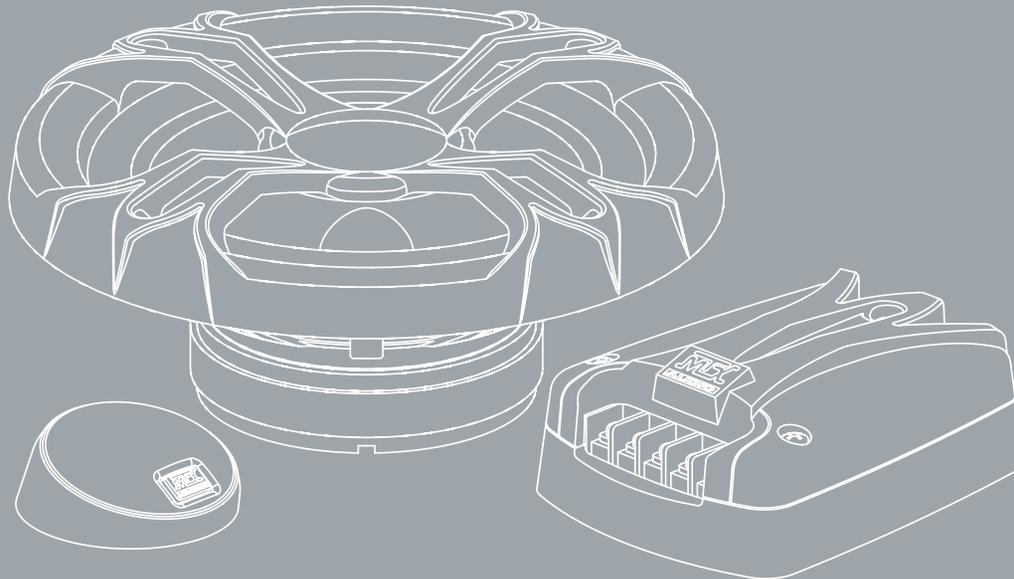




# ***THUNDER***<sup>®</sup> ***AXE SEPARATES***<sup>™</sup>



**OWNER'S MANUAL**

**TX6001, TX5001, TX4001, TX1000**

**MTX**  
BIGGEST  
BOLDEST  
SOUND

**MTX.COM**



## INTRODUCTION

Thank you for choosing MTX to help reach your ultimate goal with your vehicle. Adding MTX separates and a matching MTX amplifier with StreetWires connections will put you in a better position to hear, feel and experience all of the music the artist intended you to hear.

SPECIFICATIONS

Model	TX4001	TX5001	TX6001	TX1000
Description	4" Separate	5-1/4" Separate	6-1/2" Separate	25mm Tweeter
Cone	Polypropylene with Aluminum Deposition	Polypropylene with Aluminum Deposition	Polypropylene with Aluminum Deposition	N/A
Tweeter	25mm Soft Dome	25mm Soft Dome	25mm Soft Dome	25mm Soft Dome
Impedance	4 Ohm	4 Ohm	4 Ohm	4 Ohm
Frequency Response	74Hz-20kHz	51Hz-20kHz	44Hz-20kHz	2.5kHz-20kHz
Power (RMS)	75	90	90	50
Peak Music Power	150	180	180	100
Sensitivity @ 2.83V	90dB	90dB	90dB	90dB
Voice Coil	1"	1"	1"	25mm
X-Max	1.5 mm	2.75 mm	2.75 mm	N/A
Woofer Mounting Depth	1-7/8"	2-3/16"	2-3/16"	N/A
Woofer Cut-out Dia.	3-3/4"	4-11/16"	5"	N/A
Tweeter Mounting Depth	1"	1"	1"	1"
Tweeter Cut-out Dia.	1-7/8"	1-7/8"	1-7/8"	1-7/8"
Tweeter Mounting Options	Flush, Surface, Angle	Flush, Surface, Angle	Flush, Surface, Angle	Flush, Surface, Angle
Crossover	2-Way. 18dB/6dB	2-Way. 18dB/6dB	2-Way. 18dB/6dB	1-Way. 18dB
Adjustable Tweeter Level	0, -3,	0, -3,	0, -3,	N/A

