

## STINGER MT-1000.1M

# Stinger Audio MT-1000.1M Marine Monoblock Amplifier Instruction Manual

Model: MT-1000.1M

## 1. INTRODUCTION

This manual provides detailed instructions for the installation, operation, and maintenance of your Stinger Audio MT-1000.1M 1-Channel Monoblock Marine Audio Subwoofer Amplifier. Please read this manual thoroughly before attempting installation or operation to ensure proper use and to prevent damage to the unit or your audio system. Keep this manual for future reference.

## 2. PRODUCT OVERVIEW

The Stinger Audio MT-1000.1M is a high-efficiency Class-D monoblock amplifier designed for marine environments. It delivers 1000 Watts RMS of power, optimized for subwoofer applications. Its robust, water-resistant design ensures reliable performance in challenging conditions.

### Key Features:

- **Digital Class-D Monoblock Amplifier:** High efficiency and compact form factor.
- **Compact and Sturdy Design:** Built for lasting reliability.
- **Robust Unregulated Power Supplies:** Designed for superior performance and efficiency.
- **Advanced HEXFET Power MOSFET:** Features reduced on-resistance, faster switching speeds, and enhanced reliability.
- **Direct Insert Power and Speaker Terminals:** Decreased resistance for higher power transfer and efficiency.
- **Water-Resistant Design:** Protects the amplifier against weather elements for uninterrupted performance.
- **Bass Boost Q:** Adjustable bass boost from 0dB to 12dB at a selected frequency.
- **Remote Bass Knob Included:** Flush-mount design for effortless bass level adjustment.



Figure 2.1: Stinger Audio MT-1000.1M Marine Monoblock Amplifier, shown with the included remote bass knob and connection cable.

### 3. SAFETY INFORMATION

Always observe the following safety precautions:

- Disconnect the vehicle's negative battery terminal before any installation.
- Ensure proper grounding to the vehicle chassis.
- Use appropriate gauge wiring for power, ground, and speaker connections.
- Install the amplifier in a well-ventilated area, away from direct heat sources.
- Avoid mounting the amplifier in locations where it may be submerged in water, despite its water-resistant rating.
- Consult a professional installer if you are unsure about any part of the installation process.

## 4. WHAT'S IN THE BOX

Verify that all items are present before beginning installation:

- 1000 Watt Monoblock Amplifier (MT-1000.1M)
- Remote Level Control (Bass Knob)
- Mounting Hardware
- Instruction Manual

## 5. COMPONENT IDENTIFICATION

Familiarize yourself with the amplifier's controls and connections.



Figure 5.1: Top and bottom views of the MT-1000.1M amplifier, highlighting the power/speaker terminals and control panel.

### 5.1 Control Panel (Input Side)



Figure 5.2: Detailed view of the amplifier's control panel.

- **POWER/PRT/CLIP Indicators:** LEDs indicating power status, protection mode, and signal clipping.
- **REMOTE Port:** RJ11 connection for the included remote bass level control.
- **INPUT (RCA):** Audio input from your head unit or source.
- **BRIDGE IN/OUT (RCA):** For linking multiple amplifiers.
- **GAIN Control:** Adjusts the input sensitivity to match the output of your source unit.
- **LPF (Low-Pass Filter) Control:** Adjusts the upper frequency limit for the subwoofer. Range: 40Hz - 180Hz.
- **SUBSONIC Filter:** Removes ultra-low frequencies below the audible range to protect the subwoofer. Range: OFF - 50Hz.
- **FREQ (Bass Boost Frequency) Control:** Selects the center frequency for the bass boost. Range: 30Hz - 80Hz.
- **BOOST (Bass Boost Level) Control:** Adjusts the level of bass boost. Range: 0dB - 12dB.

## 5.2 Terminal Panel (Output Side)



Figure 5.3: Detailed view of the amplifier's power and speaker terminals.

- **GND (Ground) Terminal:** Connects to the vehicle's chassis ground.
- **REM (Remote) Terminal:** Connects to the remote turn-on lead from your source unit.
- **+12V (Power) Terminal:** Connects to the positive terminal of the vehicle's battery via an inline fuse.
- **MONO OUTPUT (Speaker Terminals):** Connects to your subwoofer(s). Minimum impedance 1 Ohm.

## 6. INSTALLATION

Proper installation is crucial for optimal performance and safety. Ensure all connections are secure and correctly polarized.

### 6.1 Mounting Location

Choose a mounting location that is secure, provides adequate ventilation, and is protected from excessive moisture. While the amplifier is water-resistant, direct exposure to heavy water spray or submersion should be avoided.



Figure 6.1: The amplifier features a water-resistant design, suitable for marine environments.

