

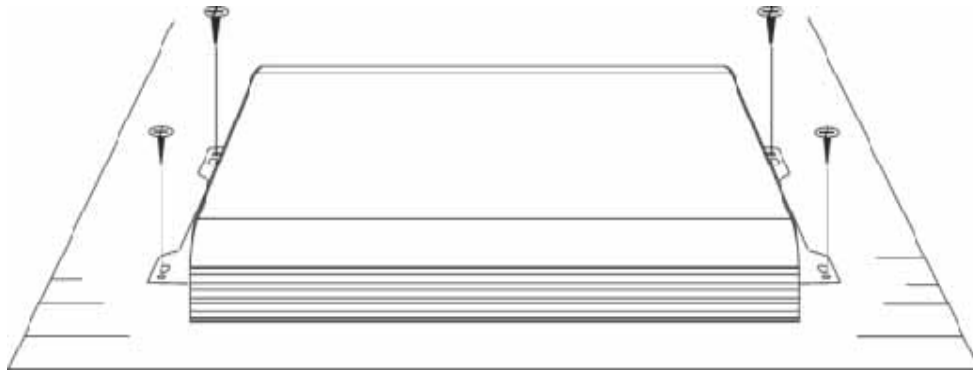


Installation Cause

Be sure to carefully read and understand the instructions before attempting to install the Amplifier.

1. Mounting Location

The mounting location and position of your amplifier will have a great effect on its ability to dissipate the heat generated during normal operation. The design of our aluminum heatsink serves to easily dissipate the heat generated over a wide range of operating conditions. However, to maximize the performance of your amplifier, care should be taken to ensure adequate ventilation.



2. Unit Installation

This section focuses on some of the vehicle considerations for installing your new amplifier. Checking your battery and present sound system as well as pre-planning your system layout and best wiring routes will save installation time. When deciding how to lay out your new system, be sure that each component will be easily accessible for making adjustments.

Before beginning any installation, be sure to follow these simple rules :

- 1) Be sure to carefully read and understand the instruction before attempting to install the amplifier.
- 2) **For safety**, disconnect the negative lead from the battery prior to beginning the installation.
- 3) For easier assembly, we suggest you run all wires prior to mounting your amplifier in place.
- 4) Route all of the RCA cables close together and away from any high current wires.
- 5) Use high quality connectors for a reliable installation and to minimize signal or power loss.
- 6) **Think before you drill!** Be careful not to cut or drill into gas tanks, fuel lines, brake or hydraulic lines, vacuum lines or electrical wiring when working on any vehicle.
- 7) Never run wires underneath the vehicle. Running the wires inside the vehicle provides the best protection.
- 8) Avoid running wires over or through sharp edges. Use rubber or plastic grommets to protect any wires routed through metal, especially the firewall.
- 9) **ALWAYS** protect the battery and electrical system from damage with proper fusing. Install the appropriate fuseholder and fuse on the +12V power wire within 18" (45.7cm) of the battery terminal.
- 10) When grounding to the chassis of the vehicle, scrape all paint from the metal to ensure a good, clean ground connection. Grounding connections should be as short as possible and always be connected to metal that is welded to the main body, or chassis, of the vehicle.

