

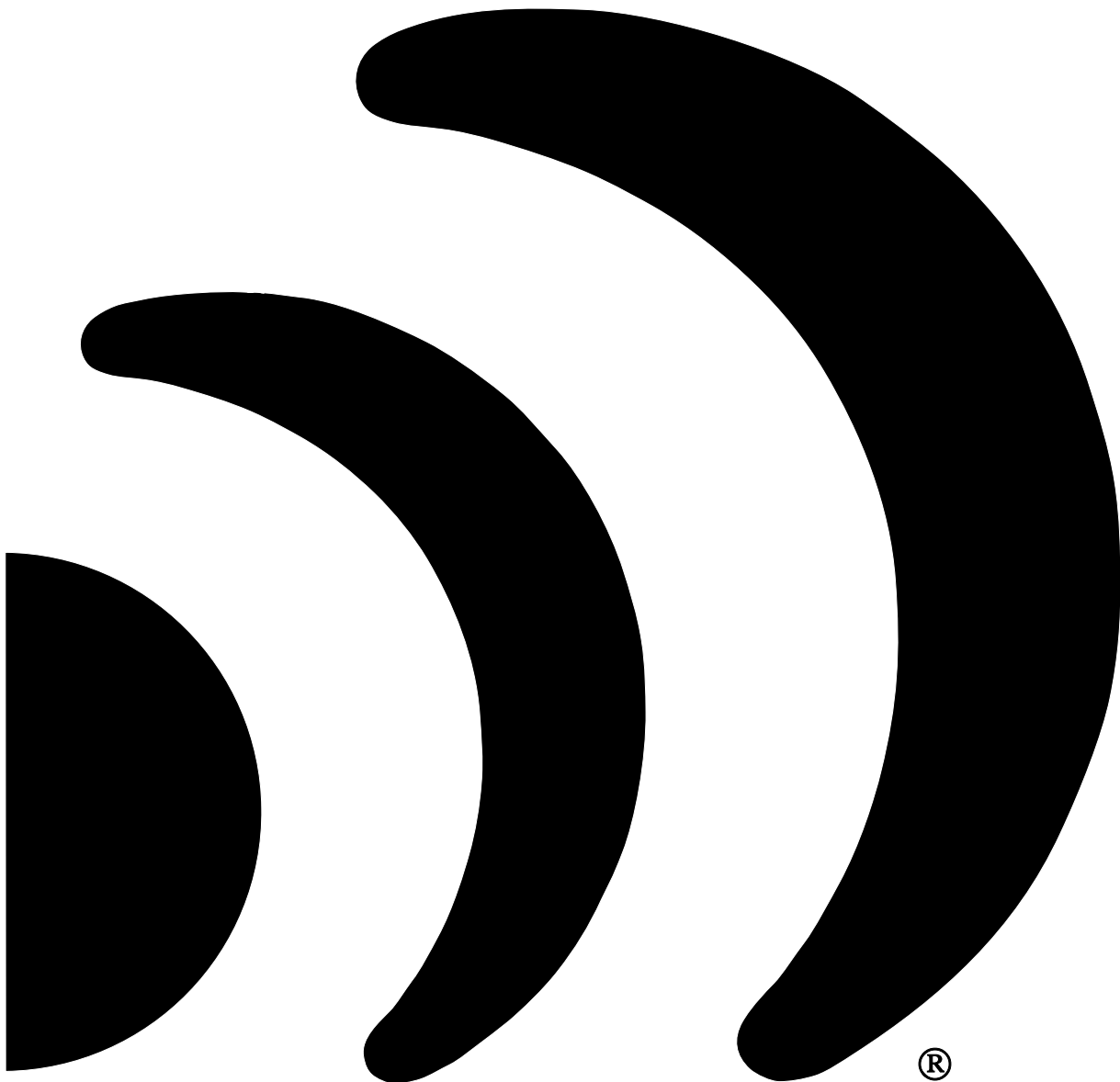
MASSIVE[®]

DRAGO SUBWOOFER & FULL RANGE AMPLIFIER

D6

D10

D16



INTRODUCTION

Congratulations!

