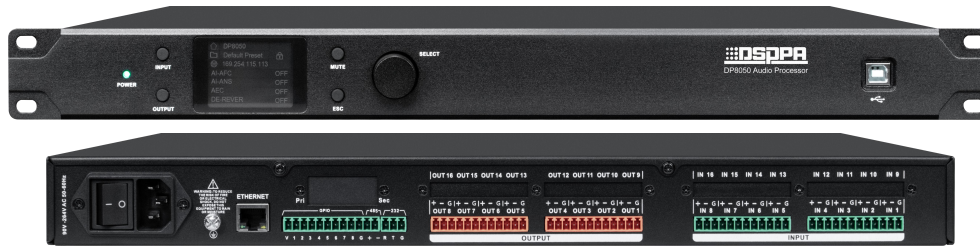


## DP8050

### 8-In 8-Out Professional AI Audio Processor



#### Description

This device is an 8-in 8-out automatic mixing media matrix with 8 analog inputs and 8 analog outputs, featuring a wide range of DSP functions including AI-based feedback suppression, AI noise reduction, automatic mixing, matrix mixing, equalization, crossover, compressor, AGC (Automatic Gain Control), AEC (Acoustic Echo Cancellation), and ANC (Active Noise Control). It is controlled by the software via USB drive-free connection to a computer, and connected to the central control via RS232, RS485, and TCP/IP for remote control, suitable for a variety of applications for sound reinforcement engineering.

#### Features

- With 8 analog balanced inputs and 8 analog balanced outputs, as well as a maximum input and output of 17dBu (5.48Vrms), undistorted.
- With 48V phantom power per input channel.
- With microphone amplifier per input channel, with gain adjustable from 0~40dB in 1dB steps.
- With stereo USB sound card function for playback and recording.
- With USB port for computer software control and USB sound card transfer function.
- With RS232 serial port for computer software control and central control function.
- With RS485 serial port for computer software control and central control function.
- With network interface for computer software control and central control function, managing multiple devices simultaneously through network connection.
- With 8 external GPIO ports.
- With an LCD screen, allowing you to configure a range of functions such as device name, device presets, device IP, input volume, output volume and input mode, and to check the device version.
- With a variety of DSP functions, such as AFC (Adaptive Feedback Cancellation), AEC (Acoustic Echo Cancellation), ANC (Active Noise Cancellation), AGC (Automatic Gain Control), AUTO MIX (Automatic Mixing), MATRIX MIX (Matrix Mixing), Noise Gate, PEQ (Parametric Equalizer), Delay, FIR Filter, High and Low Pass Crossover, Compressor, and Limiter.
- With 15-band PEQ for the input and 10-band PEQ for the output.
- With 2000ms delay per input channel and 2000ms delay per output channel.
- With 512 Tap FIR per output channel.
- With voice activation function (camera tracking) per input channel, support camera control with

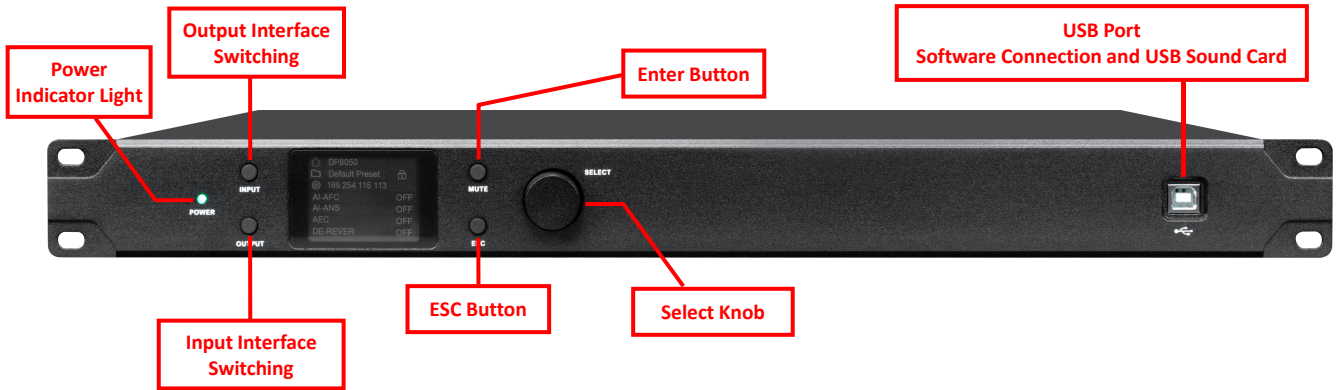
PELCO-D, PELCO-P, and VISCA protocols.