## 6.2 Wiring Connections

1. **Power (B+):** Connect a 4-gauge power cable from the +12V terminal of the amplifier directly to the positive terminal of the vehicle's battery. Install an appropriate inline fuse (100A recommended) within 18 inches of the battery.
2. **Ground (GND):** Connect a 4-gauge ground cable from the GND terminal of the amplifier to a clean, bare metal point on the vehicle's chassis. Ensure a solid, low-resistance connection.
3. **Remote (REM):** Connect a 18-gauge remote turn-on wire from the REM terminal of the amplifier to the remote output of your head unit.
4. **RCA Input:** Connect RCA cables from the subwoofer output of your head unit to the INPUT RCA jacks on the amplifier.
5. **Speaker Output:** Connect your subwoofer(s) to the MONO OUTPUT terminals. Ensure the total impedance is not below 1 Ohm. Observe correct polarity (+ to + and - to -).
6. **Remote Bass Knob:** Connect the remote bass knob to the REMOTE port on the amplifier using the provided cable.

## 7. OPERATION

After installation, follow these steps to configure and operate your amplifier.

### 7.1 Initial Setup and Gain Adjustment

1. Turn the GAIN control on the amplifier to its minimum (counter-clockwise) position.
2. Set your head unit's volume to about 75% of its maximum level.
3. Play a dynamic piece of music with strong bass content.
4. Slowly increase the GAIN control on the amplifier until you hear distortion, then back it off slightly until the sound is clear. The CLIP indicator should not illuminate continuously.

### 7.2 Crossover and Filter Settings

- **LPF (Low-Pass Filter):** Adjust the LPF control to set the upper frequency limit for your subwoofer. A common starting point is 80Hz-100Hz, but this may vary depending on your subwoofer and other speakers in your system.

- **SUBSONIC Filter:** Set the SUBSONIC filter to protect your subwoofer from playing frequencies below its resonant frequency. A common setting is 25Hz-30Hz, or slightly below your subwoofer's tuning frequency if it's in a ported enclosure. If you have a sealed enclosure, you may set it to OFF or a very low frequency.

### 7.3 Bass Boost

- **FREQ (Bass Boost Frequency):** Select the frequency at which you want the bass boost to be centered. This is typically between 30Hz and 80Hz, depending on the desired effect.
- **BOOST (Bass Boost Level):** Adjust the level of boost from 0dB to 12dB. Use this sparingly to avoid distortion and potential damage to your subwoofer.

### 7.4 Remote Bass Knob

The remote bass knob allows for convenient adjustment of the subwoofer output level from your listening position. It acts as a master volume for the subwoofer channel, allowing you to increase or decrease the bass intensity without affecting other amplifier settings.

## 8. MAINTENANCE

Regular maintenance helps ensure the longevity and performance of your amplifier.

- **Cleaning:** Periodically wipe the amplifier's exterior with a soft, dry cloth. Avoid using harsh chemicals or abrasive cleaners.
- **Connection Check:** Annually inspect all power, ground, remote, and speaker connections for corrosion or looseness. Tighten as necessary.
- **Ventilation:** Ensure that the amplifier's cooling fins are free from obstructions to allow for proper heat dissipation.

## 9. TROUBLESHOOTING

If you experience issues with your amplifier, refer to the following common problems and solutions.

Problem	Possible Cause	Solution
No Power / Power LED Off	Blown fuse, loose power/ground/remote wire, no remote signal.	Check inline fuse, verify all power connections, ensure head unit remote output is active.
Protection LED On	Speaker short circuit, impedance too low, overheating, DC offset.	Check speaker wiring for shorts, verify speaker impedance, ensure adequate ventilation, disconnect speakers and test.
No Audio Output	No input signal, incorrect gain setting, speaker wires disconnected.	Check RCA connections, adjust gain, verify speaker connections.



Problem	Possible Cause	Solution
Distorted Sound	Gain set too high, improper crossover settings, poor ground connection.	Reduce gain, adjust LPF/Subsonic filters, check ground wire for secure connection.

## 10. SPECIFICATIONS

Detailed technical specifications for the Stinger Audio MT-1000.1M amplifier.

MT-1000.1M Specs	
RMS Power Ratings listed at less than 1% THD @ 14.4v	
1Ω	1000W X 1
2Ω	650W X 1
4Ω	300W X 1
Bridged RMS Rating / 2Ω Minimum	1700W X 1
Signal to Noise (@ CEA Standard)	-93dB
Input Sensitivity	0.5v-11v
Gain	0.5v-11v
Crossover Control, Linkwitz-Riley:	SUB 0Hz - 50Hz (Subsonic) LP 40Hz - 180Hz @ 12dB/Oct
Bass-Boost Frequency Range	30-80 Hz
Bass-Boost Q	0-12dB
Frequency Response(+/- 1dB)	10Hz - 180Hz
Efficiency (Average)	82%
Topology Class	Class D
Remote Bass Control	Yep (Included)
Operating Voltage	9V to 16V
Power Terminal	4 Gauge
Speaker Terminal	8 Gauge
Recommended External Fusing	100A

Figure 10.1: Stinger Audio MT-1000.1M Amplifier Specifications.

