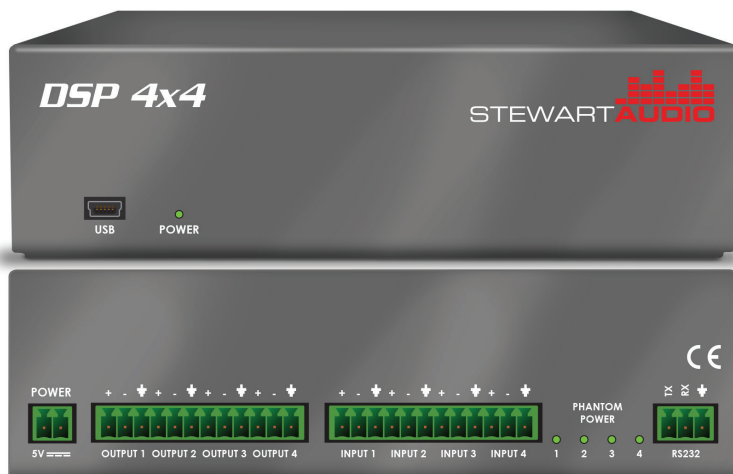# DSP Series
DSP Processors

This compact DSP was designed to address the multitude of problems encountered in typical installations impacting sound quality. The DSP 4x4 is an affordable way to add additional DSP processing to an existing installation or as a way to correct unforseen audio problems encountered during a new install. Set and forget configuration is done through the front USB port via an intuitive windows program. This downloadable program makes setup fast and repeatable with the ability to save and copy programs to multiple units for labor savings. To help minimize setup errors, all DSP block values appear with a simple mouse over and mute or bypassed blocks are clearly tagged. The RS-232 allows for preset programs to be used for applications like room combining. The inputs can be line or mic level with 24V phantom power available. Simple, versatile and powerful are all attributes of this compact DSP.

DSP4x4

Features:
- 4 channels of DSP processing
- Configurable via USB port
- RS-232 connection for live changes
- 1/3 rack package & convection cooled
- Made in the USA
- Matrix Mixer
- 9 bands of parametric filters per channel
- Priority signal ducker
- 100ms of delay per channel

Applications:
- Hospitality Installations
- Board Rooms
- Classrooms
- Conference Rooms
- House of Worship
- Remote Locations
- Distributed or centralized venues
- Room combining

DSP 4x4

STEWARTAUDIO
The Difference is Hear

DSP 4x4

Frequency Response	20Hz - 20kHz ± .2dB
THD+N	< 0.007%
Signal-to-Noise Ratio	> 120dB
Unweighted Crosstalk	< -95dB
Input Sensitivity	-20dB to +3dB
Input Impedance (Balanced/Unbalanced/Phantom)	20k Ω, 10k Ω, 2.4k Ω
Phantom Power	24VDC @ 25ma Software Selectable
D/A Conversion	24-bit, 48kHz
Current Draw	400ma @ 5VDC
Input Connectors	3.5 Euro Block
Output Connectors	3.5 Euro Block
LED Indicators	Power and Phantom Power
Controls	USB (Programming), and RS-232 (Operation)
Serial Control Port	Bidirectional RS-232
Baud Rate & Protocol	9600 Baud, 8 data-bits, 1 stop-bit, no parity, no flow control
USB Control Port	Front Panel female mini USB-B
USB Standards	USB 2.0 Low Speed
Program Control	Stewart Audio DSP Control Center
Power Supply Input	External in-line 5VDC (included)
Construction	Aluminum Chassis
Mounting	Universal Bracket, Pole Mount Options
Cooling	Convection-Cooling
Dimensions (H x W x D)	1.7" (4.3cm) H x 6.2" (15.7cm) W x 4.0" (10.3cm) D
Weight	0.6lbs (0.3kg)
Safety	C
Environmental	RoHS
Warranty	3 Years

INPUT 1 → Adjustable Pregain → Priority Ducker → EQ 3 Blocks → Compressor → Gain → Matrix Mixer → Trim → EQ 6 Blocks → Limiter → Delay → Gain → OUTPUT 1

INPUT 2 → Adjustable Pregain → Priority Ducker → EQ 3 Blocks → Compressor → Gain → Matrix Mixer → Trim → EQ 6 Blocks → Limiter → Delay → Gain → OUTPUT 2

INPUT 3 → Adjustable Pregain → Priority Ducker → EQ 3 Blocks → Compressor → Gain → Matrix Mixer → Trim → EQ 6 Blocks → Limiter → Delay → Gain → OUTPUT 3

INPUT 4 → Adjustable Pregain → Priority Ducker → EQ 3 Blocks → Compressor → Gain → Matrix Mixer → Trim → EQ 6 Blocks → Limiter → Delay → Gain → OUTPUT 4

Sine Wave → Matrix Mixer
Pink Noise → Matrix Mixer

EQ Blocks
High Pass (1st/2nd Order)
Low Pass (1st/2nd Order)
Low Shelf
High Shelf
Peak (PEQ)
Notch

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