

Stereo Power Amplifier

XM-3040F

Operating Instructions page 2

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

Mode d'emploi page 14

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 this serial number in the space provided below. Refer to them whenever you call upon your Sony dealer regarding this product.

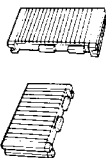
Model No. XM-3040F Serial No. _____

Features

- Provided with a built-in cassette mount with the high Pass Filter (HPF-60 Hz) and low Pass Filter (LPF-80 Hz).
 - Maximum power output of 80 watts per channel.
 - Maximum output of 30 watts per channel (20-20,000 Hz, 0.05%, 4 ohms, Acl fsc, Committee standard).
 - Wide dynamic range and low distortion (less than 0.05%).
 - The speaker material is powder-coated.
 - Pulse power supply* for cabinet, regulated output power.
 - You can also enjoy a 4-speaker system with only 2 input channels (A and C input jacks).
- * Pulse power supply
This amplifier employs pulse techniques in its power supply system to provide a high-voltage, high-current, high efficiency power supply that is highly regulated and free of ripples to the amplifier's speaker coils.

Precautions

- This unit is designed for negative ground 12 V DC operation only.
- The handle 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 installing it.
- When installing the unit, be sure that the floor mat, which is attached to the floor, is not in the way.
 - ✗ Not this way
 - This way



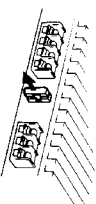
- When installing the unit horizontally, be sure not to cover the fins with the floor carpet and an interference may occur. In this case, separate the amplifier from the car radio if no power is being supplied to the cassette deck.
 - This power amplifier employs a protection circuit* to protect the transistors and speakers if the amplifier malfunctions. Do not attempt to heat the protector circuits by covering the heat sink or connecting improper loads.
- * If you have any questions or problems concerning your unit that is not covered in this manual, please consult your nearest Sony dealer.

Fuse Replacement

If the fuses blow, check the power connection and replace the fuses. If the fuses blow again after replacement, there may be an internal short circuit. In this case, consult your nearest Sony dealer.

Warning

Use the specified ampere fuse. Use of an incorrect ampere fuse may cause serious damage.

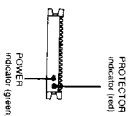


Protection circuit

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

- A DC output current
- A short circuit
- The speaker terminals are short-circuited
- The speaker terminals are short-circuited after the unit has been turned on
- The power amplifier malfunctions and causes the speakers to be damaged

If this happens, turn off the connected power supply and check whether an abnormally high current is flowing from the main power supply to the amplifier. If the amplifier becomes overheated, wait until the unit cools off.



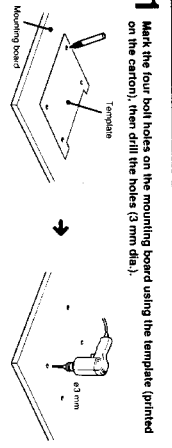
Before Installation

- Choose the mounting location carefully so that the unit will not interfere with the normal drying functions of the dryer 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.

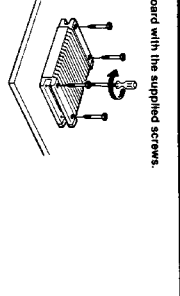
Trunk Installation

Prepare a suitable mounting board to install the unit securely.

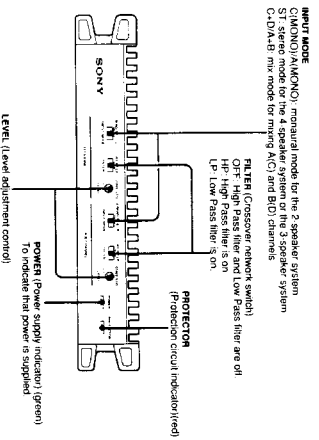
1 Mark the four bolt holes on the mounting board using the template (printed on the carton), then drill the holes (3 mm dia.).



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



3 Secure the board in the trunk compartment.



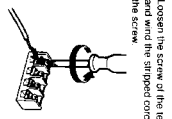
Caution

- Before making connections, disconnect the ground terminal of the car battery to avoid short circuits.
- Connect the red power input lead only after all other connections have been made.
- 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.
- Do not connect the terminals with adequate power handling capacities. If you use speakers with small capacity, they will be damaged.
- Do not connect the terminal of the speaker system with the car chassis, and do not connect the terminal of the speaker system with the left speaker, the right speaker, or both.
- If your car is equipped with computer system for navigation or some other purposes, be sure not to remove the ground wire from the terminal of the computer system. To avoid short circuits when making connections, try to connect the +12 V power input lead only after all other leads have been connected.

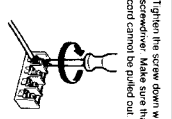
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Make terminal connections as illustrated below.

1 Loosen the screw of the terminal and remove the stripped lead of the screw.

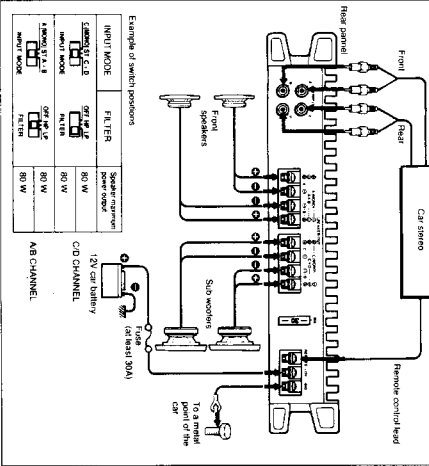


2 Tighten the screw down with a screwdriver. Make sure that the cord screw can be pushed out.



Connection of a 4-speaker System

Before making connections, remember that the input signal (A, B, C, D) is output from the corresponding speaker terminals.



