

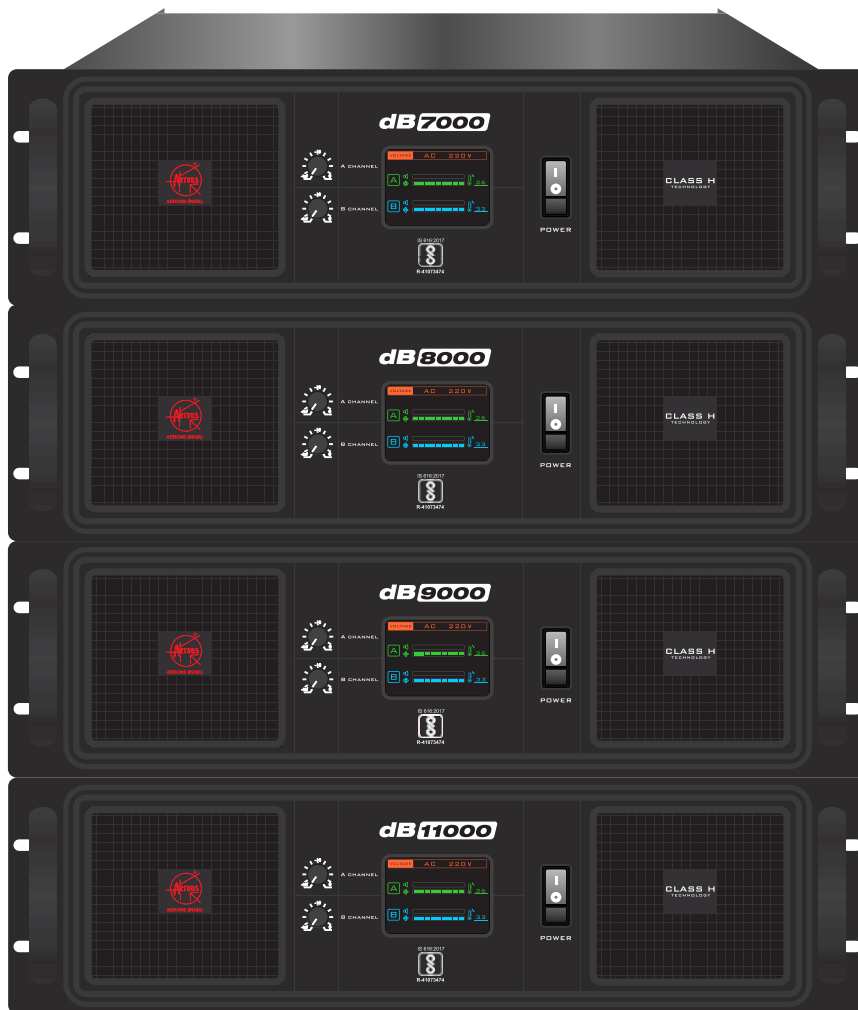


AERONS (INDIA)

dB Series

Professional Power Amplifier

USER MANUAL



Power Beyond Limits

dB7000/ dB8000/ dB9000/ dB11000

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.

LIST OF CONTENTS

1. Installation	1
2. Features	1
3. Installation Instructions	2
4. Front Panel Features	3
5. Back Panel Features	4-5
6. Rack Mounting and Dimensions	5
7. Connections	6-7
8. Technical Specifications	8

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 **dB Series** is ideal for the most demanding sound reinforcement installations and touring applications. This manual covers the operating instructions for all **dB 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 **dB 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 dB 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
dB Series amplifier
AC power cord

