

SONY®

FMIAM Cassette Car Stereo

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. XR-C8200 Serial No. _____

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

XR-C8200

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.

Welcome !

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

In addition to the tape playback and radio operations, you can expand your system by connecting an optional CD/MD unit*¹. If you connect an optional CD changer with the CD TEXT function, the CD TEXT information will appear in the display when you playback a CD TEXT disc*².

*¹ You can connect to an CD changer, MD changer, or an CD player, MD player.

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

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Getting Started

Resetting the unit

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

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

Front panel detached



Reset button

Note

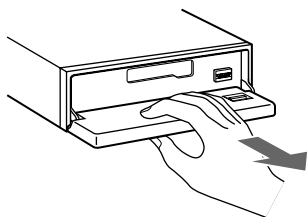
Pressing the reset button will erase the clock and some memorized functions.

EN

Detaching the front panel

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

- 1 Press **OFF**.
- 2 Press **OPEN** to open up the front panel, then pull it off towards you.

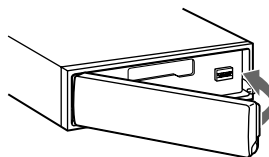


Notes

- 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

Align the front panel with the unit, and push in.



Notes

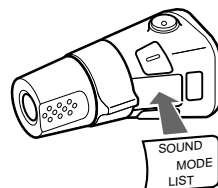
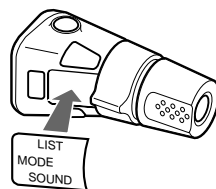
- Be sure not to attach the front panel upside down.
- Do not press the front panel hard against the unit when attaching it. Press it lightly against the unit.
- Do not press hard or put excessive pressure on the display of the front panel.
- Do not expose the front panel to direct sunlight, heat sources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

Caution alarm

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

Preparing the rotary commander

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

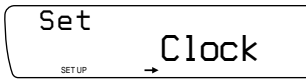


Setting the clock

The clock has a 12-hour digital indication.

Example: Set the clock to 10:08

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

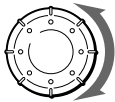


1 Press **(4) (→)**.



The hour digit flashes.

2 Set the hour.

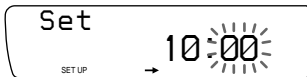


to go backward

to go forward

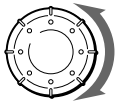


3 Press **(4) (→)**.



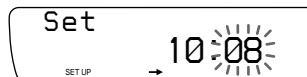
The minute digits flash.

4 Set the minute.

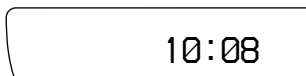


to go backward

to go forward



2 Press **(SHIFT)**.



The clock starts.

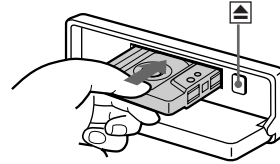
Note

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

Cassette Player

Listening to a tape

1 Press **(OPEN)** and insert a cassette.

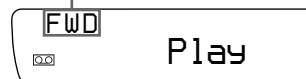


Playback starts automatically.

2 Close the front panel.

If a cassette is already inserted, press **(SOURCE)** until "FWD" or "REV" appears to start playback.

The side facing up is being played.



The side facing down is being played.



Tips

- To change the tape transport direction, press **(MODE)** (**◀▶**).
- "Metal" appears in the display when you insert a metal or CrO₂ tape (Auto Metal function).

To	Press
Stop playback	(OFF)
Eject the cassette	(OPEN) then ▲

Fast-winding the tape

During playback, press either side of **(SEEK/AMS)** for one second.



Fast-forward



Rewind

To start playback while fast-forwarding or rewinding, press **(MODE)** (**◀▶**).

Locating the beginning of a track

— Automatic Music Sensor (AMS)

You can skip up to nine tracks at one time.

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



To locate succeeding tracks



To locate preceding tracks

Note

The AMS function may not work when:

- the blanks between tracks are shorter than four seconds.
- there is noise between tracks.
- there are long sections of low volume or quiet sections.

Changing the displayed item

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



* While the ATA function is activated.

EN

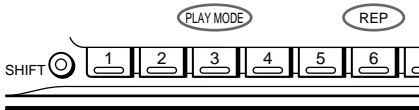
Playing tracks repeatedly

— Repeat play

You can repeat play the current track.

1 During playback press (SHIFT).

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



2 Press (6) (REP).

Repeat play starts.

To go back to the normal playback mode, press (6) again.

3 Press (SHIFT).

Playing a tape in various modes

You can play the tape in various modes:

- Intro (Intro Scan) lets you play the first 10 seconds of all the tracks.
- NR (Dolby NR) lets you select the Dolby* NR B or C system.
- ATA (Automatic Tuner Activation) turns on the tuner automatically while fast-winding the tape.
- B.Skip (Blank Skip) skips blanks longer than eight seconds.

