

4 In 4 Out DSP Audio Processor



DSP-0404N2



DSP-0404N2 DSP-0404ND2

Ordering Code

DSP-440N2: 4 In 4 out DSP audio processor AFC, AUTOMIX, RS 232 and camera control
DSP-440ND2: 4 In 4 out DSP audio processor AFC, AUTOMIX, RS 232 and camera control, DANTE Ultimo 4 Channel

Features

- 4 analog balanced inputs and 4 analog balanced outputs, with a maximum input/output of 17dBu (5.48Vrms) without distortion
- Stereo USB sound card function, supporting playback and recording
- USB/RS232/RS485, Network interface, computer software control and central control function, through the network connection can simultaneously manage multiple devices
- External 8-channel GPIO interface
- LCD screen, supporting configuration of device name/preset/IP, input/output volume, input mode, device version view and other functions
- DSP functions include AFC, AEC, ANC, AGC, AUTO MIX, MATRIX MIX, Noise Gate, PEQ, Delayer, FIR Filter, High and Low Pass Divider, Compressor, Limiter
- Input 15-band PEQ, output 10-band PEQ
- Input/output 2000ms delayer per channel
- Output 512 Tap FIR per channel
- Input each channel voice excitation function (camera tracking), support with PELCO-D, PELCO-P, VISCA protocol, camera control
- 60 preset memory positions
- Support line control box control, Android APP Network Control
- Support archive locking, hide setting parameters, and ensure project technical security



DSP-0404ND2

SPECIFICATIONS

Signal processing	DSP-0404N2/DSP-0404ND2
Audio system delay	32-bit float point DSP 400MHz
D/A	< 3ms
Sample rate	24-bit
Analog Audio Inputs and Outputs	48KHz
Input channel	4 balanced inputs Mic/line level
Audio interface	3.81 mm Phoenix plug, 12-pin
Input impedance	16kΩ
Max. input level	17dBu (5.48Vrms)/Line- 3dBu (0.54Vrms) / Mic@20dB Gain gear
Phantom power supply	+48VDC, 5.5mA, configured per channel
Output channel	4 balanced outputs, line level
Output impedance	150Ω
Audio Performance Specifications	
Frequency response	20Hz-20kHz (± 0.5dB)/Line, input 0dBu (0.775Vrms) 20Hz-20kHz (± 1.5dB)/Mic, 20dB Gain gear, input -10dBu (0.245Vrms)
THD+N	-90dB@17dBu, 1kHz,A-wt)/Line -90dB@-6dBu, 1kHz,A-wt)/Mic, 20dB Gain
SNR	110dB @17dBu, 1kHz,A-wt)/Line 100dB@-6dBu, 1kHz,A-wt)/Mic, 20dB Gain
Connection and Display	
USB	Type-B 2.0, no drive
RS232	Serial port communication
TCP/IP	RJ-45
Indicator light	Link, +48V, input/output audio signal
Electrical and Physical Parameters	
Power supply	90V-264V AC 50-60 Hz
Operation temperature	-20°C-80°C
Dimension	483mm*265mm*44.5mm
Weight	3.3kg

8 In 8 Out DSP Audio Processor



DSP-880N2



DSP-880ND2/DSP-880ND3



DSP-880N2/DSP-880ND2 DSP-880ND3

Ordering Code

- DSP-880N2: 8 In 8 out DSP audio processor AFC, AUTOMIX, RS 232 and camera control**
- DSP-880ND2: 8 In 8 out DSP audio processor AFC, AUTOMIX, RS 232 and camera control, DANTE Ultimo 4 Channel**
- DSP-880ND3: 8 In 8 out DSP audio processor AFC, AUTOMIX, RS 232 and camera control, DANTE 8 Channel**

Description

The DSP-880N2/DSP-880ND2/DSP-880ND3 audio processor combines Auto Mixer, Matrix Mixer, and Feedback suppressor in one purpose-built DSP processor. At the same time, it has independent FIR/AFC/AEC/ANS/AGC gain sharing automatic mixing, threshold automatic mixing and other processing modules. The DSP-880N2/DSP-880ND2/DSP-880ND3 includes 8 mic/line analog inputs, 8 analog outputs to meet the needs of a wide range of audio processing applications such as boardroom, medium/large conference rooms, courtrooms, auditoriums and multi-purpose halls.

