# MASSIYE

### **D BLOCK SERIES MONO AMPLIFIERS**

D 1200 D 2400

D 3600 D 8000

**D** 16000

V.012005

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# <u>WARRANTY</u>

- Massive Audio, Inc. warrants all manufactured amplifier
  products to be free from defect in material and workmanship
  for a period not to exceed *ONE YEAR\** 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 30 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.

# INTRODUCTION:

## Congratulations!

And thank you for purchasing a "Massive Audio" D-Block Series 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 D Block 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 the latest advancements in technology 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 **ONE YEAR.** 

(Please see the warranty section 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: 40 220 Hz / 18dB
- Parametric Bass Boost EQ from 30Hz 80Hz
- Short Circuit, Thermal, reverse voltage and over voltage protection.
- All models linkable with single RCA for easy upgrade
- **✓** N-Channel Circuitry 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
- ☑ Extreme power in a small footprint.

# 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.

## SPECIFICATIONS

MODEL	D 1 200	D2400	D3600	D 8000	D 1 6000
RMS @ 4 ПНМ	M 05Z	350 W	650 W	M 056	W 0061
RМЅ @ 2 □нм	450 W	W 059	950 W	W 0051	3000 W
RMS @ 1 DHM	W 009	1 200 W	1800 W	x 000z	4000 W
RMS @ 0.5 ОНМ	<b>۷</b>	٩Z	٩z	4000 W	2×4000 W
INPUT SENITIVITY	0.2~5V	0.2~5V	0.2~5V	0.2~5V	0.2~5V
LPF	40~220Hz	40~220Hz	40~220Hz	40~220Hz	40~220Hz
FREQUENCY RESPONSE	10~220Hz	10~220Hz	10~220Hz	10~220Hz	10~220Hz
SUBSONIC FILTER	zH05~01	10~50Hz	10~50Hz	10~50Hz	10~50Hz
BASSBOOST FREQUENCY	<b>۷</b>	30~80Hz	30~80Hz	30~80Hz	30~80Hz
BASSBOOST LEVEL	٩Z	0~12DB	0~12DB	0~1208	0~12DB
ТНР АТ 40НМ LOAD 30% RATED POWER	<0.15%	<0.15%	< <b>0.2</b> %	<0.15%	<0.15%
S/N RATIO	>70bs	>7008	>7008	>7008	>7008
EFFICIENCY	%E8<	%EB<	> <b>B</b> 5%	%S8<	>B5%
МІМІМИМ СОАБ	MHO 1	л пнм	1 ОНМ	MHO 5.0	1 ОНМ
BRIDGING	YES	YES	YES	YES	INTERNAL
PROTECTION SYSTEM	YES	YES	YES	YES	YES
OVERHEAT TEMPERATURE PROTECTION	80°C/176F	80°C/176F	80°C/176F	80°C/176F	80°C/176F
СОМРОМЕНТЅ&РСВ	SMT & DOUBLE SIDE BOARD				
DIMENSIONS (H x W x L) INCHES	Z.1×6.5×7.7	Z.1x6.5x11.2	2.1x6.5x14.8	2.1x6.5x19.9	4.2×6.5×19.9
DIMENSIONS (H × W × L) METRIC(MM)	53×165×196	53×165×284	53×165×376	53×165×506	106×165×506

## 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

#### 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 150 AMP ANL fuse and a copper cable with a thickness of  $25 \text{ mm}^2$  for cable length up to 5 meters.

#### **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 tightly on a nearby solid 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)

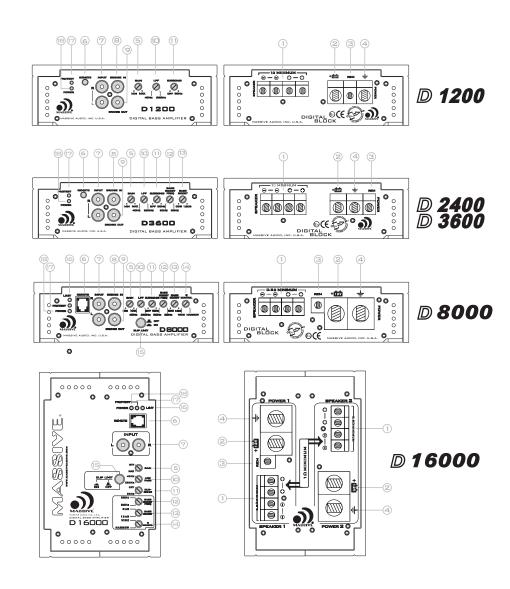
When using the Remote Bass Level Control you have the ability to control the level of the subs from the driver seat.