* Dolby noise reduction manufactured under license from Dolby Laboratories Licensing Corporation. "DOLBY" and the double-D symbol are trademarks of Dolby Laboratories Licensing Corporation.

1 Press (SHIFT), then press (3) (PLAY MODE) repeatedly until the desired play mode appears.

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

Intro → NR → ATA → B.Skip



2 Press (4) (→) to select the desired play mode setting (for example: on, NR B).



Playback starts.

3 Press (SHIFT).

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

Memorising stations automatically

— Best Tuning Memory (BTM)

The unit selects the stations with the strongest signals and memorizes them. You can store up to 10 stations on each band (FM 1, FM 2 and AM).

Caution

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

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

- 2 Press **(MODE)** repeatedly to select the desired band.
Each time you press **(MODE)**, the band changes as follows:



- 3 Press **(SHIFT)**, then press **(3)** (PLAY MODE) repeatedly until "B.T.M" appears.
- 4 Press **(4)** (→) until "B.T.M" flashes.
The unit stores stations in the order of their frequencies on the number buttons.
A beep sounds and the setting is stored.

- 5 Press **(SHIFT)**.

Notes

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

Memorising only the desired stations

You can store up to 10 stations on each band (20 for FM 1 and FM 2, 10 for AM) in the order of your choice.

- 1 Press **(SOURCE)** repeatedly to select the tuner.
- 2 Press **(MODE)** repeatedly to select the desired band.
- 3 Press either side of **(SEEK/AMS)** to tune in the station you want to store on the number button.
- 4 Keep the desired number button (**(1)** to **(10)**) pressed until "MEM" appears in the display.

The number button indication appears in the display.

Note

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

Receiving the memorized stations

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

If you cannot tune in a preset station

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

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

Note

If the automatic tuning stops too frequently, press **(SHIFT)**, then press **(3)** (PLAY MODE) repeatedly until "Local" (local seek mode) appears. Then press **(4)** (→) to select "Local on." Press **(SHIFT)**. Only the stations with relatively strong signals will be tuned in.

Tip

If you know the frequency of the station you want to listen to, press and hold down either side of **(SEEK/AMS)** for a few seconds until the desired frequency appears (manual tuning).

If FM stereo reception is poor

— Monaural Mode

- 1 Press **(SHIFT)**, then press **(3)** (PLAY MODE) repeatedly until "Mono" appears.
- 2 Press **(4)** (→) repeatedly until "Mono on" appears. The sound improves, but becomes monaural ("ST" disappears).
- 3 Press **(SHIFT)**. To go back to the normal mode, select "Mono off" in step 2 above.

Changing the displayed item

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

Frequency ↔ Clock

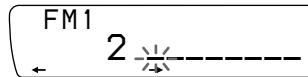
Storing the station names

— Station Memo

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

Storing the station names

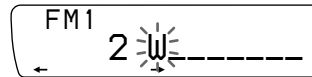
- 1 Tune in a station whose name you want to store.
- 2 Press **(LIST)** for two seconds.



- 3 Enter the characters.

- 1 Rotate the dial in a clockwise direction to select the desired characters.

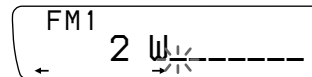
(A → B → C → ... Z → 0 → 1 → 2 → ... 9 → + → - → * → / → \ → > → < → . → _)



If you rotate the dial in a counterclockwise direction, the characters appear in the reverse order. If you want to put a blank space between characters, select "_" (under-bar).

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

The flashing cursor moves to the next space.



If you press **(1)** (←), the flashing cursor moves to the left.

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

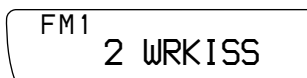
- 4 To return to the normal radio reception, press **(LIST)** for two seconds.

Tip

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

Displaying the station name

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



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




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

Erasing the station name

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

Locating a station by frequency and name — List-up

You can search for the memorized stations names in the display.

- 1 Press **(LIST)** momentarily. The frequency or the name assigned to the station currently receiving appears in the display.
- 
- 2 Press **(LIST)** repeatedly until you find the desired station.
 - 3 Press **(5) (ENTER)** to tune in the desired station.

Note

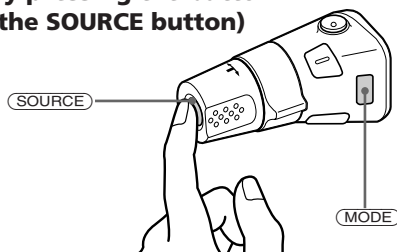
Once the station name or frequency has been displayed for five seconds, the display goes back to its normal mode. To go back to the normal mode, press **(DSPL)**.