And thank you for purchasing a Massive Audio® Drago amplifier for your car audio system. You now own an amplifier of uncompromising design and engineering incorporating the latest advances in micro topology. This handcrafted amplifier is designed to deliver the demands of serious sound competitors. You will soon discover that "Drago" 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.

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: _____

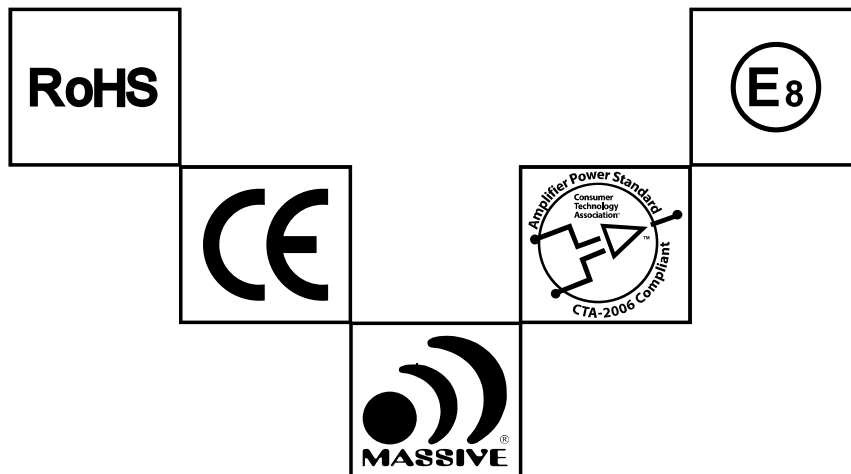
Date of Purchase: _____

Installation Shop and Date: _____

DESIGN FEATURES

- ✓ EXTREME POWER IN A SMALL FOOTPRINT
- ✓ 1 OHM STABLE DESIGN
- ✓ MIL SPEC DOUBLE SIDED & 2 LAYERS PCB DESIGN WITH SMD PARTS
- ✓ BUILT-IN NOISE REDUCTION CIRCUITRY
- ✓ FULL MOSFET WITH HIGH GRADE SWITCHING DEVICES
- ✓ 0~10 DB VARIABLE BASS BOOST
- ✓ NEXT GENERATION ADVANCED 5 WAY PROTECTION CIRCUITRY
- ✓ BUILT-IN STRONG FANS FOR EXCELLENT COOLING
- ✓ BANDPASS ADJUSTMENT
- ✓ FULL RANGE FREQ RESPONSE 10HZ-20KHZ

DRAGO
DYCO



AMPLIFIER FUNCTIONS

1. +12 VOLT POWER

CONNECT THIS TERMINAL THROUGH A FUSE OR CIRCUIT BREAKER TO THE POSITIVE TERMINAL OF THE VEHICLE BATTERY OR THE POSITIVE TERMINAL OF AN ISOLATED AUDIO SYSTEM BATTERY.

2. GND

CONNECT THIS CABLE DIRECTLY TO THE FRAME OF THE VEHICLE. MAKE SURE THE METAL FRAME HAS BEEN STRIPPED OF ALL PAINT DOWN TO THE BARE METAL. USE THE SHORTEST DISTANCE POSSIBLE. IT IS ALWAYS A GOOD IDEA TO REPLACE THE FACTORY GROUND AT THIS TIME WITH A LARGER CABLE EQUAL TO THE NEW DIRECTLY TO THE VEHICLE BATTERY GROUND TERMINAL OR ANY OTHER FACTORY GROUND POINTS.

3. RCA INPUT

THESE RCA INPUT JACKS CONNECT WITH YOUR SOURCE UNIT RCA LOW LEVEL OUTPUTS OR VIA OPTIONAL HI-LO ADAPTOR. THE USE OF HIGH QUALITY TWISTED PAIR CAR AUDIO CABLES IS RECOMMENDED TO PREVENT POSSIBLE DISTURBANCE OF THE AUDIO SIGNAL.

