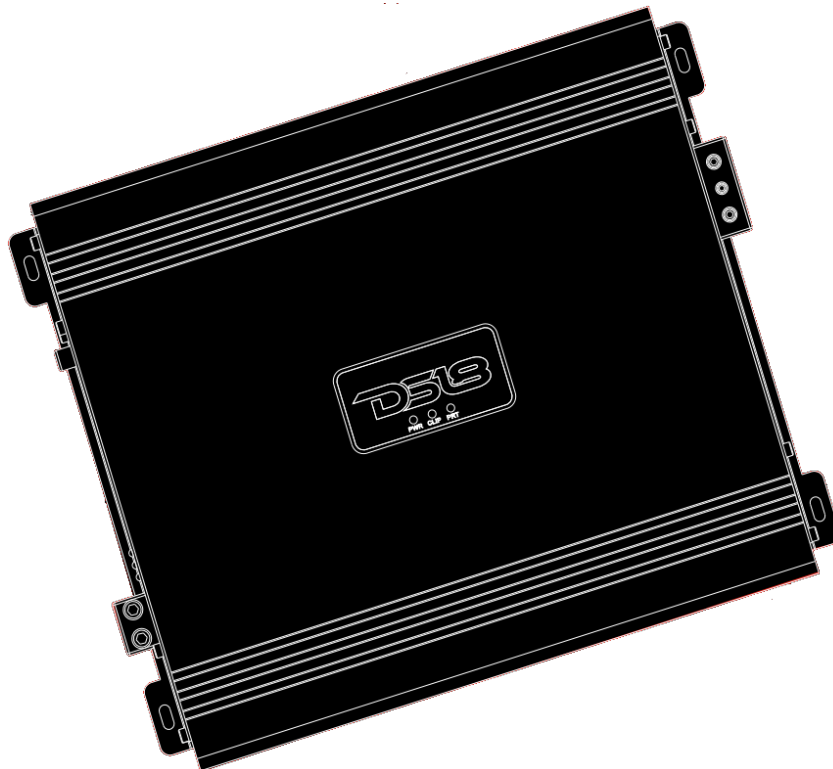




DS18 GFX Series Monoblock Amplifier Owner's Manual

[Home](#) » [DS18](#) » DS18 GFX Series Monoblock Amplifier Owner's Manual 





Contents

1 OWNER'S MANUAL

1.1 GFX

1.2 DS18 GFX AMPS

1.2.1 THANK YOU FOR CHOOSING DS18!

1.3 INTRODUCTION

1.3.1 PLATINUM FINISH CONNECTIONS

1.3.2 FULLY VARIABLE CROSSOVERS

1.3.3 PROTECTION CIRCUITRY

1.4 FEATURES

1.5 WARNING

1.6 INPUT SECTION

1.7 CROSSOVER CONTROLS

1.8 BASS BOOST

1.9 SPEAKER OUTPUTS

1.10 INSTALLATION INSTRUCTIONS

1.10.1 ONLY AFTER THIS STEP – SHOULD YOU INSTALL THE FUSE AT THE BATTERY.

1.11 SPECIFICATIONS

1.12 INSTALLATION

1.12.1 GFX-5k.5 GFX-8k.5

1.12.2 GFX-1.4k1•GFX-2.2k1•GFX-3k1•GFX-5k1•GFX-8k1

1.12.3 GFX-3k2 • GFX-5k2 • GFX-8k2

1.13 WIRING CONFIGURATION EXAMPLES

1.14 DIMENSIONS

1.15 WARRANTY

2 Documents / Resources

2.1 References

3 Related Posts

OWNER'S MANUAL

GFX-1.4k1 – GFX-2.2k1 – GFX-3k1 – GFX-3k2 GFX-5k.5 – GFX-5k1 – GFX-5k2- GFX-8k.5 – GFX-8k1 – GFX-8k2

GFX

DS18 GFX AMPS

THANK YOU FOR CHOOSING DS18!

To Take full advantage of the DS18 GFX amps you have just purchased, please read and follow the instructions in this manual. As with all of our products, professional installation by any of our authorized DS18 GFX amps dealer is highly recommended!

INTRODUCTION

The DS18 GFX Car amplifiers offer high quality audio reproduction for the audiophile and the everyday listener alike. All models feature fully variable crossovers with 12dB per octave slopes, allowing you the ability to tailor the

sound to best fit the speakers and your listening preferences.

PLATINUM FINISH CONNECTIONS

Ensures solid electrical connections that resist corrosion.

FULLY VARIABLE CROSSOVERS

Fully variable crossovers promote installation ease and save the cost of outboard crossovers. Additionally, they may be used in conjunction with outboard passive or active crossovers, depending on the complexity required by the system. The 12 dB per octave slope offers steep roll-off above or below the selected frequency.