Other Functions

Using the rotary commander

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

By pressing the button (the SOURCE button)



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

Tuner → CD → MD → Tape

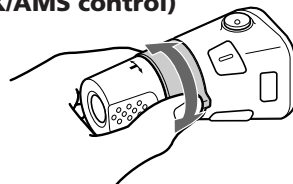
Pressing **(MODE)** changes the operation in the following ways

- the tape transport direction
- the band: FM1 → FM2 → AM
- the CD unit: CD1 → CD2 →
- the MD unit: MD1 → MD2 →

Tip

You can turn on this unit by pressing **(SOURCE)** on the rotary commander.

By rotating the control (the SEEK/AMS control)



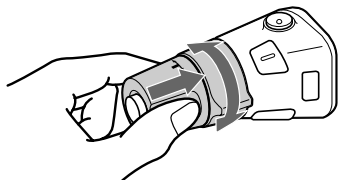
Rotate the control momentarily and release it to:

- Locate the beginnings of the tracks on the tape. Rotate and hold the control, and release it to fast-wind the tape. To playback, rotate and hold the control again, and release it.
- Locate a specific track on a disc. Rotate and hold the control until you locate the specific point in a track, then release it to start playback.

continue to next page →

- Tune in stations automatically. Rotate and hold the control to tune in the specific station.

By rotating the control while pushing in (the PRESET/DISC control)

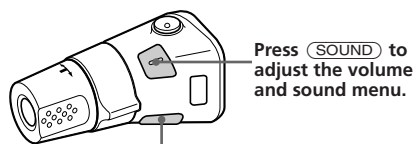
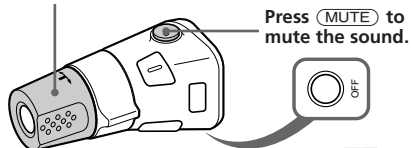


Push in and rotate the control to:

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

Other operations

Rotate the VOL control to adjust the volume.

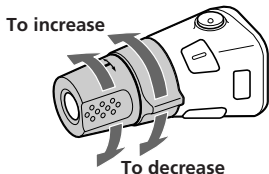


Press **(LIST)** to display memorized names.

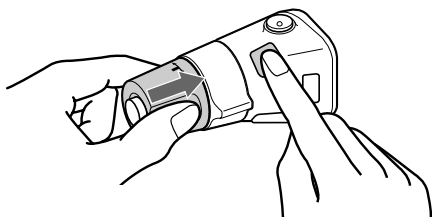
Press **(SOUND)** to adjust the volume and sound menu.

Changing the operative direction

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



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



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

Tip

You can change the operative direction of controls with the unit, refer to "Changing the sound and display settings" (page 11).

Adjusting the sound characteristics

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

- 1 Select the item you want to adjust by pressing **(SOUND)** repeatedly.

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

- 2 Adjust the selected item by rotating the dial. Adjust within three seconds after selection. (After three seconds, the dial works as the volume control dial.)

Muting the sound

The unit decreases the volume automatically when a telephone call is received (Telephone-mute function).

Changing the sound and display settings

You can set:

- Clock (page 5)
- D. Info (Dual Information) to display the clock and the play mode at the same time (ON), or to display the information alternately (OFF).
- Amber/Green to change the illumination color to amber or green.
- Dimmer to change the brightness of the display.
 - Select “Auto” to dim the display only when you turn the lights on.
 - Select “on” to dim the display.
- Contrast to adjust the contrast if the indications in the display are not recognizable because of the unit’s installed position.
- Beep to turn on or off the beeps.
- RM (Rotary Commander) to change the operative direction of the controls of the rotary commander.
 - Select “norm” to use the rotary commander in the factory preset position.
 - Select “rev” when you mount the rotary commander on the right side of the steering column.
- Loud (Loudness) to enjoy bass and treble even at low volume. The bass and treble will be reinforced.
- LPF (Low Pass Filter)
- A. Scrl (Auto Scroll) (page 12)
- Disc MEMO/TEXT name (Disc memo/CD TEXT name) to set the priority display item when you connect an optional CD unit with the CD TEXT and disc memo function.

Note

The displayed item will differ depending on the source.

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

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

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

Clock → D.Info → Amber/Green → Dimmer → Contrast → Beep → RM → Loud → LPF → A.Scrl → Disc MEMO/TEXT name

3 Press **(4) (→)** to select the desired setting (for example: “on” or “off”).

For the “Contrast” setting, pressing **(4) (→)** makes the contrast higher, and pressing **(1) (←)** makes the contrast lower.