Feature	Specification
RMS Power (1Ω)	1000W x 1
RMS Power (2Ω)	650W x 1
RMS Power (4Ω)	300W x 1
Bridged RMS Rating (2Ω Minimum)	1700W x 1
Signal to Noise (CEA Standard)	-93dB
Input Sensitivity	0.5V - 11V



Feature	Specification
Gain	0.5V - 11V
Crossover Control (Linkwitz-Riley)	SUB 0Hz - 50Hz (Subsonic), LP 40Hz - 180Hz @ 12dB/Oct
Bass-Boost Frequency Range	30Hz - 80Hz
Bass-Boost Q	0 - 12dB
Frequency Response (+/- 1dB)	10Hz - 180Hz
Efficiency (Average)	82%
Topology Class	Class D
Remote Bass Control	Yes (Included)
Operating Voltage	9V to 16V
Power Terminal	4 Gauge
Speaker Terminal	8 Gauge
Recommended External Fusing	100A
Item Weight	6.14 pounds
Package Dimensions	14.5 x 7.8 x 3.2 inches
Date First Available	March 13, 2024
Manufacturer	STINGER

# 11. WARRANTY AND SUPPORT

## 11.1 Warranty Information




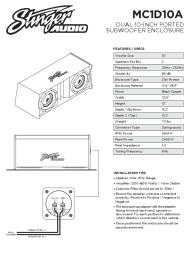

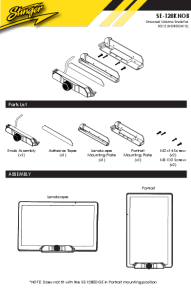
The Stinger Audio MT-1000.1M amplifier comes with a **1 Year Warranty** from the date of purchase. Please retain your proof of purchase for warranty claims. The warranty covers manufacturing defects and workmanship under normal use. It does not cover damage caused by improper installation, accident, misuse, abuse, neglect, or unauthorized modification.

## 11.2 Customer Support

For technical assistance, troubleshooting, or warranty inquiries, please contact Stinger Audio customer support. You can find more information and contact details by visiting the official STINGER brand store:

[Visit the STINGER Store on Amazon](#)

Related Documents - MT-1000.1M

 <p>MT SERIES Multi-Channel Amplifier</p> <p>MT-600.4 MT-1000.5</p> <p>Installation Guide Specifications</p>	<p><a href="#">Stinger MT Series Multi-Channel Amplifier Installation Guide and Specifications</a></p> <p>Installation guide and specifications for Stinger MT Series Multi-Channel Amplifiers, including models MT-600.4 and MT-1000.5. Learn about power and signal connections, crossover filters, gain settings, and product features.</p>
 <p>MT SERIES MONOBLOCK AMPLIFIERS</p> <p>MT-700.1 MT-1000.1 MT-1500.1 MT-2000.1</p> <p>Installation Guide Specifications</p>	<p><a href="#">Stinger MT Series Monoblock Amplifiers: Installation Guide and Specifications</a></p> <p>Detailed installation guide and specifications for Stinger MT Series Monoblock Amplifiers (MT-700.1, MT-1000.1, MT-1500.1, MT-2000.1), covering power and signal connections, amplifier controls, and technical data.</p>
 <p>MT SERIES MARINE AMPLIFIERS</p> <p>MT-600.4M MT-1000.1M MT-1800.1M</p> <p>Installation Guide Specifications</p>	<p><a href="#">Stinger MT Series Marine Amplifiers Installation Guide and Specifications</a></p> <p>Comprehensive installation guide and specifications for Stinger MT Series Marine Amplifiers, including models MT-600.4M, MT-1000.1M, and MT-1800.1M. Covers power and signal connections, amplifier controls, and detailed product specifications.</p>
 <p>MC1D10A DUAL 10-INCH PORTED SUBWOOFER ENCLOSURE</p> <p>Installation Guide Specifications</p>	<p><a href="#">Stinger MC1D10A Dual 10-Inch Ported Subwoofer Enclosure - Specs &amp; Installation</a></p> <p>Explore the Stinger MC1D10A, a powerful dual 10-inch ported subwoofer enclosure. Get detailed specifications, installation tips, and warranty information for your car audio system.</p>
 <p>SPXSH440 SWITCH HUB</p> <p>Quick Start Guide</p>	<p><a href="#">Stinger SPXSH440 SwitchHub Quick Start Guide</a></p> <p>A quick start guide for the Stinger SPXSH440 SwitchHub, a 4-channel 100 amp solid-state relay hub designed for automotive and marine applications. Learn about its features, installation, and operation.</p>
 <p>SE-128KNOB UNIVERSAL VOLUME KNOB</p> <p>Installation Guide</p>	<p><a href="#">Stinger SE-128KNOB Universal Volume Knob Installation Guide</a></p> <p>This guide provides instructions for installing the Stinger SE-128KNOB Universal Volume Knob for the IX212 (HORIZON12) in both landscape and portrait orientations. It includes a parts list and step-by-step assembly instructions.</p>

