SONY

# FM/AM Compact Disc Player

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-C90 Serial No. _____

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

*CDX-C90*

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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.

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# Welcome !

Thank you for purchasing this Sony Compact Disc Player. This unit lets you enjoy a variety of features using either a rotary remote or a wireless remote.

In addition to the CD playback and radio operations, you can expand your system by connecting an optional CD/MD unit*.
If you operate this unit or connect an optional CD unit with the CD TEXT function, the CD TEXT information will appear in the display when you play back a CD TEXT disc.

* You can connect to a CD changer and an MD changer.

## About this manual

**Conventions**

- Instructions in this manual describe the controls on the rotary remote, the wireless remote, and the front panel, depending on the function. If the controls on these devices have the same or similar names, the operation described can be performed on either device.
- The following icons are used in this manual:

Indicates that you can do the task using the rotary remote.

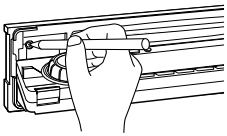
Indicates that you can do the task using the wireless remote.

Indicates that you can do the task using the front panel control.

# 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.

Main unit



**Notes**

- Pressing the reset button will erase the clock data and some memorized functions.
- When you connect the power supply cord to the unit or reset the unit, wait for about 10 seconds before you insert a disc. If you insert a disc within these 10 seconds, the unit will not be reset, and you will have to press the reset button again.

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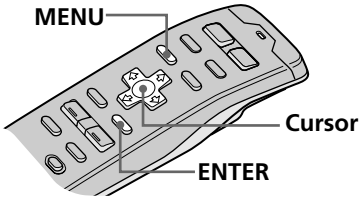
# Initial settings

Do the following initial settings before you operate the unit for the first time, after replacing the car battery, or after resetting the unit.
Be sure to make these settings, otherwise the front panel is disabled and you will be unable to insert a CD.




**Tip**
You can reset all of these initial settings (except the ACC position setting) using the set up menu.

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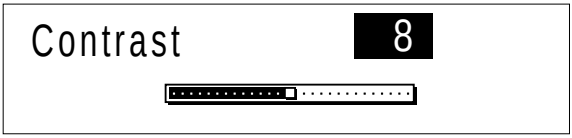
**Note**
You can specify the ACC position settings only in the initial setting procedure. To change these settings afterwards, press the reset button and repeat the procedure.

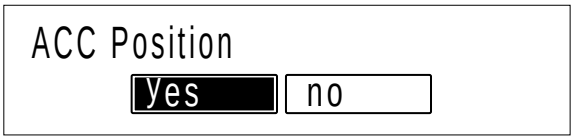
**1** **Press the reset button behind the front panel (see page 2).**
The Contrast indication appears.

Press ← or → to adjust the contrast. The contrast is adjustable to 15 levels.



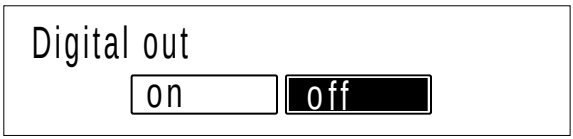

**2** **Press ENTER.**
The ACC Position indication appears.

Press ← or → to select "yes" or "no." Select "yes" if your car's ignition switch has an ACC position; select "no" if your car's ignition switch has no ACC position.




**3** **Press ENTER.**
The Digital out indication appears.

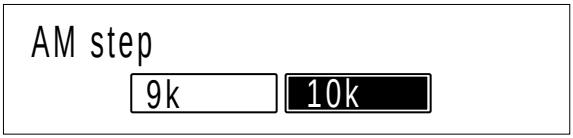
Press ← or → to select "on" or "off" depending on your car audio system. Select "on" when an optional equipment with digital input is connected to the unit.



## 4 Press ENTER.

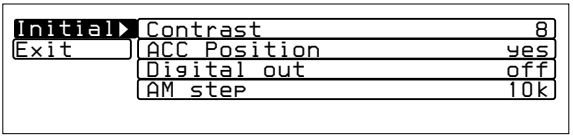
The AM step indication appears.

Press ← or → to select "10k" or "9k."
Select "10k" if you're using your system in North or South America, the Hawaiian Islands, or Guam; select "9k" for all other countries.




## 5 Press ENTER.

The Initial setting menu appears.



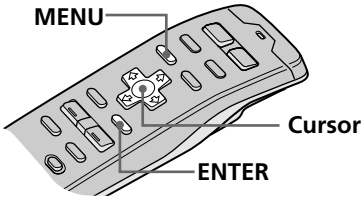

To change any of the initial settings at this time, press the cursor buttons to select the item you want to change and press ENTER.

**Tip**
You can also complete the initial settings by pressing ↑ or ↓ to select "Exit," then press ENTER.

## 6 To complete the initial settings, press MENU.

# Setting the clock

Set the clock with the wireless remote.
Turn the unit on before setting the clock.
The clock uses a 12-hour digital indication.




**Note**
If the ACC position is set to "no", turn the power on first, then set the clock.

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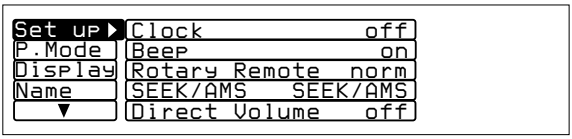
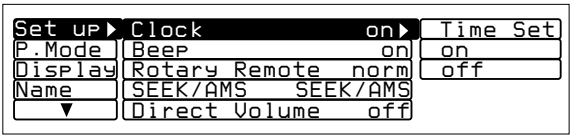
## 1 Press MENU.

The menu display appears.

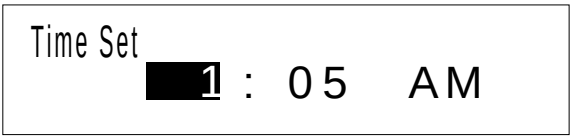



## 2 Select "Set up" and press ➡ to move to the sub menu, then select "Clock" pressing ⬆ or ⬇.




## 3 Press ➡ then ⬆ or ⬇ to select "Time Set," then press ENTER.

The Time Set indication appears.




❶ Press ⬆ or ⬇ to set the hour.

❷ Press ➡ to move to minutes and press ⬆ or ⬇ to set the minutes.

Pressing ⬇ lowers the number and ⬆ raises the number.

The "AM" and "PM" indicators are automatically switched depending on the set hour.

**Tip**
You can press ENTER or BACK instead of MENU to set a value.

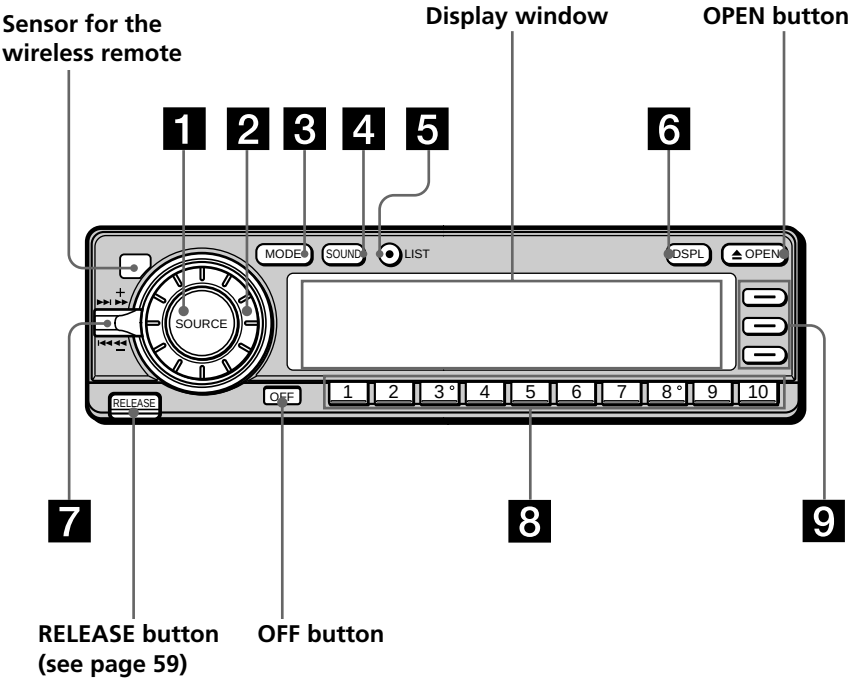
**4 After setting the time, press MENU.**
The time is stored and the menu display reappears.

### To display the current time during operation

The current time can be set to appear in the upper-left corner of the display (except when a menu is displayed). For details, see “Setting the set up menu” on page 44.

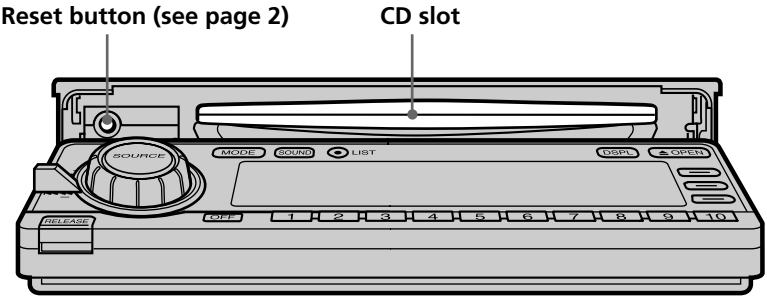
# Using the main panel controls

You can use the main panel controls for all operations except menu operations.




EN

## When the front panel is open



**1 SOURCE (source select) button**

Each time you press the button, the source switches as follows:

*Only when an optional unit is connected

**2 Dial (volume/subwoofer volume/ bass/treble/left-right/rear-front control)**

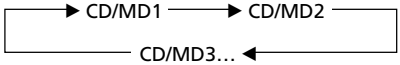
Rotate to adjust the volume or sound characteristics.

**3 MODE (band/unit select) button**

Each time you press the button, the band or unit switches as follows:

**When the tuner is selected**

**When CD/MD is selected**




**4 SOUND button**

Press to switch to the sound characteristics adjustment mode (see page 43).

When an optional DSP (digital signal processor) is connected, press and hold for two seconds to switch to the DSP Sound Tuning Mode (see page 49). To return to the previous mode, press and hold the button again.

**5 LIST button**

When CD or MD is selected, press to display the disc name list. While the list appears in the display, press again to display the track name list of the current disc (see page 29).

When FM1, FM2, or AM is selected, press to display the preset name list (see page 42).

To change the current selection, use the cursor buttons to select another disc, track, or station, then press ENTER.

**6 DSPL (display mode change) button**

When playing a CD or MD, press to display the disc title or track title. When the current disc or track has no title, "NO Disc Name (NO Track Name)" appears in the display.

Press and hold for two seconds to switch to the function menu which appears, depending on the current source or setting mode (see "9 Function buttons"). To return to the previous function menu, press and hold the button again.

**7 SEEK/AMS (seek/Automatic Music Sensor/manual search) control**

Push the control up or down to locate a track or receive a station.

Push the control up or down and hold until the desired station or track is located.

**8 Number buttons**

Press to search for the preset stations, or to switch to the desired disc in the CD/MD unit which corresponds to the number button.

**9 Function buttons**

Press to switch the mode setting manually. The function menu which appears depends on the current source.

Each time you press DSPL for two seconds, the function menu switches as follows:

**When the tuner is selected**

BTM
MONO ↔ DVOL
LCL EL

**When CD/MD is selected**

REP VC*
SHUF ↔ DVOL
PGM EL

**When labeling a CD or station**

→ VC*
ENT ↔ DVOL
← EL

**When Edit mode is selected**

UP VC*
ENT ↔ DVOL
DOWN EL

* Only when the CD player of the unit (CD1) is selected.