TA-602

2 Channel Feature Guide

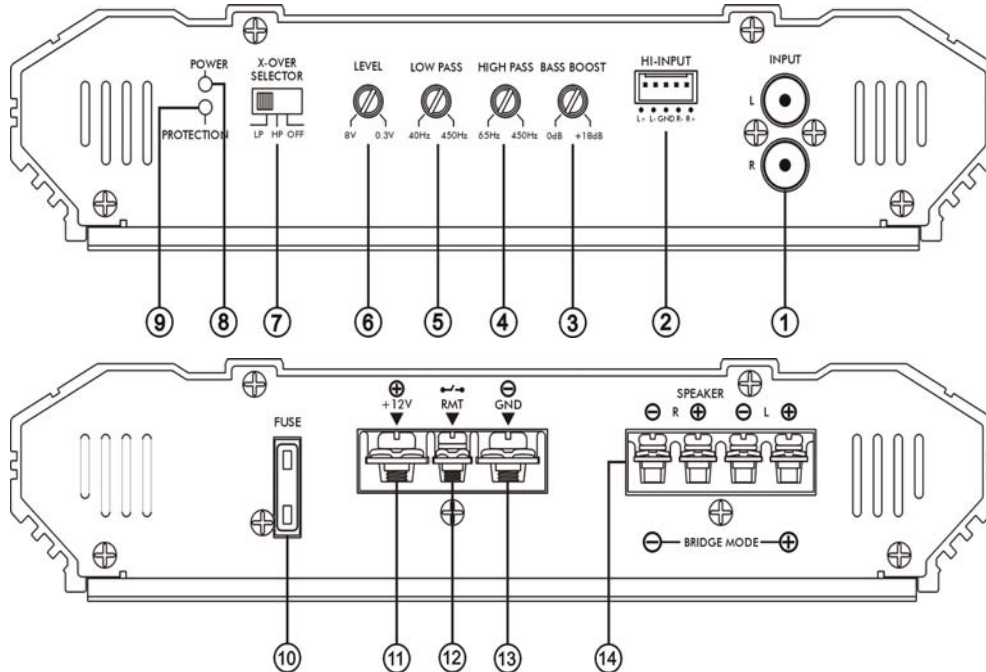


2 Channel
RMS 50Wx2CH

On purchasing a our product. This innovative line of mobile audio product has been designed with performance in mind. To get the best results from your our amplifier, our engineers have optimised the product and documented it in this manual. The notes and illustrations in this manual will help you to get the best performance out of your amplifier.

Features

- High Efficiency MOSFET Power Supplies
- Multi-standed Power Torroids
- 2 ohm Stable Stereo Operation
- Silver Plated Input and Output Connectors
- Variable Bass Boost(18dB at 45Hz)
- Wire Free PC Board Layout
- Fully Varibale Electronic Crossover(HP/LP : 40Hz-600Hz)
- 4 Way Protection Circuitry
- Soft Turn On/Off Circuitry
- Hi-Level Input Built-in



(1) LINE INPUT : This allows connection to any head unit that has a RCA outputs.

(2) HIGH LEVEL INPUT : This allow connection to any head unit that has no RCA output via the use of the high level speaker wires. In the picture to the left you will see an enlarged drawing of the high level input connector. When connecting a head unit to the amplifier ensure that you connect the GND wire to the chassis of the vehicle and connect the head units speaker connections to the appropriate connection.

(3) BASS BOOST : This is a variable control to increase the bass boost at 45Hz, adjust to suit. This output is a selectable by the Crossover Selector switch

(4) HIGH PASS : Set the crossover switch (7) to high pass and turn this control to 65Hz when using speaker's smaller than 6 x 9".
NOTE : Failure to do so could result in speaker damage.

(5) LOW PASS : Set the crossover switch (7) to low pass when a subwoofer is connected. Ensure th crossover frequency is set at 100Hz or below. NOTE : Failure to do so could result in speaker damage.

(6) LEVEL : This allows level adjustment of the input signal. Use this control to correctly match the head unit to the amplifier. To set this control correctly, turn the amplifier level to MIN and the head unit to 3/4 volume, with the BASS and TREBLE on zero, then slowly turn up the amplifier level control (6) towards the MAX end of the control. NOTE : If the sound becomes distorted, turn this control down.

(7) CROSSOVER SELECTOR : Set the apporprate mode of operation. The 3 positions available are FLAT, HIGH PASS and LOW PASS.

(8) POWER LED : When illuminated the amplifier is turned on.

(9) PROTECTION LED : When illuminated it indicates a fault has occurred. Check installation.

