

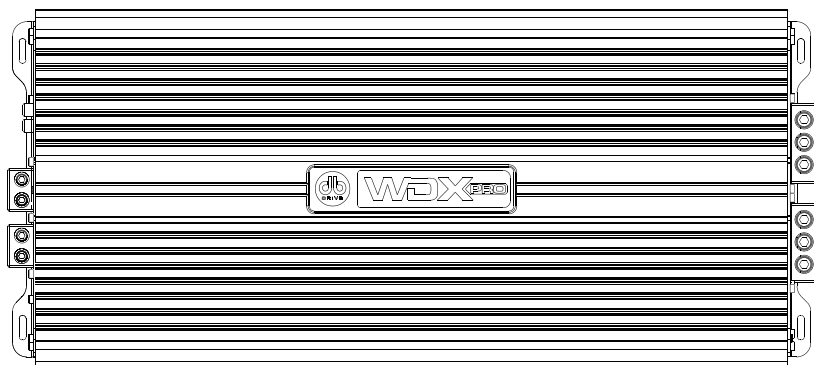


# WDX<sup>TM</sup> PRO

## AMPLIFIERS

**WDX PRO3000.1D**  
**WDX PRO3000.1D/2**  
**WDX PRO5000.1D**  
**WDX PRO5000.1D/2**  
**WDX PRO8000.1D**  
**WDX PRO10000.1D**  
**WDX PRO16000.1D**  
**WDX PRO20000.1D**  
**WDX PRO30000.1D**

**WDX PRO1000.4**  
**WDX PRO2000.4**  
**WDX PRO2500.5**



## User Manual

• Installation Instructions / Owner's Manual •

Due to continuous improvement of the product, the specifications are subject to change without notice.

## Introduction

Congratulations on your purchase of a WDX PRO state-of-the-art amplifier. Your selection of a WDX PRO product indicates a true appreciation of fine musical reproduction. Whether adding to an existing system or including your WDX PRO amplifier in a new system, you are certain to notice immediate performance benefits.

## Product Commitment

DB's engineering professionals harnessed years of expertise, experience and passion, coupled with exhaustive testing and creative design to develop the optimal product and performance for your musical enjoyment. This is our commitment to you. It's what you deserve and have come to expect from DB DRIVE. We appreciate the confidence and look forward to your positive experience.

## Keep Your Sales Receipt

Take this time to attach your sales receipt to the manual and put 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

A power 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 DB Drive retailer. However, if you decide to install it yourself, please carefully read through this manual and take your time to do a quality installation.

## Optimal Product Choice

To get the Maximum performance out of your stereo system, we recommend using 100% authentic DB Drive electronics and DB LINK wiring and accessories. Matching DB Drive amplifiers and speakers with your state-of the art electronics purchase is critical to optimize your system's performance. Wiring is the lifeblood of a system, make sure your audio system has the adequate current and signal transfer it deserves and needs. DB Link has it all, from wiring rolls; speaker power ground, remote to amplifier kits, RCAs, fuse holders, distribution blocks and battery connectors. Insist on getting the best, DB LINK. It's what you deserve to get the optimum performance from your audio system.

## IMPORTANT!

Before making any connections, disconnect the car'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 # \_\_\_\_\_



## 1. WDX PRO AMPLIFIER'S SPECIFICATION

### 1-1. WDX PRO Monoblock Amplifiers

Load	Voltage & THD	WDX PRO3000.1D	WDX PRO3000.1D/2	WDX PRO5000.1D	WDX PRO5000.1D/2
4ohm	14.4 volts & 1%	1 X 750 Watts	1 X 1500 Watts	1 X 1250 Watts	1 X 1250 Watts
2ohm	14.4 volts & 1%	1 X 1500 Watts	1 X 3000 Watts	1 X 2500 Watts	1 X 5000 Watts
1ohm	14.4 volts & 1%	1 X 3000 Watts	N/A	1 X 5000 Watts	N/A
Frequency Response		35Hz ~ 70KHz	35Hz ~ 70KHz	35Hz ~ 70KHz	35Hz ~ 70KHz
Signal to Noise Ratio		95dB	95dB	95dB	95dB
Damping Factor		≥200	≥200	≥200	≥200