# Basic operations

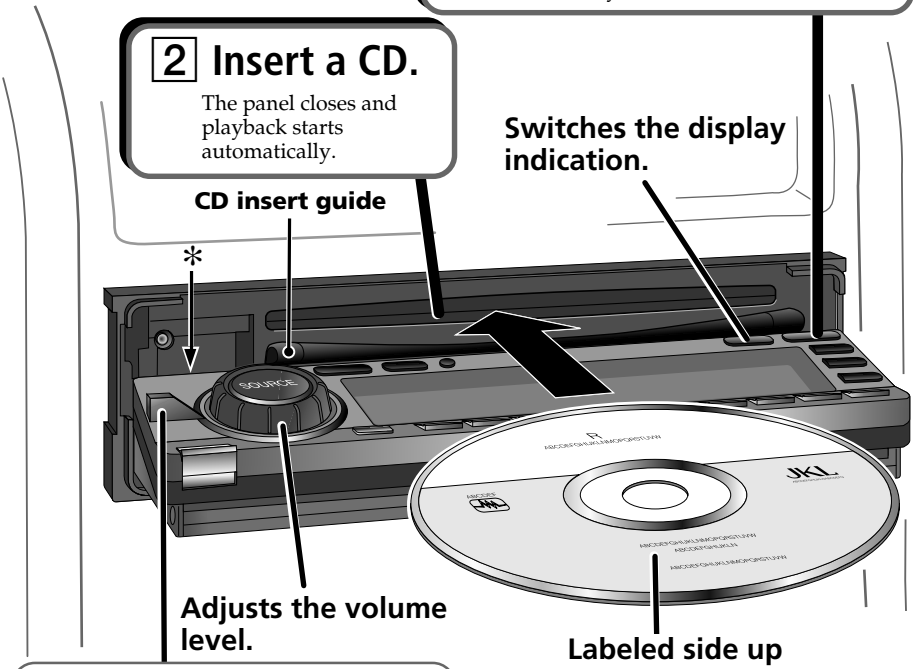
## Listening to a CD

**1 Opens the front panel.**

After 15 seconds, the panel closes automatically.

**2 Insert a CD.**

The panel closes and playback starts automatically.

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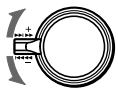
### To locate a specific point in a track (Manual searching)

Push the SEEK/AMS control up or down and hold.

To search forward

To search backward



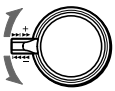
Release the control when you have found the desired point.

### To locate a specific track (Automatic music sensor (AMS))

Push the SEEK/AMS control up or down momentarily.

To locate a succeeding track

To locate a preceding track or the beginning point of the current track



**When a CD is already inserted**

Press SOURCE repeatedly until "CD" appears, playback starts automatically.

**To stop playback**

Press OFF.

**To eject the CD**

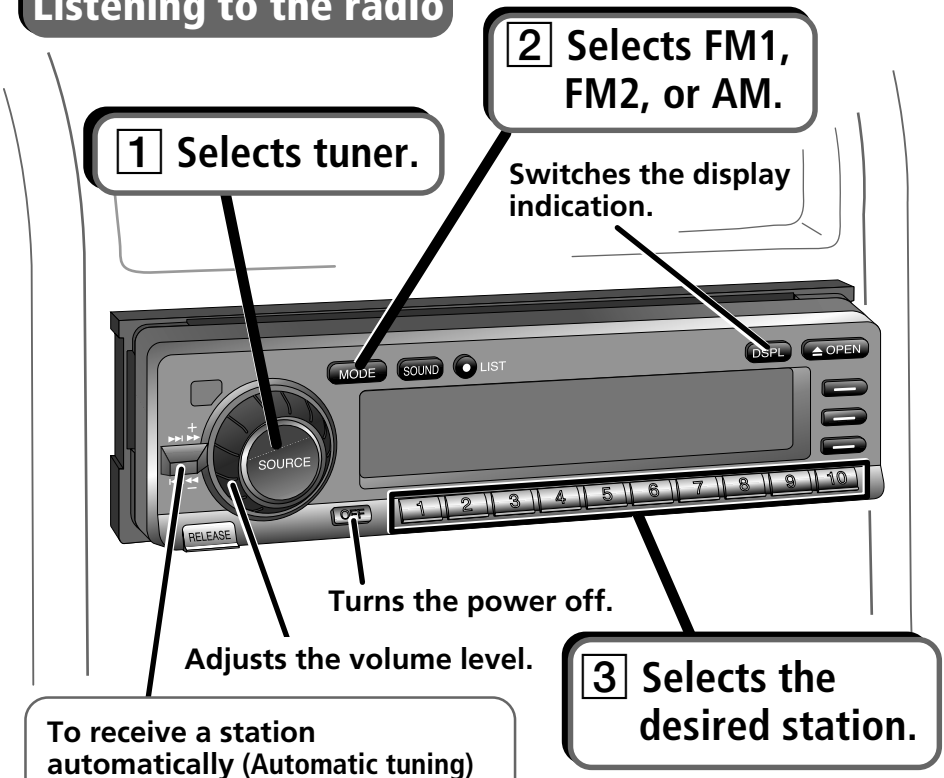
Press OPEN, the CD is automatically ejected.

**Note**

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

* Do not put any foreign objects between the front panel and the unit. The front panel cannot close and possible damage may occur to the unit.

# Listening to the radio

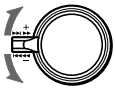



## To receive a station automatically (Automatic tuning)

Push the SEEK/AMS control up or down momentarily.

To search for succeeding stations

To search for preceding stations



Scanning stops when the unit receives a station.

## To receive the desired frequency (Manual tuning)

Push the SEEK/AMS control up or down and hold until the desired frequency is received.

To search for a higher frequency

To search for a lower frequency

You can select the buttons only when a memorized station is assigned to the number button (see page 34).

**To switch the band**

Press MODE repeatedly to select the desired band.

**To stop listening to the radio**

Press OFF.

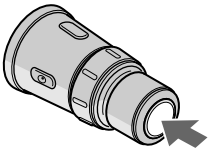
# Using the rotary remote

You can use the rotary remote for all operations except menu operations.

## Basic operations

### By pressing buttons

**SOURCE button**



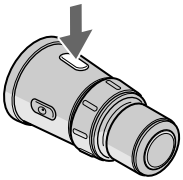
**Each time you press SOURCE, the source changes as follows:**

TUNER → CD → MD*

* When an MD unit is connected.

EN

**MODE button**

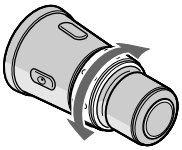


**Pressing MODE changes the operation as follows:**

- Tuner: FM1 → FM2 → AM
- CD unit: CD1 → CD2 → …
- MD unit: MD1 → MD2 → …

### By rotating the control

**SEEK/AMS control**



**Rotate the control momentarily and release it to:**

- Locate the beginning of tracks when CD or MD is selected.
- Automatically tune in a station when FM1, FM2, or AM is selected. When a station is detected, the unit stops searching.

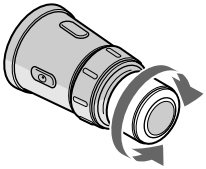
**Keep the control rotated to:**

- Locate a specific point on a track when CD or MD is selected. Playback at normal speed resumes when you release the control.
- Manually tune in a station when FM1, FM2, or AM is selected. Release the control when the desired station is located.

**Tip**

If the SEEK/AMS mode is set to "Item sel," you can select the desired station or disc with SEEK/AMS when the list appears in the display (see page 45).

### VOL control

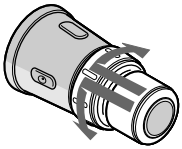


**Rotate the control to:**

**Adjust the volume level.**

### By pushing in and rotating the control

### DISC/PRESET control



**Push in and rotate the control to:**

- Receive the stations memorized on the number buttons when FM1, FM2 or AM is selected.
- Change the disc when CD or MD is selected.

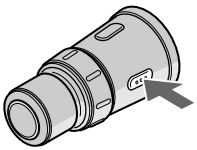
**Push in and release the control to:**

Display the list of discs (when CD or MD is selected) or preset stations (when FM1, FM2, or AM is selected) for a few seconds. The previous display will reappear after a moment.



## Other operations

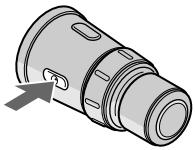
### OFF button



**Press this button to turn off the unit.**

To turn on the unit again, press SOURCE.

### ATT button



**Press this button to attenuate the sound.**

To cancel the attenuation (ATT), press the button again.

### Changing the operative direction

If you need to mount the rotary remote on the left side of the steering column, you can reverse the operative direction. See “Setting the set up menu” on page 44.

# Using the wireless remote

Use the wireless remote to make the various menu settings. For your safety, unit operations with the wireless remote should be done by a passenger. If you (the driver) want to use the wireless remote, park your car in a safe location first before performing any operations.

**SOURCE (Source select) button**

Each time you press the button, the source switches as follows:

Tuner → CD → MD*

* Only when an optional unit is connected

**MODE (band/unit select) button**

Each time you press the button, the band or unit switches as follows:

**When the tuner is selected**

→ FM1 → FM2 → AM

**When CD/MD is selected**

→ CD/MD1 → CD/MD2 → CD/MD3… →

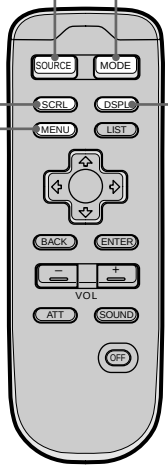
EN

**SCRL button**

Press to scroll the track or disc title when playing a CD TEXT disc or an MD.

**MENU button**

Press to switch to a menu display. The menu which appears depends on the current program source. To return to the previous display, press the button again.




**DSPL (display mode change) button**

When playing a CD or MD, press to display the disc title or track title.
When the current disc or track has no title, "NO Disc Name (NO Track Name) " appears in the display.

Press and hold for two seconds to switch to the function menu which appears, depending on the current source or setting mode (see "9 Function buttons" page 9).
To return to the previous function menu, press and hold the button again.

When the ACC position is set to "no," the unit cannot be operated with the wireless remote unless SOURCE on the rotary remote or front panel is pressed, or a CD is inserted to activate the unit first.

**Cursor buttons**

While the menu display appears, press to move the cursor within a menu display. When CD or MD is selected, press ↑ or ↓ to change the disc and ← and → to locate a track.
When FM1, FM2, or AM is selected, press ↑ or ↓ to select a preset station, or ← and → to perform automatic tuning.

**BACK button**

Press to return to the normal display during a menu operation.

**ATT button**

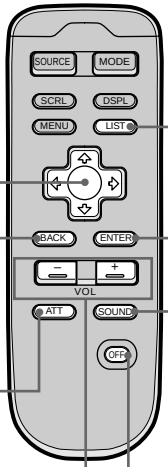
Press to attenuate the volume. To return to the previous volume level, press the button again.

**VOL +/– buttons**

Press + or – to adjust the volume or sound characteristics.

**OFF button**

Press to turn off the unit.




**LIST button**

When CD or MD is selected, press to display the disc name list. While the list appears in the display, press again to display the track name list of the current disc (see page 29).
When FM1, FM2, or AM is selected, press to display the preset name list (see page 42).