4. REMOTE(MONO BLOCKS)

CONNECT THE REMOTE CONTROLLER TO CONTROL THE SUBWOOFER AMPLIFIER VOLUME FROM THE DRIVER SEAT LOCATION, FOR EASE OF ADJUSTMENT DURING PLAYING.

5. LOW PASS FILTER CONTROL

THIS CONTROL IS USED TO SELECT THE DESIRED LOW PASS X-OVER FREQUENCY. THE FREQUENCY CAN BE ADJUSTED FROM 90HZ TO 20KHZ FOR ALL NON FULL RANGE AMPLIFIERS.

6. HPF FILTER CONTROL

THIS CONTROL CAN FILTER OUT UNWANTED LOW FREQUENCIES FROM 10HZ - 2KHZ. THIS FUNCTION WILL INCREASE THE POWER HANDLING OF YOUR WOOFERS.

7. BASS BOOST LEVEL KNOB

THIS CONTROL ADJUSTS THE BASS BOOST LEVEL OF THE BASSBOOST CENTER FREQUENCY. IT CAN BE ADJUSTED FROM 0 TO 10 DB. COMBINING THIS WITH THE BASSBOOST FREQUENCY YOU CAN ACCURATELY MATCH THE AMPLIFIERS PERFORMANCE TO THE WOOFER FREQUENCIES.

8. BASS BOOST FREQ KNOB

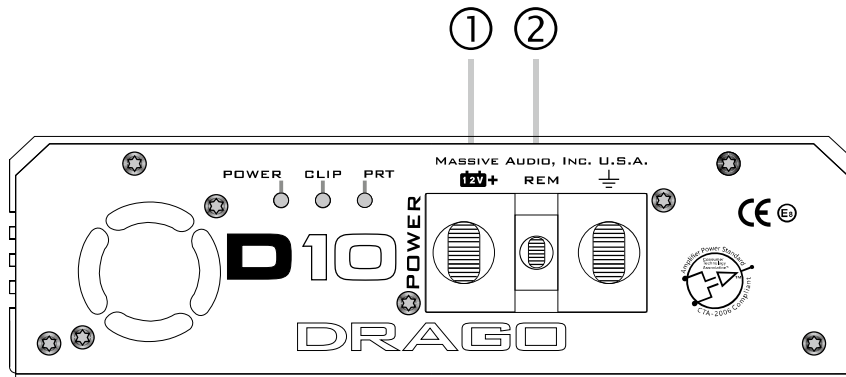
THIS CONTROLS THE BOOSTED CENTER FREQUENCY. THE FREQUENCY CAN BE ADJUSTED FROM 30HZ TO 70HZ ACCORDING TO THE CAR AUDIO SYSTEMS PERFORMANCE. (WHEN YOU ADJUST THIS KNOB TO 50HZ THE AMPLIFIER WILL BOOST THAT FREQUENCY) THIS FUNCTION SHOULD BE ADJUSTED IN COMBINATION WITH THE BASSBOOST CONTROL.

9. SPEAKERS

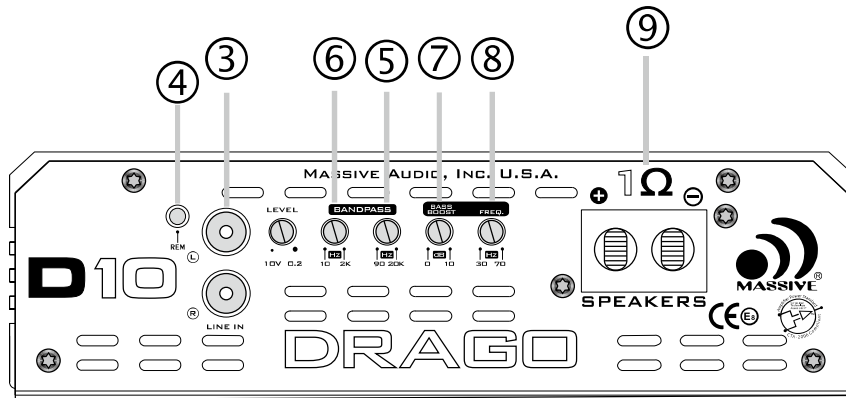
CONNECT SPEAKERS/SUBWOOFERS TO THESE TERMINALS. BE SURE TO CHECK WIRING FOR PROPER POLARITY. NEVER CONNECT THE SPEAKER CABLES TO CHASSIS GROUND.

