

LIMITED WARRANTY

DRIVEN warrants any products purchased in the U.S.A. from an authorized DRIVEN dealer. All products are warranted to be free from defects in material and workmanship under normal use and service for a period of one (1) year when the unit is installed by an authorized D R I V E N dealer. Non-authorized dealer installed products carry a one (1) year parts and labor limited warranty. This warranty applies to the original purchase only.

DRIVEN will either repair or replace (as its option) any unit that had been found to be defective and under warranty provided the defect occurs within:

One (1) year, if purchased through an authorized DRIVEN-dealer with original proof of purchase.

This limited warranty periods do not extend to units having been subjected to misuse, abuse, neglect, or accident. Products that in DRIVEN's judgment shows evidence of having been altered, modified, or serviced without DRIVEN's authorization, will be ineligible under this warranty.

To obtain warranty services please contact your retailer or visit our website at www.DRIVENelectronics.com for more details.



DB Research L.L.P.

302 Hanmore Industrial Parkway // Harlingen, TX 78550
ph: 877.787.0101 // fx: 956.421.4513 // support@dbdrive.net
www.drivenelectronics.com



DRA SERIES AMPLIFIERS

MONOBLOCK

DRA1001.1 • DRA2001.1 • DRA3001.1

4 CHANNEL

DRA4 • DRA8

2 CHANNEL

DRA2

USER MANUAL

Installation Instructions | Owners Manual

**PLEASE READ CAREFULLY BEFORE INSTALLING
OR OPERATING**

INTRODUCTION

Congratulations on your purchase of this DRIVEN Audio Amplifier. Your selection of a DRIVEN product indicates a true appreciation of fine musical reproduction. To ensure proper use of this unit, please make sure to read the owner's manual carefully before operating and keep it for future reference.

■ KEEP YOUR SALES RECEIPT

Take this time to attach your sales receipt to the manual and put it in a safe place. In case of any unforeseen reason this product may need warranty service, your receipt will be necessary to establish purchase date.

■ RECOMMENDATION

An amplifier's performance is only as good as its installation. Proper installation will maximize the system's overall performance. It is recommended that you have our product installed by an authorized DRIVEN retailer. If you decide to install it yourself, please carefully read through this manual and take your time to do a quality installation. Due to continuing product improvements and possible manual revisions, we recommend checking our website for the latest product information at:

www.drivenelectronics.com

IMPORTANT! Before making any connections, disconnect the vehicle's battery until the installation is completed to avoid possible damage to the electrical system.

WARNING!

Exposure to high power sound system can cause hearing loss or damage. Listening to your system at loud levels while driving will impair your ability to hear traffic sounds and emergency vehicles. Use common sense when listening to your system.

Serial # _____

Model # _____

■ **Fuse amplifiers power wire at the battery**

Be sure to fuse the power wire within 12" of the car's battery. This will protect the car's battery in case of a short circuit between the power amplifier and battery. THIS IS A MUST, the amplifier's built-in fuse will only protect the power amplifier not the car's battery!

■ **Use high grade wire connectors**

To ensure maximum power transfer and secure safe connections, it is recommended to use high grade barrier spades (for connection at amplifier) and terminal rings (for connection at battery).

■ **Do not run any wires underneath vehicle**

Exposed wires have a chance of being cut or damaged. It is best to run all wires through the vehicle under the carpet and/or side panels. This lends to a cleaner installation and less risk of damage.

■ **Use caution when mounting amplifier**

Remember there are many electrical wires, gas lines, vacuum lines, brake lines as well as a gas tank in the automobile. Make sure you now where they are when mounting the amplifier to avoid puncturing lines, shorting wires or drilling holes in the gas tank.

■ **Run signal wires away from electrical wires**

To avoid possibility of induced noise from the car's electrical system (i.e. popping noises or engine noise), run wires away from the car's electrical wiring.

■ *Make all ground wires as short as possible and at the same point*

In order to reduce the chance of ground loops (i.e. engine noise), make the grounding wire as short as possible to reduce the wire's resistance. Also, when using multiple components, make sure all units are grounded at the same point.

■ *Avoid sharp edges when running the wires*

To avoid the possibility of power, signal or speaker shorts, be careful not to allow the amplifiers wires to come in contact with sharp edges. Use a grommet to protect the wire when running through the fire wall.

■ **DC Offset Protection**

This circuit protects the output of the amplifier against DC voltage. If for some reason DC voltage is detected at the output stage, the amplifier will shut down protecting the speakers from direct current.