To change the current selection, use the cursor buttons to select another disc, track, or station, then press ENTER.

**ENTER button**

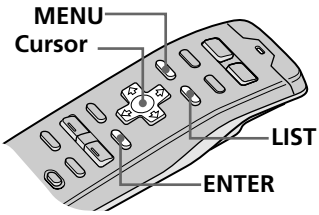
Press to carry out the selected function.

**SOUND button**

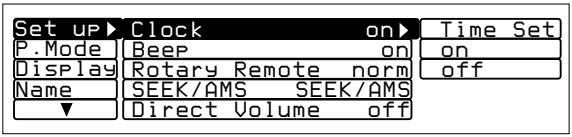
Press to adjust the sound characteristics (see page 43).
When an optional DSP (digital signal processor) is connected, press and hold for more than two seconds to switch to the DSP Sound Tuning Mode (see page 49). To return to the previous mode, press and hold the button again.

# Menu display/Lists

The following menu and lists appear in the display when you press MENU or LIST.




## Menu display (appears when you press MENU )




EN

❶ Press MENU to make various settings and adjustments.
❷ Press the cursor buttons to select the item and its setting, then press ENTER.
❸ Press MENU to cancel the menu mode and return to normal display.

## Lists (appears when you press LIST)

Press LIST to display the disc name list or track name list when CD or MD is selected.
The preset name list will appear when FM1, FM2, or AM is selected.

### To select the disc or station by name

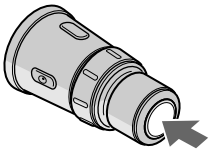
When the disc name list or preset name list appears in the display, press the cursor buttons to select the disc or radio station you want to listen to, then press ENTER.

To return to the previous display without changing the setting, press LIST again.

**Tip**
If the SEEK/AMS mode is set to “Item sel,” you can select the desired station or disc with SEEK/AMS when the list appears in the display (see page 45).

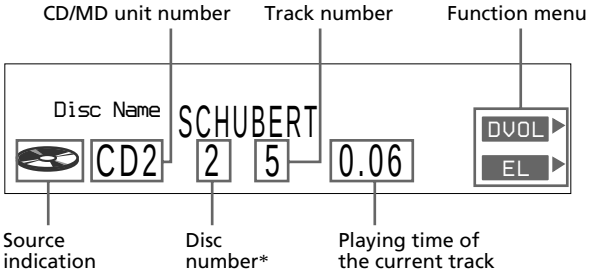
# Listening to a CD/MD

If an optional CD or MD unit is connected to this unit, you can locate and listen to discs in the optional CD or MD unit in the same way as you can with those in this unit.

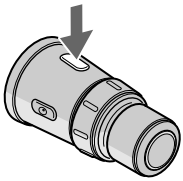


## To select the desired CD or MD unit

### 1 Press SOURCE repeatedly to select "CD" or "MD."



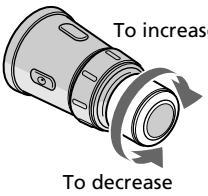

* The disc number appears when the CD/MD unit is connected.



### 2 Press MODE repeatedly to select the desired CD or MD unit.

**When optional CD units are connected**
CD1(CDX-C90) → CD2(optional CD unit 1) → CD3(optional CD unit 2)

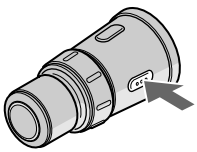
**When optional MD units are connected**
MD1(optional MD unit 1) → MD2(optional MD unit 2)




### 3 Rotate VOL to adjust the volume level.

The volume is adjustable between 0 dB to – ∞ dB.

**Caution**
For your safety, set the volume low enough so that you can hear the sound in the street around you.



### To stop play back

Press OFF.

**continue to next page →**

## To select the disc to be played

**Push in and rotate DISC/PRESET.**

The unit changes to the next or previous disc. If you keep the control rotated, the discs will continue to change.

Push in and release the control to display the disc name list.

For details on naming a disc, see "Labeling a CD" on page 25.

**Tips**

- You can also use the number buttons on the front panel that correspond to the desired disc number.
- If the SEEK/AMS mode is set to "Item sel," you can select the desired disc with SEEK/AMS when the list appears in the display (see page 45).

EN

## To locate a track

**Rotate, then release SEEK/AMS.**

The unit locates the beginning of the current track or the next or previous track.

## To locate a specific point on a track

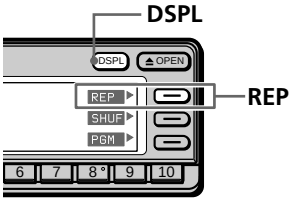
**Rotate and hold SEEK/AMS.**

The unit plays the track at high speed. When you reach the point you want, release the control.

# Playing tracks repeatedly

## (Repeat play)

The repeat play function allows you to play back a track, a disc, or all the discs in this unit or any connected CD/MD unit repeatedly.



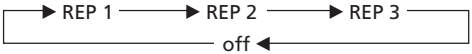

### 1 While playing a CD or an MD, press and hold DSPL for two seconds.

**Tip**

If the Select mode in the Func. menu is set to "Source," the function menu automatically appears on the right side of the display, depending on the source you select. (see page 48)

### 2 Press REP repeatedly to select the mode.

Each time you press REP, the mode changes as follows:




| Indication | Operation |
|---|---|
| REP 1 (1:track) | Repeats the current track only. |
| REP 2 (2:disc) | Repeats all tracks on the current disc (in case one or more optional CD/MD units are connected). |
| REP 3 (3:changer) | Repeats all the discs in the current CD/MD unit (in case one or more optional CD/MD units are connected). |
| off | Normal playback. |

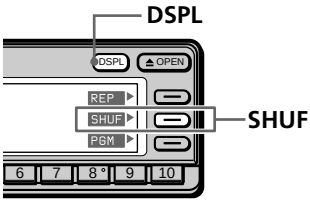
### Selecting the mode with the wireless remote

While playing a CD or an MD, press MENU and set the Repeat mode to "1:track,""2:disc," or "3:changer."

# Playing tracks in random order

## (Shuffle Play)

Shuffle Play plays back all tracks on the current disc or all discs in this unit or any connected CD/MD unit in random order.




EN

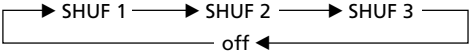
### 1 While playing a CD or an MD, press and hold DSPL for two seconds.

**Tip**

If the Select mode in the Func. menu is set to "Source," the function menu automatically appears on the right side of the display, depending on the source you select. (see page 48)

### 2 Press SHUF repeatedly to select the mode.

Each time you press SHUF, the mode changes as follows:




| Indication | Operation |
|---|---|
| SHUF 1 (1:disc) | Plays all the tracks on the current disc in random order. |
| SHUF 2 (2:changer) | Plays all the discs in the current CD/MD unit in random order (in case one or more optional CD/MD units are connected). |
| SHUF 3 (3:all) | Plays all the discs in all the CD/MD units in random order (in case one or more optional CD/MD units are connected). |
| off | Normal playback |

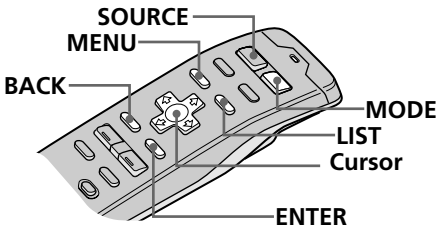
**Selecting the mode with the wireless remote**

While playing a CD or an MD, press MENU and set the Shuffle mode to "1:disc,""2:changer," or "3:all."

# Creating a program

## (CD/MD program memory)

You can play tracks from this unit or any optional CD/MD unit in any order you want by creating and storing programs in the unit's memory. Two programs with up to 12 tracks each can be stored.

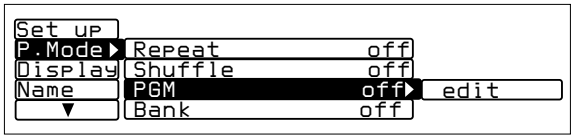



**Tips**

- In step 2, to move the cursor back to the previous column (one at a time), press ←.
- To cancel the current display and return to the previous display, press BACK.

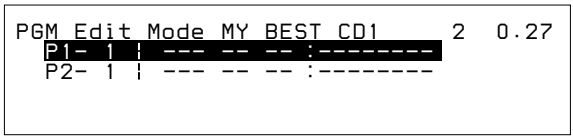
**1** **While playing a CD or an MD, press MENU.**

**2** **Select "P. Mode" and press → to move to the sub menu, then select "PGM" by pressing ↑ or ↓.**




**3** **Press → to select "edit," then press ENTER.**

The PGM Edit Mode appears.




**4** **Select the track you want to program.**

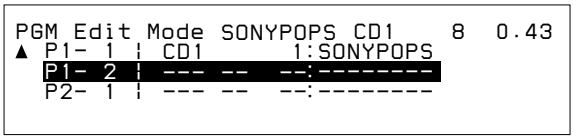
❶ Press SOURCE repeatedly to select CD or MD.
❷ Press MODE repeatedly to select the desired CD or MD unit.
❸ Press LIST and select the desired disc by pressing cursor, then press ENTER.
❹ Press ← or → to select the track you want to program.

**continue to next page →**

**Note**
Once all 12 slots have been filled, "MEMORY FULL" appears, and you cannot insert more tracks.

## 5 Press ↑ or ↓ to select the program number, "P1" or "P2," then press ENTER.

The current track in that slot number and all succeeding tracks shift down.




To continue inserting tracks, repeat steps 4 to 5.

## 6 To complete the mode setting, press BACK.

The normal display appears.

EN

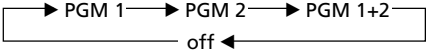
## Playing the stored program

**1** **While playing a CD or an MD, press MENU.**

**2** **Select "P.Mode" and press ➡ to move to the sub menu, then select "PGM" by pressing ↑ or ↓.**

**3** **Press ➡ then ↑ or ↓ to select the mode, then press ENTER.**

The selected mode appears to the right of "PGM" in the display.




| Indication | Operation |
|---|---|
| PGM 1 | Plays the track sequence of Program 1. |
| PGM 2 | Plays the track sequence of Program 2. |
| PGM 1 + 2 | Plays the track sequences of Program 1 and then Program 2. |
| off | Normal playback |
| edit | Sets the order of tracks and stores the program in memory. |

**Notes**

- "*Wait*" appears in the display while the unit is reading the data.
- "*Mem Full*" appears in the display when you try to enter more than 12 tracks into a program.
- "**NO data**" appears in the display when no program is stored.

### Selecting the mode with the front panel control

While playing a CD or an MD, press PGM repeatedly to select "PGM 1," "PGM 2," or "PGM 1+2."

## Erasing tracks in a program

**1** **While playing a CD or an MD, press MENU.**

**2** **Select "P. Mode" and press ➡ to move to the sub menu, then select "PGM" by pressing ↑ or ↓.**

**3** **Press ➡ then ↑ or ↓ to select "edit," then press ENTER.**

**4** **Press ↑ or ↓ to select the track you want to erase.**

```
PGM Edit Mode SONYPOPS CD1 1  2  3.09
  P1    ¦ Group Erase
  P1- 1 ¦ CD2  7  2 :DRIVING
  P1- 2 ¦ CD2  8  3 :LIVE HIT
▼ P1- 3 ¦ CD2  3  4 :POPS HIT
```

**5** **Press and hold ENTER for two seconds.**
When you erase a track from a slot number, the succeeding tracks shift up to fill the gap.

