

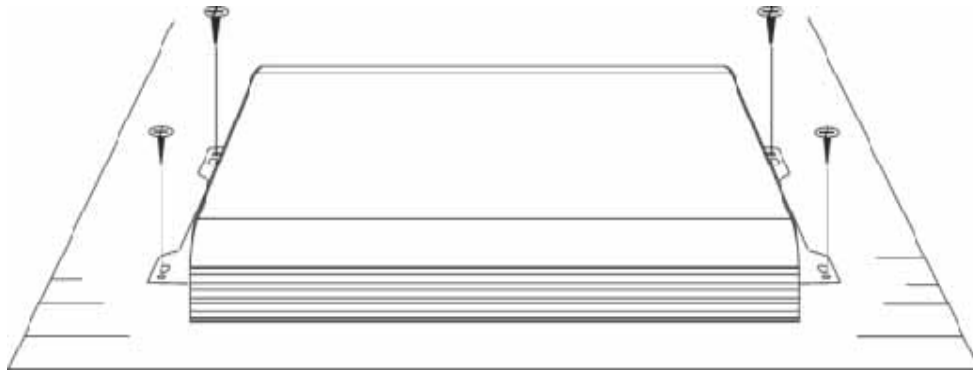


# Installation Cause

**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.

- 1 Ohm Stable D Class Amplifier Design
- Accurate Stated Amplifier Ratings
- Variable Bass Boost 0 - +15dB
- Variable Subsonic Filter from 20Hz - 55Hz
- Silver Plated 4 Gauge Power and Ground Connections

- Silver Plated Audio Input and Output Connections
- Bass Remote Controller Included
- Silver Plated RCA Output for multi-amp Installations
- Silver Plated Dual 8 Gauge Speaker Output Connections

### ① LPL REMOTE PORT

This port allows connection to the bass control which is included. To allow bass level control of the amplifier, mount the bass control in a convenient location in the passenger compartment.

### ③ RCA INPUT

Connect these RCA connectors to a head unit with a LOW LEVEL output connection.

### RCA OUTPUT

Use these RCA output connectors to connect to a secondary amplifier. This output is selectable by the Crossover Selector switch

### ③ SUBSONIC FILTER

This is a variable control that filters out all Sub Bass Frequencies point at 18dB/octave.

### ④ LOW PASS

Set the crossover switch to LP when a subwoofer is connected. Ensure the crossover frequency is set at 100Hz or below. NOTE : Failure to do so could result in speaker damage.

