

DP8008 DP8084 DP8016 / DP1680 DP1684 DP1686 8 Channels / 16 Channels Conference Audio Processor with ANC & AEC



Note: The product picture only uses DP1684 for reference only.

Description

The DP8008, DP8084, DP8016, DP1680, DP1684, and DP1686 are DSP matrix audio processors available in 8-input/8-output and 16-input/16-output configurations, designed for conference and professional audio systems. They feature advanced voice algorithms including AFC, AEC, and ANC, along with comprehensive DSP functions such as auto mix, matrix mixing, noise gate, crossover, parametric EQ, delay, compressor, and limiter. Optional Dante network audio with 4×4 or 16×16 channels is supported, making them suitable for professional applications.

Features

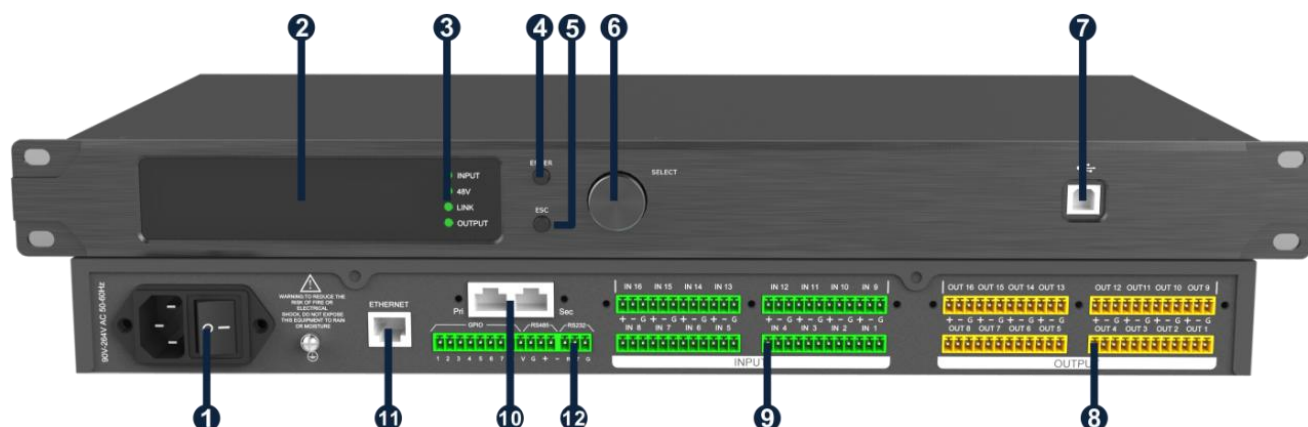
- 8 analog inputs and 8 analog outputs, with selectable Line level and Mic level per channel.
- Optional Dante network audio: 4×4 (DP8084 or DP1684) or 16×16 (DP8016 or DP1686).
- 48V phantom power available for each Mic-level input, with 40 sensitivity levels (1dB per step).
- Built-in AFC (feedback cancellation) with 2 selectable levels.
- Built-in AEC (echo cancellation) for remote video conferencing systems.
- Built-in ANC (noise cancellation) for optimizing local meeting systems.
- Built-in AGC (automatic gain control) for optimizing microphone signals in complex scenarios.
- 8-band PEQ for inputs and 8-band PEQ for outputs. Supports LSLV, HSLV, ALL-PASS, PHASE, ELLIPTIC, LOW PASS, and HIGH PASS filters. HPF and LPF with Butterworth, Bessel, or Linkwitz-Riley characteristics.
- Supports auto mix and matrix mix.

- Supports camera tracking with most camera control protocols.
- Preset archiving and locking function to help hide parameter settings for project security.
- Control interfaces: USB or TCP/IP. Equipped with RS232 and RS485 for central control integration, and GPIO for external control.
- User-friendly GUI software MConsole for Windows 7/8/10/11.
- Optional touchscreen wall control panel (RS485 wired control).

