

OPERATION MANUAL



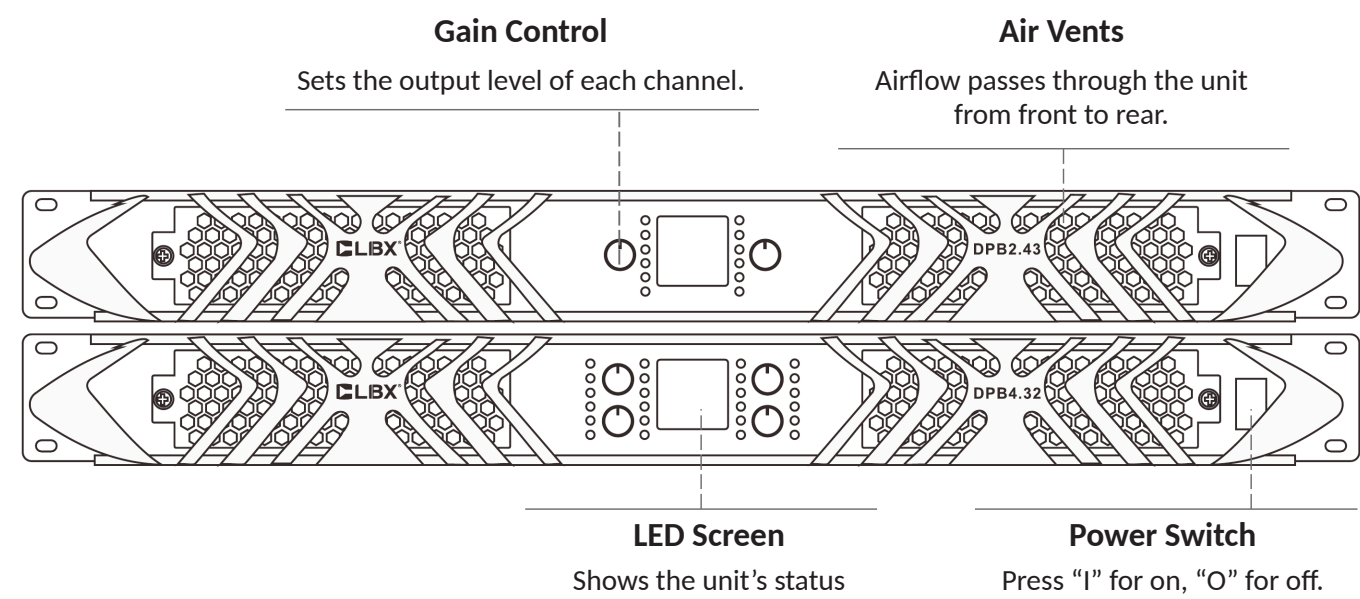
1U DIGITAL POWER AMPLIFIER

SHIPPING

Before returning the equipment, please contact your distributor to arrange transport, so that the unit can be delivered directly to the service center.
THE SERVICE CENTER DOES NOT PROVIDE A PICK-UP SERVICE.
ALWAYS USE THE ORIGINAL PACKAGING TO PREVENT
DAMAGE TO THE EQUIPMENT DURING TRANSPORT.

This manual does not include every detail of the design, production or variations of this equipment, nor does it cover every situation that may arise during installation, operation or maintenance.
READ THESE INSTRUCTIONS BEFORE UNPACKING

