

FM/AM Cassette Car Stereo

XR-7307

Operating Instructions

Before operating the unit, please read this manual thoroughly and retain it for future reference.



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

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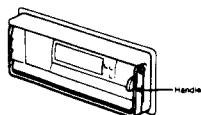
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- Tuner section**
- SSIR (Sony Super Interference Rejection) PLL Synthesizer tuner
 - Automatic memory function stores a total of 18 stations in memory quickly and easily.
 - Memory scan function scans preset stations for five seconds in order.
- Cassette deck section**
- Full logic control/feather touch mechanism.
 - The auto-reverse function changes the tape direction automatically.
 - The CrOpe Dolby NR system is incorporated as well as the B-Type Dolby NR system.
 - Intro play scans the beginning of each selection sequentially.
 - Repeat play plays the selection being played repeatedly.
 - Blank skip function automatically skips the blank portion longer than eight seconds and plays back the next selection.

- If your car was parked in direct sunlight and there was a considerable rise in temperature inside the car, allow the unit to cool off before operating.
 - 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 you have any question or problem concerning your unit that is not covered in this manual, please consult your nearest Sony dealer.

Note on the Handle

When you have secured the unit into the bracket, make sure that the handle is completely retracted as shown below. Otherwise, the unit will not be turned on.



Owner's Record

The model and the serial numbers are located on the top. 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. XR-7307 Serial No. _____

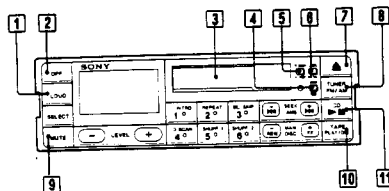
- General**
- SUB WOOFER output for powerful bass reproduction system.
 - You can take the unit away with you when you leave your car. (Slide-out security bracket).
 - You can control the optional Sony CD auto changer so that you can enjoy various plays, such as shuffle play or disc scan.
- Dolby noise reduction reproduced under license from Dolby Laboratories Licensing Corporation. "DOLBY" and the double D symbol are trademarks of Dolby Laboratories Licensing Corporation.

Notes on the Cassette

- Cassettes care**
- Avoid touching the tape surface of a cassette, as any dirt or dust will contaminate the heads.
 - Keep cassettes away from equipment with magnets such as speakers and amplifiers, as exposure or distortion on the recorded tape could occur.
 - Do not expose cassettes to direct sunlight, extremely cold temperatures or moisture.

Note on the cassettes longer than 90 minutes
 The use of a cassette longer than 90 minutes is not recommended except for long continuous playback.

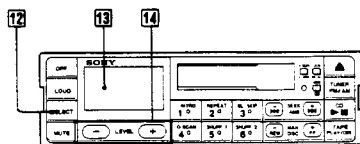
Location and Function of Controls



Refer to the page in 6 for details.

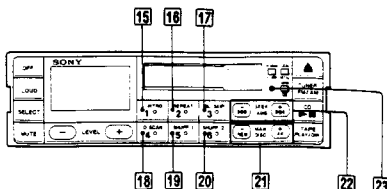
- 1. **LOUD (loudness) button**
Press to reinforce bass and treble especially when listening at low volume. To deenergize the button, press it again.
- 2. **OFF (power off) button**
Press to turn off the unit.
- 3. **Cassette insertion door**
- 4. **MONO (monaural) button**
- 5. **M. SCAN (memory scan)/ALM (automatic memory) button**
- 6. **LOCAL button**
- 7. **(select) button**
- 8. **TUNER FM/AM (radio on/band select) button**
- 9. **MUTE button**
Press to momentarily mute the sound. Press again to restore the same sound level as before.
- 10. **TAPE PLAY/DIR (tape playback/transport direction change) button**
- 11. **CD 0-11 (disc play/pause) button**

During radio reception	During tape playback
MONO (monaural) button ●	EX button ●
M. SCAN (memory scan)/ALM (automatic memory) button ●	
LOCAL button ●	METAL (metal/CrO ₂) button ●



- 12. **SELECT (control mode select) button**
Press to select the desired control mode, BAS (bass), TRE (treble), BAL (balance), FAD (fader), or VOL (volume).
- 13. **Display window**
- 14. **LEVEL (bass/treble/balance control) button**
Press to select the desired control mode, BAS (bass), TRE (treble), BAL (balance), FAD (fader), or VOL (volume). Otherwise, the mode goes back to the volume control mode.

