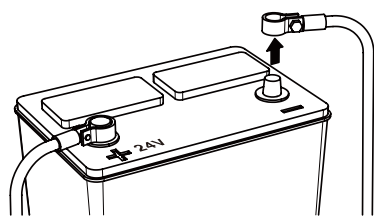


# Installation

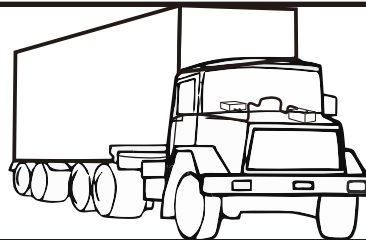
## 1 Disconnect Negative Battery Terminal

Place the battery terminal in a secure position so that it won't accidentally contact the positive or negative battery post.



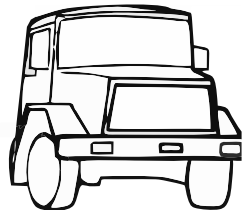
## 2 Run Cables

Properly route power, speaker and RCA cables through the vehicle.



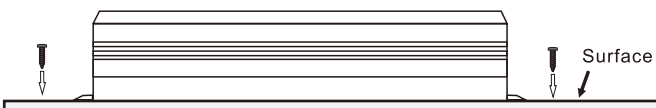
## 3 Mount Amplifier

Choose a mounting location that will provide adequate air ventilation. Mount the amplifier to a secure surface. Do not mount the amplifier upside down.



1. Put amplifier on the mounting surface (non conductive) and mark the positions of the 4 screws.
2. Ensure that objects behind the mounting surface will not be damaged when drilling.
3. Drill screw holes
4. Use the 4 self-tapping screws to fix the amplifier to the mounting surface.

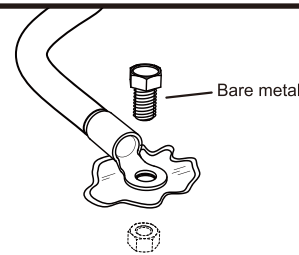
**Note:** Please ensure that the connection between grounding points/ground wire and the negative battery grounding and post is good and clean. Installing an extra ground wire between battery post and vehicles chassis ground, with the same gauge/size as positive wire, will improve the performance of your amplifier/system. Connect all devices to the same ground point as far as possible. This can help to reduce noise.



## 4 Chassis Ground

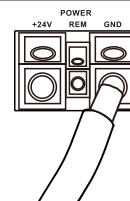


The chassis ground connection is critical to the performance of the amplifier. Choose a location that is close to the amplifier. Completely scrape away the paint and use a nut and bolt if possible.



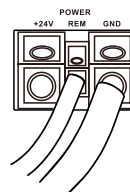
## 5 Negative Power Connection

Attach the ground wire to the amplifier GND connection. Ensure that there are no loose strands before you tighten the screw firmly.



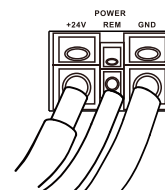
## 6 Remote Turn-on Connection

Attach the remote turn on from source unit to the amplifier REM input. **Note:** Try to avoid to use thin cables as it easily will be broken etc. Recommended size is 0.75 - 1 mm<sup>2</sup>



## 7 Positive Power Connection

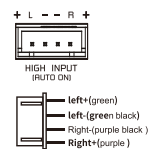
Attach the main power cable to the amplifier +24V. The cable must run directly to the battery and be properly fused. Ensure that there are no loose strands before you tighten the screw firmly.



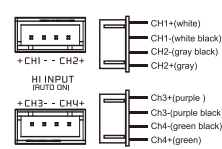
## 8 High Level Inputs (HLI)

High level inputs left and right to connect the amplifier to the radios speaker outputs. If source doesn't provide RCA outputs, there is a possibility to use the HLI inputs instead. HLI also provide an auto on function, this removes the need for REM connection to amplifier.

