OPERATING MANUAL

MIL-AMP1905

5 CHANNEL CLASS D AMPLIFIER

Prospec Electronics is located in MT, Pleasant S.C., U.S.A
our brands include Milennia, seaworthy ,JBL Marine, and
Infinity Marine. For further info , please visit us at
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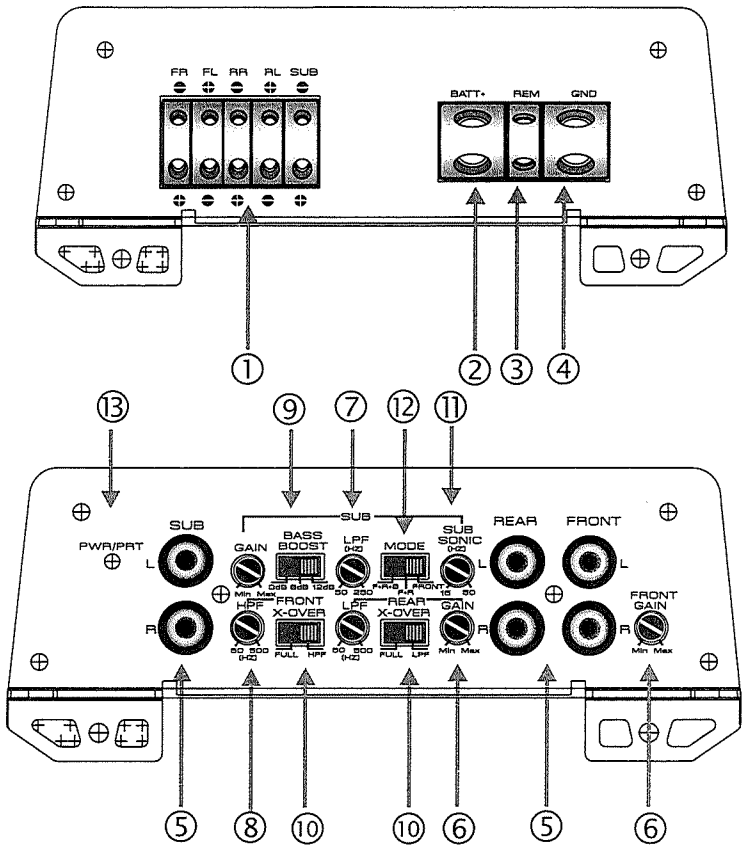
FEATURES

- MINI SIZED OEM PLUG & PLAY UPGRADE DESIGN
- DOUBLE SIDE PCB AND SMD COMPONENTS
- FULL RANGE DIGITAL OR CLASS D DESIGN
- RCA INPUT
- INPUT SENSITIVITY: 250mV-6V
- LPF/FULL/HPF SELECTION SWITCH
- BASS BOOST :0dB~12dB

SPECIFICATIONS

Model	MIL-AMP1905
Description	5 Channel
1Ohm Load @ 14.4V	NA
2Ohm Load @ 14.4V	4 x 130W+300W
4Ohm Load @ 14.4V	4 x 80W+170W
Bridge Mode	2 x 200W
	Features
Input Sensitivity	250mv - 6V Low Level
Frequency Response	20Hz~20KHz/20Hz-250Hz
LPF	50Hz - 250Hz
HPF	50Hz-500Hz
THD at 4Ohm load	<0.3%
S/N Ratio	>90dB
BassBoost @45Hz	0dB - 12dB
Efficiency @ 4Ohm	>70%
Minimum Load	2Ohm
Auto Turn ON/OFF	NA
Fuse Protection	NA
Short Circuit Protection	NA
Thermal protect °C	Protect at 84°C / 185F
Components & PCB	SMD parts / double side pcb
	Dimension(mm)
Height	50
Width	150
Length	230

CONTROL FUNCTIONS



1. SPEAKERS

Connect speakers/subwoofers to these terminals. Be sure to check wire for proper polarity. Never connect the speaker cables to chassis ground.

2. +12 Volt Power

Connect this terminal through a FUSE or CIRCUIT BREAKER to the positive terminal of the vehicle battery or the positive terminal of an isolated audio system battery.
Warning: Always protect this power cable by installing a fuse or circuit breaker of the appropriate size within 15 inches (30cm) of the battery terminal connection.

3.Remote Turn On

This terminal turns on the amplifier when (+)12 volt is applied to it . Connect it to the remote turn on lead of the head unit or signal source.

