



Instruction Manual

To ensure maximum performance and safety, please follow this manual.
Please retain the manual for future reference after installation.

Manuel d'instructions

Afin d'assurer la performance et la sécurité maximale, il est conseillé de consulter les instructions fournies et de garder le carnet même après l'installation pour éviter de futurs problèmes.

Manuale di Istruzione

Per assicurare massime e la sicurezza, si prega di seguire questo manuale.
Si prega di trattenere questi istruzioni dopo l'installazione per il riferimento nel futuro.

Bedienungsanleitung

Um die optimale Leistung und Sicherheit des Gerätes zu erhalten, folgen Sie bitte dieser Bedienungsanleitung! Bitte bewahren Sie die Bedienungsanleitung nach dem Einbau gut auf, um auch in der Zukunft Hinweise nachlesen zu können.

Manual de instrucciones

Para asegurar el buen funcionamiento y la seguridad, por favor, lea las instrucciones. Por favor, guarde el manual para futuras referencias después de la instalación.

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INTRODUCTION

The VIBE MonoBox III subwoofer amplifier features:

- Full Range frequency response with low distortion and exceptional signal to noise performance
- Advanced circuit design featuring full stability at 4 to 2 Ohm loading.
- Variable low-pass and subsonic electronic crossovers with 24dB per octave slopes
- Adjustable input level controls with ground loop isolation accepting a wide range of input signals
- Fully adjustable Bass Enhance Plus facility
- Remote turn-on with “soft start” muting to prevent turn on “thump”
- Pulse-Width Modulated (PWM) MOSFET power supply with low AM RFI and protection circuits for overheating and speaker shorts
- Dedicated Microprocessor circuit for full amplifier protection modes.
- Gold-plated input/output connectors and an external automotive-type fuse
- Aluminium heat sink for efficient heat dissipation
- Low profile, compact size for space-limited installations

ABOUT THE MANUAL AND WARRANTY

To start enjoying your new VIBE monoblock amplifier, please read the instructions listed in this manual. Keep all instructions for future reference. Please fill out and send in the enclosed warranty card to protect your purchase and aid in warranty service. Also, save your original sales receipt as proof of purchase.

VIBE ICC VENTS

The MonoBox amplifiers feature an ultra compact low profile design that utilizes ICC (Internal Convection Cooling) Vents. Each MOSFET is individually clamped to the aluminium heat sink allowing maximum heat transfer to be achieved through the internal cooling fins; the ICC vent allows the dissipation of the heat without affecting the superior exterior aesthetics. It is very important not to block or impede the air flow to and from the ICC vents as this may cause the unit to become very hot and go into a protection mode.

DO NOT BLOCK ICC VENTS OR THE AIR-FLOW TO THE ICC VENTS UNDER ANY CIRCUMSTANCES.

RECOMMENDED AMPLIFIER INSTALLATION

To achieve maximum performance and superior sonic quality from your MonoBox amplifier the following points should be followed:

- Mount the amplifier horizontally or vertically - NEVER upside down
- Use VIBE Power 4 or Power 8 supply & ground cable (minimum)
- Use VIBE REMOTE 18 FLAT LINES remote cable
- Use VIBE FLAT2 OFC RCA interconnects
- Use VIBE FLAT1 OCC Bass Specific RCA Interconnects
- Use VIBE FLAT13 OFC solid core bass cable for subwoofer applications

PRODUCT DESCRIPTION

The VIBE MonoBox III amplifier provides 1×400 watts of power into a 4 Ohm Load and 1×600 watts of power into a 2 Ohm load. This full featured model is an excellent choice for a variety of car audio subwoofer system configurations.

