



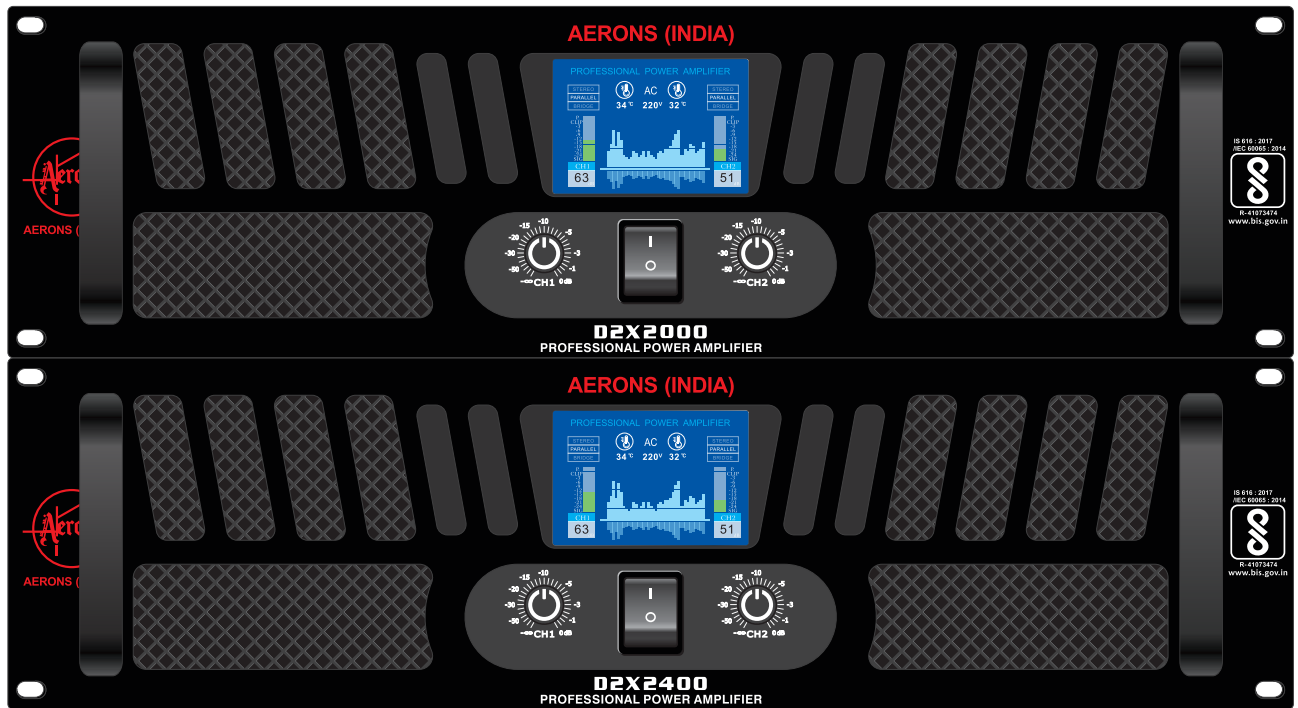
AERONS (INDIA)

D2X SERIES

Professional Power Amplifier

USER MANUAL

Pure Power, Perfect Clarity



D2X2000 / D2X2400

www.aeronsindia.com

Important Safety Precautions & Explanation of Symbols

- 1- Read these instructions.
- 2- Keep these instructions.
- 3- Heed all warnings.
- 4- Follow all instructions.
- 5- **WARNING:** To prevent fire or electric shock, do not expose this equipment to rain or moisture. Do not use this apparatus near water.
- 6- Clean only with a dry cloth.
- 7- Do not block any ventilation openings.
- 8- Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
- 9- Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding plug has two blades and a grounding prong. The wide blade or third prong are provided for your safety. If the provided plug does not fit your outlet, consult an electrician for the replacement of the obsolete outlet.
- 10- Protect the power cord from being walked on or pinched, particularly plugs, convenience receptacles, and the point where they exit from the apparatus.
- 11- Unplug the apparatus during lightning storms or when unused for long periods of time.
- 12- Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.



The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in this manual.



The lightning flashes printed next to the OUTPUT terminals of the amplifier are intended to alert the user to the risk of hazardous energy. Output connectors that could pose a risk are marked with the lightning flash. Do not touch output terminals while amplifier power is on. Make all connections with amplifier turned off.



