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-C410 Serial No.

For installation and connections, see the supplied installation/connections manual. $% \label{eq:connection}%$



CDX-C410

© 1996 by Sony Corporation

Actual total number:

Sony CDX-C410 (E) 3-856-126-11(1)

Warning

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

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

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

CAUTION

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

Welcome!

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

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

Table of Contents

This Unit Only
Getting Started
Resetting the unit
Detaching the front panel4
Setting the clock
CD Player
Listening to a CD5
Playing a CD in various modes 6
Radio
Memorizing stations automatically
— Best Tuning Memory (BTM) 6
Memorizing only the desired stations 6
Receiving the memorized stations
Storing the station names
— Station Memo 7
Locating a station by name
— List-up 8
Other Functions
Adjusting the sound characteristics
Muting the sound
Changing the sound and display settings

With Optional Equipment

_	D/MD Changer	
	Playing a CD or MD	9
	Scanning the tracks	
	— Intro Scan	10
	Playing tracks repeatedly	
	— Repeat Play	10
	Playing tracks in random order	
	— Shuffle Play	10
	Labeling a CD	
	— Disc Memo	1:
	Locating a disc by name	
	— List-up	12
	Selecting the specific tracks for playback	
	— Bank	12

EN

Additional Information

Precautions
Maintenance
Dismounting the unit
Attaching the label to the rotary remote 14
Location of controls
Specifications
Troubleshooting guide
Index Back cover

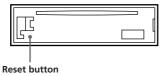
ΕN

Getting Started

Resetting the unit

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

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



Note

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

Detaching the front panel

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

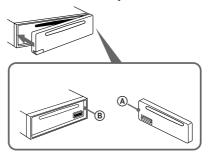
- 1 Press OFF.
- 2 Press (RELEASE) to open up the front panel. Then slide the front panel a little to the left, and pull it off towards you.



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

Attaching the front panel

Align part (a) of the front panel to part (b) of the unit as illustrated, and push until it clicks.



- Be sure not to attach the front panel upside down.
- Do not press the front panel hard against the unit when
- attaching it. Press it lightly against the unit.

 When you carry the front panel with you, put it in the supplied front panel case.
- Do not press hard or put excessive pressure on the display windows of the front panel
- Do not expose the front panel to direct sunlight, heat sources such as hot air ducts, and do not leave it in a humid place. Never leave it on the dashboard of a car parked in direct sunlight where there may be a considerable rise in temperature.

Caution alarm

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

CD Player

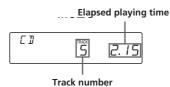
Listening to a CD

Simply insert the CD.

Playback starts automatically.



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



Note

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

То	Press
Stop playback	▲ or OFF
Eject the CD	_

Changing the displayed items

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

Track number ←→ Clock

Locating a specific track

— Automatic Music Sensor (AMS)

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



To locate succeeding tracks

To locate previous tracks

Setting the clock

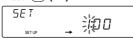
The clock has a 12-hour digital indication.

Example: Set the clock to 10:08

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



1 Press **4** (→).



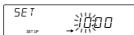
The hour digit flashes

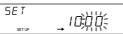
2 Set the hour.



to go forward

to go back





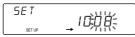
The minute digits flash.

4 Set the minute.



to go forward

to go back



2 Press SHIFT.



The clock starts.

Note

If the POWER SELECT switch on the bottom of the unit is set to the **3** position, turn the power on first, then set the clock.

ΕN

Getting Started/CD Player

Locating a specific point in a track

- Manual Search

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



To search forward

To search backward

Note

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

Playing a CD in various modes

You can play CDs in various modes:

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

1 Press SHIFT).

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



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

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

INTRO \rightarrow REP \rightarrow SHUF



3 Press ④ (→) to select "ON." Playback starts.



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

Radio

Memorizing stations automatically

— Best Tuning Memory (BTM)

The unit selects the stations with the strongest signals and memorizes them in the order of their frequencies. You can store up to 10 stations on each band (FM1, FM2 and AM).

Caution

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

- 1 Press (SOURCE) repeatedly to select the desired band (FM1, FM2 or AM).
- **2** Press (SHIFT), then press (6) (BTM). The unit stores stations in the order of their frequencies on the number buttons.

Notes

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

Memorizing only the desired stations

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

- 1 Press SOURCE repeatedly to select the desired band.
- 2 Press either side of (SEEK/AMS) to tune in the station that you want to store on the number button.
- 3 Keep the desired number button (1 to 10) pressed for two seconds until you hear a beep tone.

