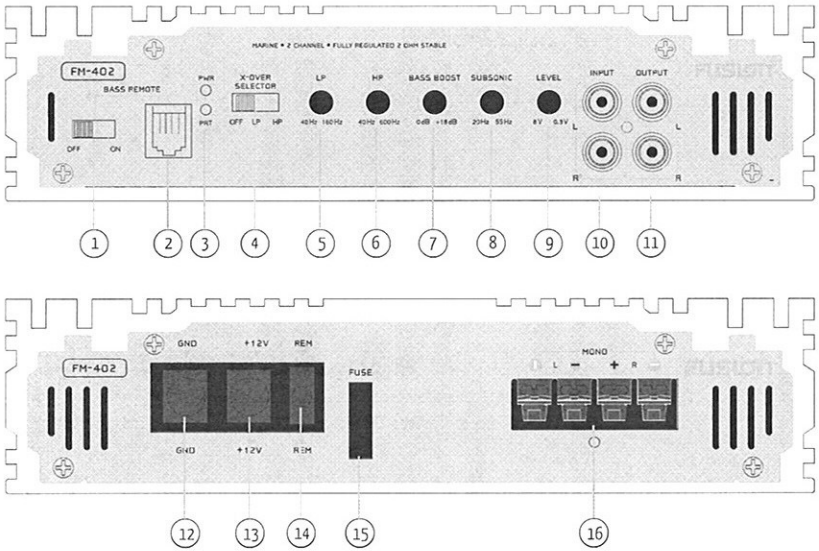
Control Descriptions



1 **Bass Remote Selector**

Use this switch to activate or deactivate the (optional) FP-BASS controller.

2 **Bass Remote Connector**

This port allows connections to the (optional) FP-BASS control.

3 **Power And Status LEDs:**

this shows if the amplifier has been correctly powered up and if any faults are present.

4 **Crossover Selector:**

Set the appropriate mode of operation. The 3 positions available are OFF, LP and HP. See points 5 and 6 below.

5 **Low Pass:**

Set the crossover switch 2 to LP when a subwoofer is connected. Ensure the crossover frequency is set at 100Hz or below, this feature is designed to filter all mid to high frequencies that only FULL RANGE speakers should produce. NOTE: Failure to do so could result in speaker damage.

6 **High Pass:**

Set the crossover switch 2 to HP and turn this control to 65Hz or above when using speakers smaller than 6 x 6", this feature is designed to filter all low bass frequencies that only SUBWOOFERS should produce. NOTE: Failure to do so could result in speaker damage.

7 **Bass Boost:**

This is a variable control to increase the bass boost at 45Hz from 0 -+18dB of gain, adjust to suit.

8 **Subsonic Filter:**

This is a variable control filters out all Sub Bass Frequencies below the set point at 18dB/octave.

9 **Level:**

This allows level adjustment of the input signal. Use this control to correctly match the head unit to the amplifier. To set this control correctly, turn the amplifier level to MIN and the head unit to 3/4 volume, with the BASS and TREBLE on zero , then slowly turn up this amplifier level control towards the MAX end of the control. NOTE: If the sound becomes distorted, turn this control down.

10 **RCA Input:**

Connect these RCA connectors to the rear LOW LEVEL output connection from the head unit.

11 **RCA Output:**

Use these RCA Output connectors to connect to a secondary amplifier. This output is a PASS-THRU connection derived from the RCA input connector so the signal level and frequency response are the same as the original input signal.

12 **Ground Connection:**

Connect directly to a suitable ground point via a 4 gauge power cable. NOTE: This is to be the first wire to connect when wiring up amplifiers. Damage could result of this is not done.

13 **+12V Connection:**

This must be connected to the battery positive (+) terminal via a 4 guage power cable and with an inline fuse or circuit breaker at the battery end. NOTE: This is to be the last wire to connect up during installation as damage could result.

14 **Remote Connection:**

This input is for turning the amplifier on and off. This requires a switched positive (+12V) to power 'ON' the amplifier, this can be found on the rear of the head unit in the form of an electric antenna output, or a remote on output. If not available you can wire to the ACC position on the key.