The lightning flash with arrowhead symbol within an equilateral triangle is intended to alert the user to the presence of uninsulated "dangerous" voltage within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to humans.



CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE THE COVER. NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED PERSONNEL.



WARNING: To prevent fire or electric shock, do not expose this equipment to rain or moisture.

PREFACE

Thank you for purchasing our professional audio equipment. Please read the manual carefully before using the product. It will provide you with the correct guidance and help ensure the equipment operates normally and has an extended lifespan. All our products come with a one-year quality warranty. If any product is found to have a quality defect within one year, we will be responsible for repairing or replacing it.

We are committed to developing our professional audio equipment with advanced technology, high performance, and competitive pricing. We offer a range of models to meet various needs, from high-end to budget options, suitable for different occasions. During our research and development process, we strive to infuse cutting-edge technology into every product to ensure high quality.

We adhere to the ISO Quality Guarantee System to ensure each product meets strict professional standards and receives excellent after-sales service. Our goal is to ensure that our customers truly benefit from our high-tech, high-performance, and competitively priced products, as well as our reliable after-sales services and technical support. We are dedicated to rewarding our customers for their support by ensuring they feel confident and satisfied with their purchase of our professional audio equipment.

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INTRODUCTION

This series of amplifiers hankers for higher speed, a bigger damping factor, more rich functions, and an advanced protection system. It is designed with an excellent cooling system, compact and stable mechanical aseismic capabilities, SMT technology, as well as precise components. This series of amplifiers can handle stereo 2 ohm loads, bridge 4 ohm loads, and adapt to drive line array speaker systems. They can be used in live concerts, discos, nightclubs, and other high-energy environments.

FEATURES

Offering top power, superior performance, and comprehensive professional features in a roadworthy, compact chassis, the **D2X SERIES** is ideal for the most demanding sound reinforcement installations and touring applications. This manual covers the operating instructions for all **D2X SERIES** professional power amplifiers. The operation and functions of these units are consistent, except where noted.

Key Operating Features:

- Colored Digital Display for Easy Monitoring and Control
- Precision Detent Volume Controls
- Parallel Balanced XLR Inputs
- Versatile Operating Modes: Stereo (dual channel), parallel input, or bridged mono, selectable via a switch
- Independent User-Defeatable Clip Limiters (Compressor)
- Three Selectable Input Sensitivities
- Ground Lift Switch
- Binding Post (Banana Plug) and Speakon Outputs

Design and Construction:

- Durable, Roadworthy Steel Chassis (3U)
- Modular Construction for Ease of Servicing

Comprehensive Safety and Reliability Features:

- Dual Speed Cooling Fans
- Soft Start Turn-On for Noise-Free Operation
- Independent DC and Thermal Overload Protection on Each Channel
- Short Circuit and Speaker Protection
- Built-In Current Limiter

The **D2X SERIES** is engineered to endure the rigors of touring while delivering the reliability and performance essential for professional audio applications.

INSTALLATION INSTRUCTIONS

This manual contains essential information for the proper and safe operation of your AERONS amplifier. Please read it thoroughly before using your amplifier. If you have any questions, please contact your AERONS dealer.

Unpacking Instructions

Carefully open the shipping carton and inspect the contents for any signs of damage. Each AERONS D2X Series amplifier is rigorously tested and inspected before leaving the factory to ensure it arrives in perfect condition. If you find any damage, please notify the shipping company immediately. Retain the carton and all packing materials for the shipping company's inspection.

