battery  
(negative ground)

#### Dimensions

Approx. 178  $\times$  50  $\times$  182 mm  
(7 <sup>1</sup>/<sub>8</sub>  $\times$  2  $\times$  7 <sup>1</sup>/<sub>4</sub> in.)  
(w/h/d)

#### Mounting dimensions

Approx. 182  $\times$  53  $\times$  161 mm  
(7 <sup>1</sup>/<sub>4</sub>  $\times$  2 <sup>1</sup>/<sub>8</sub>  $\times$  6 <sup>3</sup>/<sub>8</sub> in.)  
(w/h/d)

#### Mass

Approx. 1.6 kg  
(3 lb 9 oz)

#### Supplied accessories

Parts for installation and connections (1 set)  
Front panel case (1)  
Card remote commander  
RM-X112

#### Optional accessories

Wireless rotary commander  
RM-X55  
BUS cable (supplied with an RCA pin cord)  
RC-61 (1 m), RC-62 (2 m)

#### Optional equipment

CD changer (10 discs)  
CDX-757MX, CDX-656  
CD changer (6 discs)  
CDX-T70MX, CDX-T69  
MD changer (6 discs)  
MDX-66XLP  
MG Memory Stick  
system-up player  
MGS-X1  
Source selector  
XA-C30

#### Note

*This unit cannot be connected to a digital preamplifier or an equalizer.*

*Design and specifications are subject to change without notice.*

---

## Troubleshooting

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

---

#### The operation buttons do not function.

Press the RESET button.

---

#### No sound.

- Rotate the VOL control dial clockwise to adjust the volume.
- Cancel the ATT function.
- Set the fader control to the center position for a 2-speaker system.

---

#### The contents of the memory have been erased.

- The RESET button has been pressed.  
→ Store again into the memory.
- The power cord or battery has been disconnected.
- The power connecting cord is not connected properly.

---

#### No beep sound.

The beep sound is canceled (page 21).

---

#### Indications disappear from/do not appear in the display.

- The clock display disappears if you press (OFF) for 2 seconds.  
→ Press (OFF) again for 2 seconds to display the clock.
- Remove the front panel and clean the connectors. See “Cleaning the connectors” on page 27 for details.

---

#### Stored stations and correct time are erased.

#### The fuse has blown.

#### Makes noise when the ignition key is in the ON, ACC, or OFF position.

The leads are not matched correctly with the car’s accessory power connector.

---

#### No power is being supplied to the unit.

- Check the connection. If everything is in order, check the fuse.
  - The car does not have an ACC position.  
→ Press (SOURCE) to turn on the unit.
- 

---

#### The power is continuously supplied to the unit.

The car does not have an ACC position.  
→ Press (OFF) for 2 seconds.

---

#### The power antenna does not extend.

The power antenna does not have a relay box.

---

#### Cannot turn off the “-----” indication.

You entered the name edit mode.  
→ Press (LIST) for 2 seconds.

---

---

### CD/MD playback

---

#### Playback does not begin.

- Defective MD or dirty CD.
- Some CD-Rs/CD-RWs may not play due to its recording equipment or the disc condition.

---

#### MP3 files cannot be played back.

- Recording was not performed according to the ISO 9660 level 1 or level 2 format, or the Joliet or Romeo in the expansion format.
- The file extension “.MP3” is not added to the file name.
- Files are not stored in MP3 format.

---

#### MP3 files take longer to play back than others.

The following discs take a longer time to start playback.

- a disc recorded with complicated tree structure.
- a disc recorded in Multi Session.
- a disc to which data can be added (non-finalized disc).

---

#### The sound skips from vibration.

- The unit is installed at an angle of more than 30°.
- The unit is not installed in a sturdy part of the car.

---

#### The sound skips.

- Defective or dirty disc.
  - The CD-R/CD-RW has been damaged.
- 

continue to next page →

## Radio reception

### Preset tuning is not possible.

- Store the correct frequency in the memory.
- The broadcast signal is too weak.

### The stations cannot be received.

#### The sound is hampered by noises.

- Connect a power antenna control lead (blue) or accessory power supply lead (red) to the power supply lead of a car's antenna booster. (Only when your car has built-in FM/AM antenna in the rear/side glass.)
- Check the connection of the car antenna.
- The auto antenna will not go up.
  - Check the connection of the power antenna control lead.
- Check the frequency.
- When the DSO mode is on, the sound is sometimes hampered by noises.
  - Set the DSO mode to off (page 22).

### Automatic tuning is not possible.

- The local seek mode is set to "on."
  - Set the local seek mode to "off" (page 21).
- The broadcast signal is too weak.
  - Perform manual tuning.

### The "ST" indication flashes.

- Tune in the frequency accurately.
- The broadcast signal is too weak.
  - Set to the monaural reception mode (page 21).

### A program broadcast in stereo is heard in monaural.

The unit is in monaural reception mode.  
→ Cancel monaural reception mode (page 21).

