



GA9800

4 CHANNEL AMPLIFIER



INSTRUCTION MANUAL

**GME STRONGLY RECOMMENDS THAT YOU KEEP THIS MANUAL
IN A SAFE PLACE FOR FUTURE REFERENCE**

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ACCESSORIES SUPPLIED

- | | | |
|-------------------|----------------------|---|
| • Subwoofer wire | • Allen keys | If any items are missing or damaged, please contact your retailer or place of purchase. |
| • Remote Control | • Instruction Manual | |
| • Mounting screws | | |

INTRODUCTION

Congratulations on your purchase of the GME GA9800 marine audio amplifier.

This amplifier is designed to the highest level of quality and will offer you years of listening enjoyment.

Thank you for making GME your choice for marine audio equipment.

FEATURES

- Thermal/Short/Over Load Protection
- 2 Ohm stable (4 Ohm bridged)
- P.W.M.MOSFET power supply
- Power and distress indicator
- Variable low-pass (50–120 Hz)
- Heavy duty heat sink
- Adjustable input sensitivity
- Soft delayed remote turn-on
- Low level and high level input
- Nickel plated terminal strips/RCA jacks

- Built-in remote jack
- Built-in electronic Crossover and an adjustable Low Pass Control
- Designed with 100% MOSFET Power supply, ensuring extremely quick switching response and self-protection.

PROTECTION CIRCUITRY

The amplifier protection circuitry will disable the amplifier if input overload, short circuit or extremely high temperature conditions are detected. When the protection mode is in operation, the LED indicator on the front panel will be illuminated, indicating the amplifier has gone into a self-preservation mode.

If you observe that the protection LED is lit, please check the system carefully to determine what has caused the protection circuit to engage. The amplifier can be reset by turning the remote power OFF and then ON again. If the amplifier shuts down due to a thermal overload condition, please allow it to cool down before restarting. If the shut down is due to an input overload or short circuit, be sure to repair these conditions before attempting to power up the amplifier again.

2 OHM PROTECTION

Your GME GA9800 amplifier is designed to operate efficiently at loads down to 2 Ohm. You can install four 8 Ohm speakers per channel when using parallel wiring, increasing the number of woofers per channel at low frequencies [up to 100 Hz]. This produces an acoustic coupling effect, increasing your power output by 3 dB per speaker, or the equivalent of additional 10W to each speaker.

When operating at 2 Ohm, the amplifier will increase its output power by approximately 50%. The current draw will also increase by about the same amount, so be sure you have enough current to run the amplifiers into a 2 Ohm load. If you lack adequate current, your music reproduction will be distorted.

Note: The gain control of any audio amplifier should not be mistaken for a volume control. It is a sophisticated device, designed to match the output level of your audio source unit to the input level of the amplifier. **Do not** adjust this input level to maximum unless your input level requires it. Ignoring these instructions will result in an input overload to the amplifier, and excessive audio distortion. It can also cause the protection circuit to engage.

ELECTRICAL WIRING

Your GME amplifier is equipped with easy top-access screw terminals. These terminals are **NICKEL Plated** in order to ensure excellent electrical contact, and to resist corrosion.

When making electrical connections to the amplifier, please observe the following:

- Use at least 4 gauge or heavier wires for power and ground connections.
- Wire the amplifier directly to the battery.
- For the ground connection, use the shortest possible wire to a good chassis ground point.
- Wire the remote connection to the auto start lead of your stereo.

FUSES

Power fuses protect both the amplifier and the electrical system of your vessel from fault conditions. If you must replace the fuse in your amplifier, use a fuse of exactly the same type and rating. A different type or rating of fuse may result in damage or fire.

MOUNTING THE AMPLIFIER

Mark the location for the mounting screw holes by positioning the amplifier where you wish to install it and use a scribe [or one of the mounting screws] inserted in each mounting hole to mark the mounting surface. If the mounting surface is carpeted, measure the hole centres and mark with a felt tip pen.

Drill pilot holes in the mounting surface for the mounting screws and insert the mounting screws into these holes. Tighten them securely.

Note: Be sure to take note of any wires, lines or other devices in your vessel which may be located behind any mounting surface!

