Specifications

AUDIO POWER SPECIFICATIONS

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

CD player section

Signal-to-noise ratio	90 dB
Frequency response	10 – 20,000 Hz
Wow and flutter	Below measurable limit
Laser Diode Properties	
Material	GaAlAs
Wavelength	780 nm
Emission Duration	Continuous
Laser output power	Less than 44.6 µW*

* This output is the value measured at a distance of 200 mm from the objective lens surface on the Optical Pick-up Block.

Tuner section

FM

Tuning range	87.5 – 107.9 MHz
Antenna terminal	External antenna connector
Intermediate frequency	10.7 MHz
Usable sensitivity	11 dBf
Selectivity	75 dB at 400 kHz
Signal-to-noise ratio	65 dB (stereo), 68 dB (mono)
Harmonic distortion at 1 kHz	0.7 % (stereo), 0.5 % (mono)
Separation	33 dB at 1 kHz
Frequency response	30 – 15,000 Hz

AM

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

Power amplifier section

Outputs	Speaker outputs (sure seal connectors)
Speaker impedance	4 – 8 ohms
Maximum power output	50 W × 4 (at 4 ohms)

General

Outputs	Audio output Power amplifier control Power antenna relay control
Tone controls	Bass ±10 dB at 20 Hz Treble ±10 dB at 20 kHz
Power requirements	12 V DC car battery (negative earth)
Dimensions	Approx. 178 × 50 × 176 mm (7 $^1/_8$ × 2 × 7 in.) (w/h/d)
Mounting dimensions	Approx. 182 × 53 × 161 mm (7 $^1/_4$ × 2 $^1/_8$ × 6 $^3/_8$ in.) (w/h/d)
Mass	Approx. 1.2 kg (2 lb. 10 oz.)
Supplied accessory	Parts for installation and connections (1 set) Front panel case (1) Card remote commander RM-X115

Design and specifications are subject to change without notice.

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.

RESET button

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

Detaching the front panel

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

Caution alarm

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

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

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

2 **Press** (RELEASE), then pull it off towards you.

OFF

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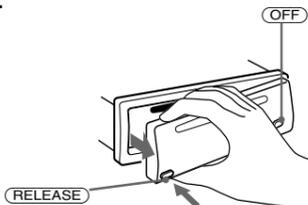
Notes
- *If you detach the panel while the unit is still turned on, the power will turn off automatically to prevent the speakers from being damaged.*
- *Do not drop or put excessive pressure on the front panel and its display window.*
- *Do not subject the front panel to heat/high temperature or moisture.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

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

Attaching the front panel

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

Note
Do not put anything on the inner surface of the front panel.

Setting the clock

The clock uses a 12-hour digital indication.

Example: To set the clock to 10:08

1 **Press** (DSPL) for 2 seconds.
The hour indication flashes.

❶ Press either side of the volume +/– button to set the hour.

❷ Press (SEL).
The minute indication flashes.

❸ Press either side of the volume +/– button to set the minute.

2 **Press** (DSPL).

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

SONY

FM/AM
Compact Disc
Player

Operating Instructions

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-L350 Serial No. _____

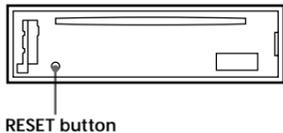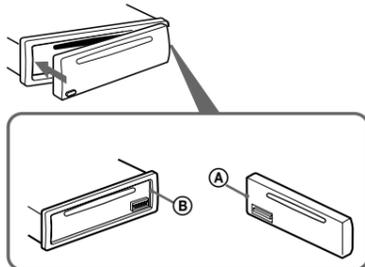For installation and connections, see the supplied installation/connections manual.

CDX-L350

Warning

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:
— Reorient or relocate the receiving antenna.
— Increase the separation between the equipment and receiver.
— Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
— Consult the dealer or an experienced radio/ TV technician for help.