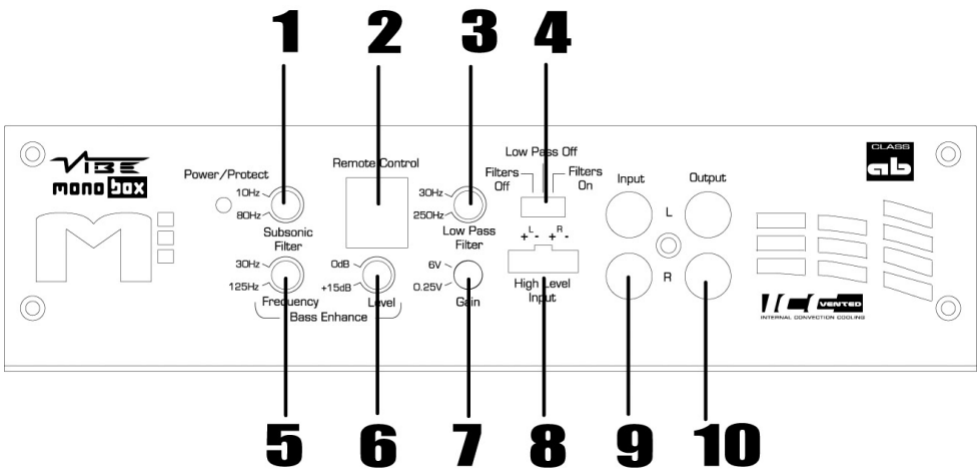
The MonoBox III uses an unregulated MOSFET power supply for superior control of output wattage. A toroid-coil transformer yields maximum power transfer with minimum heat loss. Careful attention to circuit design keeps AM RFI at low levels, so you won't hear unwanted noise when the level is cranked up. Protection circuits safeguard the amplifier when overheating and speaker shorts or improper load conditions occur.

All connections and controls for the MonoBox III are on the end panels and are easy to understand. We use gold-plated RCA and barrier connectors to ensure the best electrical connection for your system. Included are external automotive type fuses that are easy to replace.

INPUT CONNECTIONS AND AUDIO CONTROLS

The front panel of the MonoBox contains connections for RCA Inputs, Remote level control and Audio Controls as shown on the figures below. The RCA Input Connections are gold-plated RCA jacks and are labelled as RIGHT and LEFT.

Figure 1: MonoBox III Front Panel



1. Subsonic Filter
2. Remote Level Port
3. Low Pass Filter Control
4. Filter Selector
5. Bass Enhance Frequency Control
6. Bass Enhance Level Control
7. Gain Control
8. High Level Input Socket
9. RCA Input Jacks
10. RCA Output Jacks

Standard Controls

- Remote Level Input

This input socket is for the connection of the external digital level controller .

- Gain Control

This allows you to set the nominal operating level of the amplifier. The amplifier has an input range of 250mV to 6V for the RCA inputs.

- Low Pass Filter

This allows you to set the frequency at which the amplifier output will be filtered above this point. The filter has a range of 30 – 250Hz with a 24dB slope per octave.

- Subsonic Filter

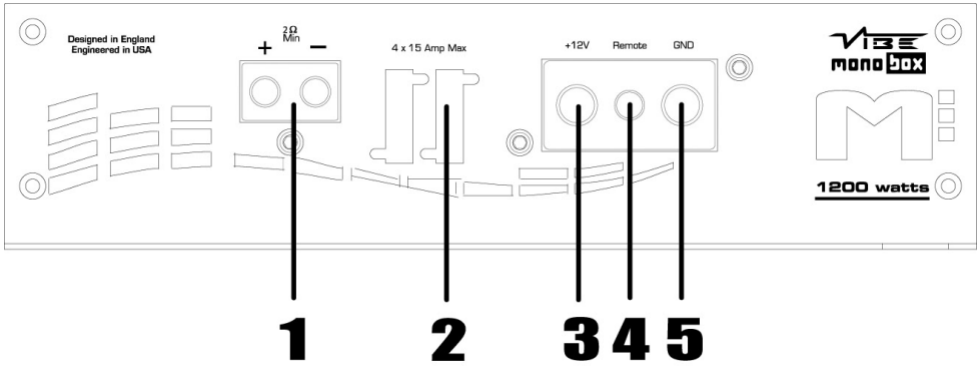
This allows you to set a frequency at which the amplifier output will be filtered out below this point. The filter has a range of 10 – 80Hz with a 24dB slope per octave.