Features

- 8-channel analog input and 8-channel analog output, Microphone or Line in switch
- +48V Phantom power per input channel
- AFC in each input
- AUTO-MIX and MATRIX-MIX
- 15 PEQS per input and 10 PEQS per output
- USB free driver connect, RS232/485 connector for center control

SPECIFICATIONS	DSP-880N2/DSP-880ND2/DSP-880ND3
Input Channels	8 balanced, Mic/line level
Connectors	3.81 mm Euro block
Input Impedance	11.5KΩ
Maximum Input Level	14dBu/Line, -7dBu/Mic
Phantom Power	+48VDC, 10mA, selectable per input
Output Channels	8/8/16 balanced, line level
Output Impedance	150Ω
Frequency Response	20Hz-20kHz(+/-0.5dB)/Line 20Hz-20kHz(+/-1.5dB)/Mic
THD+N	LINE: 0.003% MIC: 0.005%
SNR	105dB(@12dBu, 1kHz, A-wt)/Line 95dB(@-7dBu, 1kHz, A-wt)/Mic
USB	Micro-B type, free driver
RS232	Serial port communication
TCPIP	RJ-45, Optional
LED Status Indicators	Power, Link, +48V, Input and Output Audio signal
Mains Voltage	AC100V--240V 50/60 Hz
Dimensions	44mmx483mmx210mm
Net Weight	2.8kg
Operating Temperature	-20°C-60°C
Cooling System	Active, Fan inside
Signal Processor	32-bit fixed/floating-point DSP 300MHz
Audio Latency	< 1ms
A/D and D/A Converters	24-bit
Sample Rate	48KHz

8-Zone Paing Microphone Station



Features:

8 ZONE Remote Microphone Station for DSP-880ND2, DSP-880ND3, DSP-880N2

● Controls

Zone selector switches for Z1~Z8. Talk & Chime on/off. Level control volume for MIC & Chime.

● Connectors

Rs485 communication with DSP-880N2, DSP-880ND2, DSP-880ND3, DC12V input.

● Indicators

Power, Busy, Signal, Clip.



SPECIFICATIONS	DSP-M8V2
Rated Output Level / Impedance	0dB / 600Ω Balanced
Input sensitivity / Impedance	-36dB / 20kΩ Balanced
Frequency Response (-1dB)	80Hz -15kHz
T.H.D	<0.1%
Hum & Noise	> 90 dB
Number of Zone	8 Zones
Weight (Net)	750g
Dimensions (W x Hx D)	115 x 60 x 195mm (only body)

16 In 16 Out DSP Audio Processor



DSP-1616N2



DSP-1616N2/DSP-1616ND2 DSP-1616ND3

Ordering Code

- DSP-1616N2: 16 In 16 out DSP audio processor AFC, AEC, ANC, AUTOMIX, RS 232 and camera control**
- DSP-1616ND2: 16 In 16 out DSP audio processor AFC, AEC, ANC, AUTOMIX, RS 232 and camera control Dante Ultimo 4 Channel**
- DSP-1616ND3: 16 In 16 out DSP audio processor AFC, AEC, ANC, AUTOMIX, RS 232 and camera control Dante 16 Channel**

Description

The DSP-1616N2/DSP-1616ND2/DSP-1616ND3 audio processor combines Auto Mixer, Matrix Mixer, and Feedback suppressor in one purpose-built DSP processor. At the same time, it has independent FIR/AFC/AEC/ANS/AGC gain sharing automatic mixing, threshold automatic mixing and other processing modules. The /DSP-1616ND2/DSP-1616ND3 includes 16 mic/line analog inputs, 16 analog outputs to meet the needs of a wide range of audio processing applications such as boardroom, medium/large conference rooms, courtrooms, auditoriums and multi-purpose halls.

