

# MASSIVE<sup>®</sup>

PRO SERIES AMPLIFIERS

**P 500.1**  
**P 1000.1**  
**P 1500.1**  
**P 3000.1**



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# INTRODUCTION:

## **Congratulations!**

And thank you for purchasing a “Massive Audio” Pro-Series class D amplifier for your car audio system. You now own an amplifier of uncompromising design and engineering incorporating the latest advances in circuitry. This handcrafted amplifier is designed to deliver the demands of serious sound competitors. You will soon discover that Pro-Series amplifiers display a fine balance between high quality, performance and reliability; all proven qualities of “Massive Audio” products.

“Massive Audio” amplifiers are the result of American Craftsmanship using only the highest quality components and quality control standards. In order to provide you with many years of listening pleasure, we recommend you to have your new amplifier installed by an Authorized “Massive Audio Dealer.” This will ensure the proper installation of your product, and will also increase the length of your warranty to **TWO YEARS**.

*(Please see the warranty section of for more details.)*

Please take a moment to thoroughly read this manual to ensure that you get the maximum benefit from this new addition to your car audio system. When installed properly, this unit will provide years of trouble-free performance.

Should your amplifier ever need service or replacement due to theft, please record the following information, which will help protect your investment.

Model #: \_\_\_\_\_

Dealer's Name: \_\_\_\_\_

Date of Purchase: \_\_\_\_\_

Installation Shop and Date: \_\_\_\_\_

# DESIGN FEATURES

- Input sensitivity low level: 120mVrms ~ 5.0 Vrms**
- Frequency response: 8 Hz - 180 Hz**
- Variable Lowpass: 40 - 180 Hz / 18dB**
- Bass Boost 0 - 12 dB @ 45 Hz**
- Short Circuit, Thermal, reverse voltage  
and over voltage protection.**
- All models linkable with single RCA for easy  
upgrade**
- N-Channel Circuit for high-efficiency**
- Heavy duty power supply.**
- Illuminated logo.**
- Heavy duty aluminum heatsink.**
- Proprietary “Bass Kompressor” circuitry  
provides low- frequency enhancement**
- Designed and engineered in U.S.A.**
- Optional remote gain control**

# AMPLIFIER FUNCTIONS

## 1. Speaker connection

- Never connect the speaker cables with the chassis ground. This could destroy your amplifier.
- Check that your speakers are connected correctly which means plus to plus and minus to minus

We recommend speaker cable from 2.5 mm<sup>2</sup> and up. Other connection variations are shown attached.

## 2. BATT+

Battery + (plus) terminal. The + (plus) 12 Volt power cable must be connected with a fuse on the battery + (plus) terminal. We recommend a 100 ampere ANL fuse and a copper cable with a thickness of 25 mm<sup>2</sup> for cable length up to 5 metres.

## 3. REM

Remote terminal. The remote cable must be connected with the radio automatic antenna terminal so that the amplifier will switch on and off automatically with the radio. If there are 2 or more amplifiers connected to this antenna terminal it might be necessary to add an additional relay. Please consult your dealer.

## 4. GND

Chassis ground-terminal. The chassis ground cable must be connected very tight on a nearby massive and electric conductive place.

## 5. Gain

Gain control regulates the sensitivity of the amplifier to match the signal output voltage of your source unit.

The Gain control is not intended for volume adjustment.

Use high quality CD music and increase the volume of your source unit to 75%.

Position the Gain at the minimum and then slowly increase Gain (clockwise).

Stop at the first sign of distortion, then lower the Gain a little ( counter clockwise) to achieve clear undistorted music at the maximum level.

## 6. Remote Bass Level Control ( Optional )

When using the Remote Bass Level Control you have the ability to control the level of the subs from the driver seat.

## 7. RCA audio-input

These RCA inputs are to be connected with your radio preamp RCA outputs. Please use RCA cables made for car audio, otherwise there could be disturbances. Keep these cables as short as possible. To avoid disturbances from your car electronics, install the RCA cables not to close from existing car cables. If your radio has only one preamp output please use a suitable Y-RCA adaptor. If your radio has only speaker outputs you must use a HIGH-LOW-LEVEL adaptor.