## BEFORE STARTING

MTX recommends that you have your new speakers installed by an authorized MTX retailer, preferably MECF certified. If you do decide to do it yourself, make sure you have read the instructions carefully, and that you have the following tools:

- Electric drill
- Phillips bit or screwdriver
- 1/8" bit
- Door panel puller
- Wire cutters/crimpers
- Metal cutting tool
- Safety glasses
- X-acto knife

Please be aware that today's cars have door panels that are not designed to come apart easily; they are designed by the factory to sit tight against the door and not rattle. It is important to note that if the proper procedures are not followed, the door panels can easily become damaged which can make them fit improperly when you're trying to reinstall them.

There are often hidden screws that, if overlooked, can cause the panel to crack or break when force is applied to remove door panel. Even new car owners need to be aware of this potential issue. Buying a new door panel is an expensive process so please take note of the potential for damage.

With the door panel off, it is a perfect time to add sound dampener. The main goal of sound dampeners is to add mass to the metal in the door, causing less rattle and "ring" which will help to improve the overall sound of your new speakers. It also helps prevent against outside noise by adding insulation. Sound dampening material can be bought from numerous manufactures in many different forms, and kits, for many different applications. Please make sure you purchase the correct type for your specific project.

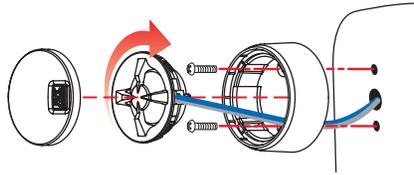
**Note:** Before cutting anything, please use common sense and make sure that no wires or glass will interfere with cutting tools. ALWAYS WEAR PROPER SAFETY GLASSES. Be sure all wires are clear of moving parts such as window crank mechanisms and trunk hinges. Use rubber grommets when running wires through sharp edged metal holes, which may wear through the wire's insulation.

### Do not mount speakers in the following locations:

- Where the doors window glass comes in contact with the speaker/s
- Where the window crank handles or gear assemblies come in contact with the speaker when rotated
- Where the speakers come in contact with the trunk springs, shock towers, or trunk lid
- Where the speakers come in contact with the gas tanks, or fuel lines
- Where the speakers come in contact with the rear window glass, car wall, etc...

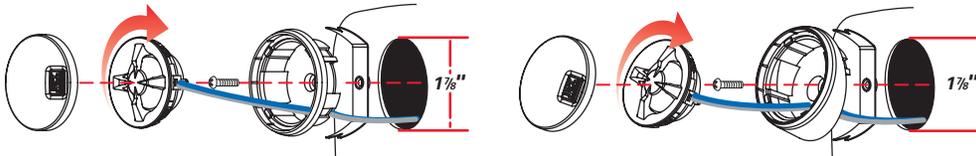
### TWEETER MOUNTING

For the best imaging and soundstage, the tweeter should be placed as close as possible to the midrange driver. This process will help when the final tuning is completed. When positioning the tweeter for the best imaging, aim the passenger side tweeter toward where the driver's head will be. The same process should also be completed on the driver's side tweeter but this time you'll aim the tweeter toward where the passenger's head will be. Positioning the tweeters in this manner will help to set up a very solid soundstage.



#### Surface Mounting

- Select mounting location. Mark wire hole and screw locations using the surface cup as a template.
- Drill holes for tweeter wires and mounting screws
- Using the supplied screws, attach the surface cup to surface
- Run tweeter wires through the hole and twist the tweeter into the cup
- Connect the tweeter wires to the supplied crossover

