

SONY[®]

3-858-377-11 (2)

FM/AM Cassette Car Stereo

Operating Instructions _____

EN

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

XR-1947

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Actual total number:

Sony XR-1947 (E) 3-858-377-11 (2)

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Welcome!

Thank you for purchasing the Sony Cassette Car Stereo. This unit lets you enjoy a variety of features.

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Getting Started

Setting the clock

The clock has a 12-hour digital indication.

Note

Turn the power on first, then set the clock.
To turn the power on, press (TUNER).

Example : Set the clock to 10:08

- 1 **Display the time.**
press (DSPL) during operation.
- 2 Press (DSPL) for two seconds.



The hour digit flashes.

- 1 Set the hour.

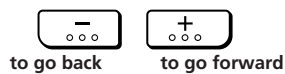


- 2 Press (SEL) momentarily.

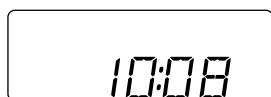


The minute digits flash.

- 3 Set the minute.



- 3 Press (DSPL) momentarily.



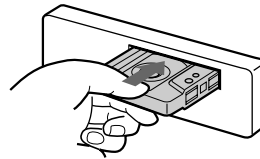
The clock starts.

4

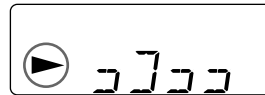
Cassette Player

Listening to the tape

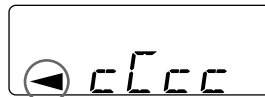
Insert the cassette.



Playback will start automatically.



The side facing up is being played.



The side facing down is being played.

Tip

To change the tape transport direction, press both ◀◀ and ▶▶ at the same time.

To eject the cassette, press ▲.

Fast-winding the tape

Direction indicator	Fast-forward	Rewind
▶	▶▶	◀◀
◀	◀◀	▶▶

To resume playback, press the other fast-winding button partially until the locked button is released.

Tip

◀ and ▶ flashes while fast-winding the tape.

Changing the displayed items

Each time you press **(DSPL)** momentarily during tape playback, the displayed item changes as follows:

Tape playback ↔ Clock

Radio

Memorizing stations automatically

— Automatic Memory

The unit selects the stations with clearest reception and memorises them. You can store up to 6 stations on each band (FM1, FM2, FM3, AM1 and AM2).

Caution

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

- 1 Press **(TUNER)** repeatedly to select the desired band (FM1, FM2, FM3, AM1 and AM2).
- 2 Press **(A.MEM/M.SCAN)** for two seconds. The unit stores stations on the number buttons.

Notes

- The unit will not store stations with weak signals. If there are only a few stations that you can receive, the stations stored before will remain on the other number buttons.
- When a preset number is indicated in the display, the unit starts storing stations from the one currently displayed.

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Getting Started/Cassette Player/Radio

Memorizing only the desired stations

You can store up to 6 stations on each band (18 for FM1, FM2 and FM3, 12 for AM1 and AM2) in order of your choice.

- 1 Press **TUNER** repeatedly to select the desired band.
- 2 Press either side of **SEEK/MANU** to tune in the station that you want to store on the number button.
- 3 Keep the desired number button (1 to 6) pressed for two seconds until you hear a beep tones.

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 **TUNER** repeatedly to select the desired band.
- 2 Press the number button (1 to 6) momentarily where the desired station is stored.

Tip

Press **A.MEM/M.SCAN** momentarily to receive in order the stations stored in the memory (Memory scan Function).

If you cannot tune in a preset station

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

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

Note

If the automatic tuning stops too frequently, press **LOUD/SENS** momentarily until "LCL" (local seek mode) appears in the display. Only the stations with relatively strong signals will be tuned on.

Tip

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

If FM stereo reception is poor

— Monaural mode

Press **LOUD/SENS** momentarily until "MONO" appears.

The sound improves, but it will become monaural ("STEREO" disappears).

Changing the displayed items

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

Frequency ↔ Clock

Other Functions

Adjusting the sound characteristics

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

1 Select the item you want to adjust by pressing (SEL) repeatedly.

To adjust bass or treble, press (SEL) repeatedly until "BAS" or "TRE" flashes.

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

2 Adjust the selected item by pressing (+) or (-).

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

Changing the sound and display settings

Enjoying bass and treble even at low volume — Loudness

Bass and treble will be reinforced.

Press (LOUD/SENS) for two seconds. "LOUD" appears.

To cancel, press (LOUD/SENS) for two seconds again.

Turn off the beeps

Press (6) while pressing (SEL).

To obtain the beeps again, press these buttons again.

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 2-speaker system, set the fader control to the center position.
- When the tape is played back for a long period, the cassette shell may become warm because of the built-in power amplifier. However, this is not a sign of a malfunction.

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 cannot remove sugar from the tape heads.



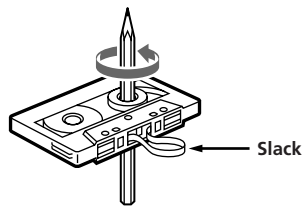
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Radio/Other Functions/Additional Information

Notes on Cassettes

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.



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- 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.