- Bass Enhance Plus

This feature offers up to 15dB of bass boost at any frequency between 30 – 125Hz with a fixed Q value of 2. Variable frequency and level offers the ability to boost and shape the frequency response of the subwoofer output.

CONNECTIONS FOR POWER AND SPEAKERS

Figure 2: MonoBox III Rear Panel

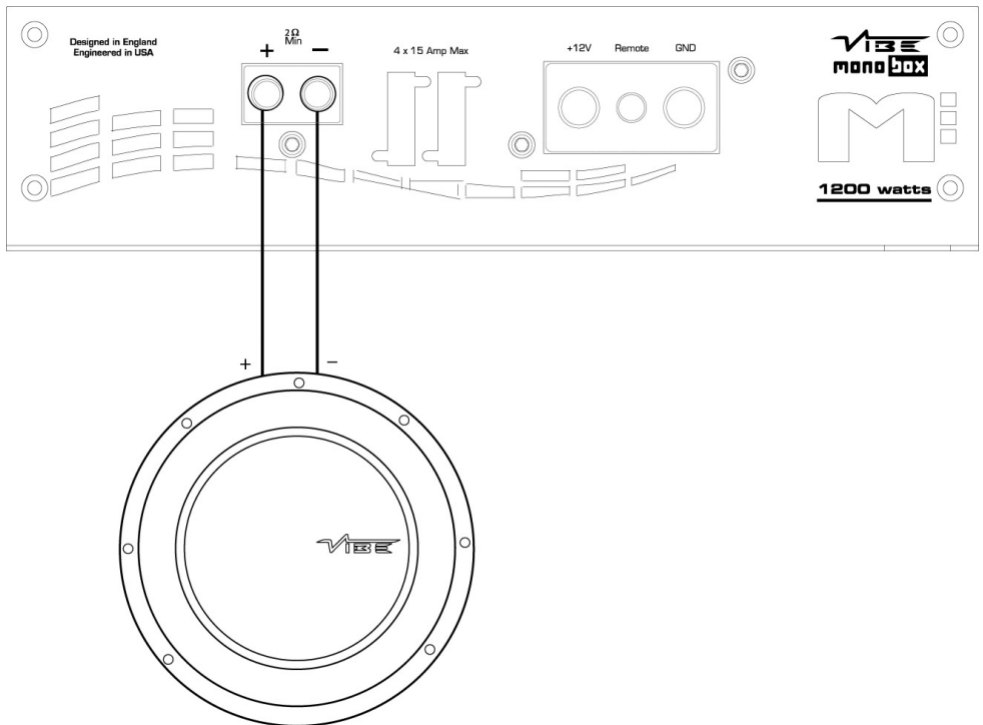


- 1. Mono Output
- 2. 2 x 25 Amp Fuses
- 3. Battery +12V Input
- 4. Remote Turn-on Input
- 5. Ground Input