POWER SUPPLY CONNECTIONS

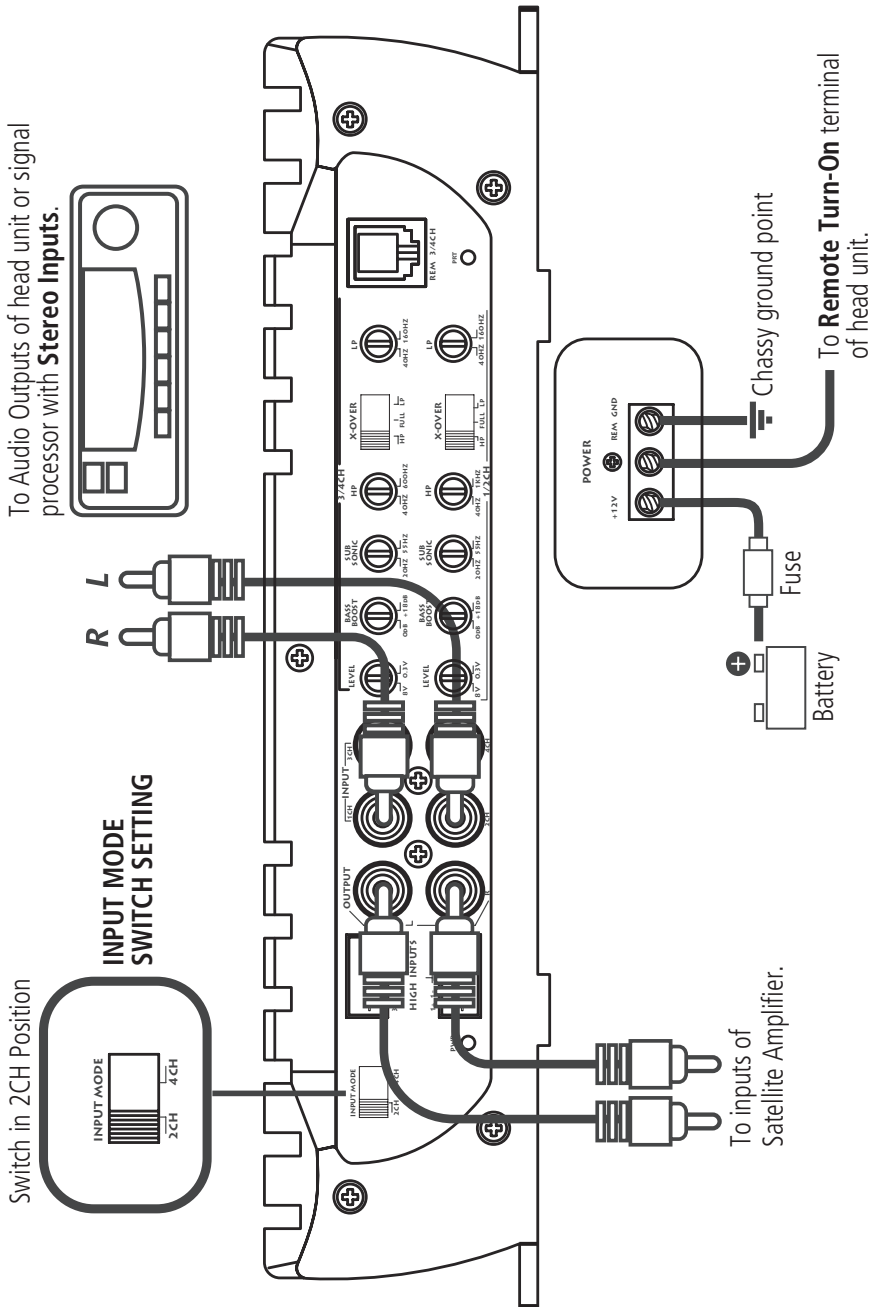
The GA9800 amplifier is designed to work within 10 to 16 Volts DC. Before any wires are connected, the vessel's electrical system should be checked for correct voltage supply with the help of a volt meter.

