



AMPLIFIER OWNER'S MANUAL

Models: TZ350.4H/TZ800.1/TZ1400.1/TZ2100.1



Designed in USA/www.tezlaaudio.com



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INTRODUCTION

Thank you for choosing Tezla Audio, a family owned car audio company. We are dedicated to consistently enhancing your music experience with quality products built with purpose. Our mission is simple: to provide our customers with the best possible music experience in their vehicle. We believe that music has the power to bring people together and create memories, and we strive to bring that joy to our customers through our products. To take full advantage of the Tezla Audio product that you have purchased, please read and follow the instructions in this manual. It is highly recommended to have your equipment installed by an authorized Tezla dealer, as they are trained on the entire lineup.

INSTALLATION

The TEZLA AUDIO/TZ amplifiers offer high quality audio reproduction for the audiophile and the everyday listener, alike. All models feature fully variable crossovers with 12 (Multi CH models) or 24 dB (Mono CH models) per octave slopes, allowing you the ability to tailor the sound to best fit the speakers and your listening preferences.

Platinum Finish Connections Ensures solid electrical connections that resist corrosion.

Fully Variable Crossovers Fully variable crossovers promote installation ease and save the cost of outboard crossovers. Additionally, they may be used in conjunction with outboard passive or active crossovers, depending on the complexity required by the system. The 12 dB per octave slope offers steep roll-off above or below the selected frequency.

Protection Circuitry against Overload, Short Circuit, Thermal, Low Voltage, High Voltage, and Reverse Polarity. These protection features are designed to protect the amplifier from misuse, as well as from common causes of amplifier failure.

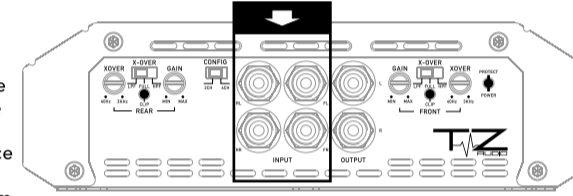
Professional installation by an authorized TEZLA AUDIO/TZ amps dealer is highly recommended! Otherwise, the performance of your new gear may not be satisfactory. In the event that you decide to do your own installation, please read and follow this manual very carefully. Failure to do so may compromise the integrity of this product, your automobile, and possibly void the product warranty.

Amplifiers are generally mounted in the hatch/trunk area of a car or SUV, and under or behind the seat of most trucks. Select a location that will provide adequate ventilation for the amplifier. Avoid mounting the amplifier with the fins facing down. The fins should be facing up, either vertically or horizontally. Secure the amplifier with the screws provided.

INPUT

Before securing the amplifier, inspect the mounting location carefully to ensure that you do not drill into or damage any electrical, hydraulic, fluid, or fuel lines.

Input Section
Because of the wide range of head unit output configurations all TEZLA AUDIO/TZ amps have an adjustable input sensitivity of "Gain". The gain is not a volume or a power limiting control like a throttle. It makes the amp more sensitive to input from the stereo. With the gain up, the amp will reach full output at a lower volume setting on the deck. At higher gain settings the amp also becomes more sensitive to noise from the car's electrical system. Try to run the gain at the lowest setting possible for your system. There is no correct gain setting. Because speakers require different power demands to reach the same output, the gains most often need to be used to compensate for these differences. We recommend using oscilloscope when setting input gains on amplifiers to make sure you have clean round sound waves. For example, if you have 5 volts coming from source unit, most likely amplifier gain will be set properly with one or two clicks from the bottom. If you have 1 volt coming into amplifier your gain most likely will be 3/4 turn.

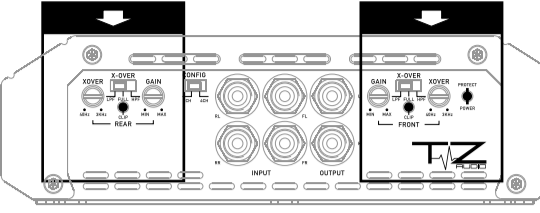


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CROSSOVER CONTROLS

A crossover is a device that removes unwanted frequencies from a speaker or amplifier. A tweeter can easily be destroyed by bass notes if they are not filtered out. Likewise, a subwoofer will not sound natural if it is playing midrange notes. A crossover removes these sounds from the speaker. As you might guess, careful adjustment is needed to ensure that all of the speakers are playing the right sounds and that you are left with no nulls or low spots in the frequency response. You will need to know what frequency response range on your speakers to determine crossover points.