Package Contents

Owner's manual
D2X Series amplifier
AC power cord

Rack Mounting Guidelines

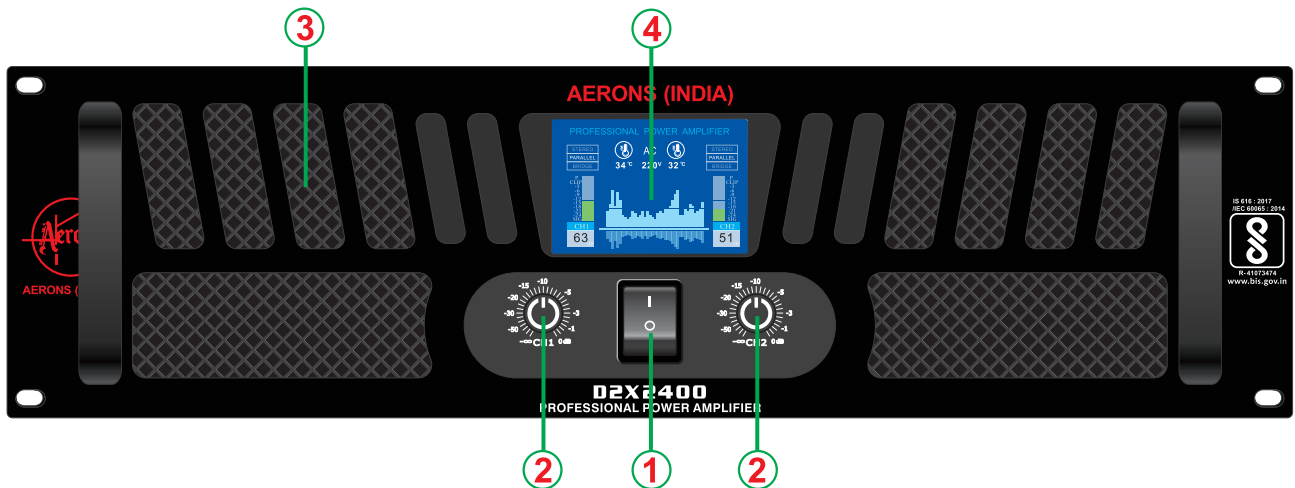
The dB Series amplifiers are engineered for standard 19" rack mounting as well as "stack" mounting without a cabinet. Use four screws and washers to secure the amplifier to the front rack rails. For enhanced stability, especially in mobile setups where the amplifiers are subjected to vibrations, it is recommended to provide additional support at the rear.

Cooling Requirements

Proper ventilation is crucial for optimal performance and longevity of the amplifier. Ensure that the air vents at the back and front of the amplifier remain unobstructed. Avoid installing the amplifier in locations exposed to direct sunlight or near heat-generating appliances such as radiators. Excessive heat can damage the cabinet and internal components. Installing the amplifier in damp or dusty environments may lead to malfunctions or accidents. If the amplifier is installed in a rack, ensure the rear door is fully open to facilitate airflow. Regularly remove internal dust using compressed air through the external ventilation holes to maintain efficient cooling.

By following these guidelines, you can ensure the reliable operation and extended lifespan of your AERONS D2X Series amplifier.

FRONT PANEL FEATURES



1. POWER SWITCH

To turn the unit ON or OFF, press the upper or lower portion of this button. Before turning on the amplifier, ensure all connections are secure and the level controls are turned down. It is normal to experience momentary muting when the amplifier is turned on or off. (Caution: Always turn on your power amplifier last, after all other connected equipment, and always turn off your power amplifier before your other connected equipment.)

2. LEVEL CONTROLS

These controls adjust the signal level entering each channel. The actual voltage attenuation of the amplifier is displayed in dB. Turn these controls counterclockwise if the Limit LEDs illuminate steadily, indicating an excessively strong input signal.

3. AIR VENT

Allows airflow from front to back for cooling.

4. LED SCREEN DISPLAY

A. Working Mode

Displays the current working mode: STEREO mode, PARALLEL mode, or BRIDGE mode.

B. Current Voltage

Indicates the current operating voltage.

C. Temperature Display

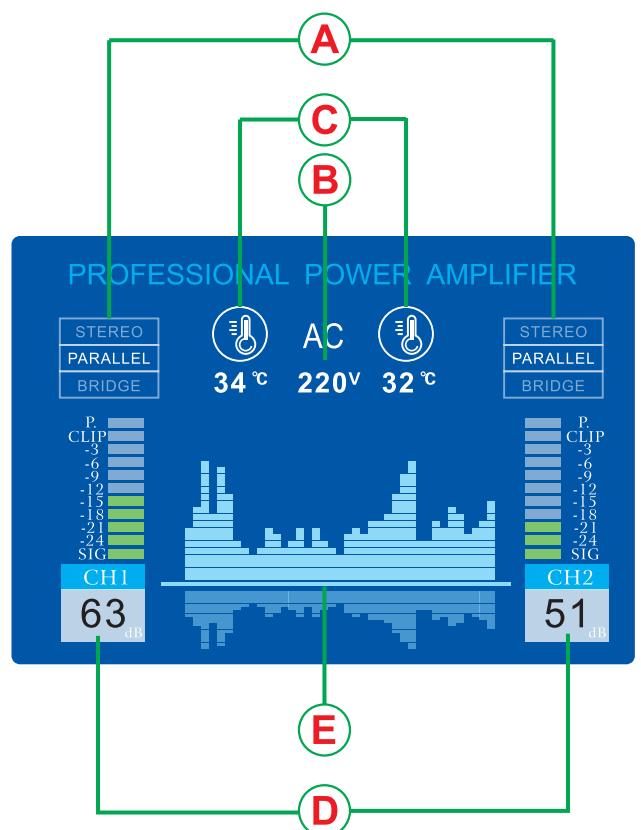
Shows the temperature of the unit.