PANEL LAYOUT

FIG 1. MONO AMPLIFIER PANEL LAYOUT



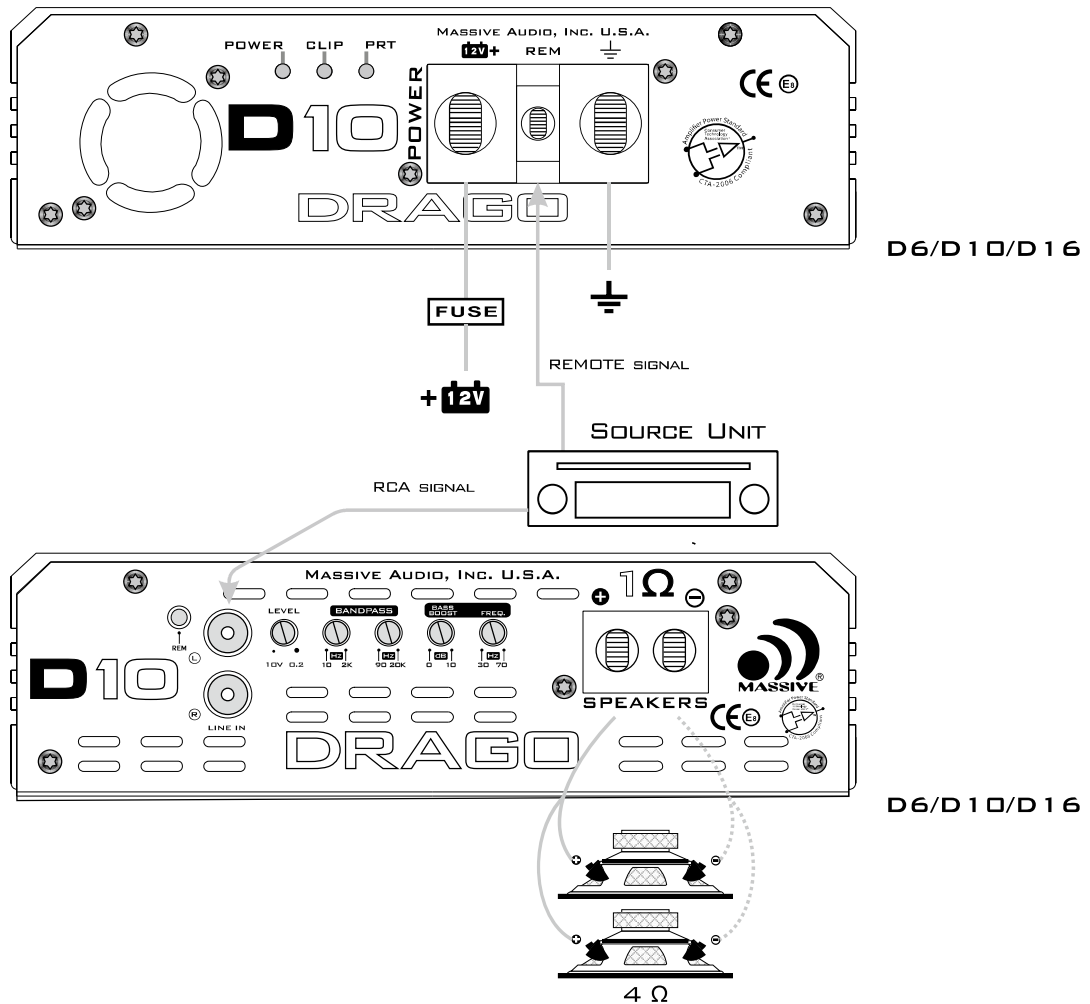
D6/D10/D16



D6/D10/D16

WIRING DIAGRAM

FIG 5. MONO AMPLIFIER WIRING
(MULTI-WOOFER LOAD)



