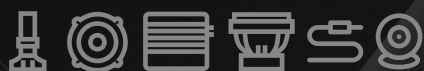




## USER MANUAL



**MADE IN PRC**  
**specially for AMP™**



**WWW.AMPGROUP.PRO**



Your AMP product was developed and manufactured with high-quality materials and components which can be recycled and/or re-used. This symbol indicates that electrical and electronic equipment must be disposed of separately from normal garbage at the end of its operational lifetime. Please dispose of this product by bringing it to your local collection point or recycling centre for such equipment. This will help to protect the environment in which we all live.



**MASS**  
**series**

**1CH/2CH/4CH AMPLIFIERS**

**We respect your choice for choosing AMP.**  
**AMP company does everything possible**  
**to ensure that our products meet your needs,**  
**and quality match the best world standards.**

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## We respect your choice!

Congratulations on your purchase of a AMP™ Amplifier.

It has been designed, engineered and manufactured to bring you the highest level of performance and quality, and will afford you of listening pleasure.

AMP™ — ENERGY OF SOUND!

## Specifications

All specifications subject to change without notice.

| <b>1 Ch Monoblock</b>                 | <b>1.500 ver.2</b> | <b>1.600</b> | <b>1.800</b> | <b>1.1000</b> | <b>1.1500</b> |
|---------------------------------------|--------------------|--------------|--------------|---------------|---------------|
| <b>Class</b>                          | D                  | D            | D            | D             | D             |
| <b>RMS power 4Ω</b>                   | 225W x 1           | 240W x 1     | 310W x 1     | 430W x 1      | 510W x 1      |
| <b>RMS power 2Ω</b>                   | 375W x 1           | 420W x 1     | 450W x 1     | 600W x 1      | 930W x 1      |
| <b>RMS power 1Ω</b>                   | 500W x 1           | 600W x 1     | 760W x 1     | 970W x 1      | 1500W x 1     |
| <b>MAX power</b>                      | 900W               | 1100W        | 1400W        | 1900W         | 3000W         |
| <b>Bridge mode 2Ω</b>                 | —                  | —            | —            | +             | +             |
| <b>Low-pass filter</b>                | 40Hz – 180Hz       | 40Hz – 180Hz | 40Hz – 180Hz | 50Hz – 400Hz  | 50Hz – 400Hz  |
| <b>Subsonic</b>                       | —                  | —            | —            | OFF   25Hz    | OFF   25Hz    |
| <b>Bass boost</b>                     | 0dB – 12dB         | 0dB – 12dB   | 0dB – 12dB   | 0dB – 12dB    | 0dB – 12dB    |
| <b>Treble boost</b>                   | —                  | —            | —            | —             | —             |
| <b>Frequency response</b>             | 10Hz – 180Hz       | 10Hz – 180Hz | 10Hz – 180Hz | 10Hz – 400Hz  | 10Hz – 400Hz  |
| <b>Input sensitivity</b>              | 0.2V – 6V          | 0.2V – 6V    | 0.2V – 6V    | 0.2V – 6V     | 0.2V – 6V     |
| <b>Signal-to-noise ratio</b>          | > 85 dB            | > 85 dB      | > 85 dB      | > 85 dB       | > 85 dB       |
| <b>Phase shift</b>                    | —                  | —            | —            | 0°   180°     | 0°   180°     |
| <b>HIGH LEVEL input</b>               | +                  | +            | +            | —             | —             |
| <b>Remote Subwoofer level control</b> | +                  | +            | +            | +             | +             |
| <b>Protection system</b>              | +                  | +            | +            | +             | +             |
| <b>Fuse</b>                           | 25A x 2            | 30A x 2      | 35A x 2      | 40A x 2       | ≥150A*        |
| <b>Operating voltage</b>              | 12V                | 12V          | 12V          | 12V           | 12V           |
| <b>Terminal</b>                       | Fork               | Fork         | Fork         | Clamp         | Clamp         |
| <b>Dimensions (L/W/H), mm</b>         | 180x180x58         | 200x180x58   | 220x180x58   | 240x180x58    | 300x180x58    |