(10) FUSE : Please ensure correct type of fuse if fitted, as specified in this manual.

(11) +12V : This must be connected directly to the vehicle batterie's positive(+) terminal via an inline fuse at the battery end. NOTE : This is to be the last wire to hook up during installation as damage could result.

(12) REMOTE : This terminal is for turning the amplifier on and off. This requires a requires a switched positive (+12V) to power "on" the amplifier, this can be found on the rear of the head unit in the form of a electric antenna output, or a remote on output. Of not available you can wire to the ACC position on the key.

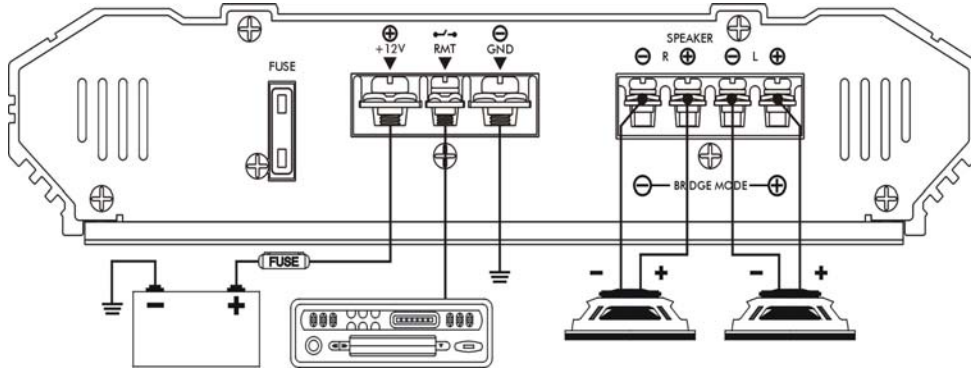
(13) GROUND : Connect directly to the vehicle's chassis.
NOTE : This is to be the first wire to hook up during installation as damage sould result.

(14) SPEAKERS : See 2 Channel and 1 Channel installation illustrations for correct speaker hookup.

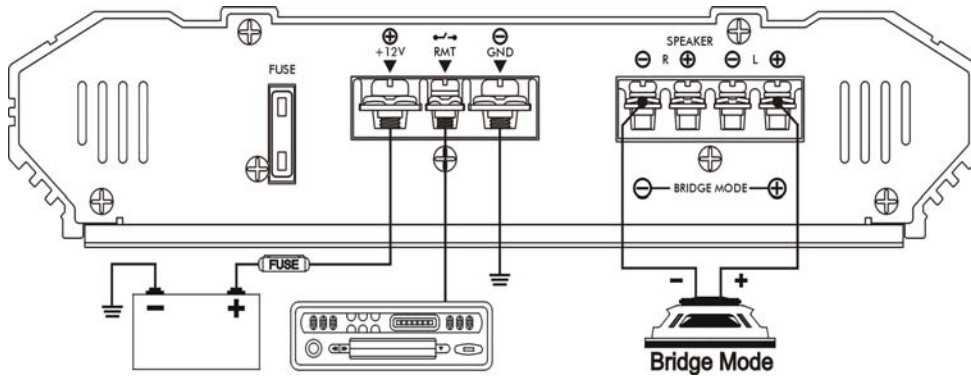


2 Channel
RMS 60Wx2CH

System Example (Stereo Mode)



System Example (Bridged Mode)