### Interference occurs during FM reception.

The wide mode is selected.  
→ Set the IF mode to "IF Auto" (page 21).

## Error displays/Messages

### Error displays

#### (For this unit and optional CD/MD changers)

The following indications will flash for about 5 seconds, and an alarm sound will be heard.

#### Blank\*1

No tracks have been recorded on an MD.\*2  
→ Play an MD with recorded tracks on it.

#### Error\*1

- A CD is dirty or inserted upside down.\*2
  - Clean or insert the CD correctly.
- A CD/MD cannot play because of some problem.\*2
  - Insert another CD/MD.

#### High Temp

The ambient temperature is more than 50°C (122°F).  
→ Wait until the temperature goes down below 50°C (122°F).

#### NO Disc

No disc is inserted in the CD/MD unit.  
→ Insert discs in the CD/MD unit.

#### NO Mag

The disc magazine is not inserted in the CD/MD unit.  
→ Insert the magazine in the CD/MD unit.

#### NO Music\*1

A CD which is not a music file is inserted.  
→ Insert a music CD.

#### Not Ready

The lid of the MD unit (MDX-40) is open or the MDs are not inserted properly.  
→ Close the lid or insert the MDs properly.

#### Push Reset

The CD/MD unit cannot be operated because of some problem.  
→ Press the RESET button on the unit.

\*1 When the CD/MD changer is connected to the unit, the disc number of the CD or MD appears in the display.

\*2 The disc number of the disc causing the error appears in the display.

If these solutions do not help improve the situation, consult your nearest Sony dealer.

### Messages

#### LCL Seek +/-

The Local Seek mode is on during automatic tuning (page 16).

#### "L L L L" or "r r r r"

You have reached the beginning or the end of the disc and you cannot go any further.

### **About ID3 tag version 2**

*Although not a malfunction, the following occurs when an MP3 file containing ID3 tag ver.2 is played:*

*– When skipping a portion of ID3 tag ver.2 (at the beginning of the track), sound is not output. Skip time changes depending ID3 tag ver.2 capacity.*

*Example: At 64 kbytes, it is about 2 seconds (with RealJukebox).*

*– The displayed elapsed playing time when skipping a portion of ID3 tag ver.2 is inaccurate. For MP3 files of a bit rate other than 128 kbps, time is not displayed accurately during playback.*

*– When an MP3 file is created with MP3 conversion software (ex. RealJukebox\*), ID3 tag ver.2 will automatically be written.*

