



ME-52 Expansion Amplifier

Introduction:

The ME-52 is a 2 channel audio amplifier capable of delivering up to 25W RMS per channel. It's compact, water resistant design allows for flexible mounting possibilities, and makes it simple to expand the audio system capabilities for any boat or vehicle.

Uses:

- To add additional speakers to a current audio system
- To provide amplification for a separate audio zone
- As a stand-alone system amplifier for any audio source

Features:

- Powers up to 4, 4 ohm speakers
- Internal distortion limiting circuit prevents harsh distortion
- Accepts line level, or speaker level input
- Polarity switch to optimize interaction with main system
- Gain level control to match output to main system

- Supports optional external volume control
- Water resistant design for confident marine use

INSTALLATION INSTRUCTIONS

Mounting the ME-52:

- 1) Choose a mounting location that is well ventilated. The Amplifier generates significant heat when operating at high power levels.
- 2) It is preferable to mount the unit such that the ventilation fins are vertical or facing upward.
- 3) Drill 1/8" (3mm) pilot holes in the mounting surface corresponding to the 4 mounting flanges of the amplifier. Be sure not to drill into any critical areas of your boat or vehicle.
- 4) Fasten the amplifier to the surface securely using the 4 included tapping screws.

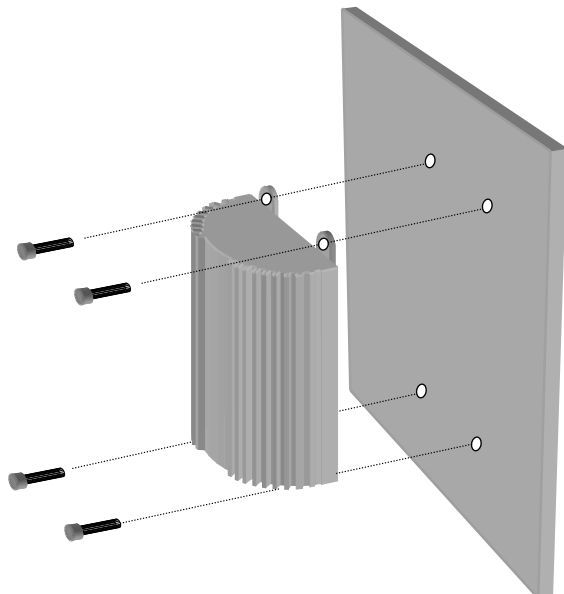


Figure 1 - Amplifier Mounting

Mounting the Volume Control:

- 1) Choose a mounting location with a flat surface the size of the volume control body
- 2) There must be at least 1.73" (44mm) of clearance behind the mounting area
- 3) Drill a 1.00" (25.4mm) hole making sure that there is nothing behind the surface that could be damaged.
- 4) Run all cables, make connections, and test the entire system.
- 5) Position unit, remove film from foam adhesive, and adhere volume control in place. Warning, the adhesive is very, very sticky so be sure that everything is functioning, and the panel is positioned very carefully before applying pressure.

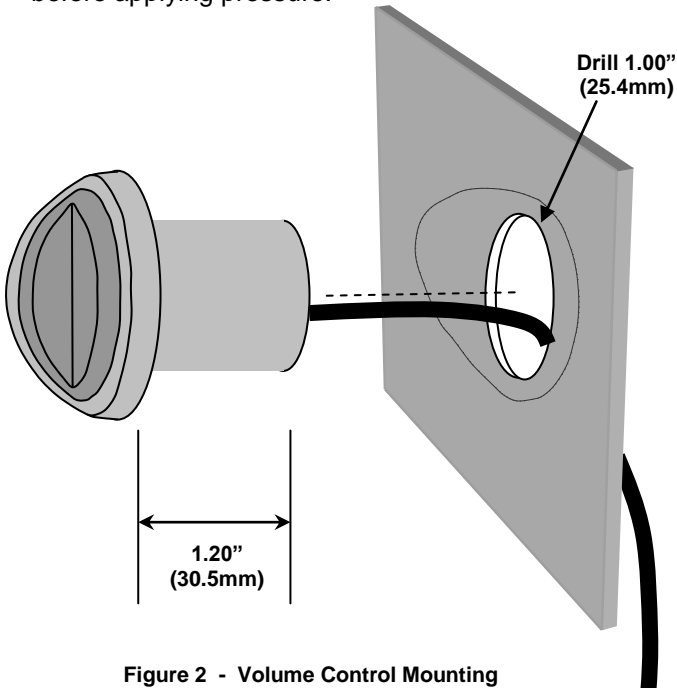


Figure 2 - Volume Control Mounting

Connecting the ME-52 Power and Speakers:

- 1) The Black and Red power wires should be connected to the boat or vehicle battery or main circuit breaker panel using heavy gauge wire (AWG #16 or lower). Black = GROUND, Red = +12VDC
- 2) The Blue REMOTE wire turns on the amplifier. Connect this to the remote trigger wire of your receiver, or if using the independent volume control, there is no need to connect the blue wire (amplifier power will turn on when volume knob is turned to on position). LED light (located on the other side of the amp) illuminates when ME52 is turned on.
- 3) Connect the white and grey speaker wires to 1 or 2 pairs of speakers. Pay close attention to polarity (black stripe = negative).