### ⑤ CROSSOVER SELECTOR

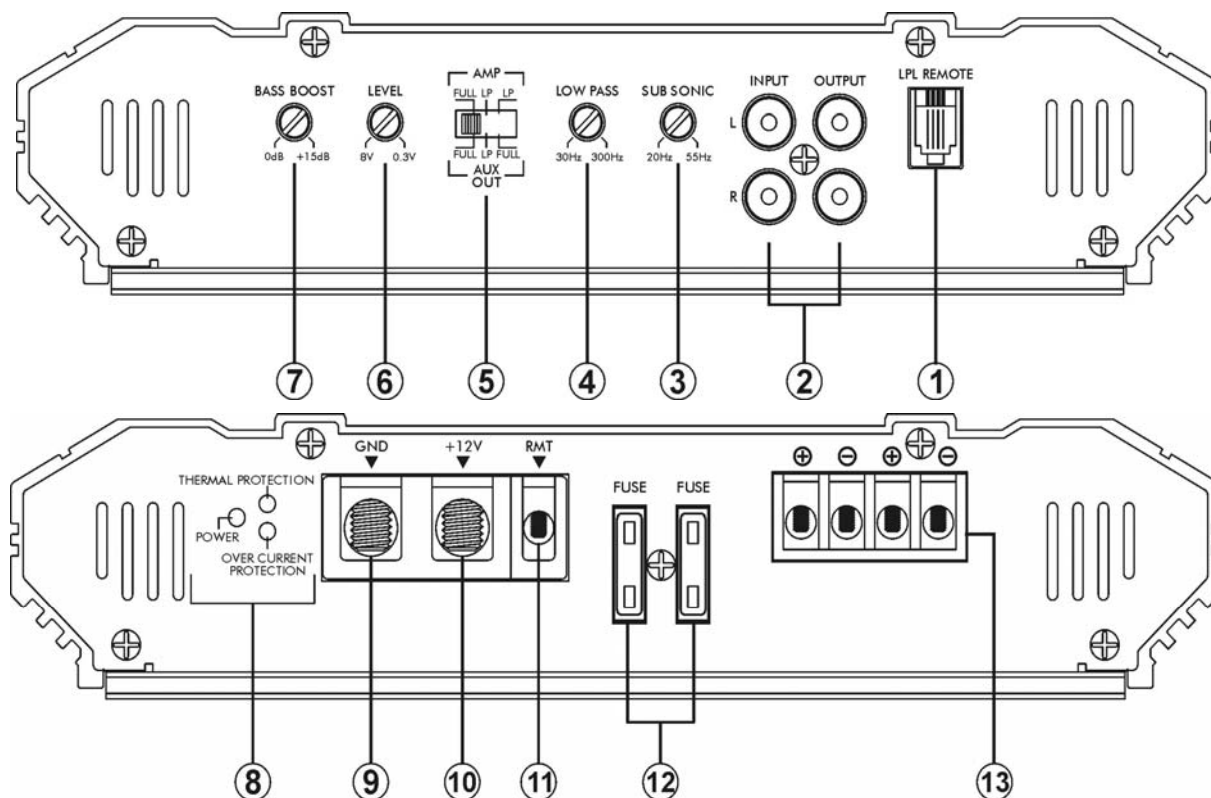
Set the appropriate mode of operation, this switch affects the speaker output as well as the RCA output. The top selection options are fed to the speaker output and the bottom selection options are fed to the RCA output connection. When FULL is selected the Crossover, Subsonic Filter and Bass functions are by-passed.

### 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 this amplifier level control towards the MAX end of the control. NOTE : If the sound becomes distorted, turn this control down.

### ⑦ BASS BOOST

This a variable control to increase the bass boost at 45Hz from 0 - +15dB of gain, adjust to suit.



### ⑧ POWER, STATUS AND THERMAL LED'S

This shows if the amplifier has been correctly powered up, if

### ⑨ GROUND INPUT

Connect directly to the vehicle's chassis via a 4 gauge power cable. NOTE : This is to be the first wire to connect when wiring up a amplifiers damage could result if this not done.

### ⑩ +12V INPUT

This must be connected to the vehicle battery positive(+) terminal via a 4 gauge power cable and with an inline fuse or circuit breaker at the battery end. NOTE : This is to be last wire to connect up during installation as damage could result.

### ⑪ REMOTE INPUT

This terminal is for turning the amplifier on and off. This 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. If not available you can wire to the ACC position on the key.

### ⑫ FUSES

Please ensure correct type of fuse is fitted.

### ⑬ SPEAKER OUTPUT

See 1 channel installation diagram in this manual for correct speaker connection. PLEASE NOTE : The two (-) terminals are internally wired in parallel inside the amplifier as well as the two (+) terminals.