D. Volume

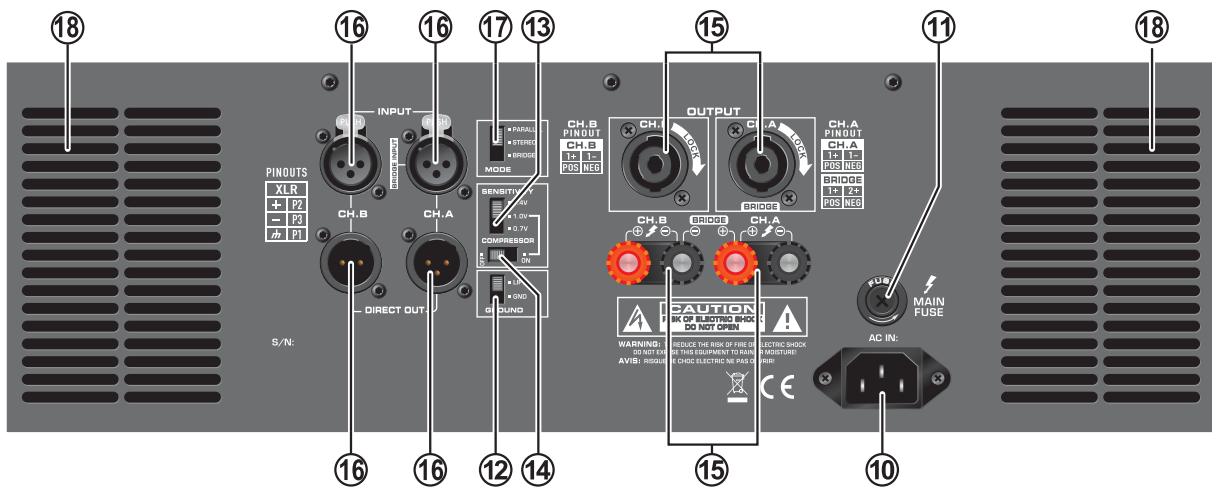
Displays the current volume level.

E. Spectrum Display

Visual representation of the audio spectrum for each channel (CH1 and Ch2).



BACK PANEL FEATURES



1. POWER CONNECTOR

The cord connector is used to connect the AC power source to your power amplifier. Caution: Always operate the unit with the AC ground wire connected to the electrical system ground.

2. FUSE

Fuse holders for 20A/250V fuses. If these fuses continuously blow, shut off the unit and have it serviced by qualified personnel.

3. GROUND LIFT SWITCH

Use this switch to disconnect the chassis from the ground if necessary to eliminate hum caused by ground loops.

4. SENSITIVITY SELECTOR SWITCH

The D2X Series amplifiers offer 3 sensitivity levels: 0.7V, 1.0V, and 1.4V.

5. COMPRESSOR SELECTOR SWITCH

The D2X Series amplifiers offer ON or OFF for the compressor. The compressor only functions when the 1V sensitivity is selected.

6. L/R CHANNEL OUTPUT CONNECTORS

Connections are described on the rear panel and in the "Connections" section on page 5 of this manual.

7. BALANCED INPUT CONNECTORS (XLR)

The XLR connector is compatible with balanced inputs. Since the XLR connector is internally wired in parallel, you can parallel this unit with another amplifier by using the XLR to output the signal to the input connectors of the other amplifier. Balanced connections are recommended as they are less prone to AC hum. For long cable runs, a source output impedance of less than 600 ohms is needed to avoid signal loss. For short cable runs, an unbalanced signal input should be suitable. For stereo (two-channel) operation, use the inputs for both CH 1+CH 2; for parallel or bridged mono operation, use only CH-1 input.