\* external, not included

| <b>2 Channel</b>                | <b>2.60</b>      | <b>2.100</b>     | <b>2.150</b>     | <b>2.190</b>     |
|---------------------------------|------------------|------------------|------------------|------------------|
| <b>Class</b>                    | AB               | AB               | AB               | AB               |
| <b>RMS power 4Ω</b>             | 60W x 2          | 100W x 2         | 150W x 2         | 190W x 2         |
| <b>RMS power 2Ω</b>             | 100W x 2         | 140W x 2         | 230W x 2         | 290W x 2         |
| <b>RMS power 4Ω Bridge mode</b> | 200W x 1         | 280W x 1         | 460W x 1         | 580W x 1         |
| <b>MAX power</b>                | 400W             | 560W             | 920W             | 1100W            |
| <b>Low-pass filter</b>          | 50Hz – 250Hz     | 50Hz – 250Hz     | 50Hz – 250Hz     | 50Hz – 250Hz     |
| <b>Hi-pass filter</b>           | 32Hz – 8kHz      | 32Hz – 8kHz      | 32Hz – 8kHz      | 32Hz – 8kHz      |
| <b>Bass boost</b>               | 0dB   6dB   12dB | 0dB   6dB   12dB | 0dB   6dB   12dB | 0dB   6dB   12dB |
| <b>Treble boost</b>             | 0dB   6dB   12dB | 0dB   6dB   12dB | 0dB   6dB   12dB | 0dB   6dB   12dB |
| <b>Frequency response</b>       | 10Hz – 45kHz     | 10Hz – 45kHz     | 10Hz – 45kHz     | 10Hz – 45kHz     |
| <b>Input sensitivity</b>        | 0.2V – 8V        | 0.2V – 8V        | 0.2V – 8V        | 0.2V – 8V        |
| <b>Signal-to-noise ratio</b>    | 90dB             | 90dB             | 90dB             | 90dB             |
| <b>Protection system</b>        | +                | +                | +                | +                |
| <b>Fuse</b>                     | 25A              | 40A              | 30A x 2          | 35A x 2          |
| <b>Operating voltage</b>        | 12V              | 12V              | 12V              | 12V              |
| <b>Terminal</b>                 | Fork             | Fork             | Fork             | Fork             |
| <b>Dimensions (L/W/H), mm</b>   | 200x180x58       | 240x180x58       | 280x180x58       | 300x180x58       |

| 4 Channel                | 4.60             | 4.80         | 4.100        | 4.120        | 4.150        | 4.190        |
|--------------------------|------------------|--------------|--------------|--------------|--------------|--------------|
| Class                    | AB               | AB           | AB           | AB           | AB           | AB           |
| RMS power 4Ω             | 60W x 4          | 80W x 4      | 100W x 4     | 120W x 4     | 150W x 4     | 190W x 4     |
| RMS power 2Ω             | 100W x 4         | 120W x 4     | 140W x 4     | 170W x 4     | 240W x 4     | 290W x 4     |
| RMS power 4Ω Bridge mode | 200W x 2         | 240W x 2     | 280W x 2     | 340W x 2     | 480W x 2     | 580W x 2     |
| MAX power                | 800W             | 960W         | 1100W        | 1360W        | 1920W        | 2320W        |
| Low-pass filter          | 32Hz – 3kHz      | 32Hz – 8kHz  | 32Hz – 8kHz  | 32Hz – 8kHz  | 32Hz – 8kHz  | 32Hz – 8kHz  |
| Hi-pass filter           | 32Hz – 3kHz      | 32Hz – 8kHz  | 32Hz – 8kHz  | 32Hz – 8kHz  | 32Hz – 8kHz  | 32Hz – 8kHz  |
| Bass boost               | 0dB   6dB   12dB |              |              |              |              |              |
| Frequency response       | 10Hz – 45kHz     | 10Hz – 45kHz | 10Hz – 45kHz | 10Hz – 45kHz | 10Hz – 45kHz | 10Hz – 45kHz |
| Input sensitivity        | 0.2V – 8V        | 0.2V – 8V    | 0.2V – 8V    | 0.2V – 8V    | 0.2V – 8V    | 0.2V – 8V    |
| Signal-to-noise ratio    | 90dB             | 90dB         | 90dB         | 90dB         | 90dB         | 90dB         |
| Protection system        | +                | +            | +            | +            | +            | +            |
| Fuse                     | 40A              | 25A x 2      | 30A x 2      | 30A x 3      | 35A x 3      | 40A x 3      |
| Operating voltage        | 12V              | 12V          | 12V          | 12V          | 12V          | 12V          |
| Terminal                 | Fork             | Fork         | Fork         | Clamp        | Clamp        | Clamp        |
| Dimensions (L/W/H), mm   | 260x180x58       | 280x180x58   | 300x180x58   | 360x180x58   | 380x180x58   | 400x180x58   |

## General precautions

Before installing and using your new amplifier, please become familiar with all the information contained in this manual.

Please keep this manual in a safe place for future reference.