TFP 500.1 24V

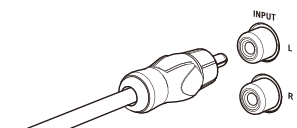


TFP 70.4 24V



## 9 Signal Input Connection

Connect the RCA cables to the input connectors.



## 10 Level Control

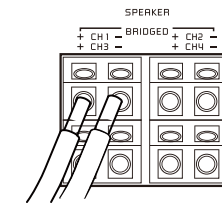


Turn the LEVEL control completely counter-clockwise to minimum.

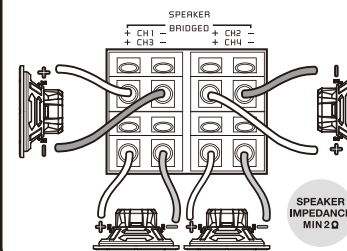


## 11 Speaker Connections

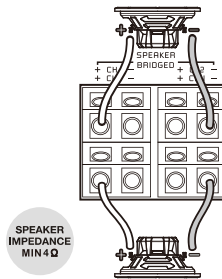
Connect the speaker cables to the speaker output connectors. Follow the diagram below that best fits your speaker configuration.



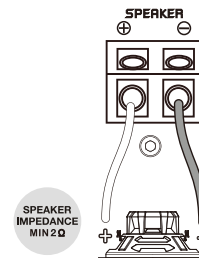
Stereo mode (TFP 70.4 24V)  
**Note:** 2 ohm stable



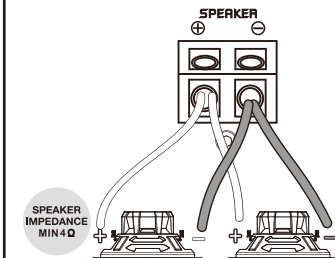
Bridged mode (TFP 70.4 24V)  
**Note:** 4 ohm stable



Monoblock (TFP 500.1 24V)  
Single Woofer  
**Note:** 2ohm stable

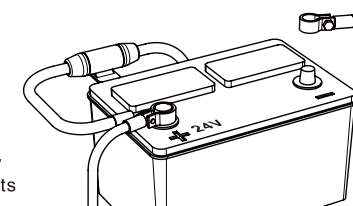


Monoblock (TFP 500.1 24V)  
Multiple Woofers  
**Note:** 2ohm stable



## 12 Positive Battery Connection

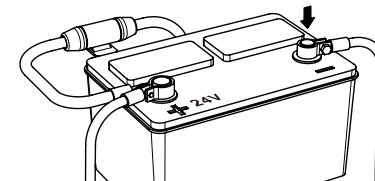
Connect the power cable to the positive battery terminal. The power cable must be fused within 15.5 inches/40 cm from the battery terminal AND before any metal parts like the bulkhead etc.



**Be prepared to disarm your vehicle's alarm and to enter your radio / source unit code.**

## 13 Re-Connect Negative Battery Terminal


Re-connect the negative battery terminal making sure it is securely tightened.



## Setup

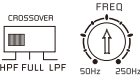
**A** Crossover Mode (TFP 70.4 24V)

Crossover mode switch set the type of crossover that will be active. 4-channel model will have two switches, one for each set of channels.



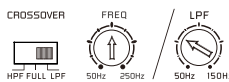
**B** High Pass Adjustment (TFP 70.4 24V)

HPF (High pass filter) control will limit the output below the selected frequency. This is typically used to protect midrange speakers and tweeters from damage and to allow smooth transition from a subwoofer.




**C** Low Pass Adjustment

LPF (Low pass filter) control will limit the output above the selected frequency. This is used to allow a smooth transition to the higher frequency speakers.




**D** Bass Boost (TFP 500.1 24V)

Bass EQ control will increase the power output at 45Hz for more pronounced bass. Be cautious when using this control. Increase the level in small amounts until distortion is noticed, then back the level down (counter clockwise) until the distortion is eliminated.