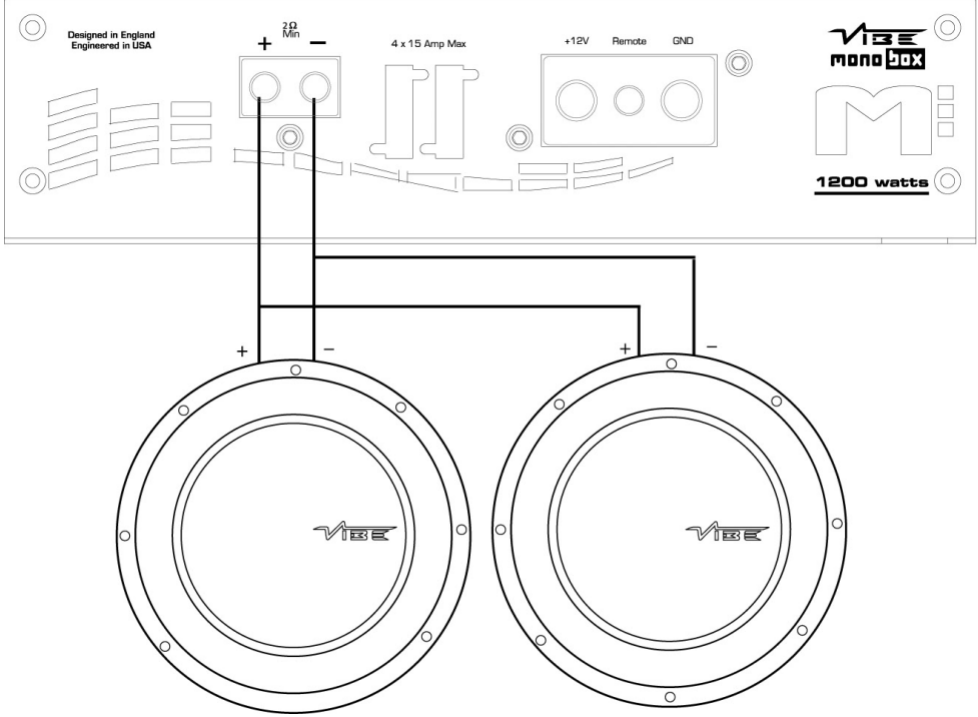
APPLICATIONS

The MonoBox III is a monoblock amplifier capable of driving speaker loads between 4 and 2 ohm, this load can consist of anything from 1 to 2 actual drive units. The following pages show some of the most common speaker configurations for the MonoBox III amplifier.

SINGLE 4 OHM SUBWOOFER APPLICATIONS

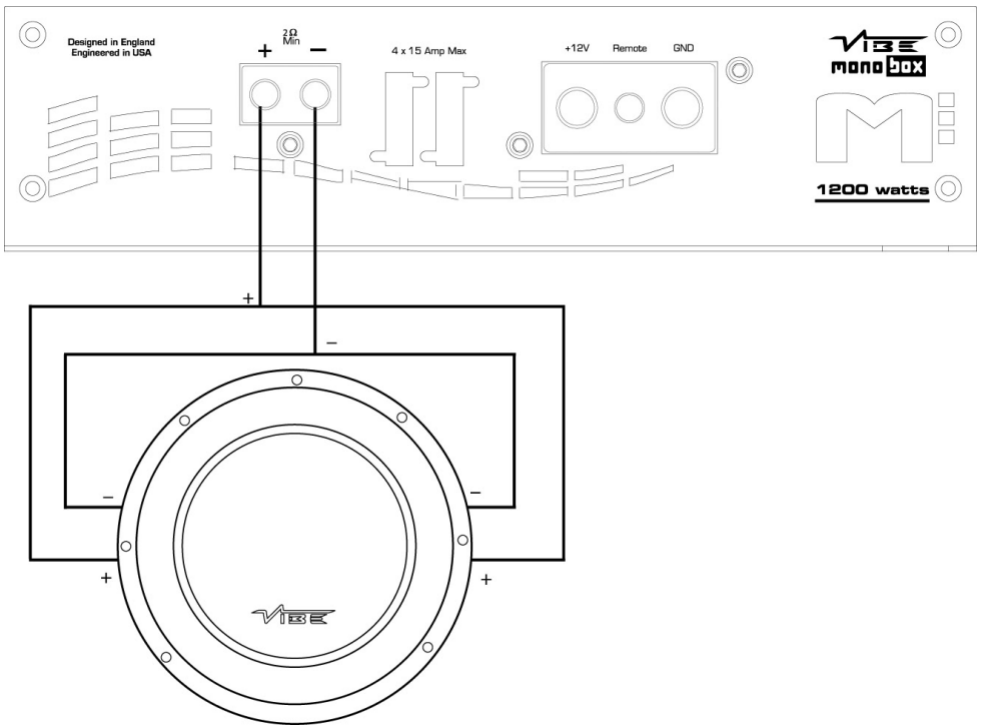


TWIN 4 OHM SUBWOOFER APPLICATIONS (2 Ohm Loading)