PROTECTION CIRCUITRY

Against Overload, Short Circuit, Thermal, and Reverse Polarity. These protection features are designed to protect the amplifier from misuse, as well as from common causes of amplifier failure.

FEATURES

- Digital Full Range Monoblock Amplifier.
- Specially designed for Mid-bass, Midrange or Driver speakers.
- Extremely high output with a small footprint.
- 0.5 / 1 / 2 ohm Minimum Impedance Available models.
- Power / Protection / Clip LED indicator.
- Full Adjustable HP/LP @ 12dB/oct Crossover.
- Bass boost with adjustable frequency.
- Level Knob Remote Control for dashboard included.
- Forced cooling available in some models.
- Multiple ways of electronic protection (thermal, Over-Load, Short Circuit, impedance, Voltage, Clipping)

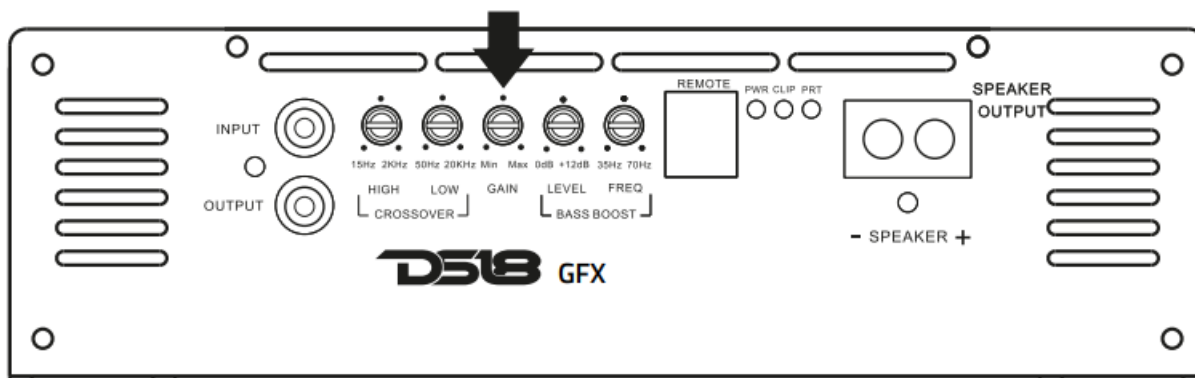
WARNING

Before securing the amplifier, inspect the mounting location carefully to ensure that you do not drill into or damage any electrical, hydraulic, fluid or fuel lines.

INPUT SECTION

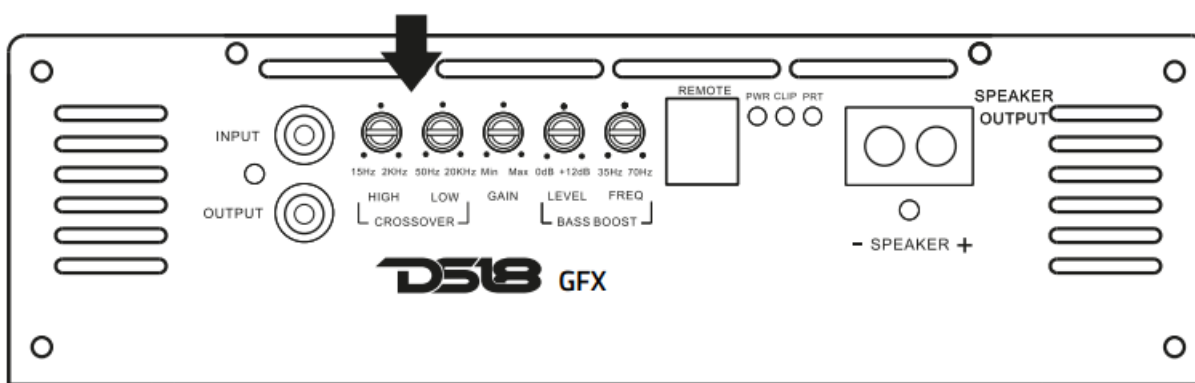
Because of the wide range of head unit output configurations all DS18 GFX amps have an adjustable input sensitivity of "Gain". The gain is not a volume or a power limiting control like a throttle. It makes the amp more sensitive to input from the stereo; with the gain up, the amp will reach full output at a lower volume setting on the deck. At higher gain settings the amp also becomes more and more sensitive to noise from the car's electrical system. Try to run the gain at the lowest setting possible for your system.

There is no correct gain setting, because speakers require different power demands to reach the same output, the gains most often need to be used to compensate for these differences. If you tried to set all the gains at half way you would probably find the system didn't sound very good. Using good judgment and listening carefully to each speaker is still the best way to tune a system.