Front Panel Features



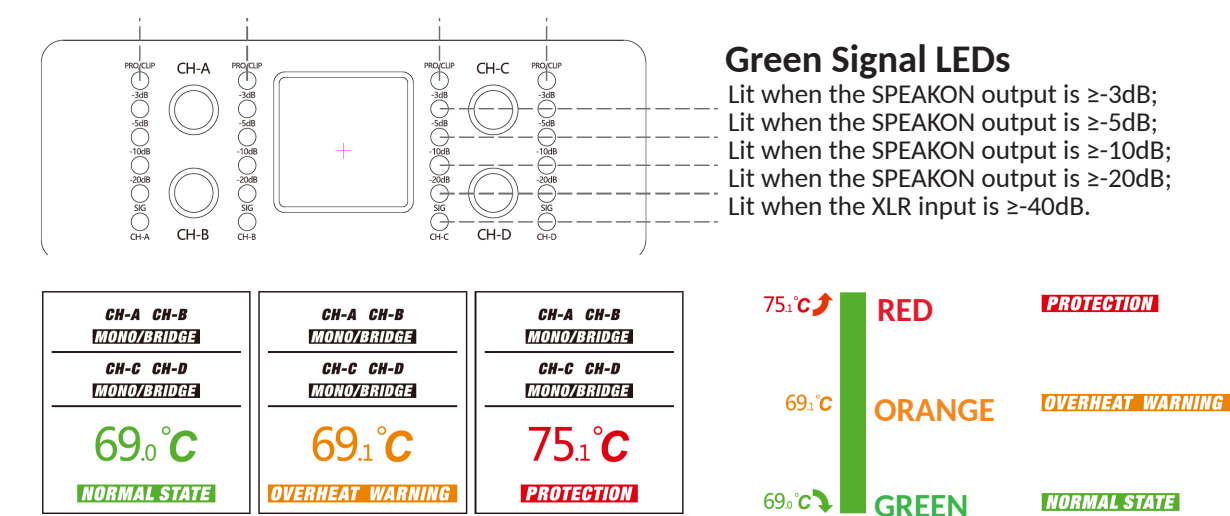
Dual-Color Status LED

Red (steady): the channel has entered protection mode and stopped working. Wait about one minute; if the unit still does not work, restart it.

Yellow (flashing): the channel signal is audibly distorting, which may damage the tweeter.

Yellow (steady):

1. The internal temperature of the unit is $\geq 70^{\circ}\text{C}$;
2. The signal is overloaded.



LED Screen

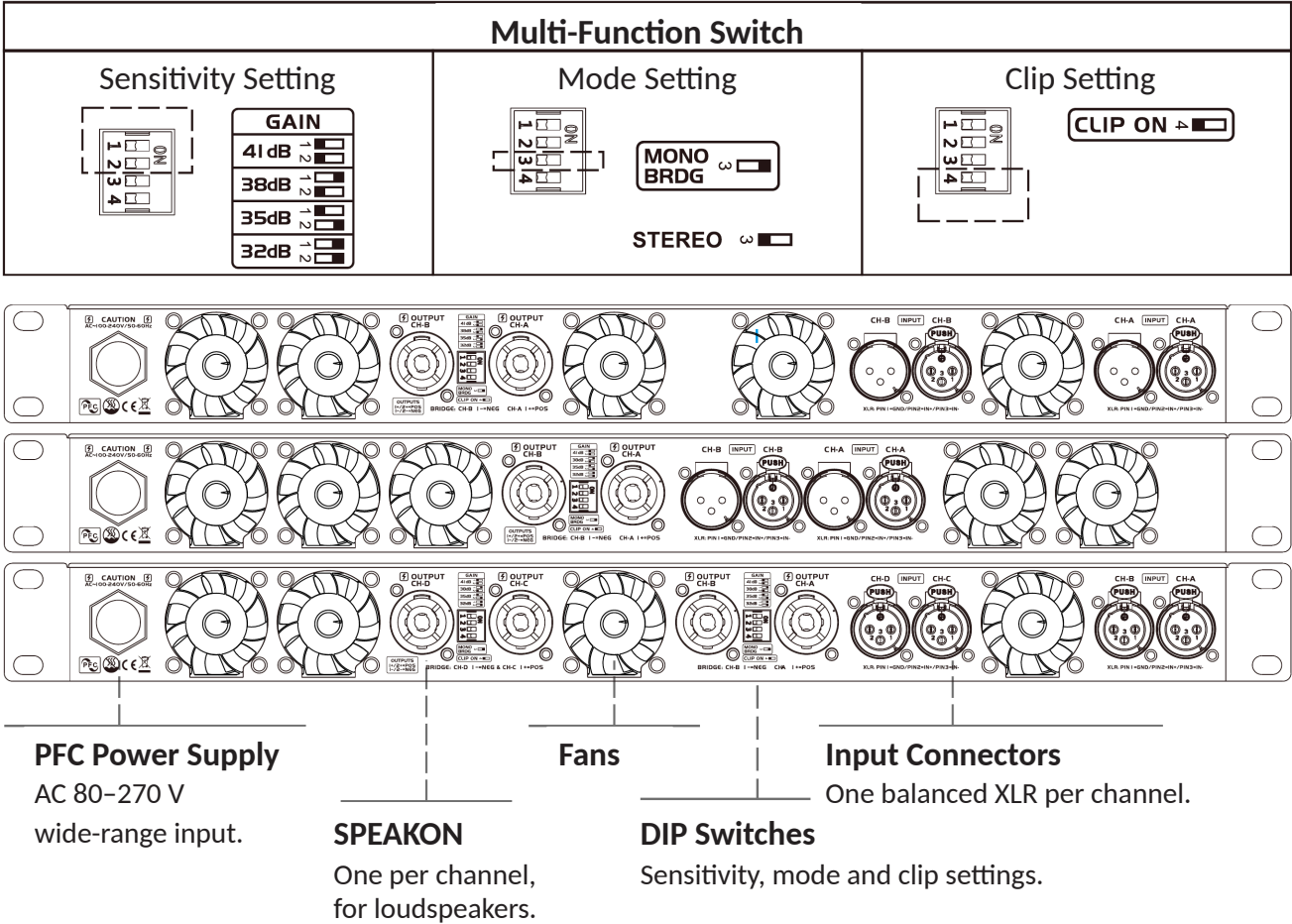
1. Shows the operating mode of each channel: mono, bridge or stereo;
2. Shows the temperature of the unit:

Green: normal operation, temperature below 69°C ;

Orange: overheat warning, temperature between 69°C and 75°C ;

Red: the unit has entered protection mode, temperature above 75°C .

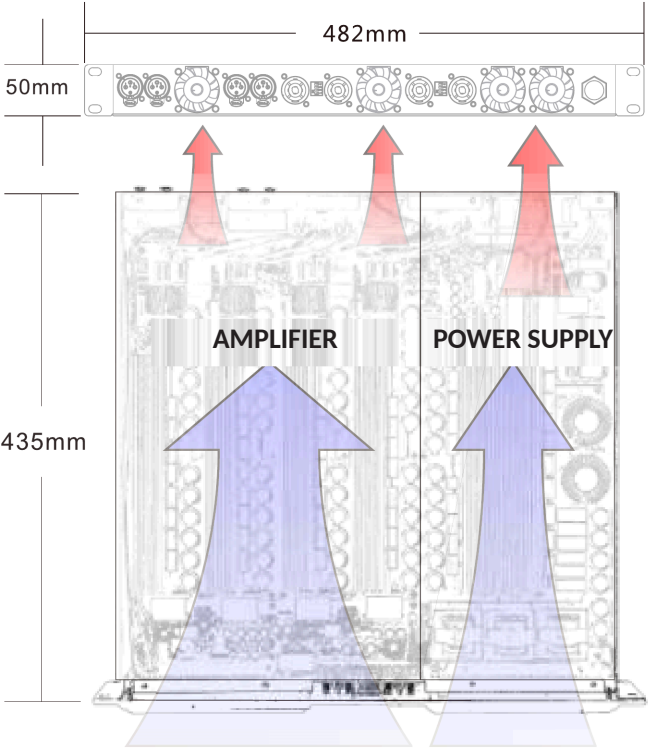
Rear Panel Features



Dimensions and Cooling System

NOTE:

The internal depth of the unit is 435 mm (excluding the cover plate and front panel). The overall depth is approx. 490 mm and varies slightly with the front panel version. Some models differ in size; please refer to the specifications.