*\* "RealJukebox is a registered trademark of RealNetworks, Inc."*

*As of December, 2001*



<http://www.sony.net/>

Sony Corporation Printed in Korea

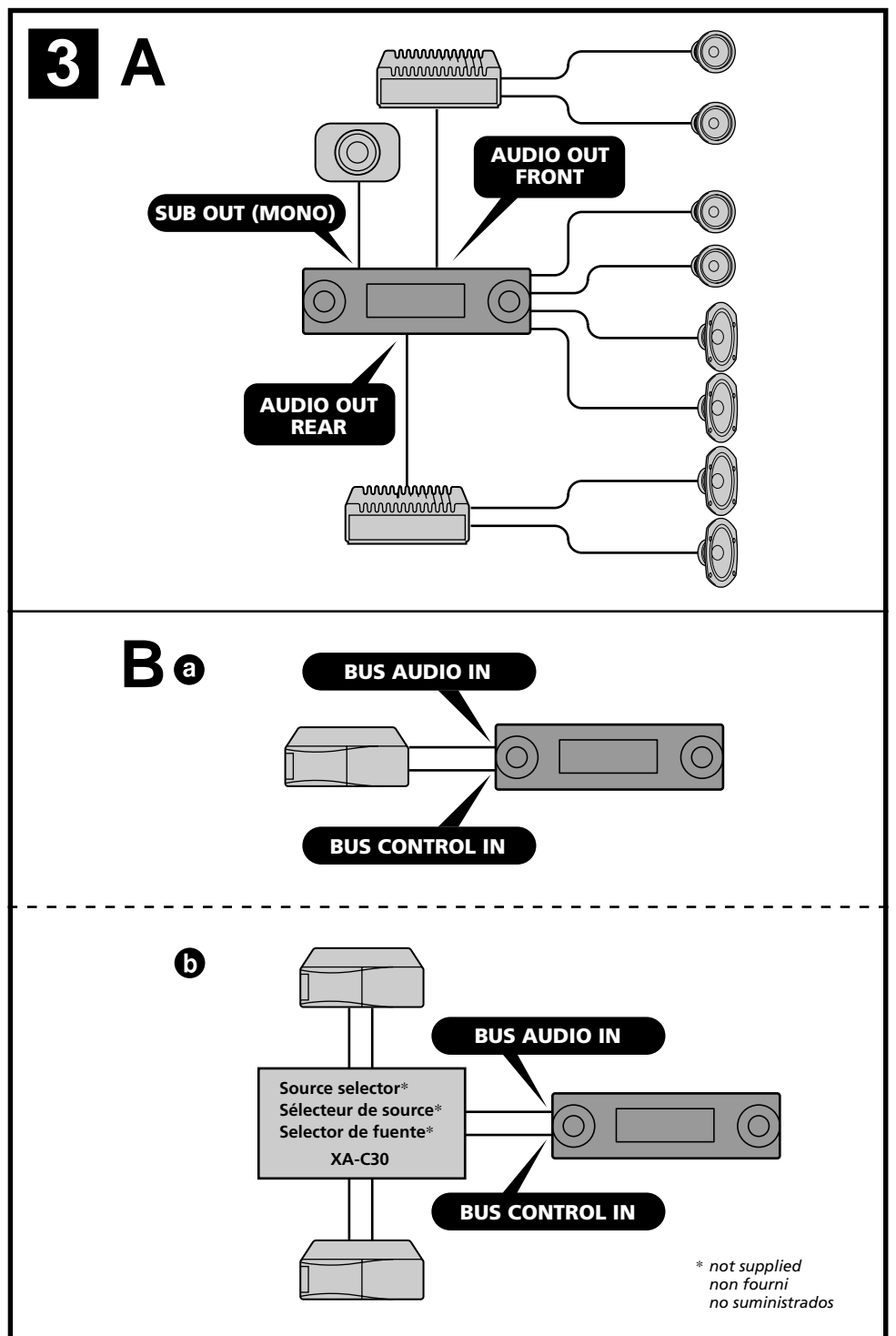
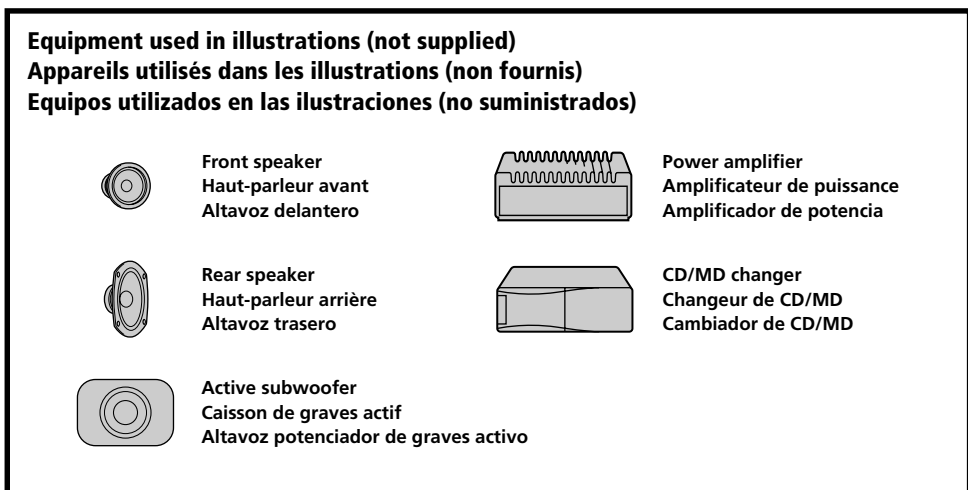
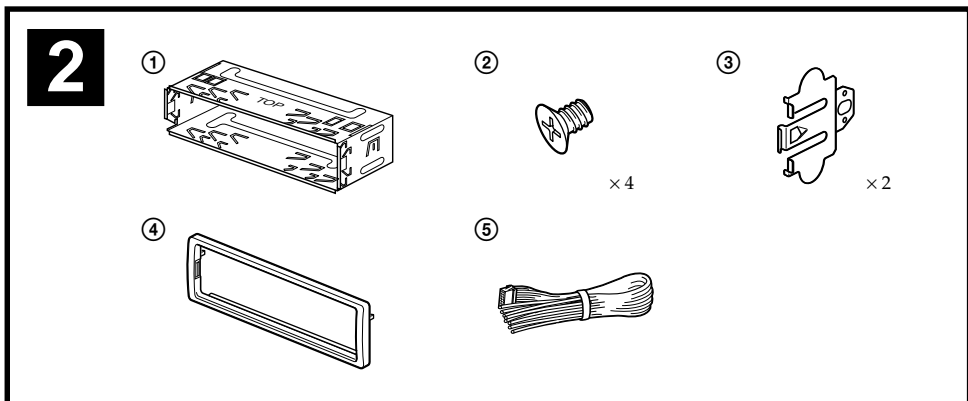
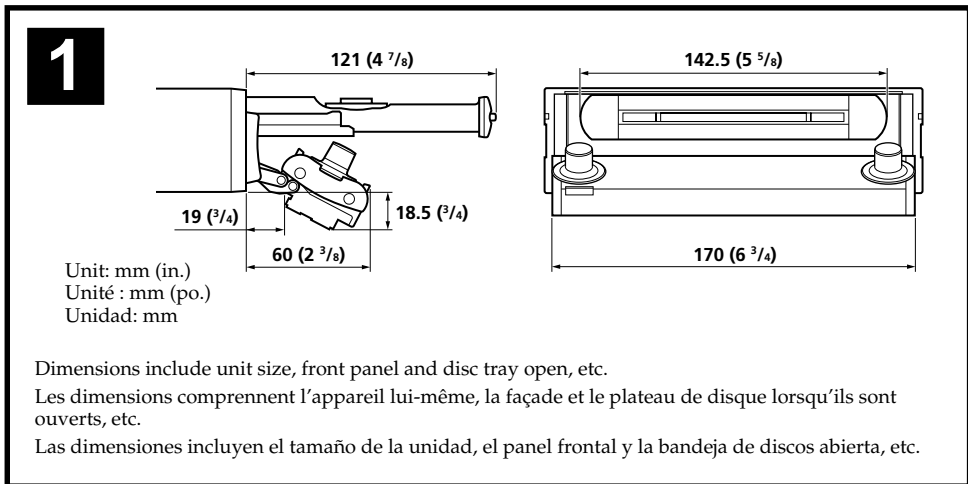


