

OWNER'S MANUAL



HIGH PERFORMANCE AMPLIFIER

REBEL-500.4/REBEL-900.4
REBEL-1400.4/REBEL-2400.4
REBEL-600.1/REBEL-1000.1
REBEL-2000.1/REBEL-3000.1
REBEL-5000.1/REBEL-8000.1



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INTRODUCTION

Welcome to the REBEL Series — precision-engineered amplifiers crafted for audiophiles and performance enthusiasts who demand uncompromising quality. Designed with advanced circuitry, robust power output, and refined control, every REBEL amplifier delivers clean, consistent performance even in the most demanding audio systems.

This manual includes technical specifications, wiring diagrams, and setup guidance to ensure optimal installation and tuning. We highly recommend reading it in full to unlock the full potential of your REBEL amplifier.

The REBEL Series represents the perfect blend of innovation, reliability, and sonic excellence.
Elevate your sound.

Thank you for choosing an American Bass VFL AUDIO REBEL amplifier for your car audio system. These high-power amplifiers are engineered for years of reliable, high-performance operation and musical enjoyment.

Note: VFL AUDIO REBEL amplifiers are intended for 12V vehicles with a negative ground electrical system. Very loud output can cause hearing damage. Connecting or operating these amplifiers with incompatible electrical systems may cause damage.

If you're installing the amplifier yourself, please carefully read and follow all instructions in this manual.

FEATURES

- Designed for motorcycles, vehicles, and compact installations
- Digital Class D monoblock amplifier
- Compact chassis design for tight spaces
- 1Ω stable for monoblock models
- 2Ω stereo stability on 4-channel models
- Variable low-pass filter
- Variable subsonic filter
- Variable bass boost
- LCD remote control with voltage and clipping LED indicators
- 4-way protection circuitry (thermal, voltage, speaker short, and DC)
- 4-layer PCB design for enhanced durability and performance

SPECIFICATIONS

	REBEL-500.4	REBEL-900.4	REBEL-1400.4	REBEL-2400.4
Rated power output				
-RMS power @ 4 ohm	80Watts x 4ch	150Watts x 4ch	220Watts x 4ch	425Watts x 4ch
-RMS power @ 2 ohm	130Watts x 4ch	220Watts x 4ch	355Watts x 4ch	640Watts x 4ch
Linkable				
-Bridge power @ 4ohm	460Watts x 2ch	440Watts x 2ch	700Watts x 2ch	1290Watts x 2ch
Working impedance	2ohm stereo	2ohm stereo	2ohm stereo	2ohm stereo
Input Sensitivity	0.4 - 6V	0.4 - 8V	0.4 - 8V	0.4 - 8V
Variable High/LOW Pass filter	40Hz - 400Hz 400Hz - 400Hz	20Hz - 200Hz 700Hz - 7KHz	20Hz - 200Hz 700Hz - 7KHz	20Hz - 200Hz 700Hz - 7KHz
Frequency Response	10Hz - 30KHz	10Hz - 30KHz	10Hz - 30KHz	10Hz - 30KHz
Signal to Noise Ratio	>93dB	<93dB	<93dB	<93dB
Efficiency @ 4ohm	Voer 90%	Voer 90%	Voer 90%	Voer 90%
THD @ 4ohm	<0.1%	<0.1%	<0.1%	<0.1%
Damping factor	150	150	150	150
Fuse Rating for Linkable	60A	80A	120A	200A
weight in lbs	2.98	2.93	4.11	4.63
Dimensions(L inches)	6.3 inches	5.43 inches	7.05 inches	8.23 inches
Dimensions(W inches)	5.91 inches	5.91 inches	5.91 inches	5.91 inches
Dimensions(H inches)	2.24 inches	2.24 inches	2.24 inches	2.24 inches

SPECIFICATIONS

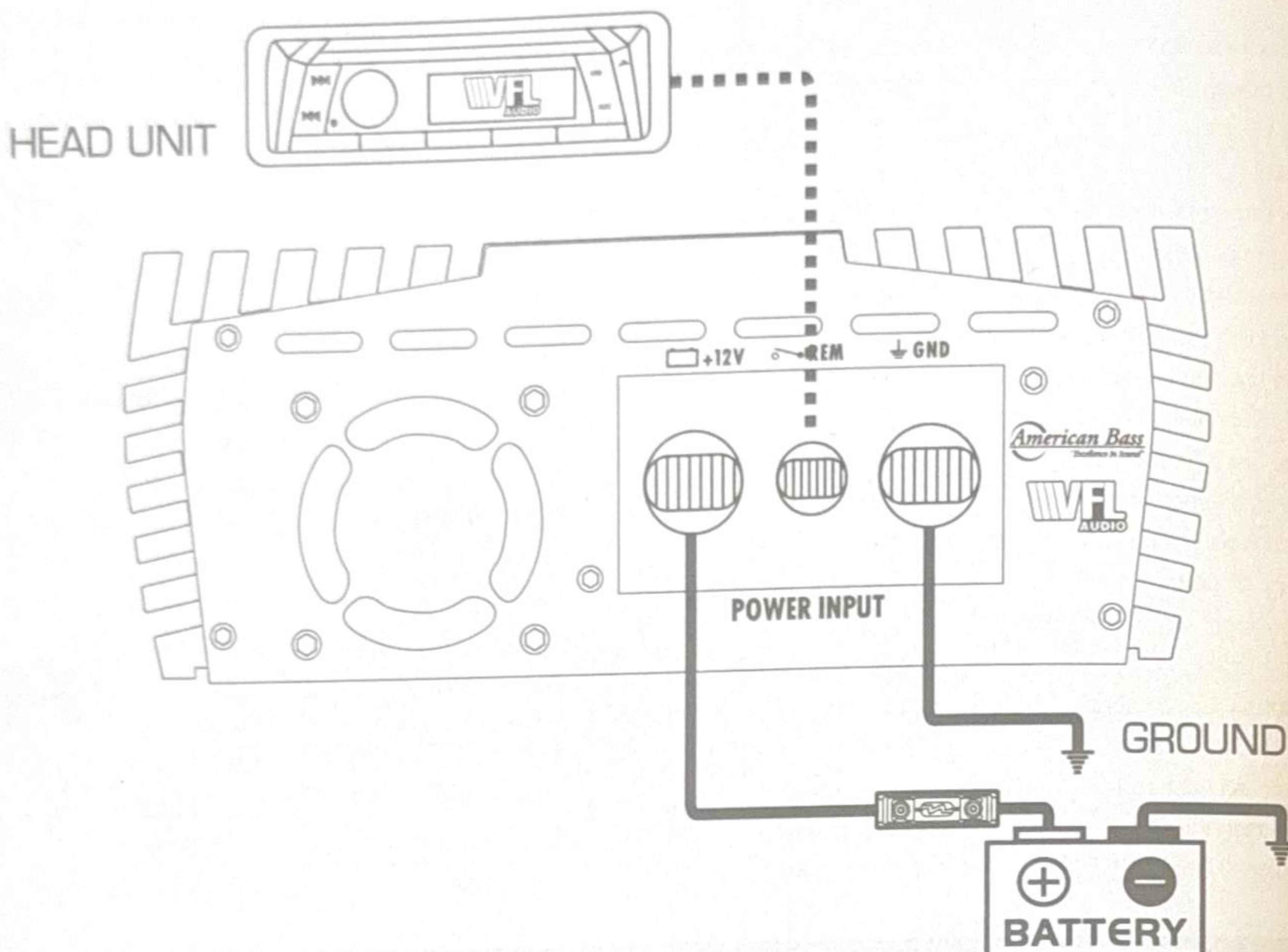
Rated power output	REBEL-600.1	REBEL-1000.1	REBEL-2000.1
-RMS power @ 1 ohm	600Watts x 1ch	1100Watts x 1ch	2200Watts x 1ch
-RMS power @ 2 ohm	450Watts x 1ch	730Watts x 1ch	1300Watts x 1ch
Linkable			
-RMS power @ 4 ohm	280Watts x 1ch	400Watts x 1ch	760Watts x 1ch
Working impedance	1ohm stereo	1ohm stereo	1ohm stereo
Input Sensitivity	0.2 - 6V	0.4 - 7V	0.4 - 6V
Variable High Pass filter	no	10Hz - 1KHz	10Hz - 1KHz
Variable Lou Pass filter	40Hz - 3KHz	60Hz - 20KHz	60Hz - 20KHz
Variable Subsonic filter	10Hz-50Hz	no	no
Variable Bass Boost	0dB - 12dB	0dB - 12dB	0dB - 12dB
Frequency Response	10Hz - 3KHz	10Hz - 20KHz	10Hz - 20KHz
Signal to Noise Ratio	>90dB	<90dB	<90dB
Efficiency @ 4ohm	Voer 90%	Voer 90%	Voer 90%
THD @ 4ohm	<0.35%	<0.35%	<0.35%
Damping factor	180	180	180
Fuse Rating for Linkable	70A	100A	200A
weight in lbs	3.2	3.07	3.95
Dimensions(L inches)	6.69 inches	5.13 inches	6.54 inches
Dimensions(W inches)	5.59 inches	5.59 inches	5.59 inches
Dimensions(H inches)	2.24 inches	2.24 inches	2.24 inches

