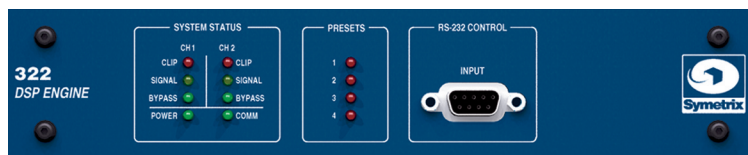


# 322 DSP Engine



Expand your design possibilities with the 322 DSP Engine. By matching a deep set of processing features with a breakthrough price, the 322 delivers the benefits of DSP to small installed sound systems. Designs that previously would have been cost prohibitive using multiple analog units, or required DSP power only available from large multi I/O platforms, are all possible with the 322.

A compact, all-in-one, general-purpose signal processor, the 322 features two inputs, two outputs, and 24-bit multifunction DSP. It provides all the processing generally needed between a mixing console and a power amplifier in small sound systems. Using Audio Workplace™ 322, a Windows®-based control application, installers create custom setups using these drag-and-drop processing modules: Parametric EQ; high-pass, low-pass and

shelving filters; a crossover and a mixer; speaker alignment delay, bus routing, and multiband comp/limiter functions.

Small installations with small budgets don't have to dictate small audio thinking. Enhance performance and increase flexibility with the 322 DSP Engine from Symetrix, the engineering-driven company of signal processing specialists.

## APPLICATIONS

- Performing Arts Centers
- A/V Presentation Systems
- Sound Masking Systems
  - Houses of Worship
  - Auditoriums
  - Casinos

## FEATURES

<b>AudioWorkplace Hardware &amp; Software</b>	Using Symetrix Audio Workplace 322 software and a host PC, system designers can program the 322's presets and adjust audio parameters. Once programmed, the 322 operates independently.
<b>Drag &amp; Drop Setup</b>	A simple Windows-based application editor allows installers to drag and drop processing blocks for a completely user-configurable signal flow. Place the blocks anywhere along the signal path and move them later to accommodate changing installation needs.
<b>Presets</b>	Four user presets. Trigger preset change using contact closure inputs on rear panel.
<b>Remote Control</b>	Rear panel inputs for remote preset selection and control of volume and/or 4 internal parameters.
<b>Tamper-proof Operation</b>	Control data streams through a front panel RS232 connection, leaving the 322's chassis tamper-proof.

## Processing & Routing Control Modules

**Filters**—Multiband 12 and 24 dB/octave low pass and high pass filters. Multiband 6 dB/octave shelving filters.

**Dynamics Processing**—Compression, with split-band mode, and limiting. Proprietary split-band mode eliminates hole-punching and breathing while delivering great-sounding peak level control.

**EQ**—Three parametric EQ's featuring options of 2, 4, and 8 bands.

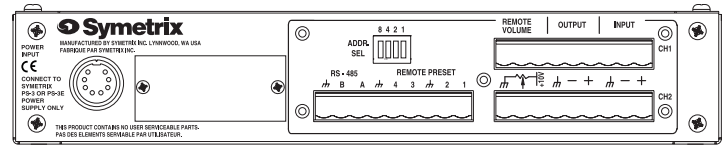
**Crossover**—1x2 crossover with Linkwitz-Riley alignment or filters with delay slopes of 12, 18, 24 and 36 dB/octave.

**Mixer & Send**—Sum two channels or split one channel into two signal paths.

**Speaker Alignment Delay**—Displays delay in either distance or time measurements. Permits manual correction of the delay time to accommodate changes in ambient temperature.

**Pink Noise Generator**—With 6 minute cycle time for testing and sound masking applications.

## REAR PANEL



## PRELIMINARY SPECIFICATIONS

### Performance Data

Frequency Response	20 Hz to 20 kHz, +/-0.5 dB
Dynamic Range	108 dB typical
THD+Noise	-95 dB at 1 kHz typical
CMR	>40 dB
Crosstalk	<-50 dB at 10 kHz
Maximum Input Level	+24 dBu
Maximum Output Level	+24 dBu
Number of Stored Programs	4
Maximum Number of Units on a Single Daisy Chain	16
RS-485 Baud Rates	9600, 19200, 38400, 57600, 115200
DB9 Baud Rate	38400

### Connections

Line Inputs and Line Outputs	Euroblock
Control	RS-232 and RS-485
Device Address	Dip switch
Remote Preset Select and Volume Control	Euroblock
Power In	7-pin DIN

### Physical

Size (H x W x D)	1/2 rack unit
	1.75 in. x 8.5 in. x 8.5 in. / 4.445 cm x 21.59 cm x 21.59 cm

### Electrical

Power Requirements	10 W maximum, Symetrix PS-3 Series only
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## ACCESSORIES

19" Rackmount Tray height is 1U	#RM-3
Filler Panel covers unused half of rack tray	#FP-3
Y Power Cable connects a 322 with any other 300 Series product	#PY-3

## SIGNAL FLOW DIAGRAM