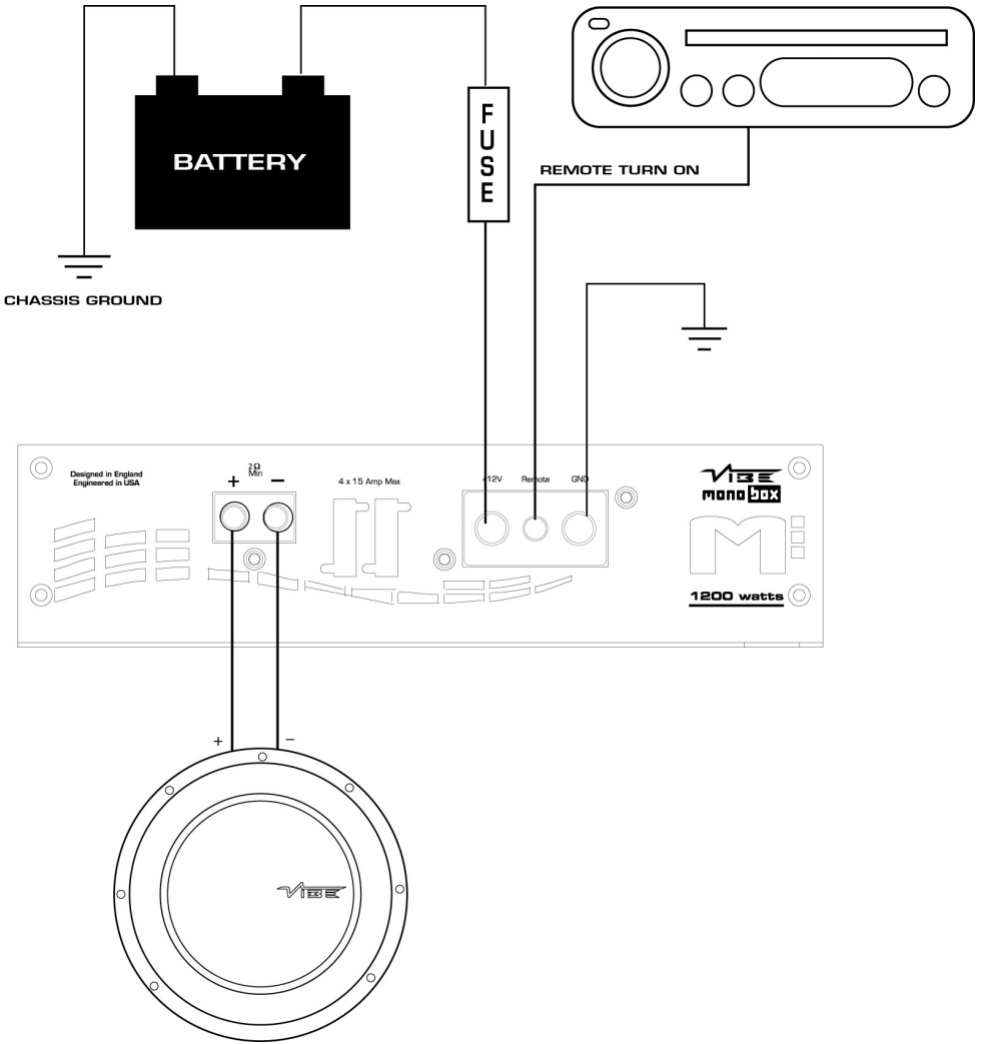


DUAL VOICECOIL (4 OHM) SUBWOOFER APPLICATIONS

(2 Ohm Loading)



ELECTRICAL CONNECTIONS



POST-INSTALLATION

After completing the installation, follow these steps to set the Gain/Crossover Controls and then perform the Final System Checks.

1. Turn the Gain Control all the way counter-clockwise (Min)
2. Turn the vehicle's ignition switch to the ON position, and then turn the ON/OFF switch on the source unit(s) to the ON position. Set all Tone or Equalisation controls to "flat" positions, and turn Loudness off
3. Play your music source unit and set the Volume Control at 75% of full level. If the system uses an equaliser, set its frequency controls to "flat" positions
4. Slowly increase the Gain Control. Stop when you hear a slight distortion of audio (beyond this point the subwoofer driver voice coil is at risk of severe damage not covered by warranty)

SETTING THE CROSSOVER

The VIBE MonoBox III features fully adjustable crossovers, low pass and subsonic.