Features

- 16-channel analog input and 16-channel analog output, Microphone or Line in switch
- +48V Phantom power per input channel
- AFC in each input
- AUTO-MIX and MATRIX-MIX
- 15 PEQS per input and 10 PEQS per output
- USB free driver connect, RS232/485 connector for center control



DSP-1616ND2/DSP-1616ND3

SPECIFICATIONS	DSP-1616N2/DSP-1616ND2/DSP-1616ND3
Input Channels	16 balanced, Mic/line level
Connectors	3.81 mm Euro block
Input Impedance	11.5KΩ
Maximum Input Level	14dBu/Line, -7dBu/Mic
Phantom Power	+48VDC, 10mA, selectable per input
Output Channels	16 balanced, line level
Output Impedance	150Ω
Frequency Response	20Hz-20kHz(+/-0.5dB)/Line 20Hz-20kHz(+/-1.5dB)/Mic
THD+N	LINE: 0.003% MIC: 0.005%
SNR	105dB(@12dBu, 1kHz, A-wt)/Line 95dB(@-7dBu, 1kHz, A-wt)/Mic
USB	Micro-B type, free driver
RS232	Serial port communication
TCPIP	RJ-45, Optional
LED Status Indicators	Power, Link, +48V, Input and Output Audio signal
Mains Voltage	AC100V---240V 50/60 Hz
Dimensions	44mmx483mmx210mm
Net Weight	2.8kg
Operating Temperature	-20°C-60°C
Cooling System	Active, Fan inside
Signal Processor	32-bit fixed/floating-point DSP 300MHz
Audio Latency	< 1ms
A/D and D/A Converters	24-bit
Sample Rate	48KHz

16-Zone Paing Microphone Station



Features:

16 ZONE Remote Microphone Station for DSP-1616N2, DSP-1616ND2, DSP-1616ND3

● Controls

Zone selector switches for Z1~Z16. Talk & Chime on/off. Level control volume for MIC & Chime.

● Connectors

Rs485 communication with DSP-1616N2, DSP-1616ND2, DSP-1616ND3
DC12V input.

● Indicators

Power, Busy, Signal, Clip.

SPECIFICATIONS	DSP-M16V2
Rated Output Level / Impedance	0dB / 600Ω Balanced
Input sensitivity / Impedance	-36dB / 20kΩ Balanced
Frequency Response (-1dB)	80Hz -15kHz
T.H.D	<0.1%
Hum & Noise	> 90 dB
Number of Zone	16 Zones
Weight (Net)	750g
Dimensions (W x Hx D)	115 x 60 x 195mm (only body)

Class D Mixer Amplifier with Audio Sources, Dante and DSP



MA-1000T V2/MA-1000TD V2 MA-2000T V2/MA-2000TD V2

Ordering Code

- MA-1000T V2: 2X500W mixer amplifier with DSP
- MA-1000TD V2: 2X500W mixer amplifier with DSP and Dante
- MA-2000T V2: 4X500W mixer amplifier with DSP
- MA-2000TD V2: 4X500W mixer amplifier with DSP and Dante

