

FM/AM Cassette Car Stereo

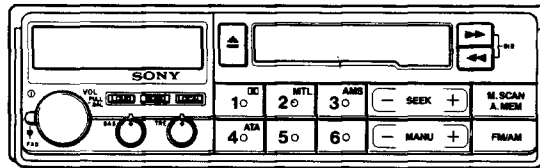
XR-5500

Operating Instructions page 2

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

Mode d'emploi page 16

Avant la mise en service de cet appareil, prière de lire attentivement ce mode d'emploi que l'on conservera pour toute référence ultérieure.



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

Pour l'installation et les connexions, se reporter au manuel d'installation/connexions fourni.

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-5500

Serial No. _____

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Features


- **Tuner section**
- **SSIF (Sony Super Interference Rejection) PLL Synthesizer tuner.**
- **Memory preset tuning function** allows you to store 6 stations for each band in memory.
- **Precise tuning is possible** with the digital synthesizer system.

Cassette deck section

- **Auto-reverse function** to listen to both sides of a cassette repeatedly.
- **The Dolby B NR system** reduces tape hiss noise during playback.
- **MTL (metal) button** for high-performance metal tapes.
- **Automatic Music Sensor (AMS)** to locate the beginning of a selection during playback.

General

- **Direct function system** allows you to switch the function between radio reception and tape playback directly.
- You can control the balance of the front speakers and the rear speakers in a 4-speaker system with an additional amplifier as well as with the built-in amplifier (Multi-fader system).
- **Maximum power output of 25 W + 25 W.** You can reinforce bass and treble especially when listening at a low volume by pressing the LOUD (loudness) button.
- Slide-out security bracket allows you to take the unit away with you when you leave your car.

• **Dolby noise reduction** manufactured under license from Dolby Laboratories Licensing Corporation. "DOLBY" and the double-D symbol  are trademarks of Dolby Laboratories Licensing Corporation.

Precautions

- 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 connectors first. If everything is in order, check the fuse.

Protection circuit

The built-in power amplifier employs a protection circuit to protect the speakers if the amplifier malfunctions. When a protection circuit activates, there will be an abrupt loss of sound from the speakers.

Particularly, when a speaker with a low input impedance (less than 3.2 ohms) is connected to the unit, the sound will be discontinued. This, however, is not a problem. If this happens, turn the volume down a little.

Cassette 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 erasure or distortion on the recorded tape could occur.
- Do not expose cassettes to direct sunlight, extremely cold temperatures or moisture.

Note on cassettes longer than 90 minutes

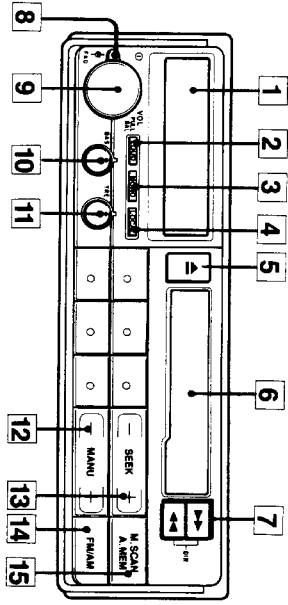
The use of cassettes longer than 90 minutes is not recommended except for long continuous playback.

If your car ignition key does not have the accessory position

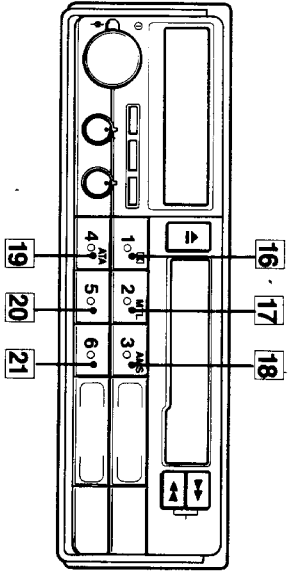
The illumination on the front panel is factory-set to be turned on when not playing the unit. However, this setting may cause the car battery to run down when the unit is used in the car which has no accessory position. To avoid this when using the unit in such a car, set the power select switch located on the bottom to OFF. You can make the illumination turned off when not playing the unit.

If you have any question or problem concerning your unit that is not covered in this manual, please consult your nearest Sony dealer.