# FM/AM Compact Disc Player

Installation/Connections  
Installation/Connexions  
Instalación/Conexiones

## CDX-MP70

Sony Corporation © 2002 Printed in Korea



### Cautions

- This unit is designed for negative ground 12 V DC operation only.
- Do not get the wires under a screw, or caught in moving parts (e.g. seat railing).
- Before making connections, turn the car ignition off to avoid short circuits.
- Connect the **yellow** and **red** power input leads only after all other leads have been connected.
- Run all ground wires to a common ground point.**
- Be sure to insulate any loose unconnected wires with electrical tape for safety.
- The use of optical instruments with this product will increase eye hazard.

#### Notes on the power supply cord (yellow)

- When connecting this unit in combination with other stereo components, the connected car circuit's rating must be higher than the sum of each component's fuse.
- When no car circuits are rated high enough, connect the unit directly to the battery.

### Before installation (1)

Do not install the unit where its operation interferes with driving.

Example:

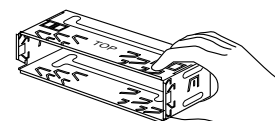
- Opening and closing of the front panel or disc tray interfere with operation of the gear shift.
- With the front panel open, operation of hazard lamps, switches etc., is impaired.

### Parts list (2)

The numbers in the list are keyed to those in the instructions.

#### Caution

Handle the bracket ① carefully to avoid injuring your fingers.



### Connection example (3)

#### Note (3-A)

Be sure to connect the ground cord before connecting the amplifier.

#### Tip (3-B-①)

For connecting two or more CD/MD changers, the source selector XA-C30 (optional) is necessary.

### Connection diagram (4)

- To a metal surface of the car**  
First connect the black ground lead, then connect the yellow and red power input leads.
- To the power antenna control lead or power supply lead of antenna booster amplifier**  
**Notes**
  - It is not necessary to connect this lead if there is no power antenna or antenna booster, or with a manually-operated telescopic antenna.
  - When your car has a built-in FM/AM antenna in the rear/side glass, see "Notes on the control and power supply leads."
- To AMP REMOTE IN of an optional power amplifier**  
This connection is only for amplifiers. Connecting any other system may damage the unit.
- To the interface cable of a car telephone**
- To a car's illumination signal**  
Be sure to connect the black ground lead to it first.
- To the +12 V power terminal which is energized in the accessory position of the ignition key switch**  
**Notes**
  - If there is no accessory position, connect to the +12 V power (battery) terminal which is energized at all times.
  - Be sure to connect the black ground lead to it first.
  - When your car has a built-in FM/AM antenna in the rear/side glass, see "Notes on the control and power supply leads."
- To the +12 V power terminal which is energized at all times**  
Be sure to connect the black ground lead to it first.

#### Notes on the control and power supply leads

- The power antenna control lead (blue) supplies +12 V DC when you turn on the tuner.
- When your car has built-in FM/AM antenna in the rear/side glass, connect the power antenna control lead (blue) or the accessory power input lead (red) to the power terminal of the existing antenna booster. For details, consult your dealer.
- A power antenna without relay box cannot be used with this unit.