Notes on the 4-speaker connection

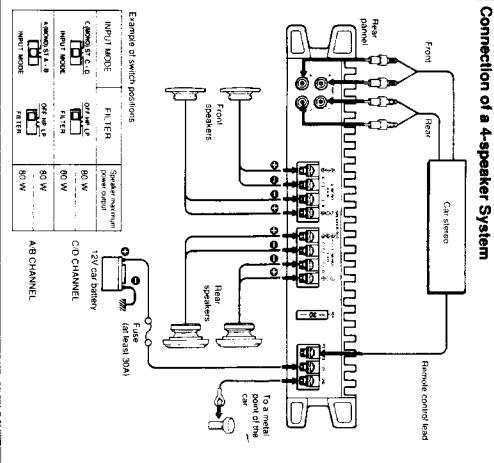
- In a 4-speaker system, set non-INPUT MODE switches to the ST position. Then set the other speaker mode on the remote control.
- B - +, + - C - - and - D - + as shown above connects the remote control lead of the car stereo to the REMOTE terminal.
- Use the power connecting cord with the fuse attached (at least 30 A).

You can also make a 4-speaker connection with two channel inputs

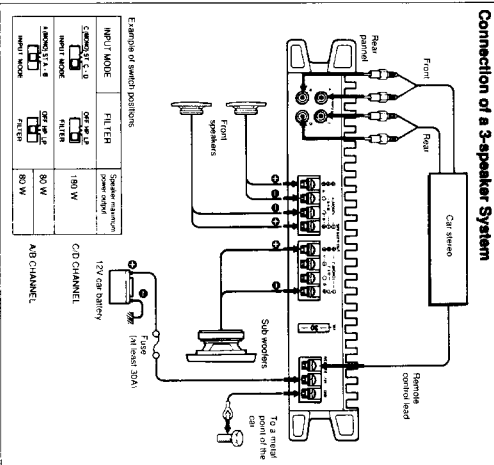
- Use the A and C input leads.

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Connection of a 4-speaker System



Connection of a 3-speaker System

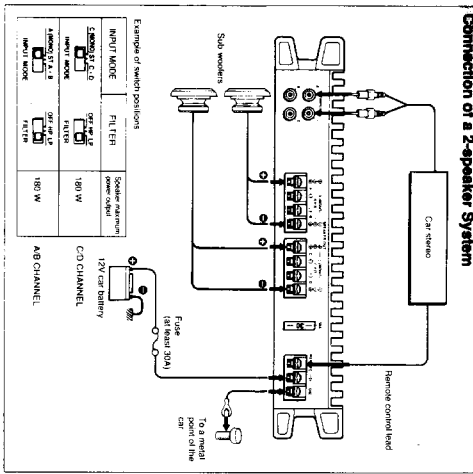


Notes on the 3-speaker connection

- In a 3 speaker system, set the A, B, C and D level of the speaker to the same level as the speaker with the ST position for the 4-speaker connection and the other INPUT MODE switch to the A/B or C/D position of the filter matches to the 12V position for the 2 speaker connection and the other filter switch to the 12V position for the 3-speaker connection. For the 3-speaker connection, the filter switch should be manually set to "A", "B", "C" and "D" as shown above.

- Make sure to connect the ground terminals of the speaker to the car's ground terminals.
- Use the power connecting cord with the fuse adaptor (at least 30 A).

Connection of a 2-speaker System

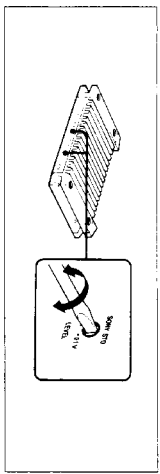


Note on the 2-speaker connection
 - Use the A and C input pins only and set both input MODE switches to the C (MONO) position and the A (MONO) position respectively. Then set connect the speaker leads to the terminals marked 4 — (MONO) ... and 1 — (MONO) ... as shown above.

- 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 (set near 30 A)

Level Adjustment Control

The input level can be varied with this control. The input level can be varied with this control 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 the control clockwise to increase the stereo's volume or CD player settings low.



AUDIO POWER SPECIFICATIONS

POWER OUTPUT AND TOTAL HARMONIC DISTORTION 30 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.

Other Specifications

Power supply system	Harmonic distortion
Pulse power supply circuitry	0.005%
Input	Input level adjustment range
Car stereo input (phone jack)	0-1-2 V
Speaker outputs	
Speaker impedance	12 VDC car battery (negative terminal to chassis)
2-8 ohms	Power requirements
Maximum power output	Current drain 28 A (at rated output)
4 oh: 80 watts x 4 at 4 ohms	Input/remote current
2 oh: 60 watts x 2, 180 watts at 4 ohms	5 mA
3 oh: 60 watts x 2, 180 watts at 4 ohms	Dimensions
2 oh: 160 watts x 2 at 4 ohms	Approx. 3.0 x .85 x .228 mm (1 1/4 x 2 7/16 x 9/16 inches)
Frequency response	Weight
8 Hz-100 kHz \pm 1dB (4 ohms)	Approx. 3.75 kg (8 lb, 4 oz.)
Crossover frequency	Accessories supplied
3 oh: 80 watts x 2, 180 watts at 4 ohms	Mounting screws (4)
Low Pass Filter 80 Hz	
Crossover slope	
High Pass Filter 18 dB/oct	Design and specifications subject to change without notice
Low Pass Filter 18 dB/oct	