The number button indication appears in the display.

Note

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

ΕN

Actual total number:

Receiving the memorized stations

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

If you cannot tune in a preset station

Press either side of SEEK/AMS momentarily 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) is displayed. Then press (₄) (→) to select "ON."

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

Tip

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

If FM stereo reception is poor

- Monaural Mode
- 1 Press SHIFT, then press ③ (PLAY MODE) repeatedly until "MONO" appears.
- 2 Press ④ (→) repeatedly until "MONO-ON" appears.

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

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

Changing the displayed items

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

Storing the station names

—Station Memo

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

Storing the station names

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

- 3 Enter the characters.
 - 1 Press + to select the desired characters.

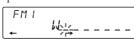
(A
$$\rightarrow$$
 B \rightarrow C \rightarrow ... Z \rightarrow 0 \rightarrow 1 \rightarrow 2 \rightarrow ... 9 \rightarrow + \rightarrow - \rightarrow * \rightarrow / \rightarrow \ \rightarrow > \rightarrow < \rightarrow ... \rightarrow _)

If you press —, the characters appear in the reverse order.

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

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

The flashing cursor moves to the next space.



If you press \bigcirc (\leftarrow), the flashing cursor moves to the left.

- 3 Repeat steps 1 and 2 to enter the entire name.
- 3 To return to the normal radio reception, press LIST for two seconds.

Tip

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

continue to next page \rightarrow

7

ΕN

CD Player/Radio

Press DSPL during radio reception.

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

➤ Station name* — ➤ Frequency — ➤ Clock

* 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 OSPL for two seconds.
- 3 Press + or to select the name that you want to erase.
- **4** Press (5) (ENTER) for two seconds. The name is erased. Repeat steps 3 and 4 if you want to erase other names.
- **5** Press LIST for two seconds. The unit returns to the normal radio reception mode.

Locating a station by name — List-up

1 Press (LIST) momentarily.

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

LST 3 WRK ISS

- 2 Press (LIST) repeatedly until you find the desired station.
- **3** Press **5** (ENTER) to tune in the desired station.

Note

8

Once the station name or frequency has been displayed for five seconds, the display goes back to its normal mode. To turn off the display, Press DSPL.

Other Functions

Adjusting the sound characteristics

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

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

VOL (volume) \rightarrow BAS (bass) \rightarrow TRE (treble) \rightarrow BAL (balance) \rightarrow FAD (fader)

2 Adjust the selected item by pressing \oplus or \bigcirc .

Adjust within three seconds after selecting. (After three seconds, the buttons work as volume control buttons.)

Muting the sound

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

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

Actual total number:

With Optional Equipment

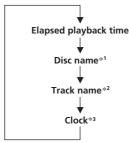
Playing a CD or MD

Press (SOURCE) until the desired changer appears. CD/MD playback starts.

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

Changing the displayed items

Each time you press OSPL during CD/MD playback, the item changes as follows:



- *1 If there is no prerecorded name for an MD, "NO
- NAME" appears in the display for about one second. *2 If the track name is not prerecorded, "NO NAME" appears in the display for one second.
- *3 If the dual information is on, clock does not appear in the display.

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

— Auto Scroll

Automatically scrolling a disc name

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

- 1 Press SHIFT, then press 2 (SET UP) repeatedly until "A.SCRL" appears.
- 2 Press ④ (→) to select "A.SCRL-ON."

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

ΕN

Radio/Other Functions/CD/MD Change

Changing the sound and display settings

You can set:

- BEEP to turn on or off the beeps.
- DIM (Dimmer) to change the brightness of the display.
- D.INFO (dual information) to display the clock and the play mode at the same time (ON) or to display the information alternately (OFF)
- •LOUD (Loudness) to enjoy bass and treble even at low volume. Bass and treble will be reinforced.
- •RM (Rotary Remote) to change the operative direction of the controls of the optional rotary remote.
 - Select "NORM" to use the rotary remote
 - as the factory preset position. Select "REV" when you mount the rotary remote on the right of the steering column.
- 1 Press SHIFT, then press 2 (SET UP).
- 2 Press ② (SET UP) repeatedly until the desired setting mode appears.

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

 $\mathsf{CLOCK} \to \mathsf{BEEP} \to \mathsf{DIM} \to \mathsf{D.INFO} \to \mathsf{LOUD} \to$

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

4 Press SHIFT).

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

Displaying the recording date of the currently selected MD

Press DSPL for two seconds during MD playback.