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

CAUTION

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

Welcome **!**

Thank you for purchasing this Sony Compact Disc Player. You can enjoy its various features even more with:

- **Supplied controller accessory**
  Card remote commander RM-X115

Precautions

• If your car was parked in direct sunlight, allow the unit to cool off before operating it.
• Power antennas will extend automatically while the unit is operating.

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

Moisture condensation

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

To maintain high sound quality

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

Notes on discs

• To keep the disc clean, do not touch the surface. Handle the disc by its edge.
• Keep your discs in their cases or disc magazines when not in use. Do not subject the discs to heat/high temperature. Avoid leaving them in parked cars or on dashboards/rear trays.
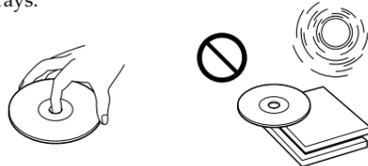
• Do not attach labels, or use discs with sticky ink/residue. Such discs may stop spinning when used, causing a malfunction, or may ruin the disc.
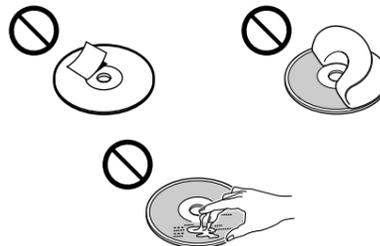
• Discs with special shapes (heart-shaped discs, octagonal discs, etc.) cannot be played on this unit. Attempting to do so may damage the unit. Do not use such discs.
• You cannot play 8cm (3in.) CDs.
• Before playing, clean the discs with a commercially available cleaning cloth. Wipe each disc from the center out. Do not use solvents such as benzine, thinner, commercially available cleaners, or antistatic spray intended for analog discs.

Notes on CD-R discs

• You can play CD-Rs (recordable CDs) designed for audio use on this unit. Look for this mark to distinguish CD-Rs for audio use.

This mark denotes that a disc is not for audio use.

• Some CD-Rs (depending on the equipment used for its recording or the condition of the disc) may not play on this unit.
• You cannot play a CD-R that is not finalized*.
* *A process necessary for a recorded CD-R disc to be played on the audio CD player.*

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.

Fuse (10 A)
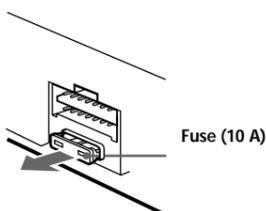
Warning

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.
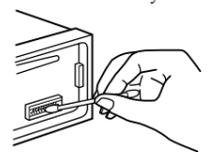
Main unit
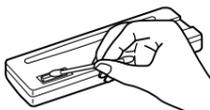
Back of the front panel

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

Replacing the lithium battery

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

+ side up
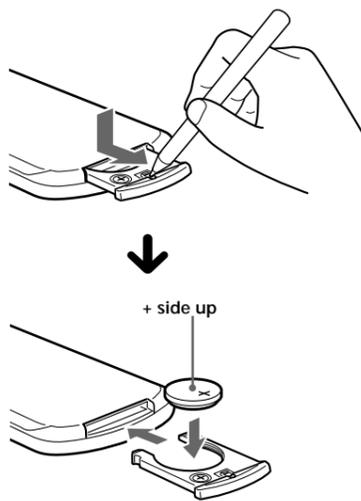
Notes on lithium battery

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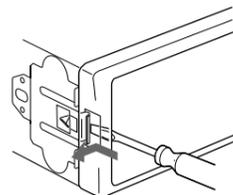• Do not hold the battery with metallic tweezers, otherwise a short-circuit may occur.