To continue erasing tracks, repeat steps 4 and 5.

**6** **To complete the mode setting, press BACK.**

**7** **Press MENU.**
The previous display appears.

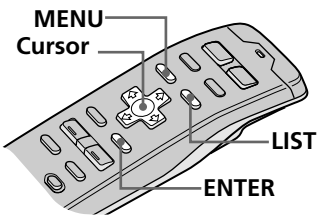
## Erasing an entire program

**Select "P1 : Group Erase" or "P2 : Group Erase" in step 4 above.**
The entire program is erased and "NO data" appears.

# Labeling a CD – Disc Memo

## (CD unit with the custom file function)

You can record a title of up to 8 characters for each disc. The disc title appears in the display whenever you insert the disc and play it. Up to 110 disc titles can be stored in memory.

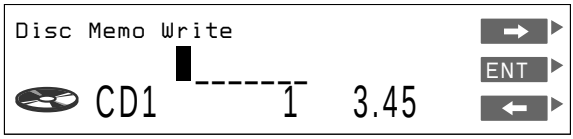



**Tip**
To cancel the current display and return to the previous display, press BACK.

**Tip**
To erase/correct a name, enter "_" (under-bar) for each character.

**1 While playing a CD, press LIST for two seconds.**

The Disc Memo Write indication appears.

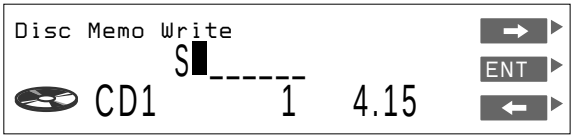



**2 Press ↑ or ↓ until the character you want to enter appears, then press →.**

Each time you press ↑, the character changes as follows:

A → B → C → ...Z → 0 → 1 → 2 → ...9 → + → – → ✱ → / → \ → > → < → . → _ (under-bar) → A...

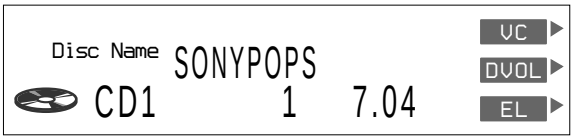
Press ↓ to move backwards.




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

**3 Repeat step 2 until you have entered the entire title, then press ENTER.**

The normal display appears.



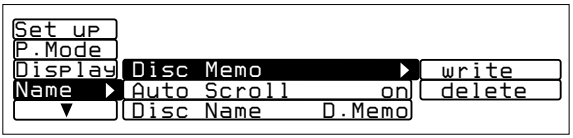

EN

CD/MD

## Erasing a disc title

**1** **While playing a CD or an MD, press MENU.**

**2** **Select "Name" and press ➡ to move to the sub menu, then select "Disc Memo" by pressing ⬆ or ⬇.**




**3** **Press ➡, then ⬆ or ⬇ to select "delete," then press ENTER.**
The Disc Memo Delete indication appears.

**4** **Press ⬆ or ⬇ to select the disc title you want to erase.**

**5** **Press and hold ENTER for two seconds.**
The selected disc title is erased.

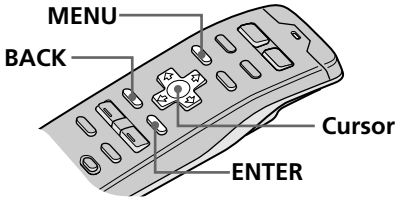
**6** **Press MENU.**
The normal display appears.

**Note**
In step 4, all the disc names stored in the CD unit's memory appear in the order they were entered. The last name entered will therefore appear at the end.

EN

# Selecting specific tracks for playback (Bank)

If you have labeled the disc (see page 25), the Bank function allows you to skip certain tracks and play only the tracks you want.




**Tips**

- In step 2, to move the cursor back to the previous column (one at a time), press ←.
- To cancel the current display and return to the previous display, press BACK.

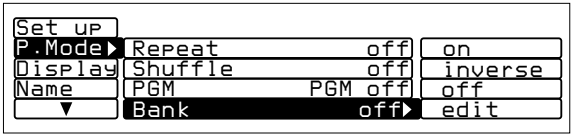
**Note**

If you have not labeled the disc, "edit" does not appear in the menu.

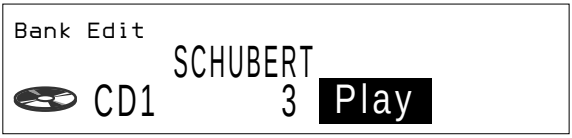
## To set tracks to "Play" or "Skip"

**1** **While playing a CD or an MD, press MENU.**

**2** **Select "P.Mode" and press → to move to the sub menu, then select "Bank" by pressing ↑ or ↓.**




**3** **Press → then press ↑ or ↓ to select "edit," then press ENTER.**




**Note**

Press ← to move to the previous track.

**4** **Press ↑ or ↓ to select "Play" or "Skip," then press → to move to the next track.**

**5** **Repeat step 4 to select "Play" or "Skip" for all succeeding tracks.**

**6** **To complete the mode setting, press BACK.**

**7** **Press MENU.**
The normal display appears.

EN

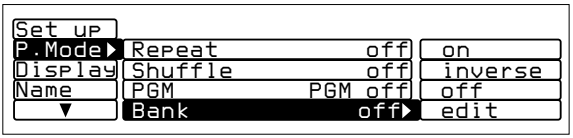
CD/MD

**Note**
You cannot use the Bank function for discs that have not been labeled using the Disc Memo function. Be sure to label the disc in advance.

## Playing specific tracks only

**1** **While playing a CD or an MD, press MENU.**

**2** **Select "P.Mode" and press ➡ to move to the sub menu, then select "Bank" by pressing ⬆ or ⬇.**




**3** **Press ➡ then ⬆ or ⬇ to select the mode, then press ENTER.**
The selected mode appears to the right of "Bank" in the display.

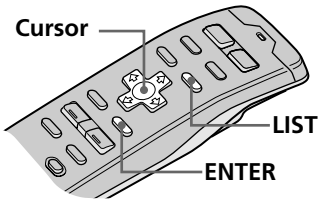
| Indication | Operation |
|---|---|
| on | Plays all tracks set to "Play." |
| inverse | Plays all tracks set to "Skip." |
| off | Normal playback |
| edit | Sets tracks on the current disc to "Play" or "Skip." |

**4** **Press MENU.**
The normal display appears.

EN

# Locating a disc by name

Use this function to locate a disc by its name.
(To add titles to discs, see page 25).



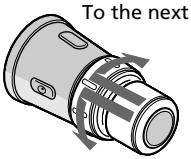

**Tips**

- To cancel the selection, press LIST twice or BACK once.
- If the SEEK/AMS mode is set to "Item sel," you can select the desired disc with SEEK/AMS when the list appears in the display (see page 45).

**Note**

The following indications may appear in the disc name list.

- "NO DISC": There is no disc in the given disc slot.
- "********": The disc is not labeled.
- "?": The unit has not verified the disc information.




## 1 While playing a CD or an MD, press LIST.

The Disc name list appears.

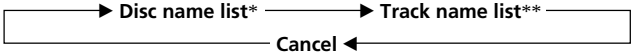
## 2 Press ↑, ↓, →, or ← to select the disc.

## 3 Press ENTER.

Playback starts from the first track of the disc.

### On track name list

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




* Only when CD/MD unit is connected.
** When CD unit with CD TEXT function is selected.

This list displays track names contained on CD TEXT discs and MDs with labeled tracks. Since this unit does not support track labeling, when playing non-CD TEXT discs or MDs with unlabeled tracks, "*********" appears instead of the track name in the track name list.

### To select a disc using the rotary remote

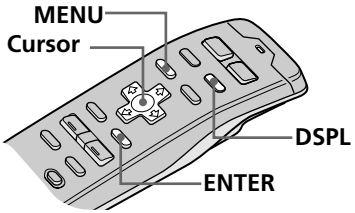
Push in and release DISC/PRESET to display the disc name list or track name list.
Push and rotate the control to select the disc or track from the list. After about 5 seconds, the normal display reappears.

EN

CD/MD

# Viewing CD TEXT information

You can view text information contained on a CD TEXT disc during playback.




**Tips**

- In step 2, to move the cursor back to the previous column (one at a time), press ←.
- To cancel the current display and return to the previous display, press BACK.

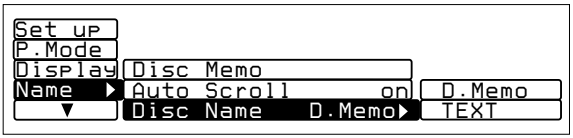
EN

## Selecting the disc name display

When playing CD TEXT discs that have been labeled using the Disc Memo function (see page 25), you can specify that disc names be displayed whenever you press DSPL or LIST.

**1 While playing a CD, press MENU.**

**2 Select "Name," press → to move to the sub menu, then select "Disc Name" by pressing ↑ or ↓.**




**3 Press → then ↑ or ↓ to select "D.Memo" or "TEXT," then ENTER.**

The selected mode appears to the right of "Disc Name" in the display.

| Indication | Operation |
|---|---|
| D.Memo | Displays disc titles entered by the Disc Memo function. |
| TEXT | Displays original CD TEXT information. |

**4 Press MENU.**

The normal display appears.

### What is a CD TEXT disc?

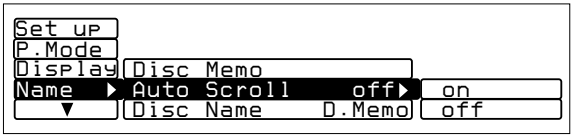
A CD TEXT disc is a music CD that also contains text data such as the disc name, artist name, and track name. This text data is recorded in areas normally unused on conventional music CDs.

## Scrolling titles automatically

When playing CD TEXT discs or MDs (using an optional MD unit,) the track or disc/artist name appears automatically whenever a new disc or track is played. Follow the procedure below to specify the automatic scrolling of titles of more than 10 characters.

**1** **While playing a CD or an MD, press MENU.**

**2** **Select "Name," press ➡ to move to the sub menu, then select "Auto Scroll" by pressing ↑ or ↓.**




**3** **Press ➡ then ↑ or ↓ to select "on," then ENTER.**

**4** **Press MENU.**
The normal display appears.

### To cancel the scrolling of titles

Select "off" in step 3 and press ENTER.

### When playing a CD TEXT disc

Each time you press DSPL, the displayed information changes as follows:

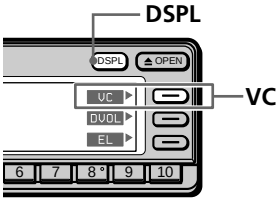
Disc Name/Artist Name* ⟷ Track Name

* The artist name appears automatically after the disc name.

# Customizing the CD sound

## (Digital filter function)

This unit has a variable coefficient (VC) digital filter. By selecting the type of filter you want, you can adjust the sound characteristics which best compliment your speaker, source, unit, etc.




**Notes**

- This function is available only for this unit and has no affect when an optional CD/MD unit or radio, etc. is selected.
- If you are playing a disc when you press VC, the sound will be interrupted momentarily.