SPECIFICATIONS

Rated power output	REBEL-3000.1	REBEL-5000.1	REBEL-8000.1
-RMS power @ 1 ohm	3000Watts x 1ch	5000Watts x 1ch	8000Watts x 1ch
-RMS power @ 2 ohm	1905Watts x 1ch	3400Watts x 1ch	4300Watts x 1ch
Linkable			
-RMS power @ 4 ohm	980Watts x 1ch	1600Watts x 1ch	2090Watts x 1ch
Working impedance	1ohm stereo	1ohm stereo	1ohm stereo
Input Sensitivity	0.4 - 4V	0.4 - 4V	0.4 - 4V
Variable High Pass filter	10Hz - 1KHz	10Hz - 1KHz	10Hz - 1KHz
Variable Lou Pass filter	60Hz - 20KHz	60Hz - 20KHz	60Hz - 20KHz
Variable Subsonic filter	no	no	no
Variable Bass Boost	0dB - 12dB	0dB - 12dB	0dB - 12dB
Frequency Response	10Hz - 205Hz	10Hz - 20KHz	10Hz - 20KHz
Signal to Noise Ratio	<90dB	<92dB	<91dB
Efficiency @ 4ohm	Voer 90%	Voer 90%	Voer 90%
THD @ 4ohm	<0.35%	<0.4%	<0.5%
Damping factor	180	180	200
Fuse Rating for Linkable	300A	450A	750A
weight in lbs	5.28	6.76	9.63
Dimensions(L inches)	8.58 inches	9.33 inches	12.91 inches
Dimensions(W inches)	5.59 inches	8.66 inches	8.66 inches
Dimensions(H inches)	2.24 inches	2.24 inches	2.24 inches

All features are subject to change in the continuing effort to improve the products without notice.

POWER CONNECTION



! CAUTION !!

VFL AUDIO REBEL amplifiers are not equipped with internal fuse in itself.
Make sure you install in-line fuse holder from the Positive (+) terminal of battery.

+12V Power

Connect the +12V terminal of the amplifier to the ⊕ terminal of the battery using the same diameter as the ground cable.

Making sure you install in-line fuse holder, approximately 300 or 400 mm from the ⊕ terminal of battery, making sure that there is no fuse in the battery holder

GROUND

Disconnect the battery and connect the GND (ground) terminal to the car's chassis

