# FM/AM Compact Disc Player

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

US

### Owner's Record

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

Model No. CDX-4250 Serial No.

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



CDX-4250

## Warning

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/ TV technician for help.

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

#### CAUTION

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

### Welcome!

Thank you for purchasing the Sony Compact Disc Player. This unit lets you enjoy a variety of features.

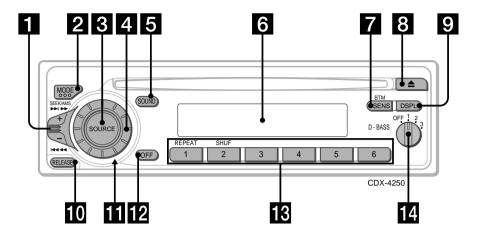
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## **Location of controls**



Refer to the pages for details.

- SEEK/AMS (seek/Automatic Music Sensor/manual search) control 7, 8
- 2 MODE (band select) button 7, 8
- 3 SOURCE (source select) button 6, 7, 8
- 4 Dial (volume/bass/treble/left-right/ front-rear control) 6, 9
- 5 SOUND button 6, 9
- 6 Display window
- SENS/BTM (sensitivity adjust/Best Tuning Memory) button 7, 8
- 9 DSPL (display mode change/time set) button 6, 8

- RELEASE (front panel release) button 5,
- Reset button (located on the front side of the unit behind the front panel) 5
- 12 OFF button 5, 6, 9
- During radio reception:
  Number buttons 8

**During CD playback:** 

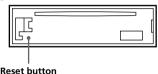
- REPEAT button 7
- SHUF button 7
- D-BASS control 9

## **Getting Started**

## Resetting the unit

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

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



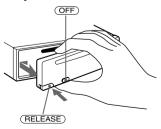
#### Notes

- Pressing the reset button will erase the clock setting and some memorized program and memory 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.

## **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), then slide the front panel a little to the left, and pull it off towards you.

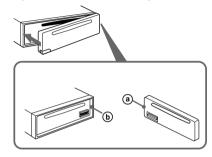


#### Notes

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

#### Attaching the front panel

Attach part ⓐ of the front panel to part ⓑ of the unit as illustrated, and push the left side into position until it clicks into position.



#### Notes

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

#### **Caution alarm**

If you turn the ignition key switch to the OFF position without removing the front panel, the caution alarm will beep for a few seconds. If you connect an optional power amplifier and do not use the built-in amplifier, the beep sound will be deactivated.

## **Setting the clock**

The clock has a 12-hour digital indication.

Example: To set the clock to 10:08

1 Press DSPL during operation.
If the POWER SELECT function is set to "ON," go to step 2. If it is set to "OFF," set to "ON" (page 9).

### 2 Press (DSPL) for two seconds.



The hour indication flashes.

### Set the hour.



To go backward

To go forward



2 Press (SOUND).



The minute indication flashes.

#### Set the minute.



To go backward

To go forward



3 Press (DSPL).



The clock starts.

#### Note

If the car has no accessory position on the ignition key switch, the clock cannot be set unless the power is turned on. Set the clock after you have turned on the radio, or started CD playback.

## **CD Player**

## Listening to a CD

#### Insert a CD.

Playback starts automatically.

Label side up



If a CD is already inserted, press <u>SOURCE</u> repeatedly until "CD" appears to start playback.



Elapsed playing time

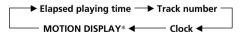
#### Note

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

То	Press
Stop playback	<b>≜</b> or <b>OFF</b>
Eject the CD	<b>_</b>

## Changing the display item

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



\* All the above items are scrolled in the display one by one in order.

### Locating a specific track

— Automatic Music Sensor (AMS)

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

To locate succeeding tracks

To locate preceding



#### Locating a specific point in a track

— Manual Search

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

To search forward



To search backward

#### Note

If " L L L L " or " っ ア っ appears in the display, you have reached the beginning or the end of the disc and you cannot go any further.

# Playing a CD in various modes

### Playing tracks repeatedly

— Repeat Play

**Press** ① **during playback**. "REP" appears in the display.

When the current track is over, it will play again from the beginning.

To return to normal playback mode, press again.