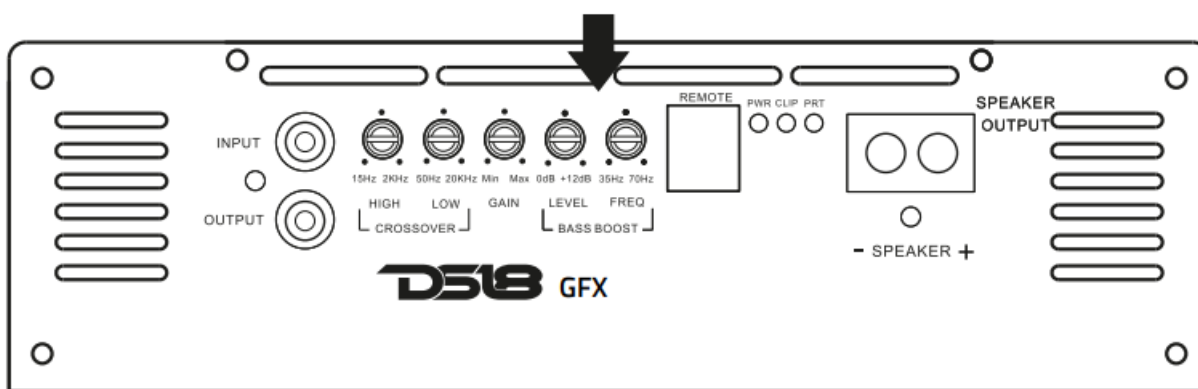
CROSSOVER CONTROLS

A crossover is a device that removes unwanted frequencies from a speaker or amplifier. A tweeter can easily be destroyed by bass notes if they are not filtered out. Likewise a subwoofer will not sound natural if it is playing midrange notes. A crossover removes these sounds from the speaker. As you might guess, careful adjustment is needed to ensure that all the speakers are playing the right sounds and that you are left with no “holes” or low spots in the frequency response.



BASS BOOST

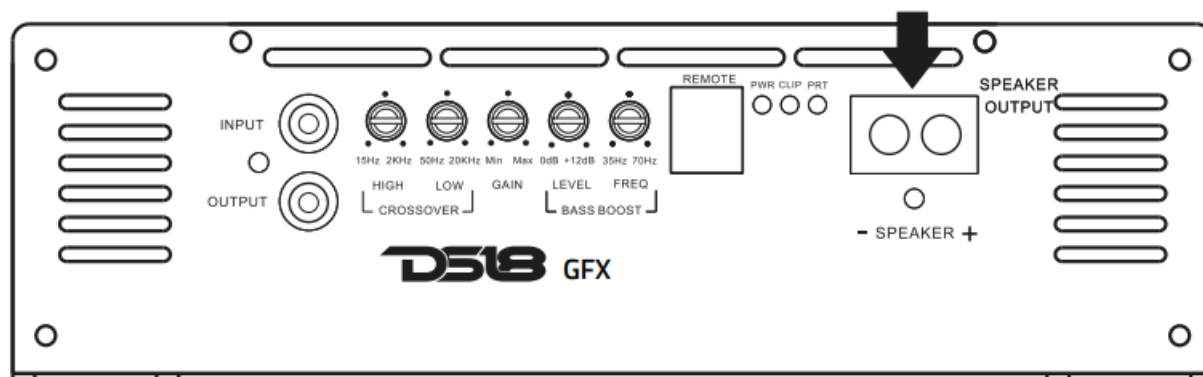
DS18 GFX amps amplifiers have an adjustable bass boost. Begin your adjustments at low volume. If you do not hear any improvement then woofer does not need any bass boost. Use Bass Boost carefully. The demands on power output are tremendous. Try to minimize the use by changing woofer position or the enclosure size.



SPEAKER OUTPUTS

This amplifier is equipped with a large block style terminal for speaker connection. Make this connection carefully and neatly. Strip your wire back and twist the exposed leads and insert them into the block terminal while being careful that there is no loose or frayed strands of wire and tighten the Allen head screw down on the terminal till

the wire is tightly secured in place. If the wires ever come in contact with each other the amplifier will go into protection.



INSTALLATION INSTRUCTIONS

1. Before you start, disconnect the negative cable from the car battery. Tape up the end so it is isolated from the battery.
2. Run an appropriate gauge wire from the battery to the amplifier. Plan this part of the installation carefully. This cable will carry very high current, if it should short to the body and it is not properly fused it could catch fire.
3. Connect the power wire to the battery using a fuse capable of the total current load of all amplifiers connected. Don't install the fuse yet. Wait until the end. Locate the fuse as close as possible to the battery. If the fuse is further than 18 inches (wire length) from the battery you should reevaluate the wire and fuse placement.
4. Find the closest clear metal area to the amp for a ground. Sand, grind or scrape all paint and undercoating from the body and screw the ground securely in place.

