D4030 D4045 D4060 D40800

4-Channel Stereo Conference Mixer Amplifier

Description

This series of four-channel professional power amplifiers is designed for multi-channel sound reinforcement systems and high-density installations. With four independent amplifier channels integrated into a compact 2U chassis, the series significantly improves system efficiency while delivering stable, high-power performance. It is an ideal solution for conference centers, theaters, multifunction halls, and commercial audio applications.

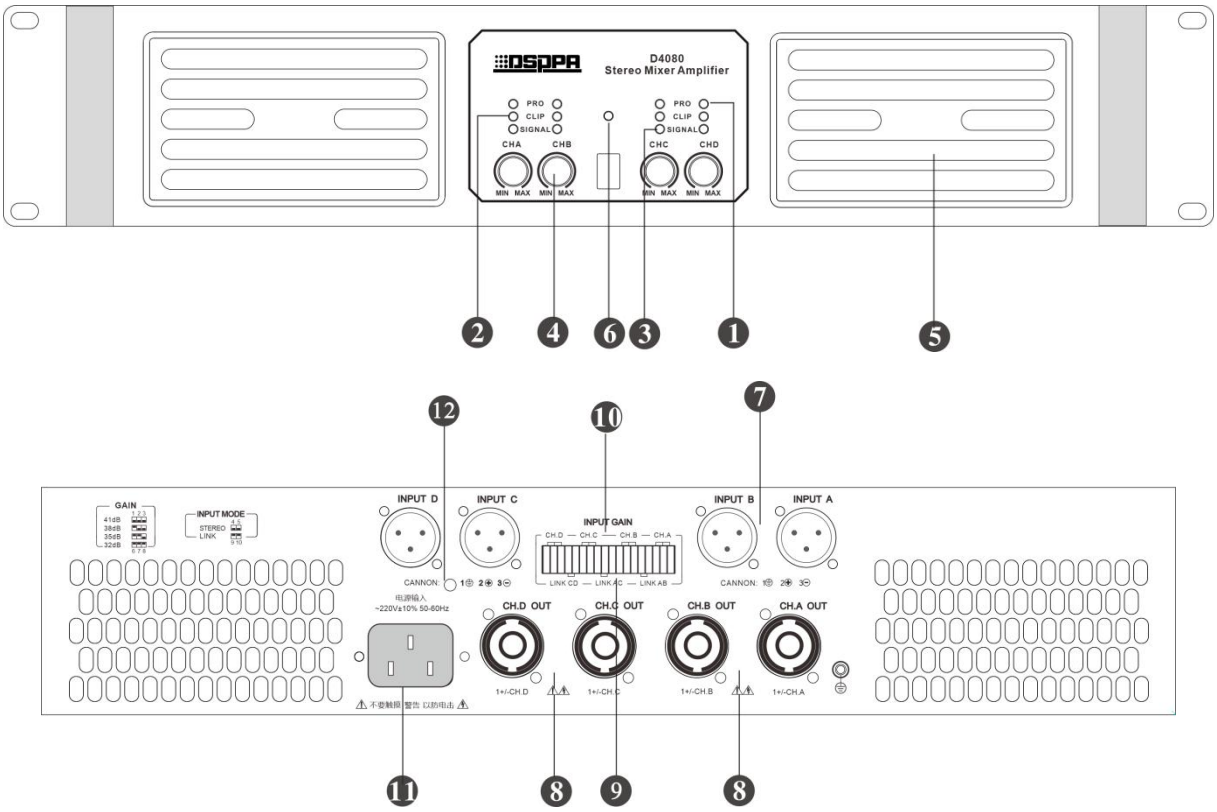
Features

- Four independent amplifier channels in a single unit.
- High-density design reduces rack space and system complexity.
- Selectable input gain settings for precise system matching.
- Channel linking capability for flexible system configurations.
- Integrated noise gate for improved signal-to-noise performance.
- Full protection circuitry including thermal, overcurrent, short-circuit, and limiter protection.
- Clear LED indicators for signal, clipping, protection, and power status.