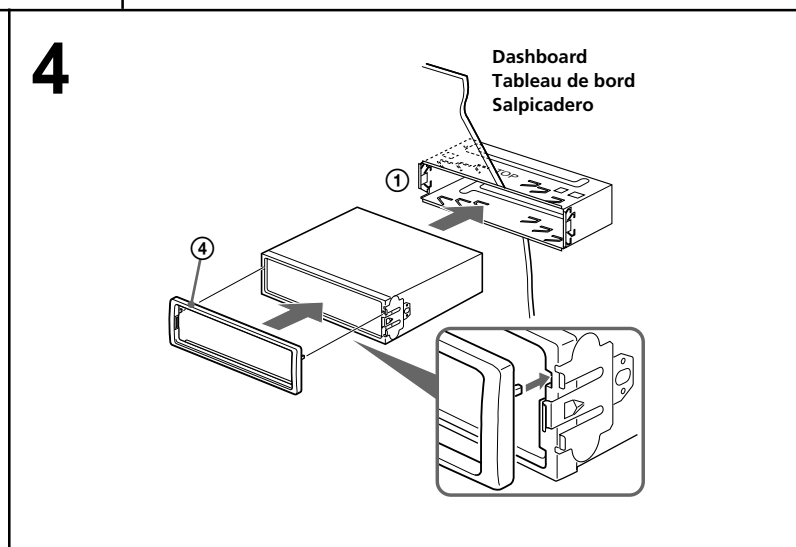
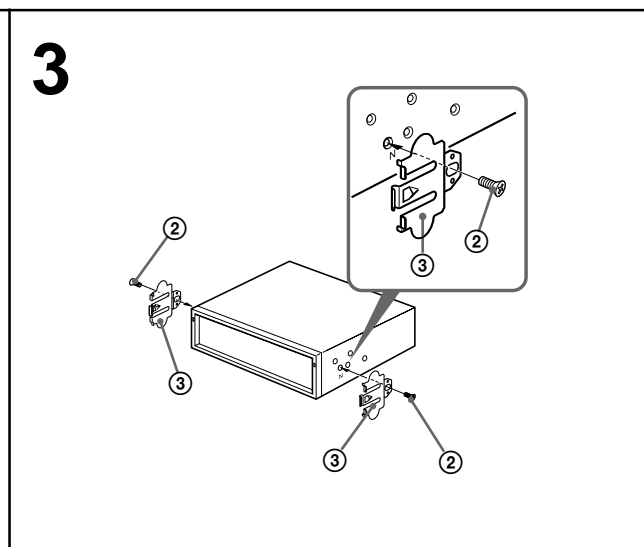
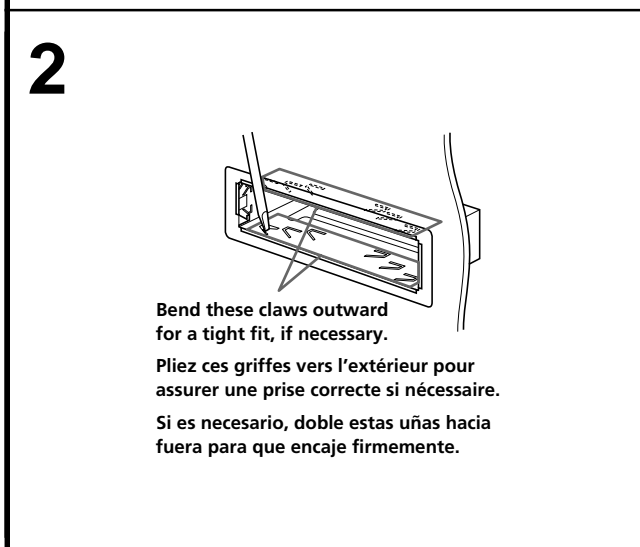
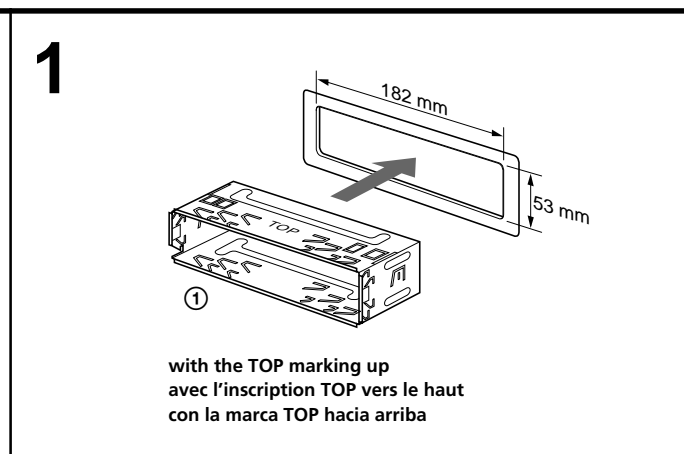
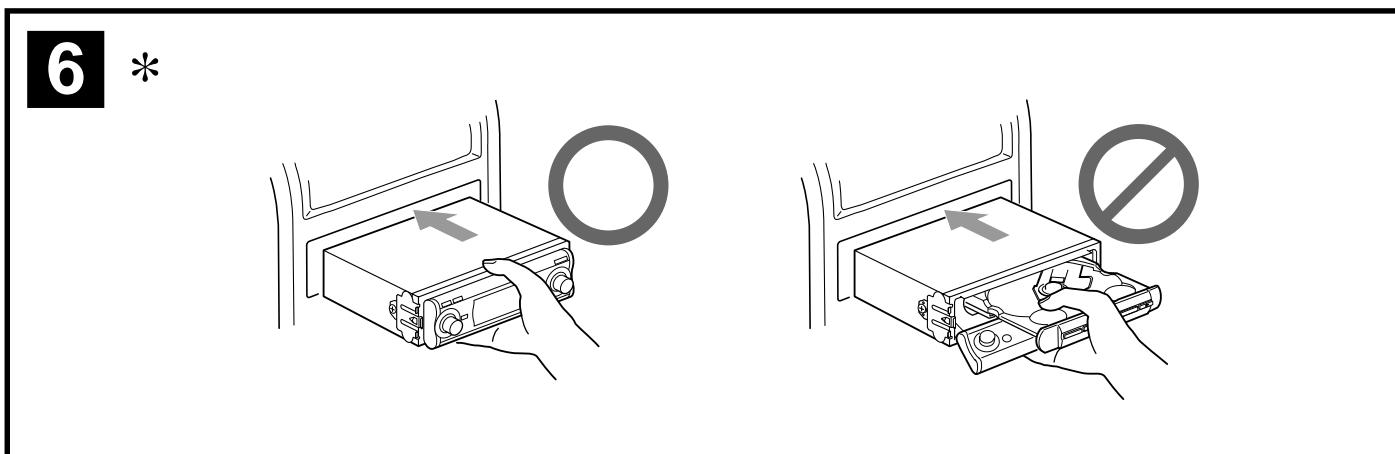
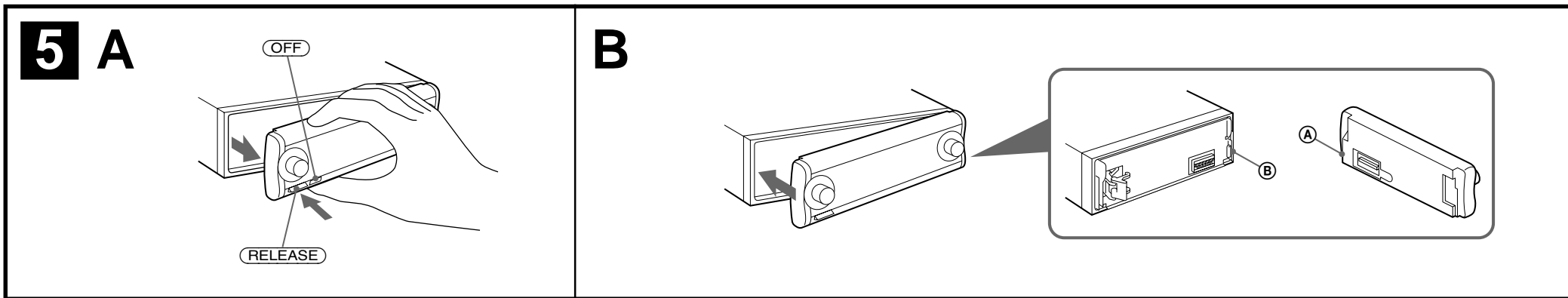
#### Memory hold connection