Display window	Control mode	For less	For more
BAS	Bass control	For less bass	For more bass
TRE	Treble control	For less treble	For more treble
BAL	Balance control	To decrease the right-speaker volume	To decrease the left-speaker volume
FAD	Fader control	To decrease the rear-speaker volume	To decrease the front-speaker volume
VOL	Volume control	For less volume	For more volume



15	16	17	18	19	20	21	22	23
During tape playback			During disc play			During radio reception		
INTRO button ●			REPEAT button ●			Preset number buttons ●		
BL SKIP (blank skip) button ●			D.SCAN (disc scan) button ●					
-			SHUFF (shuffle) 1 button ●					
-			SHUFF (shuffle) 2 button ●					
FF/REW (fast forward/rewind) button ●			DISC (disc change) button ●			MAN (manual tuning) button ●		
AMS* button			SEEK (automatic tuning) button ●					

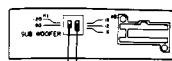
23 Reset button
Press this button when no other button functions.

Note: Multi function, intro play, repeat play, disc scan and shuffle plays 1 and 2 will be cancelled when you press OFF button or when you keep the ignition key set to the ON position for more than eight seconds. Blank skip function will be maintained until you press BL SKIP button again.

*Dynamic Music Sensor

When Connecting the Sub-woofer Speaker System

The SUB WOOFER output is provided for the powerful bass reproduction. When you connect the power amplifier for the sub-woofer speaker system with this unit, set the SUB WOOFER switches on the rear to the appropriate positions.

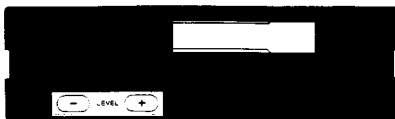


Select the output level to be boosted.

Select the cut-off frequency lower than which is to be boosted.

For the detailed information on connections, see the supplied installation/connections manual.

Tape Playback



- 1 Insert a cassette to start playback.
- 2 Press to adjust the volume.

Other Operations

To rewind or fast-forward the tape		To stop the tape and return to the radio	
To listen to the other side of the cassette		To stop the tape and start the disc play	
To take out the cassette		To play back the tape again	
		To stop the tape and turn off the unit	

To select the tape type

Tape type	Indicator	Side
LOCAL (TYPE II)	L	The side facing upward
METAL (TYPE IV)	M	The side facing upward
Normal (TYPE I)	None	The side facing downward

MONO

Press MONO Select Dolby B or Dolby C. Select the same Dolby NR system used for the recorded cassettes. Dolby NR (Noise Reduction) system reduces tape hiss noise in low-level, high-frequency signals.

Locating the Beginning of a Desired Selection during Playback

To locate the beginning of the selection being played Press

To locate the next selection Press

Listening to the First Ten Seconds of Selections in Chronological Order

Press First ten seconds of each selection will be played back in order from the next selection. Press again to release it. (during tape playback)

Returning to the Beginning of a Selection

Press The unit goes back to the beginning of the selection when the selection ends.

Automatic Long Blank Playback

Press The unit skips the long blank (more than eight seconds) automatically and plays back the next selection. Press again to release this function.

Side of the cassette being played back
The unit plays back both sides of the cassette repeatedly. The indicator on the display window shows which side of the cassette is being played back.

Indicator	Side
L	The side facing upward
M	The side facing upward
None	The side facing downward

Automatic Tuning

- Press to turn on the unit.
- Press to select the desired band, FM1, FM2 or AM.
- Press to start scanning.
 - For lower frequencies
 - For higher frequencies
 The scanning automatically stops when a station is tuned in. Repeat this step until the desired station is tuned in.
- Press to adjust the volume.

Manual Tuning

- Press to turn on the unit.
- Press to select the desired band.
- Press to select the desired station.
 - For lower frequencies
 - For higher frequencies
 To change the frequency rapidly, keep the button pressed.
- Press to adjust the volume.