CONTROL FUNCTIONS

4. GND

Connect the ground cable to the cathode of the battery, the ground cable must use 6 gauge wire.

5. RCA input jacks

These RCA input jacks are for use with source units that have RCA outputs. A source unit with a minimum level of 200mV is required for proper operation. The use of high quality twisted pair cables is recommended to decrease the possibility of radiated noise entering the system.

6. Gain Control

The Gain control will match the amplifiers sensitivity to the source units signal voltage. The Operating range is 6V to 250mV at Low Level and 15V to 800mV at High Level signals.

7. 24dB Low Pass Variable Control

Adjustable low pass crossover frequency should be from 50Hz-250Hz

8. 24dB High Pass Variable Control

Adjustable high pass crossover frequency from 50Hz-500Hz

9. BASS BOOST Switch

This equalization circuit is used to enhance the low frequency response of the vehicle's interior. Selectable for 6 or 12dB of boost centered at 45Hz, the BASS BOOST can be adjusted to meet your own personal taste.

10. X-OVER

Depending on the selected switch setting the amplifier operates in Fullrange,Highpass or Lowpass mode.

11. SUB SONIC Control

This control is continuously adjustable from 15Hz through 50Hz at 12dB per octave to rovide an extra level of subwoofer protection from bass robbing power at unheard frequencies.

12. INPUT Mode

When a low level input signal is not available to feed the rear/subwoofer channels, position the switch to FRONT and the rear/subwoofer channels will produce sound. When A LOW Level input signal is available for the front and rear channel only, position the switch to F+R and the subwoofer channel will produce sound. when low level input signals are available for all channels, position the switch to F+R+S and all channels will produce sound.

13. POWER/STATUS Indicator

The clear LED turns BLUE when the power is on. Should the LED turn RED this is an indicator there is a problem with the system in relation to the amplifier (see Troubleshooting Tips).

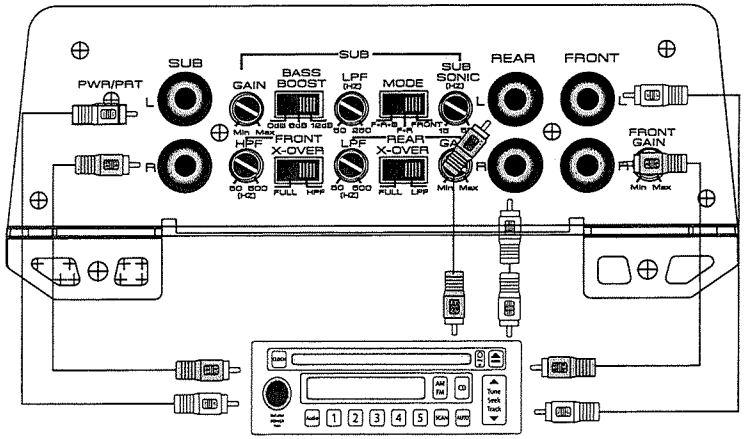
Location shown on pag2

LOW LEVEL INPUT WIRING

Low-level (RCA) input wiring is preferred for best audio performance. Always use a high-quality RCA cable for best audio performance.

NOTE: Do not connect BOTH the high level and low level inputs from your receiver to your amplifier at the same time!