Troubleshooting

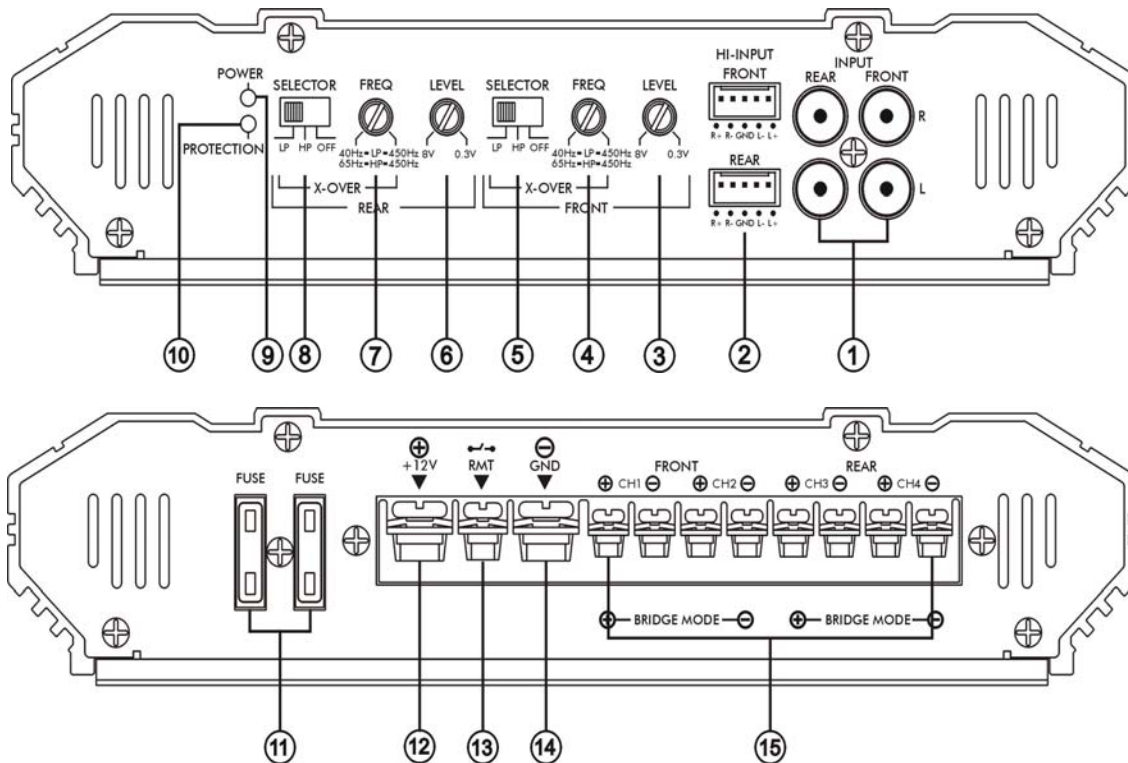
Symptoms	Check	Cure
Amplifier turns off at low volume levels.	<ul style="list-style-type: none"> • Check speakers for damage or short circuit. 	<ul style="list-style-type: none"> • Have your dealer inspect the speakers
No sound.	<ul style="list-style-type: none"> • Is the power LED I illuminated? 	<ul style="list-style-type: none"> • Is the power LED I illuminated? • Be sure 12V remote lead is connected. • Check signal leads. • Check gain control. • Check tuner/deck volume level. • Clean contacts on fuse holders.
	<ul style="list-style-type: none"> • Check for speaker short circuit or amplifiers overheating. 	<ul style="list-style-type: none"> • Have your dealer inspect the speakers.
No sound in one channel.	<ul style="list-style-type: none"> • Check speaker leads. 	<ul style="list-style-type: none"> • Inspect for short circuit or an open connection.
	<ul style="list-style-type: none"> • Check audio leads. 	<ul style="list-style-type: none"> • Reverse left and right RCA Inputs to determine if problem is occurring before the amplifier
Amplifier turning off at medium or high volume levels.	<ul style="list-style-type: none"> • Check speaker load impedance. 	<ul style="list-style-type: none"> • Be sure speaker load impedance recommendations are observed. (If you use an ohmmeter to check speaker resistance, please remember that DC resistance and AC impedance may not be the same.)

TA-604

4 Channel Feature Guide



4 Channel
RMS 60Wx4CH



(1) LINE INPUT : This allows connection to any head unit that has a RCA outputs.