EN

### 1 While playing a CD, press and hold DSPL for two seconds.

**Tip**

If the Select mode in the Func. menu is set to "Source," the function menu automatically appears on the right side of the display, depending on the source you select. (see page 48)

### 2 Press VC repeatedly to select the mode.

Each time you press VC, the filter type changes as follows:

Plain → Analog A → Analog B → Standard

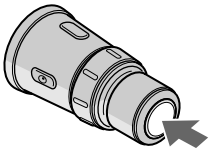
| Type | Sound image |
|---|---|
| Plain | • high clarity<br>• strong |
| Analog A<br>Analog B | • warm<br>• deep |
| Standard | • wide ranging<br>• ample spatial representation |

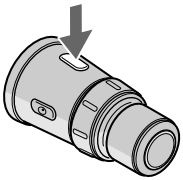
### What is a variable coefficient (VC) digital filter?

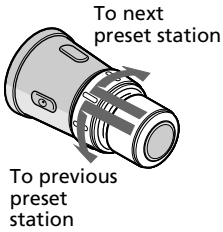
CD players use digital filters to eliminate the noise generated during sampling. You can change the tone of your music by changing the cutoff characteristics of the digital filter. This unit has four types of filters with different coefficient characteristics: "Plain," "Analog A," "Analog B," and "Standard."

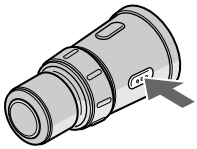
# Listening to radio

You can store your favorite radio stations in the unit's memory for instant tuning at a later time (see "Presetting radio stations" on page 34).



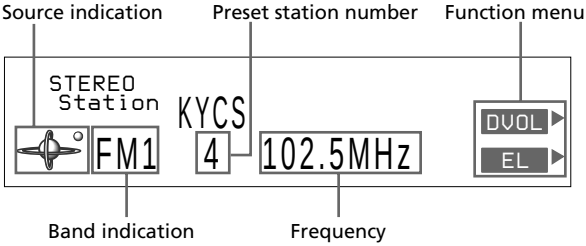




**1** **Press SOURCE repeatedly to select tuner.**

**2** **Press MODE repeatedly to select FM1, FM2, or AM.**




**3** **Rotate VOL to adjust the volume level.**
The volume is adjustable between 0 dB to – ∞ dB.

**Caution**
For your safety, set the volume low enough so that you can hear the sounds in the street around you.

**4** **To change the preset station, push in and rotate DISC/PRESET.**

### To stop listening to the radio

Press OFF.

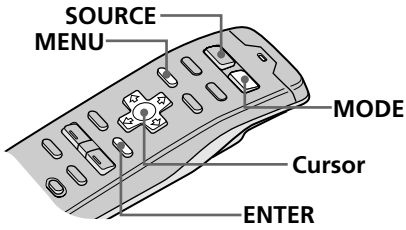
EN

CD/MD/Radio

# Presetting radio stations

There are two ways to preset radio stations:
- Selecting the station frequency (Manual preset memory)
- Selecting stations with the strongest signals (BTM*)

* Best Tuning Memory




**Tips**
- In step 2, to move the cursor back to the previous column (one at a time), press ←.
- To cancel the current display and return to the previous display, press BACK.

EN

**Tip**
- Rotate and hold AMS/SEEK on the rotary remote to continue searching, then release the control when the frequency you want appears.

**Note**
If you selected AM in step 2, the "Mono/Stereo" and "Antenna" sub menus will not appear in the display.

## Specifying the station frequency (Manual Preset Memory)

**Caution**
When tuning in stations while driving, use the Best Tuning Memory to prevent an accident (see page 36).

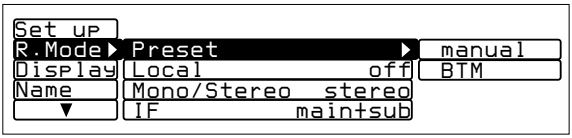
**1 Press SOURCE repeatedly to select tuner.**

**2 Press MODE repeatedly to select FM1, FM2, or AM.**

**3 Press and hold ← or → until the frequency you want appears in the display, then release the button.**

**4 Press MENU.**

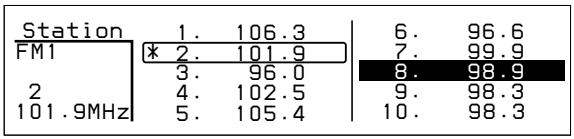
**5 Select "R.Mode" and press → to move to the sub menu, then select "Preset" by pressing ↑ or ↓.**



**Tip**
If the SEEK/AMS mode is set to "Item sel," you can select the desired station with SEEK/AMS when the list appears in the display (see page 45).

**Note**
If you assign a new frequency to a preset station number that has already been assigned a frequency, the new frequency replaces the old frequency.

## 6 Press ➡, then ⬆ or ⬇ to select "manual," then ENTER.




## 7 Press ⬆, ⬇, ➡, or ⬅ to select the preset station number to which the frequency will be stored then press ENTER.

You can preset up to 20 FM stations (10 stations each in FM1 and FM2) and up to 10 AM stations.

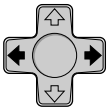
## 8 Press MENU.

The normal display appears.

EN
Radio

### To receive a station automatically (Automatic Tuning)

Press and release ⬅ or ➡.
"Seek Up" or "Seek Down" appears until the unit detects a station.

For a lower frequency  For a higher frequency

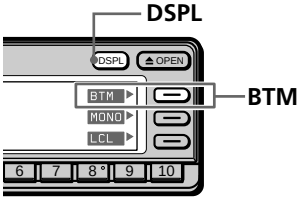
**Tip**
You can start Automatic Tuning by momentarily rotating SEEK/AMS on the rotary remote, then releasing it.

### Presetting the station with the front panel controls

After tuning in the station, press and hold the desired number button for two seconds.

**Tip**
If the Select mode the in Func. menu is set to "Source," the function menu is automatically appears on the right side of the display, depending on the source you select. (see page 48)

# Selecting stations with the strongest signals (BTM)




## 1 While listening to an FM or AM broadcast, press and hold DSPL for two seconds.

## 2 Press BTM.

The unit selects the station with the strongest signals and memorizes them in the order of their frequencies.

A beep sounds after storing the stations and the unit returns to the normal display.

**Note**
If the radio can only tune in a few stations or receives only weak frequencies, the BTM function may not assign frequencies to all the preset station numbers.

### Selecting the mode with the wireless remote

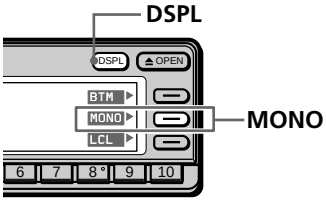
While listening to an FM or AM, press MENU and set the Preset mode to "BTM."

### What is the BTM (Best Tuning Memory) function?

BTM is a function that selects the radio stations with the strongest signals and automatically sets them to preset station numbers. The BTM function starts tuning in stations from the lowest frequency on the band (FM or AM). When a station is found, the unit assigns the frequency to the currently selected preset station number. When preset numbers are not displayed, the unit assigns frequencies starting with preset station 1.
Even after the unit has assigned frequencies to all the preset station numbers, the unit continues tuning. If stronger signals are found, the unit replaces the current preset stations with the stronger frequencies. Finally, the unit sorts the stations in ascending order by frequency.

# Specifying monaural/ Stereo mode

If the FM stereo reception is poor, you can select "Mono" to improve the sound.




## 1 While listening to an FM broadcast, press and hold DSPL for two seconds.

**Tip**

If the Select mode in the Func. menu is set to "Source," the function menu automatically appears on the right side of the display, depending on the source you select. (see page 48)

## 2 Press MONO repeatedly to select "on."

The sound will improve, but will not be in stereo.

### To cancel the monaural mode

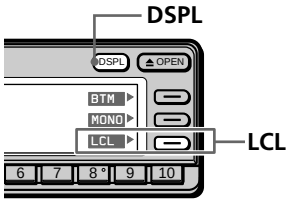
Select "off" in step 2 above.

### Selecting the mode with the wireless remote

While listening to FM, press MENU and set the Mono/ Stereo mode to "mono," or "stereo."

# Receiving only the strongest signals (Local on/off)

The Automatic Tuning function may stop frequently when there are many radio stations in the area. If this happens, you can reduce the sensitivity of the tuner so that only the strongest signals are tuned in.




EN

**1** **While listening to an FM or AM broadcast, press and hold DSPL for two seconds.**

**Tip**

If the Select mode in the Func. menu is set to "Source," the function menu automatically appears on the right side of the display, depending on the source you select. (see page 48)

**2** **Press LCL repeatedly to select "on."**

Only the stations with relatively strong signals will be tuned in.

### To cancel the local mode

Select "off" in step 2 above.

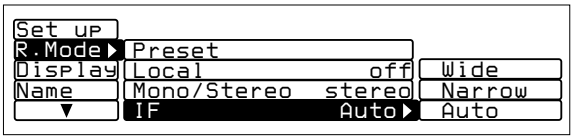
### Selecting the mode with the wireless remote

While listening to FM or AM, press MENU and set the Local mode to "on," or "off."

# If interference occurs during FM reception

**1** **While listening to an FM broadcast, press MENU.**

**2** **Select “R.Mode” and press ➡ to move to the sub menu, then select “IF” by pressing ⬆ or ⬇.**




**3** **Press ➡ then ⬆ or ⬇ to select the mode, then press ENTER.**
The selected item appears to the right of “IF” in the display.

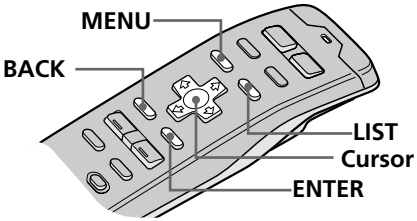
| Type | Function |
|---|---|
| Wide | Maximizes signal reception and improves sound quality. |
| Narrow | Prevents interference from neighboring stations. |
| Auto | Switches the mode between “Narrow” and “Wide” automatically. |

**4** **Press MENU.**
The normal display appears.

EN
Radio

# Labeling radio stations (Station Memo)

You can add a title of up to 8 characters to each station. The station name appears in the display whenever the station is selected. Up to 44 station names can be stored in memory.




**Tip**
To cancel the current display and return to the previous display, press BACK.

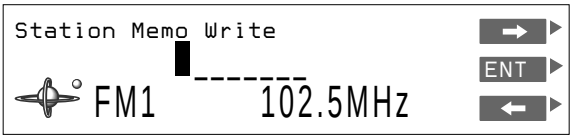
EN

**Tip**
To erase/correct a name, enter "_" (under-bar) for each character.

## 1 Tune in the station you want to label.

## 2 Press LIST for two seconds.

The Station Memo Write indication appears.

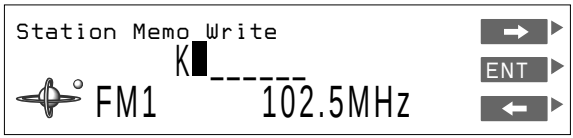



## 3 Press ↑ or ↓ until the character you want to input appears and press →.

Each time you press ↑, the character changes as follows:

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

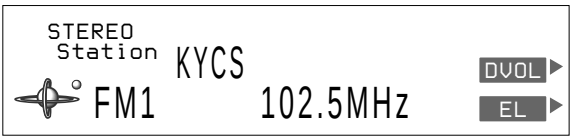
Press ↓ button to move backwards.




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

## 4 Repeat step 3 until you have entered the entire name, then press ENTER.

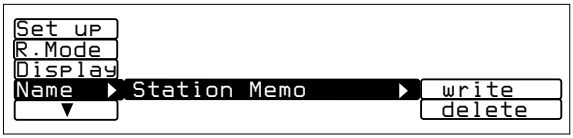
The normal display appears.