Specifications

Model		D4030	D4045	D4060	D4080
Power Specifications					
EIA AC220V Output Power 1kHz Max. THD 1% Test Mono	8Ω	300W	450W	600W	800W
	4Ω	400W	600W	800W	1200W
Electrical Specifications					
Amplifier	Gain	41dB / 38dB / 35dB / 32dB			
	Impedance	20kΩ (balanced, stereo) 10kΩ (unbalanced, parallel)			
Frequency Response		＜±0.5dB (8Ω 30W 20-20kHz)			
Slew Rate		＞20V/us (8Ω 1kHz)			
Damping Factor		＞300 (8Ω 1kHz)			
Crosstalk		＞60dB (8Ω 1kHz)			
S/N Ratio		＞100dB (A-weighted)			
Total Harmonic Distortion (THD+N)		＜0.05% (8Ω 30W)			
Inter-Modulation Distortion (IMD)		＜0.3% (8Ω 30W)			
General Specifications					
Protections	Amplifier	Power on/off protection Transistor thermal protection Short circuit protection Sensor for current on outputs Limiter			
	Speakers				
Controls	Front Panel	On/Off switch Signal level control for each channel			
	Back Panel	Stereo/Parallel selector Input gain adjust			
Indicators		Power: 1 blue; Protect: 4 red; Clip: 4 yellow; Signal: 4 blue.			
Connectors	Input	1 Neutrik XLR connectors each channel			
	Output	1 Neutrik Speakon connectors each channel			
Power Supply		See label on the apparatus			
Dimensions (W×H×D)		483×88×447mm			
Weight		19kg	19kg	20kg	20kg

Front / Rear Panel



1. PROTECT LEDs

Protection pilot lights

If these LEDs light up, this indicates that one of the various protections safeguarding the different sections of the amplifier and the loudspeaker enclosures has tripped due to an operating fault. In these cases, the power output is normally switched off until normal operating conditions are restored.

The following is a description of all the series protections

1) Switch on AC soft working protection: Limit the electric current when start up, don't affect the others equipment or out the rush of circuit inside.

2) Delay the link load: protect the loudspeaker, keep silence when start up.

3) Circuit damage protection: midpoint excursion and output the AC, limit the damage to extend.

4) Limit the output current soft protection: The loading impedance is low and too drastic signal; it can protect the loudspeaker and amplifier.

5) Clip and compress protection: When input too big signal, the clip output is distortion, it is easy to damage the speaker unit; this circuit can check the compress signal to protect the loudspeaker.

6) Short circuit protection: trips in the event of a short-circuit or overload, limiting the output current.

7) Over hot protection: In high temperature and low overload state, the temperature grow hot quickly, the protect will work to cut the load over 90℃. The amplifier will rework below 75℃.

8) Switch off protection: First turn off the overload when switch off, it keep the loudspeaker silence out of the rush.

Note: Some protection situations require the amplifier to be switched off and then back on for normal operating conditions be restored.

2. LIMIT LEDs

Amplifier "status" indicators: these LEDs are able to indicate for channels A and B, the operation of the

internal limiter, when inserted, or the clipping of the amplifier.
These 2 LEDs are POST-LEVEL: in other words they display the status of the signal when it has already been regulated by the input level controls.

3. SIGNAL LEDs

Signal "status" indicators: these LEDs are able to indicate for channels A and B, a signal presence in the inputs of the amplifier.

4. LEVEL

Control of the input level of the external signal: operates with continual values which vary from "fully closed" (position "MIN" - the signal is not fed to the amplifier sections) to "fully open" (position "MAX" - the signal is sent to the amplifier sections at the same level as that with which it arrives at the input). In other words, this control operates as an attenuator of the signal fed to the amplifier.