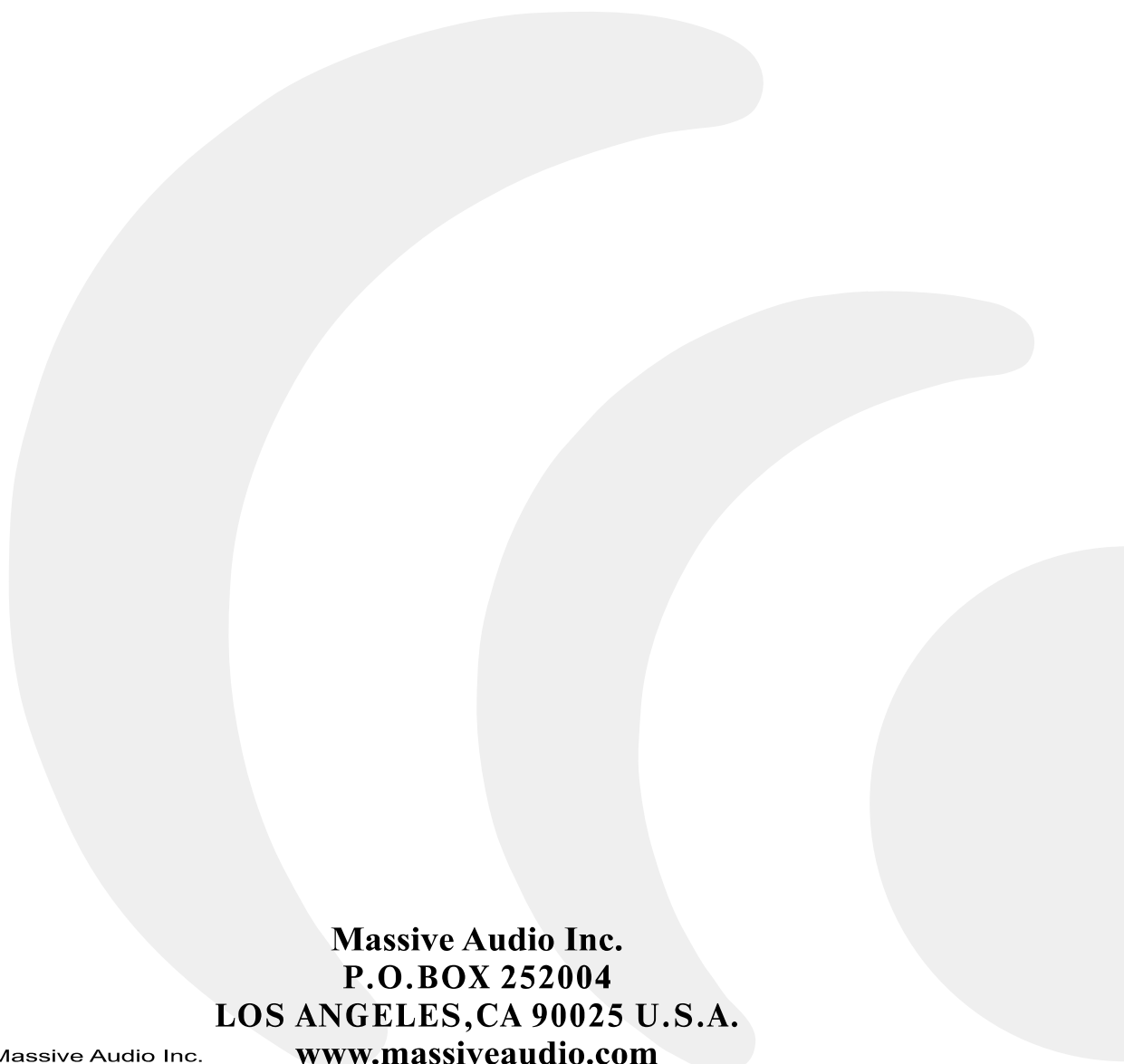
* EQUIVALENT PARALLEL WOOFER LOADS CANNOT BE LESS THAN THE MINIMUM STABLE LOAD RATED IN THIS MANUAL. THE TWO NEGATIVE AND TWO POSITIVE SPEAKER TERMINALS ARE WIRED INTERNALLY INSIDE EACH AMPLIFIER. ONLY ONE NEGATIVE AND ONE POSITIVE ARE NEEDED WHEN WIRING TO THE AMPLIFIER. THESE ARE MONO-BLOCK AMPLIFIERS AND NOT MULTI-CHANNEL AMPLIFIERS. THE MINIMUM LOAD FOR ALL "DRAGO" (MONOBLOCK) AMPLIFIERS ARE ONE OHM.