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

Locating a specific track

Automatic Music Sensor (AMS)

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



To locate succeeding tracks

To locate previous tracks

Locating a specific point in a track

— Manual Search

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

Scanning the tracks

— Intro Scan

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

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

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

Actual total number:

Playing tracks repeatedly

— Repeat Play

You can select:

- REP 1 to repeat a track.
- REP 2 to repeat a disc.
- REP 3 to repeat all the discs in the current changer.
- 1 During playback, press (SHIFT), then press (3) (PLAY MODE) repeatedly until "REP" appears.
- 2 Press ④ (→) repeatedly until the desired setting appears.



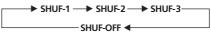
Repeat Play starts.

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

Playing tracks in random order — Shuffle Play

You can select:

- SHUF 1 to play the tracks on the current disc in a random order.
- SHUF 2 to play the tracks in the current changer in a random order.
- SHUF 3 to play all the tracks in a random order.
- 1 During playback, press <u>SHIFT</u>, then press <u>3</u> (PLAY MODE) repeatedly until "SHUF" appears.
- 2 Press ④ (→) repeatedly until the desired setting appears.



Shuffle Play starts.

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

ΕN

$\textbf{Labeling a CD} - {\tiny \texttt{Disc Memo}}$

(CD changer with custom file function)

You can label each disc with a personalized name. You can enter up to eight characters for a disc. If you label a CD, you can locate a disc by name and select the specific tracks for playback (page 12).

1 Play the CD and press LIST for two seconds.

- **2** Enter the characters.
 - 1 Press + to select the desired characters.

$$(A \rightarrow B \rightarrow C \rightarrow \cdots Z \rightarrow 0 \rightarrow 1 \rightarrow 2 \rightarrow \cdots 9 \rightarrow + \rightarrow - \rightarrow * \rightarrow / \rightarrow \backslash \rightarrow > \rightarrow < \rightarrow . \rightarrow _)$$

If you press —, the characters appear in the reverse order.

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

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

The flashing cursor moves to the next space.

If you press \bigcirc (\leftarrow), the flashing cursor moves to the left.

- 3 Repeat steps 1 and 2 to enter the entire name.
- 3 To return to the normal CD playback mode, press LIST for two seconds.

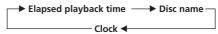
Tip

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

Displaying the disc memo

Press (DSPL) during CD playback.

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



Erasing the disc memo

- 1 Press SOURCE to select the CD changer (for example CD2 or CD3).
- 2 Press (LIST) for two seconds.
- **3** Press OSPL for two seconds.
- 4 Press \oplus or \bigcirc to select the name that you want to erase.
- **5** Press ⑤ (ENTER) for two seconds. The name is erased. Repeat steps 3 and 4 if you want to erase other names.
- **6** Press LIST for two seconds. The unit returns to the normal CD playback mode.

Locating a disc by name

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

You can use this function for the discs that have been assigned a custom name. For more information on disc names, refer to "Labeling a CD" (page 11).

1 Press LIST momentarily.
The name assigned to the disc currently playing appears in the display.

2 Press LIST repeatedly until you find the desired disc.

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

EN Notes

- Once a disc name has been displayed for five seconds, the display goes back to its normal playback mode. To turn off the display pross (DSPL)
- off the display, press (DSPL).

 The track names are not displayed during MD playback.
- If there are no discs in the magazine, "NO DISC" appears in the display.
- appears in the display.
 If a disc has not been assigned a custom file, "*******" appears in the display.
- If the disc information has not been read by the unit, "NOT READ" appears in the display. To load the disc, first press the number button, then choose the disc that has not been loaded.
- The information is displayed only in upper cases. There are also some letters which cannot be displayed (during MD playback)

Selecting the specific tracks for playback

— Bank

(CD changer with custom file function)

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

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

Bank edit mode

Actual total number:

Note

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

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

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

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

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

Notes

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

Playing the specific tracks only

You can select:

- BANK-ON to play the tracks with the "PLAY" setting.
- BANK-INV (Inverse) to play the tracks with the "SKIP" setting.

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

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

Playback starts from the track following the current one.

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

Before playing, clean the discs with an optional

cleaning cloth. Wipe each disc from the center

Do not use solvents such as benzine, thinner,

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.