Professional installation by an authorized DS18 dealer is highly recommended. Otherwise, the performance of your new gear may not be satisfactory. In the event that you decide to do your own installation, please read and follow this manual very carefully. Failure to do so may compromise the integrity of this product, your automobile, and possibly void the product warranty.

Amplifiers are generally mounted in the hatch/ trunk area of a car or SUV, and under or behind the seat of most pick-up trucks. Select a location that will provide adequate ventilation for the amplifier. Avoid mounting the amplifier with the fins down. The fins should be facing up either vertically or horizontally. Secure the amplifier with the screws provided.

Before securing the amplifier, inspect the mounting location carefully to ensure that you do not drill into or damage any electrical, hydraulic, fluid or fuel lines.

5. Run the speaker wire to the speakers. It is advised that you leave some extra wire at this point. You can fix it later.
6. If you haven't done so already, mount the amp now.
7. Connect the power and ground to the amplifier.

ONLY AFTER THIS STEP – SHOULD YOU INSTALL THE FUSE AT THE BATTERY.

8. Connect the remote wire from the head unit to the amplifier. Now is a good time to turn on the amp for the first time. Make sure it turns on properly and does not go into protection mode.
9. Connect the speaker wires to the amp and speakers (make sure the amp is off first). Make sure the polarity (+) and (-) is correct.
10. Connect the RCA's to the amp.
11. Double check the amplifier controls at this time. Make sure everything is set correctly for your system.

12. Now you're ready to play it for the first time. It is best to leave the gain all the way down at first. Start with the head unit volume low and work your way up.

13. Now you can tune the amp. Take your time and make only one adjustment at a time. It may take some time to get the system fully adjusted. During this time the amp is drawing current from the battery. You should check the battery voltage from time to time and recharge it, if it gets low. That's it. You're done. Now have fun!

SPECIFICATIONS

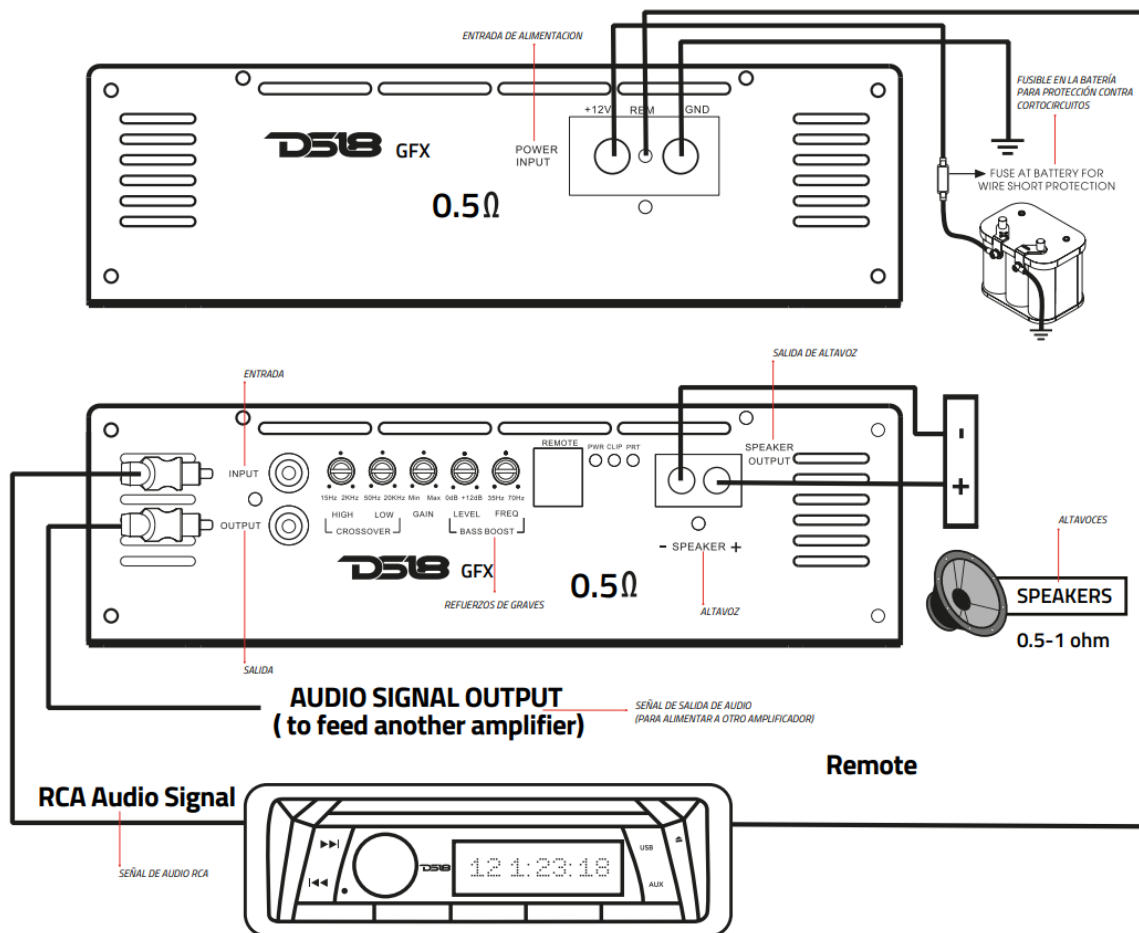
MODEL	GFX-1.4k1	GFX-2.2k1	GFX-3k1	GFX-3k2	GFX-5k.5
Power @ 8 ohms (14.4V)	N/A	N/A	N/A	1000W	N/A
Power @ 4 ohms (14.4V)	550W	800W	1000W	2000W	N/A
Power @ 2 ohms (14.4V)	950W	1500W	2000W	3000W	2000W
Power @ 1 ohms (14.4V)	1400W	2200W	3000W	N/A	3500W
Power @ 0.5 ohms (14.4V)	N/A	N/A	N/A	N/A	5000W
Frequency Response	15Hz-20KHZ	15Hz-20KHZ	15Hz-20KHZ	15Hz-20KHZ	15Hz-20KHZ
Total Harmonic Distortion (THD)	1 %	1 %	1 %	1 %	1 %
Low level Input Range	0.5 ~ 8V	0.5 ~ 8V	0.5 ~ 8V	0.5 ~ 8V	0.5 ~ 8V
Hi Pass X-Over Filter Range	15Hz – 2KHZ	15Hz – 2KHZ	15Hz – 2KHZ	15Hz – 2KHZ	15Hz – 2KHZ
Low Pass X-Over Filter Range	50Hz – 20KHZ	50Hz – 20KHZ	50Hz – 20KHZ	50Hz – 20KHZ	50Hz – 20KHZ
Bass Boost Range	0 ~ 12dB	0 ~ 12dB	2 ~ 12dB	3 ~ 12dB	4 ~ 12dB
Bass Boost Frequency	35Hz – 70HZ	35Hz – 70HZ	35Hz – 70HZ	35Hz – 70HZ	35Hz – 70HZ
Recommended Fuse	140A	220A	300A	300A	500A
Minimum Impedance	1 OHM	1 OHM	1 OHM	2 OHM	0.5 OHM
Power Input Terminal Size	2 AWG	2 AWG	1/0 AWG	1/0 AWG	1/0 AWG