Rack Mounting Guidelines

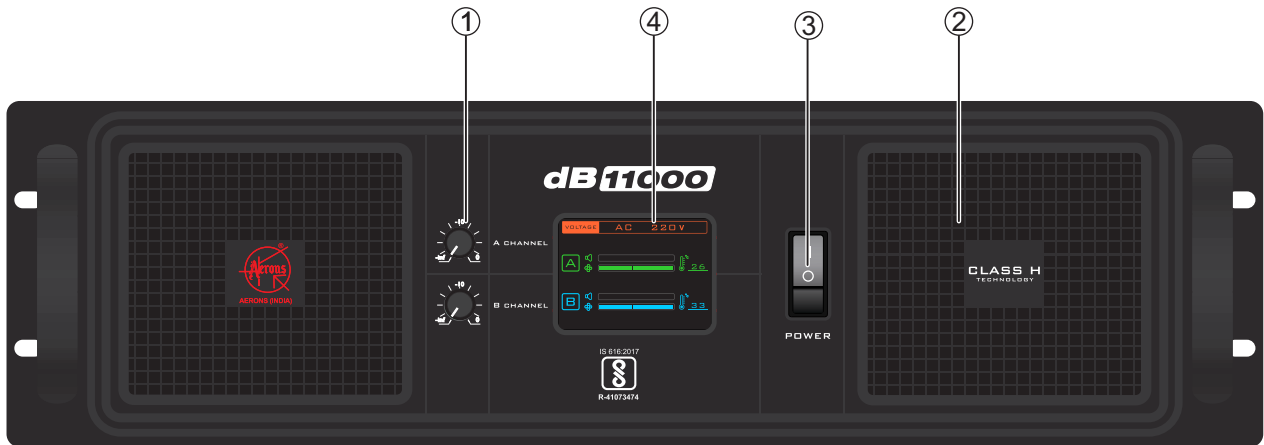
The dB Series amplifiers are engineered for standard 19" rack mounting as well as "stack" mounting without a cabinet. Use four screws and washers to secure the amplifier to the front rack rails. For enhanced stability, especially in mobile setups where the amplifiers are subjected to vibrations, it is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

FRONT PANEL FEATURES



1. GAIN CONTROLS

- Each channel is equipped with a 41-step gain control, offering approximately 20dB of input headroom. The control maintains 1dB increments down to 14dB of attenuation, with progressively larger steps below this point, as indicated.
- Gain reduction can be applied to minimize input noise, but this will also decrease the headroom available to the clip limiter. Utilize the three-position Gain Sensitivity Switch to align the amplifier's input dynamic range with that of the source, enabling normal, near-maximum gain settings.

2. AC POWER SWITCH

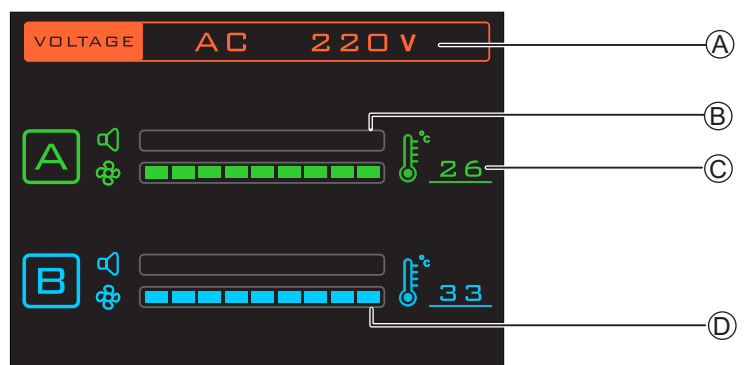
The AC Power Switch controls the amplifier's power. It must be turned ON for the amplifier to operate. When the power is ON, the display will illuminate.