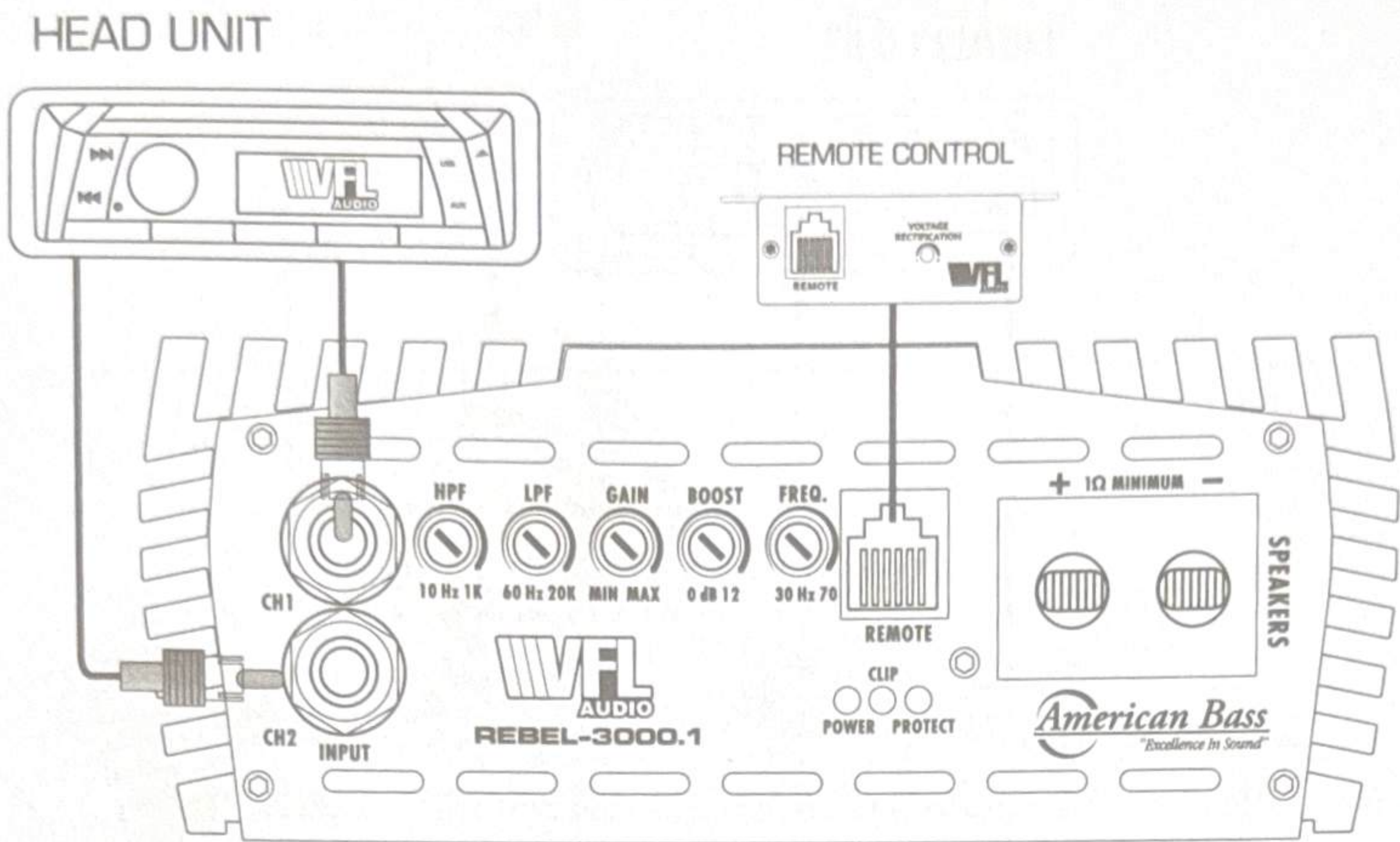
Keep this cable as short as possible (not longer than 20 inches or less).

Making sure that the connection with the chassis is rust free and clear of paint or grime.

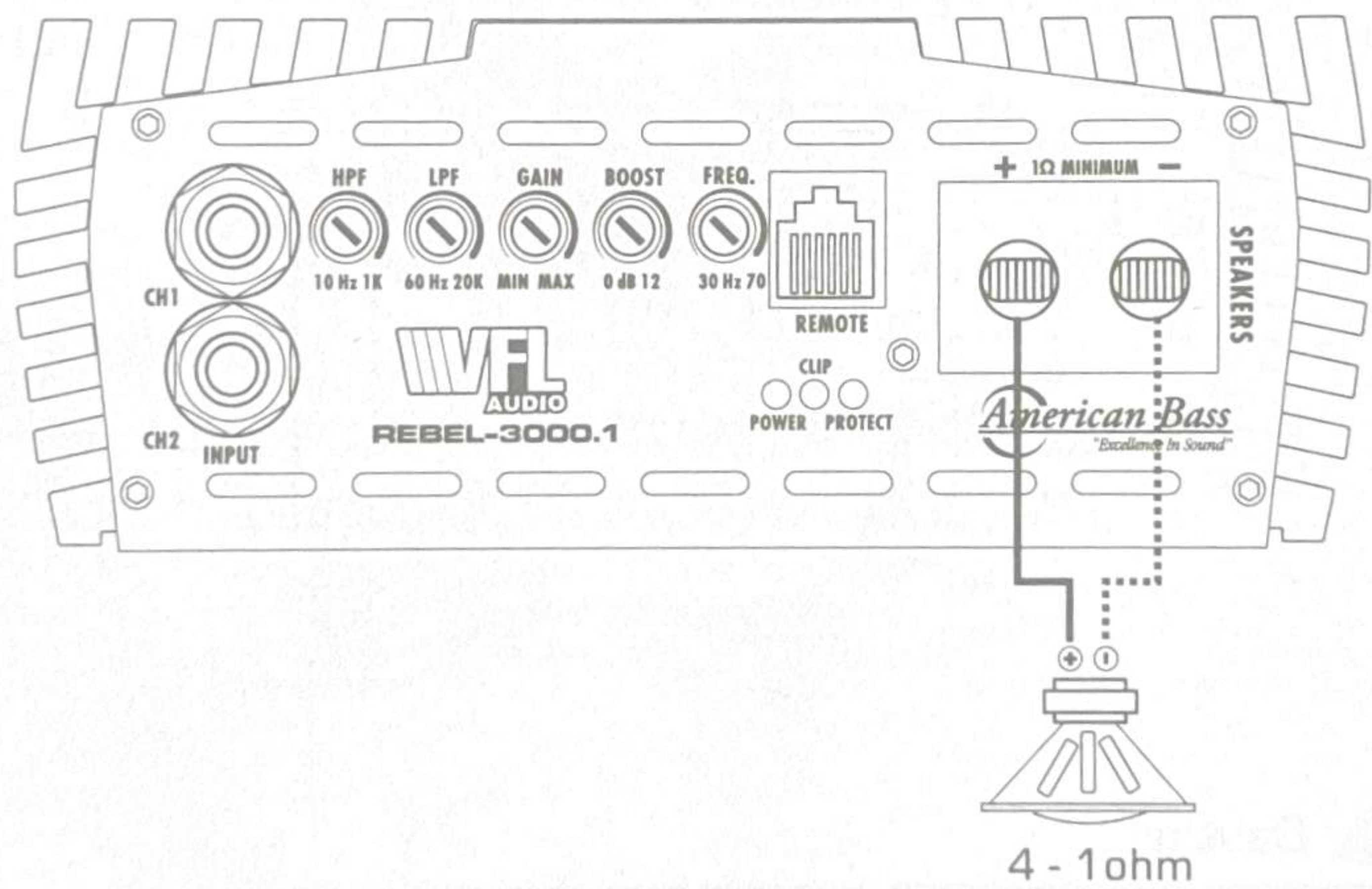
REMOTE

Connect the REM terminal of the amplifier to the power antenna terminal in the car ignition switch using 12 or 16 ga. electrical wire.

