

## MTX TH1400.5

# MTX TH1400.5 Thunder Series Amplifier Instruction Manual

Model: TH1400.5

## INTRODUCTION

The MTX TH1400.5 is a versatile 5-channel Class-D amplifier from the MTX Thunder Series, designed to power your entire car audio system. This amplifier provides full-range clarity for your speakers and deep, impactful bass for your subwoofer, all within a compact footprint. Each unit includes a Dyno Certificate, verifying its performance exceeds rated specifications, ensuring reliable and powerful output.

## KEY FEATURES

- **All-in-One Amplification Solution:** Powers your entire car audio system with its versatile five-channel design, providing 100 watts RMS per channel for speakers at  $2\Omega$  and 800 watts RMS for the subwoofer at  $1\Omega$ .
- **Customizable Sound Control:** Fine-tune your audio with adjustable gain, crossover, and bass boost settings for each channel. Controls are hidden beneath a sleek panel for a clean installation.
- **Efficient and Reliable Class-D Technology:** Utilizes advanced Class-D circuitry for high efficiency, reducing heat and power consumption. Includes built-in thermal, short, and voltage protection systems.
- **Compact Design with Big Power:** Despite its impressive 1400-watt RMS output, the TH1400.5 features a compact chassis for easy installation in tight spaces.
- **Convenient Subwoofer Control:** An external wired bass control remote is included, allowing quick adjustment of bass levels from the driver's seat.
- **High-Quality Inputs:** Features Tiffany-style RCA inputs and 10V high-level audio input compatibility.
- **Clip Detection Light:** Aids in tuning optimization.
- **Dyno Power Rating Certificate:** Each amplifier comes with a certificate verifying its actual power output.

## PRODUCT OVERVIEW

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*Official Product Overview:* This video provides a comprehensive overview of the MTX Thunder Series Amplifiers, including the TH1400.5. It highlights key features, compact design, and the range of models available, demonstrating their power and versatility for various car audio setups.

The MTX Thunder Series offers a range of amplifiers designed for various car audio needs, all featuring a compact footprint with significant power output. This series includes monoblock amplifiers like the TH750.1, TH1500.1, and TH2500.1 for powering subwoofers, and multi-channel amplifiers such as the TH400.4, TH800.4, TH900.6, and the TH1400.5 (which includes a built-in sub-amp for an all-in-one system solution).

## COMPONENTS AND PACKAGING

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*Figure 1:* The MTX TH1400.5 Thunder Series 5-Channel Amplifier features a sleek, brushed aluminum finish with the MTX logo prominently displayed. This top-down view highlights its compact design.



*Figure 2:* The included wired remote control allows for convenient adjustment of bass levels from the driver's seat. This remote is standard with TH750.1, TH1500.1, TH2500.1, and TH1400.5 models.

Each MTX Thunder Series amplifier comes with a Dyno Certificate, providing verified power output measurements. For example, a TH1500.1 amplifier might test out at 1751 watts, exceeding its rated power. This ensures you receive the advertised performance and more.

The packaging for all Thunder Series amplifiers features a uniform family look, with the amplifier displayed on the front and detailed specifications, including power ratings, on the back. This transparency ensures customers are well-informed about the product's capabilities.

## SETUP AND INSTALLATION

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Before installation, ensure your vehicle's battery is disconnected. Proper wiring and grounding are crucial for optimal performance and safety. Refer to the detailed wiring diagrams in the full user manual for specific connections.



*Figure 3:* A detailed view of the amplifier's rear panel, showcasing the various input and output terminals for audio connections and power. Ensure all connections are secure

and properly insulated.



*Figure 4:* This image shows the MTX TH1400.5 amplifier with its protective top cover removed, revealing the hidden control panel for adjustments. The cover can be removed using the supplied Allen head wrench.

## Mounting

Choose a mounting location that is dry, well-ventilated, and away from direct heat sources. The compact design of the TH1400.5 allows for flexible placement in various vehicle interiors. Secure the amplifier firmly using appropriate mounting hardware.

## OPERATING AND ADJUSTMENTS

The TH1400.5 features a hidden control panel for precise audio adjustments. This panel is accessible by removing the top cover using the supplied Allen head wrench. Once adjusted, the cover can be re-secured for a clean look and to protect settings.