4 Press **(SHIFT)**.

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

Adjusting the frequency of the subwoofer(s)

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

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

2 Press **(SHIFT)**, then press **(2) (SET UP)** repeatedly until “LPF” appears.

3 Press **(4) (→)** or **(1) (←)** repeatedly to select desired setting.



Each time you press **(4) (→)** or **(1) (←)**, the cut-off frequency in the display changes as follows:

LPF 120 Hz ← → LPF 80 Hz ← → LPF off

4 Press **(SHIFT)**.

When the frequency setting is complete, the display goes back to the normal playback mode.

With Optional Equipment

CD/MD Unit

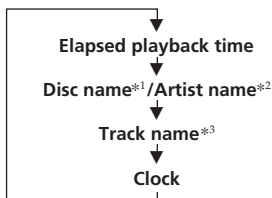
If you connect an optional CD unit with the CD TEXT function, the CD TEXT information will appear in the display when you playback a CD TEXT disc.

Playing a CD or MD

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

Changing the displayed item

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



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

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

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

You can label a personalized name for CDs and CD TEXT discs with the disc memo function, refer to "Labeling a CD" (page 15).

Tip

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

Automatically scrolling a disc name

— Auto Scroll

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

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

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

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

To cancel Auto Scroll, select "A. Scrl off" in step 2 above.

Note

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

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

Displaying the recording date of the currently selected MD

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

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

Locating a specific track

— Automatic Music Sensor (AMS)

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



To locate succeeding tracks



To locate preceding tracks

Locating a specific point in a track

— Manual Search

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



To search forward



To search backward

Locating a disc by disc number

— Direct Disc Selection

Press the number button that corresponds with the desired disc number.

The desired disc in the currently selected unit begins playback.

Scanning the tracks

— Intro Scan

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

- 1 During playback, press **(SHIFT)**, then press **(3)** (PLAY MODE) repeatedly until "Intro" appears.
- 2 Press **(4)** (→) repeatedly until "Intro on" appears.
Intro Scan starts.
- 3 Press **(SHIFT)**.


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

Playing tracks repeatedly

— Repeat Play

You can select:

- Repeat 1 to repeat a track.
- Repeat 2 to repeat a disc.
- Repeat 3 to repeat all the discs in the current unit when you connect two or more units.

- 1 During playback, press **(SHIFT)**, then press **(6)** (REP) repeatedly until "Repeat" appears.
- 2 Press **(6)** (REP) repeatedly until the desired setting appears.

Repeat play starts.
- 3 Press **(SHIFT)**.

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

Playing tracks in random order

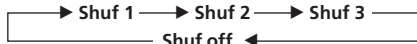
— Shuffle Play

You can select:

- Shuf 1 to play the tracks on the current disc in random order.
- Shuf 2 to play the tracks in the current unit in random order.
- Shuf 3 to play all the tracks in random order when you connected two or more units.

- 1 During playback, press **(SHIFT)**, then press **(7)** (SHUF) repeatedly until "Shuf" appears.

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



Shuffle play starts.

- 3 Press **(SHIFT)**.

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

Creating a program

— Program Memory (CD/MD unit with program memory function)

You can play tracks in the order you want by making your own program. You can make two programs: Program 1 and Program 2. You can select up to 12 tracks for each program. You can store the programs in memory.

- 1 Press **(SHIFT)**, then press **(3)** (PLAY MODE) for two seconds.

Program edit mode



"P1" shows Program 1 is selected.

If you have labeled the disc, the bank edit mode appears. Press **(3)** (PLAY MODE) to display "P1" above.

To select Program 2, press **(4)** (→) repeatedly until "P2" appears.

- 2 Select the track you want.

- 1 Press **(SOURCE)** repeatedly to select the CD or MD.

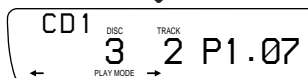
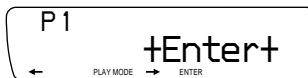
- 2 Press **(MODE)** repeatedly to select the unit.

- 3 Press **(SHIFT)**, then press the number button to select the disc.

- 4 Press **(SHIFT)**.

- 5 Press either side of **(SEEK/AMS)** to select the track.

3 Press **(ENTER)** momentarily.



4 To continue entering tracks, repeat steps 2 and 3.

5 When you finish entering tracks, press **(PLAY MODE)** for two seconds.

6 Press **(SHIFT)**.

Notes

- “*Wait*” appears in the display while the unit is reading the data, or when a disc has not been put into the unit.
- “*Mem full*” appears in the display when you try to enter more than 12 tracks into a program.

Playing the stored program

Changing the disc order in the unit will not affect program memory play.

You can select:

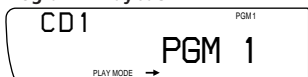
- PGM 1 to play Program 1.
- PGM 2 to play Program 2.
- PGM 1+2 to play Programs 1 and 2.

1 Press **(SHIFT)**.

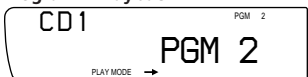
2 Press **(PLAY MODE)** repeatedly until “PGM” appears.