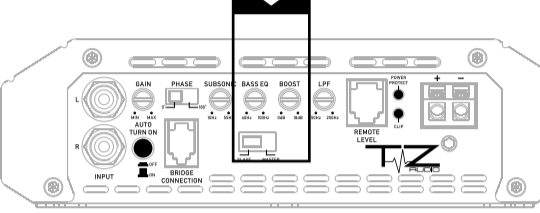


BASS BOOST AND CONT

TEZLA AUDIO/TZ800.1 & TZ1400.1 & TZ2100.1 amplifiers have an adjustable bass boost which is controlled by a VR selecting the most commonly used BASS BOOST setting. Begin your adjustments at low volume. If you do not hear any improvement then woofers does not need any BASS BOOST.

The Low Pass Filter (LPF) must be switched on for the bass boost to activate.

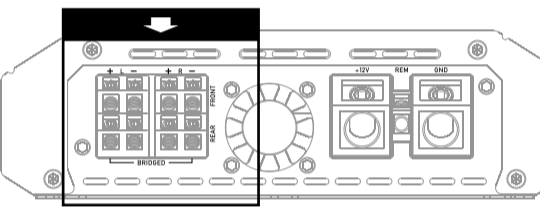
Also, the TZ1400.1 & TZ2100.1 have a fully adjustable bass boost with adjustments for both Boost level and Boost Frequency. Begin your adjustments at low volume. Turn the Bass Boost Level control about 1/4 way up. Next, turn the Bass Boost Frequency up and down. This will take some tweaking but try to find the setting that gives you a richer and fuller sound without over working the subwoofer. Play several different kinds of music to test your adjustment. You may find that you have to go back and make some changes and compromises to get it to sound right with an assortment of music. Use Bass Boost carefully. The demands on power output are tremendous. Try to minimize the use by changing woofer position or the enclosure size.



SPEAKER OUTPUTS

This amplifier is a multi-channel amplifier design. Meaning it has more than one channel of speaker outputs. It is equipped with a large block style terminal for speaker connection. Make this connection carefully and neatly. Strip your wire back and twist the exposed leads and insert them into the block terminal while being careful that there is no loose or frayed strands of wire and tighten the Allen head screw down on the terminal till the wire is tightly secured in place.

If the wires ever come in contact with each other the amplifier will go into protection. Know your total ohm load before you make any connections.



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INSTALLATION INSTRUCTIONS

- Before you start, disconnect the negative cable from the car battery. Tape up the end so it is isolated from the battery.
- Run an appropriate gauge wire from the battery to the amplifier. Plan this part of the installation carefully. This cable will carry a very high current. If it should short to the body and it is not properly fused it could catch fire.
- Connect the power wire to the battery using a fuse capable of the total current load of all amplifiers connected. Don't install the fuse yet. Wait until the end. Locate the fuse as close as possible to the battery. If the fuse is further than 18 inches (wire length) from the battery you should reevaluate the wire and fuse placement.
- Find the closest clear metal area to the amp for a ground. Sand, grind or scrape all paint and undercoating from the body and screw the ground securely in place. It is advisable to test the ground with an ohm meter between the ground cable and the negative battery cable to insure a good low resistance connection. Some alloys used in modern cars do not offer the best ground. If you believe this is the case, consult with the vehicle manufacturer.
- Run the speaker wire to the speakers. It is advised that you leave some extra wire at this point. You can "clean it up" later.
- If you haven't already done so, mount the amp now.
- Connect the power and ground to the amplifier.

Only after this step should you install the fuse at the battery.