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

Removing the unit

1 **Remove the front cover**
  ❶ **Detach the front panel.**

  ❷ **Press the clip inside the front cover with a thin screwdriver.**

  ❸ **Repeat step ❷ for the other side.**

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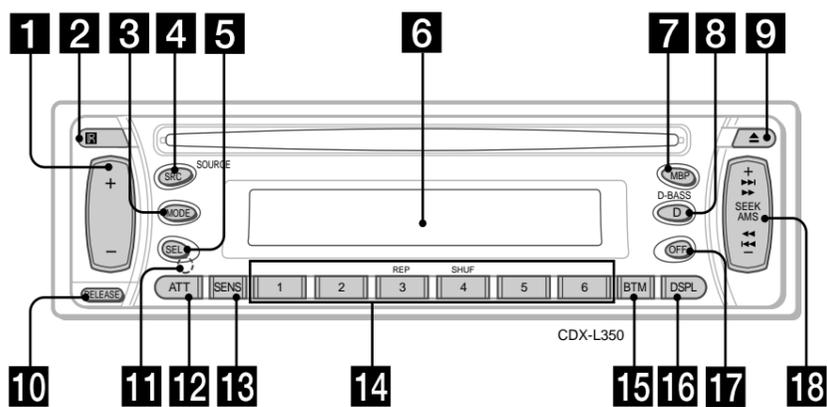 ❶ **Use a thin screwdriver to push in the clip on the left side of the unit, then pull out the left side of the unit until the catch clears the mounting.**

  4 mm
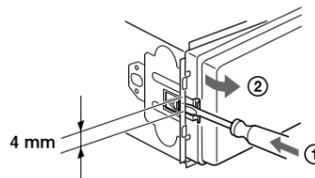
  ❷ **Repeat step ❶ for the right side.**

  ❸ **Slide the unit out of its mounting.**

Location of controls

Refer to the pages listed for details.

CDX-L350

1 Volume +/– button
2 Receptor for the card remote commander
3 MODE button
4 SRC (SOURCE) (TUNER/CD) button
5 SEL (select) button
6 Display window
7 MBP (My Best sound Position) button
8 D (D-BASS) button
9 ▲ (eject) button
10 RELEASE (front panel release) button

11 RESET button (located on the front side of the unit, behind the front panel)
12 ATT (attenuate) button
13 SENS button
14 Number buttons
    3 REP
    4 SHUF
15 BTM (Best Tuning Memory) button
16 DSPL (display mode change) button
17 OFF button*
18 SEEK/AMS +/– button

* **Warning when installing in a car without an ACC (accessory) position on the ignition key switch**
Be sure to press (OFF) on the unit for 2 seconds to turn off the clock display after turning off the engine.
Otherwise, the clock display does not turn off and this causes battery drain.
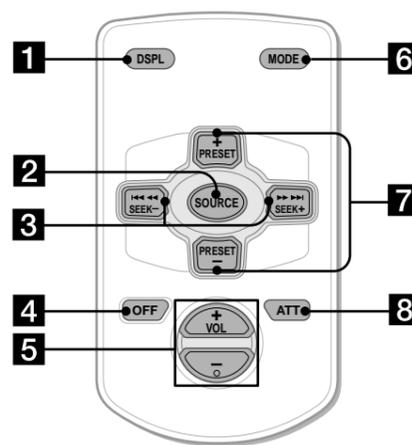
The corresponding buttons of the card remote commander control the same functions as those on this unit.

1 DSPL button
2 SOURCE button
3 SEEK (←/→) buttons
4 OFF button
5 VOL (+/–) buttons
6 MODE button
7 PRESET (+/–) buttons
8 ATT button

Note
If the unit is turned off by pressing (OFF) for 2 seconds, it cannot be operated with the card remote commander unless (SOURCE) on the unit is pressed, or a disc is inserted to activate the unit first.

Tip
Refer to "Replacing the lithium battery" for details on how to replace the batteries.

Radio

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

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

Storing stations automatically
— Best Tuning Memory (BTM)

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

1 Press (SRC) repeatedly to select the radio.

2 Press (MODE) repeatedly to select the band.

3 Press (BTM) for 2 seconds.
The unit stores stations in the order of their frequencies on the number buttons. A beep sounds when the setting is stored.