Location and Function of Controls

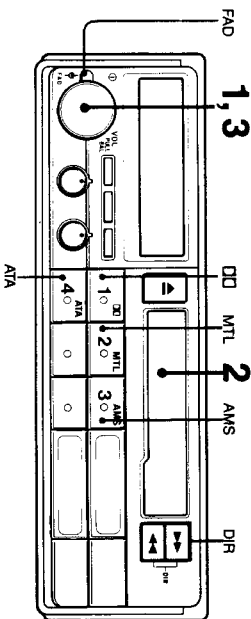


- Refer to the page in ● for details.
- 1 Display window
 - 2 LOUD (loudness) button
 - 3 MONO (monaural) button ●
 - 4 LOCAL button ●
 - 5 EJECT button
 - 6 Cassette insertion door
 - 7 DIR (tape transport direction)/▶▶◀◀ (fast winding) buttons ●
 - 8 FAD (fader) control ●
 - 9 VOL (volume) control ●/PUSH POWER switch ●/PULL BAL (balance) control ●
 - 10 BAS (bass) control
 - 11 TRE (treble) control
 - 12 MANU (manual) +/- buttons ●
 - 13 SEEK +/- buttons ●
 - 14 FM/AM button
 - 15 M.SCAN (memory scan)/A.MEM (automatic memory) button ●



During tape playback		During radio reception	
16	DD (Dolby noise reduction) button ●	Preset number button ●	
17	MTL (metal) button ●		
18	AMS (Automatic Music Sensor) button ●		
19	ATA (Automatic Tuner Activation) button		
20	—		
21	—		

Tape Playback



- 1 Press **PUSH POWER**.
- 2 Insert a cassette.
Playback starts automatically.
- 3 Adjust the volume.

Options

To listen to the other side of the cassette	Press ▶▶ and ◀◀ at the same time (DR).
To stop playback and listen to the radio	Press ▲ . The unit enters the radio mode.
To stop playback and turn off the unit	Press ▲ and then press PUSH POWER .

Before turning off the unit:
Be sure to eject the tape to avoid tape damage.

To adjust the unit to each tape type

Tape type	Indicator
CO ₂ (TYPE II)	Press MTL. "MTL" appears on the display window.
Metal (TYPE IV)	Press MTL again to disengage the button. "MTL" disappears on the display window.
Normal (TYPE I)	

Side of the cassette being played back or fast-forward:

Indicator	Operation mode
▶▶	Playback or fast forward
◀◀	The side facing upwards
▶	The side facing downwards
◀	The side facing upwards

To listen to Dolby NR-processed tapes
Press DD.

Dolby NR (Noise Reduction) system reduces tape hiss noise in low-level, high-frequency signals. The system boosts these signals in recording and lowers them in playback. Therefore, the DOLBY NR system must be engaged when you listen to tapes recorded with this system.

To Locate the Beginning of a Selection—Automatic Music Sensor (AMS)

- 1 Press **AMS**.
- 2 Press **▶▶** or **◀◀**, referring to the following table.

Indicator	Cassette side being played	Desired selection	
		Next selection	Current selection
▶▶	Side facing upwards	Press ▶▶ .	Press ◀◀ .
◀◀	Side facing downwards	Press ◀◀ .	Press ▶▶ .

The desired selection may not be located if ...

- there is noise in the space between selections.
- the space is less than 4 seconds long.
- the **▶▶** or **◀◀** button is pressed immediately before or after the desired selection, or within the blank space.

Playback may begin in the middle of the selection when AMS is activated, as the followings are treated as blanks:

- a long pause in the selection
- a passage of low frequencies or very low volume
- gradual increase or decrease of volume, as in some classical music

To Turn on the Radio Automatically While Fast-winding the Tape (ATA Function)

Press **ATA**.
The tuner turns on automatically when you press **▶▶** or **◀◀** during tape playback. When you resume the tape playback, the tuner turns off automatically.

Note:
No preset buttons can be worked while the ATA function is operating. However, other tuner operation buttons function.

In a 4-speaker system

When you connect four speakers to this unit, set the **FADER SELECT** switch on the left side of the unit to **PWR**. When you connect an additional amplifier to this unit in a 4-speaker system, set it to **PME**.