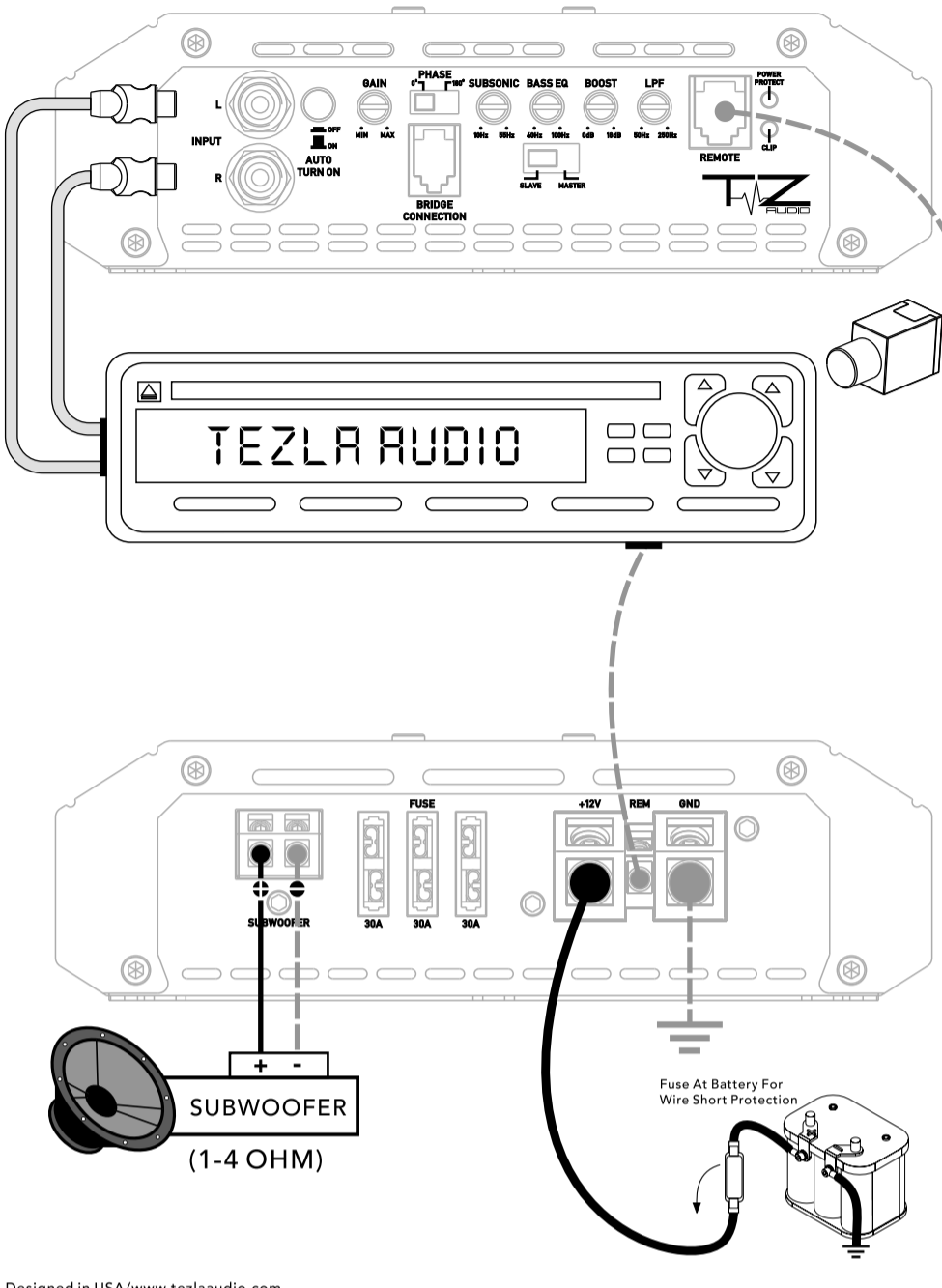
- Connect the remote wire, from the head unit, to the amplifier. Now is a good time to turn on the amp for the first time. Make sure it turns on properly and does not go into protection.
- Connect the speaker wires to the amp and speakers (make sure the amp is off first). Make sure the polarity is correct.
- Connect the RCA'S to the amp.
- Double check the amplifier controls at this time. Make sure everything is set correctly for your system.
- Now you're ready to play it for the first time. It is best to leave the gain all the way down at first. Start with the head unit volume low and work your way up.
- Now you can tune the amp. Take your time and make only one adjustment at a time. It may take some time to get the system fully adjusted. During this time the amp is drawing current from the battery. You should check the battery voltage from time to time and re-charge it if it gets low.