3 Press **(→)** repeatedly until the desired program appears. Program play starts.

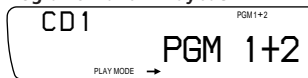
Program 1 Playback



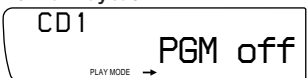
Program 2 Playback



Programs 1 and 2 Playback



Normal Playback



4 Press **(SHIFT)**.

To go back to the normal playback mode, select “PGM off” in step 3 above.

Notes

- If you press a number button during program memory play, program memory play is interrupted, and playback of the selected disc starts.
- “NO Data” appears in the display if no track is stored in the program.
- If a track stored into the program memory is not in the disc magazine, the track will be skipped.
- When the disc magazine contains not a single track stored into the program memory, or when the program information has not been loaded yet, “Not Ready” appears.

Erasing the entire program

1 Press **(SHIFT)**, then press **(PLAY MODE)** for two seconds.

If you have labeled the disc, the bank edit mode appears. Press **(PLAY MODE)** to display “P1” above.

2 Press **(←)** repeatedly until “DEL” appears.



To erase Program 2, press **(→)** repeatedly until “P2” appears.

3 Press **(ENTER)** for two seconds.



The entire program is erased.

4 When you finish erasing programs, press **(PLAY MODE)** for two seconds.

5 Press **(SHIFT)**.

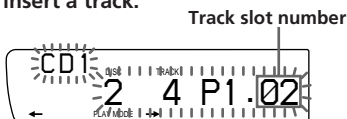
Adding tracks to the program

1 Press **(SHIFT)**, then press **(PLAY MODE)** for two seconds.

If you have labeled the disc, the bank edit mode appears. Press **(PLAY MODE)** to display “P1” above.

To select Program 2, press **(→)** repeatedly until “P2” appears.

2 Press **(←)** or **(→)** to select the track slot number where you want to insert a track.



3 Press either side of **(SEEK/AMS)** to select the track you want to insert.

4 Press **(5)** (**ENTER**) momentarily to enter the track.

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

To continue inserting tracks, repeat steps 2 through 4.

Note

Once all 12 slots have been filled, “*Mem full*” appears in the display, and you cannot insert tracks.

5 When you finish inserting tracks, press **(3)** (**PLAY MODE**) for two seconds.

6 Press **(SHIFT)**.

Erasing the tracks in the program

1 Press **(SHIFT)**, then press **(3)** (**PLAY MODE**) for two seconds.

If you have labeled the disc, the bank edit mode appears. Press **(3)** (**PLAY MODE**) to display “P1” above.

To select Program 2, press **(4)** (**→**) repeatedly until “P2” appears.

2 Press **(1)** (**←**) or **(4)** (**→**) to select the track you want to erase.

Track Slot Number



The track currently registered in slot 6 of Program 1.

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

When you erase a track from a slot number, the succeeding tracks shift up to fill the gap.



4 To continue erasing tracks, repeat steps 2 and 3.

5 When you finish erasing tracks, press **(3)** (**PLAY MODE**) for two seconds.

6 Press **(SHIFT)**.

Labeling a CD

— Disc Memo/Custom File
(CD unit with custom file function)

You can label each disc with a personalized name. You can enter up to 8 characters for a disc. If you label a CD, you can locate a disc by name (page 16) and select the specific tracks for playback (page 16).

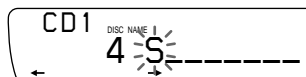
1 Play the CD and press **(LIST)** for two seconds.



2 Enter the characters.

1 Rotate the dial clockwise to select the desired characters.

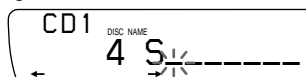
(A → B → C → ... Z → 0 → 1 → 2 → ... 9 → + → - → * → / → \ → > → < → . → _)



If you rotate the dial counterclockwise, the characters appear in reverse order. If you want to put a blank space between characters, select “_” (under-bar).

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

The flashing cursor moves to the next space.



If you press **(1)** (**←**), the flashing cursor moves to the left.

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

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

Tip

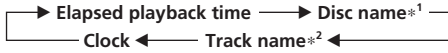
To erase/correct a name, enter “_” (under-bar) for each character.

Displaying the disc memo

During playback, press (DSPL).



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



- *1 When you connect an optional CD unit with the CD TEXT function, the personalized label or the CD TEXT disc name appears. See below to change the display.
- To change the displayed item press (4) (→).
 - To change the display using Display settings (page 11).

The display item will change depending on the setting as follows.