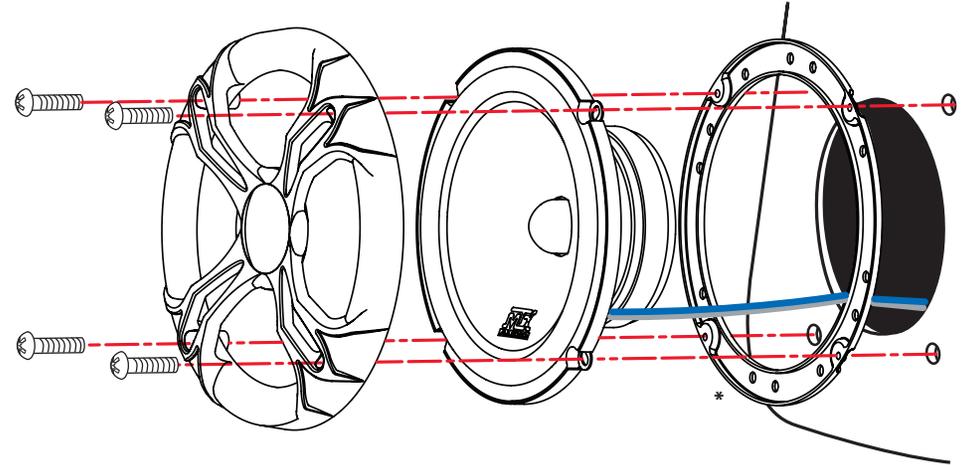


#### Flush and Angle Mounting

- Select mounting location and mark a 1-7/8" diameter hole with supplied template
- Cut out the 1-7/8" hole (a hole saw is recommended for metal and hard plastic surfaces; an X-acto knife for any other surface)
- Place the supplied bevel headed screws through the flush/angle cup and thread into the mounting clip, but do not tighten
- Take the assembled flush/angle cup and mounting clip and place them into the 1-7/8" diameter hole, making sure the mounting clip goes completely through the hole
- Tighten the screw in the base of the flush cup until the cup is completely tight
- Split tweeter wires and run through the hole and twist the tweeter into the cup

### MID RANGE MOUNTING

To get the best possible music reproduction, it is important to isolate the sound that is produced from the rear of the speaker from the sound that is produced from the front of the speaker. To isolate the front from the back wave, make sure the speaker is mounted in a baffle or plate, so that the back of the speaker is in a sealed chamber.



#### Mounting

- Select the mounting location (door panels, rear side panels, rear deck, etc...)
- Using the supplied templates, mark the mounting holes on the door panel or rear deck.
- Drill or cut the required holes as needed.
- Install the units as illustrated in the diagrams.

**\*Note:** The TX6001 Thunder Axe Separates are supplied with mounting adapter plates. The adapters are used to convert the smaller basket sizes needed for European models to the larger domestic sizes. The plates will allow a tight and accurate fit, decreasing the need to fabricate adapters out of MDF or plastic.

### CROSSOVER MOUNTING

When choosing a location to mount the crossover, accessibility is important. Adjustment will need to be made like tweeter attenuation. Keep in mind the crossover has electronic components inside, and must be mounted so that no moisture can make contact.