■ **Short Circuit Protection**

The circuit protects the amplifier from damage due to a short found in the speakers or wiring. If one of the speakers or its wiring comes in contact with ground, the amplifier will shut down. To resume normal operation, correct the problem and turn the head unit off, then back on. The amplifier will reset and play again.

■ **Thermal Protection**

To protect the amplifier circuitry against damage caused by prolonged exposure to high temperatures, a thermal protection circuit is activated if the amplifier reaches excessively high operating temperature. Once the thermal circuit is activated, the amplifier will shut down to cool off. The amplifier will automatically turn back on once it cools down to a safe operating temperature.

■ **Power Indicator**

The diagnostic L.E.D. illuminates when the amplifier is on and receiving power.

■ **Built-in Crossover**

The DRIVEN **DRA8**, **DRA4** and **DRA2** are equipped with a built in variable crossover network allowing you to select the crossover function and frequency for each the front channels or rear channels of the amplifier independently.

The DRIVEN **DRA3000.1**, **DRA2000.1** and **DRA1000.1 Monoblock Amplifiers** are equipped with a built in variable lowpass crossover network allowing you to select the crossover function and frequency for each the front channels or rear channels of the amplifier independently.

■ **Power and Speaker Distribution Blocks**

Heavy gauge bare wire distribution blocks are provided for maximum power and signal transfer with minimal resistance.

■ DRA3000.1

Monoblock Amplifier

■ DRA2000.1

Monoblock Amplifier

■ DRA1000.1

Monoblock Amplifier

Features:

- Class D Monoblock circuitry
- 1Ω Load Mono Capability
- Low level RCA inputs
- Variable Low Pass Crossover
- Variable Sub-sonic Filter
- High Efficiency Mosfet Design
- Heat Management System
- Remote Dash Bass Control

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Specifications:

■ DRA3000.1

■ DRA2000.1

■ DRA1000.1

	Monoblock	Monoblock	Monoblock
Rated Power:	1 x 3000W @ 1Ω Mono	1 x 2000W @ 1Ω Mono	1 x 1000W @ 1Ω Mono
Rated Power:	1 x 1500W @ 2Ω Mono	1 x 1000W @ 2Ω Mono	1 x 500W @ 2Ω Mono
Rated Power:	1 x 750W @ 4Ω Mono	1 x 500W @ 4Ω Mono	1 x 250W @ 4Ω Mono
THD at Rated Power:	>0.5%	>0.5%	>0.5%
Bandwidth:	(-3 dB) - 18Hz- 200Hz	(-3 dB) - 18Hz- 200Hz	(-3 dB) - 18Hz- 200Hz
Damping Factor:	(1k Hz @ 4Ω) - 126	(1k Hz @ 4Ω) - 126	(1k Hz @ 4Ω) - 126
Signal to Noise Ratio:	>90dB	>90dB	>90dB
Input Sensitivity:	285Mv - 6V	285Mv - 6V	6V - 0.2 V
Minimum Load Impedance:	1Ω Mono	1Ω Mono	2Ω
Phase Shift Selector:	0-180°	0-180°	0-180°
Mono Low Pass Filter Slope:	12dB	12dB	12dB
Low Pass filter range:	40Hz-200Hz	40 Hz - 200 Hz	40 Hz - 300 Hz
Sub - Sonic Filter slope:	12dB	12dB	12dB
Sub- Sonic Filter Range:	10 Hz - 40 Hz	10 Hz - 40 Hz	10 Hz - 40 Hz
Selectable Bass Boost @45 Hz:	0-12 dB	0-12 dB	0-12 dB

Full range line outputs have been provided for convenient connection to additional amplifiers in the system. The outputs are buffered to reduce signal loss.

■ POWER FUSING

This protects the amplifier against short circuits and excessive current.

■ REMOTE TURN- ON

Automatically turns amplifier on when connected to the head unit's remote output. amplifier will turn on and off with the head unit to save current consumption. This control also operates the reset circuit for the amplifier's protection. It must be connected with the head unit in order to reset protection circuits.

■ ADJUSTABLE INPUT SENSITIVITY

Allows you to fine-tune the level matching between your source and the power amplifier.