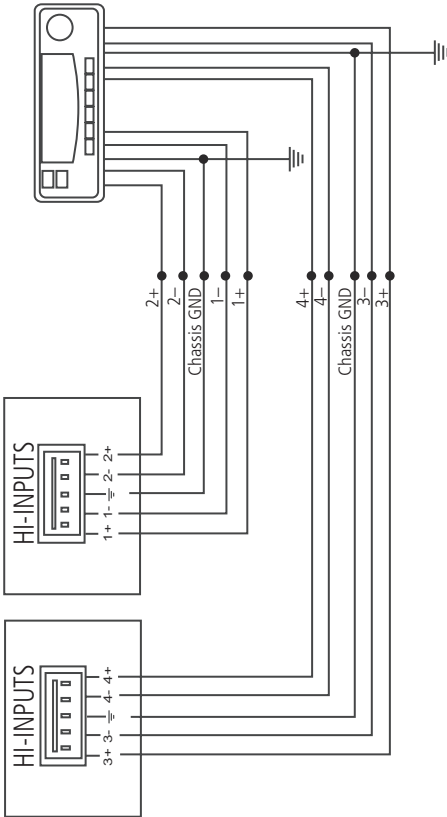
1. Check the voltage at the battery terminals with the ignition in the OFF position. The Volt Meter should read no less than 12 Volts.
2. Check the battery with the engine running between 1500 and 2000 rpms. The Volt Meter should now read between 13.5 and 14.5 Volts.

Note: If your vessel's electrics are not up to these specifications, we recommend it to be checked by an Marine Electrician before you continue with the installation.