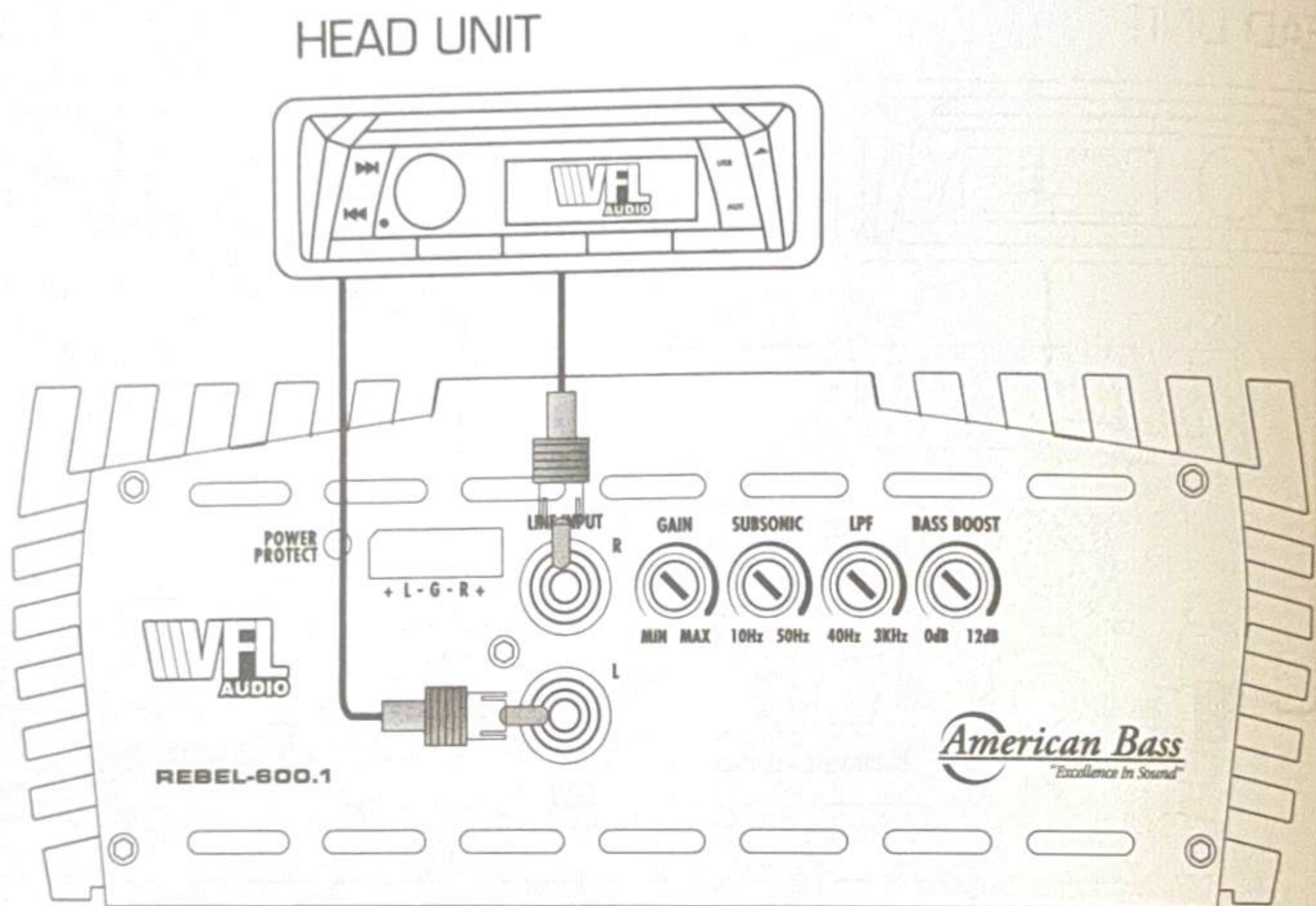
DIGITAL MONOBLOCK RCA INPUT CONNECTION



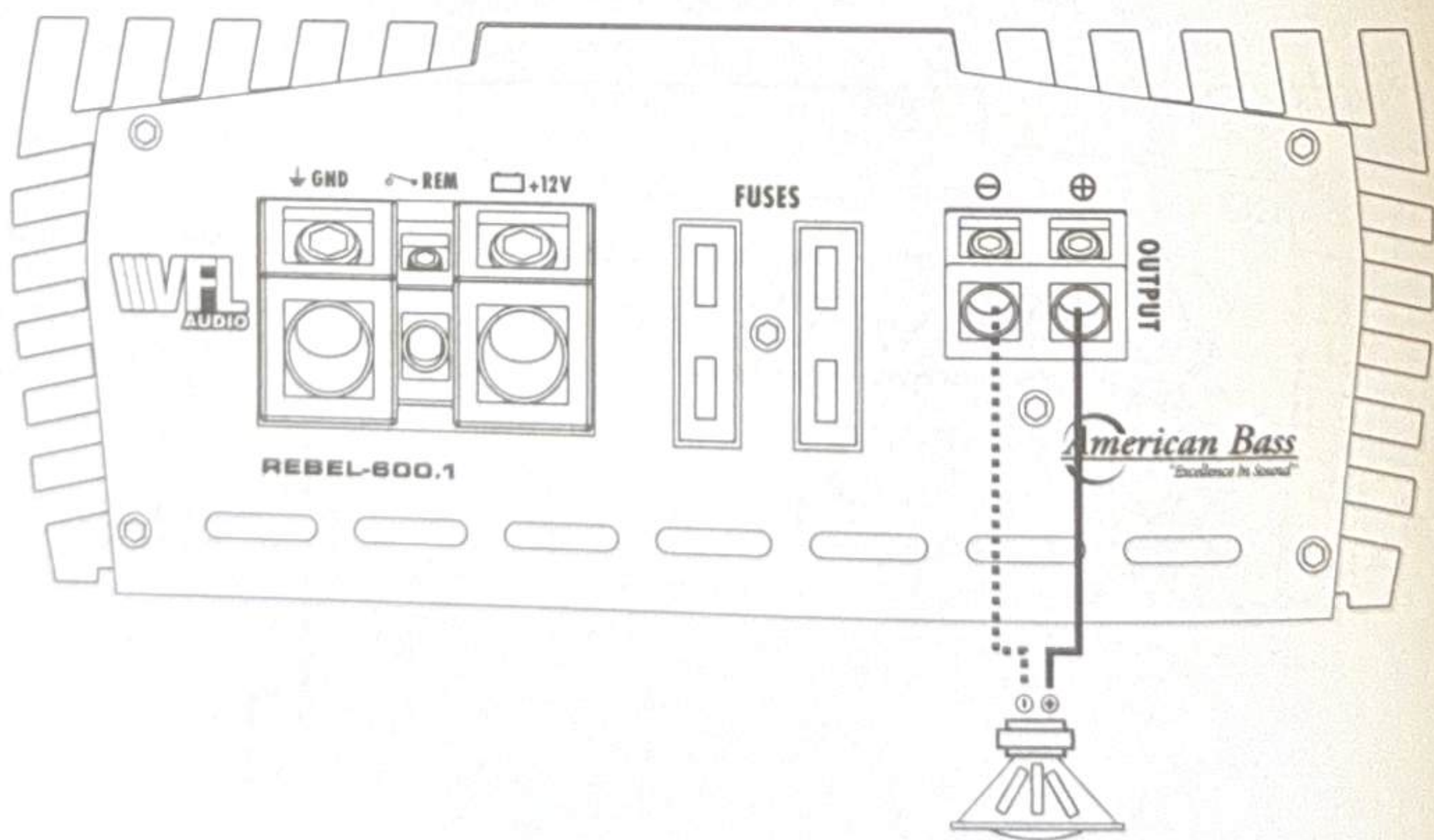
DIGITAL MONOBLOCK SPEAKER CONNECTION



