

FM/AM Cassette Car Stereo

# EXR-25

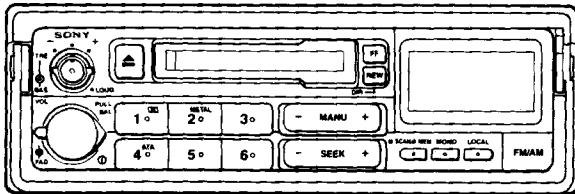
## Operating Instructions

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

### Owner's Record

The model and serial numbers are located on the top of the unit. Record the serial number in the space provided below. Refer to them whenever you call upon your Sony dealer regarding this product.

Model No. EXR-25 Serial No. \_\_\_\_\_



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

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## Features

- Tuner section**
- **SRIF (Sony Super Interference Rejection) PLL synthesizer tuner** for precise tuning.
  - **Memory preset tuning** allows you to store 6 stations on the AM band and 18 stations on the FM band in the memory.
  - **The ATA (Automatic Tuner Activation) function** automatically turns on the tuner while fast-winding a tape.

- Cassette deck section**
- **The auto-reverse function** changes the tape direction automatically.
  - **The Dolby B NR\* system** reduces the tape hiss noise during playback.
  - **The METAL button** for high-performance metal tapes.

- General**
- **Line outputs** for connecting an optional power amplifier.
  - **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 **DD** are trademarks of Dolby Laboratories Licensing Corporation.

## Precautions

- If your car was parked in direct sunlight or 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 order, check the fuse.
- If no sound comes from the speakers of a 2-speaker system, set the fader control to center position.

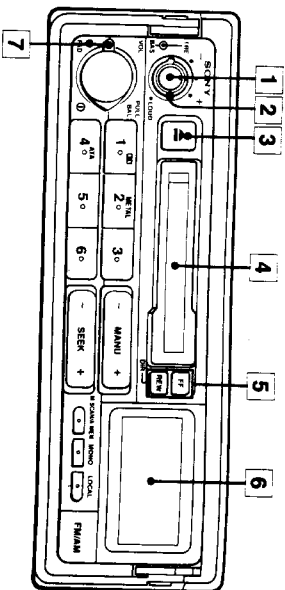
If you have any questions or problems concerning your unit that are not covered in this manual, please consult your nearest Sony dealer.

### Notes on Cassettes

- Cassette care**
- Avoid touching the tape surface of a cassette, as any dirt or dust may contaminate the head.
  - Keep cassettes away from equipments with magnets such as speakers and amplifiers. Erasure or distortion of the recorded tape could occur.
  - Do not expose cassettes to direct sunlight, extremely cold temperature or moisture.

**Note on cassettes longer than 90 minutes:**  
The use of cassettes longer than 90 minute not recommended except for long continuous playback.

# Location and Function of Controls



Refer to the pages in ● for details.

## 1 | LOUD (loudness) button/TRE (treble) control

### LOUD button

Press to reinforce bass and treble especially when listening at low level. To disengage the button, press again.

Turn clockwise to increase and counterclockwise to decrease the treble.

## 2 | BAS (bass) control

Turn clockwise to increase and counterclockwise to decrease the bass.

## 3 | ▲ (eject) button

Press to stop tape playback and eject the cassette.

## 4 | Cassette insertion door

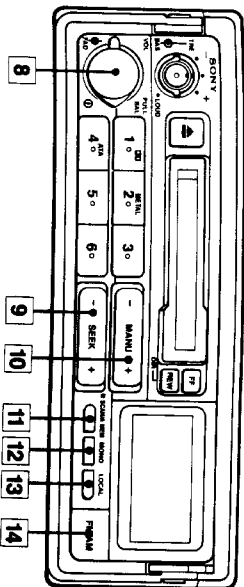
## 5 | FF/REW (fast-winding) buttons/DIR (tape transport direction change) buttons ●

During playback, depress FF or REW for fast winding, or press both FF and REW simultaneously to listen to the other side of the cassette.

## 6 | Display window

## 7 | FAD (fader) control ●

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



## 8 | Power on • off switch/VOL (volume) control/PULL BAL (balance) control

### Power on • off switch

Press to turn on and off the unit.

### VOL control

Turn clockwise to increase and counterclockwise to decrease the volume.

### PULL BAL control

While pulling the control knob, turn to adjust the balance of the left and right channel outputs.

## 9 | SEEK -/+ button ●

Press - side to search stations in lower frequencies and + side to search in higher frequencies.

## 10 | MANU (manual) -/+ button ●

Press to tune in the desired stations manually.

## 11 | M SCAN (memory scan)/A.MEM (automatic memory) button ●

### Function

#### M.SCAN

#### A.MEM

### Operation

Press for a moment to scan the preset stations automatically.

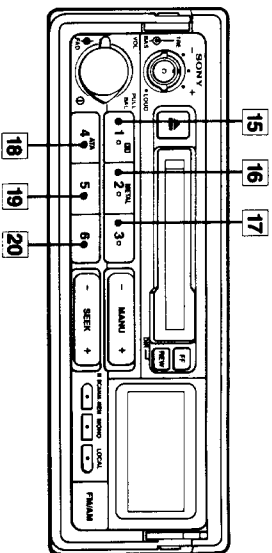
Press for more than two seconds to memorize the stations automatically.