MODEL	GFX-5k1	GFX-5k2	GFX-8k.5	GFX-8k1	GFX-8k2
Power @ 8 ohms (14.4V)	N/A	2000W	N/A	N/A	3500W
Power @ 4 ohms (14.4V)	2000W	3500W	N/A	3500W	5000W
Power @ 2 ohms (14.4V)	3500W	3500W	3500W	5000W	8000W
Power @ 1 ohms (14.4V)	5000W	N/A	5000W	8000W	N/A
Power @ 0.5 ohms (14.4V)	N/A	N/A	8000W	N/A	N/A
Frequency Response	15Hz-20KHZ	15Hz-20KHZ	15Hz-20KHZ	15Hz-20KHZ	15Hz-20KHZ
Total Harmonic Distortion (THD)	1 %	1 %	1 %	1 %	1 %
Low level Input Range	0.5 ~ 8V	0.5 ~ 8V	0.5 ~ 8V	0.5 ~ 8V	0.5 ~ 8V
Hi Pass X-Over Filter Range	15Hz – 2KHZ	15Hz – 2KHZ	15Hz – 2KHZ	15Hz – 2KHZ	15Hz – 2KHZ
Low Pass X-Over Filter Range	50Hz – 20KHZ	50Hz – 20KHZ	50Hz – 20KHZ	50Hz – 20KHZ	50Hz – 20KHZ
Bass Boost Range	5 ~ 12dB	6 ~ 12dB	7 ~ 12dB	8 ~ 12dB	9 ~ 12dB
Bass Boost Frequency	35Hz – 70HZ	35Hz – 70HZ	35Hz – 70HZ	35Hz – 70HZ	35Hz – 70HZ
Recommended Fuse	500A	500A	800A	800A	800A
Minimum Impedance	1 OHM	2 OHM	0.5 OHM	1 HM	2 OHM
Power Input Terminal Size	1/0 AWG	1/0 AWG	1/0 AWG	1/0 AWG	1/0 AWG