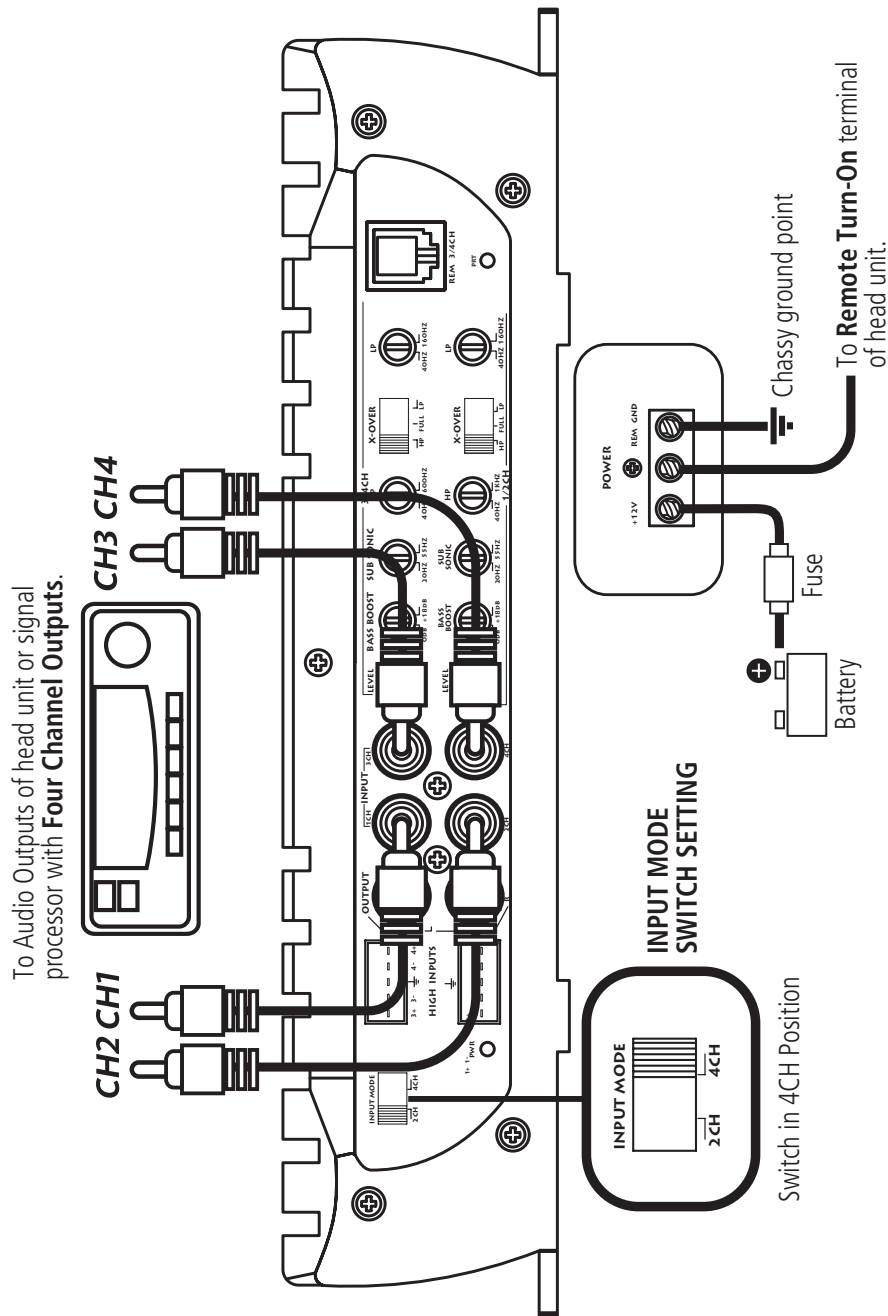
4 CHANNEL INSTALLATION WIRING

1. LOW INPUT WIRING CONFIGURATION 2 CHANNEL



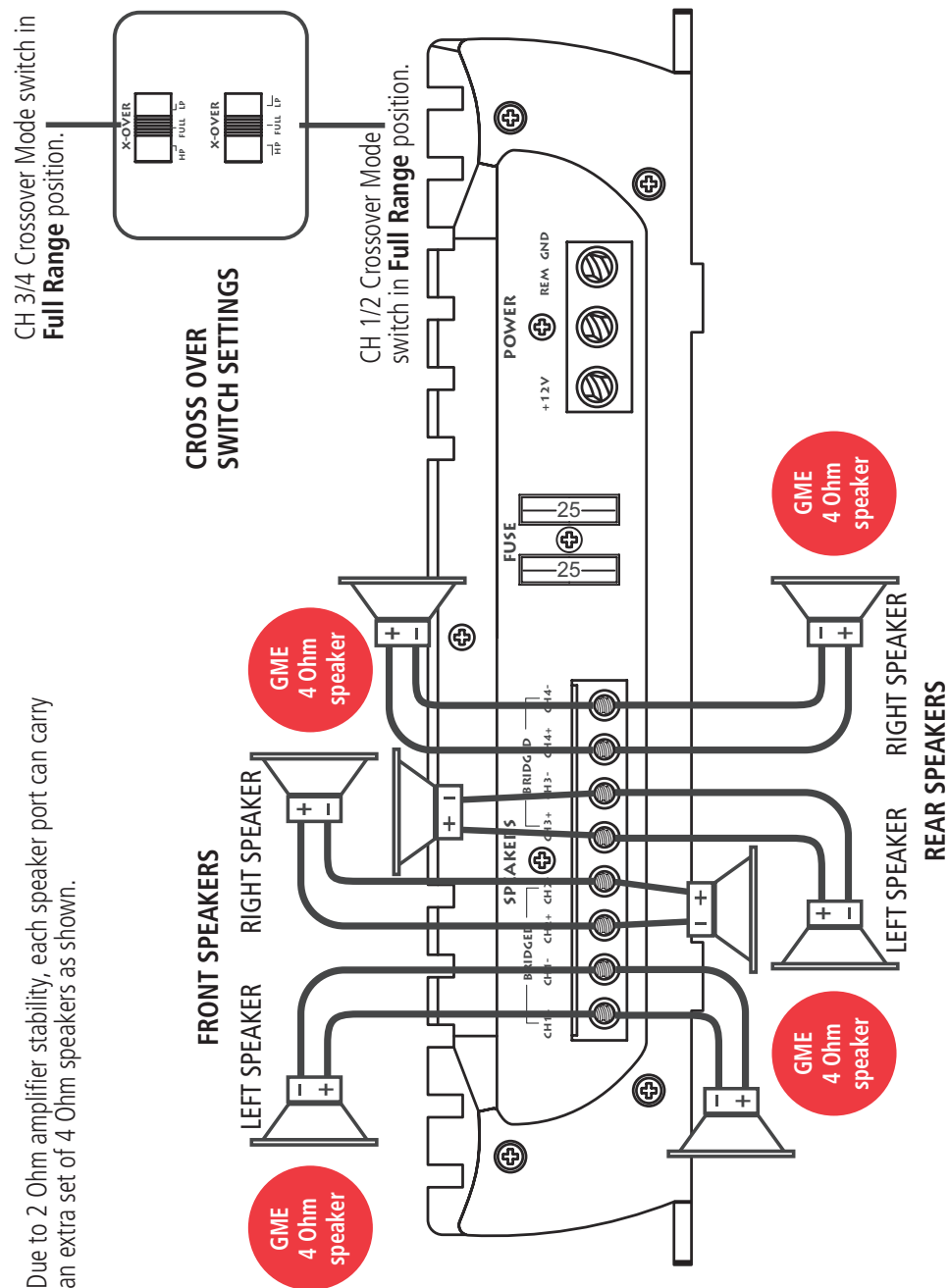


