

Memphis 16-MXA1.300

Memphis 16-MXA1.300 Monoblock Marine Amplifier User Manual

Model: 16-MXA1.300

1. INTRODUCTION AND SAFETY INFORMATION

Thank you for choosing the Memphis 16-MXA1.300 Monoblock Marine Amplifier. This manual provides essential information for the proper installation, operation, and maintenance of your amplifier. Please read it thoroughly before attempting installation or use.

Important Safety Instructions:

- Always disconnect the vehicle's battery negative terminal before starting any electrical work.
- Ensure all wiring is properly routed and secured to prevent damage or short circuits.
- Use appropriate gauge wiring for power and ground connections as specified in this manual.
- Install the amplifier in a location that is protected from direct water exposure, excessive heat, and vibration.
- Consult a professional installer if you are unsure about any part of the installation process.
- This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm. Wash hands after handling.

2. PRODUCT OVERVIEW

The Memphis 16-MXA1.300 is a compact, full-range Class-D monoblock amplifier designed for marine applications. It delivers 300 watts of power, making it suitable for driving subwoofers or full-range speakers in a marine audio system. Its robust design ensures reliable performance in challenging environments.

What's in the Box:

- Memphis 16-MXA1.300 Monoblock Marine Amplifier
- Wiring Harness (Power/Ground/Remote/Speaker Output)
- Remote Gain Control with Cable
- RCA Input Cable

- Mounting Hardware



Figure 2.1: Contents of the Memphis 16-MXA1.300 amplifier kit, including the amplifier unit, wiring harness, remote gain control, RCA cable, and mounting hardware.

3. SETUP AND INSTALLATION

Proper installation is crucial for optimal performance and longevity of your amplifier. Follow these steps carefully.

3.1 Mounting Location

- Choose a dry, well-ventilated location away from direct sunlight and heat sources.
- Ensure sufficient airflow around the amplifier for cooling.
- Mount the amplifier securely to a solid surface using the provided hardware.

3.2 Wiring Connections

The amplifier uses a multi-pin wiring harness for power, ground, remote turn-on, and speaker output connections.



Figure 3.1: Rear view of the Memphis 16-MXA1.300 amplifier showing the multi-pin connector for power, ground, remote, and speaker output connections. The PWR (Power) and PRT (Protection) indicator lights are also visible.

1. **Power (B+):** Connect the yellow wire from the harness to the positive (+) terminal of your boat's battery. Install an appropriate fuse (not supplied, typically 15A for 300W) within 18 inches of the battery.
2. **Ground (GND):** Connect the black wire from the harness to a clean, solid metal ground point on the boat's chassis or directly to the battery's negative terminal. Ensure a good electrical connection.
3. **Remote Turn-On (REM):** Connect the blue wire from the harness to the remote turn-on output of your head unit or a switched 12V source.
4. **Speaker Output:** Connect the white and gray wires from the harness to your speaker(s). Refer to the wiring diagram for correct polarity. This is a monoblock amplifier, so connect a single speaker or multiple speakers wired to a single channel.
5. **RCA Input:** Connect the RCA input cable from your head unit's pre-out to the RCA input jacks on the amplifier.

6. **Remote Gain Control:** Plug the remote gain control cable into the designated port on the amplifier. This allows for convenient level adjustment from the driver's seat.

4. OPERATING INSTRUCTIONS

Once installed, the amplifier requires minimal adjustment for optimal performance.

4.1 Setting Input Sensitivity (Gain)

The input sensitivity control (often labeled "SENS" or "GAIN") matches the amplifier's input level to the output level of your head unit. Proper gain setting is crucial to prevent distortion and maximize sound quality.



Figure 4.1: Front view of the Memphis 16-MXA1.300 amplifier showing the "SENS" (Sensitivity) control knob, adjustable from MIN to MAX. This control adjusts the input gain of the amplifier.

1. Turn the amplifier's gain control (SENS) to its minimum (MIN) setting.
2. Turn your head unit volume up to about 75-80% of its maximum level.

- 3. Slowly increase the amplifier's gain control until you hear slight distortion, then back it off slightly until the sound is clear.
- 4. The remote gain control can then be used for fine-tuning the bass level from your listening position.

4.2 Indicator Lights

- **PWR (Power):** Illuminates green when the amplifier is powered on and operating normally.
- **PRT (Protection):** Illuminates red when the amplifier enters protection mode due to a fault (e.g., short circuit, overheating, low voltage). Refer to the Troubleshooting section.

5. MAINTENANCE

The Memphis 16-MXA1.300 amplifier is designed for durability. Regular, simple maintenance can ensure its long-term performance.

- **Cleaning:** Periodically wipe the amplifier's exterior with a soft, dry cloth. Avoid using harsh chemicals or abrasive cleaners.
- **Connections:** Annually inspect all wiring connections for corrosion, looseness, or damage. Tighten any loose connections.
- **Ventilation:** Ensure that the amplifier's cooling fins are free from obstructions to maintain proper airflow.

6. TROUBLESHOOTING

If you experience issues with your amplifier, consult this section before contacting support.

Problem	Possible Cause	Solution
No Power (PWR light off)	Blown fuse Loose power or ground connection No remote turn-on signal	Check and replace fuse at battery. Verify all power and ground connections are secure. Check remote wire for 12V when head unit is on.
Protection Mode (PRT light on)	Speaker short circuit Overheating Low voltage	Check speaker wiring for shorts. Ensure adequate ventilation; allow amplifier to cool. Verify battery voltage and charging system.
No Sound	RCA input cable disconnected or faulty Speaker wires disconnected Head unit settings	Check RCA connections at both amplifier and head unit. Verify speaker wire connections. Ensure head unit volume is up and correct source is selected.
Distorted Sound	Gain set too high Poor ground connection Damaged speaker	Reduce amplifier gain (SENS) setting. Inspect and secure ground connection. Test speaker with another amplifier if possible.

7. SPECIFICATIONS

Feature	Specification
Model	16-MXA1.300
Brand	Memphis
Amplifier Type	Monoblock, Class-D, Full Range Marine Amplifier
Number of Channels	1
Maximum Output Power	300 watts
Mounting Type	Surface Mount
Manufacturer	Memphis Audio
UPC	702588204763
ASIN	B073ZQWSC2

8. WARRANTY AND SUPPORT

For detailed warranty information and technical support, please refer to the official Memphis Audio website or contact their customer service directly. Keep your purchase receipt as proof of purchase for warranty claims. You can visit the Memphis Audio store on Amazon for more products and information:[Memphis Audio Store](#)

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Example: How do I reset this device or fix this error?

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Model number, symptoms, what you tried, or the section of the manual you are using.

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