

SONY

3-750-927-21 (1)

Stereo Power Amplifier

PROPERTY OF THE
NATIONAL TECHNICAL DEPT.

XM-3520

Operating Instructions page 2

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

Mode d'emploi page 12

Avant la mise en service de l'appareil, lire attentivement ce mode d'emploi et le conserver pour toute référence ultérieure.

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Owner's Record

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

Model No. XM-3520 Serial No. _____

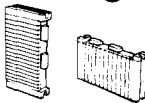
Features

- Maximum power output of 65 watts per channel
- Wide dynamic range and low distortion (less than 0.005%)
- Equipped with a chemical capacitor with a capacity of 20,000 μ F for powerful reproduction of lower frequencies
- The channel switch allows the XM-3520 to be used as a monaural amplifier
- A remote power system automatically switches the amplifier on when a connected car stereo is turned on
- A protection circuit is provided
 - Pulse power supply* for stable, regulated output power
 - You can install the XM-3520 easily only with the supplied screws
- **Pulse power supply**
This amplifier employs basic techniques in its power supply section. The use of the original light-weight power supply system provides a high-voltage, a high-efficiency power supply. This is highly regulated under variations in the automobile's electrical voltage.

Precautions

- This unit is designed for negative ground 12 V DC operation only.
- The nameplate indicating operating voltage, etc., is located on the bottom exterior.
- Use speakers with an impedance of 2 to 8 ohms
- Avoid installing the unit where:
 - It would be subject to high temperatures, such as from direct sunlight or from hot air from the heater.
 - It would be exposed to rain or moisture
 - It would be subject to dust or dirt
- If your car is parked in direct sunlight and there is a considerable rise in temperature inside the car, allow the unit to cool off before operating.
- When installing the unit vertically, make sure that the fins of the heat sink are vertical to the floor.

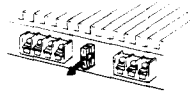
X Not this way O This way



- When installing the unit horizontally, be sure not to cover the fins with the floor carpet and so on
- If this unit is placed too close to the car radio, an interference may occur. In this case, separate the amplifier from the car radio.
- If no power is being supplied to the cassette player or tuner, check the connections
- This power amplifier employs a protection circuit* to protect the transistors and speakers if the amplifier malfunctions. Do not attempt to test the protection circuits by covering the heat sink or connecting improper loads.

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 ampere fuse.
Use of a higher ampere fuse may cause serious damage.



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

*** Protection circuit**
This amplifier is provided with a protection circuit which operates in the following cases:

- the unit is overheated
- a DC current is generated
- the speaker terminals are short circuited

When a protection circuit operates, the red indicator lights up and there will be an abrupt loss of sound from the speakers. If this happens, turn off the connected equipment and take out the cassette tape or disc and determine the cause of the malfunction. If the amplifier has overheated, wait until the unit cools off.

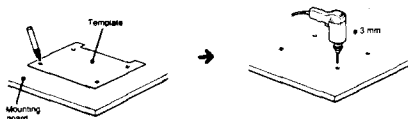


Installation

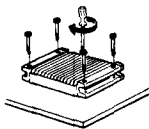
- Choose the mounting location carefully so that the unit will not interfere with the normal driving functions of the driver and that the unit will not be exposed to direct sunlight or hot air from the heater
- Do not install the unit under the floor carpet, where the heat dissipation from the unit will be considerably impaired

Prepare a suitable mounting board to install the unit securely.

- 1 Mark the four bolt holes on the mounting board using the template (printed on the carton), then drill the holes (3 mm dia.).



- 2 Secure the unit to the board with the supplied screws.



- 3 Secure the board in the trunk compartment or under the seat of your car.

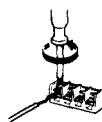
Connections

Caution

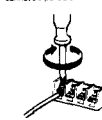
- Before making connections, disconnect the ground terminal of the car battery to avoid short circuits.
- Connect the +12 V power input lead only after all other leads have been connected.
- Be sure to connect the ground wire of the unit securely to a metal point of the car. A loose connection may cause a malfunction of the amplifier.
- Be sure to use speakers with adequate power handling capacities. If you use speakers with small capacity, they will be damaged.
- Do not connect the G terminal of the speaker system with the car chassis, and do not connect the G terminal of the right speaker with that of the left speaker.
- If your car is equipped with computer system or navigation or some other purposes, be sure not to remove the ground wire from the car battery. If you disconnect the wire, the memory of the computer may be erased. To avoid short circuits when making connections, try to connect the +12 V power input lead only after all other leads have been connected.