Load	Voltage & THD	WDX PRO8000.1D	WDX PRO10000.1D	WDX PRO16000.1D	WDX PRO20000.1D
4ohm	14.4 volts & 1%	1 X 2000 Watts	1 X 2500 Watts	1 X 4000 Watts	1 X 5000 Watts
2ohm	14.4 volts & 1%	1 X 4000 Watts	1 X 5000 Watts	1 X 8000 Watts	1 X 10000 Watts
1ohm	14.4 volts & 1%	1 X 8000 Watts	1 x 10,000 Watts	1 X 16000 Watts	1 X 20000 Watts
Frequency Response		35Hz ~ 70KHz	10Hz ~ 25KHz	10Hz ~ 25KHz	10Hz ~ 25KHz
Signal to Noise Ratio		92dB	92dB	92dB	92dB
Damping Factor		≥200	≥200	≥200	≥200

Load	Voltage & THD	WDX PRO30000.1D
4ohm	14.4 volts & 1%	1 X 7500 Watts
2ohm	14.4 volts & 1%	1 X 15,000 Watts
1ohm	14.4 volts & 1%	1 X 30,000 Watts
Frequency Response		10Hz ~ 25KHz
Signal to Noise Ratio		92dB
Damping Factor		≥200

Working Voltage	12-15 Volts
Low Level Input	6V - 0.2mV
Variable Bass Boost Frequency	35Hz - 70Hz
Bass Boost EQ Gain	0dB - 12dB
High Pass Filter Variable	15Hz - 8KHz
Low Pass Filter Variable	40Hz - 20 KHz
Minimum working Impedance	1ohm

\*WDX PRO Mono Amplifiers are not recommended to run under 1 ohm. Running them below recommended value could cause serious damage to internal components and would void warranty.



## 1-2. WDX PRO 4 Channel Class D Amplifiers

Load	Voltage & THD	WDX PRO1000.4	WDX PRO2000.4
4 ohm	14.4 volts & 1%	4 X 75 Watts	4 X 125 Watts
2 ohm	14.4 volts & 1%	4 X 150 Watts	4 X 250 Watts
1 ohm	14.4 volts & 1%	4 X 300 Watts	4 X 500 Watts
4 ohm bridged	14.4 volts & 1%	2 X 1500 Watts	2 X 1000 Watts
Frequency Response		10Hz - 25KHz	10Hz - 25KHz
Signal to Noise Ratio		96dB	96dB
Damping Factor		≥200	≥200

Working Voltage	12-15 Volts
Low Level Input	6V - 0.2mV
Ch 1/2 High Pass Filter Variable	15 Hz - 6KHz
Ch 1/2 Low Pass Filter Variable	50Hz - 2KHz
Ch 3/4 High Pass Filter Variable	15Hz - 6KHz
Ch 3/4 Low Pass Filter Variable	50Hz - 2KHz
Minimum working Impedance	1 ohm stereo / 2 Ohms bridged

\*WDX PRO 4 Channel Amplifiers are not recommended to run under 2 ohm stereo or 4 ohm mono. Running them below recommended value could cause serious damage to internal components and would void warranty.

## 1-3. WDX PRO 5 Channel Class D Amplifier

Load	Voltage & THD	WDX PRO2500.5
4 ohm	14.4 volts & 1%	4 X 100 Watts
2 ohm	14.4 volts & 1%	4 X 200 Watts
1 ohm	14.4 volts & 1%	4 X 300 Watts
(5th Ch) @ 1 ohm	14.4 volts & 1%	1 X 1000 Watts
Frequency Response		10Hz - 25KHz
Signal to Noise Ratio		96dB
Damping Factor		≥200

Working Voltage	12-15 Volts
ACT - Variable Crossover	HP/BP/LP
Low Level Input	6V - 0.2mV
Ch 1/2 High Pass Filter Variable	15Hz - 2KHz
Ch 1/2 Low Pass Filter Variable	50Hz - 2KHz
Ch 3/4 High Pass Filter Variable	15Hz - 2KHz
Ch 3/4 Low Pass Filter Variable	50Hz - 2KHz
Minimum working Impedance	1 ohm

\*WDX PRO 5 Channel Amplifiers are not recommended to run under 2 ohm stereo or 4 ohm mono. Running them below recommended value could cause serious damage to internal components and would void warranty.