## 12 | MONO (monaural) button ●

Press to reduce noise during reception of a weak FM stereo program. To listen in stereo, press again.

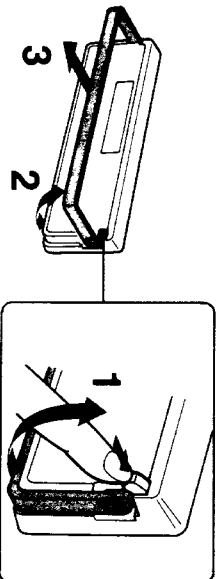
## 13 | LOCAL (local seek) button ●

## 14 | FM/AM (band select) button ● ●



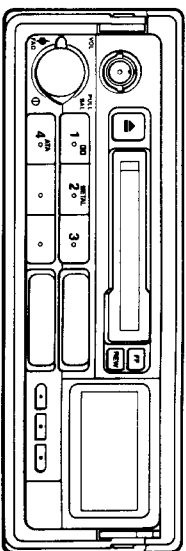
15	□ (Dolby NR) button ⑦	During tape playback
16	METAL button ⑦	
17		During radio operation
18	A/TX (Automatic Tuner Activation) button ⑨	Presets number buttons ⑧ ●
19		
20		

**To Remove the Unit**



**To prevent the unit from being stolen**  
 When you leave your car, remove the unit from the bracket and take it away with you. Be sure to turn off the power of the unit before removing the unit. Otherwise, you may hear a noise.

**Cassette deck operation**  
**Tape Playback**



- 1 Press to turn on the unit.
- 2 Insert a cassette. Playback starts automatically.
- 3 Adjust the volume.

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	
COZ (TYPE II)	Press the METAL button.
Metal (TYPE IV)	Press the METAL button again.
Normal (TYPE I)	

**Listening to Dolby NR-processed tapes**



Press the DII (Dolby NR) button to activate the B-type Dolby NR system. Press the NR system used for the selected cassette. The Dolby NR (Noise Reduction) system reduces tape hiss noise in low-level, high-frequency signals.



**Other Operations**

To listen to the other side of the cassette

Press   (simultaneously)

To wind the tape rapidly



To advance the tape	Depress 
To rewind the tape	Depress 

To resume playback, press  or  lightly so as not to depress it.


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 

**To Turn on the Radio Automatically while Fast-winding the Tape (ATA function)**

Press 

The tuner turns on automatically when you press the FF or REW button during tape playback. When you resume the tape playback, the tuner turns off automatically.

**Note**  
None of the preset number buttons will function while the ATA function is in operation. However, other tuner operation buttons will function normally.

Side of the cassette being played back or fast-wound

Indicator	The side facing upward
	The side facing downward

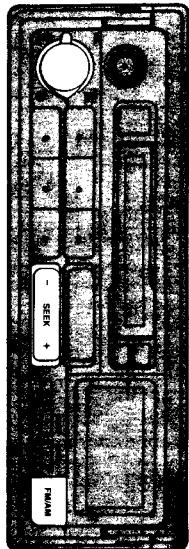
**To control the balance of the front and rear speakers in a 4-speaker system**





Use the FAD control.  
Turn clockwise to decrease the volume of the rear speakers.  
Turn counterclockwise to decrease the volume of the front speakers.

**To control the balance of the right and left speakers**

Use the PULL BAL control.  
Pull out the control and turn clockwise to decrease the volume of the left speaker(s) and turn counterclockwise to decrease the volume of the right speaker(s).

# Automatic Tuning



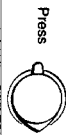
- 1**  Press to turn on the unit.
- 2**  Press to select the desired band, FM I, FM II, FM III or AM.
- 3**  Press to start scanning.  
 - : For lower frequency stations  
 + : For higher frequency stations  
 The scanning automatically stops when a station is tuned in.  
**Repeat this step until the desired station is tuned in.**
- 4**  Adjust the volume.

## Other Operations

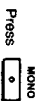
To stop the radio and start tape playback



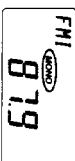
To stop the radio and turn off the unit



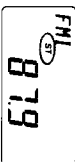
## When the FM stereo program is too weak and noisy



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




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



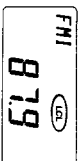
The program is automatically received in stereo.

## Automatic Tuning

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

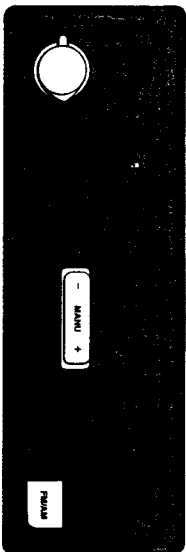
Press  LOCAL


Only the stations with relatively strong signals can be tuned in.





## Radio reception Manual Tuning


Use this method when you know the frequency of the desired station, or when the desired station is too weak to be tuned in by the automatic tuning.