- Do not open or attempt to repair this unit yourself. Dangerous high voltages are present which may result in electric shock. Refer any repairs to a qualified service technician.
- To avoid risk of electronic shock or damage to the amplifier, do not permit any of this equipment to become damp or wet from water or drinks. If this does occur, immediately unplug the power wires and send the amplifier to your local dealer or service center as soon as possible.
- If there is smoke or any peculiar odor present during use or if there is damage to any of the component enclosures, immediately unplug the power wire and send the amplifier to your local dealer or service center as soon as possible.

## Installation precautions

Before you drill or cut any holes, investigate your car's layout very carefully. Take special care when you work near the gas tank, fuel lines, hydraulic lines and electrical wiring.

Never operate the amplifier when it is unmounted. Attach all audio system components securely to prevent damage, especially in an accident.

Before making or breaking power connections in your system, disconnect the vehicle battery. Confirm that your head unit or other equipment is turned off while connecting the input jacks and speaker terminals.

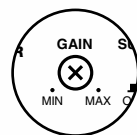
If you need to replace the power fuse, replace it only with a fuse identical to that supplied with the amplifier. Using a fuse of a different type or rating may result in damage to your audio system or your amplifier which is not covered by the manufacturer's warranty.

Mounting the amplifier

1. Find a suitable location in the vehicle in which to mount the amplifier.
2. Make sure there is sufficient air circulation around the intended mounting location.
3. Mark the location for the mounting hole screws by positioning the amplifier where you wish to install it.
4. Drill pilot holes in the mounting surface for the mounting screws. Place the amplifier in position, and attach the amplifier to the mounting surface securely using screws.

## Connecting the amplifier

1. Connect the power ground terminal to the closest point on the chassis of the car. Keep this ground wire to less than 39" (100 cm) in length. Use 8 gauge (or heavier) wire.
  2. Connect the remote terminal to the remote output of the head unit using 16 gauge (or heavier) wire.
  3. Connect an empty fuse holder within 18" (45 cm) of the car battery, and run cable from this fuse to the amplifier location.
  4. Check that the fuse holder is empty. Then connect the fuse holder to the "FUSES" connection on the amplifier.
  5. If multiple amplifiers are being used in your system, either:
    - Run a separate pair of cables from the battery and a chassis ground point to each amplifier. Cable (+) must have its own inline fuse.
- or-
- Connect amplifiers through distribution block. Then run separate cables from the amplifier to this distribution block and to independent chassis ground points.
6. Connect all line inputs and outputs (if used) using high-quality cables. Connect all speakers, following the diagrams in this manual. Be sure to observe proper polarity to avoid audio phase problems.
  7. Recheck all connections before powering up the amplifier.
  8. Set GAIN to minimum position, and set all crossover controls/switches to the desired frequency points.
  9. Power up the head unit and the amplifier. Then set the volume control on the head unit to about 3/4 volume, and adjust the amplifier's GAIN to just below the level of distortion.
  10. Further fine tuning of the various controls may be necessary to obtain best results.



### Don't misuse the GAIN (input level control)!

Do not mistake the GAIN for a volume control!

It is designed ONLY to match the output level of your audio source to the input level of your amplifier.

Do not adjust GAIN to maximum unless your input level requires it.

Ignoring these instructions will result in an input overload to the amplifier, and excessive audio distortion. It can also cause the protection circuit to engage.



**SHOCK HAZARD! Do not open the case of this product. There are dangerous voltages present within the unit. There are no user-serviceable parts within the unit.**

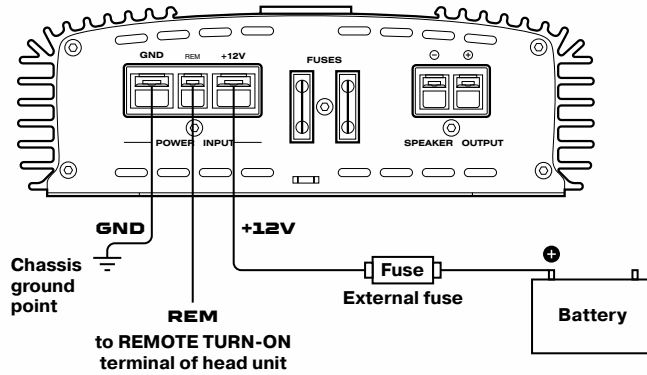
|                                        |             |
|----------------------------------------|-------------|
| Warranty period                        | 12 months   |
| Warranty lifetime                      | 3 years     |
| Warranty service life                  | 5 years     |
| The operating temperature              | +5...+30°C  |
| Transportation and storage temperature | -40...+40°C |