- With 60 preset memory points.
- Support control box control.
- Support Android APP network control.
- Support archive locking and setting parameters hiding to ensure the technical security of the project.

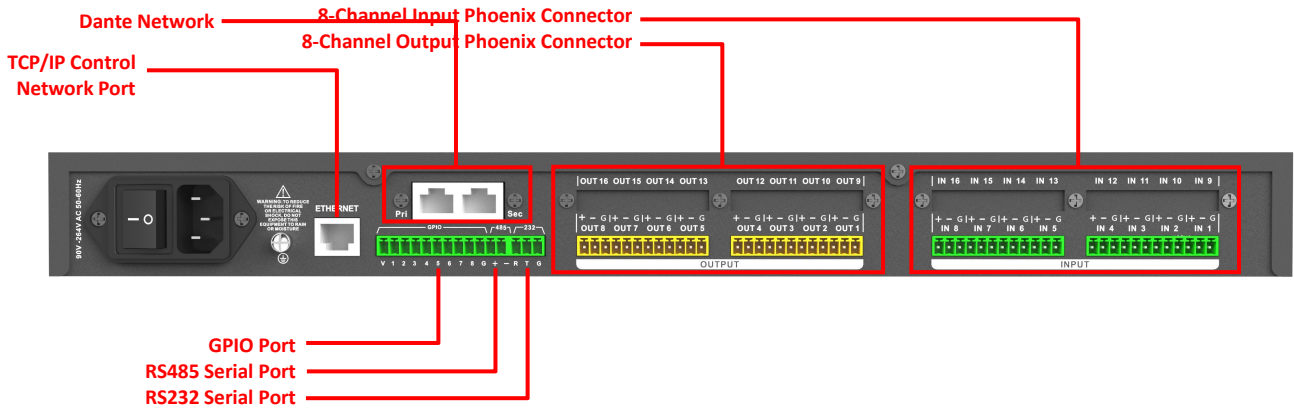
## Specifications

Model	DP8050
<b>DSP Chip</b>	
Signal Processing	32bit float point dsp 400Mhz
Audio System Delay	< 3ms
Digital-to-Analog Conversion	24-bit
Sampling Rate	48KHz
<b>Analog Audio Input/Output</b>	
Input Channel	8 balanced inputs, Mic/line level
Audio Connector	3.81 mm Phoenix plug, 12-pin
Input Impedance	16k $\Omega$
Maximum Input Level	17dBu (5.48Vrms)/Line; -3dBu (0.54Vrms)/Mic@20dB Gain
Phantom Power	+48VDC, 5.5mA per channel
Output Channel	8 balanced outputs, line level
Output Impedance	150 $\Omega$
<b>Audio Performance Specifications</b>	
Frequency Response	20Hz-20kHz ( $\pm$ 0.5dB)/Line, input 0dBu (0.775Vrms) 20Hz-20kHz ( $\pm$ 1.5dB)/Mic, 20dB gain, input -10dBu (0.245Vrms)
THD+N	-90dB (@17dBu, 1kHz, A-wt)/Line -90dB (@-6dBu, 1kHz, A-wt)/Mic, 20dB gain
S/N Ratio	110dB (@17dBu, 1kHz, A-wt)/Line 100dB (@-6dBu, 1kHz, A-wt)/Mic, 20dB gain
<b>Communication Ports and Indicators</b>	
USB	Type-B 2.0, drive-free
RS232	Serial port communication
TCP/IP Network Port	RJ-45
Indicator Light	Link, +48V, input and output audio signals
<b>Electrical and Physical Parameters</b>	
Power Supply	90V-264V AC 50-60 Hz
Operating Temperature	-20 $^{\circ}$ C~60 $^{\circ}$ C
Dimensions (W*D*H)	483mm*265mm*44.5mm
Package Dimensions (W*D*H)	540*390*80
Overall Package Dimensions (W*D*H)	560*430*425
Net Weight	3.3KG
Gross Weight	4.4KG
Overall Gross Weight (5 Units)	23KG

Front Panel



Rear Panel



Machine Dimension Drawings