LOW IMPEDANCE STABILITY

4 CHANNEL STEREO AMPLIFIERS		HEIGHT	WIDTH	LENGTH
DRA4	2Ω STEREO	2" / 55 mm	6" / 153 mm	11.2" / 285 mm
DRA8	2Ω STEREO	2" / 55 mm	6" / 153 mm	6.9" / 345 mm
2 CHANNEL STEREO AMPLIFIER				
DRA2	2Ω STEREO	2" / 55 mm	6" / 153 mm	6.9" / 175 mm
MONOBLOCK AMPLIFIERS				
DRA3000.1	1Ω MONO	2" / 55 mm	6" / 153 mm	13" / 333 mm
DRA2000.1	1Ω MONO	2" / 55 mm	6" / 153 mm	10" / 253 mm
DRA1000.1	2Ω MONO	2" / 55 mm	6" / 153 mm	6.89" / 175 mm

DRA4, DRA8

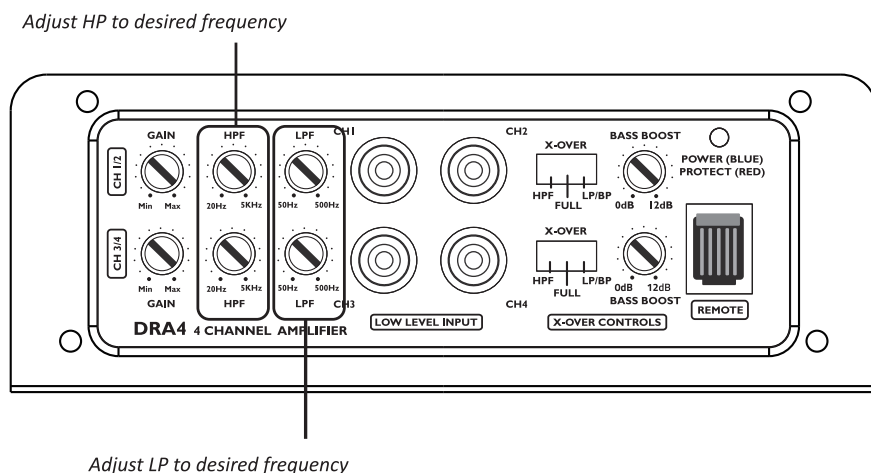
The DRA4 and DRA8 amplifier allow you to select the crossover mode (High-Pass/Full Range or Low Pass/ Band Pass) and desired crossover point for channels 1-2 and 3-4.

For example if you wish to use a 2-way loud speaker on channels 1-2, simply set the crossover switch to HPF and adjust the frequency setting to the desired HPF setting to block out any unwanted low frequencies.

If you wish to run a subwoofer on channels 3-4, simply set the crossover switch to LP/BP. You must adjust the HPF Frequency setting to 50 Hz and the LPF Frequency setting to the desired Low Pass setting to block out unwanted high frequencies.

If you wish to run a component midrange on either channels 1-2 or 3-4 set the crossover switch to LP/BP. Then use both HPF and LPF frequency controls to create the desired band pass frequency range.

THESE SETTING CAN BE USE ON CHANNELS 1-2 OR 3-4 INDEPENDENTLY OR FOR ALL CHANNELS



■ DRA4 | DRA8 | DRA2

Features:

- Class A/B Circuitry
- 2Ω Load Stereo Capability
- Low level RCA inputs
- Selectable HP/LP *2 Channel / Selectable HP/LP/BP *4 Channel
- High Efficiency Mosfet Design
- Heat Management System
- Bridgeable outputs @4Ω load

Specifications:

■ DRA4

■ DRA8

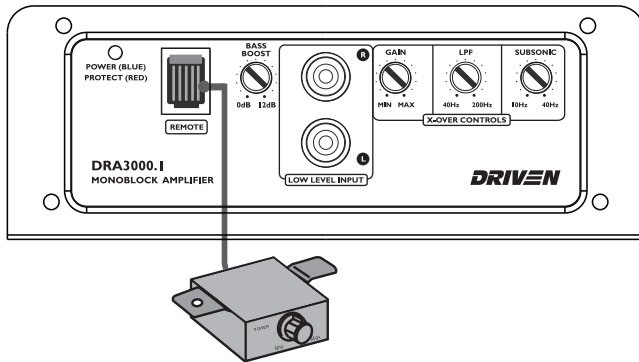
Rated Power:	4 x 150 Watts @ 4 Ω Stereo	4 x 250 Watts @ 4 Ω Stereo
Rated Power:	4 x 375 Watts @ 2 Ω Stereo	4 x 500 Watts @ 2 Ω Stereo
Rated Power:	2 x 750 Watts @ 4 Ω Bridged	2 x 1000 Watts @ 4 Ω Bridged
	Compatibility 2 Ω Stereo	Compatibility 2 Ω Stereo
THD at Rated Power:	>0.5%	>0.5%
Bandwidth:	(-3 dB) - 18Hz- 22Hz	(-3 dB) - 18Hz- 22Hz
Damping Factor:	(1k Hz @ 4Ω) - 100	(1k Hz @ 4Ω) - 100
Signal to Noise Ratio:	>90dB	>90dB
Input Sensitivity:	285Mv - 6V	285Mv - 6V
Minimum Load Impedance:	2 Ω Stereo	2 Ω Stereo
Input:	Pre in RCA	Pre in RCA
Crossover Filter Slope in Stereo:	12dB	12dB
Channel 1-2 HP Filter Range:	20Hz - 5KHz	20Hz - 5KHz
Channel 3-4 LP / BP Filter Range:	50Hz - 500Hz	50Hz - 500Hz
Selectable Bass Boost:	@45Hz - 0-12dB	@45Hz - 0-12dB