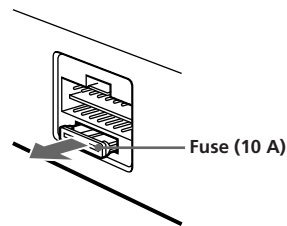


Maintenance

Fuse Replacement

When replacing the fuse, be sure to use one matching the amperage rating stated 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.

Replace the fuse on the rear of the unit.



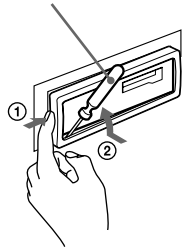
Warning

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

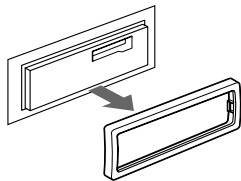
Dismounting the unit

- 1 While pushing in on the left side of the front cover, insert the tip of a thin screwdriver as shown in the illustration, then pry off the front cover.

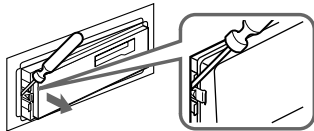
Thin screwdriver
(Be careful to not break the front cover.)



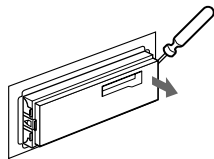
- 2 Repeat step 1 on the right side. Then the front cover will be removed.



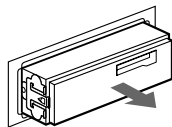
- 3 Use a thin screwdriver to push in the clip on the left side of the unit, then pull out the left side of the unit until the catch clears the mounting.



- 4 Repeat step 3 on the right side.



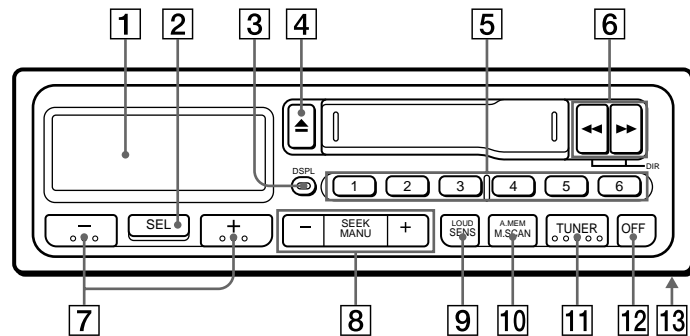
- 5 Slide the unit out of the mounting.



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Additional Information

Location of controls



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Refer to the pages for further details.

- 1 Display window
- 2 SEL (control mode select) button 4, 7
- 3 DSPL (display mode change/time set) button 4, 5, 6, 7
- 4 ▲ (eject) button 4
- 5 During radio reception:
Preset number buttons 6
- 6 ◀▶ (fast winding)/DIR (tape transport direction change) buttons 4
- 7 (+) (-) (volume/bass/treble/balance/fader control) button 7
- 8 SEEK/MANU button 6
- 9 LOUD (loudness)/SENS (sensitivity adjust) button 6, 7
- 10 A.MEM (automatic memory)/M.SCAN (Memory scan) 5, 6
- 11 TUNER (radio on/band select) button 5, 6
- 12 OFF button
- 13 Frequency select switch (located on the bottom of the unit)
See "Frequency select switch" in the Installation/Connections manual.

Specifications

Cassette player section

Tape track	4-track 2-channel stereo
Wow and flutter	0.13 % (WRMS)
Frequency response	50 – 15,000 Hz
Signal-to-noise ratio	52 dB

Tuner section

FM

Tuning range	FM tuning interval: 50 kHz/200 kHz switchable 87.5 – 108.0 MHz (at 50 kHz step) 87.5 – 107.9 MHz (at 200 kHz step)
Antenna terminal	External antenna connector
Intermediate frequency	10.7 MHz
Usable sensitivity	12 dBf
Selectivity	75 dB at 400 kHz
Signal-to-noise ratio	60 dB (stereo), 65 dB (mono)
Harmonic distortion at 1 kHz	0.5 % (stereo), 0.3 % (mono)
Separation	28 dB at 1 kHz
Frequency response	30 – 15,000 Hz
Capture ratio	2 dB

AM

Tuning range	AM tuning interval: 9 kHz/10 kHz switchable 531 – 1,602 kHz (at 9kHz step) 530 – 1,710 kHz (at 10 kHz step)
Antenna terminal	External antenna connector
Intermediate frequency	450 kHz
Sensitivity	30 μ V

Power amplifier section

Outputs	Speaker outputs (sure seal connectors)
Speaker impedance	4 – 8 ohms
Maximum power output	25 W \times 4 (at 4 ohms)

General

Outputs	Power amplifier control/ Power antenna relay 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 ground)
Dimensions	Approx. 178 \times 50 \times 176 mm (w/h/d) not incl. projecting parts and controls
Mounting dimension	Approx. 182 \times 53 \times 160 mm (w/h/d) not incl. projecting parts and controls
Mass	Approx. 1.3 kg
Supplied accessories	Parts for installation and connections (1 set)

Design and specifications are subject to change without notice.

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Additional Information

Troubleshooting guide

The following check help you remedy most 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	<ul style="list-style-type: none">• Adjust the volume with (+).• Set the fader control to the center position on the 2-speaker system.

Tape playback

Problem	Cause/Solution
Playback sound is distorted.	Contamination of the tape head. → Clean the head.

Radio reception

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

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