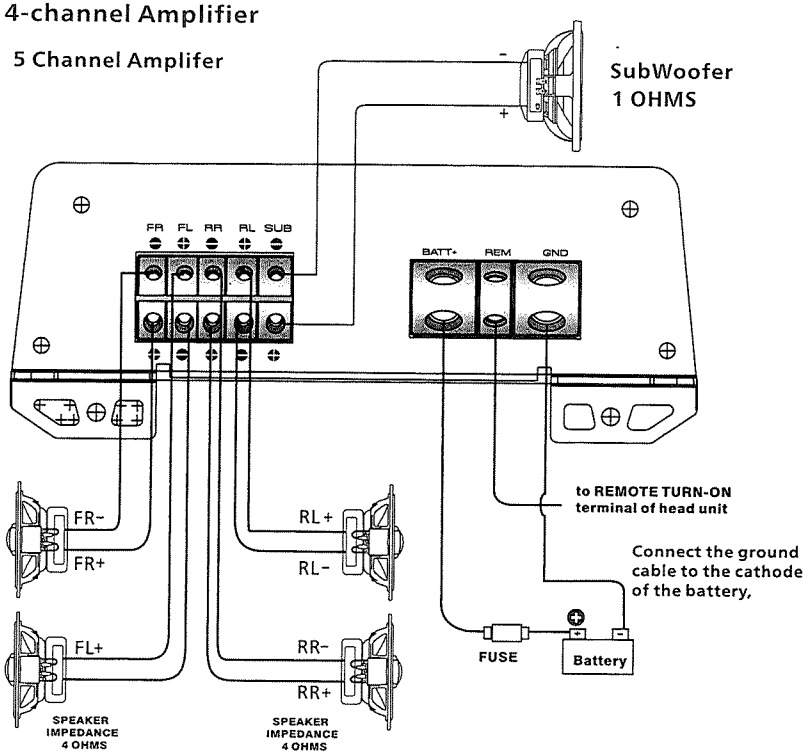
5 Channel Amplifer



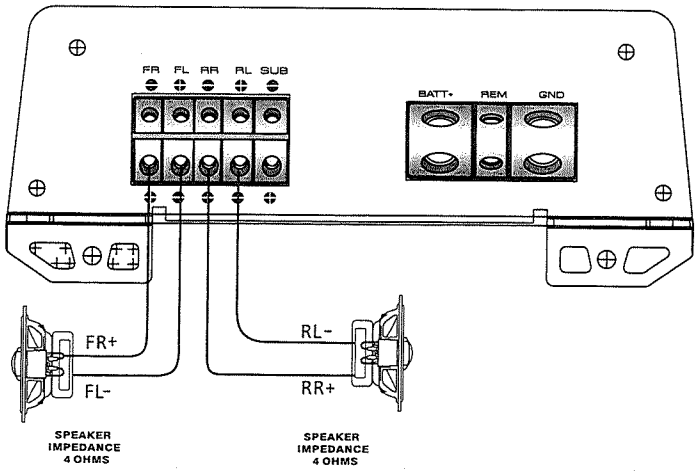
POWER AND SPEAKER WIRING

4-channel Amplifier

5 Channel Amplifer



Bridged Mode



INSTALLATION PRECAUTIONS

Before you install the amplifier, investigate your layout very carefully. Take special care when you work near the gas tank, fuel lines, hydraulic lines and electrical wiring. Before making or breaking power connections in your system, disconnect the vehicle battery. Confirm that your head unit or other equipment is turned off while connecting the input jacks and speaker terminals. If you need to replace the power fuse, replace it only with a fuse identical to that suggested by this manual. Using a fuse of a different type or rating may result in damage to your audio system or your amplifier which is not covered by warranty .

CONNECTING THE AMPLIFIER

1. Connect the ground cable to the cathode of the battery, the ground cable must use 6 gauge wire.
2. Connect the remote terminal to remote output of the head unit using upper 16 gauge wire.
3. Connect the fuse holder within 15"(30cm) of the battery, and run the selected cable from this fuse to the amplifier.
4. Connect all the inputs with high-quality cables.
5. Insert fuse(s) into the battery fuse holder(s).

TROUBLE SHOOTING

Symptom	*Possible Remedy*
Amplifier will not power up	*Check to make sure you have a good ground connection.* *Check that there is battery power on the (+)terminal .* *Check all fuses, replace if necessary .* *Make sure that the Protection LED is not illuminated.*
Protection LED Comes on	*Check for short circuits on speaker leads.* *Check the speaker load not beyond the minimum load.* *Remove speaker lead, and reset the amplifier. If the protection LED still Comes on, then the amplifier is faulty and needs servicing .*
No output	*Check that the RCA audio cables are plugged into the proper inputs.* *Check all speakers wiring.* *Check the headunit output and the amplifier level setting.* *Check amplifier gain settings.*
Low output	*Reset the level Control.* *Check the Crossover Control settings.* *Check amplifier gain settings.*
High hiss in The speakers	*Check the RCA cable is not shorted to power ground at amplifier side.* *Check the amplifier grounding.* *Adjust amplifier gain settings.*
Distorted sound	*Check that the Input level control is set to match the signal level of the head unit. Always try to set the Input level as low as possible.* *Check that all crossover frequencies are properly set.* *Check for short circuits on the speaker leads.*
Amplifier gets Very hot	*Check that the minimum load impedance for the amplifier model is correct.* *Check that there is good air circulation around the amplifier. In some applications, It may be necessary to add an external cooling fan.*