Specifications:

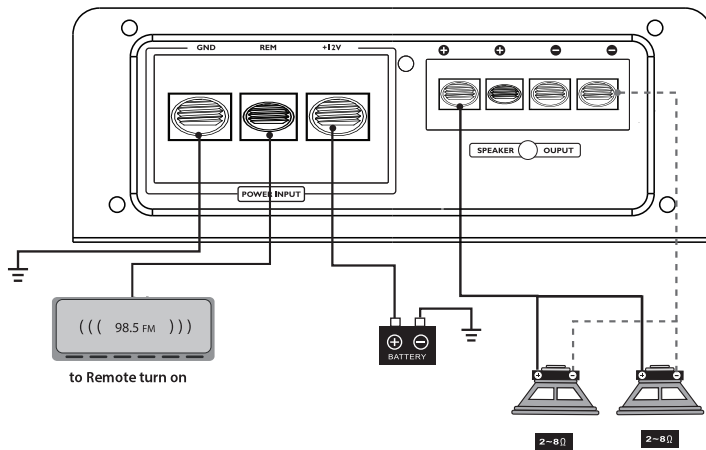
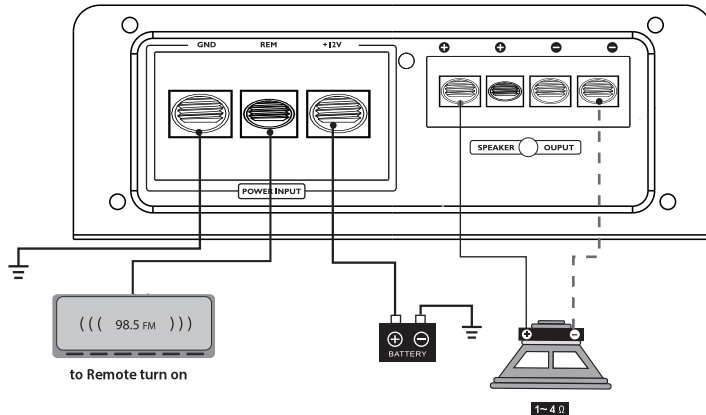
■ DRA2

Rated Power:	2x150 Watts @ 4 Ω Stereo
Rated Power:	2 x 375 Watts @ 2 Ω Stereo
Rated Power:	1 x 750 Watts @ 4 Ω Bridged
	Compatibility 2 Ω Stereo
THD at Rated Power:	>0.5%
Bandwidth:	(-3 dB) - 18Hz- 22KHz
Damping Factor:	(1k Hz @ 4Ω) - 100
Signal to Noise Ratio:	>90dB
Input Sensitivity:	285Mv - 6V
Minimum Load Impedance:	2 Ω Stereo
Input:	Pre in R C A
Crossover Filter Slope in Stereo:	12dB
HP Filter Range:	20Hz - 5KHz
LP Filter Range:	50Hz - 500Hz
Selectable Bass Boost:	@45Hz - 0-12dB