8. Mode Selector Switch

The D2X Series amplifiers offer 3 modes of operation: PARALLEL, STEREO, and BRIDGED. Slide the switch to one of the three positions to suit your application.

Parallel (Mono) Input:

This mode allows both channels to operate in parallel with the same signal without requiring a Y-cord. In this mode, the inputs for both channels are internally connected, so you only need to feed a signal into one of the channels. This still allows independent level control of each channel. It also enables easy "daisy-chaining" with other amps by using the other channel input connectors.

(Note: Do not select this "Parallel" mode when feeding the amplifier with 2 separate signals.)

(Note: Do not use both unbalanced and balanced cables in the same setup as that can unbalance all the connections when daisy-chaining, resulting in hum.)

Stereo Input:

This is the most commonly used mode and allows independent control of 2 separate signals, such as stereo playback, main and monitor live mixes, and bi-amp operation (highs in one channel and lows in the other).

Bridged Mono:

This mode combines the power of both channels to drive a single speaker. In this mode, the amp produces 4 times the peak power and 3 times the sustained power into a 4 or 8-ohm speaker, where each channel can deliver separately in stereo or parallel mode.

(Caution: In this mode, the amplifier can deliver high power into a speaker. Ensure that the speaker, connectors, and wiring can handle this output. For prolonged use, make sure that you do not overload the amplifier.) Connect the input signal to CH-1 input for bridged mono operation.

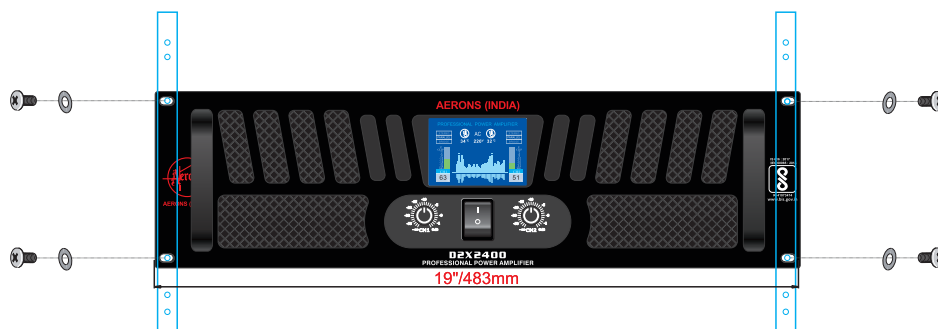
9. Ventilation Holes

The fan speed is varied automatically to maintain the proper internal operating temperature.

RACK MOUNTING

Use four screws and washers to securely mount the amplifier to equipment rack rails. For non-rack applications, affix the self-adhesive rubber feet to the bottom.

For portable or mobile setups, especially where the rack assembly may move, support the rear of the amplifier for stability. Optional rack handles provide convenient finger grips at each end, facilitating easier lifting and installation into the rack.



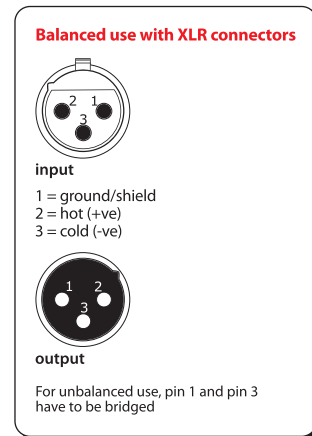
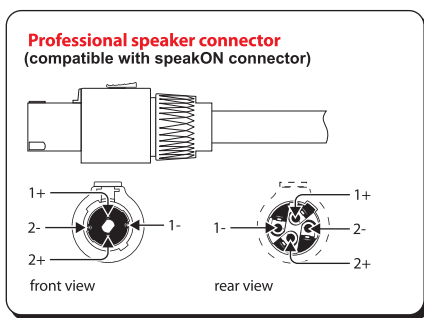
CONNECTIONS

To install your amplifier into a sound system, follow these steps:

1. Turn Off the Amplifier: Ensure the amplifier power switch is turned off before making any connections.
2. Select Operation Mode: The dB Series amplifiers can operate in three modes:
 - Stereo
 - Bridged-Mono
 - Parallel Mono

Refer to the wiring diagrams provided in your amplifier's manual for the specific speaker connections needed for your chosen mode.