When the yellow power input lead is connected, power will always be supplied to the memory circuit even when the ignition key is turned off.

#### Notes on speaker connection

- Before connecting the speakers, turn the unit off.
- Use speakers with an impedance of 4 to 8 ohms, and with adequate power handling capacities to avoid its damage.
- Do not connect the speaker terminals to the car chassis, or connect the terminals of the right speakers with those of the left speaker.
- Do not connect the ground lead of this unit to the negative (-) terminal of the speaker.
- Do not attempt to connect the speakers in parallel.
- Connect only passive speakers. Connecting active speakers (with built-in amplifiers) to the speaker terminals may damage the unit.
- To avoid a malfunction, do not use the built-in speaker wires installed in your car if the unit shares a common negative (-) lead for the right and left speakers.
- Do not connect the unit's speaker cords to each other.





### Precautions

- Choose the installation location carefully so that the unit will not interfere with normal driving operations.
- Avoid installing the unit in areas subject to dust, dirt, excessive vibration, or high temperatures, such as in direct sunlight or near heater ducts.
- Use only the supplied mounting hardware for a safe and secure installation.

### Mounting angle adjustment

Adjust the mounting angle to less than 30°.

### How to detach and attach the front panel (5)

Before installing the unit, detach the front panel.

#### 5-A To detach

Before detaching the front panel, be sure to press **(OFF)**. Press **(RELEASE)** to open up the front panel and pull it off towards you.

#### 5-B To attach

Attach part **(A)** of the front panel to part **(B)** of the unit as illustrated and push the left side into position until it clicks.

### Mounting example (6)

Installation in the dashboard

When installing this unit, be sure to close the front panel of the unit. **(6-\*)**

Do not hold the unit by its front panel or disc tray when installing as this can damage the unit, or cause malfunction.

### Mounting the unit in a Japanese car (7)

You may not be able to install this unit in some makes of Japanese cars. In such a case, consult your Sony dealer.

#### Note

To prevent malfunction, install only with the supplied screws **(2)**.