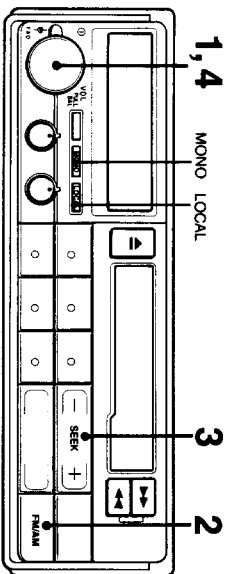
To control the balance of the front speakers and the rear speakers in a 4-speaker system

Turn clockwise to increase the volume of the rear speakers.
Turn counterclockwise to decrease the volume of the front speakers.

To control the balance of the right and the left speakers

Use the **PULL BAL** control.
Pull out the control and turn clockwise to decrease the volume of the left speakers, and turn counterclockwise to decrease the volume of the right speakers.

Automatic Tuning



- 1 Press PUSH POWER.
- 2 Press FM/AM to select the desired band, FM I, FM II, FM III or AM.
- 3 Press SEEK + or -.

The unit automatically scans for a station and stops when a station is tuned in. Repeat pressing the button until the desired station is tuned in.

- 4 Adjust the volume.

Options

To stop the radio and listen to a tape	Insert a cassette.
To stop the radio and turn off the unit	Press PUSH POWER.

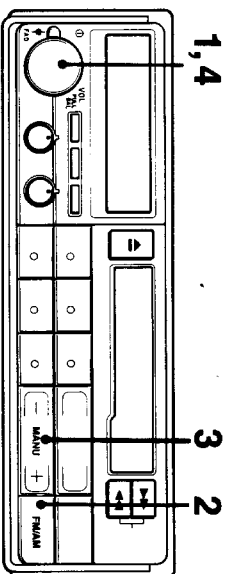
When an FM stereo program of sufficient signal strength is tuned in:
 "STEREO" appears on the display window.

When the FM stereo program is too weak and noisy:
 Press MONO. "MONO" appears on the display window. 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:
 1 Press LOCAL.
 "LOC" appears on the display window.

2 Press SEEK + / -.
 Only the station with relatively strong signals can be tuned in.

Manual Tuning



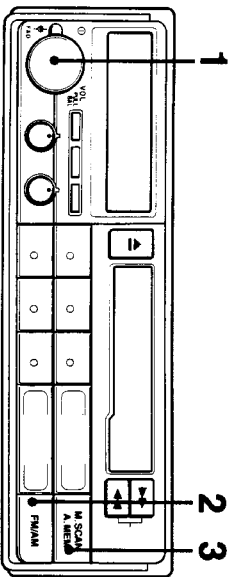
- 1 Press PUSH POWER.
- 2 Press FM/AM to select the desired band, FM I, FM II, FM III or AM.
- 3 Press MANU + or - until the desired station is tuned in.
- 4 Adjust the volume.

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

Memory Preset Tuning

To Memorize the Stations Automatically—Automatic Memory Function

The unit can memorize up to 6 stations each band, one on each preset number.



1 Press PUSH POWER.

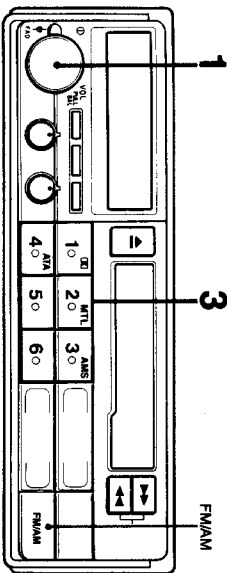
2 Select the desired band, FM I, FM II, FM III or AM.

3 Keep M.SCANVA.MEM pressed for more than 2 seconds.

The unit scans for the stations, and memorize them on the preset buttons in order of the frequency, and of the preset number.

To Memorize Only the Desired Stations

Use this method when the desired stations are not memorized by the automatic memory function.



1 Press PUSH POWER.

2 Tune in the desired station.

3 Keep the desired preset number button pressed until the momentarily muted sound is restored.

The station has been memorized.

Repeat these steps for each station.

To Tune in a Preset Station

1 Press FM/AM to select the desired band, FM I, FM II, FM III or AM.

2 Press the desired preset number button.

The previously memorized station will be erased when:

You enter a new station from the same band on the same number preset button.