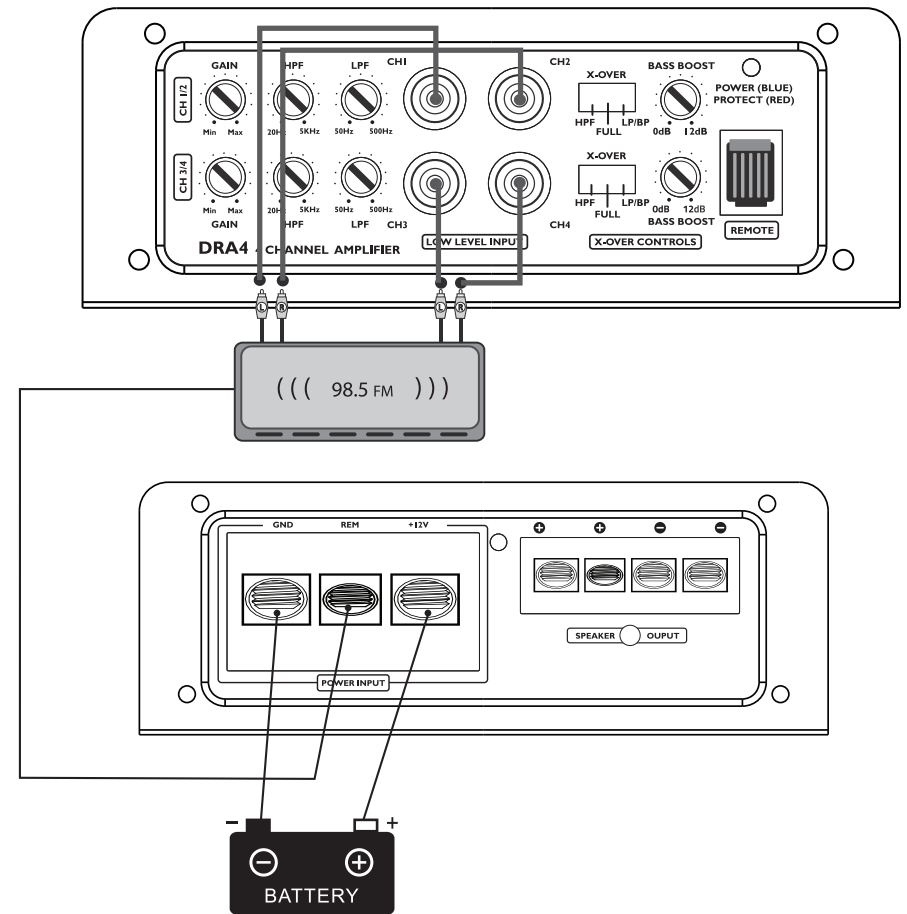
■ SINGLE AMP INPUT CONNECTION



■ SPEAKERS CONNECTIONS



■ Power Connection Leads



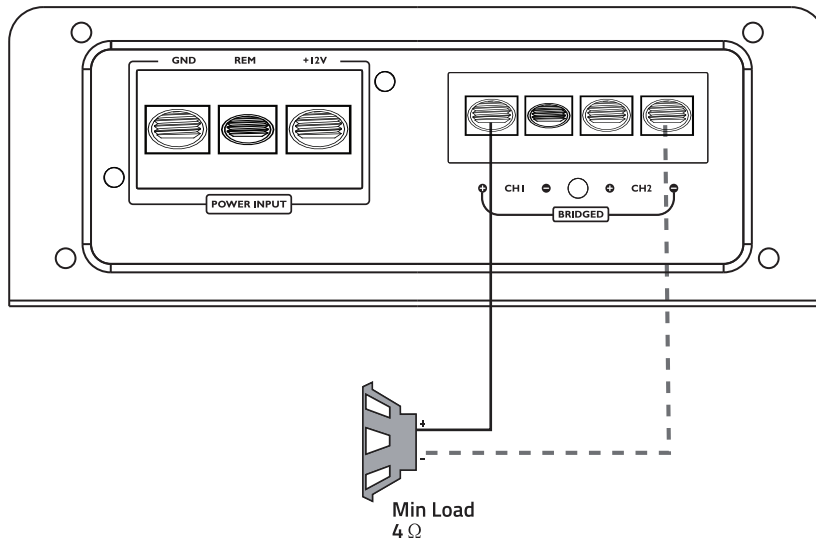
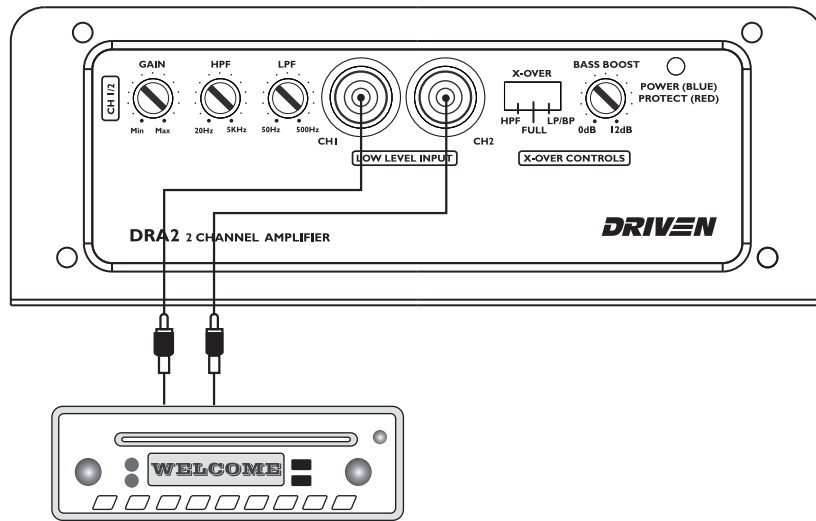
■ Notes on the Power Supply

Connect the +12V power input lead only after all other leads have been connected. Be sure to connect the ground wire of the unit securely to a metal part of the car. A loose connection may cause a malfunction of the amplifier.