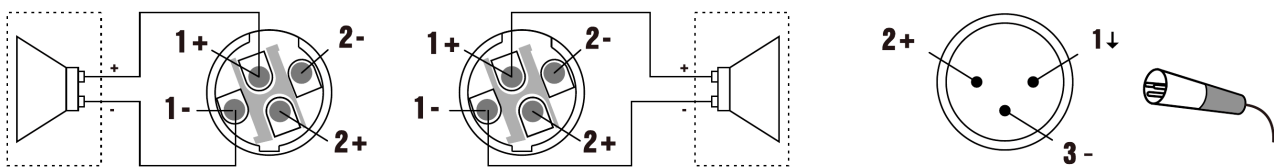


Straight-Through Tunnel Cooling

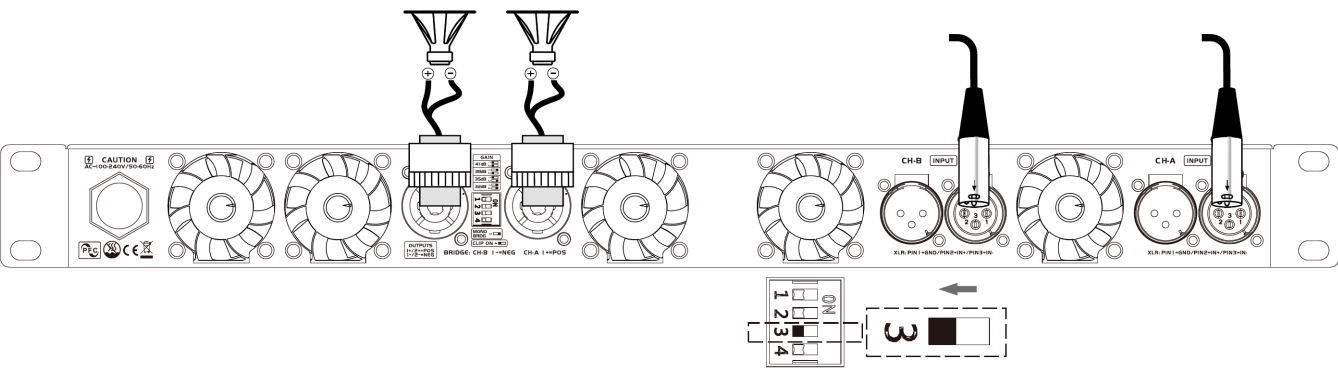
Cool air enters through the front panel, flows through a straight tunnel across the heat sinks to carry the heat away, and exits through the rear panel. Do not block the front or rear of the unit, as this will impair cooling.