Now you're ready to experience music in its purest form. We are Tezla Audio... engineered for sound.

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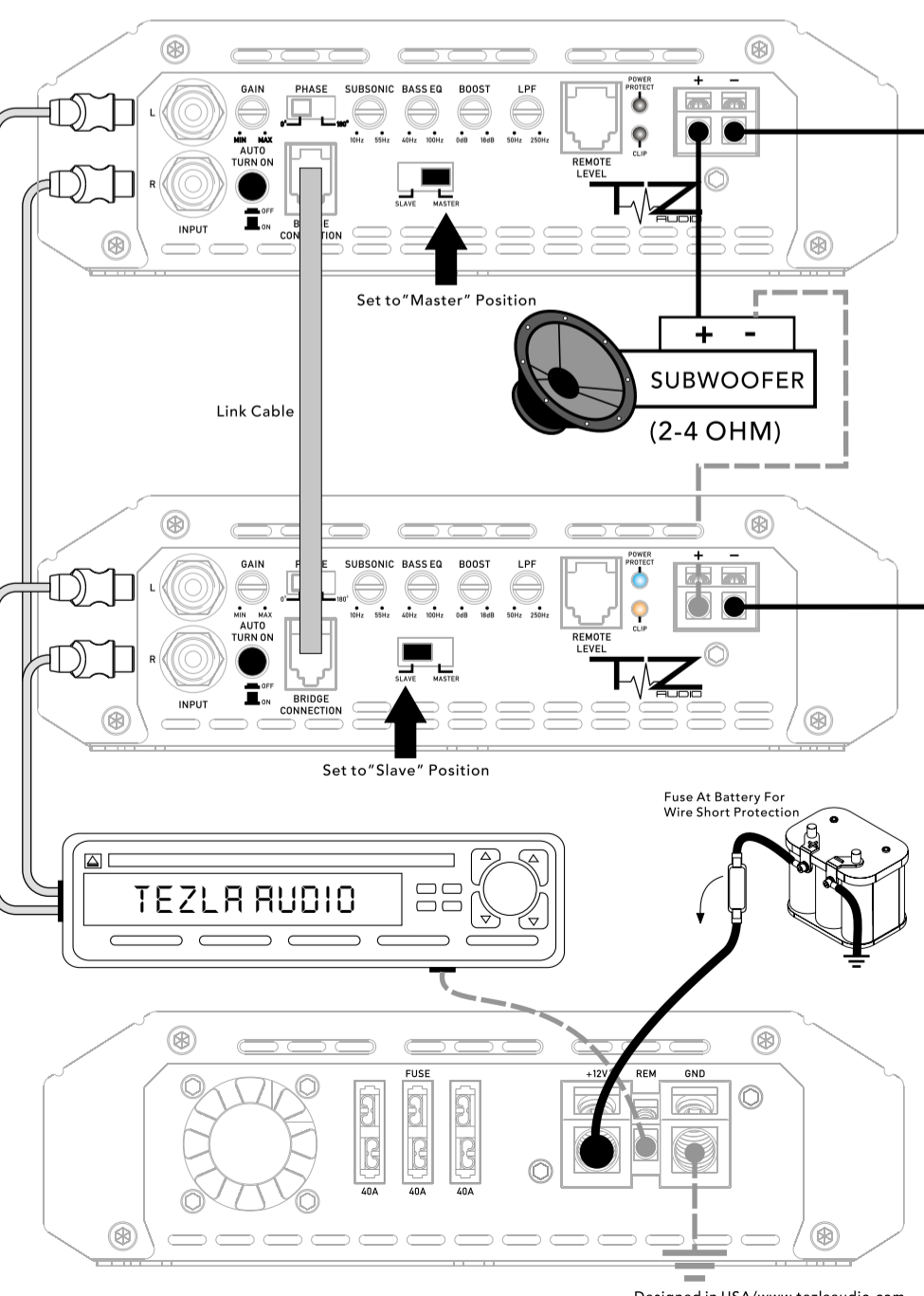
NORMAL INSTALLATION (MONO CHANNEL) (TZ800.1 & TZ1400.1 & TZ2100.1)