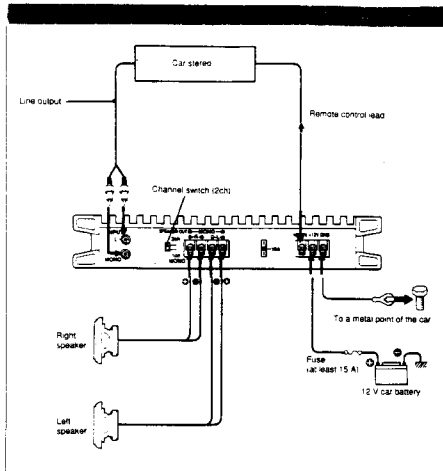
Make terminal connections as illustrated below

- 1 Loosen the screw of the terminal and wind the stripped wire around the screw.

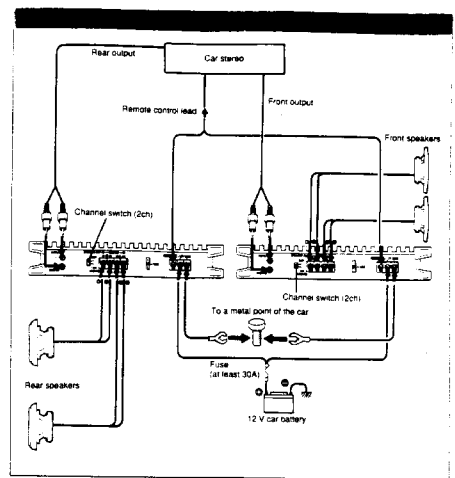


- 2 Tighten the screw down with a screwdriver. Make sure that the cord cannot be pulled out.

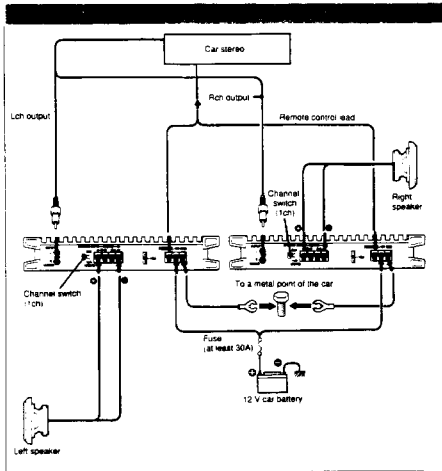




- Notes**
- Set the channel switch to 2ch.
 - Make sure to connect the remote control lead of the car stereo to the REMOTE terminal.
 - Use the power connecting cord with the fuse attached (at least 15A).

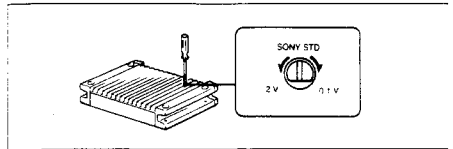


- Notes**
- Set the channel switch to 2ch.
 - Make sure to connect the remote control lead of the car stereo to the REMOTE terminal.
 - Use the power connecting cord with the fuse attached (at least 30A).



- Notes**
- Set the channel switch to 1ch (MONO).
 - Connect the speaker cords to the \ominus -MONO- \ominus marked terminals as shown above.
 - Use only the R (MONO) input jack for monaural connection.
 - Make sure to connect the remote control lead of the car stereo to the REMOTE terminal.
 - Use the power connecting cord with the fuse attached (at least 30A).

The input level can be varied with this control. Use it to adjust the input sound level when using source equipment of other manufacturers. Be sure to set the control to SONY STD if the unit is connected to a SONY car stereo. Turn it to 0.1 V when the input level of the cassette car stereo or CD player seems low.



Specifications

AUDIO POWER SPECIFICATIONS

POWER OUTPUT AND TOTAL HARMONIC DISTORTION 35
watts per channel minimum continuous average power into 4 ohms,
both channels driven from 20–20,000 Hz with no more than 0.08%
total harmonic distortion per Car Stereo Ad Hoc Committee
standards.

Power supply system	Pulse power supply circuitry	Input level adjustment range	0.1–2 V
Input	Car stereo input (phone jack)	Power requirements	12 V DC car battery (negative ground)
Outputs	Speaker outputs	Current drain	13 A (at rated output)
Speaker impedance	2–8 ohms	Input remote current	4 mA
Maximum power output	65 watts per channel minimum RMS at 4 ohms	Dimensions	Approx. 260 × 45 × 130 mm (w/h/d) (10 $\frac{1}{4}$ × 1 $\frac{3}{4}$ × 5 $\frac{1}{8}$ inches)
Frequency response	140 watts (monaural) at 4 ohms	Weight	Approx. 1.8 kg (3 lb. 15 oz.)
Harmonic distortion	8 Hz–100 kHz: \leq 3 dB	Accessories supplied	Mounting screws (4)
	0.005%	Design and specifications subject to change without notice.	