Application Connection Diagrams

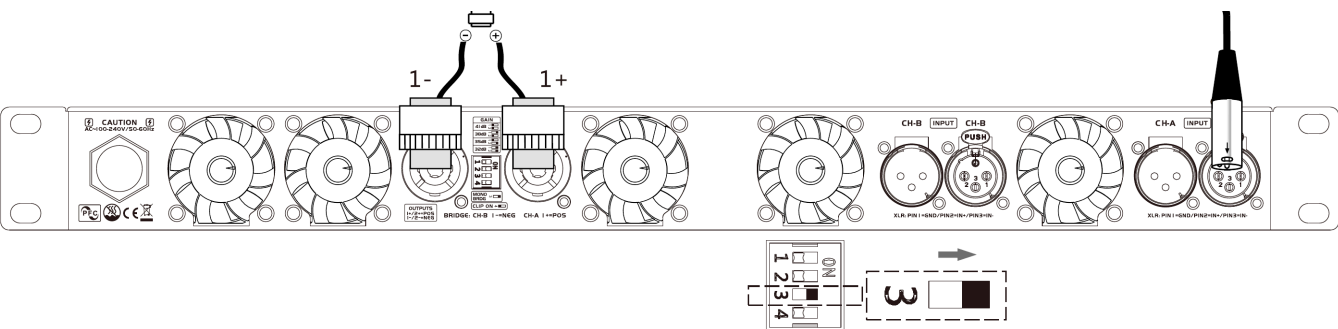
2-Channel Series



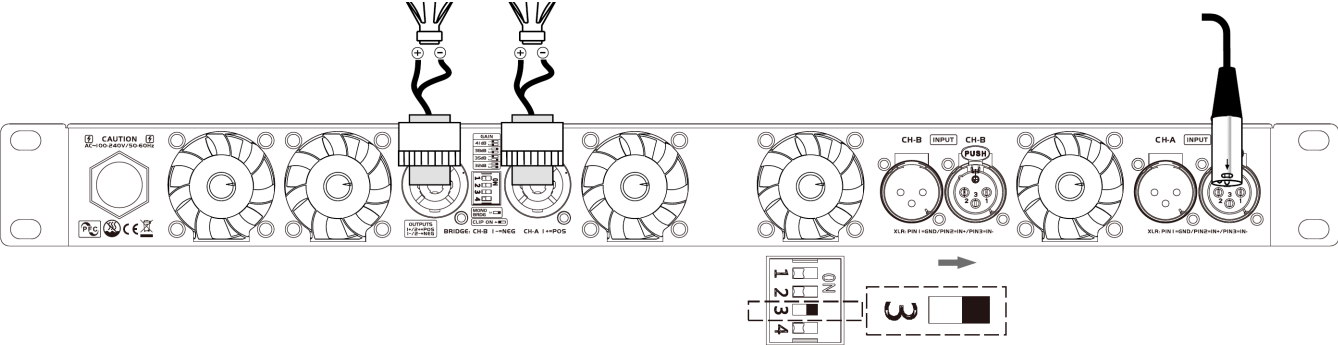
STEREO MODE



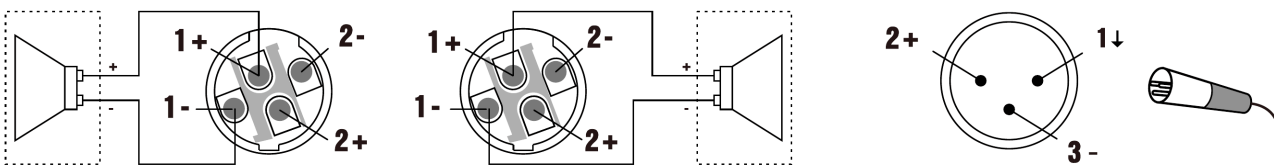
BRIDGE MODE



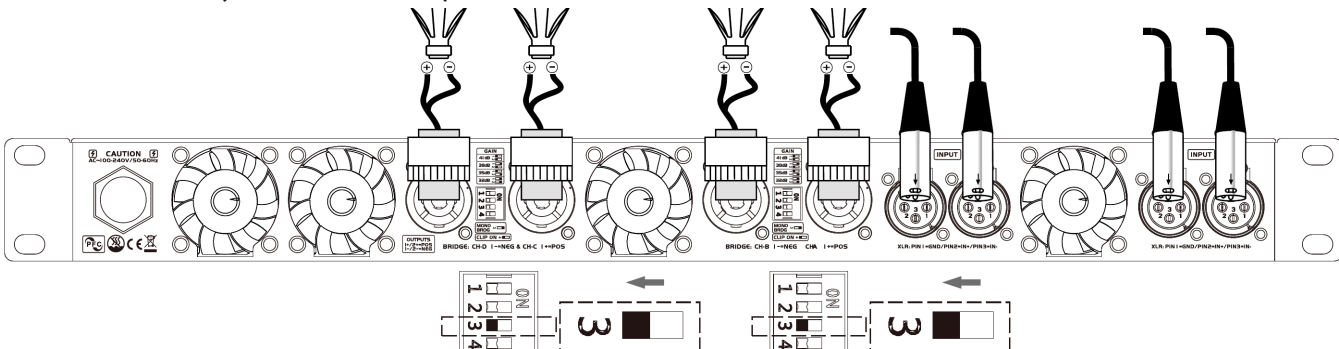
MONO MODE (PARALLEL)