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

CD Player

Playing a disc

Insert the disc (labeled side up).

Playback starts automatically.

If a disc is already inserted, press (SRC) repeatedly until "CD" appears to start playback.
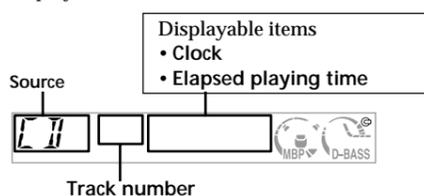
To	Press
Stop playback	▲ or (OFF)
Eject the disc	▲
Skip tracks – Automatic	(SEEK/AMS) (I◄◄/►►I) [once for each track] Music Sensor
Fast-forward/ reverse – Manual Search	(SEEK/AMS) (◄◄/►►) [hold to desired point]

Note
When the last track on the disc is over, playback restarts from the first track of the disc.

Display items

When the disc/track changes, any prerecorded title of the new disc/track is automatically displayed.

Displayable items
• Clock
• Elapsed playing time

Source

Track number

To	Press
Switch display item	(DSPL)

Playing tracks repeatedly
— Repeat Play

The current track will repeat itself when it reaches the end.

During playback, press 3 (REP) repeatedly until "REP" indicator appears in the display.
Repeat Play starts.

To return to normal play mode, press 3 (REP) again.

Playing tracks in random order — Shuffle Play

You can select to play the tracks on the current disc in random order.

During playback, press 4 (SHUF) repeatedly until "SHUF" indicator appears in the display.
Shuffle Play starts.

To return to normal play mode, press 4 (SHUF) again.

Other Functions

Adjusting the sound characteristics

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

1 **Select the item you want to adjust by pressing (SEL) repeatedly.**
Each time you press (SEL), the item changes as follows:

BAS (bass) → TRE (treble) → BAL (left-right) → FAD (front-rear)

2 **Adjust the selected item by pressing either side of the volume +/– button.**

Note
Adjust within 3 seconds after selecting the item.

Quickly attenuating the sound

Press (ATT).
The "ATT" indicator appears in the display.

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

Canceling the beep sound

Press 6 while pressing (SEL) down.

To activate 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.

Storing only the desired stations

You can manually preset the desired stations on any chosen number button.

1 Press (SRC) repeatedly to select the radio.

2 Press (MODE) repeatedly to select the band.

3 Press either side of (SEEK/AMS) to tune in the station that you want to store.

4 Press 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 stored stations

1 Press (SRC) repeatedly to select the radio.

2 Press (MODE) repeatedly to select the band.

3 Press the number button (① to ⑥) on which the desired station is stored.

If preset tuning does not work
— Automatic tuning/ Local Seek Mode

Automatic tuning:

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

Local Seek Mode:

If the automatic tuning stops too frequently, press (SENS) repeatedly until "LCL" indicator appears.

"LCL" indicator is displayed.

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 either side of (SEEK/AMS) until the desired frequency appears (manual tuning).

If FM stereo reception is poor
— Monaural Mode

During radio reception, press (SENS) repeatedly until "MONO" indicator appears.

"MONO" indicator is displayed.

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

To return to normal, press (SENS) again.

Troubleshooting

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

General

No sound.
• Adjust the volume with volume + button.
• Cancel the ATT function.
• Set the fader control to the center position for a 2-speaker system.

The contents of the memory have been erased.
• The RESET button has been pressed.
→ Store again into the memory.
• The power cord or battery has been disconnected.
• The power connecting cord is not connected properly.

No beep sound.
• An optional power amplifier is connected and you are not using the built-in amplifier.
• The beep sound is canceled.

Indications disappear from/do not appear in the display.
• The clock display disappears if you press (OFF) for 2 seconds.
→ Press (OFF) again for 2 seconds to display the clock.
• Remove the front panel and clean the connectors. See "Cleaning the connectors" for details.

Stored stations and correct time are erased.
The fuse has blown.
Makes noise when the ignition key is in the ON, ACC, or OFF position.
The leads are not matched correctly with the car's accessory power connector.