TROUBLE SHOOTING

Symptom	Possible Remedy
Amplifier will not power up	Check to make sure you have a good ground connection. Check that there is battery power on the (+)terminal . Check all fuses, replace if necessary . Make sure that the Protection LED is not illuminated.
Protection LED Comes on	Check for short circuits on speaker leads. Check that the speaker load is not beyond the minimum load. Remove speaker lead, and reset the amplifier. If the protection LED still comes on, then the amplifier is faulty and needs servicing .
No output	Check that the RCA audio cables are plugged into the proper inputs. Check all speakers wiring. Check the headunit output and the amplifier level setting.
Low output	Reset the level Control. Check the Crossover Control settings.
High hiss in The speakers	Check the RCA cable is not shorted to power ground at amplifier side. Check the amplifier grounding.
Distorted sound	Check that the Input level control is set to match the signal level of the head unit. Always try to set the Input level as low as possible. Check that all crossover frequencies are properly set. Check for short circuits on the speaker leads
Amplifier gets Very hot	Check that the minimum load impedance for the amplifier model is correct. Check that there is good air circulation around the amplifier. In some applications, It may be necessary to add an external cooling fan. Do not mount amplifier upside down.

SPECIFICATIONS

MODEL	D6	D10	D16
	<i>RMS POWER AT 14.4V</i>		
10HM LOAD	3000Wx1	5000Wx1	8000Wx1
20HM LOAD	1600Wx1	2500Wx1	4000Wx1
40HM LOAD	900Wx1	1300Wx1	2000Wx1
40HM BRIDGED	N/A		
<i>FEATURES</i>			
INPUT LEVEL	300MV		
FREQUENCY RESPONSE	10Hz~20KHz		
HPF	90Hz~2KHz		
LPF	10Hz~20KHz		
THD AT 40HM LOAD 30% RATED POWER	< 0.3%		
S/N RATIO	> 90dB		
BASSBOOST LEVEL	0~10dB		
BASSBOOST FREQ.	30Hz~70Hz		
BEST EFFICIECY @ 40HM	> 80%		
MINIMUM LOAD	1 OHM		
OPTIONAL REMOTE	YES		
AUTO TURN ON	NC		
LOW VOLTAGE PROTECTION	YES, PROTECT < 8V		
SHORTCIRCUIT TEST @ MAX POWER	NC		
RECOMMENDED EXTERNAL FUSE	250A	450A	650A
OVERHEAT PROTECT TEMPERATURE	PROTECT AT 75C / 167F		
COMPONENTS & PCB	SMD PARTS / 2 LAYER MILL SPEC PCB`S		
<i>DIMENSIONS (INCHES)</i>			
HEIGHT	2.2"		
WIDTH	8.0"		
LENGTH	7.9"	9.1"	12.1"



Massive Audio Inc.
P.O. BOX 252004
LOS ANGELES, CA 90025 U.S.A.
www.massiveaudio.com