3-856-035-**11** (1)

SONY®

FM/MW/LW Cassette Car Stereo

Operating Instructions ______EN

XR-3208MK2

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Actual total number: Sony XR-3208MK2 (E) 3-856-035-11 (1)

Features

General

- **Detachable-front panel** enables you to take the front panel away with you when you leave your car (page 4).
- Caution alarm will be activated if you turn off the ignition key without removing the front panel from the unit.
 Built-in power amplifier (max. output:
- Built-in power amplifier (max. output 15 W × 4 ch) enables you to enjoy a 4-speaker system.
- Digital 24-hour clock provided (page 5).

Tuner section

- Up to 30 stations can be preset: 18 stations on FM, 6 stations each of MW and LW.
- Automatic Memory function stores a total of 30 stations in memory quickly and easily (page 7).

Precautions

- If your car is 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.
- If your car is equipped with a power antenna, note that it will be automatically extended 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 TOYOTA dealer.

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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 of the recorded tape could occur.
- Do not expose cassettes to direct sunlight, extremely cold temperatures, or moisture.
- When the tape is played back for a long period, the cassette shell may become warm because of the built-in power amplifier. This is not a sign of a malfunction.

Notes on Cassette Deck Tape Heads

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

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.

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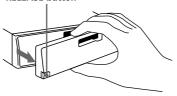
Detaching and Attaching the Front Panel

The front panel of this unit can be detached in order to prevent the unit from being stolen.

Detaching the Front Panel

Before detaching the front panel, be sure to press the FF button first. Then press the RELEASE button to open up the front panel and detach the panel by pulling it towards you as illustrated.

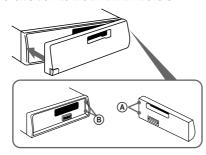




Be sure not to drop the panel after detaching it from the unit.

Attaching the Front Panel

Apply the right side of the front panel to the unit by attaching part (a) of the front panel to part (b) of the unit as illustrated, then swing the left side into the unit until it clicks.



Notes

- Make sure that the front panel is the right way up when attaching it to the unit as it cannot be attached upside
 dozum.
- Do not press the front panel hard against the unit when attaching it to the unit. It can easily be attached by pressing 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 give excessive pressure to the display windows of the front panel.
 Before removing the front panel, be sure to turn the
- Before removing the front panel, be sure to turn the power off. However, if you press the RELEASE button to detach the panel while the unit is still turned on, the power will be automatically turned off in order to protect the speakers from being damaged.

 Do not expose the front panel to direct sunlight, heat sources such as hot air ducts or leave it in a humid place. Never leave it on the dashboard etc. of a car parked in direct sunlight where there may be a considerable rise in temperature inside the car.

Caution alarm

If you turn the ignition key to the OFF position without removing the front panel, the caution alarm will be activated and a beep tone will be heard for a few seconds.

Setting the Clock

The clock has a 24-hour digital indication.

For example, setting it to 10:08

- **1 Display the time.** (Press the O button during unit operation.)
- 2 Press the Observation button for more than two seconds.



The hour digit(s) blinks.

Set the hour digits.



(to go back) (to go forward)



3 Press the button momentarily.



The minute digits blink.

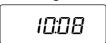
Set the minute digits.



(to go back) (to go forward)



4 Press the O button momentarily.



The clock activates.

Note

The clock cannot be set unless the power is turned on. Set the clock after you turn on the radio, or during tape playback.

Cassette Player Operation

Listening to Tape Playback

After inserting the cassette, playback will start automatically.



To change the tape direction,

press both the \blacktriangleleft and the \blacktriangleright buttons at the same time.



Indication of Tape Transport Direction



The side facing up is being played.



The side facing down is being played.

Tape playback automatically changes direction at the end of the tape.

Note

Before turning off the unit, eject the tape to avoid tape damage.

Ejecting the Cassette

Press the **a** button to stop playback and eject the cassette.

Fast-winding the Tape

Direction indicator*	To advance	To rewind
>		
-		

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

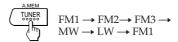
* The or ► indicator will flash while fast-winding the tape.

Radio Reception

Searching for Stations Automatically

— Automatic Tuning

1 Select the desired band.



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



The scanning stops when a station is received. Press either side of the button repeatedly until the desired station is received.

When an FM stereo program with a sufficient signal strength is tuned in,



the "ST" indication will appear.

To avoid the automatic tuning from stopping on stations too frequently (local seek mode), press the SENS button momentarily to get the "LCL" indication.

Only the stations with relatively strong signals will be tuned in. The local seek mode functions only when the automatic tuning is in operation.

If FM Stereo Reception is

Poor — Monaural Mode

Press the Sens button momentarily.

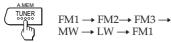
→ "MONO" appears on the display.

The sound will improve, but it will become monaural.

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Tuning in by Adjusting the Frequency — Manual Tuning

1 Select the desired band.



2 Press and hold either side of the SEEK/ MANU button.

Release the button when the desired station is received.



PREVENT ACCIDENTS!

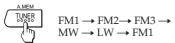
When tuning in during driving, use the automatic tuning and the memory preset tuning instead of the manual tuning.