#### 7. RCA audio-input

These RCA audio-inputs connect with your source unit RCA outputs. Please use car audio RCA cables, otherwise it may be disturbed. Keep these cables as short as possible. To avoid disturbances from your car electronics, please don't close the existing car cables when you install the RCA cables. If your source unit has only one set output, please use a suitable Y-RCA adaptor. If your source unit has only speaker outputs, you should use a HIGH-LOW level adaptor. All models linkable with single RCA for easy bridging.

## 8. Bridge In

This RCA output jack is used to send the signal to another D Block "same model" amplifier in a bridged configuration.

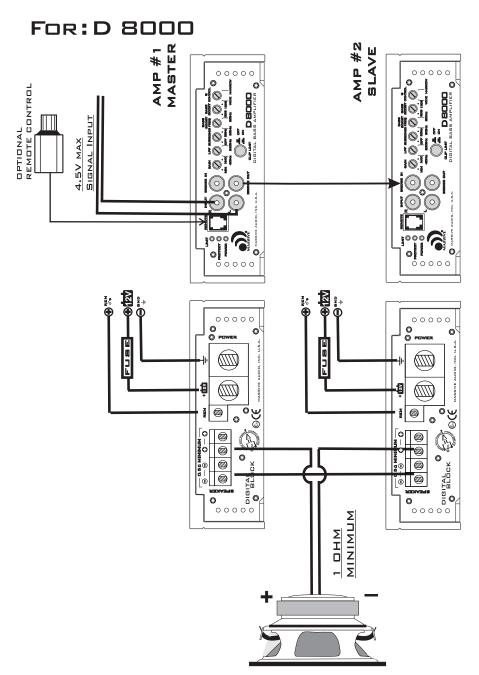


#### 9. BRIDGE OUT

This RCA output sends out bridge signal to the slave amplifier (matching model) in bridging configuration. All the functions will be adjusted by the master amplifier.

#### 10. LPF(Low Pass Filter)

Filter out high frequency from 40Hz to 220 Hz that the woofer can't play. Adjust this knob to match the woofer's frequency response.



#### TWO AMPLIFIERS LINKED TO ONE CHANNEL

## For: D 1200 / D 2400/D 3600 AMP #1 MASTER 7 \* SLAVE AMP 00000 00000 0 ©. 50 500 10:<u>1</u> |°°| 6 6 0 00000 00000 国 **₹** 00000 00000 0 0 0 . | | | | | | | | | | | REAKER 0 0 0 00000 MINIM

#### 11. SUBSONIC

It is the opposite of the LPF. It can filter out unwanted low frequency from 10Hz (OFF) to 50Hz. This function will increase the power handling of your woofers.

#### 12. BASSBOOST FREQ (Not Available On D1200)

This knob controls the boosted center frequency. The frequency can be adjusted from 30Hz to 80Hz according the specification of your car audio system. (Eg. When you adjust this knob to 50Hz, amplifier will boost the frequency around 50Hz.) This function should be adjusted combining with bassboost level tuning.

#### 13. BASSBOOST (Not Available On D1200)

This knob adjust the boost level of the bassboost center frequency. It can be adjusted from 30 to 80 Hertz. Combining with bass-boost frequency, you can accurately match the amplifier performance to woofer response.

#### 14. Q-CONTROL (Available on D8000 & D16000 only)

This knob adjusts the curve of the bassboost. Turning this knob clockwise will make the boosted frequency narrow and sharp. Turning this knob counter clockwise will extend the boosted frequency range. By combining the bassboost frequency and the bassboost level you can achieve a perfect bass response that matches your system.

#### 15. CLIP LIMIT SWITCH (Available on D8000 & D16000 only)

This switch controls the amount of clip limit (on/off). When it is switched on the amplifier will control the output level at the clipping point and reduce the distortion. This will keep your amplifier at a low distortion level at the clipped signal.

#### 16. LIMIT INDICATOR

This LED will light up when the output is clipped or the amplifier over heats. When the limit indicator lights up, the amplifier will hold or reduce the output power to protect the subwoofer and amplifier. Reduce the gain or cool down the amplifier when this indicator lights up continuously.

#### 17. PROTECTION - LED

Indicated if the amplifier is in protection or other malfunction.