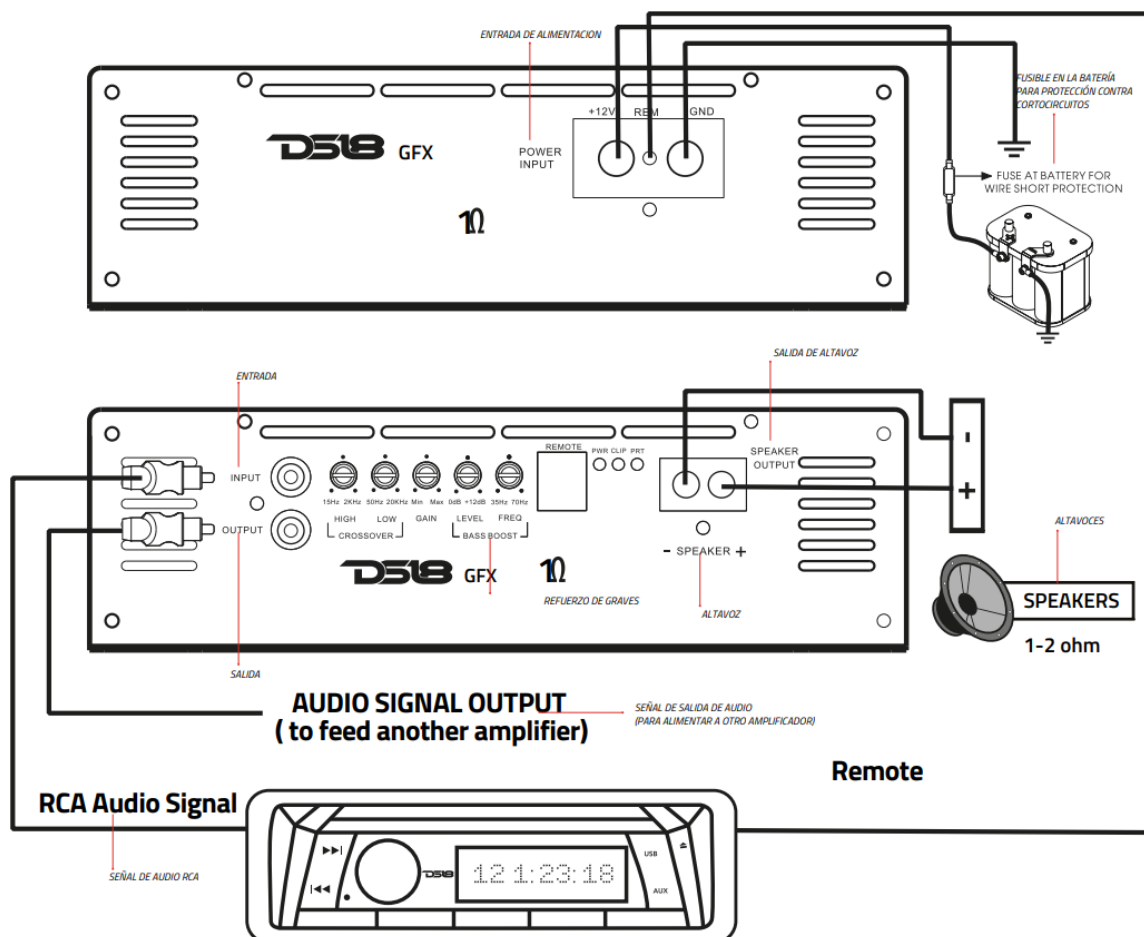
WE LIKE IT LOUD

INSTALLATION

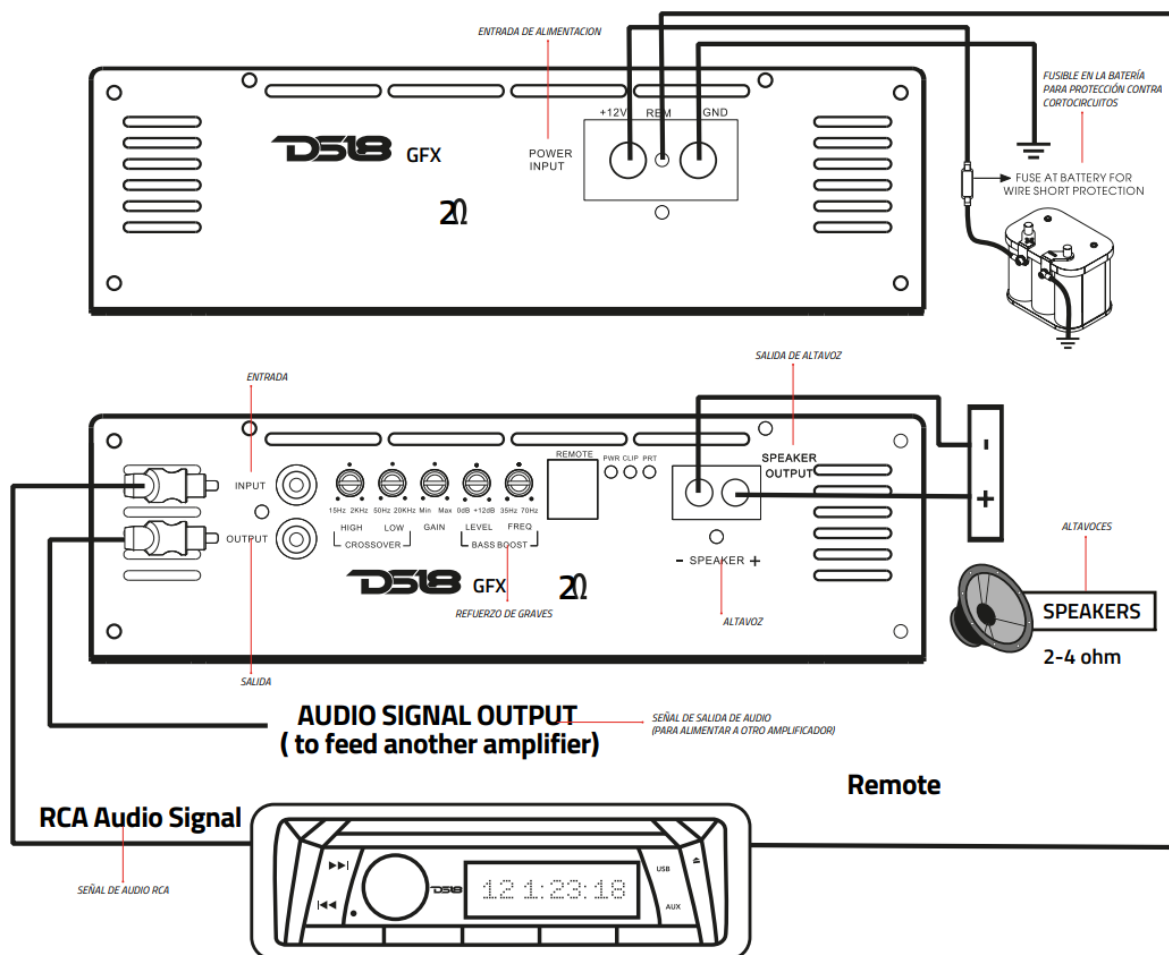