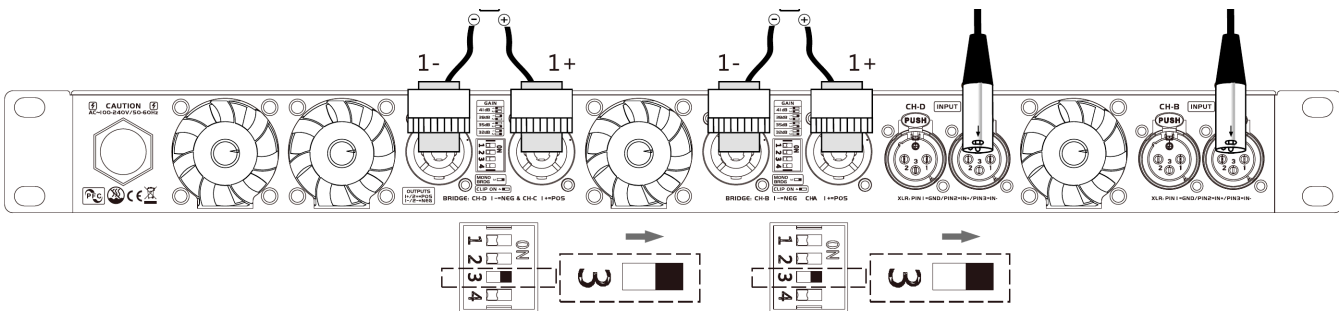
4-Channel Series



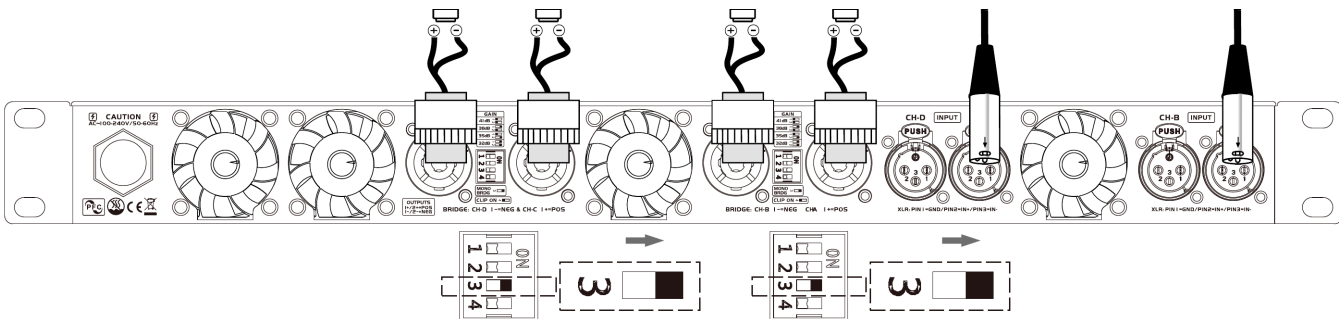
STEREO MODE (4 IN / 4 OUT)



BRIDGE MODE



MONO MODE (2 IN / 4 OUT)



Performance Specifications

AC Power	
Power Supply	PFC power supply
Rated Voltage	80–270 V ±10%, 50/60 Hz
Operating Voltage	80–270 V
Power Factor cos (φ)	>0.95 @ >500 W
Standby	47 W, 0.8 A
Gain / Sensitivity	32 dB, 35 dB, 38 dB, 41 dB
Max. Output Voltage / Current	185 V / 85 A (370 V in bridge mode)
Power Consumption	230 V (115 V in bridge mode)
Temperature	
Ambient Temperature	0–45 °C / 32–113 °F
Cooling System	Straight-through tunnel cooling
Performance	
Frequency Response	20 Hz – 20 kHz (1 W @ 8 Ω, ±0.5 dB)
Signal-to-Noise Ratio	>110 dBA (20 Hz – 20 kHz, A-weighted)
Crosstalk	>66 dB @ 1 kHz
Input Impedance	10 kΩ balanced
THD	<0.5% from 1 W to full power (typically <0.05%)
IMD	<0.5% from 1 W to full power (typically <0.05%)
Damping Factor (8 Ω)	>5000 @ 20–200 Hz
Slew Rate	50 V/μs @ 8 Ω
Front Panel	
Indicators (per channel)	1 green LED: XLR input signal ≥-40 dB; 4 green LEDs: SPEAKON output level (-20 dB, -10 dB, -5 dB, -3 dB); 1 dual-color LED (yellow/red): protection / clip / overheat / overload
LED Screen	Shows the operating mode of each channel: mono, bridge or stereo; Shows the unit temperature and overheat warnings; the unit enters protection mode when the temperature exceeds 75 °C
Power Switch	Press “I” to switch on, “O” to switch off
Dust Filters	Two cotton dust filters, removable from underneath the front panel for cleaning or replacement
Connections	
Signal Inputs	4-channel models: one balanced female XLR (locking) per channel; 2-channel models: one balanced female XLR (locking) and one balanced male XLR per channel
Signal Outputs	One SPEAKON per channel for loudspeaker connection
Power Cord	Fixed to the unit; 3 x 2.5 mm ² (varies by model and region); length approx. 1.5 m
Multi-Function Switches	Two sensitivity switches, one mode switch and one clip switch
Dimensions and Weight (vary by model and shipping method)	
Dimensions	500 x 50 x 485 mm
Net Weight	12.6 kg
Packing Size	610 x 560 x 95 mm
Gross Weight	15.5 kg