DIGITAL MONOBLOCK RCA INPUT CONNECTION



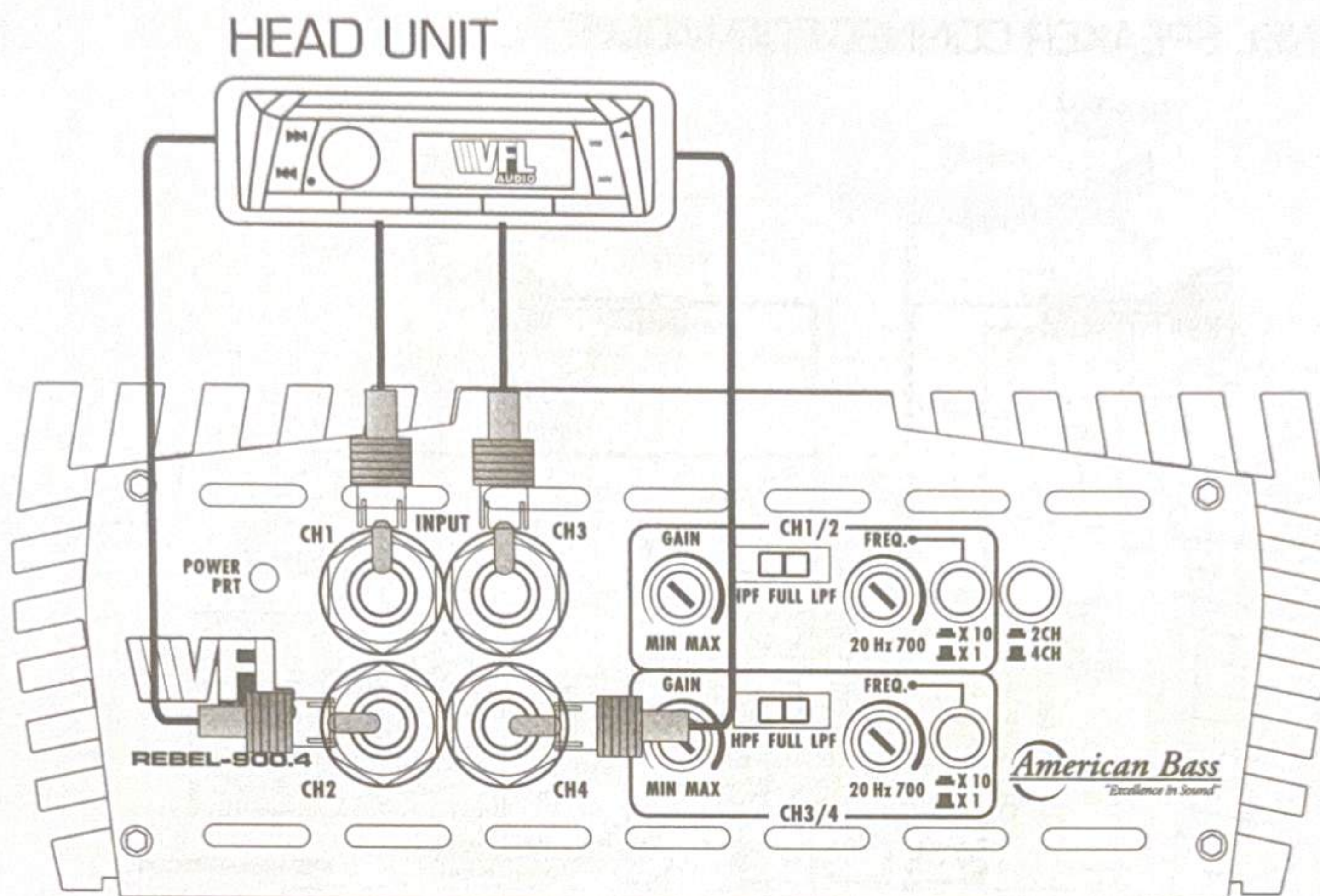
DIGITAL MONOBLOCK SPEAKER CONNECTION



⚠ Caution !!