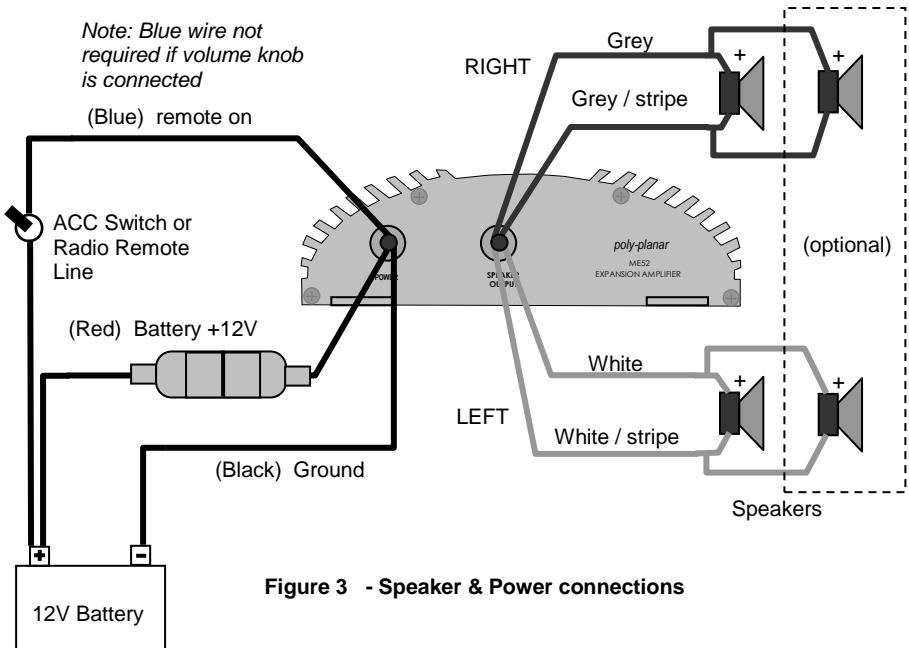


Figure 3 - Speaker & Power connections

Input connections without Volume control:

- 4) For operation without the optional external volume control, connect the amplifier inputs to the VARIABLE LINE OUT of your receiver using shielded RCA patch cables. In this case the amplifier volume will be determined by the volume setting of the source component. If the receiver does not have line level outputs, the ME-52 can be connected to the speaker outputs, however line level is preferred due to superior noise and distortion performance. See Figure 6 for amplifier settings related to input connections.