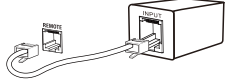
**E** Phase adjustment (TFP 500.1 24V)

Controls the amplifier phase between 0 and 180 variable. **Note: This is for more or advanced users. Normally this should be set to 0.**



**F** Remote Level Control (TFP 500.1 24V)


TFP 500.1 24V includes a bass level remote. Avoid adjusting the bass remote while driving.



**G** Level Setting

**This is a critical step to insure your amplifier is properly adjusted to match the signal output level of your source unit.**

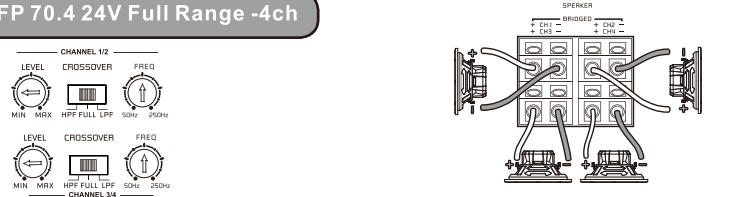
**THIS IS NOT A VOLUME CONTROL!**



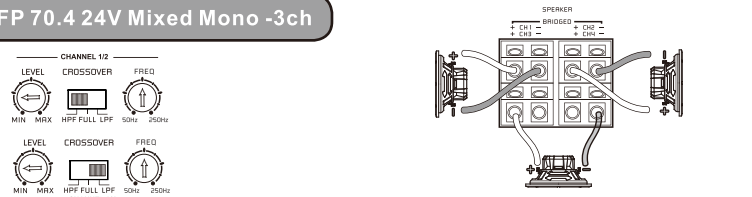
1. If possible, with the source unit off, confirm that the primary volume control is turned down (counter clockwise).
2. Turn on the source unit (CD or MP3 player). Re-confirm that the volume is turned down. Make sure the source unit controls; balance, fader, bass and treble are all set to center or "0" adjustment. Make sure that the green LED on the end of the amplifier is illuminated.
3. Play a clean musical selection of which you are very familiar. CD is preferred. Do not use radio signals for level setting. Hit play and start turning the volume of the source unit up.
4. Stop increasing the source unit volume when you reach 3/4 (about 75%) or until you hear speakers begin to slightly start producing distortion.
5. Increase the amplifier level (clockwise) until distortion is heard, then back the level down (counter clockwise) until the distortion is eliminated. Small adjustments may need to be made to balance the levels of multiple amplifiers.

## Common System Setup

**TFP 70.4 24V Full Range -4ch**



**TFP 70.4 24V Mixed Mono -3ch**



**TFP 500.1 24V Mono - 1ch**



## SPECIFICATIONS

MODEL	TFP 70.4 24V	TFP 500.1 24V
RMS POWER (4Ω)	70W×4	300W×1
RMS POWER (2Ω)	110W×4	500×1
BRIDGED POWER(4Ω)	220W×2	/
T.H.D	<0.3%	<0.3%
FREQUENCY RESPONSE	15Hz-30KHz	20Hz-150Hz
S/N RATIO (A-WEIGHTED)	>90dB	>90dB
SEPARATION	>45dB	/
INPUT SENSITIVITY	6V-0.5V	6V-0.2V
INPUT IMPEDANCE	>10Kohm	>10Kohm
POWER FUSE	25A	15Ax2
BASS BOOST	/	0-12dB, 45Hz
PHASE	/	0°-180°
LOW PASS	50-250Hz	50-150Hz
HIGH PASS	50-250Hz	/
CROSSOVER	HPF/FULL/LPF	LPF
DIMENSIONS L:	203mm/225mm with legs	203mm/225mm with legs
W:	113mm	113mm
H:	46mm	46mm

# Owners Manual

**GAS**  
CAR AUDIO

**24**  
VOLT

AMPLIFIER



MODEL: TFP 70.4 24V  
TFP 500.1 24V

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