Warning
While driving, keep your eyes on the road and use the automatic tuning or the memory preset tuning!

To stop the radio and start tape playback:

When no cassette is inserted:

When a cassette is inserted:

To stop the radio and...

To reset clock (OFF):

To turn off the unit:

When the FM stereo program is too weak and noisy

MONO Press The noise will be reduced. The sound will be monaural instead.

When there are too many stations and the scanning stops too frequently during automatic tuning

LOCAL Only the stations with comparably strong signals can be tuned in.

METAL

When an FM stereo program of sufficient signal strength is tuned in:

FM 1 87.9 The program is automatically received in stereo.

Memory Preset Tuning

You can memorize a total of 18 stations (6 stations for each band), one on each preset number.

PRESET	FREQ. RANGE
1	87.5 - 90.5
2	87.5 - 90.5
3	87.5 - 90.5
4	87.5 - 90.5
5	87.5 - 90.5
6	87.5 - 90.5

- Press to turn on the unit.
- Press to select the desired band.
- Press for more than two seconds. The unit starts scanning the selected band and memorizes the tuned stations on the preset number buttons 1 through 6 automatically in the order of the stronger station.

Surviving When A Better Program Is On The Preset Station

M-SCAN Press Each memorized station will be scanned for five seconds in order. (When the broadcast of the memorized station is too weak, it cannot be received.)

A - MEM

Example: To memorize on the preset number 1

1		Press to turn on the unit.
2		Press to select the desired band.
3		Press to tune in the desired station.
4		Press for more than two seconds. The number of the pressed preset number button will be displayed. MEM indicator appears to show that the station has been memorized. (MEM indicator will disappear in a few seconds.)

Repeat these steps for each station.

To Receive the Preset Station

1		Press to select the desired band.
2		Press lightly to receive the desired station.

Important!

Every preset number button has only one memory for a band. The previously memorized station will be erased when you enter a new station of the same band on the same preset number button.

Disc Playing



Before operating, insert a disc magazine with discs in it into CD auto changer.

1		Press to start the disc play.
2		Press to adjust the volume.

Other Operations

To listen to another disc in the disc magazine	
To pause during play	
To start again	

To stop disc play and start tape playback

When no cassette is inserted	
When a cassette is inserted	

To stop disc play and...

To listen to the radio	
To turn off the unit	

Disc Playing

To locate the beginning of the selection being played	Press
To locate a previous selection	Keep pressing Release the button at the desired selection.
To locate the next selection	Press
To locate a selection ahead	Keep pressing Release the button at the desired selection.

When the first selection or the last selection of the disc is located, the play begins from the selection.

Various Plays

To listen to the beginnings of the selections in order (Intro play)	Press	First ten seconds of each selection on every disc will be played in sequence from the next selection.
To repeat the selection being played (Repeat play)	Press	The unit goes back to the beginning of the selection when the selection ends.
To search for the desired disc (Disc scan)	Press	First ten seconds of the first selection on each disc will be played in sequence.
To play the selections on the disc in a random order (Shuffle play 1)	Press	All the selections on a disc being played will be played in a random order. After playing all the selections on the disc, the unit goes to the next disc.
To play the selections on all the discs in a random order (Shuffle play 2)	Press	All the selections on all the discs in the disc magazine will be played in a random order.

To resume normal playback:
Press each button again.

*When you press the INTRO button during the shuffle play (1 or 2), the first ten seconds of all the selections will be played in a random order.

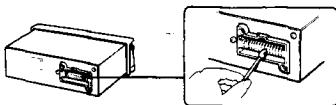
If the fuse blows, check the power connection and replace the fuse. If the fuse blows again after replacement, there may be an internal malfunction. In this case, contact your nearest Sony dealer.

Warning:
Use the specified ampere fuse for each lead. Use of a higher ampere fuse may cause serious damage.



Cleaning the Connector

To keep the best possible sound quality, clean the metallic part of the connector at the rear of the unit periodically using a commercially available head cleaning fluid or rubbing alcohol and a cotton swab.