Power Specifications: 2 & 4 Channel

Model: DPB2.30

2 * 3000W	2-Channel Mode			Bridge Mode	
	8Ω	4Ω	2Ω	8Ω	4Ω
EIAJ test standard, 1 kHz, 1% THD	2*3000W	2*5100W	2*7140W	10200W	14280W
1/8 max. output power (4Ω)		1457W, 8A		1457W, 15.6A	
1/4 max. output power (4Ω)		2564W, 16A		2564W, 31.8A	

Model: DPB2.43

2 * 4300W	2-Channel Mode			Bridge Mode	
	8Ω	4Ω	2Ω	8Ω	4Ω
EIAJ test standard, 1 kHz, 1% THD	2x4300W	2x7900W	2x8600W	15700W	17100W
1/8 max. output power (4Ω)		2228W, 12A		2228W, 24.6A	
1/4 max. output power (4Ω)		3920W, 23A		3920W, 47.1A	

Model: DPB4.22

4 * 2200W	4-Channel Mode			Bridge Mode	
	8Ω	4Ω	2Ω	8Ω	4Ω
EIAJ test standard, 1 kHz, 1% THD	4x2200W	4x4100W	4x4900W	2x6800W	2x9520W
1/8 max. output power (4Ω)		2125W, 11.375A		2125W, 22.5A	
1/4 max. output power (4Ω)		3750W, 19.5A		3750W, 39A	

Model: DPB4.32

4 * 3200W	4-Channel Mode			Bridge Mode	
	8Ω	4Ω	2Ω	8Ω	4Ω
EIAJ test standard, 1 kHz, 1% THD	4x3200W	4x5200W	4x6700W	2x10200W	2x13200W
1/8 max. output power (4Ω)		2857W, 14A		2857W, 28.2A	
1/4 max. output power (4Ω)		5000W, 23.8A		5000W, 45.8A	

WARNING:

■ IF THE POWER CORD IS DAMAGED, OBTAIN A REPLACEMENT FROM YOUR DISTRIBUTOR. CONTINUING TO USE THE UNIT MAY RESULT IN FIRE OR ELECTRIC SHOCK.

■ IF THE UNIT HAS BEEN DROPPED OR ITS ENCLOSURE IS DAMAGED, SWITCH OFF THE POWER IMMEDIATELY, UNPLUG THE POWER CORD AND CONTACT YOUR DEALER.

■ IF YOU NOTICE ANYTHING ABNORMAL, SUCH AS SMOKE OR AN UNUSUAL ODOR, SWITCH OFF THE POWER IMMEDIATELY AND UNPLUG THE POWER CORD. CONTACT YOUR DISTRIBUTOR TO HAVE THE CAUSE CHECKED.

■ TO PREVENT ELECTRIC SHOCK, DO NOT REMOVE THE TOP OR BOTTOM COVER.

■ THIS UNIT HAS BEEN TESTED AND EVALUATED FOR USE AT ALTITUDES UP TO 2,000 METERS ONLY.

All information in this manual is accurate at the time of delivery.

Changes resulting from version updates or design modifications may not be notified in time.

For the latest information, please contact your distributor.

Please note these symbols:



The exclamation-point triangle alerts the user to important operating and maintenance instructions.



The lightning-bolt triangle warns the user of the risk of electric shock.

DESIGN CHANGES

WE RESERVE THE RIGHT TO CHANGE THE DESIGN OF ANY PRODUCT AT ANY TIME WITHOUT NOTICE AND WITHOUT ANY OBLIGATION TO MAKE CORRESPONDING CHANGES TO PRODUCTS PREVIOUSLY MANUFACTURED.

SAFETY INSTRUCTIONS

Installation and Connection

1. During a lightning storm, switch off the unit as soon as possible and unplug the power cord from the outlet.
2. Before connecting this unit, switch off all audio equipment and loudspeakers. Use the correct cables and make all connections as specified.
3. Use only speaker cables to connect loudspeakers to the amplifier outputs. Using other types of cable may cause a fire.
4. If the unit will not be used for a long time, unplug the power cord from the AC outlet. Otherwise, a fire may result.

Abnormal Conditions

5. If the unit is damaged in any way—for example, the power cord or plug is damaged, liquid or a foreign object may have entered the unit, or the unit rattles or makes unusual noises—stop using it and contact your dealer.

User Responsibilities

6. Do not modify this unit. Doing so may cause a malfunction, fire or electric shock.
7. If you believe the unit needs inspection, maintenance or repair, contact your authorized dealer.