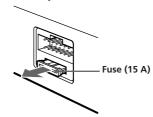
When you play 8 cm (3 in.) CDs

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

Maintenance

Fuse replacement

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



Warning

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

Precautions

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

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

Notes on handling CDs



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

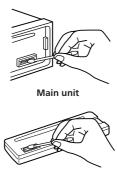


Do not stick paper or tape on the labeled surface.



Cleaning the connectors

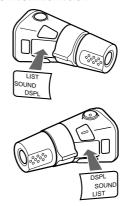
The unit may not function properly if the connectors between the unit and the front panel are not clean. To prevent this, open the front panel by pressing (RELEASE), then detach it and clean the connectors with a cotton swab dipped in alcohol. Do not apply too much force. Otherwise, the connectors may be damaged.



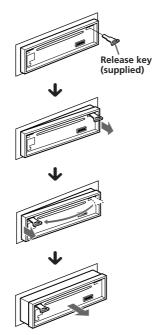
Back of the front panel

Attaching the label to the rotary remote

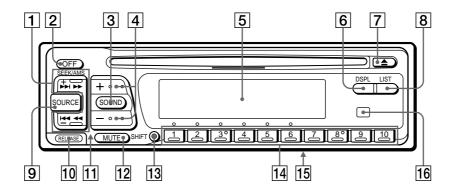
You can control this unit with the optional rotary remote (RM-X2S). Several labels are supplied with the rotary remote. Attach the label that match the functions of this unit and the mounting position of the rotary remote. After you mount the rotary remote, attach the label in the illustration below.



Dismounting the unit



Location of controls



Refer to the pages for details.

- SEEK/AMS (seek/Automatic Music Sensor/manual search) button 5, 6, 7, 10, 12
- 2 OFF button 4, 5
- 3 SOUND button 8
- 4 + (volume/sub output level/bass/ treble/balance/fader control) buttons 5, 8, 11
- 5 Display window
- 6 DSPL button (display mode change) button 5, 7, 8, 9, 10, 11
- 8 LIST button

Disc Memo 11

List-up **8, 12**

Station Memo 7,8

- 9 SOURCE (source select) button 5, 6, 7, 9,
- 10 RELEASE (front panel release) button 4,

- Reset button (located on the front side of the unit hidden by the front panel) 4
- 12 MUTE button 8
- 13 SHIFT button

BTM 6

PLAY MODE 6, 7, 10, 12

SET UP 5, 9

14 During radio reception: Number buttons 6, 7

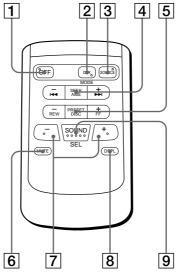
> During CD/MD playback: Direct disc selection buttons 10

POWER SELECT switch (located on the bottom of the unit)

See "POWER SELECT Switch" in the installation/Connections manual.

16 Receptor for the optional wireless remote

Optional wireless remote (RM-X41)



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

1 OFF button

ΕN

2 DIR button

DIR does not work with this unit.

- 3 SOURCE button
- 4 SEEK/AMS button
- 5 PRESET/DISC button

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

- 6 MUTE button
- 7 + buttons
- 8 DSPL button
- 9 SOUND button

When the POWER SELECT switch is set to the ⑤ position, the unit cannot be operated with the wireless remote unless ⑤OURCE) on the unit is pressed or a CD is inserted to activate the unit first.

Approx. 1.5 kg (3 lb.

Front panel case (1)

RC-65 (5 m)

Parts for installation and connections (1 set)

Rotary remote RM-X2S Wireless remote RM-X41 BUS cable (supplied with an RCA pin cord) RC-61 (1 m), RC-62 (2 m) RCA pin cord RC-63 (1 m), RC-64 (2 m),

Cleaning cloth XP-CD1 Compact disc single adapter CSA-8 CD changer CDX-71 (10 discs),

CDX-72 (10 discs), CDX-81 (10 discs), CDX-91 (10 discs), CDX-T60 (6 discs), CDX-T62 (6 discs)

4.9 oz.)

Specifications

AUDIO POWER SPECIFICATIONS

POWER OUTPUT AND TOTAL HARMONIC DISTORTION 15 watts per channel minimum continuous average power into 4 ohms, 4 channels driven from 20 Hz to 20 kHz with no more than 1 % total harmonic distortion.