Memorizing Stations Automatically

Automatic Memory Function

Stations with the clearest reception are automatically searched and memorized on each band (FM1, FM2, FM3, MW and LW). Up to 6 stations on each band can be stored on the preset number buttons 1 to 6 in the order of band frequency.

1 Select the desired band.



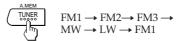
2 Press the TUNER/A.MEM button for more than two seconds.



The unit will be start scanning the selected band and memorize the tuned stations on the preset number button 1 through 6 automatically.

Memorizing Only the Desired Stations

1 Select the desired band.



- 2 Tune in the station which you wish to store on the preset number button.
- 3 Press and hold the desired preset number button (1 to 6) for about two seconds until you hear a beep tone.

The number of the pressed preset number button appears in the display window.

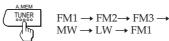


Up to 6 stations on each band (FM1, FM2, FM3, MW and LW) can be stored on the preset number buttons in the order of your choice. Therefore, 18 stations can be memorized on FM.

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

Receiving the Memorized Stations

1 Select the desired band.



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

Note

If you press the preset number button for more than two seconds, the currently received station will be memorized. To receive the previously memorized station, make sure that the preset number button is pressed only momentarily.

Other Functions

Adjusting the Sound Characteristics

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

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

2 Adjust the selected item by pressing either the ____ or __+__ button.

Adjust within three seconds after selecting. (After three seconds the button will again serve as volume control button.)

Enjoying Bass and Treble at Low Volume

- Loudness Function

Actual total number

Press the $\overset{\text{\tiny LOUD}}{\text{\tiny O}}$ button. \rightarrow "LOUD" will appear on the display.

Bass and treble will be boosted. To cancel, press again.

Muting the Beep Tone

Press the button while pressing the button.

To reactivate the beep tone, press these buttons once more.

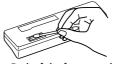
Maintenance

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 the RELEASE button, then detach it and clean with a cotton swab dipped in alcohol. Do not apply too much force. Otherwise, the connector may get damaged.



Main unit



Back of the front panel

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Refer to the pages in ● for details.

- 1 Display window
- 2 SEL (control mode select) button 58
- 3 DSPL (display mode change/time set) button 6
- 4 **≜** (eject) button **⑤**
- 5 During radio reception: Preset number buttons 7
- 6 ◀◀/▶▶ (fast winding)/DIR (tape transport direction change) buttons **3 6**
- 7 LOUD (loudness) button 8

- 8 RELEASE (front panel release) button 48
- 9 + (volume/bass/treble/balance/fader control) buttons **9 3**
- 10 SEEK/MANU button 60
- TUNER/A.MEM (radio on band select/ automatic memory) button 67
- 12 SENS (sensitivity adjust) button 6
- 13 OFF button 4

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Specifications

Cassette player section

Tape track 4-track 2-channel stereo 0.13 % (WRMS) 30 – 15,000 Hz Wow and flutter Frequency response 55 dB Signal-to-noise ratio

Tuner section

FM

87.5 - 108.0 MHz Tuning range External antenna connector 10.7 MHz Antenna terminal Intermediate frequency

Usable sensitivity 12 dBf Selectivity 70 dB at 400 kHz Signal-to-noise ratio 65 dB (stereo), 68 dB (mono)

Harmonic distortion at 1 kHz

0.5% (stereo), 0.3% (mono) 35 dB at 1 kHz 30 – 15,000 Hz

Frequency response Capture ratio 2 dB

MW/LW

Separation

MW: 531 - 1,602 kHz Tuning range LW: 153 - 281 kHz Antenna terminal External antenna connector

Intermediate frequency 450 kHz Sensitivity $MW:30 \mu V$ LW : $50 \mu V$

Power amplifier section

Outputs Speaker outputs (sure seal connectors)

Speaker impedance 4 – 8 ohms Maximum power output 15 W × 4 (at 4 ohms)

General

Tone controls Bass ± 8 dB at 100 Hz

Treble ± 8 dB at 10 kHz Power requirements 12 V DC car battery

(negative ground) Approx. $186 \times 57 \times 170$ mm (w/h/d) not incl. Dimensions

projecting parts and controls

Mounting dimension Approx. $182 \times 53 \times 155$ mm

(w/h/d) not incl. projecting parts and

controls Approx. 1.2 kg Mass Supplied accessories Front panel case (1)

Design and specifications are subject to change without

Troubleshooting Guide

The following checklist will assist in the correction of most problems which you may encounter with your unit.

Before going through the checklist below, refer to the connection and operating procedures.

Problem	Cause/Solution	
No sound	 Adjust the volume with the	
Indications do not appear in the display window.	Remove the front panel and clean the connectors. See "Cleaning the Connectors" of "Maintenance" for details.	

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.	Memorize the correct frequency.The broadcast is too weak.
Automatic tuning is not possible.	The broadcast is too weak. → Use the manual tuning.
The "ST" indication flashes.	 Tune in precisely. The broadcast is too weak. → Press the SENS button to enter the MONO mode.

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