## Playing tracks in random order — Shuffle Play

**Press** ② **during playback.** "SHUF" appears in the display.

To return to normal playback mode, press again.

## **Radio**

# Memorizing stations automatically

— Best Tuning Memory (BTM)

This unit selects the stations with the strongest signals and memorizes them in the order of their frequencies. You can store up to 6 stations on each band (FM I, FM II, FM III, 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 mode changes as follows:

CD ←→ TUNER

2 Press MODE repeatedly to select the band.

Each time you press (MODE), the band changes as follows:



3 Press (SENS/BTM) for two seconds.
The unit stores stations in the order of their frequencies on the number buttons.
A beep sounds when the setting is stoned.

#### Notes

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

# Memorizing only the desired stations

You can store up to 6 stations on each band (a total of 18 for FM I, FM II, and FM III, and 6 for AM) in the order of your choice.

- 1 Press SOURCE repeatedly to select the tuner.
- 2 Press MODE repeatedly to select the band.
- 3 Push the SEEK/AMS control up or down to tune in the station that you want to store on the number button.
- 4 Press and hold the desired number button (1 to 6) until "MEM" appears. The number button indication appears in the display.

#### Note

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

# Receiving the memorized stations

- 1 Press SOURCE repeatedly to select the tuner.
- 2 Press MODE repeatedly to select the band.
- 3 Press the number button (1 to 6) on which the desired station is stored.

## If you cannot tune in a preset station

Push and release the SEEK/AMS control up or down to search for the station (automatic tuning).

Scanning stops when the unit receives a station. Push the SEEK/AMS control up or down repeatedly until the desired station is received.

#### Note

If the automatic tuning stops too frequently, press (SENS/BTM) repeatedly until "LCL" (local seek mode) is displayed. Only the stations with relatively strong signals will be tuned in.

#### Tin

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

#### If FM stereo reception is poor

— Monaural Mode

Press (SENS/BTM) repeatedly until "MONO" appears.

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

To return to normal mode, press again until "MONO" disappears.

### Changing the display item

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



\* All the above items are scrolled in the display one by one in order.

## **Other Functions**

# Adjusting the sound characteristics

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

1 Select the item you want to adjust by pressing SOUND repeatedly.

BAS (bass)  $\rightarrow$  TRE (treble)  $\rightarrow$  BAL (left-right)  $\rightarrow$  FAD (front-rear)  $\rightarrow$  VOL (volume)

## 2 Adjust the selected item by rotating the dial.

Adjust within three seconds after selecting the item. (After three seconds, the dial function reverts to volume control.)

# Turning on the clock display — Power Select Function

Only for cars with an accessory position on the ignition key switch

#### To turn the Power Select Function ON

**Press** OFF) while pressing SOUND. The Power Select Function ties the clock

display power to the accessory position on the ignition key switch.

To avoid battery wear, the clock is not displayed while the unit is initializing.

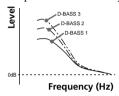
# Changing the sound and beep sound

#### **Boosting the bass sound** — D-bass

You can enjoy a clear and powerful bass sound.

The D-bass function boosts the low frequency signal with a sharper curve than conventional bass boost.

You can hear the bass line more clearly even while the vocal remains at the same volume. You can emphasize and adjust the bass sound easily with the D-BASS control. This is similar in effect to an optional subwoofer system.



#### Adjusting the bass curve

Turn the D-BASS control to adjust the bass level (1, 2, or 3).

"D-BASS" appears in the display.

To cancel, turn the control to OFF.

#### Note

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

#### Cancel the beep sound

Press 6 while pressing SOUND.

To obtain the beep sound again, press these buttons again.

#### Note

If you connect an optional power amplifier and do not use the built-in amplifier, the beep sound will be deactivated.

# 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, it will extend automatically while the unit is operating.

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

#### **Notes on handling CDs**

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



Do not stick paper or tape on the labeled surface.



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



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

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



#### Notes on moisture condensation

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

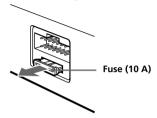
#### When you play 8 cm (3 in.) CDs

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

## Maintenance

#### **Fuse replacement**

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

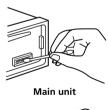


#### Warning

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

#### Cleaning the connectors

The unit may not function properly if the connectors between the unit and the front panel are not clean. In order to prevent this, 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.