3. LOW INPUT WIRING CONFIGURATION 4 CHANNEL

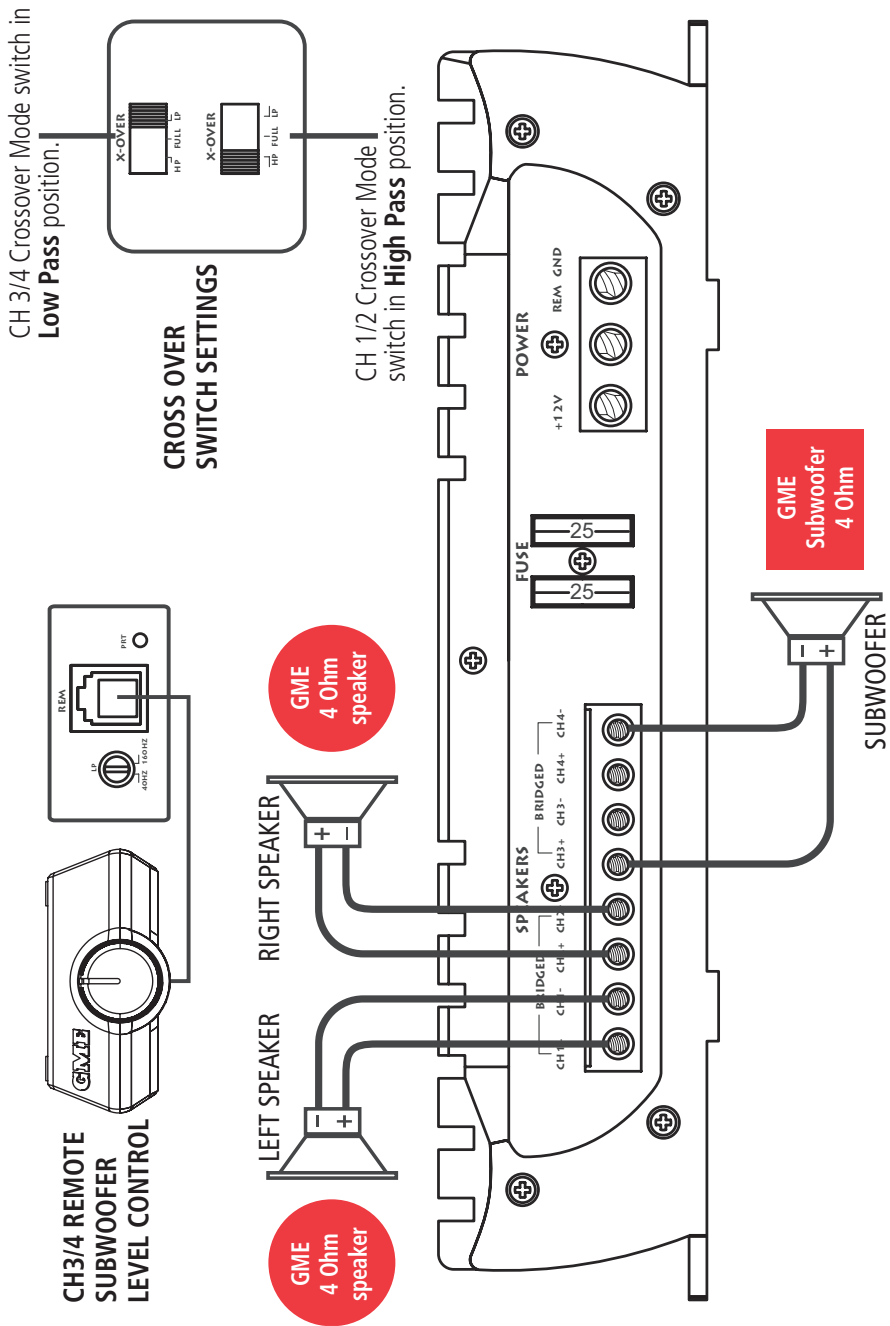


SPEAKER OUTPUT CONFIGURATION

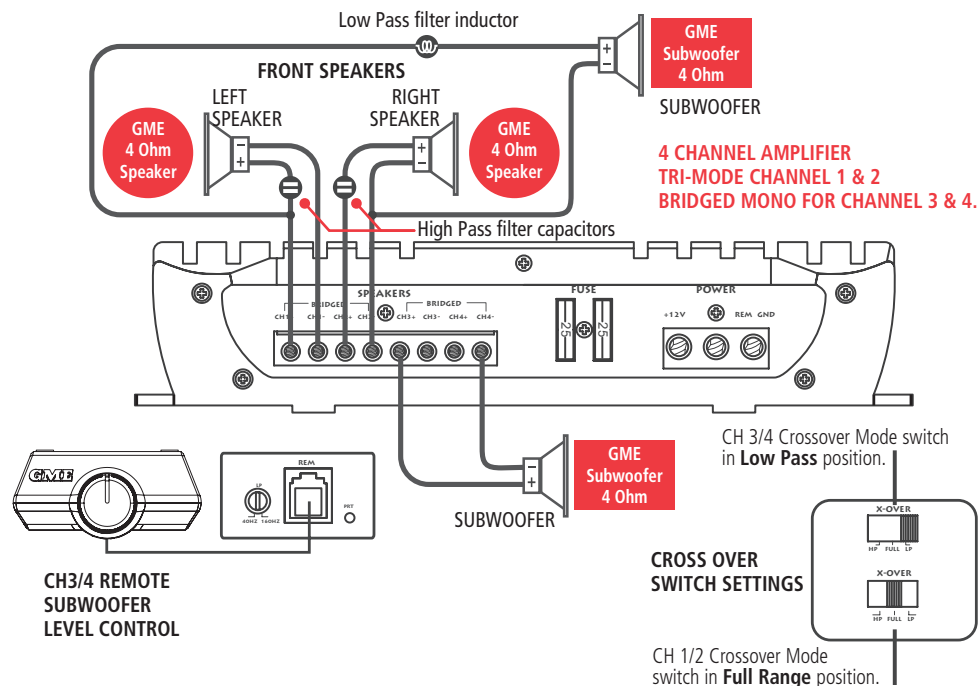
1. 4/8-WAY SPEAKER CONFIGURATION