### WIRING

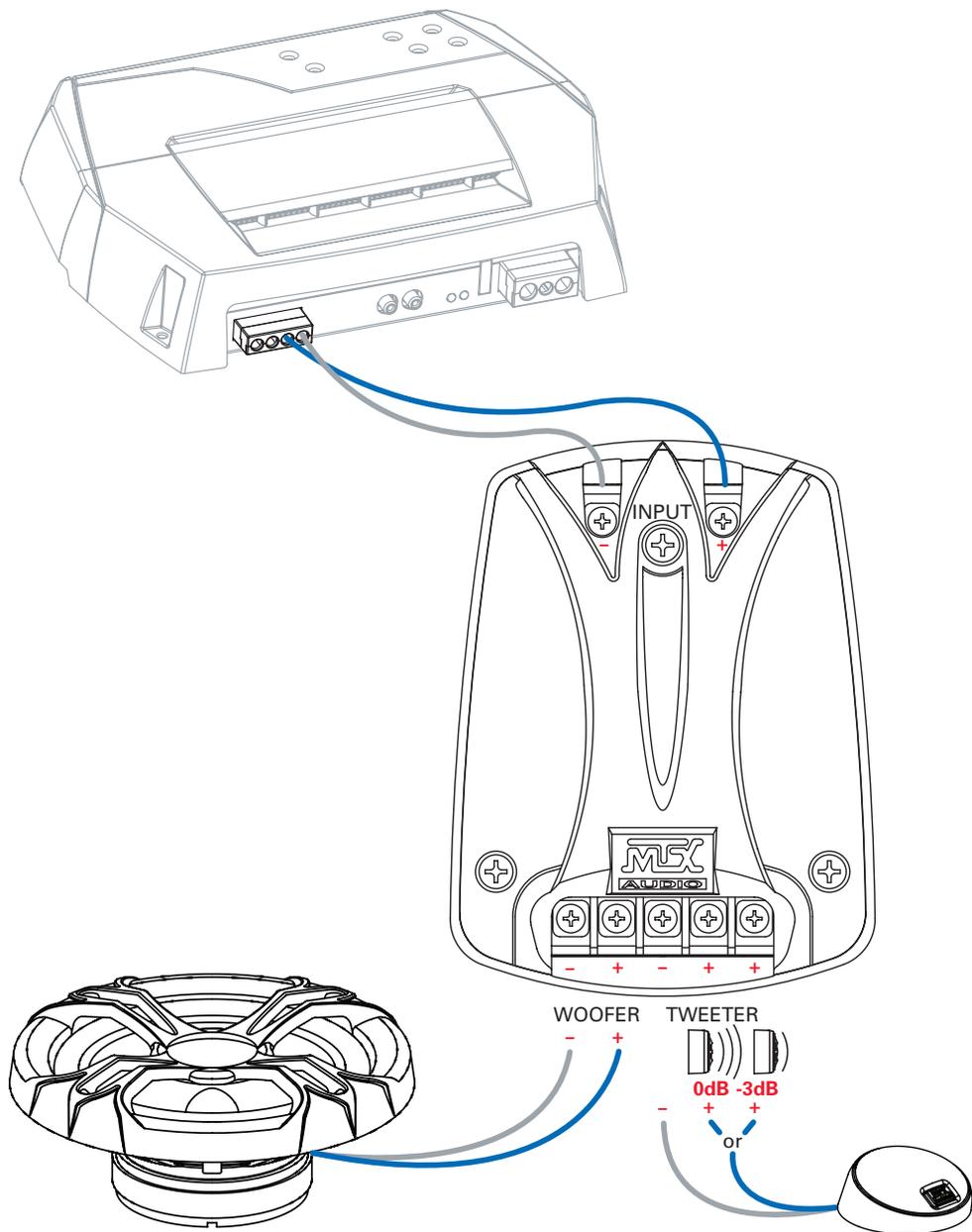
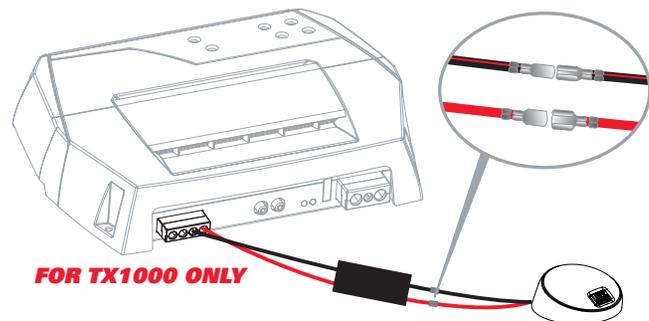
Two things to take into consideration when installing these separates is the age of the factory wiring and gauge (size) of wire. If the vehicle is an older model or was pre-wired with small wire (18 gauge or less), running new high performance wire (<http://www.streetwires.com/products/speakerCable/microUltraCable.cfm>) will be necessary. The speaker wire should run from the amplifier's output terminals, under the carpet and through the factory rubber boot (loom) that protects the wires in the inner door jam. If the factory boot cannot be used, take other measures to protect these wires as best you can. Sometimes the door has to be completely removed to use the factory boot. If this is something that you do not feel comfortable doing, please ask a professional to help you. The wires should originate from the amplifier and attach to the crossover inputs.