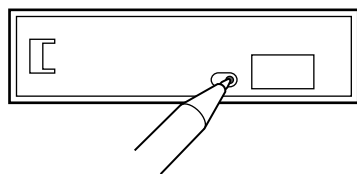
### Warning when installing in a car without ACC (accessory) position on the ignition key switch

Be sure to press **(OFF)** on the unit for two seconds to turn off the clock display after turning off the engine.

When you press **(OFF)** only momentarily, the clock display does not turn off and this causes battery wear.

### RESET button

When the installation and connections are completed, be sure to press the RESET button with a ball-point pen, etc., after removing the front panel.



### Précautions

- Choisissez soigneusement l'emplacement d'installation pour que l'appareil ne gêne pas le chauffeur pendant la conduite.
- Évitez d'installer l'appareil dans un endroit exposé à la poussière, à la saleté, à des vibrations excessives ou à des températures élevées comme en plein soleil ou à proximité de conduits de chauffage.
- Pour garantir un montage sûr, n'utilisez que le matériel fourni.

### Réglage de l'angle de montage

Ajustez l'inclinaison à un angle inférieur à 30°.

### Retrait et pose de la façade (5)

Avant d'installer l'appareil, retirez la façade.

#### 5-A Pour retirer

Avant de déposer la façade, n'oubliez pas d'appuyer sur **(OFF)**. Appuyez sur **(RELEASE)** pour ouvrir la façade, puis retirez-la en tirant vers vous.

#### 5-B Pour poser

Fixez la partie **(A)** de la façade sur la partie **(B)** de l'appareil, comme indiqué sur l'illustration, puis poussez le côté gauche pour le mettre en place jusqu'au dé clic.

### Exemple de montage (6)

Installation dans le tableau de bord

Pendant l'installation de l'appareil, vérifiez que le panneau avant de cet appareil est fermé. **(6-\*)**

Ne tenez pas l'appareil par la façade ou le plateau de disque lors de l'installation, car cela risque d'endommager l'appareil ou d'entraîner un problème de fonctionnement.

### Installation de l'appareil dans une voiture japonaise (7)

Cet appareil ne peut pas être installé dans certaines voitures japonaises. Consultez, dans ce cas, votre revendeur Sony.

#### Remarque

Pour éviter tout dysfonctionnement, utilisez uniquement les vis **(2)** pour le montage.

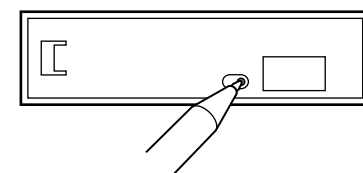
### Avertissement en cas d'installation dans une voiture dont le contact ne comporte pas de position ACC (accessoires)

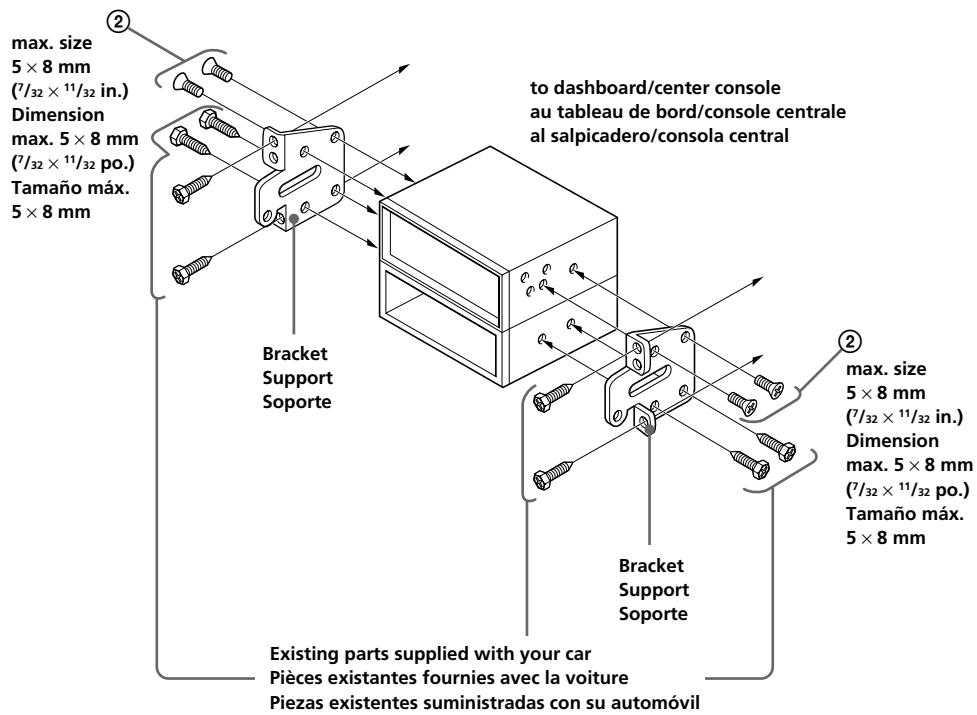
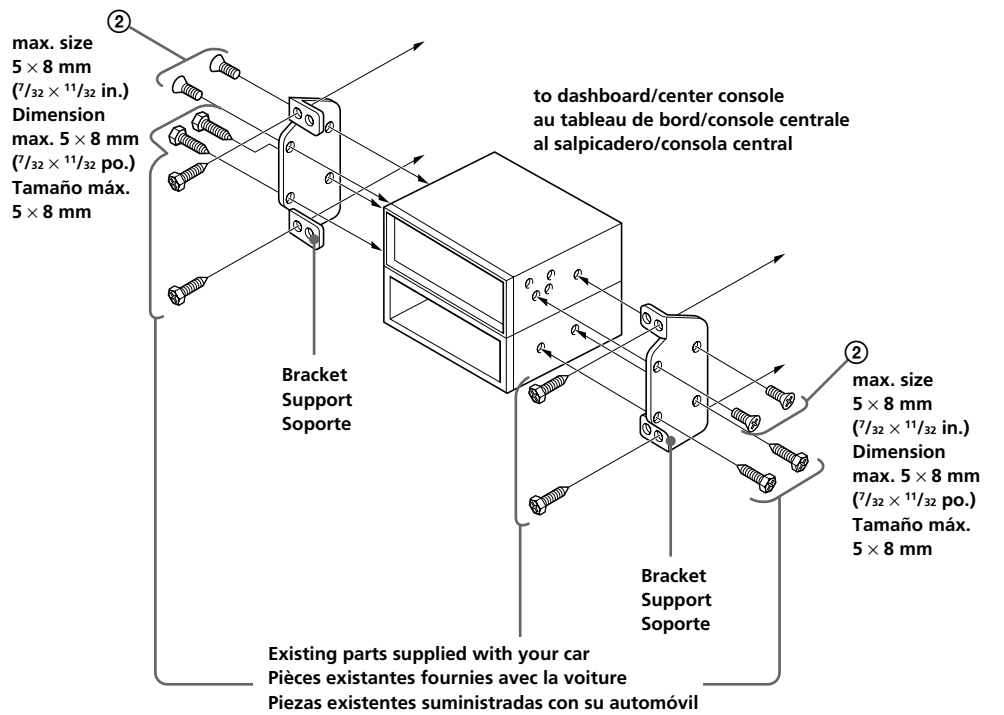
N'oubliez pas d'appuyer sur le bouton **(OFF)** de l'appareil pendant deux secondes après avoir coupé le moteur de façon à désactiver l'affichage de l'horloge.