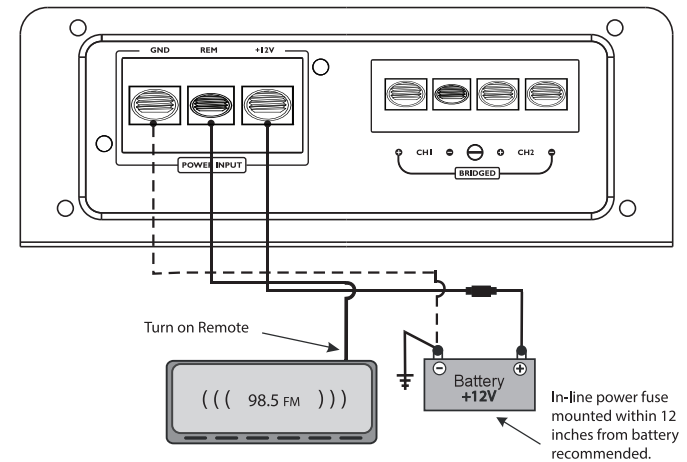
REMOTE: The unit is turned on by applying +12Volts to this terminal. This terminal does not draw heavy current like the two power terminal so a thinner connecting wire is acceptable. Standard 18 GAUGE is fine and the standard color is yellow. If the power antenna wire is already in use, you can still splice into it. With this method, the unit will turn on automatically with the radio. Use the power supply lead with a fuse attached whose value is the same as original fuse. Place the fuse in the power supply lead as close as possible to the car battery.

During a full power operation. Maximum current will run through the system. Therefore, Make sure that the leads to be connected to the +12V and GND terminals of the unit respectively must be larger than 10-Gauge (AWG 10)

■ Bridged



■ Power Connections



IMPORTANT! Before making any connections, disconnect the car's battery until the installation is completed to avoid possible damage to the electrical system.

It is important that you read this manual very carefully and follow it for your installation carefully. Before you start your installation, please consider following concerns.

1. Disconnect the negative (-) battery cable before mounting the amplifier or making any connections. Check the battery and alternator ground (-) connections. Make sure they are properly connected and free of corrosion.

2. Before selecting a mounting location for amplifier, please take some concerns into consideration with cooling efficiency and safety.

3. Power connection

Before installing amplifier, disconnect the negative (-) wire from battery to protect any accidental damage to your amplifier and System. This Amplifier is designed to use 4 AWG POWER and GROUND cables.

4. Ground connection

Locate a secure grounding connection as close to the amplifier as possible. Make sure the location is clean and provides a direct electrical connection to the frame of the vehicle. Connect one end of a short piece of the same size cables as the power cable to the grounding point. Run the other end of the cable to the amplifier mounting location. Connecting the ground cable to the screw terminal labeled as GND.

5. Remote connection

Run a remote turn on cable from the switched +12V source you will be using to turn on the system components. This may be a toggle switch, a relay, or your source unit's remote trigger wire, or power antenna trigger wire. Connect the remote turn on cable to the power terminal labeled as REM. Run this lead to the amplifier mounting location. Using 16AWG wire or larger.

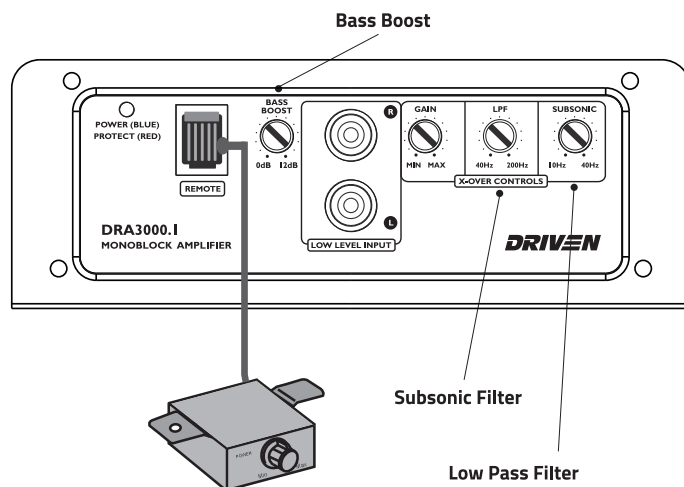
■ Built - In - Crossover

DRA3000.1 / DRA2000.1 / DRA1000.1

The DRIVEN Mono Amplifiers are equipped with a 24dB per octave variable Low Pass crossover.