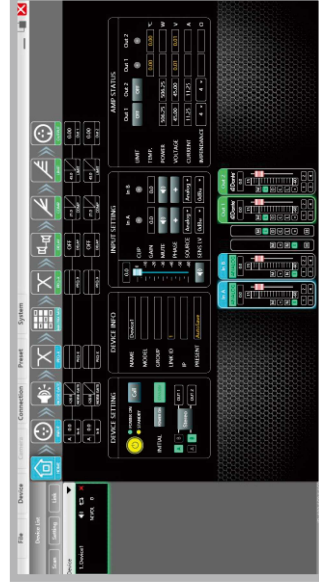
Description

MA-1000TD V2 is a multi-function network DSP digital High-Z and low-Z power amplifier 2*500W@4Ω, 2*300W@8Ω, bridged 1000W@8Ω, low-Z 100V-1000W@10Ω. It can remotely monitor the status of power amplifier, set compression Controller, limiter, noise gate, parametric equalization, matrix routing, delay and other DSP functions in real time. Simple software interface provides customers with simple setup and operation experience, and a variety of connection methods ensure its good configurability and expandability, suitable for various applications, such as performance center, theatre, gallery, hotel, conference center, shopping center, retail store, restaurant, etc.

Features

- Flexible Dante Network amplifier with DSP with both 100V line and 8ohm Software selectable
- Local analog audio input selection
- Built-in DSP digital processor
- Network TCP/IP control for multiple device management
- Support multiple on line modes: USB, TCP/IP, RS232, RS485
- Real-time remote monitoring of power amplifier working status
- Support balanced XLR input and unbalanced RCA input
- Support stereo, bridge, mono, free matrix mode, one-button switching

SPECIFICATIONS	MA-1000T V2 MA-1000TD V2	MA-2000T V2 MA-2000TD V2
Output Power	2*500w at 4ohm; or 1*600W at 8ohm bridged, 1*600W 100V line bridged, 1*600W 70V line bridged	4*500w at 4ohm; or 2*600W at 8ohm bridged, 2*600W 100V line bridged, 2*600W 70V line bridged
Output	100V or 4 - 16ohm, DSP software selectable	100V or 4 - 16ohm, DSP software selectable
Frequency Response	20 - 20,000 Hz, +/- 0.5dB at 1W, 8ohm	20 - 20,000 Hz, +/- 0.5dB at 1W, 8ohm
THD	Less than 0.1% at 1W to full load	Less than 0.1% at 1W to full load
S/N Ratio	6dBu and 0dBu at 94dB	6dBu and 0dBu at 94dB
Input EQ	5 Bands	5 Bands
Output EQ	9 Bands	9 Bands
Cooling	Internal 12VDC fan, extensive heat sinking	Internal 12VDC fan, extensive heat sinking
Display	240*240 res, IPS colored	240*240 res, IPS colored
Dante interface	2 Channel	2 Channel
Power Requirements	180-264V AC, 50/60 Hz	100-240V AC, 50/60 Hz
Dimensions	44.5(H) x 483(W) x 330(D) mm	44.5(H) x 483(W) x 330(D) mm
Built-in Dimensions	1 U rack 19 inch	1 U rack 19 inch
Finish	Panel: Aluminum plate, black; Case: steel plate, black	



4- Channel Amplifier with DSP



Features

- Optional for Dante network audio
- With network TCP/IP control, and it can realize the management of multiple devices
- Power on or off remotely
- Use 4.3 inch IPS capacitive touch screen
- With built-in DSP digital processor
- Support multiple connection method: USB, TCP/IP, RS232, RS485
- Monitor the working status of the power amplifier remotely in real time
- The power amplifier can be identified by software on site
- Switch to bridging or matrix mode freely
- Three levels of input sensitivity can be adjusted 0dBu/6dBu/12dBu, software or color LCD screen setting
- With standard Fir function, support 4×2048 Taps
- Support constant voltage and constant resistance: 100V, 70V, 8 ohms, 4 ohms
- Software control, it can control media matrix and professional processor at the same time
- Wide voltage operation 180-264VAC