## 8.Fuse (P 500.1 only)

To protect the amplifier when current drawn is more than rated.

Never replace a fuse with a higher amp fuse.

Never replace a burnt fuse before checking the system for cause of malfunction.

Never bridge a fuse.

## 9. Bridge in

This RCA jack receives the signal sent from the master amplifier when this amplifier is bridged as slave. DO NOT use Input Jacks when the amplifier is set as slave. All the level and functions will be adjusted along with the master amplifier.

## 10. Bridge out

This RCA output signal is sent to other Pro-Series amplifiers in an bridged configuration.

## 11. Low Pass

To filter out the high frequency and only produce low frequency with 24 dB filter (12dB P 500.1) to insure high quality solid bass reproduction.

## 12. Subsonic Switch ( not available on P 500.1)

When switched on it will filter unwanted low frequency with a 24 dB filter. This feature will increase the power handling of your woofers.

Usually all frequencies below the enclosure tuning have increased impedance which results in increasing the voice coil temperature.

## 13. Subsonic Frequency ( not available on P 500.1)

When the subsonic switch is on, it will adjust the cut off frequency filter from 20 Hz - 50 Hz

## 14.Bass Boost

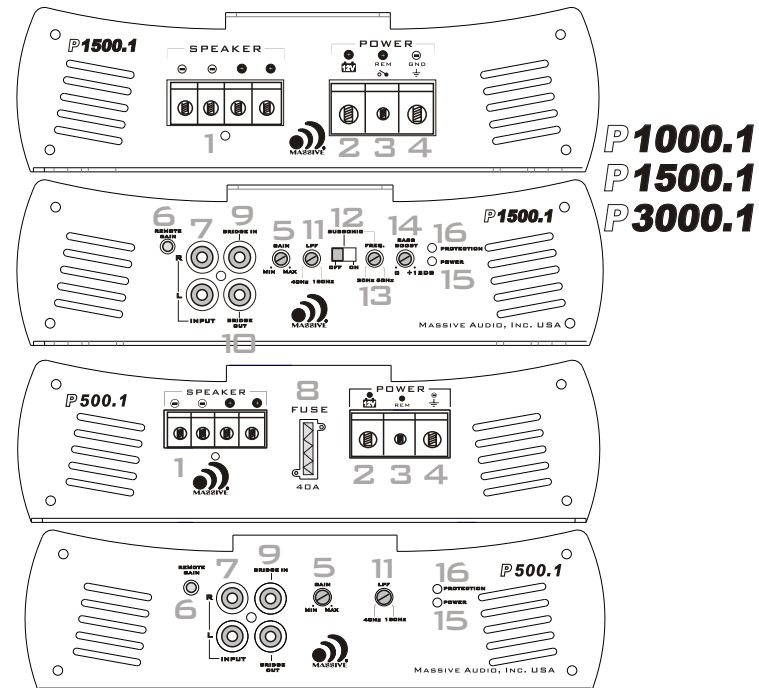
This function will increase the bass boost level from 0 to 12 dB with center frequency at 45 Hz.

## 15. Power-LED

Indicates the amplifier is switched on. It will flash when there is a mal function.

## 16.Protection-LED

Indicated if the amplifier is in protection or other malfunction.



# PRE INSTALLATION

We recommend to have the installation done by an Authorized Massive Audio, Dealer.

Required Power, Ground Connection and proper external fuse as indicated below:

<i>Model</i>	<i>Fuse</i>	<i>Wire</i>
<b>P 500.1</b>	40 AMP	6 Gauge
<b>P 1000.1</b>	60 AMP	4 Gauge
<b>P 1500.1</b>	100 AMP	2 to 4 Gauge
<b>P 3000.1</b>	200 AMP	0 Gauge

We recommend a fuse to be installed within 16 inches of the battery.

The Ground Wire should be connected directly to the chassis of your vehicle with a metal to metal ground point connection.

The amplifier must be securely mounted to a solid, dry and low vibration surface in the trunk or passenger area.