2. 2-WAY SPEAKER AND SUBWOOFER CONFIGURATION



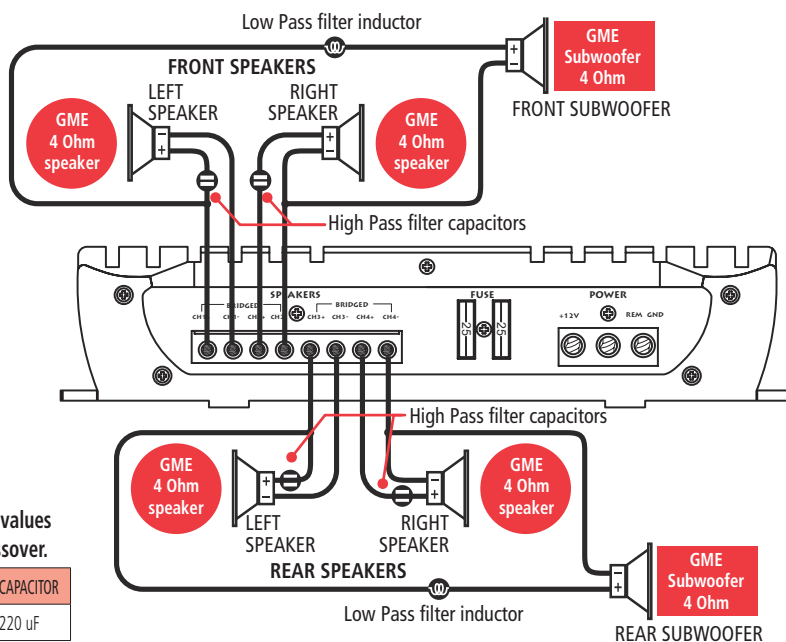
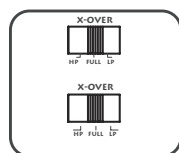
3. 2-WAY SPEAKER AND 2-WAY SUBWOOFER CONFIGURATION