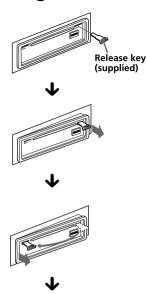


Back of the front panel

#### Notes

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

## Dismounting the unit



Pull the unit out while the release key is inserted.



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



## **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

### **CD** player section

System Compact disc digital audio

system 90 dB

Below measurable limit

Signal-to-noise ratio 90 dB Frequency response 10 – 20,000 Hz

Wow and flutter 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 87.5 – 107.9 MHz
Antenna terminal External antenna connector

Intermediate frequency Usable sensitivity 10.7 MHz 9 dBf

Selectivity 75 dB at 400 kHz Signal-to-noise ratio 65 dB (stereo), 68 dB (mono)

Harmonic distortion at 1 kHz

1.0 % (stereo), 0.7 % (mono)

Separation 35 dB at 1 kHz Frequency response 30 – 15,000 Hz

AM

Tuning range 530 - 1,710 kHz

Antenna terminal External antenna connector

Intermediate frequency 10.71 MHz/450 kHz

Sensitivity 30 µV

**Power amplifier section** 

Outputs Speaker outputs

(sure seal connectors)

Speaker impedance 4 – 8 ohms

Maximum power output 40 W × 4 (at 4 ohms)

#### General

Outputs Power antenna relay

control

Telephone ATT control lead

Tone controls Bass ±8 dB at 100 Hz

Treble ±8 dB at 10 kHz

Power requirements 12 V DC car battery (negative ground)

Dimensions Approx.  $178 \times 50 \times 185$  mm  $(7^{1}/8 \times 2 \times 7^{3}/8 \text{ in.})$ 

(w/h/d)

Mounting dimensions Approx.  $182 \times 53 \times 162 \text{ mm}$ 

 $(7^{1}/4 \times 2^{1}/8 \times 6^{1}/2 \text{ in.})$ 

(w/h/d)

Mass Approx. 1.2 kg (2 lb. 10 oz.) Supplied accessories Parts for installation and

connections (1 set) Front panel case (1)

Optional accessories Cleaning cloth XP-CD1 Compact disc single

adapter CSA-8

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.	<ul> <li>Rotate the dial in a clockwise direction to adjust the volume.</li> <li>Set the fader control to the center position for two-speaker systems.</li> </ul>		
The contents of the memory have been erased.	<ul> <li>The power cord or battery has been disconnected.</li> <li>The reset button has been pressed.</li> <li>→ Store the settings again into the memory.</li> </ul>		
Indications do not appear in the display.	Remove the front panel and clean the connectors. See "Cleaning the connectors" (page 11) for details.		
No beep sound.	<ul> <li>An optional power amplifier is connected and you are not using the built-in amplifier.</li> <li>The beep sound is cancelled (page 9).</li> </ul>		

### **CD** playback

Problem	Cause/Solution		
CD cannot be loaded.	<ul><li>Another CD is already loaded.</li><li>The CD was forcibly inserted upside down.</li></ul>		
Play does not begin.	Dirty disc.		
CD is automatically ejected.	The ambient temperature exceeds 50°C (122°F).		
CD will not eject.	Press the <b>≜</b> button for two seconds.		
The operation buttons do not function.	Press the reset button.		
The sound skips due to vibration.	<ul> <li>The unit is installed at an angle of more than 60°.</li> <li>The unit is not installed in a sturdy part of the car.</li> </ul>		

## **Radio reception**

Problem	Cause/Solution
Preset tuning is not possible.	Memorise the correct frequency.     The broadcast signal is too weak.
Automatic tuning is not possible.	The broadcast signal is too weak.  → Use manual tuning.
The "ST" indication flashes.	<ul> <li>Tune in the frequency accurately.</li> <li>The broadcast signal is too weak.</li> <li>→ Set to the MONO mode (page 8).</li> </ul>

## **Error displays**

The following indications will flash for about five seconds.

Display	Cause	Solution
E - 04	A CD is dirty or inserted upside down.	Clean or insert the CD correctly.
E - 99	The CD player cannot be operated because of some problem.	Press the reset button or <b>≜</b> .

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