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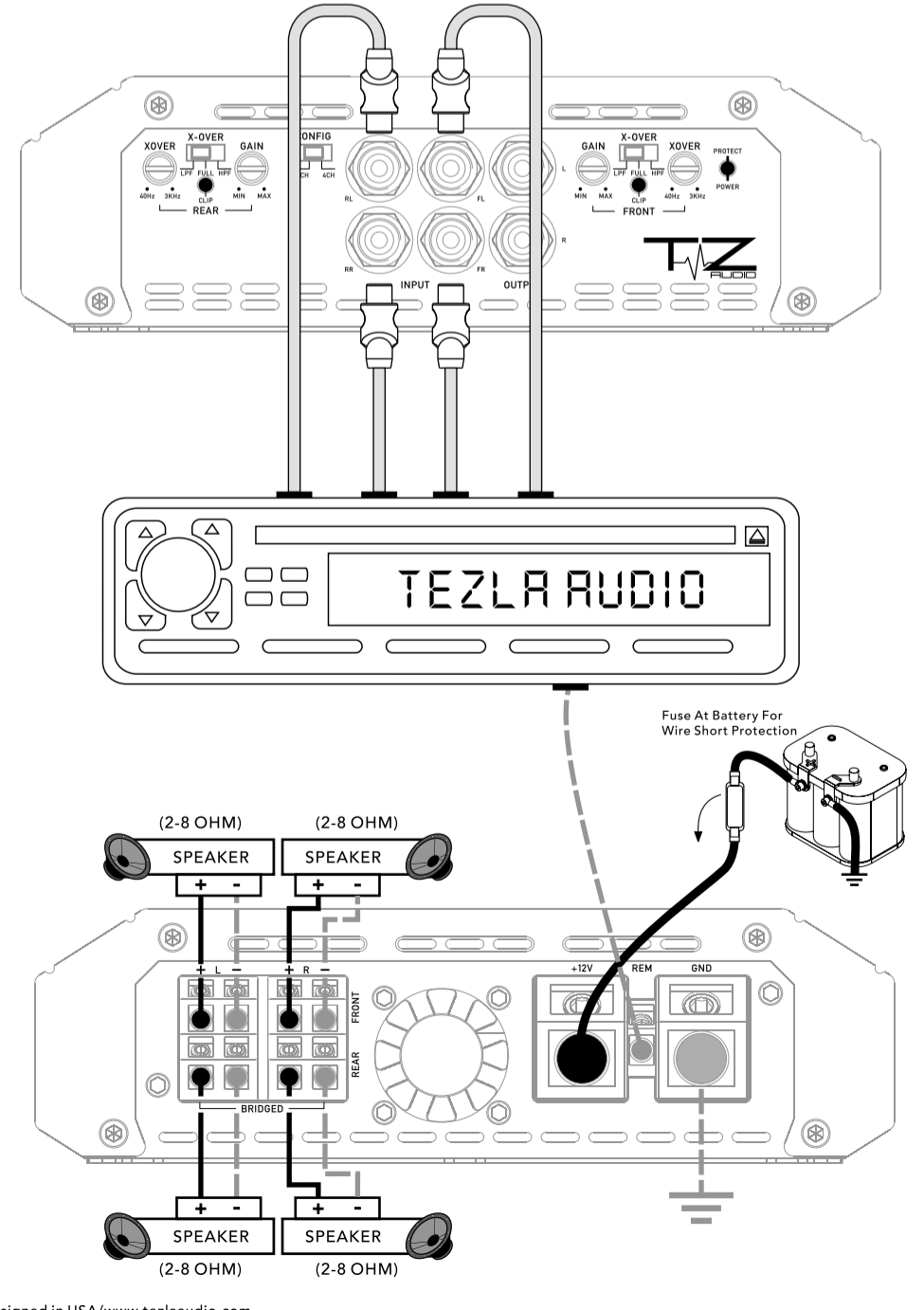
BRIDGING TWO TZ800.1 & TZ1400.1 & TZ2100.1 TO GET DOUBLE POWER OUTPUT