2. WDX PRO AMPLIFIER’S CONTROL & CONNECTION.

2-1. WDX PRO Monoblock Amplifiers



**AUDIO GRADE TIFFANY RCA CONNECTORS INPUT**  
Connect RCA output cables from the headunit to WDX PRO amplifier's RCA input.  
**OUTPUT**  
Is used when connecting multiple amplifiers to the same RCA signal.



**AUDIO PROTECTION CIRCUIT POWER & PROTECTION INDICATOR**  
Power LED - GREEN-lit shows normal operation  
Protect LED - RED-lit shows general malfunction, faulty connection or thermal protection



**SIGNAL EVALUATION STATUS INDICATOR.**  
BLUE-lit LED shows clipping peaks of audio signal

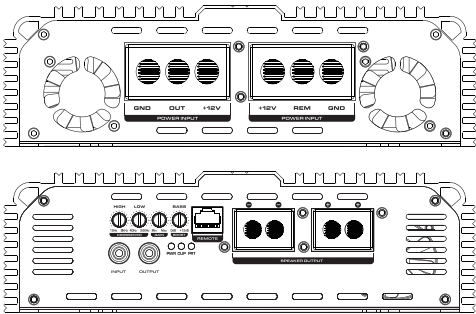
**GAIN ( 6V ~ 0.2V )**  
Matching the output voltage of the head unit's RCA line-outs to WDX PRO amplifiers' input section.



**ADAPTIVE CROSSOVER TECHNOLOGY LOW PASS FILTER**  
( 40Hz ~ 20KHz @ 24dB/Oct )  
Controls the low pass point for the speaker outputs.

**BASS BOOST ( 0~12dB @ 45Hz )**  
It boosts the bass 0 ~ 12dB

**PHASE ( 0 ~ 180 degree )**  
It controls phase from 0 ~ 180 degree



**REMOTE LEVEL CONTROL PORT**  
This port is for connecting remote gain level control.

**+12V ( POWER CONNECTION )**  
This must be connected to the fuse positive terminal ( +12V ) of the battery. \*  
*Refer to chart below for recommended gauge values.*

**GND ( GROUND CONNECTION )**  
It is connected to the Negative or ground cables of the Vehicle. \**Refer to chart below for recommended gauge values.*

MODEL	GAUGE	MODEL	GAUGE
WDX PRO3000.1D	4	WDX PRO10000.1D	DUAL 0
WDX PRO3000.1D/2	4	WDX PRO16000.1D	DUAL 0
WDX PRO5000.1D	4	WDX PRO20000.1D	DUAL 0
WDX PRO5000.1D/2	DUAL 0	WDX PRO30000.1D	QUAD 4
WDX PRO8000.1D	DUAL 0	WDX PRO2500.5	0

**REM ( REMOTE )**  
It is connected to switched +12V with a trigger cable coming from the head unit

**SPEAKER OUTPUTS**  
it connects amplifier's terminals to subwoofer speakers.  
Minimum speaker wire is 12 gauge.  
Minimum impedance is 1 ohm for single unit.

**FUSES**  
WDX PRO amplifiers are externally fused. Protect the amplifiers power supply from any shorts by externally fusing your amplifier. Any use of overvalued fuses will void all warranty.  
*\*Refer to page 6 for recommended fuse values.*

2-2. WDX PRO Channel Class D Amplifiers



**AUDIO GRADE TIFFANY RCA CONNECTORS INPUT**

Connect the RCA output cables from the headunit to WDX PRO amplifiers' RCA Input. **OUTPUT** Is used when connecting multiple amplifier to the same RCA signal.

**MODE ( CH2 / CH 4 )**  
Selectable input setting.



**AUDIO PROTECTION CIRCUIT POWER & PROTECTION INDICATOR**  
Power LED - GREEN-lit shows normal operation  
Protect LED - RED-lit shows general malfunction, faulty connection or thermal protection.



**SIGNAL EVALUATION STATUS INDICATOR.**  
BLUE-lit LED shows clipping peaks of audio signal

**GAIN ( 6V ~ 0.2V )**  
The gain control matches the voltage of the head unit's RCA line-outs to WDX PRO amplifiers' input section.