GFX-5k.5 GFX-8k.5



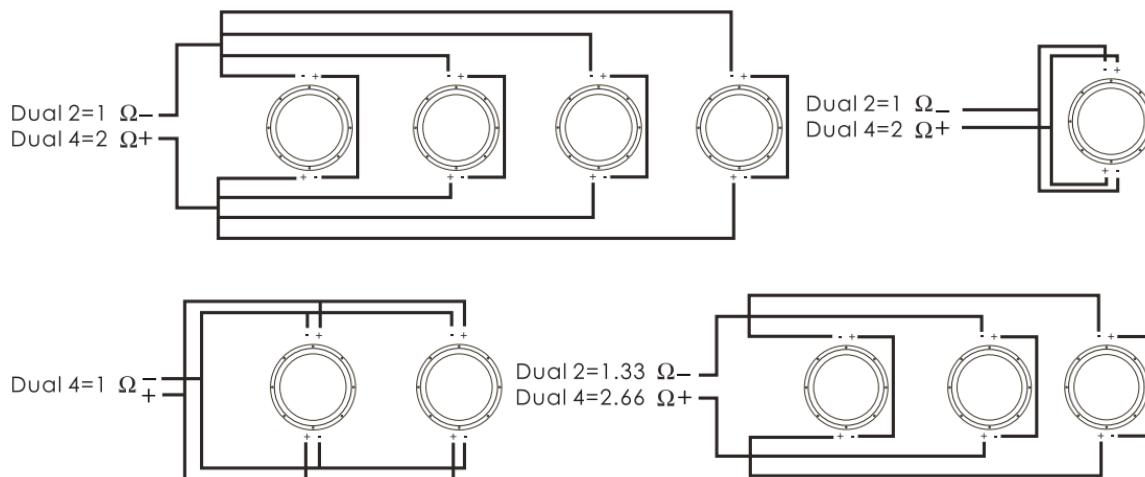
GFX-1.4k1•GFX-2.2k1•GFX-3k1•GFX-5k1•GFX-8k1