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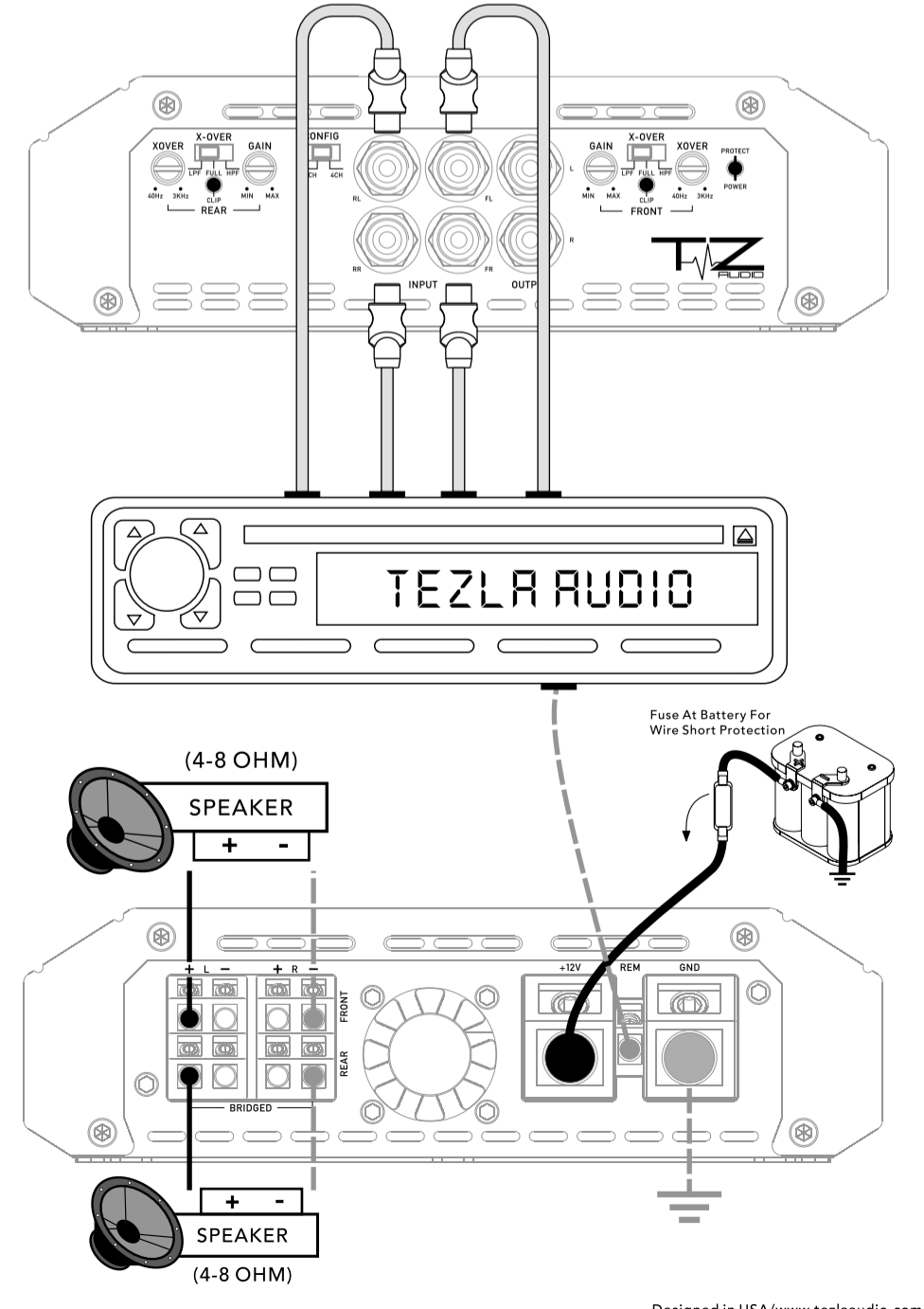
NORMAL INSTALLATION (TZ350.4H)