Position the amplifier in an area with sufficient air flow to insure proper heat dissipation.

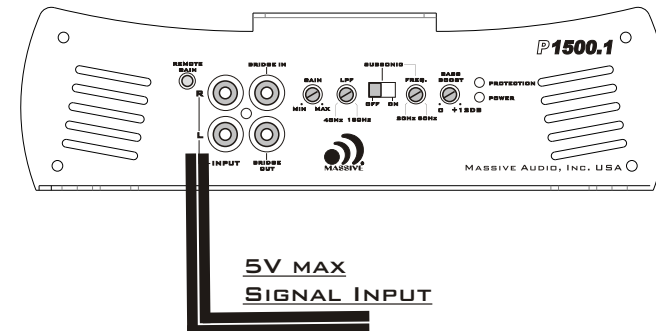
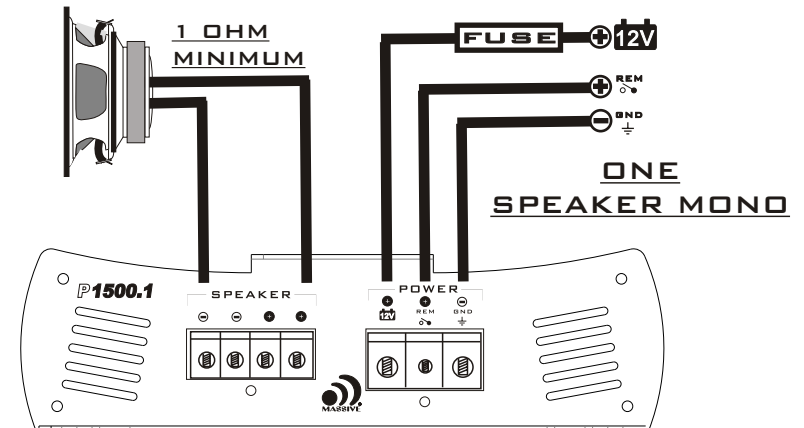
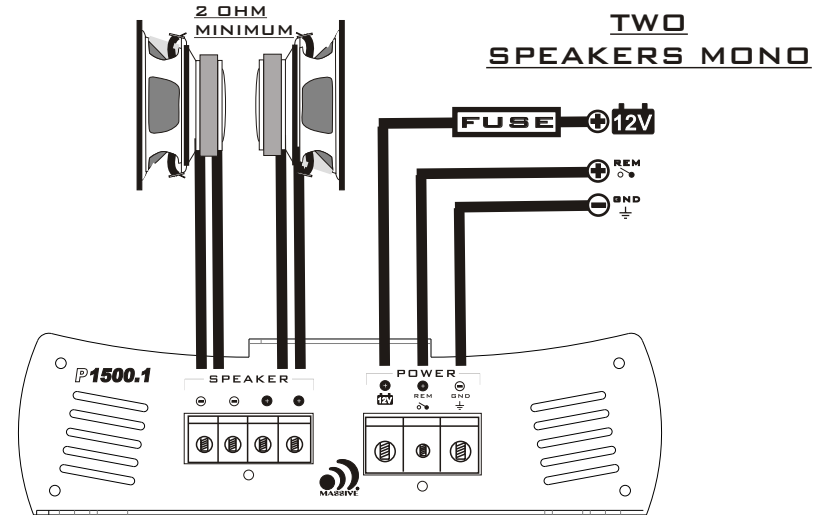
Position the amplifier for an easy access to the input-setting controls.

Install all amplifier cables as far as possible from car electrical cables. i.e. The car ignition cable.

# IMPORTANT:

- \* When bridging two amplifiers, connect cables as shown in the bridge figure. (Page 8)
- \* When bridging two amplifiers you must use the same model amplifier.
- \* Please make sure the negative output terminal of two amplifiers are connected with the same gauge cable as the positive terminal being used.
- \* DO NOT connect any signal to the input RCA jacks when bridged as slave unit.
- \* The LPF, Input Level, and remote functions will be disabled on slave amplifier when bridged.
- \* The Input Level and the LFP frequency of the slave amplifier will be adjusted along with the master amplifier.