3. FRONT PANEL VENTILATION SLOTS

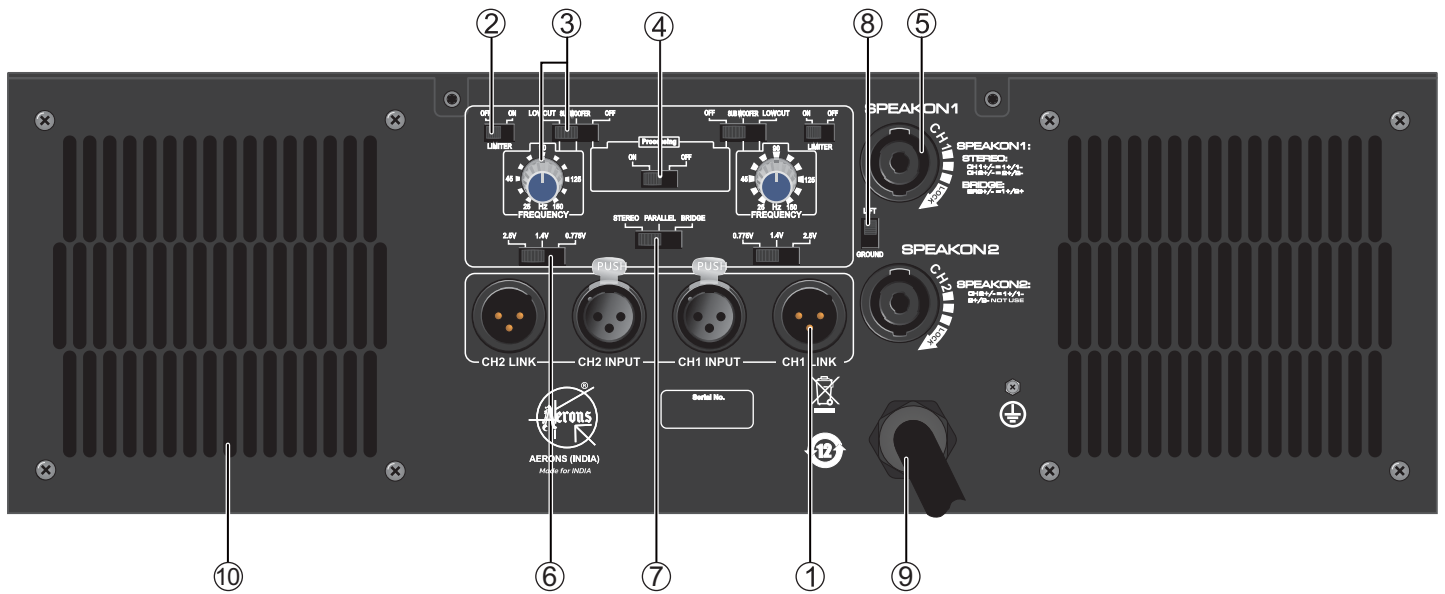
This series of amplifiers is designed with a cooling system that draws air from the rear and exhausts it through the front. This design facilitates efficient heat dissipation without warming the rack. As the amplifier's workload increases, the fan will accelerate to expel more hot air. The exhaust temperature can be easily monitored, unlike rear-exhaust amplifiers that may appear cool at the front while expelling hot air into the rack.

4. LCD SCREEN DISPLAY

- A. VOLTAGE
- B. CHANNEL LEVELS
- C. OPERATING TEMPERATURE
- D. FAN AIR SPEED



BACK PANEL FEATURES



1. INPUT CONNECTIONS

- Precision Balanced Inputs offer exceptional hum rejection and can accommodate input levels exceeding 21dBu across all sensitivity settings (refer to Specs).
- They feature Female and Male XLR connectors, as well as Pluggable Terminal Blocks. Connect the XLR input to your mixer's output for balanced operation.

2. CLIP LIMITING, ON-OFF SWITCH (CH1, CH2)

This switch limits input levels to safeguard your power amplifier from potential damage due to input device malfunctions (e.g., mixer, CD player).

3. FILTER SWITCH AND FREQUENCY ADJUSTMENT KNOB

Each channel includes a filter switch and frequency adjustment knob:

Filter Switch: Select from:

- OFF: No filtering applied.
- SUB WOOFER: Applies a low-pass filter. Adjust cutoff frequency using the Frequency knob.
- LOWCUT: Applies a high-pass filter to eliminate unwanted low frequencies or sub-audio.
- Frequency Knob: Use this knob to set the cutoff frequency (adjustable range: 25Hz to 150Hz).



Note: In BRIDGE mode, only controls on channel 1 are active; channel 2's frequency knob is disabled.

4. PROCESSING ON/OFF SWITCH

When ON, this switch activates low-frequency compensation to enhance speaker output. The actual effect on low-frequency balance varies with speaker type.

5. SPEAKER CONNECTIONS - SPEAKONS

- Ch1: Provides "4-wire" access to both channels: Uses 1+ and 1-
- Ch2: Uses 2+ and 2-Ch2: Provides "2-wire" access to Ch2: Uses 1+ and 1-

6. INPUT SENSITIVITY SWITCH

Select input sensitivity (0.775V, 1.4V, or 2.5V) to match your device and optimize performance.

7. Input Mode Switch,

- Bridge Mode: Utilizes one input (Channel 1) and one output.
- Stereo Mode: Utilizes two inputs (Channel 1 and 2) and two outputs.
- Parallel Mode: Utilizes one input (Channel 1) and two outputs.