(2) HIGH LEVEL INPUT : This allow connection to any head unit that has no RCA output via the use of the high level speaker wires. In the picture to the left you will see an enlarged drawing of the high level input connector. When connecting a head unit to the amplifier ensure that you connect the GND wire to the chassis of the vehicle and connect the head units speaker connections to the appropriate connection.

(3)(6) LEVEL : This allows level adjustment of the input signal. Use this control to correctly match the head unit to the amplifier. To set this control correctly, turn the amplifier level to MIN and the head unit to 3/4 volume, with the BASS and TREBLE on zero, then slowly turn up the amplifier level control (2) towards the MAX end of the control. NOTE : If the sound becomes distorted, turn this control down.

(4)(7) FREQ

HIGH PASS : Set the crossover switch (5)(8) to high pass and turn this control to 65Hz when using speaker's smaller than 6 x 9". NOTE : Failure to do so could result in speaker damage.

LOW PASS : Set the crossover switch (5)(8) to low pass when a subwoofer is connected. Ensure th crossover frequency is set at 100Hz or below. NOTE : Failure to do so could result in speaker damage.

(5)(8) CROSSOVER SELECTOR : Set the appropriate mode of operation. The 3 positions available are FLAT, HIGH PASS and LOW PASS.

(9) POWER LED : When illuminated the amplifier is turned on.

(10) PROTECTION LED : When illuminated it indicates a fault has occurred. Check installation.

(11) FUSE : Please ensure correct type of fuse if fitted, as specified in this manual.

(12) +12V : This must be connected directly to the vehicle batterie's positive(+) terminal via an inline fuse at the battery end. NOTE : This is to be the last wire to hook up during installation as damage could result.

(13) REMOTE : This terminal is for turning the amplifier on and off. This requires a requires a switched positive (+12V) to power "on" the amplifier, this can be found on the rear of the head unit in the form of a electric antenna output, or a remote on output. Of not available you can wire to the ACC position on the key.

(14) GROUND : Connect directly to the vehicle's chassis. NOTE : This is to be the first wire to hook up during installation as damage sould result.

(15) SPEAKERS : See 4 Channel and 3/2 Channel installation illustrations for correct speaker hookup.