**ADAPTIVE CROSSOVER TECHNOLOGY CROSSOVER SELECTOR**  
Selectable @ HP-LP  
Band pass function ready.

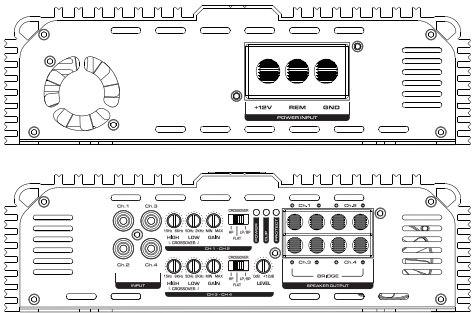
*\*Refer to section 2-3C for more details.*

**HIGH PASS FILTER VARIABLE**  
15Hz - 6KHz  
Controls the high pass point for the speaker outputs.

*\*Refer to section 2-3A for more details.*

**LOW PASS FILTER**  
50Hz - 2KHz  
Controls the low pass x-over point for the speaker outputs.

*\*Refer to section 2-3B for more details.*



**REMOTE LEVEL CONTROL PORT**  
This port is for connecting the remote gain level control.

**GND ( GROUND CONNECTION )**  
It is connected to the Negative or ground cables of the Vehicle. *Refer to chart below for recommended gauge values.*

MODEL	GAUGE
WDX PRO1000.4	4
WDX PRO2000.4	4

**REM ( REMOTE )**  
Connected to switched +12V remote cable from the head unit.

**+12V ( POWER CONNECTION )**  
This must be connected to a fused positive terminal ( +12V ) of the battery.

*Refer to chart above for recommended gauge values.*

**SPEAKER OUTPUTS**  
The minimum recommended speaker wire is 12 gauge. The minimum impedance is 2 ohm stereo or 4 ohm mono.

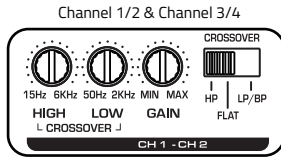
**FUSES**  
WDX PRO amplifiers are externally fused. Protect the amplifiers power supply from any shorts by externally fusing your amplifier. Any use of overvalued fuses will void all warranty.

*\*Refer to page 7 for recommended fuse values.*

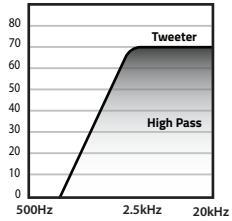


## 2-3. ADAPTIVE CROSSOVER TECHNOLOGY

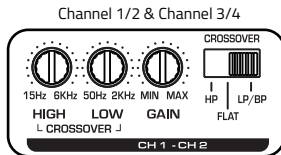
### A) Settings for high-frequency speakers



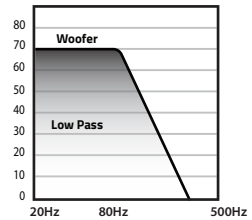
Crossover Selection to HP position  
Variable Crossover HP  
15Hz - 6KHz



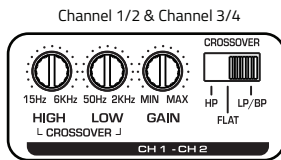
### B) Settings for subwoofers



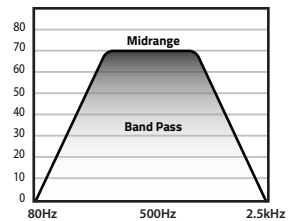
Crossover Selection to LP/BP position  
Variable Crossover LP  
50Hz - 2KHz



### C) Settings for midrange speakers



Crossover Selection to BP position



Variable Crossover HP  
15Hz - 6KHz

Variable Crossover LP  
50Hz - 2KHz

Variable Crossover BP  
15Hz - 2KHz

### 3. INSTALLATION

In case you install the WDX PRO amplifiers by yourself, please read owner's manual very carefully. Before you start your installation, please take all steps into consideration, or you can have a DB Drive or DB Research's authorized dealer check the installation and help set your car audio systems.

#### 3-1. MOUNTING PREPARATION

Disconnect the negative (–) battery cable before mounting your amplifier or making any connections. Check the battery and alternator ground (–) connections. Make sure they are properly connected and Free of corrosion before selecting a mounting location. Please also take into consideration cooling efficiency and safety.