4. 4-WAY SPEAKER AND 2-WAY SUBWOOFER CONFIGURATION

**4 CHANNEL
AMPLIFIER
TRI-MODE ALL
4 CHANNELS.**

**ALL CROSSOVER
SETTINGS IN THIS
MODE SHOULD
BE FULL RANGE.**

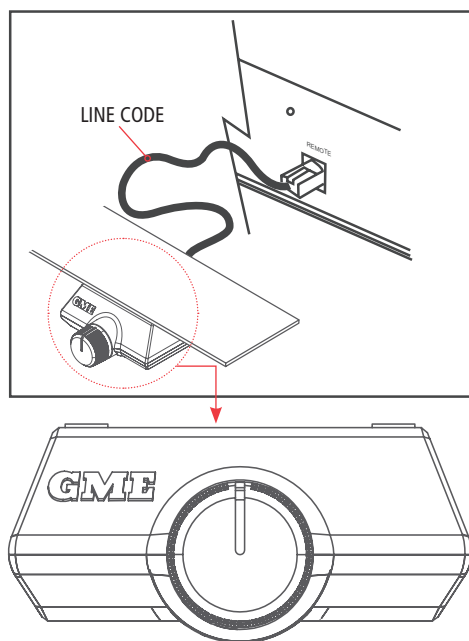


GME recommends the following component values for 12 dB Passive Crossover.

FREQUENCY	INDUCTOR	CAPACITOR
140 Hz	6.5 mH	220 uF

AMPLIFIER INSTALLATION

SUBWOOFER REMOTE CONTROL



PRECAUTIONS

Before you drill or cut any holes, investigate your vessel's layout very carefully. Take care when you work near the gas tank, fuel lines, hydraulic line and electrical wiring.

Do not operate the amplifier when it is unmounted. Attach all audio system components securely within the vessel.

Do not mount this amplifier so that the wire connections are unprotected or in a pinched condition, or likely to be damaged by nearby objects.

Before making or breaking power connections in your system, disconnect the vessel's 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, only replace it with a fuse identical to that supplied with the system. Using a fuse of a different type or rating may result in damage to your system which isn't covered by the manufacturer's warranty.

SPECIFICATIONS

GENERAL

Max. Power @ 2 Ohm:	4 x 367 Watts
RMS Power @ 4 Ohm:	4 x 65 Watts
Bandwidth:	10 Hz – 40 kHz
Signal to Noise:	≥ 95 dB
Channel Separation:	≥ 60 dB
Input Sensitivity Range:	300 mV – 8V
LP Variable Crossover:	40 – 160 Hz & 12 dB/octave
HP Variable Crossover:	40 – 600 Hz/ 1 kHz & 12 dB/octave
Variable Bass Boost:	0 – +18 dB & 45 Hz
Variable Subsonic Filter:	20 – 55 Hz & 12 dB/octave

Phase: No

RCA Input Model: Yes

Input Impedance: 20 K Ohm

Damping Factor: ≥ 200

T.H.D (4 Ohm): 0.05%

Fuse Rating: 2 x 25 Amp

PHYSICAL

Dimensions: 254 mm (10") (W)
x 56 mm (2.2") (H)
x 381 mm (15") (D)

***All specifications are typical and subject to change without notice or obligation**

TROUBLESHOOTING

PLEASE NOTE: Before moving your amplifier, refer to the list below and follow the suggested procedures. ALWAYS test the speakers and their connecting wires first.