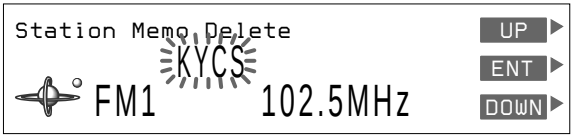
## Erasing a station name

**1** **While listening to an FM or AM broadcast, press MENU.**

**2** **Select “Name,” press ➡ to move to the sub menu, then select “Station Memo” by pressing ↑ or ↓.**




**3** **Press ➡, then ↑ or ↓ to select “delete,” then ENTER.**
The Station Memo Delete indication appears.




**4** **Press ↑ or ↓ to select the station name you want to erase.**

**5** **Press and hold ENTER for two seconds.**
The selected station name is erased.

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

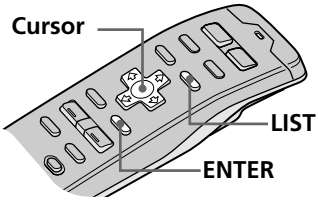
**6** **To complete the mode setting, press BACK.**

**7** **Press MENU.**
The normal display appears.

**Note**
In step 4, all the station names stored in memory appear in the order they were entered. The last station name entered will therefore appear at the end.

# Selecting a station by name

You can use this function to select a station by the name that has been stored in memory for it.



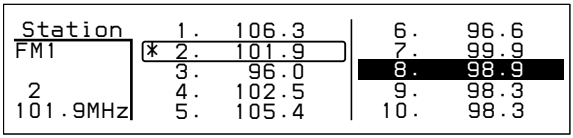

**Tips**

- To cancel the selection, press LIST.
- If the SEEK/AMS mode is set to "Item sel," you can select the desired station with SEEK/AMS when the list appears in the display (see page 45).

EN

## 1 While listening to an FM or AM broadcast, press LIST.

The preset name List appears.




## 2 Press ↑, ↓, →, or ← to select the station.

## 3 Press ENTER.

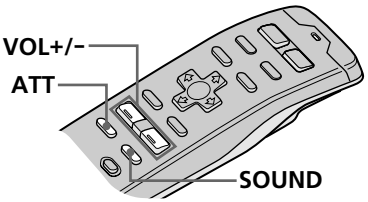
The unit selects the station, and the normal display appears.

### To select a station using the rotary remote

Push in and release DISC/PRESET to display the present name list.
Push and rotate the control to select the station from the list. After about 5 seconds, the normal display reappears.

# Adjusting the sound characteristics

You can adjust the bass, treble, balance, and fader. The bass and treble levels can be stored respectively for each source.




**1** **Press SOUND repeatedly to select the item you want to adjust.**

Each time you press SOUND, the item changes as follows:

Volume → Sub W (subwoofer volume) → Bass* → Treble* → Balance (left-right) → Fader (rear-front)

* Only when the DVOL (Direct Volume) function is turned off.

**2** **Adjust the selected item by pressing VOL + or –.**

Adjust within three seconds after selecting the item. (After three seconds, VOL + and – function as the volume button.)

## Attenuating the sound

**Press ATT.**

The unit automatically decreases the volume to a low level.

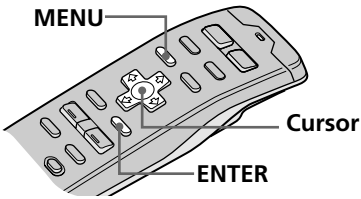
To restore the previous volume level, press ATT again.

**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).

# Setting the set up menu

Use the Set up menu to perform additional settings, including Clock, Beep, Rotary remote, SEEK/AMS, Digital out, VC (Variable Coefficient) filter, and Direct Volume.

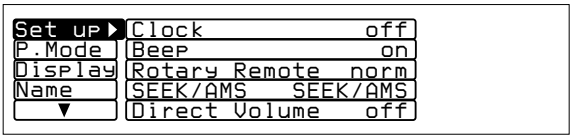



**Tips**

- In step 2, to move the cursor back to the previous column (one at a time), press ←.
- To cancel the current display and return to the previous display, press BACK.

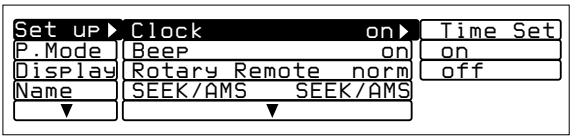
EN

## 1 Press MENU and select "Set up."




## 2 Press → to move to the sub menu, then select the setting by pressing ↑ or ↓.

The current setting appears to the right of the sub menu.




## 3 Change the setting and press ENTER.

The new setting appears to the right of the sub menu.

Sub menus and the method for changing their settings are explained in the table on the next page.

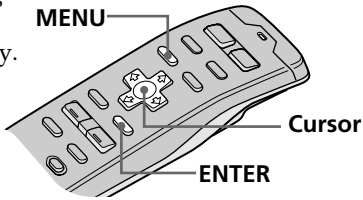
## 4 Press MENU.

The normal display appears.

| Sub Menu | Explanation and settings |
|---|---|
| Clock | Select “on” to display the current time in the upper-left corner of the display at all times. If you select “off,” the time is displayed only when the system is turned off. Select “Time Set” to set the clock (see page 6). |
| Beep | Specifies whether a beep sounds when an operation button is pressed. |
| Rotary remote | Reverses the rotational direction of the rotary remote for controlling operations. Select “normal” for increasing volume, frequency, track numbers, etc. by rotating the remote clockwise. Select “reverse” for increasing the same parameters by rotating the remote counterclockwise. |
| SEEK / AMS | The SEEK / AMS function has two modes:<br>Normal mode — Select “SEEK / AMS” to quickly locate tracks or stations.<br>Item select mode — When the name list is displayed, select “Item sel” to locate discs or stations using the rotary remote or the front panel control. |
| Digital out | Select “ON” to output the digital signals through DIGITAL OUT if optional equipment with digital input is connected. Select “OFF” to cancel the output of digital signals. |
| VC filter | Select one of four filter types for adjusting the sound to match your desired sound image, the music source, etc. |
| Direct Volume | Select “on” to output the signal without processing through the volume control circuit for pure high quality sound. In this case, the bass and treble adjustment do not work.<br>Select “off” to output the signal through the tone control circuit. You can control the bass and treble levels, but the pureness of the original sound will be degraded. |

# Setting the display menu

Use the Display menu to perform additional settings including Illumination, Dimmer, Panel angle, Font Style, Contrast, EL (Electric Luminosity), and Display.

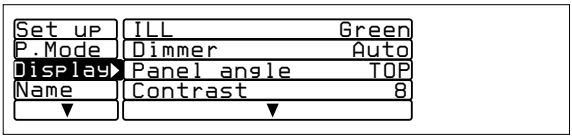



**Tips**

- In step 2, to move the cursor back to the previous column (one at a time), press ←.
- To cancel the current display and return to the previous display, press BACK.

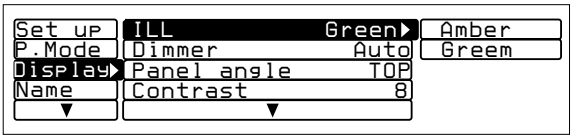
EN

## 1 Press MENU and select "Display."




## 2 Press → to move to the sub menu, then select the item you want to set by pressing ↑ or ↓.

The current sub menu setting appears to the right of the item.



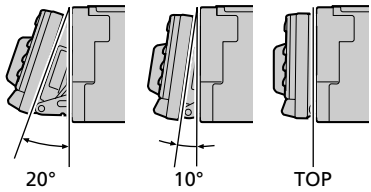

## 3 Change the setting and press ENTER.

The new setting appears to the right of the item.

For an explanation of the sub menus, see the table on the next page.

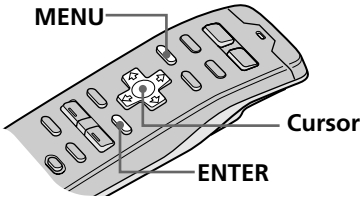
## 4 Press MENU.

The normal display appears.

| Sub menu | Explanation and setting |
|---|---|
| ILL (Illumination) | Select "Amber" or "Green" for the button colors of the front panel. |
| Dimmer | Select "Auto" to dim the brightness of the display whenever you turn the lights on. |
| Panel angle | Select either "10," or "20" degrees to automatically set the front panel angle. Select "Top" for normal angle.   |
| Contrast | Select 1 of 15 contrast levels for the display. Select "Contrast," then press ENTER. You can change the current setting by pressing ← or →. Press ENTER again to change the setting. |
| Font Style | Select "Regular" or "Bold" to set the style of the display characters. |
| EL (Electric Luminosity) (Display window sleep mode) | Select "off" to have the display window automatically turn off after a few seconds whenever you operate any of the controls. Select "on" to have the display window appear constantly. |
| Display | Select "Negative" to reverse the display window contrast. Select "Positive" to display the original contrast. |

# Setting the function menu

Use the function menu to assign the specific function mode to each function button.




**Tips**

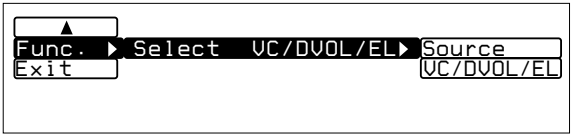
- In step 2, to move the cursor back to the previous column (one at a time), press ⬅.
- To cancel the current display and return to the previous display, press BACK.

EN

## 1 Press MENU and select "Func."

## 2 Press ➡ to move to the sub menu, then select "Select."

The current sub menu setting appears to the right of the item.




## 3 Change the setting and press ENTER.

The new setting appears to the right of the item.

For an explanation of the sub menus, see the table below.

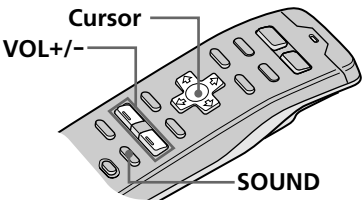
| Indication | Explanation and settings |
|---|---|
| Select | Select "Source" to display the function menu depending on each source or setting mode. Select "VC/DVOL/EL" to display VC, DVOL, and EL independently of the selected source or setting mode. |

## 4 Press MENU.

The normal display appears.

# Selecting a surround menu

The optional XDP-U50D lets you add some effects to the sound field of the currently selected source. The followings are the operating instructions for the XDP-U50D.
When the XDP-210EQ is connected to the unit, refer to the instructions manual supplied to the XDP-210EQ.




**Tips**

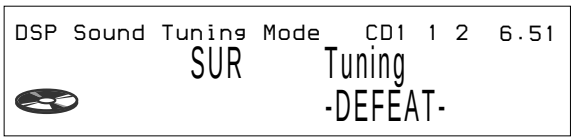
- Each time you press SOUND, the tuning item changes as follows:

SUR (Surround)
↓
POS (Position)
↓
SUB (Subwoofer)
↓
BAS (Bass)
↓
TRE (Treble)

- In step 3, press → to switch to the effect level adjustment.