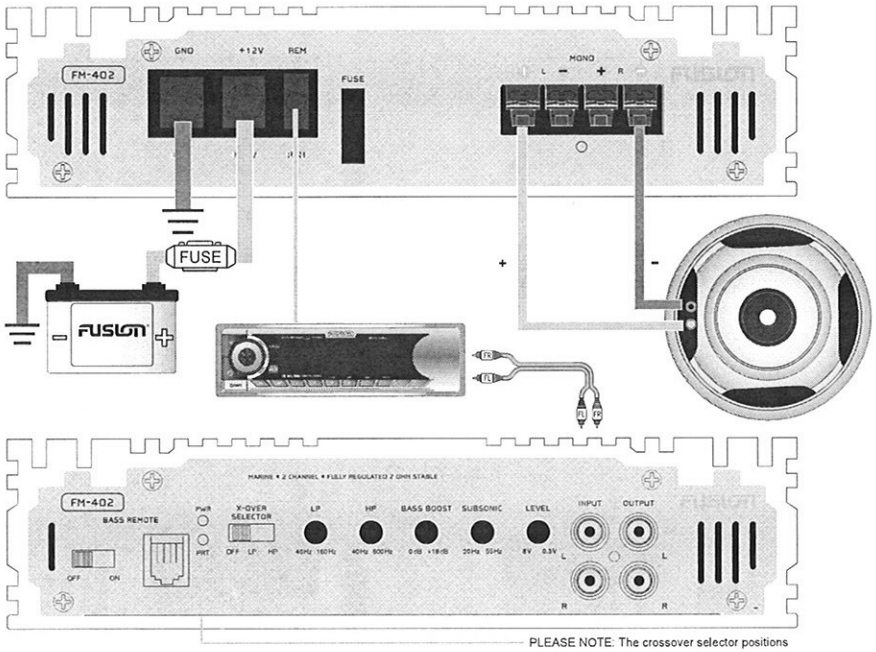
15 **Fuses:**

Please ensure the correct type of fuse is fitted, as specified in this manual. PLEASE NOTE: the FM-402 has 1x 25A fuses.

16 **Speaker Output:**

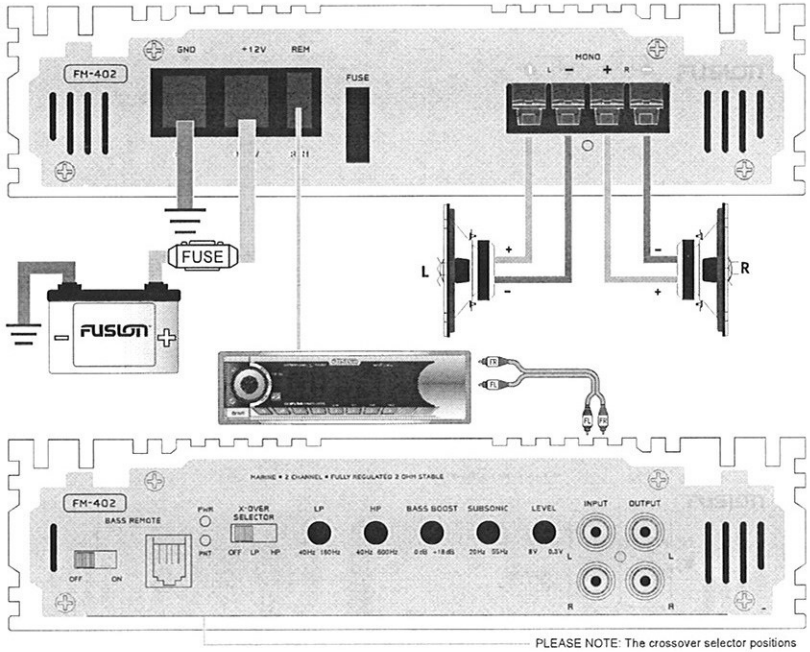
See 2/1 channel installation diagrams in this manual for correct speaker connection.

1 Channel Installation



PLEASE NOTE: The crossover selector positions

2 Channel Installation



PLEASE NOTE: The crossover selector positions

Power Cable Calclator

Total Amperage	0-4ft	4-7ft	7-10ft	10-13ft	13-16ft	16-19ft	19-22ft	22-28ft
0-20	14	12	12	10	10	8	8	8
20-35	12	10	8	8	6	6	6	4
35-50	10	8	8	6	4	4	4	4
50-65	8	8	6	4	4	4	4	2
65-85	6	6	4	4	2	2	2	0
85-105	6	6	4	2	2	2	2	0
105-125	4	4	4	2	0	0	0	0
125-150	2	2	2	0	0	0	0	0

The above chart shows cable gauges to be used, if no less than a 0.5 volt drop is acceptable. If aluminium wire or tinned wire is used, the gauges should be of an even larger size to compensate. Cable gauge size calculation takes into account terminal connection resistance. 1 Metre = 3.28 Feet

Trouble Shooting

Problem	Cause	Solution
Power LED not 'ON	Fuse at battery blown or not installed	Replace with correct fuse. Typically twice the rating of the fuse that is on the amplifier
	Improper connections	Check that the ground wire, power wire and the remote wires are connected to the correct terminal
Status LED 'ON'	Fuse or amplifier blown	Replace with the correct AMP rated fuse
	Amplifier too hot	Move the amplifier into a more ventilated area
	Speaker wires shorted	Check that there are no speaker wires shorted to any other wire and also check if any wire is shorted to the vehicle chassis
	Internal malfunction	Disconnect all wires except ground, power and remote. Then turn the amplifier 'ON', if the protection light is still 'ON' then return for service