- 

Press to turn on the unit.
- 

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

Press to select the desired station.  
- : For lower frequency stations  
+ : For higher frequency stations  
To change the frequency rapidly, keep the button pressed.
- 

Adjust the volume.

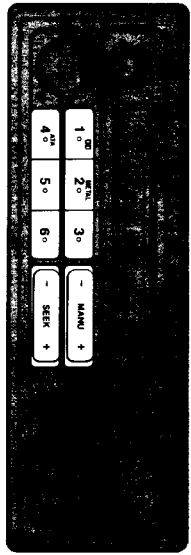
### Warning

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

# Radio reception Memory Preset Tuning

## To Memorize the Stations

The unit can memorize up to 6 stations on the AM band and 18 stations on the FM band (6 stations each on FM I, FM II and FM III).



**1**

— SEEK +  
OR  
— MANUAL +

Tune in a desired station using the automatic or manual tuning.

**2**

1 AM — 6 AM

Keep the desired preset number button pressed until the "MEM" indication will come on.

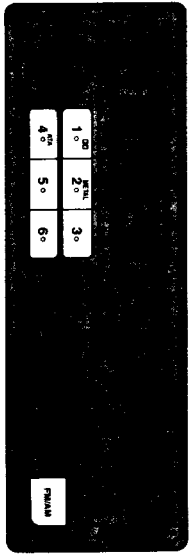
FMI  
87.9 MHz

The station is memorized.

Repeat these steps for each preset number button.

**Important**  
Every preset number button has only one memory location. If you memorized a station in a band, it is erased when you enter a new station of the same band on the same preset number button.

## To Receive the Preset Station



**1**

FM/AM

Press to select the desired band.

**2**

1 AM — 6 AM

Press the desired preset number button lightly.

### To memorize the stations automatically

Press the M.SCAN/A.MEM button for more than two seconds. The unit scans for the stations, and memorizes them on the preset number in order of frequency and of the preset number. (Scanning starts from the frequency indicated on the display window.)

Press the FM/AM button again to select FM I, FM II, FM III or AM and repeat the procedure again.  
**If a station is received when you start to memorize**  
The station will be memorized on the preset number 1.

### When any other preset number is indicated on the display window

The stations will be memorized on the next preset number to the preset number 6.

### To survey what is being broadcasted on the preset stations

Press the M.SCAN/A.MEM button. Each memorized station will be scanned for a few seconds. To stop scanning, press the M.SCAN/A.MEM button again at the desired program.



# Maintenance

## Fuse Replacement

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, consult your nearest Sony dealer.

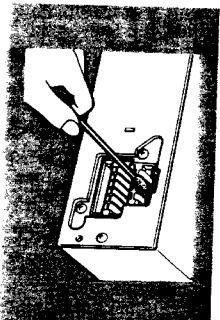
**Warning**  
Use the specified amperage fuse for each lead. Use of a higher amperage fuse may cause serious damage.

## Cleaning the Head and the Tape Path

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

## 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.



# Specifications

## Audio Power Specifications

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

## Other Specifications

### Power amplifier section

Outputs Speaker output (sure seal connectors)  
Speaker impedance 4, 8 ohms  
Maximum power output 25 W × 2 (at 4 ohms)\*  
15 W × 4 (at 4 ohms)\*  
\*Measured at 14.4 V

### Cassette player section

Tape track 4-track, 2-channel stereo  
Frequency response 30 - 16,000 Hz  
Signal-to-noise ratio

Cassette type	Dolby B	Dolby all
TYPE II, IV	66 dB	58 dB
TYPE I	63 dB	55 dB

Wow and flutter 0.13% (W/RMS)

### Tuner section

System Superheterodyne tuner  
Controlled quartz-locked synthesizer system  
Antenna terminal External antenna connector

### FM tuner section

Tuning range 87.9 - 107.9 MHz  
Intermediate frequency 10.7 MHz  
Usable sensitivity 13 dBf (75 ohms)  
Selectivity 75 dB at 400 KHz  
Signal-to-noise ratio 66 dB (stereo), 69 dB (mono)  
Harmonic distortion at 1 KHz 0.2% (stereo), 0.5% (mono)  
Separation 62 dB at 1 KHz  
Frequency response 30 - 15,000 Hz  
Capture ratio 2 dB

### AM tuner section

Tuning range 530 - 1,710 KHz  
Intermediate frequency 450 KHz  
Sensitivity 35 μV

### General

Tone controls Bass ± 8 dB at 100 Hz  
Treble ± 8 dB at 10 KHz  
Loudness + 10 dB at 100 Hz  
+ 6 dB at 10 KHz

Output lead Power antenna relay control lead

Power requirement 12 V DC car battery

Dimensions (negative tolerance)

Approx. 178 × 50 × 154 mm  
(7 1/8 × 2 × 6 1/8 in.)

not incl. projecting parts and controls

Mounting dimensions

Approx. 182 × 53 × 145 mm  
(7 1/8 × 2 1/8 × 5 3/4 in.)

not incl. projecting parts and controls

Weight Approx. 1.4 kg (3 lb., 1 oz.)

Accessories supplied Mounting hardware (1 set)

Design and specifications subject to change without notice.