8. Grounding Selector

If you experience hum or noise in your speakers, set the selector to the "ON" position to address grounding issues.

9. AC Power Cable and AC Voltages

Plug the power cord into the power supply socket. Ensure the power supply is suitable for 220V before powering the amplifier.

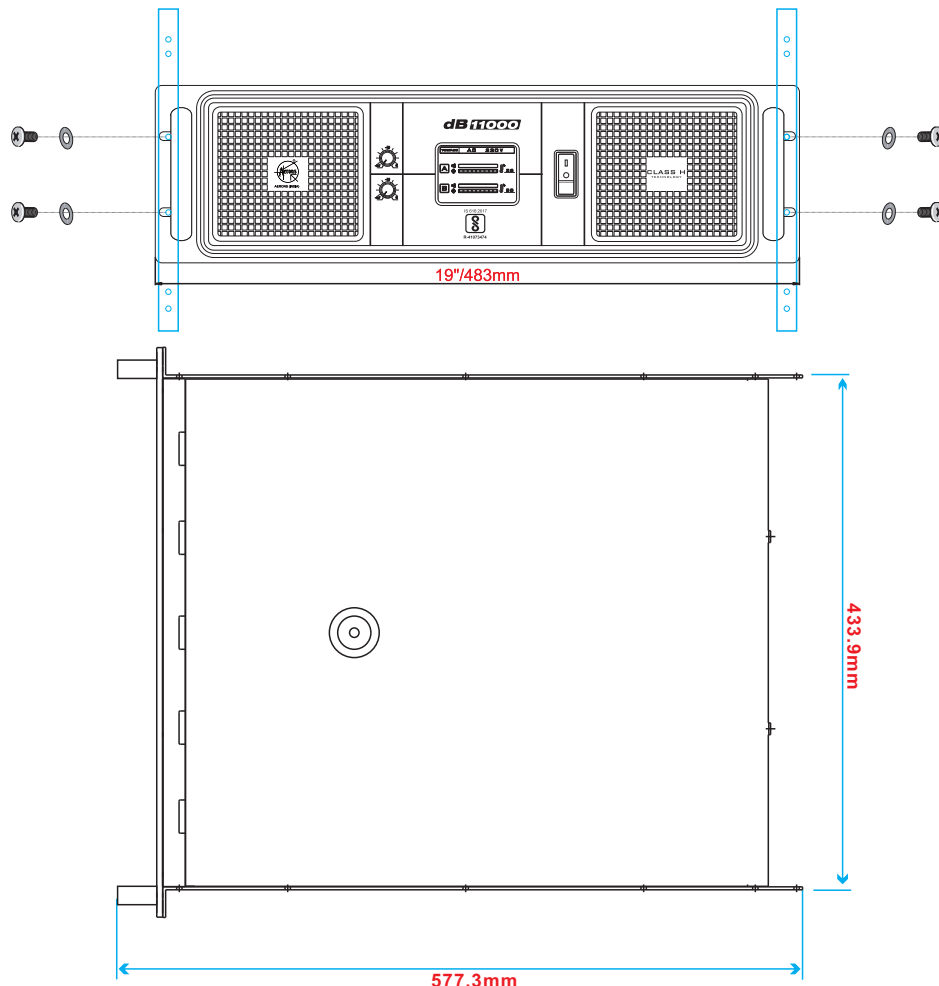
10. Air Entrance

The air entrance is crucial for cooling. Do not block it to ensure effective heat dissipation.

RACK MOUNTING AND DIMENSIONS

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.



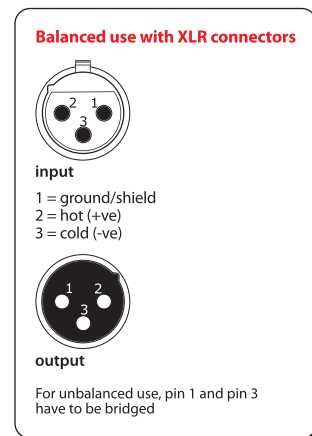
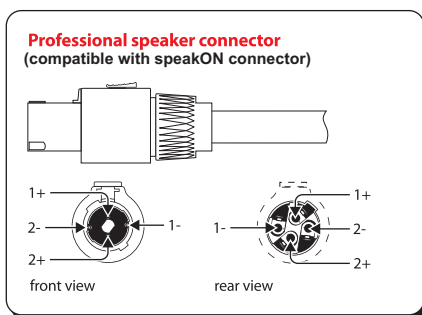
CONNECTIONS

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.