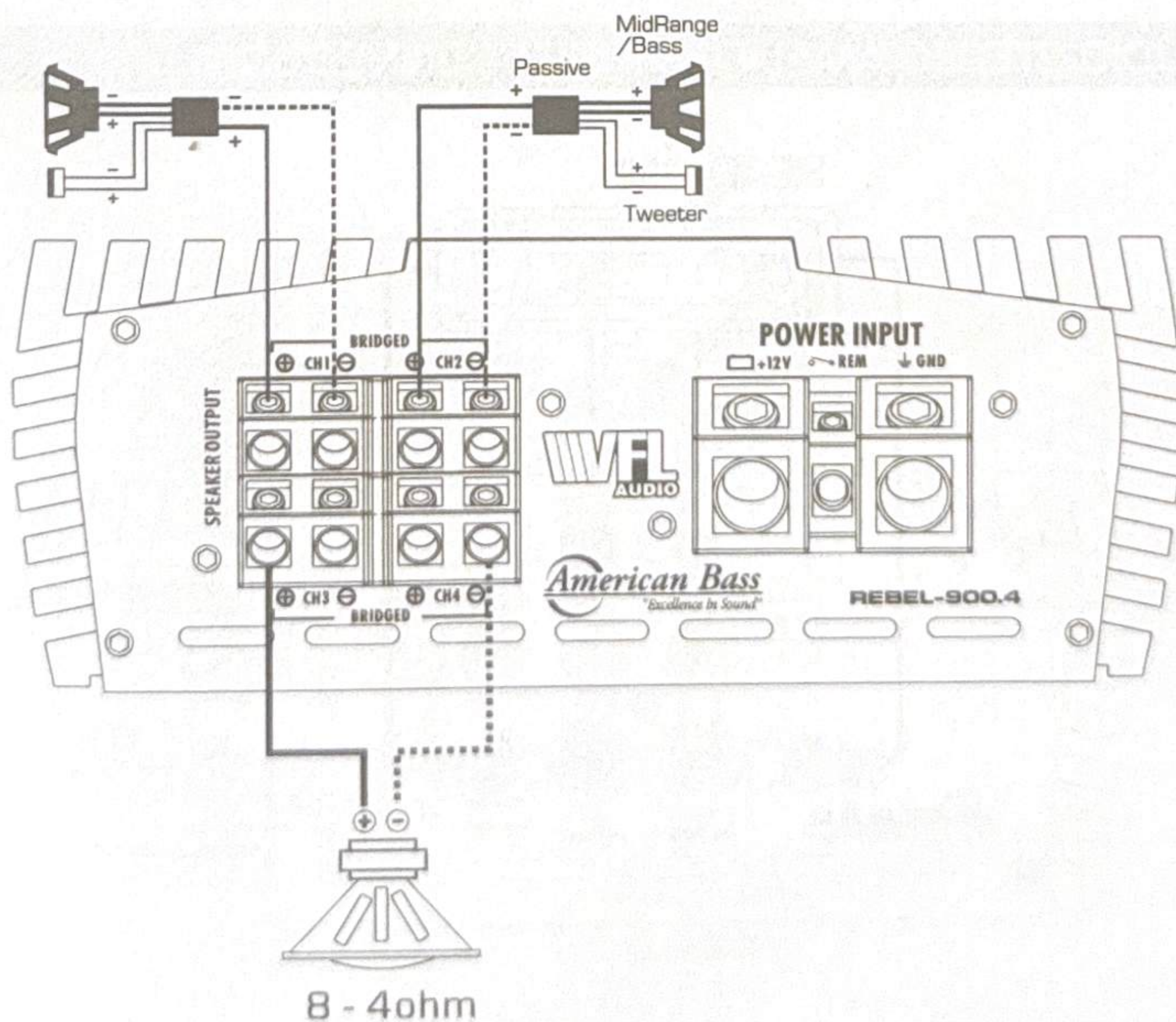
VFL AUDIO REBEL Digital Monoblock amplifiers' minimum working impedance is 1 ohm.

VFL AUDIO STEREO AMPLIFIER INPUT CONNECTION



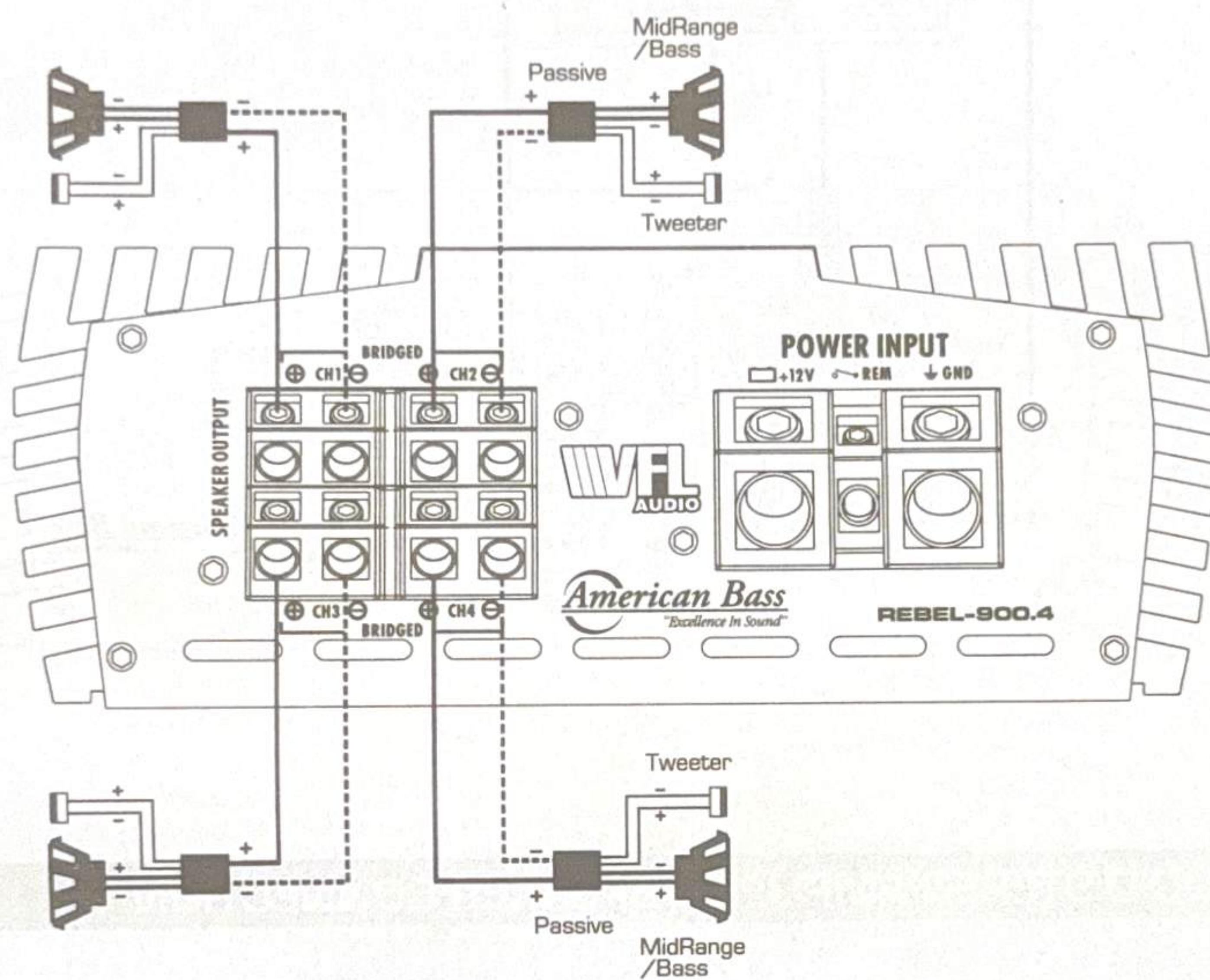
VFL AUDIO STEREO AMPLIFIER SPEAKER CONNECTION