### CROSSOVER CONNECTIONS

Each TX speaker system has a 2-way 18dB/6dB oct separate crossover network. The crossover networks allow the drivers to recreate the frequencies within a precisely designed range so that the speakers do not become distorted by trying to reproduce frequencies that they are physically unable to reproduce. This feature ensures that the tweeter does not receive low bass notes and the mid bass driver doesn't receive high frequencies. The 18dB (tweeter)/6dB (mid) oct means the slope, or the amount of other frequencies that will be affected, is fairly narrow. This design complements both the tweeter and mid and provides greater musical detail. Pay close attention to the markings on the crossover to be certain the correct speakers are in the correct outlet. If a tweeter is accidentally asked to play the frequencies reserved for a mid-bass driver, it will be damaged.

### CROSSOVER CONNECTIONS FOR TX1000

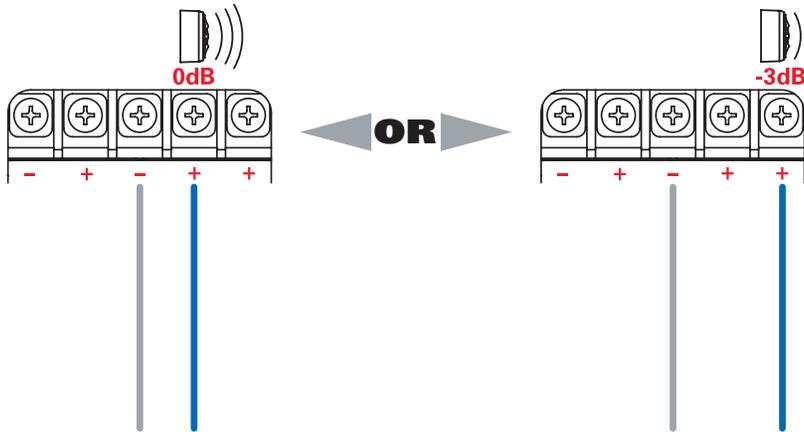
Separate 1-way 18dB/oct crossovers are included with the TX1000 tweeters, which allows the drivers to recreate the frequencies within a precisely designed range. This ensures that the speakers do not become distorted by trying to reproduce frequencies that they are physically unable to reproduce. The 18dB/oct means the slope, or how many other frequencies will be affected, is fairly narrow. This design complements both the tweeter and mid-bass to provide greater musical detail.



### TWEETER ATTENUATION ADJUSTMENT

When setting the attenuation of your tweeter, take into account the distance between the listener and the tweeter, and your own personal preferences. The attenuation levels range is 0 and -3dB, 0 dB is generally used for those who are further away and -3dB for the listener who is closer to the tweeter. If you have the attenuation set at 0dB and the speakers seem too bright, adjust the jumper downward until it matches your personal taste.

*For answers to further questions, please call 1-800-call-MTX*



### WARRANTY STATEMENT

MTX Audio Thunder Axe Separates purchased in the United States from an authorized MTX Audio dealer are guaranteed against defects in material and workmanship for a period of ONE YEAR from the date purchased by the end user, and limited to the original retail purchaser of the product. Product found to be defective during that period will be repaired or replaced by MTX Audio at no charge. This warranty is void if it is determined that unauthorized parties have attempted repairs or alterations of any nature. Warranty does not extend to cosmetics or finish. Before presuming a defect is present in the product, be certain that all related equipment and wiring is functioning properly. MTX Audio disclaims any liability for other incurred damages resulting from product defects. Any expenses incurred in the removal and reinstallation of products are not covered by this warranty. MTX Audio's total liability will not exceed the purchase price of the product. If a defect is present, your authorized MTX Audio dealer may be able to effect repairs. Proof of purchase is required when requesting service. Please retain your sales receipt and take a moment to register your product on line at [mtx.com](http://mtx.com).



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Due to continual product development, all specifications are subject to change without notice.  
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