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BRIDGE INSTALLATION (TZ350.4H)



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FEATURES

- IRS (International Rectifier) Class-D Topology
- Tiffany RCA Jack & Replaceable Top Panels with Machined Engraved Glossy CNC Logo
- Surface Mount Component Technology
- Audio Precision Quality Control Verification
- Stable & Reliable Four Layers PCB Trace Layout
- Power & Protection & Clipping Led Lights Status Indicator
- Short circuit, thermal, DC offset, Overload and voltage protection
- Bass Knob Controller (TZ800.1 & TZ1400.1 & TZ2100.1)
- Robust Cooling Fan Built in & High Density and Heavy Duty Heatsink

SPECIFICATIONS

MODEL NO.	TZ350.4H	TZ800.1	TZ1400.1	TZ2100.1
CIRCUIT TOPOLOGY	Full Range Class-D	MONO Class-D	MONO Class-D	MONO Class-D
RMS POWER OUTPUT AT 1 Ω & 12.6V	N/A	800W	1200W	2000W
RMS POWER OUTPUT AT 2 Ω & 12.6V	500Wx4CH	500W	800W	1350W
RMS POWER OUTPUT AT 4 Ω & 12.6V	300Wx4CH	350W	500W	780W
RMS POWER OUTPUT AT 1 Ω & 14.4V	N/A	1000W	1400W	2100W
RMS POWER OUTPUT AT 2 Ω & 14.4V	530Wx4CH	600W	1000W	1400W
RMS POWER OUTPUT AT 4 Ω & 14.4V	350Wx4CH	320W	700W	820W
RMS POWER OUTPUT AT 4 Ω BRIDGED	1060Wx2CH	N/A	N/A	N/A
TOTAL HARMONIC DISTORTION	<0.3%	<0.3%	<0.3%	<0.3%
S/N RATIO REF 1W AT 4Ω	>90dB	>90dB	>90dB	>90dB
GAIN RANGE	0.2-10V	0.2-10V	0.2-10V	0.2-10V
CROSSOVER RANGE	40-3KHz	50-250Hz(LPF)	50-250Hz(LPF)	50-250Hz(LPF)
FREQUENCY RANGE	20-20KHz	20-500Hz	20-500Hz	20-500Hz
SUBSONIC	N/A	10-55Hz	10-55Hz	10-55Hz
BASS BOOST	N/A	0-18dB	0-18dB	0-18dB
BASS KNOB	N/A	YES	YES	YES
DIMENSIONS	338x180x53.3(MM) 13.3"x7.1"x2.1"	258x180x53.3(MM) 10.2"x7.1"x2.1"	368x180x53.3(MM) 14.5"x7.1"x2.1"	308x180x53.3(MM) 12.1"x7.1"x2.1"

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WARRANTY

Should your amplifier require service, please consult with the dealer from which it was purchased or contact a local TEZLA AUDIO dealer. Do not attempt to return your amplifier directly to us. Units received without an accompanying return authorization number will not be processed. Additionally, you must include a copy of your purchase receipt from an authorized dealer for consideration of in-warranty service; otherwise repair charges will apply. Units received without a receipt will be held for 30 days. Allowing us time to contact you and obtain a copy of the receipt. After 30 days, all units will be returned.



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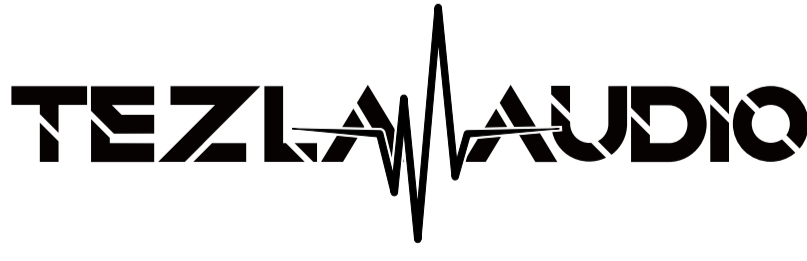
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