**1** **Press and hold SOUND for two seconds.**
The DSP Sound Tuning Mode appears.

**2** **Press SOUND repeatedly to select "SUR Tuning."**




**3** **Press VOL + or – to select the surround menu.**
The surround menu appears in the order shown on the next page.

**4** **Press and hold SOUND for two seconds.**
The normal display appears.

**continue to next page →**

| Surround menu | Effect of sound field |
|---|---|
| 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 |

EN

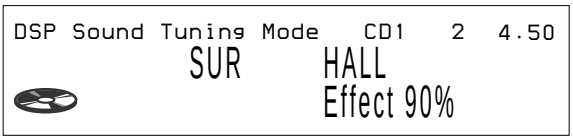
## Adjusting the effect level

**Note**
You cannot adjust the effect level of "-DEFEAT-."

**Tip**
In step 2, press ➡ again to switch to the sound menu selection.

**1** **Follow the steps 1 through 3 of "Selecting a surround menu" (see page 49).**

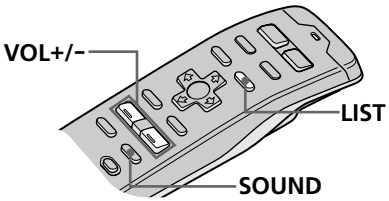
**2** **Press ➡, then VOL + or – to adjust the level.**
The effect level is adjustable from 0 to 100%. Increase the level to enhance the effect.



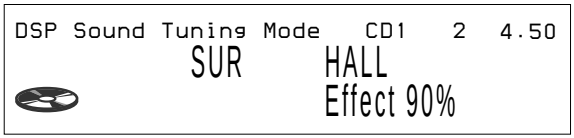

**3** **Press and hold SOUND for two seconds.**
The normal display mode appears.

# Storing a surround effect for CDs (DSP custom file)

Once you have registered the desired surround menu for the discs, you can enjoy the same surround menu every time you play that disc. (Only when you have labeled the disc using the Custom file function. )




**1** **Press and hold SOUND for two seconds.**
The DSP Sound Tuning Mode appears.




**2** **Press VOL + or – to adjust to the desired sound effect.**

**3** **Press and hold LIST for two seconds.**

**4** **Press and hold SOUND for two seconds.**
The normal display mode appears.

EN

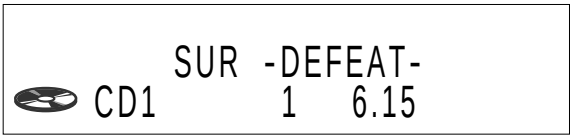
DSP

**Note**
You can use this function for discs that have been assigned a custom name.

## Playing a disc with a stored surround effect

**1 While playing a CD, press and hold LIST for two seconds.**
The Disc Memo Write indication appears.

**2 Press LIST.**
The DSP Tuning Mode appears.




**3 Press VOL + or – to select the surround menu.**

**4 Press and hold LIST for two seconds.**
The normal display appears.

## Changing the stored surround effect

Play the disc whose surround effects you want to change, then follow the steps of "Storing the surround effect for CDs"(see page 51).

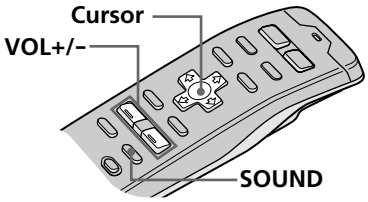
## Erasing the stored surround effect

Select "-DEFEAT-" in step 3 of "Selecting a surround menu" (see page 49 ).

EN

# Selecting the listening position

You can set a delayed time for the sound to reach the listeners from the speakers. In this way, the unit can simulate a natural sound field so that you feel as if you are in the center of the sound field wherever you sit in the car.




**Tips**

- Each time you press SOUND, the tuning item changes as follows:

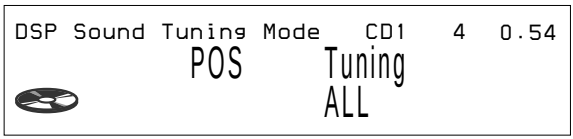
SUR (Surround) → POS (Position) → SUB (Subwoofer) → BAS (Bass) → TRE (Treble) → SUR (Surround)

- In step 3, press → to switch to the listening position adjustment. (see next page)

## 1 Press and hold SOUND for two seconds.

The DSP tuning mode appears.

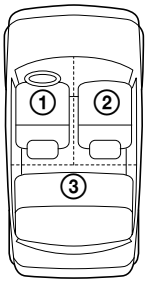
## 2 Press SOUND repeatedly to select "POS Tuning."




## 3 Press VOL + or – repeatedly to select the listening position.

The position appears in the order shown below.

| Indication | Center of sound field |
|---|---|
| All | Normal setting (① + ② + ③) |
| Front | Front part (① + ②) |
| Front R | Right front (②) |
| Front L | Left front (①) |
| Rear | Rear part (③) |




## 4 Press and hold SOUND for two seconds.

The normal display appears.

EN

DSP

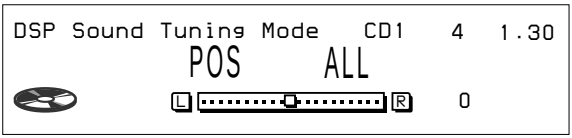
**Tip**
You cannot adjust the effect level of "-DEFEAT-."

## Adjusting the listening position

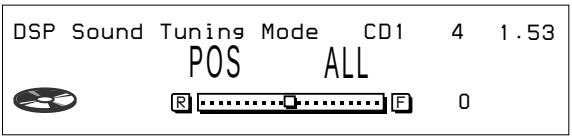
**1 Follow steps 1 through 3 of "Selecting the listening position" (see page 53).**

**2 Adjust the center of the sound field.**

❶ Press ➡.
❷ Press VOL + or – to adjust the center to the left or right.




❸ Press ➡.
❹ Press VOL + or – to adjust the center to the rear or front.

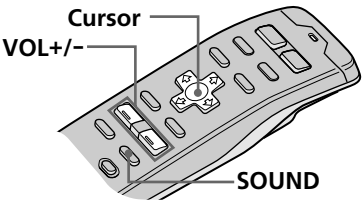



**3 Press and hold SOUND for two seconds.**

The normal display appears.

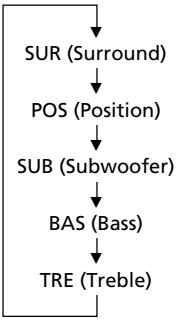
EN

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




**Tips**

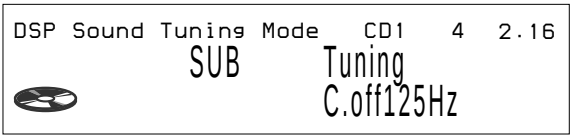
- Each time you press SOUND, the tuning item changes as follows:




- In step 3, press → to switch to the subwoofer's volume adjustment. (see next page)

**1** **Press and hold SOUND for two seconds.**
The DSP Sound Tuning Mode appears.

**2** **Press SOUND repeatedly to select "SUB."**




**3** **Press VOL + or – repeatedly to select the cut-off frequency.**
The frequency appears in the order as follows.

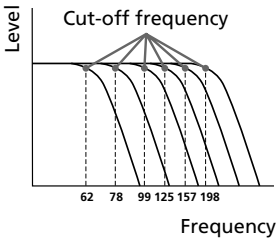
62Hz ⟷ 78Hz ⟷ 99Hz ⟷ 125Hz* ⟷ 157Hz ⟷ 198Hz

* Factory-set frequency

**4** **Press and hold SOUND for two seconds.**
The normal display appears.

**What is the cut-off frequency?**

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, the subwoofer(s) will output only low frequency signals so you can get a clearer sound image.

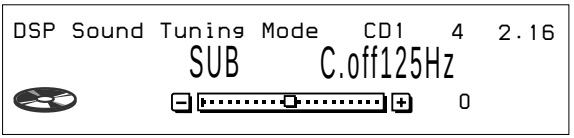



EN
DSP

## Adjusting the volume of the subwoofer(s)

**1** **Follow the steps 1 through 2 of "Adjusting the cut-off frequency of the subwoofer(s)" (see page 55).**

**2** **Press ➡, then VOL + or – to adjust the level.**



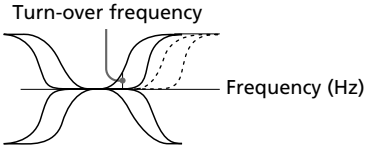

**3** **Press and hold SOUND for two seconds.**
The normal display appears.

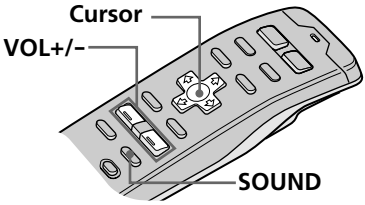
**Note**
When you adjust the volume all the way down, "SUB W ATT" appears and the cut-off frequency of the subwoofer is disabled.

EN

# Adjusting the turn-over frequency of the bass and treble

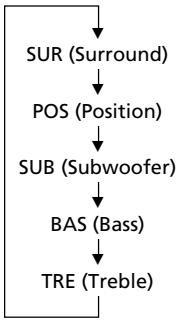
You can adjust the bass and treble turn-over frequencies to best fit the acoustic characteristics inside your car.




**Tips**

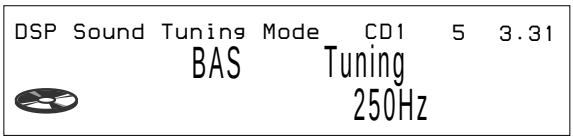
- Each time you press SOUND, the tuning item changes as follows:




- In step 3, press → to switch to the volume adjustment of bass and treble. (see next page)

**1** **Press and hold SOUND and hold for two seconds.**
The DSP Sound Tuning Mode appears,

**2** **Press SOUND repeatedly to select "BAS" or "TRE."**




**3** **Press VOL + or – repeatedly to select the turn-over frequency.**
The turn-over frequency appears in the order as follows:

BAS:
198Hz ↔ 250Hz ↔ 314Hz* ↔ 396Hz

TRE:
2.00kHz ↔ 3.17kHz* ↔ 4.00kHz ↔ 5.03kHz*

* Factory-set frequency

**4** **Press and hold SOUND for two seconds.**
The normal display mode appears.

EN

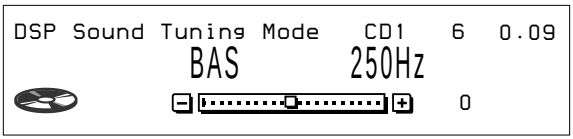
DSP

## Adjusting the volume of the bass and treble

**1** **Press and hold SOUND for two seconds.**
The DSP Sound Tuning Mode appears.

**2** **Press SOUND repeatedly to select "BAS" or "TRE."**

**3** **Press ➡, then VOL + or – to adjust the level.**




**4** **Press and hold SOUND for two seconds.**
The normal display appears.

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

**(Last Sound Memory (LSM))**

Each time you restore the same source, you can hear the same surround effect registered for that source, even after changing the program source or turning the unit off and then on again.

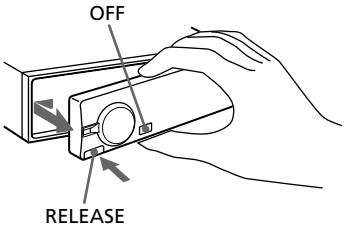
EN

# Detaching the front panel

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

**1 Press OFF.**

**2 Press RELEASE to open the front panel, then slide the front panel to the left side, and pull out from the right side of the front panel.**

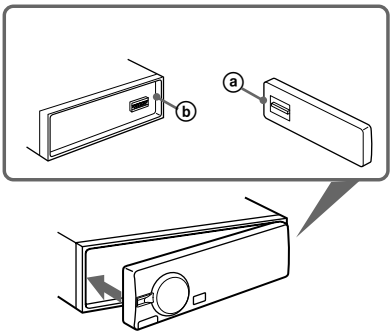



**Notes**

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

### Attaching the front panel

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




### Caution alarm

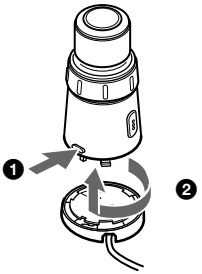
If you turn the ignition key switch to the OFF position without removing the front panel, the caution alarm will beep for a few seconds (only when the ACC Position is set to "yes") (see page 4).