#### 3-2. MOUNTING PREPARATION



##### COLLECTIVE HEAT MANAGEMENT

The WDX PRO amplifier uses a specially designed heat radiation heatsink to avoid excessive heat from the WDX PRO circuitry. But for better heat disipitation, it is recommend- ed to find a mounting location where you can install you WDX PRO amplifier where the heatsink fins have better air flow. For safety, you have to find a dry well ventilated location. Before mounting, be sure the location and drilling of pilot cables will not present a hazard to any cables, control cables, fuel lines, fuel tanks, hydraulic lines or other vehicle systems or components.

#### 3-3. +12V, GND, REM CONNECTION

##### A) 12V ( POWER CONNECTION )

Before mounting WDX PRO amplifiers, disconnect the negative (– ) wire from the battery to protect any accidental damage to the amplifier and the audio system. Then, connect the power cables to power terminal labeled as + 12V. WDX PRO amplifiers are not equipped with fuses so you need to install external fuses.

MODEL	FUSE
WDX PRO1000.4	150A
WDX PRO2000.4	200A
WDX PRO3000.1D	250A
WDX PRO3000.1D/2	250A
WDX PRO5000.1D	450A
WDX PRO5000.1D/2	450A

MODEL	FUSE
WDX PRO8000.1D	680A
WDX PRO10000.1D	800A
WDX PRO16000.1D	1200A
WDX PRO20000.1D	1600A
WDX PRO30000.1D	2500A
WDX PRO2500.5	200A

##### RECOMMENDED EXTERNAL FUSE VALUES

In order to install external fuses, connect one end of the fuse holder to the power cable and the other end of fuse holder within 18in of the positive battery terminal, using the same cable gauge. This fuse location will protect the system and the vehicle against the possibility of a short circuit in the power cable. Be sure to use fuses and fuse holder adequate for the current draw application.

##### B) GND ( GROUND CONNECTION )

Locate a secure grounding connection as close to the WDX PRO amplifiers 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 gauge cable as the power cable to the grounding point. Run the one end of the cable to the grounding point.

Run the other end of the cable to the mounting location.

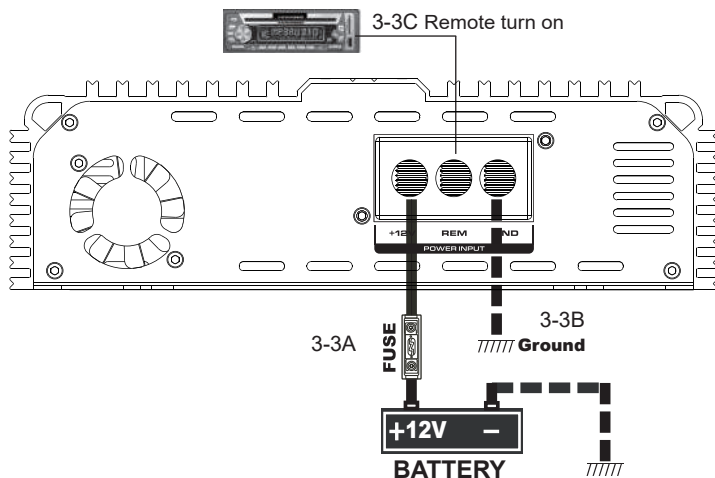
Connect the ground cable to the screw terminal labeled as GND.



### C) REM ( REMOTE CONNECTION )

Run a remote turn on cable from the head units remote switched + 12V output.

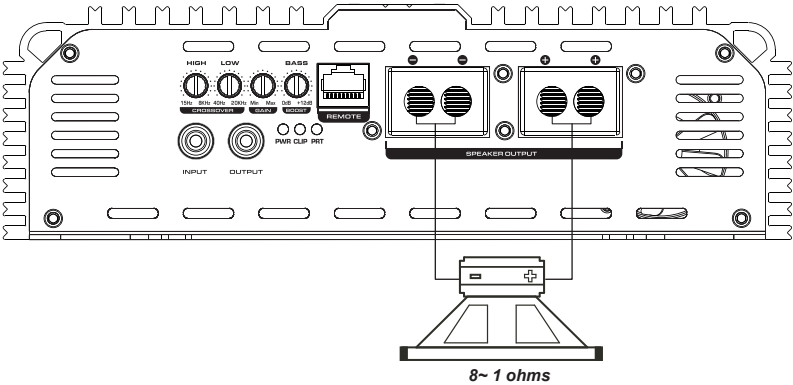
### 3-3. WDX PRO +12V, GROUND, REMOTE CONNECTION DIAGRAM