They also feature a variable Sub Sonic filter between 10Hz - 40Hz to protect your subwoofers from ultra low frequencies when using vented enclosures.

A Variable Bass Boost is available to tune your subwoofer enclosure.



EXTERNAL FUSE RATINGS

DRA3000.1 - 200A

DRA2000.1 - 150A

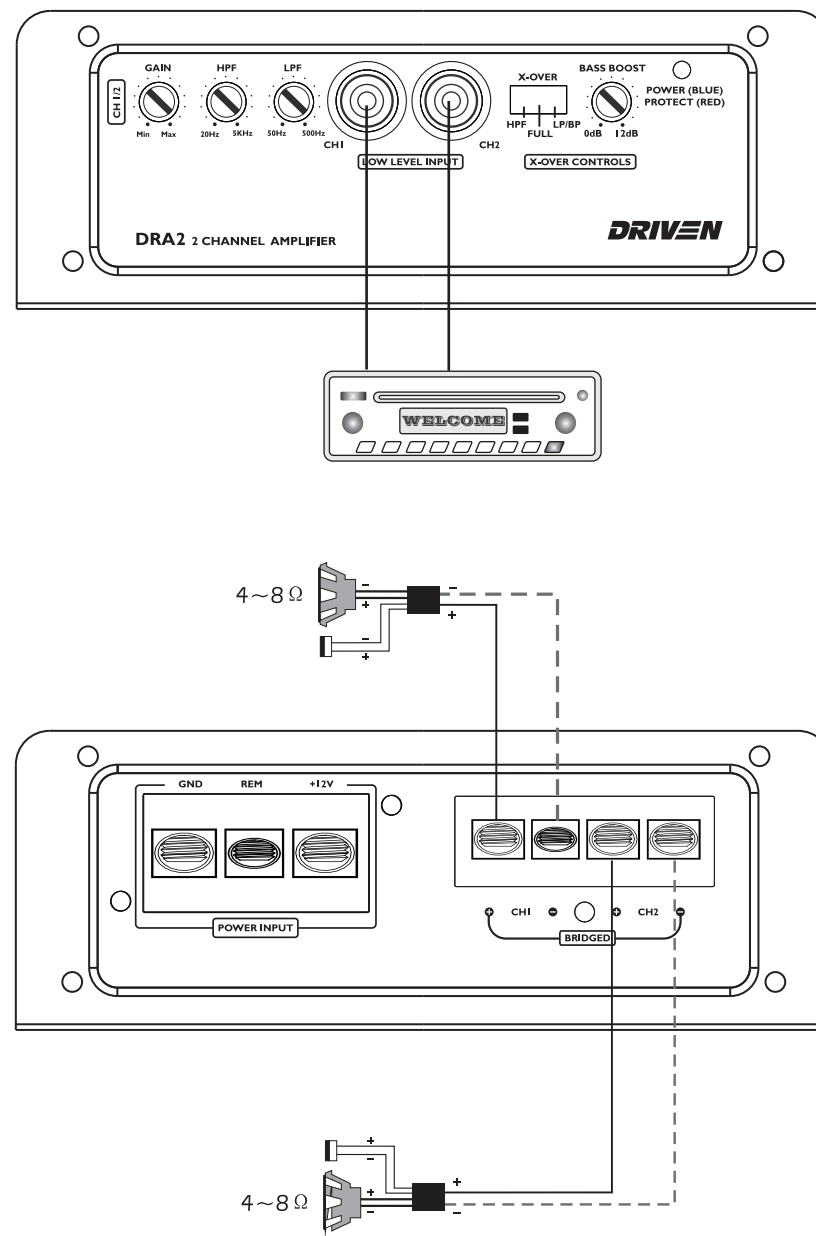