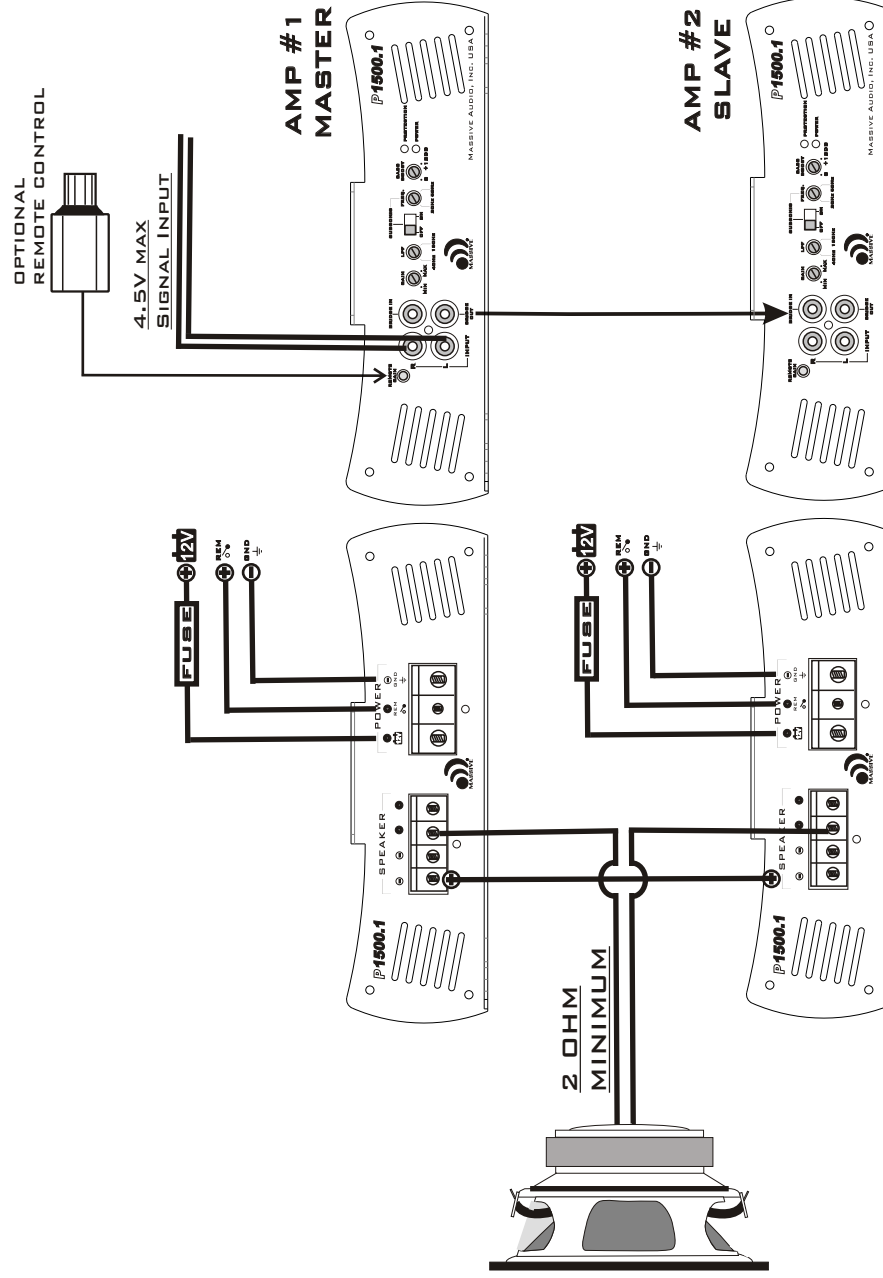
# WIRING CONFIGURATION



# SPECIFICATIONS

MODEL	P 500.1	P1000.1	P 1500.1	P 3000.1
RMS @ 4 OHM (< 1% DISTORTION)	160 W	320 W	600 W	1800 W
RMS @ 2 OHM (< 1% DISTORTION)	280 W	540 W	950 W	2680 W
RMS @ 1 OHM (< 1% DISTORTION)	420 W	880 W	1250 W	N/A
MAXIMUM POWER @ 14.4 VDC	500 W	1000 W	1500 W	3000 W
FREQUENCY RESPONSE @ -3 DB	8HZ - 185HZ	8HZ - 180HZ	8HZ - 180HZ	8HZ - 180HZ
FREQUENCY RESPONSE @ -1 DB	16HZ - 139HZ	16HZ - 135 HZ	16HZ - 135 HZ	16HZ - 135 HZ
S/N RATIO ( A. WTG ) 1 WATT REFF.	>92 DB	> 100 DB	> 100 DB	> 100 DB
BASS BOOST @ 45 HZ 12 DB	N/A	YES	YES	YES
INPUT IMPEDANCE	67 KOHM	67 KOHM	67 KOHM	67 KOHM
INPUT SENSITIVITY	0.2 - 5V	0.2 - 5V	0.2 - 5V	0.2 - 5V
DAMPING 100 HZ @ 4 OHMS	>100	>110	>120	>120
EFFICIENCY	85%	82%	82%	82%
IDLE CURRENT	0.6 A	0.8A	1.2A	2.2A
MAX PEAK CURRENT	60A	100A	120A	240A
MINIMUM IMPEDENCE	1 OHM	1 OHM	1 OHM	2 OHM
REQUIRED EXTERNAL FUSE	40	60	100	200
DIMENSIONS (H X W X L) INCHES	2.6 X 8.7 X 9	2.6 X 8.7 X 13	2.6 X 8.7 X 16.9	2.6 X 8.7 X 34.7
DIMENSIONS (H X W X L) METRIC(MM)	66 X 220 X 229	66 X 220 X 329	66 X 220 X 429	66 X 220 X 882

## TWO AMPLIFIERS LINKED TO ONE CHANEL



# TROUBLES SHOOTING

## MALFUNCTION

## SHOULD CHECK

### **Power LED doesn't light up**

check all fuses on the amplifier  
check main fuse near the battery  
check plus and minus battery cables  
check remote voltage

### **Power LED is on but no sound**

check volume control on the radio  
check GAIN regulator on the amplifier  
check RCA cables and connections  
check speaker cables and connections

### **Bass response is low**

one speaker cable could be disconnected  
the bass control on the radio is set on low  
an active crossover unit is adjusted wrong

### **The amplifier switches On and Off**

bad chassis ground connection to the amplifier  
cable terminals and battery terminals are oxidated  