To set the crossover, follow these steps:

1. Using the Frequency (Hz) Control, select the desired frequency. Depending on the type of subwoofer driver and enclosure the low pass filter should be set to achieve perfect integration between subwoofer output and the rest of the car audio system.
2. Switching on the subsonic filter will enable a lower frequency limit to be set. The subwoofer output can often be cleaned up in terms of clarity and definition if the subsonic output from the amplifier is limited.

SETTING THE BASS ENHANCE PLUS

The VIBE MonoBox III features fully adjustable BASS ENHANCEMENT PLUS, this allows up to a 15dB boost at a frequency between 30 – 125Hz. This feature can aid in maximising the output of any subwoofer enclosure, it can be used to boost a poor region of the frequency response or to put emphasis on a chosen frequency area. The Q of Bass ENHANCE PLUS is approximately fixed at 2.

To set this feature, follow either of these steps:

1. Apply a large amount of boost and sweep the frequency control, listen carefully to the output of the subwoofer. Seek out an area of the subwoofer output that is clearly lower than the rest, this is where this feature can be used to aid response. Back off the boost amount to give a smooth overall subwoofer response.
2. Apply a large amount of boost and sweep the frequency control, listen for an increase in output at a favoured frequency area. Adjust the boost amount to a desired level.

FINAL SYSTEM CHECKS

1. Start the engine and turn on the source unit. After a two-second delay, slowly increase the Volume Control and listen to the audio. If you hear any noise, static, distortion or no sound at all, check the connections, and also refer to Troubleshooting. Depending on your system design, the levels may become quite loud even at low Volume Control settings. Until you get an "audio feel" of the system's power, use care when adjusting controls.
2. Increase the volume and verify that the amplifier reproduces audio without distortion. If you hear distortion, check the connections and verify that the Gain Control is set correctly. Another possibility is damaged speakers or under-powered speakers. Once again refer to Troubleshooting for additional help.
3. A distorting subwoofer is not as easily heard, listen for pops and visually check that the cone is not moving at full excursion. If the amplifier at any enters into protection mode, turn the head unit off and the main ignition and check the installation and operation of the unit.

TROUBLESHOOTING

Problem: No Audio

Solution:

- Low or no remote turn-on voltage – check remote connections at amplifier and source unit
 - Blown amplifier fuse – replace with new fast-blow fuse (same rating)
 - Power wires not connected – check battery and ground wiring at amplifier, and also check battery connections
 - Speaker leads shorted – check speaker continuity to ground – it should not show a common ground
 - Speakers not connected or are blown – check speaker connections at amplifier, measure coil impedance
-

Problem: Audio cycles on and off

Solution:

- Thermal protection circuits are shutting the amplifier off – check location for adequate ventilation; consult an authorised VIBE Audio Dealer
-

Problem: Distorted Audio

Solution:

- Gain is not set properly, or damaged speaker cones – review setting gain; inspect each speaker cone for signs of damage (i.e. frozen cone, burning smell etc.)
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Problem: Audio lacks punch

Solution:

- Speakers wired in correctly, causing cancellation of bass frequencies – check polarity of wires from amplifier to each speaker as defined by the system design
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Problem: Amplifier fuse keeps blowing

Solution:

- Incorrect wiring or short circuit – review installation and check all wiring connections
-

Problem: Whining or ticking noise in the audio with engine on

Solution:

- Amplifier is picking up alternator noise or radiated noise. Turn down input gain; move audio cables away from power wires. Check power and ground connections on amplifier – install an in-line noise filter on source unit's power wire. Check alternator and/or voltage regulator – test for weak battery or add water to battery

SPECIFICATIONS

	MonoBox III
Frequency Response	10 Hz – 50 kHz
Signal Noise Ratio	112dB
THD	<0.01%
Input Sensitivity Low Level	200mV – 6V
RMS Power @ 4 Ohm	400 W
RMS Power @ 2 Ohm	6000 W
Damping Factor	1200
Maximum Power Output	1200 W
Dimensions	335 x 222 x 60 mm
Current Consumption at Max Power	53A @ 1200 W