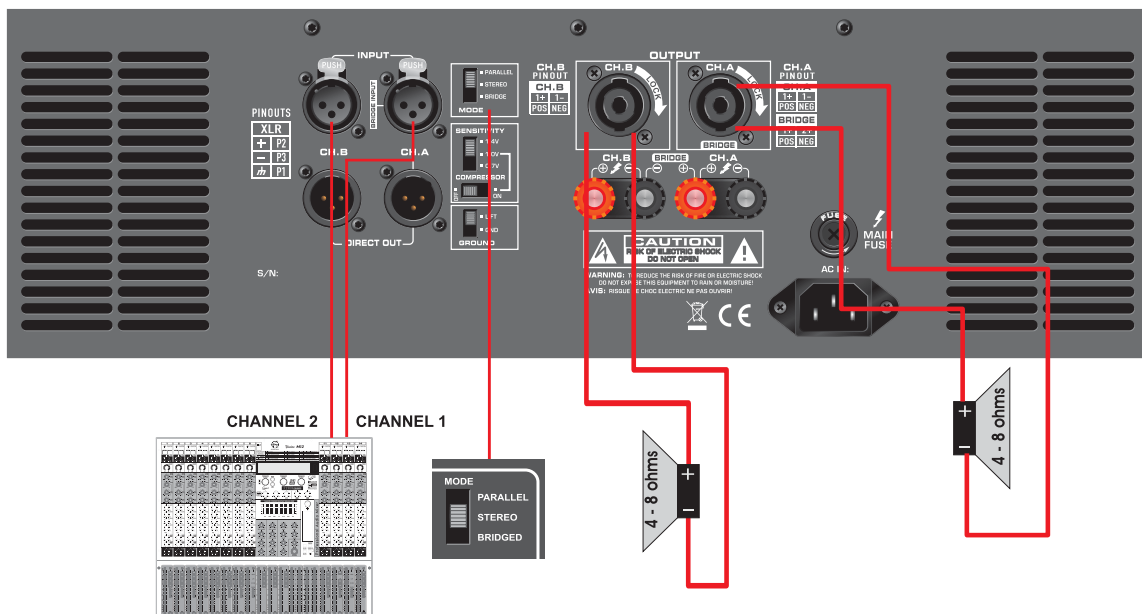
Note: AERONS Systems assumes no liability for damaged speakers resulting from improper wiring, careless amplifier use, or overpowering.



STEREO (TWO CHANNEL) MODE

To switch your amplifier to stereo mode:

1. Turn off the amplifier.
 2. Slide the MODE SELECTOR SWITCH to the center "STEREO" position.
 3. Properly connect the input/output wiring as shown in the amplifier's manual for stereo mode.
- This ensures proper setup and optimal performance in stereo mode.



PARALLEL (MONO) MODE

To switch your amplifier to parallel-mono mode:

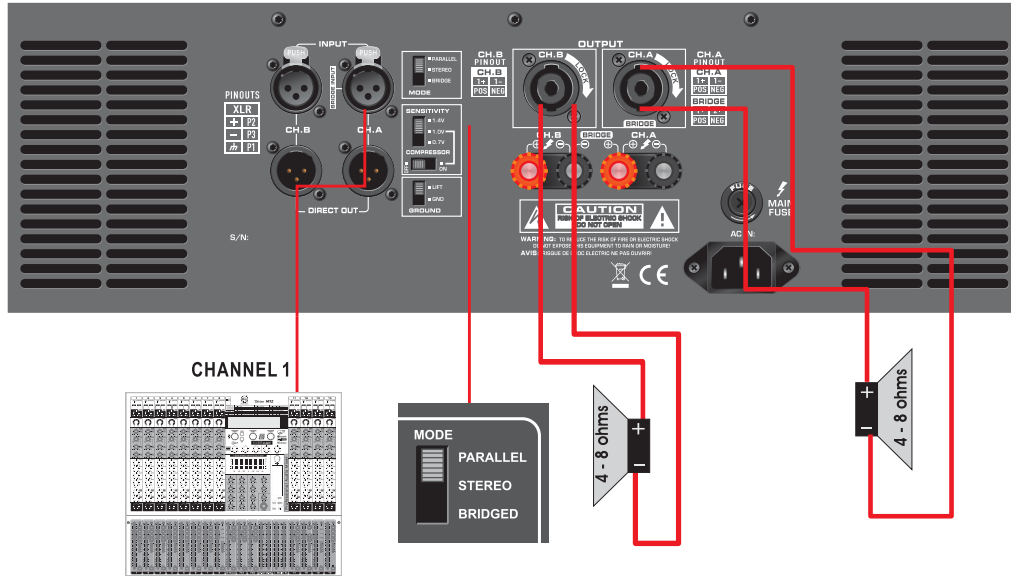
1. Turn Off the Amplifier.
2. Slide the MODE SELECTOR SWITCH to up "PARALLEL (MONO)" position.
3. Connect Input/Output Wiring:

Input: Connect the input signal to any input connector.