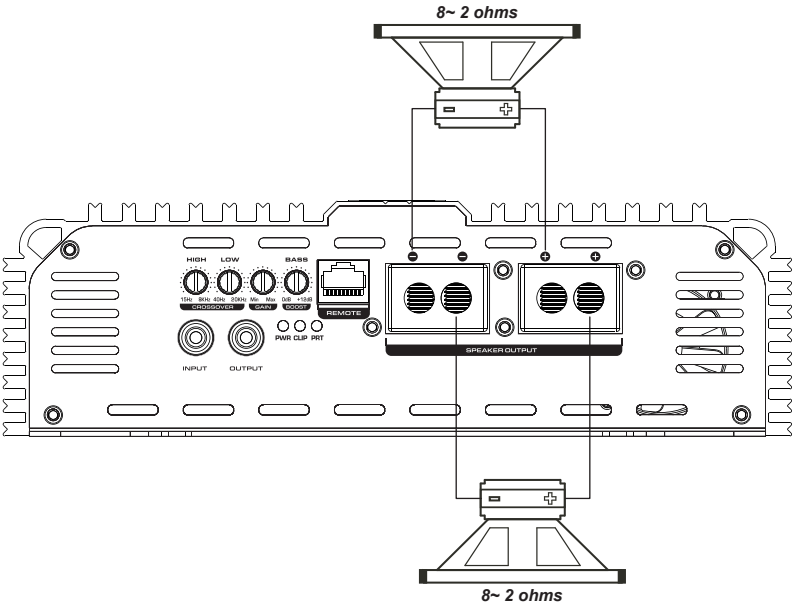
### 3-4. SPEAKER CONNECTION

DB Drive recommends to use a minimum of 12 gauge speaker connecting cables. Run 12 gauge speaker connecting cables from your speakers to the WDX PRO amplifier's mounting location. Keep speaker cables away from power cables and WDX PRO amplifier's input cables. Use grommets anywhere the cables have to pass through the holes in the metal frame or sheet metal. Connect to the speakers according to the type of the terminals on each speaker. Strip 3/8" of insulation from the end of each cable and twist the cables strands together tightly. Make sure there are no stray strands that might touch other cables or terminals causing a short. Crimp spade lugs over the cable ends or tin the ends with solder to provide a secure termination. Connect the cable ends to WDX PRO amplifiers as shown on speaker system diagrams.

3-4A. WDX PRO MONOBLOCK AMPLIFIERS' SPEAKER CONNECTION DIAGRAM 1.



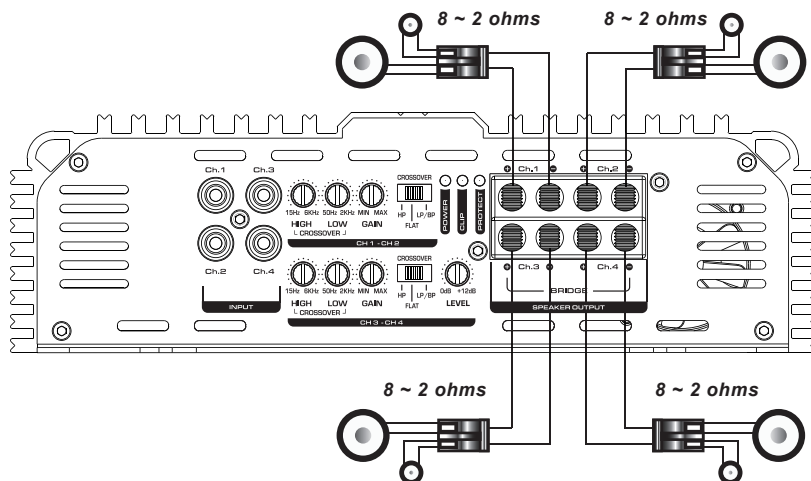
3-4B. WDX PRO MONOBLOCK AMPLIFIERS' SPEAKER CONNECTION DIAGRAM 2.