Type of disc	Priority display setting	Actual display
A	D.MEMO	Disc memo
	CD TEXT	CD TEXT information
B	D.MEMO	Disc memo
	CD TEXT	
C	D.MEMO	CD TEXT information
	CD TEXT	
D	D.MEMO	NO D. Name
	CD TEXT	

- A: CD TEXT disc with disc memo
- B: Normal CD with disc memo
- C: CD TEXT disc without disc memo
- D: Normal CD without disc memo

- *2 If you connect an optional CD unit with the CD TEXT function, the CD TEXT information will appear on the display when you playback a CD TEXT disc.

Erasing the disc memo

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

Locating a disc by name

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

You can use this function for the discs that have been assigned a personalized name. For more information on disc names, refer to "Labeling a CD" (page 15).

1 Press (LIST) momentarily.

The names assigned to the disc currently playing and the next disc to be played appear in the display. The name assigned to currently playing disc is flashing.



If you add disc memo labels to a CD TEXT disc, the display setting you make will determine which information is displayed. If the disc has only one set of information (either CD TEXT or disc memo labels), that information will be displayed regardless of the display setting you make.

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

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

Notes

- To go back to the normal display, press (DSPL). Once a disc name has been displayed for five seconds, the display goes back to the normal playback mode.
- The track names are not displayed during MD playback.
- If there are no discs in the magazine, "NO Disc" appears in the display.
- If a disc has not been assigned a custom file, "*****" appears in the display.
- If the disc information has not been read by the unit, "?" appears in the display. To load the disc, first press a number button, then choose a disc that has not been loaded.
- The information appears only in upper cases. There are also some letters which cannot be displayed (during MD playback).

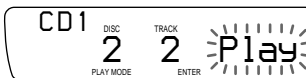
Selecting the specific tracks for playback

— Bank/Custom File (CD unit with custom file function)

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

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

Bank edit mode



Note

If you have not labeled the disc, the bank edit mode does not appear and the program edit mode appears. To go back to the normal playback mode, press (3) (PLAY MODE) for two seconds.

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



The indication changes from "Play" to "Skip." If you want to return to "Play," press (5) (ENTER) again.

- 3 Repeat step 2 to set the "Play" or "Skip" mode on all the tracks.
- 4 Press (3) (PLAY MODE) for two seconds.
- 5 Press (SHIFT).

Notes

- You can set the "Play" and "Skip" modes on up to 24 tracks.
- You cannot set the "Skip" mode on all the tracks.

Playing the specific tracks only

You can select:

- Bank on to play the tracks with the "Play" setting.
- Bank inv (inverse) to play the tracks with the "Skip" setting.

- 1 During playback, press (SHIFT), then press (3) (PLAY MODE) repeatedly until "Bank" appears.
- 2 Press (4) (→) repeatedly until the desired setting appears.



Playback starts from the track following the current one.

- 3 Press (SHIFT).

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

Additional Information

Precautions

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

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

To maintain high quality sound

If you have drink holders near your audio equipment, be careful not to splash juice or other soft drinks onto the car audio. Sugary residues on this unit or cassette tapes may contaminate the playback heads, reduce the sound quality, or prevent sound reproduction altogether.

Cassette cleaning kits do not remove sugar from the tape heads.

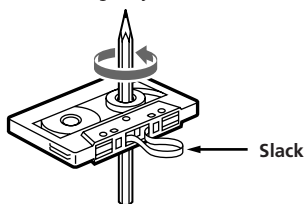


Notes on cassette deck tape head

- Long use of cassette tapes contaminates the tape head causing poor sound quality or complete sound dropout. Therefore, we recommend cleaning the tape head once a month or so with the separately available Sony Cassette Cleaning Set. If the sound does not improve after using a cleaning cassette, please consult your nearest Sony dealer.
- In case of old or inferior cassette tapes, the tape head gets contaminated much more quickly. Depending on the tape, one or two playbacks may cause poor sound.

Cassette care

- Do not touch the tape surface of a cassette, as any dirt or dust will contaminate the heads.
- Keep cassettes away from equipment with built-in magnets such as speakers and amplifiers, as erasure or distortion on the recorded tape could occur.
- Do not expose cassettes to direct sunlight, extremely cold temperatures or moisture.
- Slack in the tape may cause the tape to be caught in the machine. Before you insert the tape, use a pencil or similar object to turn the reel and take up any slack.



- Distorted cassettes and loose labels can cause problems when inserting or ejecting tapes. Remove or replace loose labels.



Cassettes longer than 90 minutes

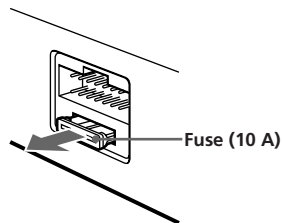
The use of cassettes longer than 90 minutes is not recommended except for long continuous play. The tapes used for these cassettes are very thin and tend to be stretched easily. Frequent playing and stopping of these tapes may cause them to be pulled into the cassette deck mechanism.