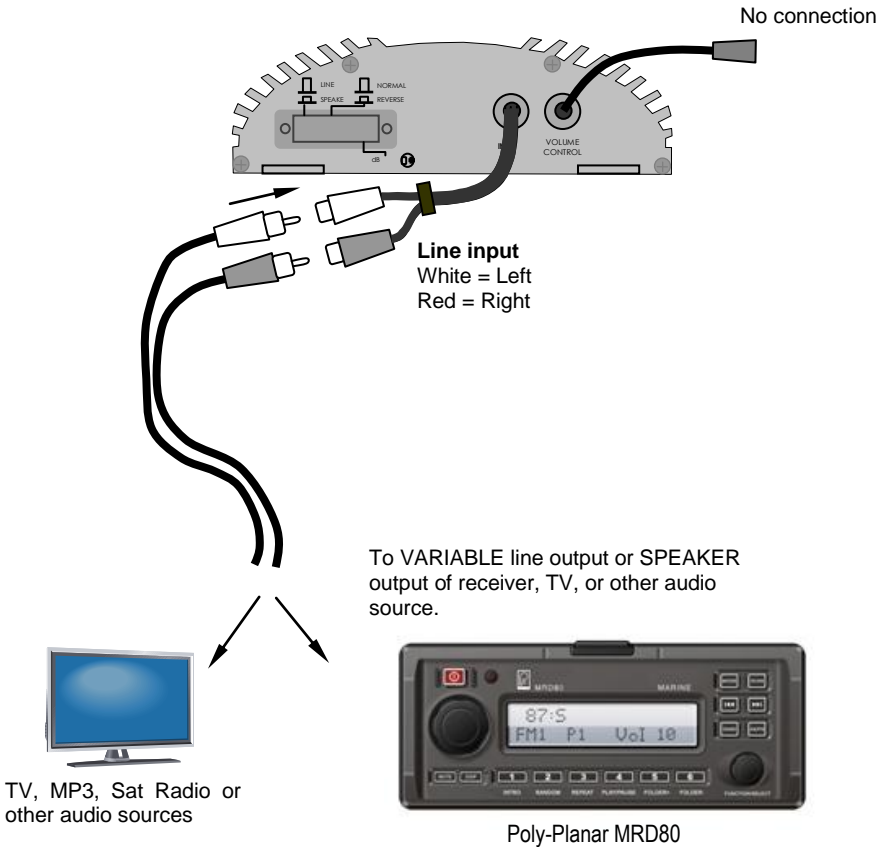


Figure 4 - Input connections without Volume control

Input connections with Volume control:

- 5) For operation with the external volume control, connect the amplifier inputs to the PRE-AMP LINE OUT of your receiver using shielded RCA patch cables. The Pre-amp line output should be a fixed level output that is independent of the volume setting of the receiver.

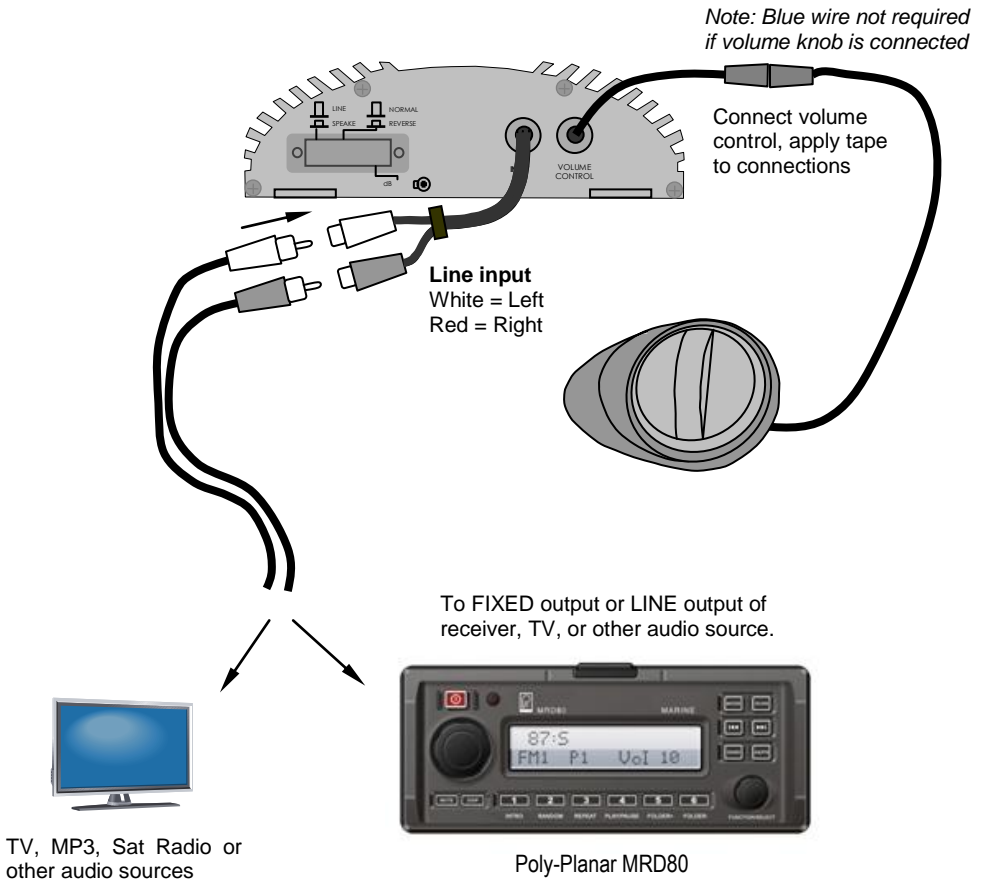


Figure 5 - Input connections with Volume control

Switch & Gain Settings:

