

MTX 5510-44

MTX 5510-44 10-inch Car Audio Subwoofer Instruction Manual

Model: 5510-44

INTRODUCTION

This manual provides essential information for the proper installation, operation, and maintenance of your MTX 5510-44 10-inch Car Audio Subwoofer. Please read these instructions carefully before attempting to install or use the subwoofer. Retain this manual for future reference.

SAFETY INFORMATION

Always observe the following safety precautions:

- Disconnect the vehicle's battery before beginning any electrical installation to prevent electrical shock or damage.
- Ensure all wiring is properly insulated and secured to prevent short circuits and damage.
- Do not mount the subwoofer in a location that obstructs the driver's view or interferes with the safe operation of the vehicle.
- Use appropriate gauge wiring for power and speaker connections to handle the subwoofer's power requirements.
- Avoid prolonged exposure to extremely high sound pressure levels, which can cause permanent hearing damage.

SETUP AND INSTALLATION

Proper installation is crucial for optimal performance and longevity of your subwoofer. Consider professional installation if you are unfamiliar with car audio wiring and mounting procedures.

Mounting Considerations

The MTX 5510-44 subwoofer is designed for flush mounting within a suitable enclosure. Ensure the

mounting surface is rigid and free from obstructions. The cut-out diameter required is 9.188 inches, and the mounting depth is 5.625 inches.



Image: Front view of the MTX 5510-44 10-inch subwoofer, highlighting the cone and terminal connections.

Enclosure Recommendations

The performance of your subwoofer is highly dependent on the enclosure. Refer to the following guidelines:

- **Sealed Enclosure:** For tight, accurate bass response, a sealed enclosure with a net volume of approximately 0.75 cubic feet is recommended.
- **Vented Enclosure:** For louder, more impactful bass, a vented (ported) enclosure with a net volume of approximately 2.0 cubic feet is recommended. Consult a car audio specialist for port tuning specifications.

Wiring the Subwoofer

The MTX 5510-44 features a Dual Voice Coil (DVC) 4-ohm configuration. This allows for flexible wiring options to match your amplifier's impedance requirements. Common wiring configurations include:

- **Parallel Wiring (2-ohm load):** Connect the positive terminals of both voice coils together, and the negative terminals of both voice coils together. Then connect these combined positive and negative

terminals to the amplifier. This results in a 2-ohm load.

- **Series Wiring (8-ohm load):** Connect the positive terminal of one voice coil to the negative terminal of the other voice coil. Then connect the remaining positive and negative terminals to the amplifier. This results in an 8-ohm load.

Always ensure correct polarity (+ to + and - to -) to prevent phase issues and ensure proper sound reproduction.



Image: Side view of the MTX 5510-44 subwoofer, illustrating the durable basket and magnet assembly.

OPERATING THE SUBWOOFER

Power Handling

The MTX 5510-44 has an RMS power handling of 400 Watts and a peak power handling of 800 Watts. It is recommended to use an amplifier that can deliver between 200-400 Watts RMS to the subwoofer for optimal performance and longevity. Overpowering or underpowering the subwoofer can lead to damage.

Break-in Period

Allow a break-in period of approximately 10-20 hours of normal listening before operating the subwoofer at its maximum potential. This allows the suspension components (surround and spider) to loosen up, improving overall performance and extending the subwoofer's lifespan.

Amplifier Settings

Properly adjust your amplifier's gain, crossover, and bass boost settings. Start with the gain at its lowest setting and slowly increase it until the desired volume is achieved without distortion. Set the low-pass filter (LPF) on your amplifier to prevent higher frequencies from reaching the subwoofer, typically between 80Hz and 120Hz, depending on your system and preference.

MAINTENANCE

The MTX 5510-44 subwoofer requires minimal maintenance. Keep the cone and surround free from dust

and debris. Avoid exposing the subwoofer to excessive moisture or direct sunlight for prolonged periods. Periodically check all wiring connections to ensure they are secure.

TROUBLESHOOTING

If you experience issues with your subwoofer, refer to the following common problems and solutions:

Problem	Possible Cause	Solution
No sound from subwoofer	No power to amplifier; loose wiring; amplifier in protect mode; incorrect input signal.	Check power and ground connections; verify remote turn-on wire; inspect speaker wires; check amplifier fuses; ensure head unit is sending signal.
Distorted sound	Amplifier gain too high; incorrect crossover settings; damaged subwoofer; poor enclosure.	Reduce amplifier gain; adjust LPF; inspect subwoofer cone and surround for damage; ensure enclosure is sealed and properly sized.
Weak or muddy bass	Incorrect wiring polarity; insufficient amplifier power; improper enclosure; phase issues.	Verify wiring polarity; ensure amplifier matches subwoofer RMS rating; check enclosure design; adjust phase settings on amplifier/head unit.
Subwoofer cuts out	Overheating amplifier; short circuit in wiring; low voltage.	Check amplifier ventilation; inspect all wiring for shorts; verify vehicle's electrical system and battery voltage.

SPECIFICATIONS

The following table details the technical specifications for the MTX 5510-44 10-inch Car Audio Subwoofer:

Feature	Specification
Model Number	5510-44
Speaker Size	10 Inches
RMS Power Handling	400 Watts
Peak Power Handling	800 Watts
Impedance	Dual 4 Ohms
Frequency Response	28Hz - 130Hz
Sensitivity	83.5 dB
Voice Coil Diameter	2 inches (Dual)
Mounting Depth	5.625 inches
Cut Out Diameter	9.188 inches
Volume Displacement	35.0 cubic inches
Recommended Sealed Enclosure Net Volume	0.75 cubic feet

Feature	Specification
Recommended Vented Enclosure Net Volume	2.0 cubic feet
Key Features	Inverted Apex Surround, Spider Plateau Venting, Progressive Suspension, Radial Ribbed T-Yoke
Material	Plastic (Enclosure)
Item Weight	9.8 Pounds
UPC	715442352746

WARRANTY AND SUPPORT

The MTX 5510-44 subwoofer is covered by a 2-Year Manufacturer Warranty. This warranty covers defects in materials and workmanship under normal use. It does not cover damage caused by improper installation, abuse, accident, or unauthorized modifications.

For warranty claims or technical support, please contact MTX customer service through their official website or authorized dealers. Keep your proof of purchase for warranty validation.