Maintenance

Fuse replacement

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

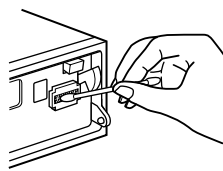


Warning

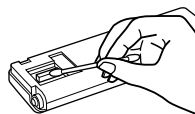
Never use a fuse with an amperage rating exceeding the one supplied with the unit as this could damage the unit.

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 **OPEN**, then detach it and clean the connectors with a cotton swab dipped in alcohol. Do not apply too much force. Otherwise, the connectors may be damaged.



Main unit

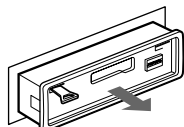
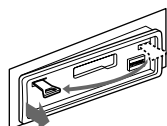
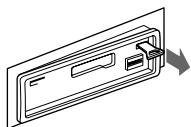
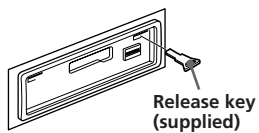


Back of the front panel

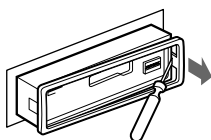
Notes

- For safety, 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.

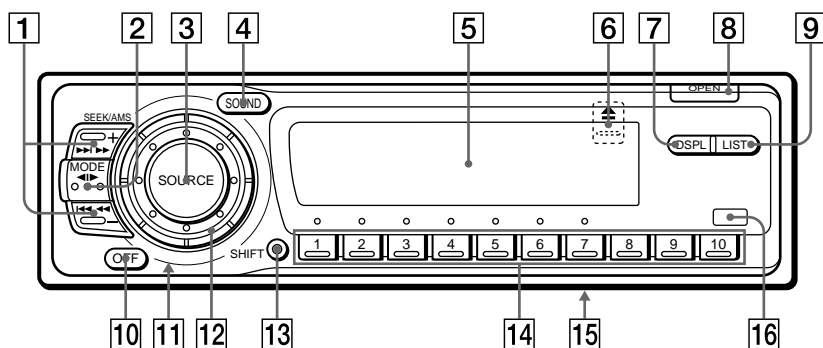
Dismounting the unit



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



Location of controls

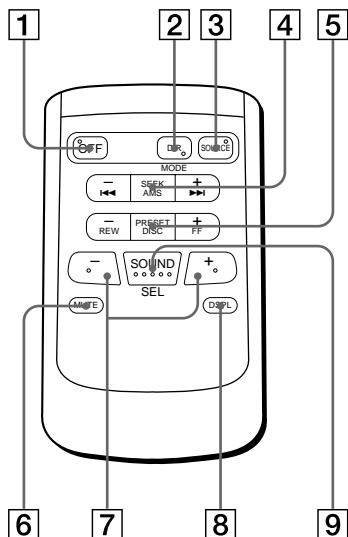


Refer to the pages for details.

EN

- 1 **SEEK/AMS** (seek/Automatic Music Sensor/manual search) button 5, 6, 7, 8, 12, 13, 15, 17
- 2 **MODE** (band select, unit select, tape transport direction) button 5, 7, 8, 12, 13, 16
- 3 **SOURCE** (source select) button 5, 7, 8, 11, 12, 13
- 4 **SOUND** button 10
- 5 **Display window**
- 6 **▲** (eject) button (located on the front of the unit hidden by the front panel) 5
- 7 **DSPL** button (display mode change) button 6, 8, 9, 12, 16
- 8 **OPEN** button 4, 5, 18
- 9 **LIST** button
Disc Memo 15
List-up 9, 15
Station Memo 8
- 10 **OFF** button 4, 5
- 11 **Reset** button (located on the front of the unit hidden by the front panel) 4
- 12 **Dial** (volume/subwoofer volume/bass/treble/left-right/front-rear) 5, 8, 15
- 13 **SHIFT** button
BTM 7
SET UP 5, 11, 12
PLAY MODE 6, 7, 12, 13, 14, 15, 16, 17
- 14 **During radio reception:**
Preset number buttons 7, 8
During CD/MD playback:
Direct disc selection buttons 12
- 15 **POWER SELECT** switch (located on the bottom of the unit)
See "POWER SELECT switch" in the Installation/Connections manual.
- 16 **Receptor** for wireless remote

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



Buttons with the same functions as those on this unit.

- | | | | |
|---|-----------------|---|--------------|
| 1 | OFF button | 7 | - + buttons |
| 2 | MODE button | 8 | DSPL button |
| 3 | SOURCE button | 9 | SOUND button |
| 4 | SEEK/AMS button | | |
- You cannot do manual search and manual tuning with the remote commander.*
- | | |
|---|--------------------|
| 5 | PRESET/DISC button |
| 6 | MUTE button |

The unit cannot be operated with the wireless remote unless (SOURCE) on the unit is pressed or a cassette is inserted to activate the unit first.