- 6) The switches and gain settings are secure behind a water resistant rubber seal. Be sure to replace the cover when finished with adjustments.
- 7) The INPUT LEVEL switch selects the input sensitivity of the amplifier. If you are connecting to a LINE level source (typically any RCA type connection) then the switch should be in the LINE (out) position. When connecting to speaker outputs or headphone or high level sources then set the switch to the SPEAKER (in) position.
- 8) The POLARITY switch allows the user to optimize bass performance in the case that there are more than 1 set of speakers producing bass in the system. Play some music with strong bass content and listen with the switch alternately in the NORMAL and REVERSE position until it can be determined which setting results in more pleasing bass response. If in doubt, or if any interaction with other speakers is unlikely, then leave the switch in the NORMAL position.
- 9) The GAIN control adjusts the overall level of the amplifier. When using the amplifier without volume control (as in Figure 4) the level should be set to achieve a balance with other loudspeakers in the system. As a rule, keep the gain setting as low as possible while still insuring that the system will reach full output power. When using the system with external volume control (as in Figure 5), set the external Volume Control to FULL (clockwise) and adjust the gain on the amplifier until full output power is reached. Full output power level can be determined by turning the gain control clockwise until the apparent loudness does not appear to increase any more. Leave the control at the setting where this begins to become apparent.

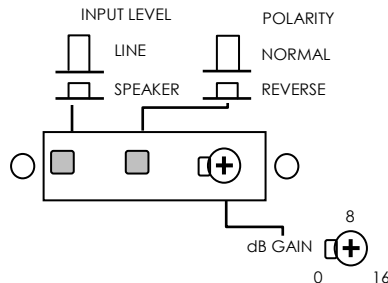
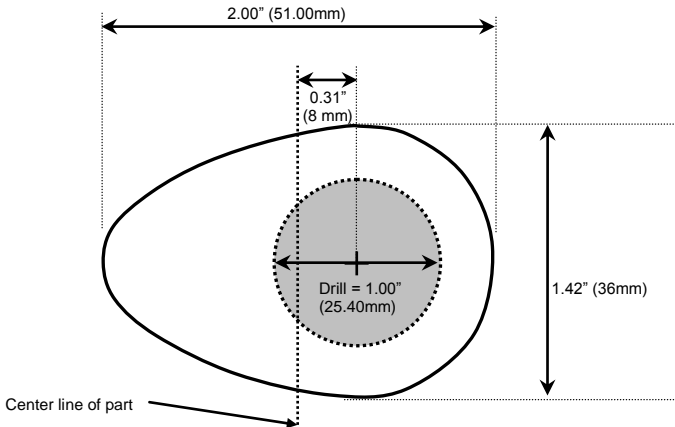


Figure 6 – Amplifier Switch and gain settings

Specifications:

Speaker Impedance	2 – 8 ohm
Output Power (2 ohm load)	25 W RMS per channel
(4 ohm load)	15 W RMS per channel
Frequency Response	20Hz – 20KHz
Operating Voltage	13.8V (10V – 16V) DC
Idle Current (no signal)	10 mA
Maximum current draw (full power)	7 A
Remote wire current	4 mA
Fuse Rating.....	10A * 1
Dimensions (approx. w/h/d)	105.5mm X 39mm X 124mm
	4.15 X 1.54 X 4.88 inches
Weight	15 oz (.425 Kg)

Volume Control mounting template Note: Horizontal center of part is 0.31”(8mm) to the left of the mounting hole center.



WARRANTY INFORMATION

This unit is warranted to be free of defects in material and workmanship for a period of two years. Warranty is subject to proper installation and operation within the published specifications. Except as provided below, Poly-Planar will repair or replace, at its discretion, any unit returned prepaid to our facility with proper documentation and determined to be defective in normal use. Poly-Planar is not liable for any consequential damages.

LIMITS OF LIABILITY

Proof of date of purchase is required for warranty service of this unit.

Poly-Planar will consider this warranty void if unit has been tampered with or has had serial number altered, defaced or removed. Poly-Planar warranty does not cover damage incurred in transit, accident, abuse, misuse, negligence, fire, flood, lightning, or unauthorized service. This warranty assumes no responsibility for damages incurred during installation of this equipment. This warranty does not cover labor costs for removal of defective unit or reinstallation of replacement unit. This warranty covers normal consumer use only. In no event shall Poly-Planar be liable for special, incidental, or consequential damages.

To obtain service under this warranty, please call Poly-Planar for a **RETURN AUTHORIZATION NUMBER**. After a return authorization number is issued, return unit with proof of purchase and a letter stating your return address, daytime phone number and detail description of the problem or malfunction.

poly-planar

Maryland, USA

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detach here



WARRANTY REGISTRATION

In order to validate you Warranty please complete this Registration Card within 1 week of purchase. Detach and mail to Poly-Planar Group, LLC P.O. Box 409, Hanover, MD 21076

A copy of proof of purchase must accompany this registration

SERIAL NUMBER	MODEL NUMBER	DATE OF PURCHASE
LAST NAME	FIRST NAME	EMAIL (optional)
STREET ADDRESS		
CITY	STATE	ZIP
DEALER	CITY	STATE