Cleaning the Head and Tape Path

Prolonged use may contaminate the tape head and the tape path. Contamination causes sound dropouts in playback. Clean the tape head and tape path every two weeks to enjoy optimum hi-fi stereo sound. Use a commercially available cleaning cassette.

Cassette player section
Tape track: 4-track, 2-channel stereo
Frequency response: 30 - 18,000 Hz

Signal-to-noise ratio

Cassette type	Dolby B	Dolby C	Dolby off
TYPE II, IV	86 dB	78 dB	58 dB
TYPE I	83 dB	73 dB	55 dB

Wow and flutter: 0.1% (WRMS)

Tuner section
FM
Tuning range: 87.9 - 107.9 MHz
Antenna terminal: External antenna connector
Usable sensitivity: 15 dB (75 ohms)
Selectivity: 75 dB at 400 kHz
Signal-to-noise ratio: 68 dB (stereo), 70 dB (mono)
harmonic distortion at 1 kHz: 0.5% (revers), 0.3% (mono)
Separation: 35 dB at 1 kHz
Frequency response: 30 - 15,000 Hz
Capture ratio: 2 dB

AM
Tuning range: 530 - 1,710 kHz
Antenna terminal: External antenna connector
Sensitivity: 30 μV

General
Output level: Power antenna relay control lead
Tone controls: Bass ±10 dB at 100 Hz
Treble ±10 dB at 10 kHz
±7 dB at 100 Hz
±2 dB at 10 kHz
Loudness: 12 V DC car battery (negative ground)
Power requirements: Dimensions (without brackets): Approx. 176 × 50 × 153 mm (w/h/d)
(7 1/4 × 2 × 6 1/8 inches)
not incl. projecting parts and controls
Mounting dimensions: Approx. 182 × 53 × 145 mm (w/h/d)
(7 1/8 × 2 1/8 × 5 3/8 inches)
not incl. projecting parts and controls
Weight: Approx. 1.9 kg (4 lb 3 oz)
Accessories supplied: Mounting hardware (1 set)

Design and specifications subject to change without notice.

Troubleshooting Guide

The following checks will assist in the correction of most problems which you may encounter with your unit. Before going through the check list below, first refer back to the connection and operating procedures.

Troubleshooting	Causes/Remedy	
Radio reception		
Presets tuning is not possible.	<ul style="list-style-type: none"> Memorize the correct frequency. The broadcast is weak. — Use manual tuning. 	
Automatic tuning is not possible.	<ul style="list-style-type: none"> The broadcast is weak. — Use manual tuning. 	
The STEREO indicator flashes.	<ul style="list-style-type: none"> Tune in precisely. The broadcast is weak. — Press the MONO button. 	
Tape playback		
Playback sound is distorted.	<ul style="list-style-type: none"> Contamination of the tape head. — Clean the head. 	
The AMS does not operate correctly.	<ul style="list-style-type: none"> There is a trouble in the disc between selections. A blank space is too short (less than 4 seconds). FF is pressed immediately before the following selection. REW is pressed immediately after the selection starts. A long pause, or a passage of low frequencies or very low sound level is treated as a blank. 	
Disc play		
No sound.	<ul style="list-style-type: none"> The unit is in the pause mode. 	
Playback sound is stopped.	<ul style="list-style-type: none"> Dusty or defective disc. 	
General		
No sound.	<ul style="list-style-type: none"> Control the volume with the LEVEL button. Set the tape control to the center position on the 2-speed system. 	
About the error displays		
The following indicator flickers for about five seconds and alarm sound is heard.		
Display	Cause	Remedy
E-01	The disc magazine is not inserted in the CD auto changer.	Insert the disc magazine with discs in it into the CD auto changer.
E-02	No disc is inserted in the disc magazine.	Take out the magazine and insert the disc.
E-04	The disc is dirty.	Clean the disc.
E-05	The disc is inserted upside down.	Insert the disc correctly.
E-08	The CD auto changer cannot be operated because of some trouble.	Press the reset button of the XR 7307.
W-UT	The temperature is too high and the protection circuit has activated.	Wait till the unit cools off.