No power is being supplied to the unit.
• Check the connection. If everything is in order, check the fuse.
• The car does not have an ACC position.
→ Press (SRC) (or insert a disc) to turn on the unit.

The power is continuously supplied to the unit.
The car does not have an ACC position.

The power antenna does not extend.
The power antenna does not have a relay box.

CD playback

A disc cannot be loaded.
• Another CD is already loaded.
• The CD is forcibly inserted upside down or in the wrong way.

Playback does not begin.
• Dirty or defective disc.
• CD-R that is not finalized.
• You tried to playback a CD-R not designed for audio use.
• Some CD-Rs may not play due to its recording equipment or the disc condition.

A disc is automatically ejected.
The ambient temperature exceeds 50°C.

CD will not be ejected.
The operation buttons do not function.
Press the reset button.

The sound skips from vibration.
• The unit is installed at an angle of more than 60°.
• The unit is not installed in a sturdy part of the car.

The sound skips.
Dirty or defective disc.

Radio reception

Preset tuning is not possible.
• Store the correct frequency in the memory.
• The broadcast signal is too weak.

The stations cannot be received.
The sound is hampered by noises.
• Connect a power antenna control lead (blue) or accessory power supply lead (red) to the power supply lead of a car's antenna booster. (Only when your car has built-in FM/AM antenna in the rear/side glass.)
• Check the connection of the car antenna.
• The auto antenna will not go up.
→ Check the connection of the power antenna control lead.
• Check the frequency.

Automatic tuning is not possible.
• The local seek mode is set to "ON."
→ Set the local seek mode to "OFF".
• The broadcast signal is too weak.
→ Perform manual tuning.

The "ST" indication flashes.
• Tune in the frequency accurately.
• The broadcast signal is too weak.
→ Set to the monaural reception mode.

Selecting the sound position
— My Best sound Position (MBP)

When you drive without passengers, you can enjoy the most comfortable sound environment with "My Best sound Position."
"My Best sound Position" has two presets, which adjust the sound level of balance and fader. You can select one very easily with the MBP button.

Display window	Balance Level		Fader Level	
	Right	Left	Front	Rear
MBP-A	– 4dB	0	0	– 4dB
MBP-B	0	– 4dB	0	– 4dB
MBP-OFF	0	0	0	0

Press (MBP) repeatedly for the desired listening position.
The mode of "My Best sound Position" is shown in the display in order of the table.
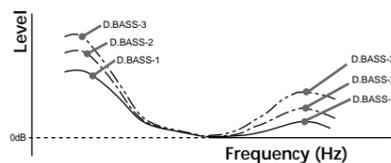

If you want to adjust the sound level of balance and fader more precisely, you can do it using the (SEL) button.

Notes
• When the BAL (balance) or FAD (fader) in "Adjusting the sound characteristics" is adjusted. the MBP setting returns OFF.
• When MBP is set to OFF, the BAL and FAD setting is activated.

Boosting the bass sound
— D-bass

You can enjoy a clear and powerful bass sound. The D-bass function boosts the low frequency signal and high frequency signal with a sharper curve than conventional bass boost.
You can hear the bass line more clearly even while the vocal volume remains the same. You can emphasize and adjust the bass sound easily with (D) (D-BASS) button.

Adjusting the bass curve

Press (D) (D-BASS) repeatedly to select the desired bass curve.
As the D-BASS number increases so does the effect.

Note
The bass sound may distort at same volume. If the bass sound distorts, select less effective bass curve.

A program broadcast in stereo is heard in monaural.
The unit is in monaural reception mode.
→ Cancel monaural reception mode.

Error displays

Error displays

The following indications will flash for a while.

E-04
A CD is dirty or inserted upside down.
→ Clean or insert the CD correctly.

E-99
The CD unit cannot be operated because of some problem.
→ Press the RESET button on the unit.

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