

# 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

DP8008 DP8084 DP8016 / DP1680 DP1684 DP1686 are 8/16 inputs and 8/16 outputs DSP matrix audio processors for conference system and professional system. These products with useful voice algorithm AFC, AEC, ANC and DSP functions including auto mix, matrix mixer, noise gate, crossover, parameter EQ, delay, compressor, limiter, etc. Support Dante network audio 4x4 /16x16 channels in option, suitable for professional applications.

### Features

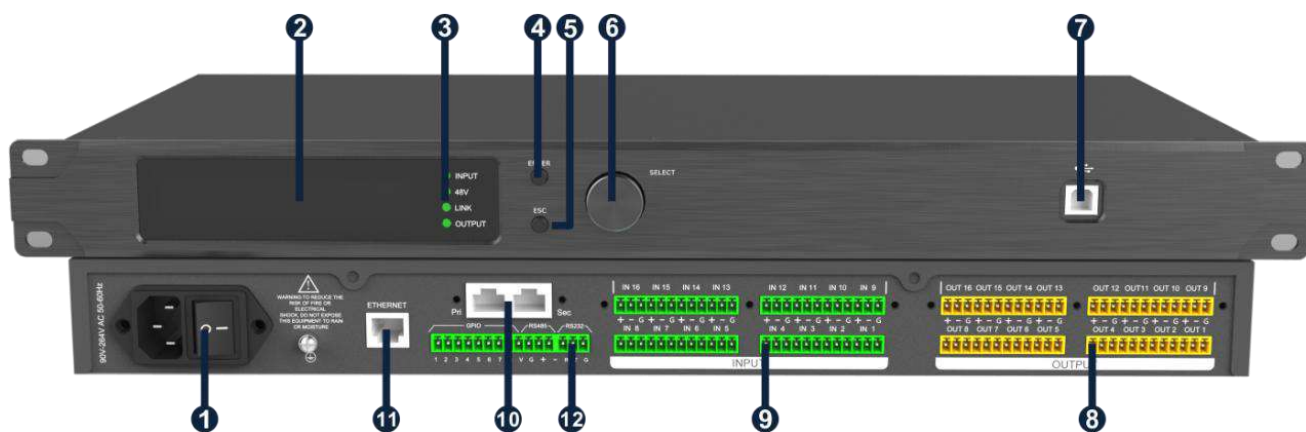
- 8 analog inputs and 8 analog outputs, support to select Line level and Mic level
- Dante network audio 4x4 (DP8084 or DP1684) or 16x16 (DP8016 or DP1686) in option.
- Support 48V phantom for each Mic level input, 40 level sensitivity (1dB in step).
- Built-in AFC(feedback cancellation) , 2 level to select.
- Built-in AEC(echo cancellation) for remote video-conference system.
- Built-in ANC(noise cancellation) for optimizing local meeting system.
- Built-in AGC(automatic gain control) for optimizing microphone signals in complex scenarios
- Input with 8 PEQ and output with 8 PEQ. Support LSLV, HSLV, ALL-PASS, PHASE, ELLIPTIC, LOW PASS AND HIGH PASS filters. Support HPF and LPF with Butterworth / Bessel / Linkwitz-Riley.
- Support auto mix and matrix mix.
- Support camera tracking with most of camera control.
- Support presets archiving and locking, help project to hide parameters of setting.

- Control connections: USB or TCP/IP. Configured with RS232 and RS485 central control connection. Configured with GPIO external control connection.
- Nice GUI windows7/8/10/11 software Mconsole.
- Support touch screen wall control panel in option (RS485 wired control).

## Specifications

Model	DP8008 / DP8084 / DP8016
<b>1. DSP Process</b>	
Process:	32bit float point DSP 400MHz
System delay:	<3ms
AD/DA:	24-bit 48KHz
<b>2. Analog Audio Inputs and Outputs</b>	
Input:	8 channels balanced. Line/Mic level to switch
Input interface:	3.81mm phoenix, 12-pin
Input impedance:	16K $\Omega$
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 $\Omega$
<b>3. Audio Performance Specifications</b>	
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
<b>4. Connect Ports and Indicators</b>	
USB:	Type A-B, free driver
RS232:	Serial port communication
TCP/IP interface:	RJ-45
Indicator light:	Input signal, +48V, Link, Output signal
<b>5. Electrical and Physical</b>	
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
<b>1. DSP Process</b>	
Process:	32bit float point DSP 400MHz
System delay:	<3ms
AD/DA:	24-bit 48KHz
<b>2. Analog Audio Inputs and Outputs</b>	
Input:	16 channels balanced. Line/Mic level to switch
Input interface:	3.81mm phoenix, 12-pin
Input impedance:	16K $\Omega$
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 $\Omega$
<b>3. Audio Performance Specifications</b>	
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
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USB:	Type A-B, free driver
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| <ul style="list-style-type: none"> <li>1. Power connector</li> <li>2. Display</li> <li>3. Indicator (input, +48V, link, output)</li> <li>4. Enter (display menu)</li> <li>5. ESC (display menu)</li> <li>6. Select (display menu)</li> <li>7. USB control and audio</li> <li>8. Output channels (Line level)</li> <li>9. Input channels (Line/Mic level)</li> </ul> | <ul style="list-style-type: none"> <li>10. Dante network audio (This interface is only available for DP8084 DP8016 DP1684 DP1686)</li> <li>11. Ethernet (TCP/IP) control support external control system</li> <li>12. -GPIO control (8 channel)                             <ul style="list-style-type: none"> <li>- RS485 control</li> <li>- RS232 control</li> </ul>                             support external control system                         </li> </ul> |
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