low voltage from the battery  
remote wire is not connected right

### **One channel has no function**

check RCA connections of this channel  
check speaker connection of this channel  
balance regulator to the radio is not set in the middle  
check speakers for this channel

For additional questions please contact your authorized Massive Audio, dealer.

# WARRANTY

- Massive Audio, Inc. warrants all manufactured amplifier products to be free from defect in material and workmanship for a period not to exceed **TWO YEARS\*** from the date of original purchase when installed by an authorized “Massive Audio” dealer. Units that are not installed by an authorized “Massive Audio” dealer maintain a warranty not to exceed 90 days from the original purchase date by the original purchaser.
- **Products that displays abuse such as power deficiency, over driving the amplifier or clipping the input require purchase of new PCB for replacement.**
- “Massive Audio” obligations under this warranty are limited to repairing or replacing, at its own sole option, any such defective products. This warranty does not apply to equipment that has been damaged by accident, negligence, or misapplication or has been altered or modified in anyway. This warranty applies only to the original purchaser who must have properly registered the product within 10 days of purchase.

*Except as provided herein, Massive Audio, Inc. makes no warranties or representations, express or implied, including any warranty implied by law, whether for merchantability or fitness for a particular purpose and shall be effective only for the period that this express warranty is effective. SEE THE WARRANTY REGISTRATION CARD TO ADDITIONAL INFORMATION.*

\*DUE TO CONSTANT IMPROVEMENT PRICES AND SPECS ARE SUBJECT TO CHANGE WITHOUT PRIOR NOTIFICATION.