*Figure 5:* This close-up highlights the adjustable controls for Low Pass Filter (LPF), Boost, Subsonic filter, Phase, and Gain, along with a Clip indicator. These controls are easily accessible from the top of the amplifier.

## Control Functions:

- **LPF (Low Pass Filter):** Adjusts the upper frequency limit for the subwoofer channel.
- **Boost:** Controls the bass boost level for enhanced low-frequency output.
- **Subsonic:** Filters out ultra-low frequencies that are inaudible and can damage subwoofers.
- **Phase:** Adjusts the phase of the subwoofer output (0° or 180°) to optimize bass integration with other speakers.
- **Gain:** Matches the amplifier's input sensitivity to the output voltage of your head unit. Use the Clip

detection light for optimal setting.

- **Clip Indicator:** Illuminates when the input signal is clipping, indicating distortion. Adjust gain down until the light no longer illuminates during peak playback.

The external bass control remote (Figure 2) provides convenient, on-the-fly adjustment of the subwoofer level without needing to access the amplifier directly.

## SPECIFICATIONS

Feature	Detail
Description	5-Channel Amplifier
Topology	Class D
4Ω RMS Power Output	100W x 4 Channels + 300W (Sub)
2Ω RMS Power Output	150W x 4 Channels + 500W (Sub)
4Ω RMS Bridged Power Output	300W x 2 Channels (1/2/3/4)
1Ω RMS Power Output	800W (Sub Only)
THD	<0.4%
Signal to Noise Ratio	> 95dB
Frequency Response (Ch1-4)	20Hz - 20KHz
Frequency Response (Sub)	20Hz - 250Hz
Crossover (Ch1-4)	40Hz - 400Hz
Crossover (Sub)	50Hz - 250Hz
Subsonic Filter	10Hz - 55Hz (Sub)
Maximum Input Signal	10V
Item Weight	9.06 pounds
Package Dimensions	16.93 x 9.45 x 3.15 inches

## MAINTENANCE

To ensure the longevity and optimal performance of your MTX TH1400.5 amplifier, regular maintenance is recommended. Keep the amplifier clean and free from dust and debris. Ensure proper ventilation around the unit to prevent overheating. Periodically check all wiring connections for tightness and corrosion. Avoid exposing the amplifier to extreme temperatures or moisture.

## TROUBLESHOOTING

If you experience issues with your amplifier, consult the following basic troubleshooting steps before seeking professional assistance:

- **No Power:** Check all power and ground connections. Verify the fuse is intact. Ensure the remote turn-on wire is receiving a signal.
- **No Audio Output:** Confirm all RCA input and speaker output connections are secure. Check the head unit's settings and ensure it is sending an audio signal. Verify the amplifier's gain settings are not set too low.
- **Distorted Sound:** Reduce the gain setting. Check for proper impedance matching with your speakers/subwoofers. Ensure the input signal is not clipping (monitor the Clip indicator light).
- **Amplifier Overheating:** Ensure adequate ventilation around the amplifier. Check speaker/subwoofer impedance to ensure it's within the amplifier's stable operating range.

For more detailed troubleshooting, refer to the complete user manual or contact MTX customer support.

## WARRANTY AND SUPPORT

The MTX TH1400.5 Thunder Series Amplifier comes with a **2-year warranty**, ensuring confidence in your purchase. For warranty claims, technical support, or further assistance, please refer to the contact information provided in your product packaging or visit the official MTX website.

Manufacturer: MTX

### Documents - MTX – TH1400.5



#### [\[pdf\]](#) User Manual Warranty

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MTX007950D TH Amp Manual A4 Half Page mtz d 49103 |||

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#### [\[pdf\]](#) Owner's Manual Warranty

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Amplifiers Specifications MTX Audio TH900 6 N A 800W sub only 100W x 4CH 200W 150W 500W 6CH 50W 300W 75W 2CH MTX008063 TH Amp Tri fold Brochure mtx |||

Specifications Model RMS Power Output at 1 RMS Power Output at 2 RMS Power Output at 4 RMS Power Ou ... Hz N/A N/A No 40A - 60A 2 x 8-3/16 x 7 50 x 207 x 176mm Full Range Class-D Amplifiers TH800.4 **TH1400.5** N/A 800W sub only 200W x 4CH 150W x 4CH 500W 100W x 4CH 100W x 4CH 300W TH900....

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