PROBLEM	CHECK ITEM/SOLUTION
No output	<ol style="list-style-type: none"> 1. Confirm all terminal strip connections are secure and tight. 2. Check both in-line and built-in fuses. Both the '+ 12V' and the 'REMOTE' terminal must have + 12V referenced to chassis ground. 3. Confirm the audio signal source [radio, equalizer, etc.] is connected and is supplying output signal. To check if the amplifier is supplying signal, unplug the RCA cables from the signal source [but leave them plugged into amp]. Briefly tap the centre pin of each of the disconnected RCA plugs with your finger. This should produce a noise [feedback] in your speakers.
Only 1 Channel is working	<ol style="list-style-type: none"> 1. Confirm all speaker strip connections are secure and tight. 2. Check the 'BALANCE' control on the head unit [or other source] to verify that it is set to its midpoint. 3. If you are using the Low Level RCA input, reverse the input plugs at the amplifier [switch the R with the L]. If the channel which is silent switches to the other side, the problem is either in the head unit/other source or the connecting cables.
Weak output	Re adjust the Input Sensitivity Control to better suit input signal.
Noise in the audio	<ol style="list-style-type: none"> 1. If the noise is a 'whine' whose pitch follows the engine speed, confirm that the amplifier and any other signal sources [head unit, etc.] are properly grounded. 2. If the noise is a 'clicking' or 'popping' noise whose rate follows the engine speed, this usually means the vessel is equipped with resistor spark plugs and wires, or that the ignition is in need of service. 3. Check the routing of the speaker and input wires to make sure they are not adjacent to wires which interconnect lights and other accessories. If the above steps fail to improve or clear noise interference, the system should be checked by a professional marine audio installer.

STANDARD COMMUNICATIONS CONTRACT WARRANTY

1. STATUTORY WARRANTIES

- 1.1 The Trade Practices Act Part V, Division 2A and other legislation imply conditions, warranties and other obligations on us to consumers that cannot be excluded, restricted or modified. Those provisions apply to the extent required by law.
- 1.2 We exclude all other conditions, warranties and obligations which would otherwise be implied concerning the activities covered by this agreement.
- 1.3 We limit our liability where we are allowed to do so. Examples of where we are allowed to limit liability are -
 - (a) you acquire goods from us for re-supply;
 - (b) the goods or services we supply are not of a kind ordinarily acquired for personal, domestic or household use or consumption.
- 1.4 Where we are allowed to limit our liability, to the extent permitted by law, our sole liability for breach of a condition, warranty or other obligation implied by law is limited -
 - (a) in the case of goods we supply, to any one of the following as we decide -
 - (i) the replacement of the goods or the supply of equivalent goods;
 - (ii) the repair of the goods;
 - (iii) the payment of the cost of repairing the goods or of acquiring equivalent goods;
 - (iv) the payment of the cost of having the goods repaired; or
 - (b) in the case of services we supply, to any one of the following as we decide -
 - (i) the supplying of the services again;
 - (ii) the payment of the cost of having the services supplied again.

2. ADDITIONAL WARRANTIES

- 2.1 The warranties in this clause are in addition to the statutory warranties referred to in the previous clause.
- 2.2 We warrant our goods to be free from defects in materials and workmanship for one year from the date of original sale (or another period we agree to in writing). During this period and as our sole liability to you under this warranty, we agree to, at our option, either repair or replace goods

which we are satisfied are defective. We warrant replacement parts for the remainder of the period of warranty for the goods into which they are incorporated.

- 2.3 We warrant our other repairs to be free from defects in materials and workmanship for three months from the date of the original repair. During this period and as our sole liability to you for the repair, we agree to repair or replace (at our option) repaired goods which we are satisfied are defective.
- 2.4 We warrant that we will perform services with reasonable care and skill and agree to investigate any complaint made in good faith that we have performed services unsatisfactorily. If we are satisfied that the complaint is justified, and as our sole liability to you under this warranty, we agree to supply those services again at no extra charge to you.
- 2.5 If you want warranty service under this clause you must give us an original or copy of the sales invoice from the transaction or some other evidence showing details of the transaction.

3. OTHER LIMITATIONS

- 3.1 You may not rely on any representation, warranty or other provision by or for us which is not covered by clause [1] or repeated in this agreement in clear terms.
- 3.2 We are not liable (nor are our employees, contractors and agents) for any damage, economic loss or loss of profits whether direct, indirect, general, special or consequential -
 - (a) arising out of any breach of any implied or express term, condition or warranty; or
 - (b) suffered as a result of our negligence (or that of our employees, contractors or agents) -
 - apart from liability as set out in the previous two clauses.
- 3.3 The liability of a party under this agreement (whether arising in contract, tort or by statute) is to be reduced by the same proportion as represents the proportion of the loss or damage caused or contributed to by the other party, its contractors or agents.



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