Specifications

Model	DP8008 / DP8084 / DP8016
1. DSP Process	
Process:	32bit float point DSP 400MHz
System delay:	<3ms
AD/DA:	24-bit 48KHz
2. Analog Audio Inputs and Outputs	
Input:	8 channels balanced. Line/Mic level to switch
Input interface:	3.81mm phoenix, 12-pin
Input impedance:	16K Ω
Max input level:	17dBu/Line; -3dBu/Mic@20dB sensitivity
Phantom supply:	+48V DC, 5.5mA in each input channel
Output:	8 channels balanced. Line level
Output interface:	3.81mm phoenix, 12-pin
Output impedance:	150 Ω
3. Audio Performance Specifications	
Frequency response:	20Hz-20kHz(+/-0.5dB)/Line, input 0dBu; 20Hz-20kHz(+/-1.5dB)/Mic, 20dB gain sensitivity, input -10dBu
THD+N:	-90dB(@17dBu, 1kHz, A-wt)/Line -90dB(@-6dBu, 1kHz, A-wt)/Mic, 20dB gain sensitivity
SNR:	110dB(@17dBu, 1kHz, A-wt)/Line 100dB(@-6dBu, 1kHz, A-wt)/Mic, 20dB gain sensitivity
4. Connect Ports and Indicators	
USB:	Type A-B, free driver
RS232:	Serial port communication
TCP/IP interface:	RJ-45
Indicator light:	Input signal, +48V, Link, Output signal
5. Electrical and Physical	
Supply:	AC 90V ~ 264V 50/60 Hz
Products Dimensions	483mmx265mmx44.5mm
Packaged Dimensions	540mmx390mmx80mm
Net Weight	3.3kg
Packaged Weight	4.4kg
Operating temperature:	-20 $^{\circ}$ C ~ 80 $^{\circ}$ C

Model	DP1680 / DP1684 / DP1686
1. DSP Process	
Process:	32bit float point DSP 400MHz
System delay:	<3ms
AD/DA:	24-bit 48KHz
2. Analog Audio Inputs and Outputs	
Input:	16 channels balanced. Line/Mic level to switch
Input interface:	3.81mm phoenix, 12-pin
Input impedance:	16K Ω
Max input level:	17dBu/Line; -3dBu/Mic@20dB sensitivity
Phantom supply:	+48V DC, 5.5mA in each input channel
Output:	8 channels balanced. Line level
Output interface:	3.81mm phoenix, 12-pin
Output impedance:	150 Ω
3. Audio Performance Specifications	
Frequency response:	20Hz-20kHz(+0.5dB)/Line, input 0dBu; 20Hz-20kHz(+1.5dB)/Mic, 20dB gain sensitivity, input -10dBu
THD+N:	-90dB(@17dBu, 1kHz, A-wt)/Line -90dB(@-6dBu, 1kHz, A-wt)/Mic, 20dB gain sensitivity
SNR:	110dB(@17dBu, 1kHz, A-wt)/Line 100dB(@-6dBu, 1kHz, A-wt)/Mic, 20dB gain sensitivity
4. Connect Ports and Indicators	
USB:	Type A-B, free driver
RS232:	Serial port communication
TCP/IP interface:	RJ-45
Indicator light:	Input signal, +48V, Link, Output signal
5. Electrical and Physical	
Supply:	AC 90V ~ 264V 50/60 Hz
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| <ul style="list-style-type: none"> 1. Power connector 2. Display 3. Indicator (input, +48V, link, output) 4. Enter (display menu) 5. ESC (display menu) 6. Select (display menu) 7. USB control and audio 8. Output channels (Line level) 9. Input channels (Line/Mic level) | <ul style="list-style-type: none"> 10. Dante network audio (This interface is only available for DP8084 DP8016 DP1684 DP1686) 11. Ethernet (TCP/IP) control support external control system 12. -GPIO control (8 channel) - RS485 control - RS232 control support external control system |
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