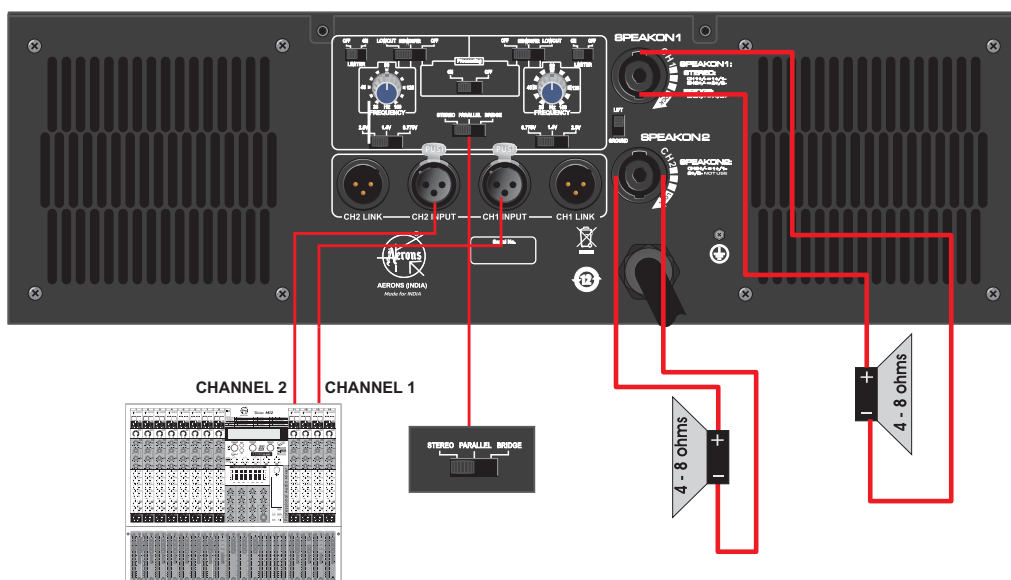
Note: AERONS Systems assumes no liability for damaged speakers resulting from improper wiring, careless amplifier use, or overpowering.



STEREO (TWO CHANNEL) MODE

To switch your amplifier to stereo mode:

1. Turn off the amplifier.
 2. Slide the MODE SELECTOR SWITCH (17) to the left "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:

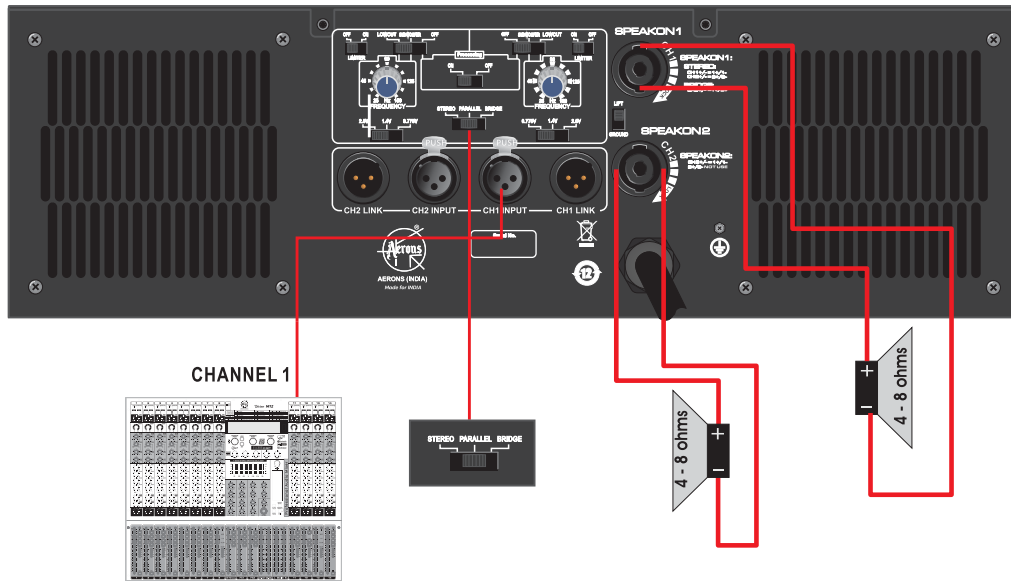
1. Turn Off the Amplifier.
2. Slide the MODE SELECTOR SWITCH to the center "PARALLEL (MONO)" position.
3. Connect Input/Output Wiring:

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:

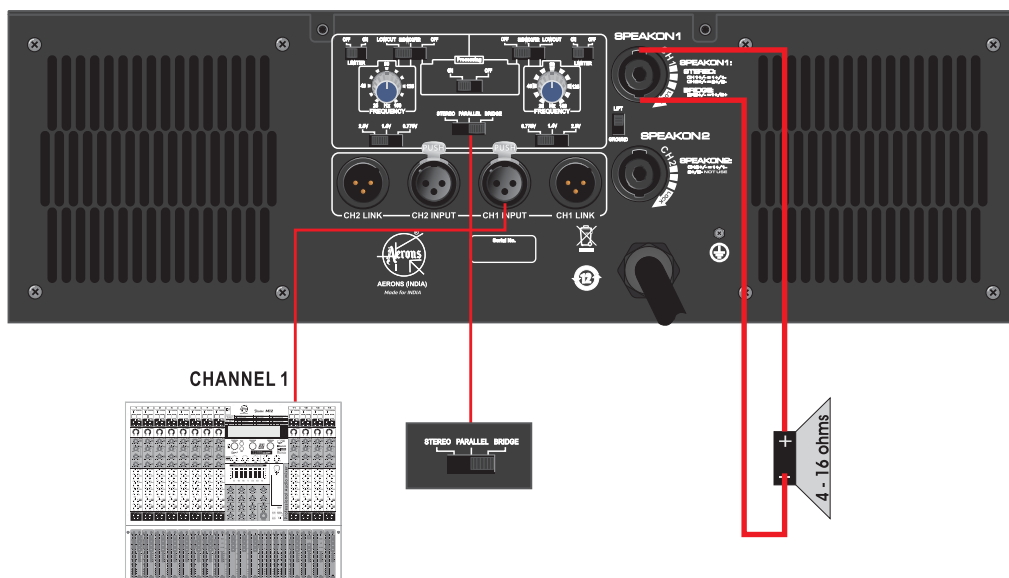
1. Turn Off the Amplifier.
2. Slide the MODE SELECTOR SWITCH to the right "BRIDGED" position.
3. Connect Input/Output Wiring:

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

	dB 7000	dB 8000	dB 9000	dB 11000
8Ω Stereo Power	1300W	1500W	1900W	2100W
4Ω Stereo Power	2300W	2600W	3000W	3600W
2Ω Stereo Power	3500W	4000W	4500W	5400W
8Ω Bridge Power	2600W	5200W	6000W	7200W
4Ω Bridge Power	7000W	8000W	9000W	10800W
Output Circuitry	CLASS H			
Frequency response (1W@8Ω)	20Hz-20kHz +1/-1Db			
THD+N (20Hz-20kHz for 1W THD+N)	<0.1%			
Damping factor	800	800	1300	1300
S/N rate	≥100dB			
Input Sensitivity	0.775V/1.2V/2.5V			
Input impedance	>10KΩ, Balance or Unbalanced, All Models			
Input Connector	Male XLR, Female XLR			
Output Connector	2x NL4 SpeakON			
Rear Panel Control	Input Mode Switch: Stereo/ Parallel/ Bridge, Sensitivity: 0.775V/1.4V/2.5V, Limiter: OFF/ON, Grounding: Lift/Ground			
Dimensions	483x132x577.3mm			
Power Requirement	220V/50-60Hz			
Net Weight	38.5kgs	39kgs	39.5kgs	40kgs

*SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE.



AERONS (INDIA)

dB Series

Professional Power Amplifier

Power Beyond Limits

■ **dB7000**

■ **dB9000**

■ **dB8000**

■ **dB11000**

www.aeronsindia.com