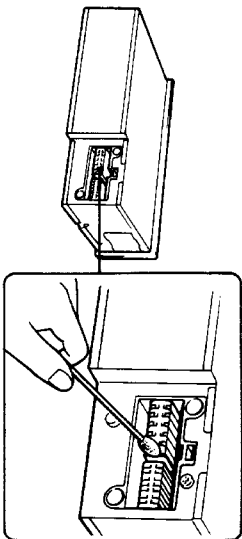
In what way are stations scanned and memorized?
The unit scans the selected band twice. The scanning starts from the displayed frequency. During first cycle, the unit scans stations with considerably strong signals. During the next cycle, the unit scans all stations that can be received, including weak ones. And for memorizing, if any preset number is indicated in the display window, memorizing starts from this preset number. When you choose FM II and the preset number 3 is displayed in the window, for example, memorizing starts from the preset number 3 on FM II, and stops at the preset number 6 on FM III.

To survey what is being broadcast on the preset stations
Press M.SCANVA.MEM lightly. Each memorized station will be scanned for a few seconds. To stop scanning, press M.SCANVA.MEM again at the desired program.

Maintenance

Cleaning of the Connector

To secure good connection, clean the connector at the rear with a cotton swab moistened with alcohol, etc.



Clearing the head

Clean the tape head every two weeks to enjoy optimum hi-fi stereo sound. Use a commercially available cleaning cassette.

How to Replace the Fuse

If the fuse blows, check the power connection and replace the fuse.

Warning

Use the specified ampere fuse for each lead.

Use of a higher ampere fuse may cause serious damage to the unit.

Specifications

Audio Power Specifications

POWER OUTPUT AND TOTAL HARMONIC DISTORTION 11 watts per channel minimum continuous average power into 4 ohms, both channels driven, from 30–20,000Hz with no more than 1% total harmonic distortion.

Other Specifications

Power amplifier section

Outputs Speaker outputs (sure seal connectors)
Preamp outputs (phono jacks)

Speaker impedance 3.2–8 ohms

Maximum power output 25 W * 2 (at 4 ohms)
25 W * 4 (at 4 ohms) *

* Measured at 1 kHz

Cassette player section

Tape track 4-track 2-channel stereo

Frequency response 40–16,000 Hz

Signal-to-noise ratio With type II, IV cassette 56dB

(Dolby NR off)

With type I cassette 55dB (Dolby NR off)

Dolby B NR effect

Wow and flutter 8dB
0.15% (WRMS)

Tuner section

System Superheterodyne tuner

Computerized quartz-locked synthesizer system

Antenna terminal External antenna connector

FM/AM power antenna relay control lead

FM tuner section

Tuning range 87.9–107.9 MHz

Intermediate frequency 10.7 MHz

Usable sensitivity 12.5 dB (75 ohms)

Selectivity 70 dB at 400 kHz

Signal-to-noise ratio

Harmonic distortion at 1 kHz 65 dB (stereo), 68 dB (mono)

0.5% (stereo)

0.5% (mono)

35 dB at 1 kHz

Separation Frequency response 30–15,000 Hz

Capture ratio 20 dB

Specifications

AM tuner section

Tuning range 530-1710kHz
Intermediate frequency 450kHz
Sensitivity 3 μ V

General

Tone controls Bass +8dB at 100Hz
Trebble \pm 8dB at 10kHz
Loudness +6dB at 100kHz
+6dB at 10kHz

Output lead Power antenna relay control lead
Power requirements 12V DC car battery (negative
ground)

Dimensions Approx. 178 x 50 x 180mm (W/H/D)
(7 $\frac{1}{8}$ x 2 x 6 $\frac{1}{8}$ inches)
not incl. protruding parts and
controls

Mounting dimensions Approx. 182 x 53 x 145mm (W/H/D)
(7 $\frac{1}{4}$ x 2 $\frac{1}{8}$ x 5 $\frac{7}{8}$ inches)
not incl. protruding parts and
controls

Weight Approx. 1.3kg (2 lb 14 oz)
Accessories supplied Mounting hardware (1 set)

Design and specifications subject to change without
notice