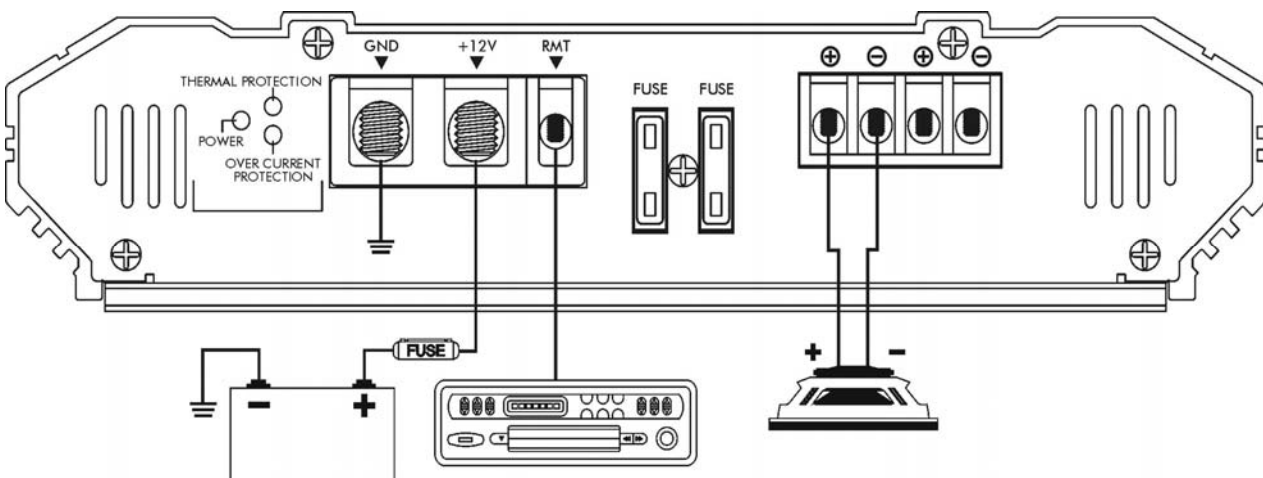
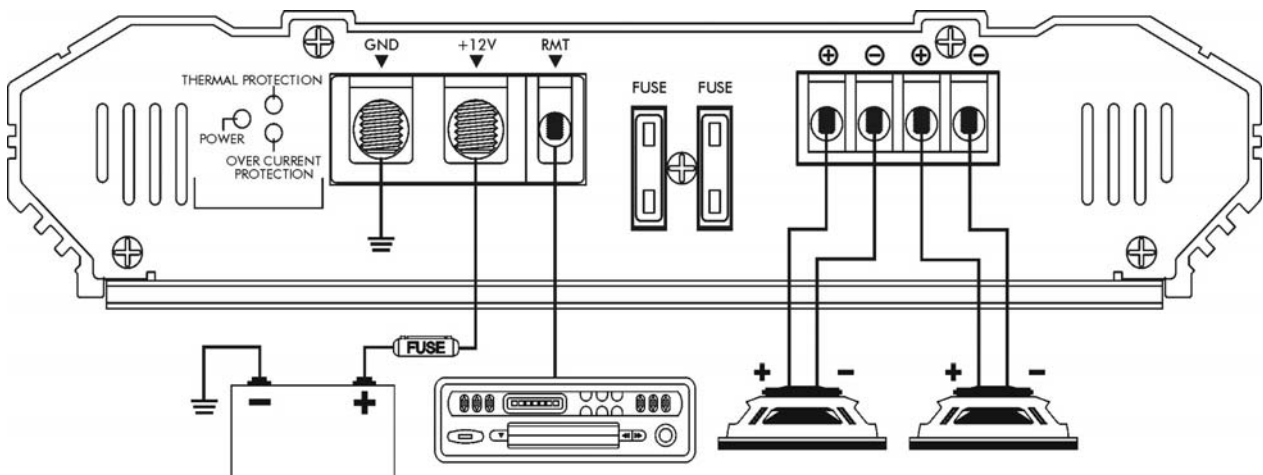


## POWER CABLE CALCULATOR

| 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

## System Example



# TA-series Specifications



|                           | TA-601                     |
|---------------------------|----------------------------|
| into 4 Ohms at 14.4V      | 300W x 1Ch                 |
| into 2 Ohms at 14.4V      | 530W x 1Ch                 |
| into 1 Ohms at 14.4V      | 650W x 1Ch                 |
| Frequency Response        | 5Hz ~ 472KHz               |
| S/N Ratio with A-Weight   | > 77dB                     |
| T.H.D                     | < 0.05 %                   |
| Recommended Fuse size     | 40A x 2                    |
| Dimension (L x W x H)     | 340mm x 238mm x 51mm       |
| Input Sense               | 300mV - 8V                 |
| Separation                | > 65 dB                    |
| LP Variable X-Over        | 30Hz ~ 300Hz @ 18dB/Octave |
| Sub sonic Variable X-Over | 20Hz ~ 55Hz @ 12dB/Octave  |
| Variable Bass Boost       | 0~ +18dB at 45Hz           |
| Input Impedance           | 20kΩ                       |
| Damping Factor            | > 250                      |

## 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.