5. AIR VENTS

Amplifier cooling system air in/out vents.
The fan of the cooling system create a flow of air with front to back direction: this means that the air is taken from the front panel to the back cover, and having cooled the heat sinks and transformer through the opening on the back side. Care must always be taken to avoid blocking these openings and to never place the amplifier in a position which does not allow sufficient air circulation.

6. POWER ON

ON/OFF switch with indication LED. (Active LED)

7. INPUTS

Each channel has a XLR input, CH.1 & CH.3 inputs have a XLR input for parallel output.

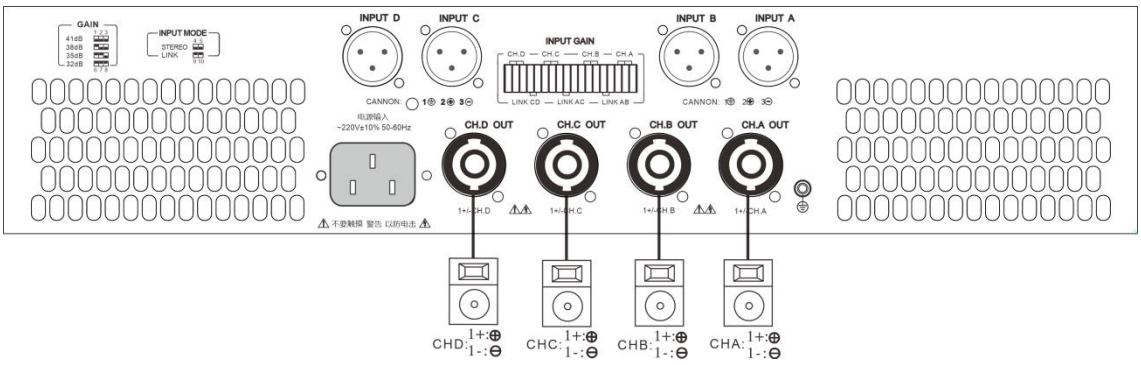
8. OUTPUTS

STEREO outputs : output of CHA : the "1+" is the "⊕ " of CHA, the"1-" is the "⊖" of CHA,

output of CHB : the "1+" is the "⊕ " of CHB , the "1-" is the "⊖" of CHB.

output of CHC: the "1+" is the "⊕ " of CHC, the "1-" is the "⊖" of CHC,

output of CHD: the"1+" is the "⊕ " of CHD, the "1-" is the "⊖" of CHD.



9. STEREO/PARALLEL selector

Selector for the amplifiers 2 operating setting: allows to decide how use the amplifier in the audio setup, connect with other units (crossovers, other amplifiers, loudspeaker enclosures).

Note: This control should only be used when the amplifier off, otherwise the loudspeaker's components could be damaged.

A) STEREO
With the STEREO setting, 4 separate signals are treated separately by each channel of the amplifier

B) PARALLEL MODE
With the parallel setting, Input signal from one channel. It can drive and work with other channels.
There are 5 modes for parallel setting:

When switch 4 5 A&B open, CH.A and CH.B are parallel. 

When switch 9 10 A&C open, CH.A and CH.C are parallel. 

When switch 4 5 C&D open, CH.C and CH.D are parallel. 

When switch 4 5 A&B 9 10 A&C open, CH.A and CH.B and CHC are parallel. 

When switch 4 5 A&B 4 5 C&D open, CH.A and CH,B are parallel; CH C and CH. D are parallel. 

When switch 9 10 A&C 4 5 C&D open, CH.A and CH.C and CHD are parallel. 

When all switch open, 4 channels are parallel. 

10. GAIN adjust
According to different file, it can set different gain for each channel
(32dB / 35dB / 38dB / 41dB).

GAIN Setting 

11. POWER INTERFACE

12. NOISE GATE
The factory default is-80dB. Click to change to -75dB, and click again to change back to -80dB. In this cycle. Press and hold for 5 seconds to close the squelch door function, and then click to open the squelch door function.