## Power Wiring

[+] Wire

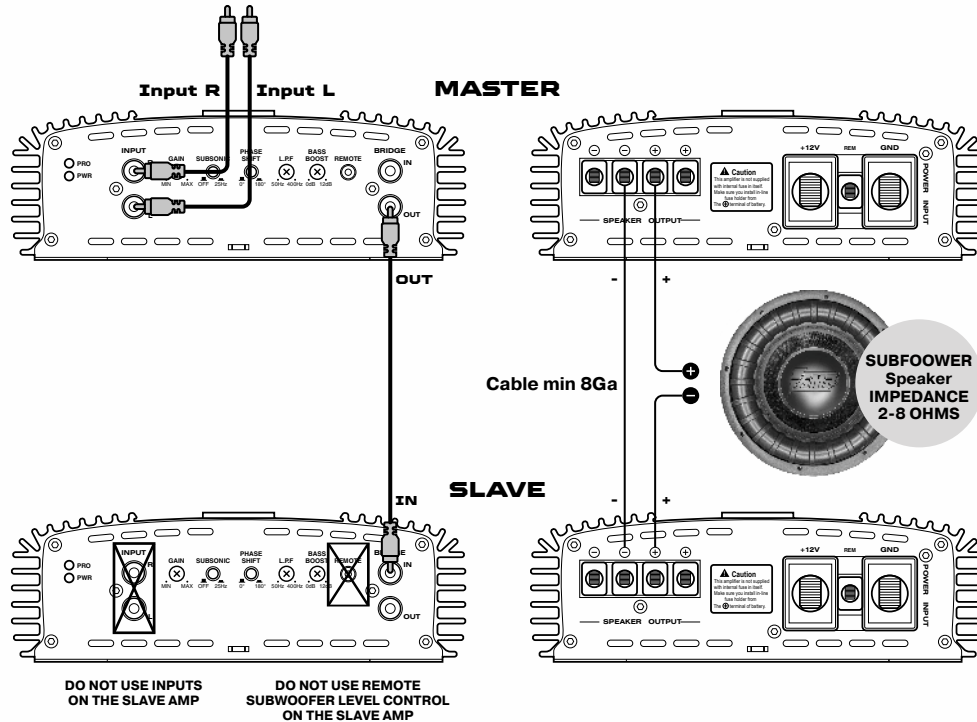
>8Ga >4Ga

|             |        |
|-------------|--------|
| 1.500 ver.2 | 1.1000 |
| 1.600       | 1.1500 |
| 1.800       | 2.190  |
| 2.60        | 4.190  |
| 2.100       |        |
| 2.150       |        |
| 4.60        |        |
| 4.80        |        |
| 4.100       |        |
| 4.120       |        |
| 4.150       |        |



1+1 Bridge Mode 2Ω  
MASS 1.1000 / 1.1500

To Audio Outputs of head unit  
or Subwoofer Outputs of signal processor

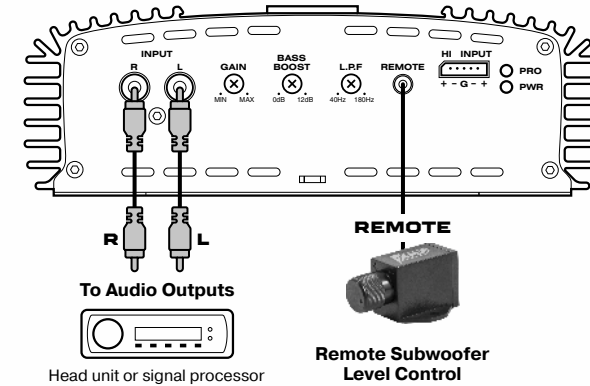


## Low Level Input Wiring

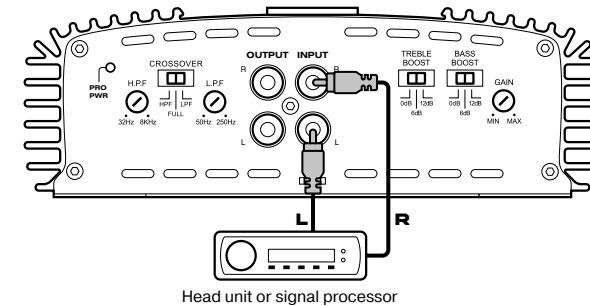
Low-level (RCA) input wiring is preferred for best audio performance. Always use a high-quality RCA cable for best audio performance.

**NOTE:** Do not connect BOTH the high level and low level inputs from your receiver to your amplifier at the same time!

1Ch Monoblock



2 Channel amplifier



4 Channel amplifier