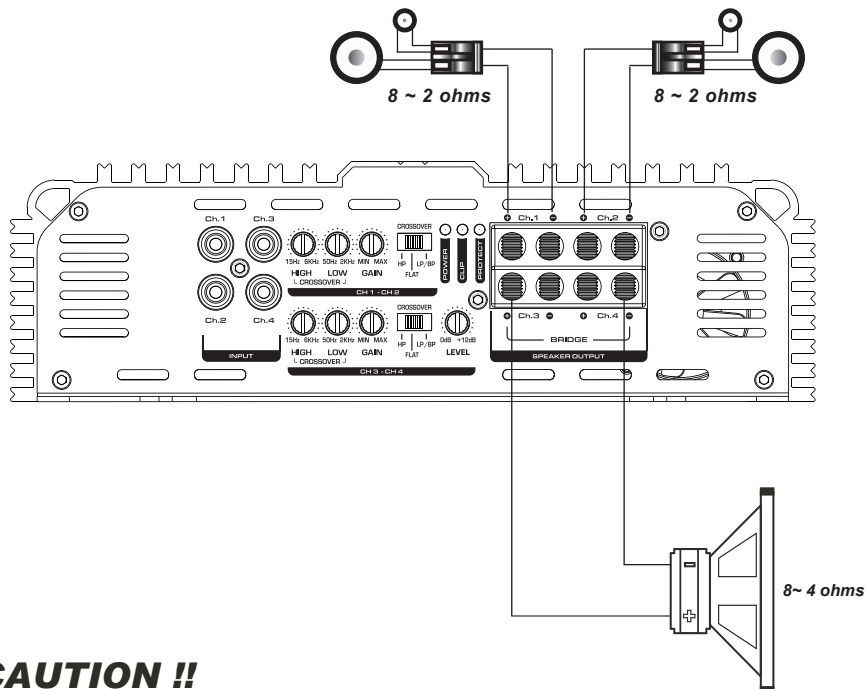
**⚠ CAUTION !!**

WDX PRO3000.1D, WDX PRO5000.1D, WDX PRO8000.1D, WDX PRO10000.1D  
WDX PRO16000.1D, WDX PRO20000.1D, WDX PRO30000.1D  
Amplifiers minimum impedance is 1 ohms.

### 3-4C. WDX PRO 4 CHANNEL AMPLIFIERS' SPEAKER CONNECTION DIAGRAM 1.



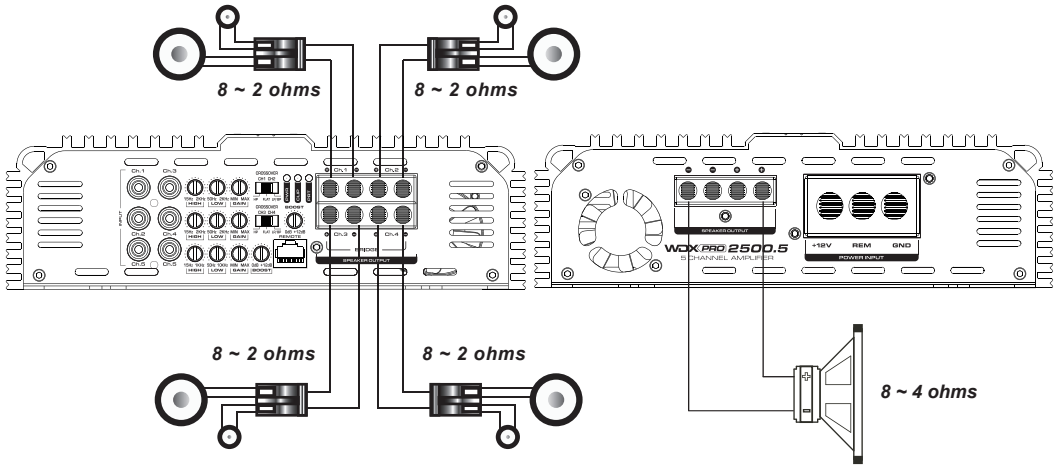
### 3-4D. WDX PRO 4 CHANNEL AMPLIFIERS' SPEAKER CONNECTION DIAGRAM 2.



**CAUTION !!**

WDX PRO1000.4, WDX PRO2000.4 Amplifiers' minimum impedance is 2 ohms stereo or 4 ohm mono.