3 CHANNEL SPEAKER CONNECTION MODE.

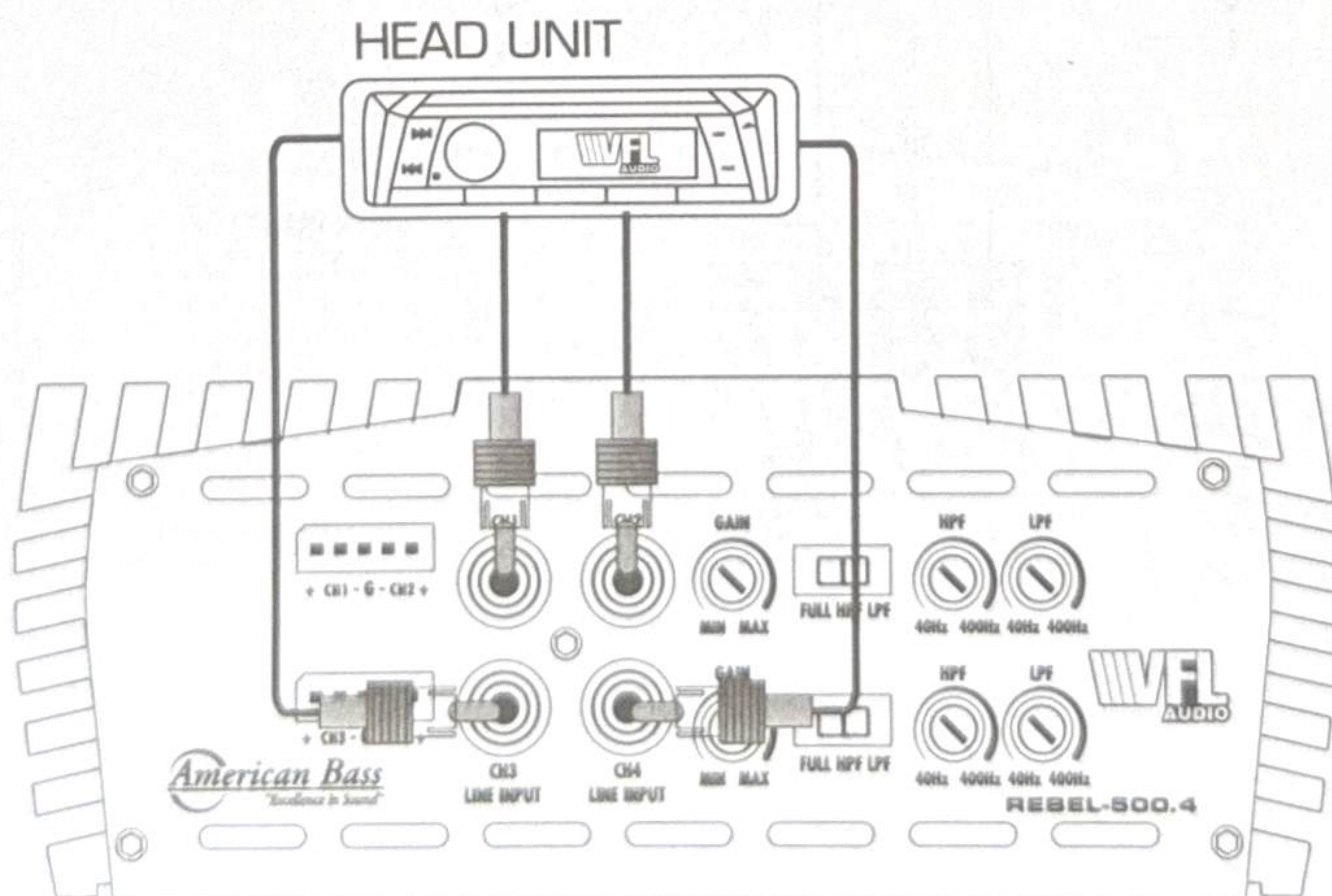


VFL AUDIO STEREO AMPLIFIER SPEAKER CONNECTION

4 CHANNEL SPEAKER CONNECTION MODE.

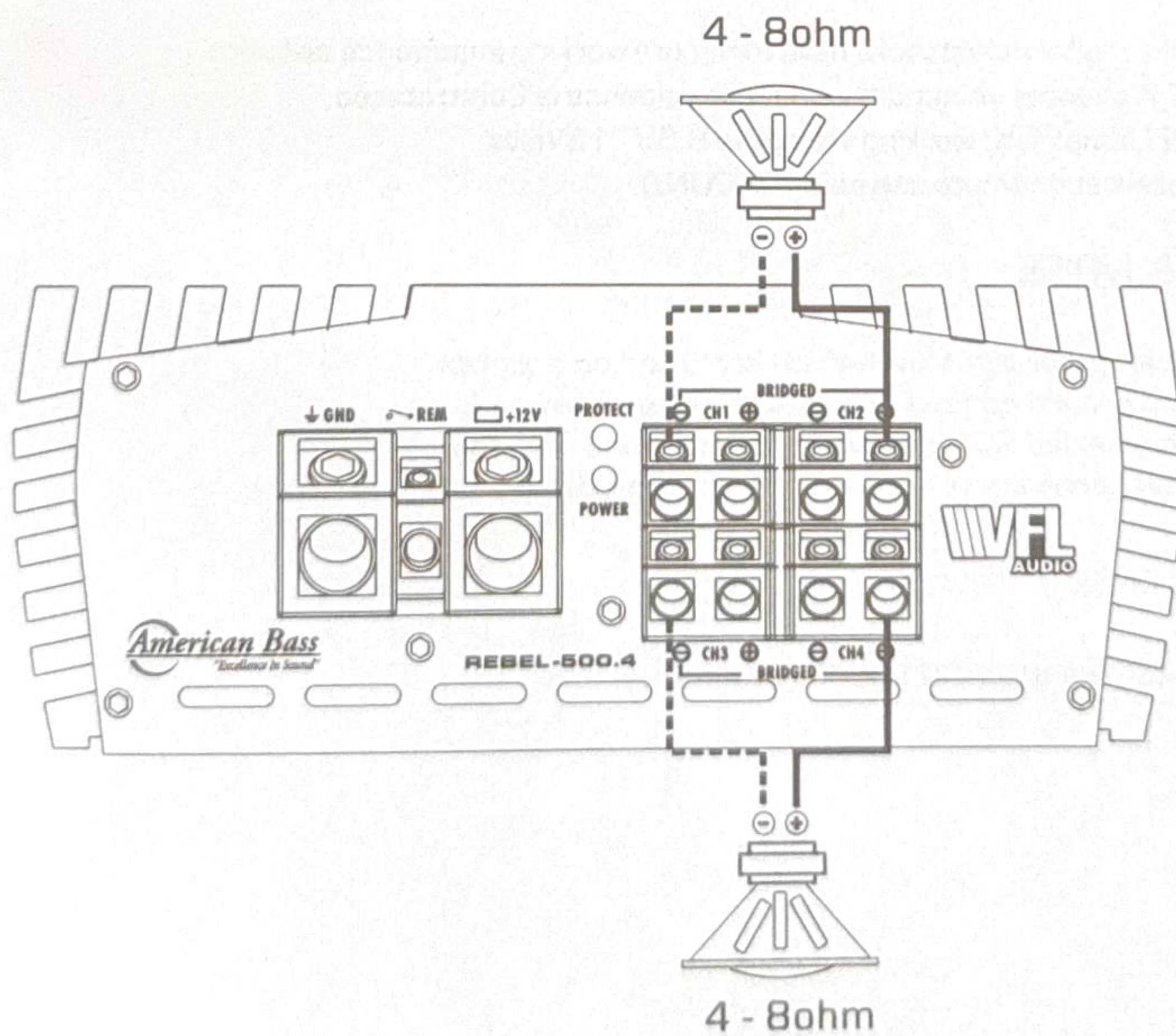
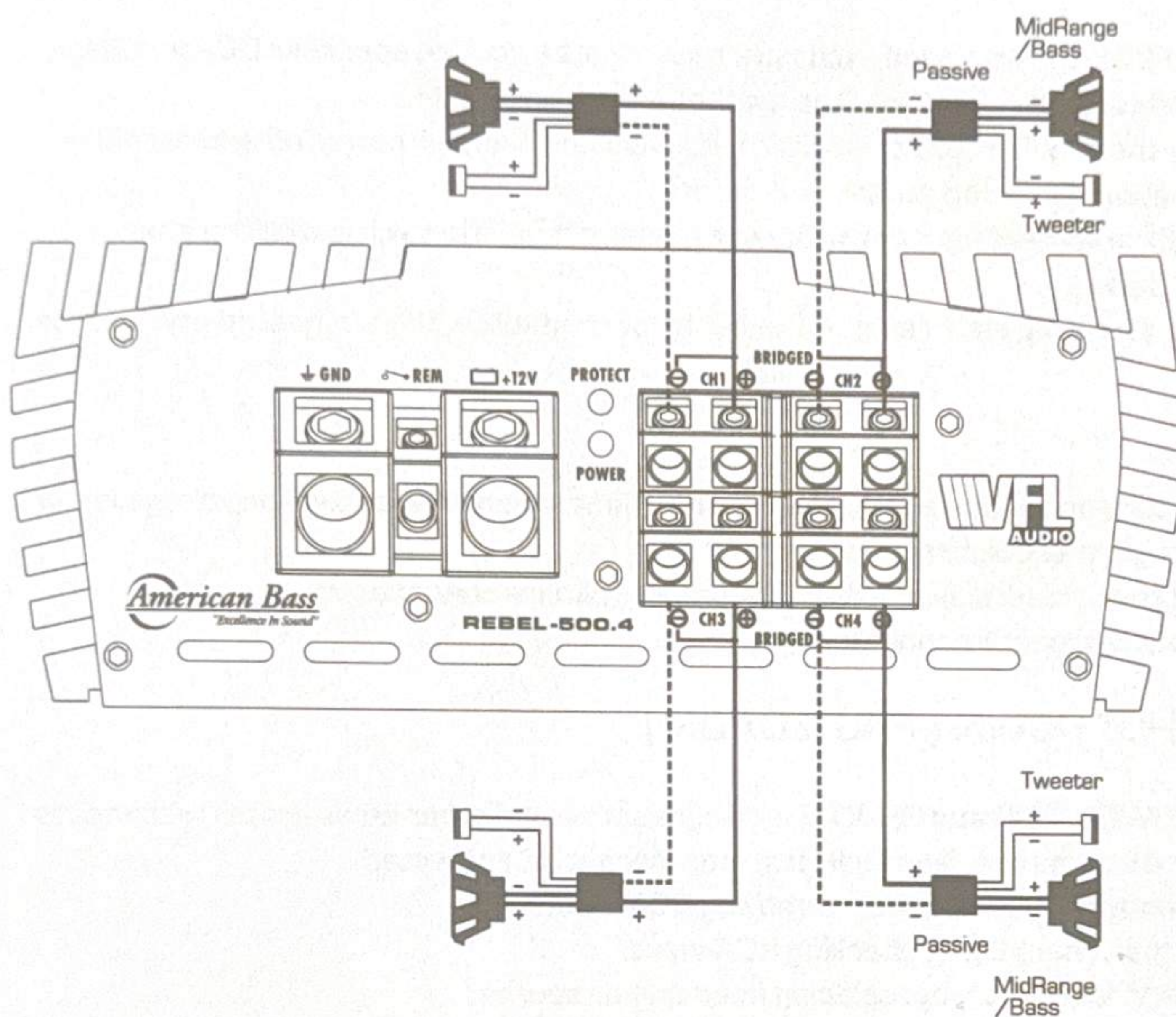


VFL AUDIO STEREO AMPLIFIER INPUT CONNECTION



VFL AUDIO STEREO AMPLIFIER SPEAKER CONNECTION

4 CHANNEL SPEAKER CONNECTION MODE.



TROUBLE SHOOTING

VFL Audio REBEL amplifiers have the protection features to prevent any damages from misuse or faulty conditions.

If VFL Audio REBEL amplifiers sense excessive heat, short circuited speakers DC, or voltage. the protection indicator will light, and the system will be turned off.

In order to check the problem, you should turn all levels down and all power off and carefully check the installation for wiring mistakes or short.

If VFL Audio REBEL amplifiers shut down due to excessive heat, They will be working later when it is cooled down.

Before removing your amplifier, refer to the list below and follow the suggested procedures.

NO OUTPUT

1. Check remote turn-on voltage at amplifier and headunit, when remote turn-on voltage is low or no turn-on voltage, there is no sound.
2. Check fuses at the battery side or external fuses and all wire connections.
3. Check RCA Input is properly connected.

AMPLIFIER SHUT DOWN (PROTECTION)

1. Please check POWER, GND and REMOTE wire connection and other wires properly connected.
2. When DC over 4V come into the amplifiers, amplifiers is DC protected.

Pls check whether amplifiers work after removing RCA-input.

If amplifier work, then check DC by checking RCA-input.

When DC is over 4V at input, try by replacing head-unit or source.

3. When amplifier is over-heated, amplifier goes into the thermal protection.

Amplifier will be back after cooling down little bit, Please install amplifier in better ventilation and make it cool.

4. VFL Audio REBEL digital monoblocks have minimum working impedance as 1 ohm

VFL Audio REBEL 4 channel minimum working impedance is 2ohm stereo.

5. VFL Audio REBEL amplifiers working voltage is 8.5V " 16Volts.

6. Make sure chassis and remote use same GROUND.

DISTORTION & NOISE

1. Please readjust amplifier input level which is printed on endplate.
2. Make sure good ground contact of amplifier or headunit.
3. Use sufficiently shielded RCA interconnects and good RCA routing
4. Check all ground connections of all other audio equipments.

POOR BASS PESPONSE

1. Check speaker wiring and reverse polarity.



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