GFX-3k2 • GFX-5k2 • GFX-8k2

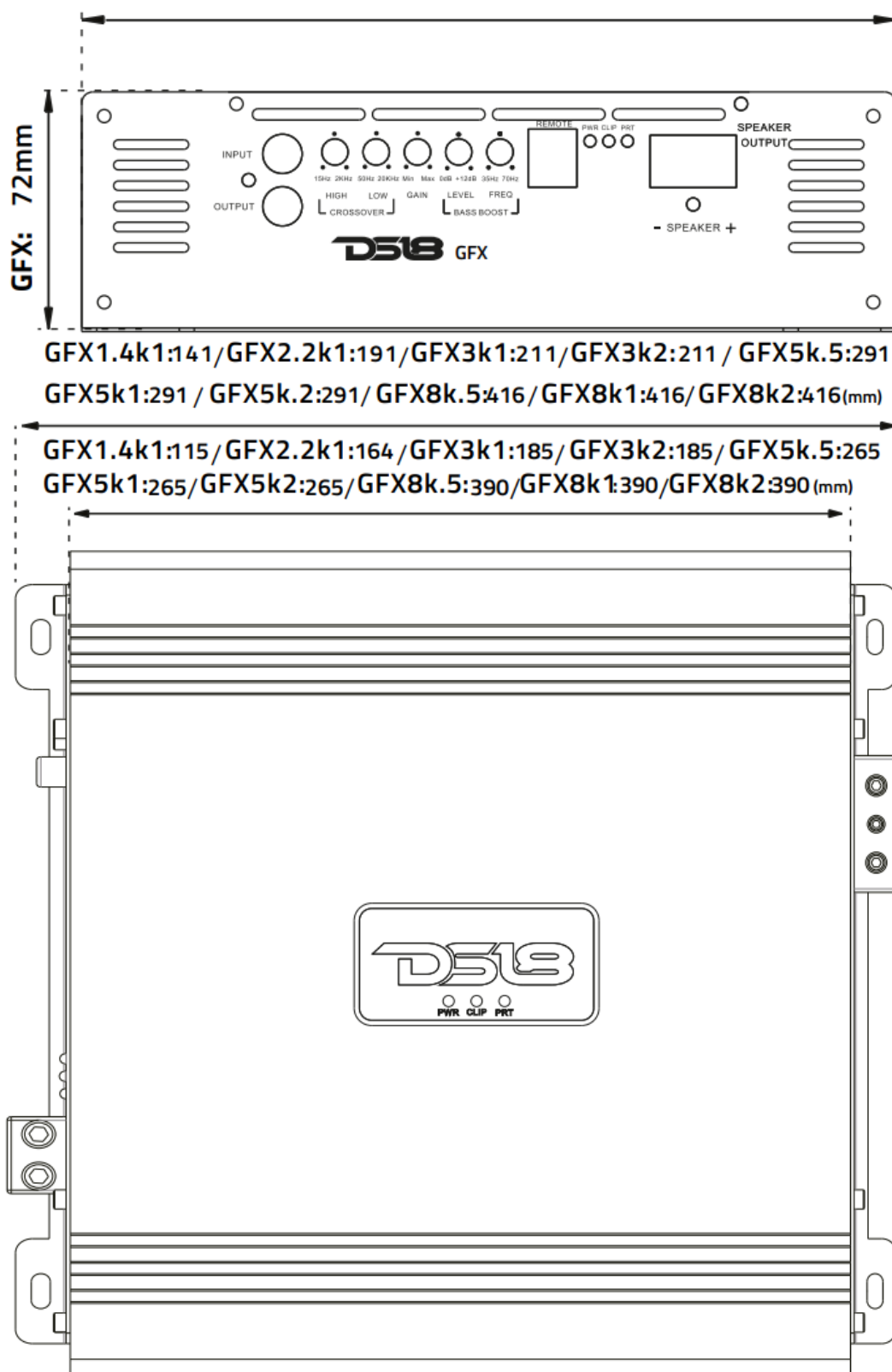


WIRING CONFIGURATION EXAMPLES



DIMENSIONS

GFX: 236mm



WARRANTY

Should your amplifier require service:

Please consult with the dealer from which it was purchased, or contact DS18 CAR AUDIO Local Dealer. Do not

attempt to return your amplifier directly to us without first calling for a Return Authorization Number. Units received without any accompanying Return Authorization Number will be processed more slowly. Additionally, you must include a copy of your purchase receipt from an authorized dealer for consideration of in-warranty service; otherwise repair charges will apply. Units received without a receipt will be held for 30 days, allowing us time to contact you and obtain a copy of the receipt. After 30 days, all units will be returned.

 HIGH POWER AMPLIFIER	 ! DANGER SPEAKER CONNECTOR WITH LIVE DC OUTPUT. DO NOT TOUCH THE SPEAKER OUTPUT WITH THE AMPLIFIER ON I T MUST BE INSTALLED BY PROFESSIONALS.
---	---

#WELIKEITLOUD     

WE
LIKE
IT
LOUD



FOR MORE INFORMATION
PLEASE VISIT
[DS18.COM](https://www.ds18.com)



Documents / Resources

	<p>DS18 GFX Series Monoblock Amplifier [pdf] Owner's Manual GFX-1.4k1, GFX-2.2k1, GFX-3k1, GFX-3k2, GFX-5k.5, GFX-5k1, GFX-5k2, GFX Series Monoblock Amplifier, GFX Series, Monoblock Amplifier, Amplifier, GFX-8k.5, GFX-8k1, GFX-8k2</p>
--	--

References

-  [Official DS18 Pro Audio Store - Speakers, Subwoofers, Amps & More!](#)