Specifications

AUDIO POWER SPECIFICATIONS

POWER OUTPUT AND TOTAL HARMONIC DISTORTION

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

Other specifications

Cassette player section

Tape track	4-track 2-channel stereo
Wow and flutter	0.08 % (WRMS)
Frequency response	30 – 20,000 Hz
Signal-to-noise ratio	

Cassette type	Dolby B NR	Dolby C NR	Dolby NR off
TYPE II, III, IV	67 dB	73 dB	61 dB
TYPE I	64 dB	70 dB	58 dB

Tuner section

FM

Tuning range	87.5 – 107.9 MHz
Antenna terminal	External antenna connector
Intermediate frequency	10.7 MHz
Usable sensitivity	8 dBf
Selectivity	75 dB at 400 kHz
Signal-to-noise ratio	65 dB (stereo), 68 dB (mono)
Harmonic distortion at 1 kHz	0.5% (stereo), 0.3% (mono)
Separation	35 dB at 1 kHz
Frequency response	30 – 15,000 Hz
Capture ratio	2 dB

AM

Tuning range	530 – 1,710 kHz
Antenna terminal	External antenna connector
Intermediate frequency	10.71 MHz/450 kHz
Sensitivity	30 μ V

Power amplifier section

Outputs	Speaker outputs (sure seal connectors)
Speaker impedance	4 – 8 ohms
Maximum power output	40 W \times 4 (at 4 ohms) 35 W \times 4 (at AM band, 4 ohms)

General

Outputs	Line outputs (3) Power antenna relay control lead Power amplifier control lead
Tone controls	Bass \pm 8 dB at 100 Hz Treble \pm 8 dB at 10 kHz
Power requirements	12 V DC car battery (negative earth)
Dimensions	Approx. 184 \times 50 \times 176 mm (w/h/d)
Mounting dimensions	Approx. 182 \times 53 \times 163 mm (w/h/d)
Mass	Approx. 1.3 kg
Supplied accessories	Parts for installation and connections (1 set) Front panel case (1) Rotary commander RM-X2S (1)
Optional accessories	Wireless remote RM-X41 (1) BUS cable (supplied with an RCA pin cord) RC-61 (1 m), RC-62 (2 m) RCA pin cord RC-63 (1 m)
Optional equipment	CD changer 10 discs: CDX-715 6 discs: CDX-T65, CDX-T62 MD changer MDX-62 Source selector XA-C30

Design and specifications are subject to change without notice.

Troubleshooting guide

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

General

Problem	Cause/Solution
No sound	<ul style="list-style-type: none">• Rotate the dial clockwise to adjust the volume.• Set the fader control to the center position for 2-speaker systems.
The contents of the memory have been erased.	<ul style="list-style-type: none">• The power cord or battery has been disconnected.• The reset button has been pressed. → Store again into the memory.
Indications do not appear in the display.	Remove the front panel and clean the connectors. See "Cleaning the connectors" (page 18) for details.
No beep tone.	The beep tone is turned off (page 11).

Tape playback

Problem	Cause/Solution
Playback sound is distorted.	Contamination of the tape head. → Clean the head.
The AMS does not operate correctly.	<ul style="list-style-type: none">• There is noise in the space between tracks.• A blank space is too short (less than four seconds).• ►► on (SEEK/AMS) is pressed immediately before the following tracks.• ◄◄ on (SEEK/AMS) is pressed immediately after the track starts.• A long pause, or a passage of low frequencies or very low sound level is treated as a blank space.

Radio reception

Problem	Cause/Solution
Preset tuning is not possible.	<ul style="list-style-type: none">• Store the correct frequency.• The broadcast is too weak.
Automatic tuning is not possible.	The broadcast is too weak. → Use manual tuning.
The "ST" indication flashes.	<ul style="list-style-type: none">• Tune in the frequency correctly.• The broadcast signal is too weak. → Set to the monaural mode (page 8).

EN

Additional Information

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

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

Display	Cause	Solution
NO Mag	The disc magazine is not inserted in the CD/MD unit.	Insert the disc magazine with discs into 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.
Error ^{*1}	A CD is dirty or inserted upside down. ^{*2}	Clean or insert the CD correctly.
	An MD cannot play because of some problem. ^{*2}	Insert another MD.
Blank ^{*1}	No tracks have been recorded on an MD. ^{*2}	Play back an MD with recorded tracks on it.
Push reset	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.
High temp	The ambient temperature is more than 50° C.	Wait until the temperature goes below 50° C.

^{*1} When an error occurs during playback of a CD or MD, the disc number of the CD or MD 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.

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