Output: Connect the output as shown in the amplifier's manual for parallel-mono mode.

4. Patching Signals: Use any remaining input jacks to patch the signal to other amps if needed.

Note: Do not use the "PARALLEL (MONO)" switch when feeding the amp two separate signals.



BRIDGE MONO MODE

To switch your amplifier to bridged mono mode:

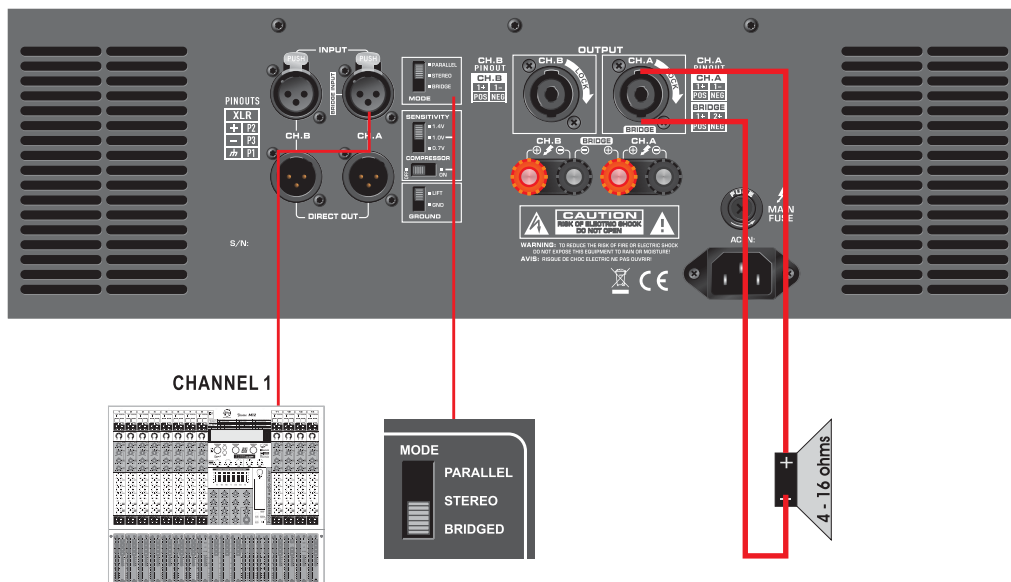
1. Turn Off the Amplifier.
2. Slide the MODE SELECTOR SWITCH to down "BRIDGED" position.
3. Connect Input/Output Wiring:

Input: Connect the input signal to CH-1.

Output: Connect the output as specified in the amplifier's manual for bridged mono mode.

4. Adjust Level Control: Turn the level control of channel "2" completely down (counterclockwise).

Note: This mode produces a large amount of power. Ensure that your wiring and speaker can handle the increased power output.



TECHNICAL SPECIFICATIONS

	D2X2000	D2X2400
8Ω Stereo Power	900W	1200W
4Ω Stereo Power	1500W	1900W
2Ω Stereo Power	2000W	2400W
8Ω Bridge Power	3000W	3800W
4Ω Bridge Power	4000W	4800W
Output Circuitry	CLASS H	
Frequency response (1W@8Ω)	20Hz-20kHz +1/-1Db	
THD+N (20Hz-20kHz for 1W THD+N)	<0.035%	
Damping factor	500	
S/N rate	≥105dB	
Input Sensitivity	0.7V/1V/1.4V	
Input impedance	>10KΩ, Balance or Unbalanced, All Models	
Input Connector	Male XLR, Female XLR	
Output Connector	2x NL4 SpeakON & binding post	
Rear Panel Control	Input Mode Switch: Stereo/ Parallel/ Bridge, Sensitivity: 0.7V/1V/1.4V, Compressor, Grounding: Lift/Ground	
Dimensions	483x132x487mm	
Power Requirement	220V/50-60Hz	
Net Weight	25kgs	29kgs

*SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE.



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