### 3-4E. WDX PRO 5 CHANNEL AMPLIFIERS' SPEAKER CONNECTION DIAGRAM 1.



## 4. TROUBLE SHOOTING

### NO SOUND ( NO OUTPUT )

- 1) Please check all connections, cables' routing, short and voltage on the WDX PRO amplifiers and headunit.
- 2) Please check external fuses. If any are blown, replace with new one.
- 3) Please check whether speakers work well. You can test speakers by connecting to another amplifier.

### PROTECTION

- 1) Please check overload, overheat ( thermal ), short, voltage and DC offset.
- 2) Minimum working impedance for 4 channel amplifiers is 2 ohm stereo or 4 ohm mono  
Minimum working impedance for all Class D mono amplifiers is 1 ohm for a single unit.
- 3) If the WDX PRO amplifier shuts down due to overheat, Reset by turning off the remote input and allow time to cool down.  
Please make sure there are no airflow obstructions around WDX PRO amplifiers to prevent thermal protection.
- 4) **WDX PRO Amplifiers** have voltage operation of 12V~15V  
If Voltage is out of range, WDX PRO amplifiers will be protected.

### POOR BASS RESPONSE

- 1) Please check speaker polarities.

### WHINING NOISE

- 1) Engine noise is caused by poor grounding of WDX PRO amplifiers, headunit, other components, battery or alternator, so please check all grounding connections.

# **Limited Manufacturer's Defect Warranty and Repair Service**

DB Drive warrants all WDX PRO amplifiers per the following terms and conditions.

## **Manufacturer's Defect Warranty:**

The warranty period begins on the original purchase date from an authorized DB DRIVE WDX PRO dealer for the respective period specified below. DB DRIVE agrees to repair or replace, at our discretion and expense, all DB DRIVE WDX PRO products that are defective in material and/ or workmanship for one year from the original date of purchase. This warranty is non-transferable and applies only to the original purchaser of the product. A valid receipt of purchase must be sent in with the product to be eligible for warranty. In addition to the Manufacturer's Defect Warranty, DB DRIVE offers Repair Service or Up-Trade on qualifying products. Any product requiring a warranty claim must be pre-qualified through our RA department before you send it in. No product will be accepted for warranty without a pre-authorized RA number.

To obtain warranty information and instructions:

Contact: [RMADept@DBDRIVE.net](mailto:RMADept@DBDRIVE.net) or [support@dbdrive.net](mailto:support@dbdrive.net).

## **Warranty Period:**

- 1 Year

## **Repair Service:**

If your DB DRIVE WDX PRO amplifier is out of warranty or the damage done isn't covered under the manufacturer's defect warranty, we can most likely provide a repair service for it. If we can't service your product due to unreparable damage, we will extend a discount on a new equivalent product.

# Limited Manufacturer's Defect Warranty and Repair Service

## Serviced Product:

DB DRIVE technicians will make all in-house service repairs. Amplifiers serviced under warranty will maintain any remaining warranty period. All out-of-warranty serviced amplifiers will be tested and guaranteed to be in 100% working order, to the best of our knowledge, in addition, a video of the working amplifier will be emailed to the customer before it leaves our possession. Amplifiers serviced as out of warranty will have a 30-day Service Warranty on repairs made. Failures after the serviced products return, not directly related to the made repairs will not be covered under the Service Warranty.

## Warranty Exclusions

DB DRIVE WDX PRO- The Manufacturer's defect Warranty does not apply to the following:

1. Blown speaker or power supply outputs in amplifiers due to overdriving or undervoltage.
2. Cosmetic damage of any kind.
3. Damage caused by accident, or improper installation, which includes improper use or lack of battery supply or enhanced charging system.
4. Charging system not using 100% pure OFC Copper \*(pictures of the charging system will be required for warranty consideration)
5. Improper setup of external audio devices such as bass enhancers or external equalizers that could overdrive and clip the amplifier.
6. Amplifiers with serial numbers defaced, altered, or removed.
7. Amplifiers that have been altered or repaired by anyone other than DB DRIVE.
8. Amplifiers sold outside the USA. \* (For amplifiers sold outside of the USA contact your original dealer for warranty information)
9. Amplifiers shipped to DB DRIVE for service that has shipping damage.



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Designed and Engineered in the U.S.A

