DP7008 DP1580 DP1586

DSP Matrix Audio Processor

Description

DP7008/DP1580 DP1586 is a DSP matrix audio processor with 8/16 inputs and 8/16 outputs for conference system and professional system. It provides 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 16×16 channels in option, suitable for professional applications.

DP7008 holds 8 channels, while DP1580 enjoys 16 channels, and DP1586 has 16 channels with Dante function. This series of audio processor is suitable for meeting rooms, multi-functional halls, auditoriums, and sports stadiums.

Features

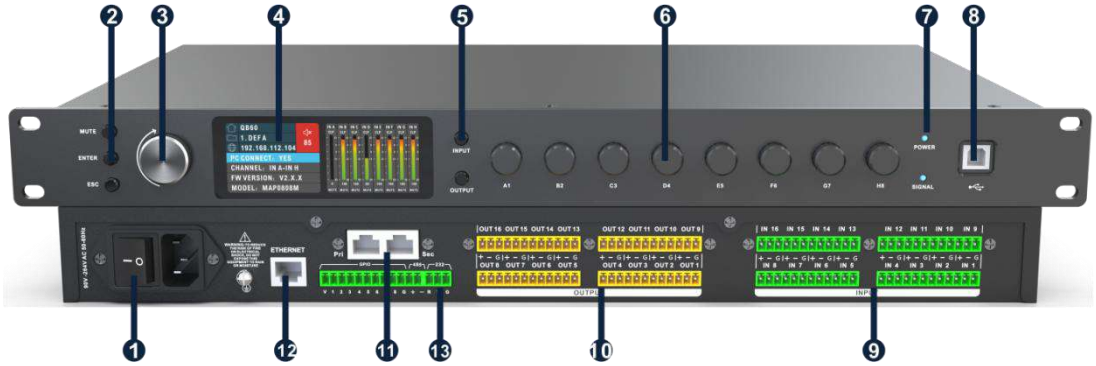
- 8/16 analog inputs and 8/16 analog outputs, support to select Line level and Mic level.
- Dante network audio 16×16 in option.
- Support 48V phantom for each Mic level input, 40 level sensitivity (1dB in step).
- Built-in AFC(feedback cancellation) , 2 level to select.
- Built-in AEC(echo cancellation) 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	DP7008 DP1580 DP1586
1. DSP Process	
Process	32bit float point DSP 400MHz
System Delay	<3ms
AD/DA	24-bit 48KHz
2. Analog Audio Inputs and Outputs	
Input	8/16 channels balanced. Line/Mic level to switch
Input Interface	3.81mm phoenix, 12-pin
Input Impedance	16KΩ
Max Input Level	17dBu/Line; -3dBu/Mic@20dB sensitivity
Phantom Supply	+48V DC, 5.5mA in each input channel
Output	8/16 channels balanced. Line level
Output Interface	3.81mm phoenix, 12-pin
Output Impedance	150Ω
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
Product Dimensions	483mmx265mmx44.5mm
Package Dimensions	540mmx390mmx80mm
Net Weight	3.3kg
Package Weight	4.4kg
Operating Temperature	-20℃ ~ 80℃

Front / Rear Panel

Function Structure and Panel Operation



1. Power connector
2. Device mute button
   Menu enter/esc button
3. OK knob
4. Colourful dual-display
5. Switch button - input channel
   Switch button - output channel
6. Gain knob
7. Power and signal indicator
8. USB control and audio
9. Output channels (Line level)
10. Input channels (Line/Mic level)
11. Dante network audio
12. Ethernet (TCP/IP) control
    support external control system
13. -GPIO control
    (8 channel)
    - RS485 control
    - RS232 control
    support external control system

Dimensions (mm)