**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.
- 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 or heat sources such as hot air ducts, and do not leave it in a humid place. Never leave it on the dashboard of a car parked in direct sunlight where there may be a considerable rise in temperature.

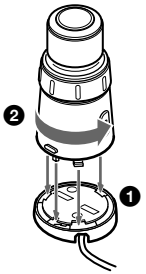
# Detaching the rotary remote

You can detach the rotary remote as a safety measure against theft.
Turn the remote clockwise while pressing down RELEASE.




### Attaching the rotary remote

Align the four holes on the bottom of the rotary remote to the four catches on the holder and slide the rotary remote until it locks into place as illustrated.



# 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, 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.

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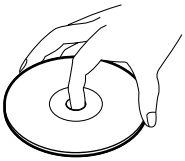
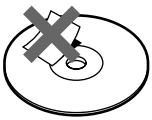
## Notes on handling CDs

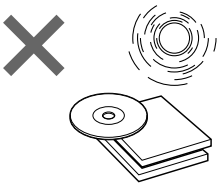
A dirty or defective disc may cause sound dropouts while playing. To enjoy optimum sound, handle the disc as follows.
Handle the disc by its edge. To keep the disc clean, do not touch the surface.



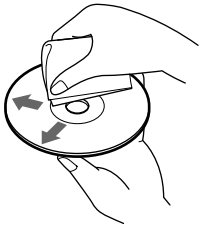
Do not stick paper or tape on the labelled surface.



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.



## Note 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.

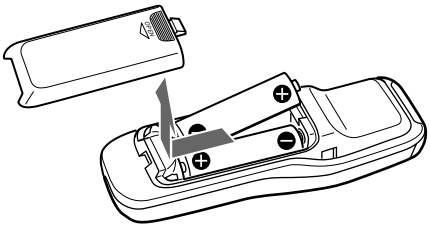
### About the LCD display on the display section

When the temperature is extremely high or low, the display may become dim and hard to see. This is due to the characteristics of the LCD and is not a malfunction. The display will return to normal when the temperature becomes normal.

## Wireless Remote

### Installing batteries in the wireless remote

Insert two size-AA (R6) batteries with the correct polarity.



### Battery life

When the batteries become weak, you will not be able to operate the unit with the wireless remote. Battery life is about six months (or shorter, depending on the way the remote is used). If the remote becomes inoperative, replace the batteries, then verify that it can operate the system.

### Notes on battery use

To avoid damage from battery leakage and corrosion:

— Make sure the polarity of the batteries match the + and – markings in the battery compartment.
— Do not use an old battery with a new one, or different types of batteries together.
— Remove the batteries when the system will not be used for a long period of time.
— Do not charge the batteries.

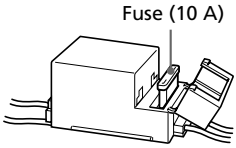
If any battery leakage occurs, replace both batteries after cleaning the battery compartment.

### Notes on the wireless remote

- To prevent deformation due to heat, do not leave the remote in a place subject to direct sunlight.
- Direct sunlight may affect the system's ability to receive infrared signals from the remote. If this happens, move the remote closer to the remote control sensor of the system.
- When parking your car, put the remote somewhere, such as the glove compartment, that is away from direct sunlight to prevent deformation due to heat.

### 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.

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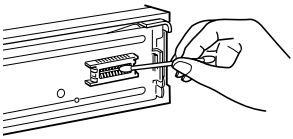
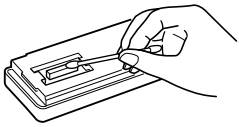
### Cleaning the connectors

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



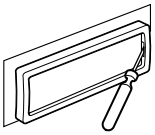
Back of the front panel

**Notes**

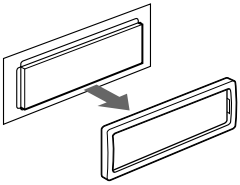
- For safety, before cleaning the connectors, turn off the engine and remove the key from the ignition switch.
- Never touch the connectors directly with your fingers or any metal device.

## Dismounting the unit

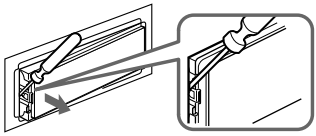
**1 Press the clip inside the front cover with a thin screwdriver, and gently pry the front cover free.**



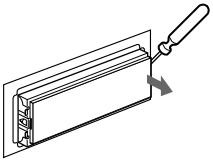
**2 Repeat step 1 on the left side.**
The front cover is removed.



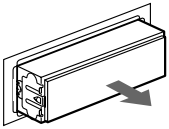
**3 Use a thin screwdriver to push in the clip on the left side of the unit, then pull out the left side of the unit until the catch clears the mounting.**



**4 Repeat step 3 on the right side.**



**5 Slide the unit out of the mounting.**



# Specifications

## CD player section

| | |
|---|---|
| System | Compact disc digital audio system |
| Signal-to-noise ratio | 109 dB |
| Frequency response | 5 – 20,000 Hz (±1 dB) |
| Wow and flutter | Below measurable limit |
| Laser Diode Properties | |
| Material | GaAlAs |
| Wavelength | 780 nm |
| Emission Duration | Continuous |
| Laser output power | Less than 44.6 µW* |

* 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 | FM tuning interval:<br>50 kHz/200 kHz switchable<br>87.5 – 108.0 MHz<br>(at 50 kHz step)<br>87.5 – 107.9 MHz<br>(at 200 kHz step) |
| Antenna terminal | External antenna connector |
| Intermediate frequency | 10.7 MHz |
| Usable sensitivity | 8 dBf |
| Selectivity | 75 dB at 400 kHz<br>50 dB at 200 kHz |
| Signal-to-noise ratio | 65 dB (stereo),<br>68 dB (mono) |
| Harmonic distortion at 1 kHz | |
| | 0.3 % (stereo),<br>0.3 % (mono) |
| Separation | 35 dB at 1 kHz |
| Frequency response | 20 – 15,000 Hz |

### AM

| | |
|---|---|
| Tuning range | AM tuning interval:<br>9 kHz/10 kHz switchable<br>531 – 1,602 kHz<br>(at 9 kHz step)<br>530 – 1,710 kHz<br>(at 10 kHz step) |
| Antenna terminal | External antenna connector |
| Intermediate frequency | 10.71 MHz/450 kHz |
| Sensitivity | 30 dB µV |

## General

| | |
|---|---|
| Outputs | Digital output<br>Line outputs (3)<br>Power antenna relay control lead<br>Power amplifier control lead<br>Telephone ATT control lead<br>Illumination control lead |
| Power requirements | 12 V DC car battery (negative ground) |
| Dimensions | Approx.<br>178 × 50 × 184 mm<br>($7\frac{1}{8} \times 2 \times 7\frac{1}{4}$ in.)<br>(w/h/d) |
| Mounting dimensions | Approx.<br>182 × 53 × 163 mm<br>($7\frac{1}{4} \times 2\frac{1}{8} \times 6\frac{1}{2}$ in.)<br>(w/h/d) |
| Mass | Approx. 1.6 kg<br>(3 lb. 1 oz.) |
| Supplied accessories | Parts for installation and connections (1 set)<br>Rotary remote RM-X90<br>Wireless remote RM-X9<br>Front panel case (1) |
| Optional accessories | Optical adapter XA-D210<br>Optical cable RC-97 (2m), RC-98 (5m)<br>BUS cable (supplied with an RCA pin cord) RC-61 (1 m), RC-62 (2 m)<br>Compact disc single adapter CSA-8 |
| Optional equipment | CD changer CDX-805 (10 discs), CDX-715 (10 discs), CDX-T65 (6 discs), CDX-T62 (6 discs)<br>MD changer MDX-62<br>Digital preamplifier XDP-U50D<br>Digital equalizer preamplifier XDP-210EQ<br>Source selector XA-C30 |

Design and specifications are subject to change without notice.

# Troubleshooting guide

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

## General

| Problem | Cause/Solution |
|---|---|
| **No sound** | • Cancel the ATT function.<br>• Set the fader control to the center position for two-speaker systems.<br>• Adjust the volume. |
| **The contents of the memory have been erased.** | • The power cord or battery has been disconnected.<br>• The reset button has been pressed.<br>→ Store again into the memory. |
| **Indications do not appear in the display.** | • EL function is "off" (see page 47).<br>• Remove the front panel and clean the connectors. See "Cleaning the connectors" on page 62 for details. |
| **The unit does not respond.** | Follow the initial setting procedures with the wireless remote after resetting the unit. The unit dose not work unless these settings are completed (see page 4). |
| **The wireless remote does not function.** | • Remove any obstacles blocking the signal path from wireless remote to the unit.<br>• Point the wireless remote at the remote sensor on the unit. |

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## CD/MD playback

| Problem | Cause/Solution |
|---|---|
| **A disc cannot be loaded.** | • Another CD is already loaded.<br>• The CD is forcibly inserted upside down or in the wrong way (MD). |
| **Playback 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.** | • The unit is installed at an angle of more than 60°.<br>• The unit is not installed in a sturdy part of the car. |

## Radio reception

| Problem | Cause/Solution |
|---|---|
| **Preset tuning is not possible.** | • Memorize the correct frequency.<br>• The broadcast signal is too weak. |
| **Automatic tuning is not possible.** | The broadcast signal is too weak.<br>→ Use manual tuning. |
| **The "ST" indication flashes.** | • Tune in the frequency accurately.<br>• The broadcast signal is too weak.<br>→ Set to the monaural mode (see page 37). |
| **Interference occurs during FM reception.** | The Wide mode is selected.<br>→ Set to Narrow or Auto mode (see page 39). |

## 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.<br>→ Adjust the balance.<br>The speaker balance can be set separately for the DSP Sound Tuning mode (see page 53). |

### Error displays

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

| Display | Cause | Solution |
|---|---|---|
| NO Magazine | The disc magazine is not inserted in the CD/MD unit. | Insert the disc magazine in the CD/MD unit. |
| NO Disc | No disc is inserted in the CD/MD unit. | Insert discs in the CD/MD unit. |
| NG Discs | A CD/MD cannot play because of some problem. | Insert another CD/MD. |
| Disc Error*1 | A CD is dirty or inserted upside down.*2 | Clean or insert the CD correctly. |
| | An MD does not play because of some problem.*2 | Insert another MD. |
| Blank*1 | No tracks have been recorded on an MD*2 | Play an MD with tracks recorded on it. |
| PushReset | The CD/MD unit cannot be operated because of some problem. | Press the reset button of the unit. |
| Not Ready | The lid of the MD unit is open or MDs are not inserted properly. | Close the lid or insert the MDs properly. |
| HighTemp | The ambient temperature is more than 50°C (122°F). | Wait until the temperature goes down below 50°C (122°F). |

*1 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.
*2 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.

Sony online http://www.world.sony.com/

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