PA-41500T/ PA-41000T PA-4800T

Ordering Code

- PA-41500TD: 4*1500W@8Ω, 4*2000W@4Ω, 100V (4*1250W); 70V (4*600W); Amplifier with DANTE AND DSP
- PA-41500T: 4*1500W@8Ω, 4*2000W@4Ω, 100V (4*1250W); 70V (4*600W); Amplifier with DSP
- PA-41000TD: 4*1000W@8Ω, 4*1800W@4Ω, 100V (2*1250W); 70V (4*600W); Amplifier with DANTE AND DSP
- PA-41000T: 4*1000W@8Ω, 4*1800W@4Ω, 100V (2*1250W); 70V (4*600W); Amplifier with DSP
- PA-4800TD: 4*800W@8Ω, 4*1600W@4Ω, 100V (2*1250W); 70V (4*600W); Amplifier with DANTE AND DSP
- PA-4800T: 4*800W@8Ω, 4*1600W@4Ω, 100V (2*1250W); 70V (4*600W); Amplifier with DSP

Description

PA Series is a multifunctional network DSP digital power amplifier, which can remotely monitor the status of the power amplifier in real time, and it can set the compressor, limiter, noise gate, parametric equalization, matrix routing, delay as well as other DSP functions in real time. A simple software interface provides customers with simple and convenient settings and operating experience. Besides, the multiple connection methods can achieve good configurability and scalability, which is suitable for various environments.

	PA-41500T	PA-41000T	PA-4800T
Channels	4	4	4
Rated power	4*1500W@8Ω, 4*2000W@4Ω, 100V (4*1250W); 70V (4*600W);	4*1000W@8Ω, 4*1800W@4Ω, 70V (4*600W)	4*800W@8Ω, 4*1600W@4Ω, 70V (4*600W)
Bridge power	2*3200W@8Ω	2*3200W@8Ω, 100V (2*1250W)	2*3200W@8Ω; 100V (2*1250W)
Minimum output impedance	4Ω for each channel	4Ω for each channel	4Ω for each channel
Input	Balanced input, 4*XLR	Balanced input, 4*XLR	Balanced input, 4*XLR
Output	4*Spoken; 4*Terminal	4*Spoken; 4*Terminal	4*Spoken; 4*Terminal
Maximum input level	20dBu/7.75V	20dBu/7.75V	20dBu/7.75V
Sensitive	12dBu; 31dB/6dBu; 37dB/0dBu; 43dB	12dBu; 29.3dB/6dBu; 35.3dB/0dBu; 41.3dB	12dBu; 28.3dB/6dBu; 34.3dB/0dBu; 40.3dB
Signal to noise ratio	103dB@12dBu/ 1kHz	103dB@12dBu/ 1kHz	103dB@12dBu/ 1kHz
Frequency	20Hz ~20kHz (±0.5dB) @1W, 8Ω	20Hz ~20kHz (±0.5dB) @1W, 8Ω	20Hz ~20kHz (±0.5dB) @1W, 8Ω
THD+N	<0.08%@1W	<0.08%@1W	<0.08%@1W
Sampling rate	48k/24bit	48k/24bit	48k/24bit
Dante(Optional)	4 Dante channels	4 Dante channels	4 Dante channels
Display	4.3 inch IPS capacitive touch screen	4.3 inch IPS capacitive touch screen	4.3 inch IPS capacitive touch screen
Protection	Audio limiter, high temperature, DC, high frequency short circuit, back-EMF, peak current limiter, inrush current limiter, start-up delay, power circuit breaker protection, power supply overvoltage/undervoltage protection	Audio limiter, high temperature, DC, high frequency short circuit, back-EMF, peak current limiter, inrush current limiter, start-up delay, power circuit breaker protection, power supply overvoltage/undervoltage protection	Audio limiter, high temperature, DC, high frequency short circuit, back-EMF, peak current limiter, inrush current limiter, start-up delay, power circuit breaker protection, power supply overvoltage/undervoltage protection
PC software	Software can control media matrix, audio processor, DSP power amplifier, active DSP module	Software can control media matrix, audio processor, DSP power amplifier, active DSP module	Software can control media matrix, audio processor, DSP power amplifier, active DSP module
Power supply	180-264VAC	180-264VAC	180-264VAC