Si vous appuyez brièvement sur **(OFF)**, l'affichage de l'horloge n'est pas désactivé, ce qui provoque une usure de la batterie.

### Touche RESET

Après avoir retiré la façade, une fois que l'installation et les raccordements sont terminés, appuyez sur la touche RESET avec un stylo à bille, etc.



**7****A TOYOTA****B NISSAN****Precauciones**

- Elija cuidadosamente el lugar de montaje de forma que la unidad no interfiera las funciones normales de conducción.
- Evite instalar la unidad donde pueda quedar sometida a altas temperaturas, como la luz solar directa o el aire caliente de la calefacción, o a polvo, suciedad, o vibraciones excesivas.
- Para realizar una instalación segura y firme, utilice solamente la ferretería de montaje suministrada.

**Ajuste del ángulo de montaje**

Ajuste el ángulo de montaje a menos de 30°.

**Cómo extraer e instalar el panel frontal (5)**

Antes de instalar la unidad, extraiga el panel frontal.

**5-A Para extraerlo**

Antes de extraer el panel frontal, asegúrese de presionar **(OFF)**. Presione **(RELEASE)** para abrir el panel frontal y tire hacia usted.

**5-B Para instalarlo**

Coloque el orificio **(A)** del panel frontal en el eje **(B)** de la unidad, como se muestra en la ilustración, y después presione la parte izquierda hasta que oiga un clic.

**Ejemplo de montaje (6)**

Instalación en el salpicadero

Cuando instale esta unidad, asegúrese de cerrar el panel frontal de la unidad. **(6-\*)**

No sujete la unidad por el panel frontal o la bandeja de discos durante su instalación ya que puede dañarla o causar un mal funcionamiento.

**Montaje de la unidad en un automóvil japonés (7)**

No podrá instalar esta unidad en algunos automóviles japoneses. En tal caso, consulte a su proveedor Sony.

**Nota**

Para evitar que se produzcan fallos, realice la instalación solamente con los tornillos suministrados **(2)**.

**Advertencia sobre la instalación en un automóvil que no disponga de posición ACC (accesorios) en el interruptor de la llave de encendido**

Asegúrese de presionar **(OFF)** en la unidad durante dos segundos para desactivar la indicación del reloj después de apagar el motor.

Si presiona **(OFF)** sólo momentáneamente, la indicación del reloj no se desactivará y esto causará el desgaste de la batería.

**Botón RESET**

Cuando finalice la instalación y las conexiones, cerciórese de presionar el botón RESET con un bolígrafo, etc. después de extraer el panel frontal.