#### 18. POWER-LED

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

Model	Fuse	Wire
D1200	40 AMP	6 Gauge
D2400	80 AMP	4 Gauge
D3600	150 AMP	2 to 4 Gauge
D8000	300 AMP	0 to 2 Gauge
D16000	2 x 300AMP	2 x (0 to 2 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.

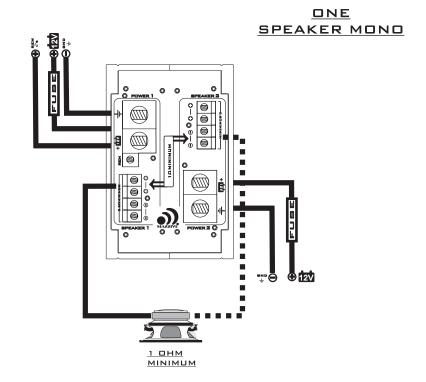
Position the amplifier in an area with sufficient air flow to insure proper heat dissipation.

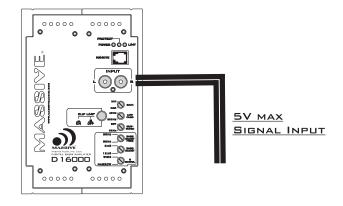
Position the amplifier for an easy access to the input-setting controls.

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

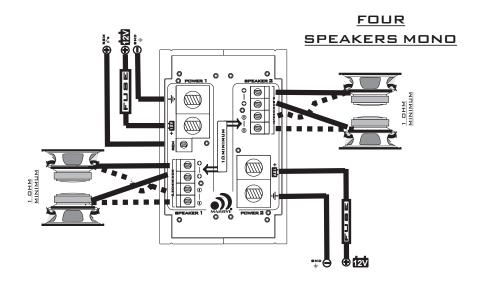
# IMPORTANT:

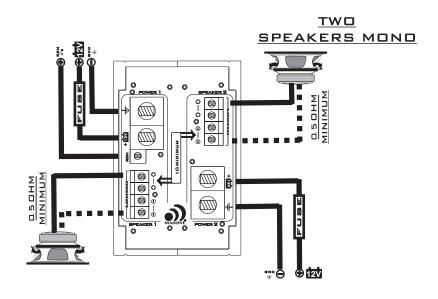
- $\mbox{\ensuremath{\,^\star}}$  When bridging two amplifiers, connect cables as shown in the bridge figure. (Page13-14)
- \* When bridging two amplifiers you must use the same model amplifier.
- \* Please make sure the negative output terminal of two amplifiers are connected with the same gauge cable as the positive terminal being used.
- \* DO NOT connect any signal to the input RCA jacks when bridged as slave unit.
- ${\bf *}$  The LPF, Input Level, and remote functions will we 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.





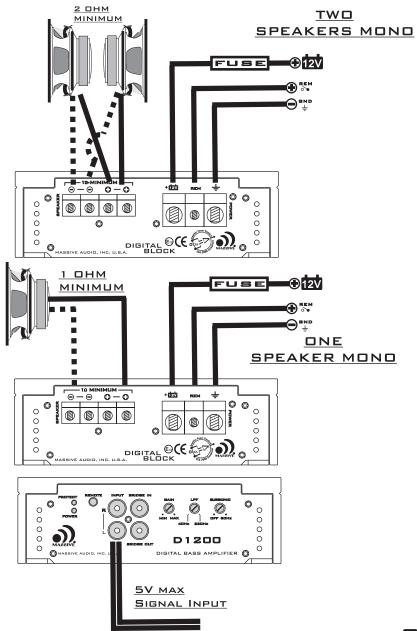
## For: D 16000



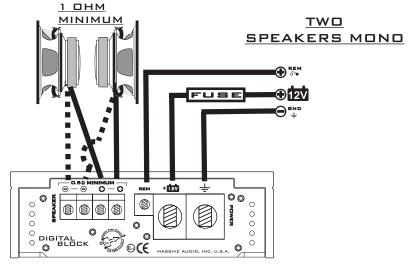


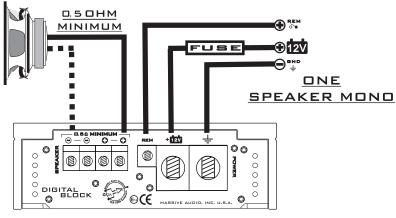
# WIRING CONFIGURATION

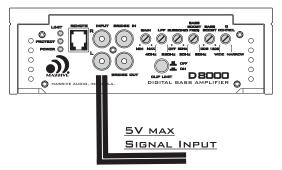
## For: D 1200



## For: D 8000







## For: D 2400/D 3600