TA-604 Power Cable Calculator

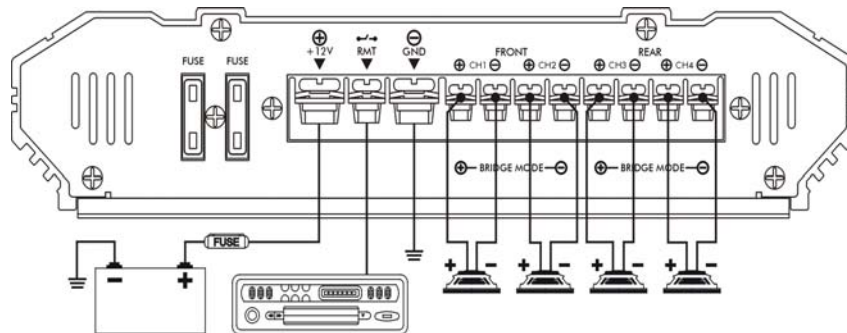


**4 Channel
RMS 60Wx4CH**

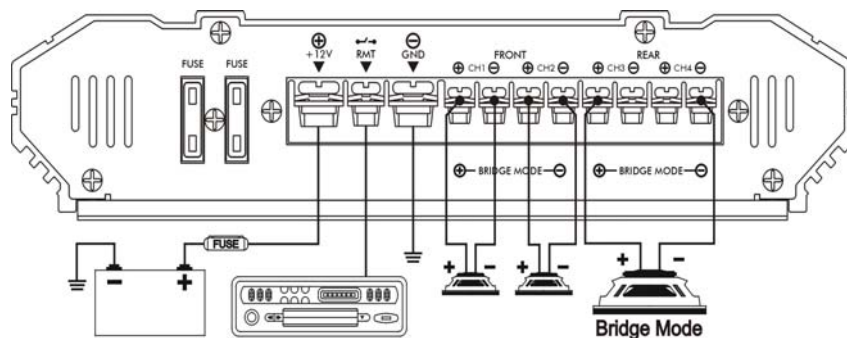
Total Amperage	0-4ft	4-7ft	7-10ft	10-13ft	13-16ft	16-19ft	19-22ft	22-28ft
0-20	14	12	12	10	10	8	8	8
20-35	12	10	8	8	6	6	6	4
35-50	10	8	8	6	4	4	4	4
50-65	8	8	6	4	4	4	4	2
65-85	6	6	4	4	2	2	2	0
85-105	6	6	4	2	2	2	2	0
105-125	4	4	4	2	0	0	0	0
125-150	2	2	2	0	0	0	0	0

The above chart shows cable gauges to be used, if no less than a 0.5 volt drop is acceptable. If aluminum wire or tinned wire is used, the gauges could be of an even larger size to compensate. Cable gauge size calculation takes into account terminal connection resistance. 1 Metre = 3.28 Feet

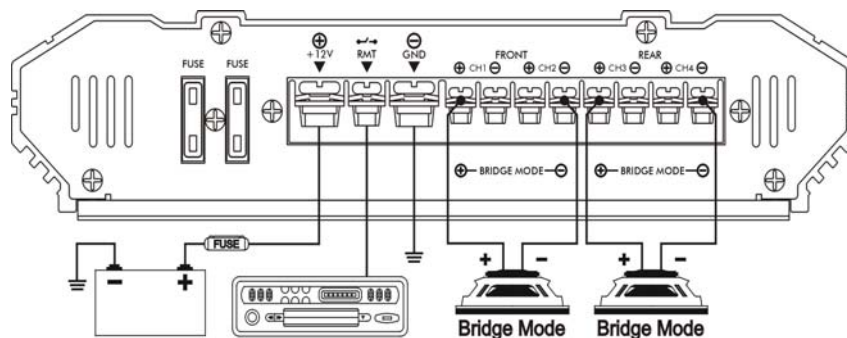
4 Channel Installation



3 Channel Installation



2 Channel Installation



TA-series Specifications



	TA-602	TA-604
into 4 Ohms at 14.4V	60W x 2Ch	60W x 4Ch
into 2 Ohms at 14.4V	95W x 2Ch	95W x 4Ch
Bridged 4 Ohms 14.4V	200W x 1Ch	200W x 2Ch
Frequency Response	20Hz ~ 22KHz	20Hz ~ 22KHz
S/N Ratio with A-Weight	> 100dB	> 100dB
T.H.D	< 0.05 %	< 0.03 %
Recommended Fuse size	25A x 1	25A x 2
Dimension (L x W x H)	170mm x 238mm x 51mm	290mm x 238mm x 51mm
Input Sense	300mV - 8V	
Separation	< 60 dB	
LP Variable X-Over	40Hz ~ 600Hz @ 18dB/Octave	
HP Variable X-Over	40Hz ~ 600Hz @ 12dB/Octave	
Variable Bass Boost	0~ +18dB at 45Hz(2 Channel Only)	
Input Impedance	20kΩ	
Damping Factor	> 200	

dB level

30	Quiet library, soft whispers
40	Living room, refrigerator, away from traffic
50	Light traffic, normal conversation, quiet office
60	Air conditioner at 20 feet, sewing machine
70	Vacuum cleaner, hair dryer, noisy restaurant
80	Average city traffic, garbage disposals, alarm clock at 2 feet

example

The following noises can be dangerous under constant exposure

90	Subway, motorcycle, truck traffic, lawn mower
100	Garbage truck, chain saw, pneumatic drill
120	Rock band concert in front of speakers, thunderclap
140	Gunshot blast, jet plane
180	Rocket launching pad

Information courtesy of the deafness Research Foundation.