DRA1000.1 - 80A

DRA8 - 80A

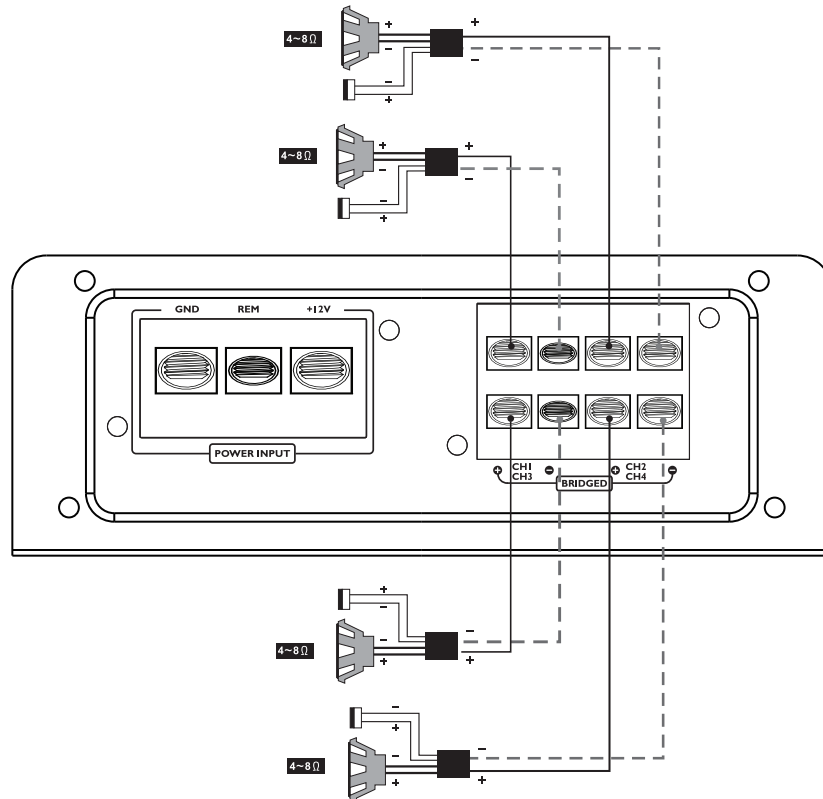
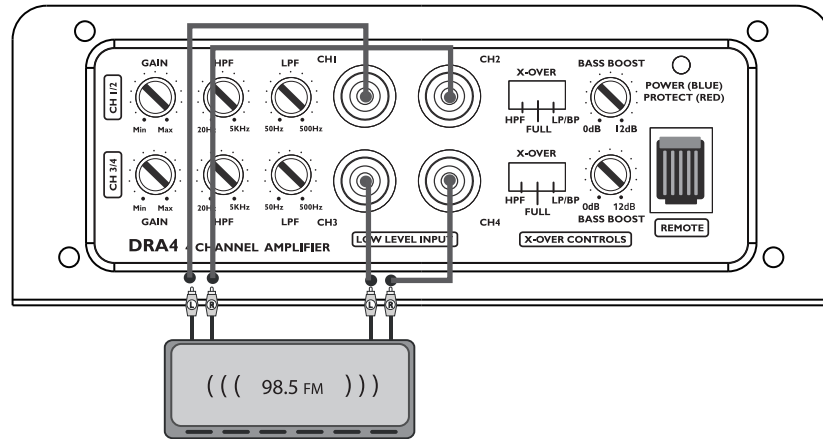
DRA4 - 40A

DRA2 - 30A x 2

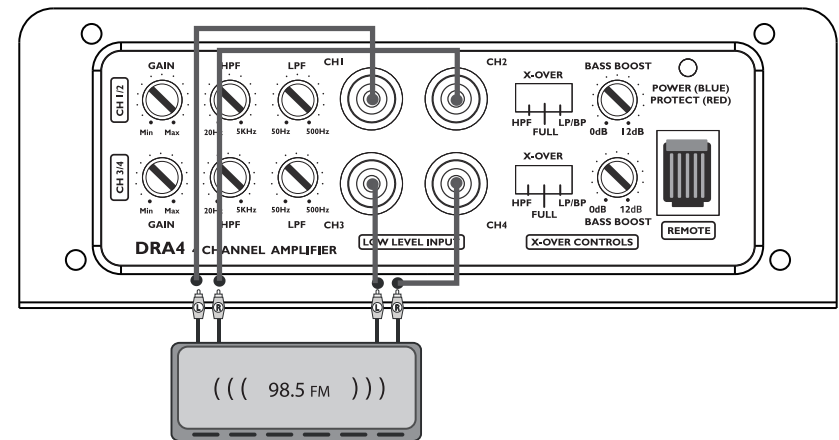
■ Stereo



■ System 1: 4 Channel Model



■ System 2: Bridged / Stereo Connection Subwoofer DRA4 & DRA8



■ Subwoofer Connection