Other specifications CD player section

CD player section		General		
	System	Compact disc digital audio system	Output lead	Power antenna relay control lead
	Signal-to-noise ratio	90 dB		Power amplifier control
	Frequency response	10 – 20,000 Hz		lead
	Wow and flutter	Below measurable limit	Tone controls	Bass ±8 dB at 100 Hz
	Laser Diode Properties			Treble ±8 dB at 10 kHz
	Material	GaAlAs	Power requirements	12 V DC car battery
	Wavelength	780 nm		(negative ground)
	Emission Duration	Continuous	Dimensions	Approx. $188 \times 58 \times 177$ mm
	Laser output power	Less than 44.6 μW*		$(7^{1}/_{2} \times 2^{3}/_{8} \times 7 \text{ in.})$
* This output is the value measured at a distance of 200 mm from the objective lens surface on the Optical			(w/h/d)	
		Mounting dimensions	Approx. $178 \times 50 \times 154 \text{ mm}$	
	Pick-up Block.	c ichs surface on the Optical		$(7^{1}/8 \times 2 \times 6^{1}/8 \text{ in.})$
	I LER UP DIOCK.			(ruz /b /d)

Mass

Supplied accessories

Optional accessories

Optional equipment

Tuner section

FM		
Tuning range	87.5 – 107.9 MHz	
Antenna terminal	External antenna connector	
Intermediate frequency	10.7 MHz	
Usable sensitivity	8 dBf	
Selectivity	75 dB at 400 kHz	
Signal-to-noise ratio	62 dB (stereo),	
	65 dB (mono)	
Harmonic distortion at 1 kHz		
	0.9 % (stereo),	
	0.5 % (mono)	
Separation	33 dB at 1 kHz	
Frequency response	30 – 15,000 Hz	
Capture ratio	2 dB	

AM

530 – 1,710 kHz
External antenna connecto
10.71 MHz/450 kHz
30 μV

Power amplifier section

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

MD changer MDX-40, MDX-60 Source selector XA-U20, etc.

Design and specifications are subject to change without notice.

EN

Troubleshooting guide

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

General

Problem	Cause/Solution	
No sound.	 Adjust the volume with (+). Set the fader control to the center position for two-speaker systems. 	
The contents of the memory have been erased.	 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 14) for details.	

CD/MD playback

Problem	 Cause/Solution Another CD is already loaded. The CD is forcibly inserted upside down or in the wrong way (MD). 	
A disc cannot be loaded.		
Play does not begin.	Defective MD or dusty CD.	
A disc is automatically ejected. The ambient temperature exceeds 50°C (122°F).		
The operation buttons do not function.	Press the reset button.	
The sound skips due to vibration. • The unit is installed at an angle of more than 20°. • 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. The broadcast signal is too weak.
Automatic tuning is not possible.	The broadcast signal is too weak. → Use manual tuning.
The "ST" indication flashes.	 Tune in the frequency correctly. The broadcast signal is too weak. → Set to the MONO mode (page 7).

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

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

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

 $^{^{*1}}$ 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

Index

```
M, N, O
 Automatic Music Sensor (AMS) 5, 10
                                                             Manual search 6, 10
                                                             Manual tuning 7
MD playback 9
 Automatic tuning 7
 Auto Scroll 9
                                                             Memorizing a station 6
В
                                                             Monaural mode 7
                                                             Mute 8
 Balance 8
 Bass 8
                                                            P, Q
 Bank Play 12
Beep tone 9
                                                             PLAY MODE
                                                                BANK 12
INTRO 6, 10
LOCAL 7
 Best Tuning Memory (BTM) 6
C
                                                                MONO 7
REP 6, 10
SHUF 6, 10
 Caution alarm 4
 CD playback 5,9
                                                            R
D, E
                                                             Radio 6
 Direct disc selection 10
                                                             Repeat Play 6, 9
 Disc Memo 11
                                                             Reset 4
Disc Scan 10
Display 5, 8, 9
Dual information 9
                                                             Rotary remote 9, 14
                                                             SET UP
F, G, H
                                                                A.SCRL 9
                                                                BEEP 9
 Fader 8
                                                                CLOCK 5
DIM 9
Front panel 4
Fuse 13
                                                                D.INFO 9
                                                             LOUD 9
RM 9
Shuffle Play 6, 10
I, J, K
 Intro Scan 6, 10
                                                             Station Memo 7
L
                                                            T, U
List-up 8, 12
Local seek 7
                                                             Treble 8
 Locating a disc 10, 12
    a specific point 6, 10
a specific track 5, 10
                                                             Volume 8
a station 8
Loudness 9
                                                            W, X, Y, Z
```

Sony Corporation Printed in Japan

Wireless remote 16