



digital signal processor  
for loudspeaker management and optimization







DC-One 24-BIT DIGITAL SOUND SYSTEM PROCESSOR



DC-ONE

COMPARE SELECT PROCESSING MENU

VALUE

input output

(Repeat press for next channel)

INPUT

Clp

A B

A B

-12 -10 -8 -6 -4 -2 0dB

-15 -18 -27 -∞

Ey CP2200 PRECISION SERIES

A B

LIMIT 0 dB SIGNAL

PROTECT POWER

A B

-12 -10 -8 -6 -4 -2 0dB

-15 -18 -27 -∞

A B

LIMIT 0 dB SIGNAL

PROTECT POWER

Ey CP3000 PRECISION SERIES

A B

-12 -10 -8 -6 -4 -2 0dB

-15 -18 -27 -∞

A B

LIMIT 0 dB SIGNAL

PROTECT POWER

Ey CP4000 PRECISION SERIES





# State of the Art DSP for Today's Applications

The Electro-Voice DC-One is a 2-in, 6-out digital signal processor for loudspeaker management and optimization. Built on EV's DSP heritage, DC-One is the next generation of EV signal processing, proven in thousands of installations and live applications around the world including the Olympics, the FIFA World Cup, Live 8, and Live Earth. Throughout the years, EV has set industry standards for superior processing solutions featuring outstanding dynamic range, legendary reliability, and powerful DSP—options normally associated with units costing many, many times more. World class floating point processing ensures a total sonic match with all existing EV loudspeaker presets from existing and future processing platforms and also allows expansion of the DC-One processing features with new releases. DC-One packages this level of performance and flexibility into a system that balances ease of use with sophisticated functionality.

## Taking Your System to the Next Level

Ask yourself these questions:

How do I get the most out of my Electro-Voice PA? DC-One provides all the tools to optimize your system with ease. Factory designed presets are available at the push of a button to automatically configure processing, including equalization and crossovers, that is unique to your setup. Not only does this provide the highest sonic performance, it also protects your loudspeaker components for maximum longevity.

How do I manage multiple rental systems? DC-One is designed to handle a multitude of applications with varying degrees of access to control parameters. One event may call for a small, portable system with limited access for simple house EQ, while another may need a larger system with deeper access to crossover and limiter functions. In any case, DC-One can be configured to the situation, scaled up or down, sophisticated or simple, always protecting your investment.

What level of control is available? DC-One gives experienced system designers a full complement of precision tools for loudspeaker management and tuning normally associated with more expensive units. The user friendly software interface allows complete control of all parameters for the most critical applications, from house of worship to high-end club installations.



Audible comparative reference – Want to hear how your changes compare to stored parameters? Pressing the Compare button toggles between the selected preset and your edited settings.



Reliable, accurate input metering assures proper gain staging.

USB connection for advanced editing and control with DC-One Editor software

Convenient system setup configurations – 2-way stereo, 3-way stereo, 4-way plus full range, 5-way plus full range, or free configuration



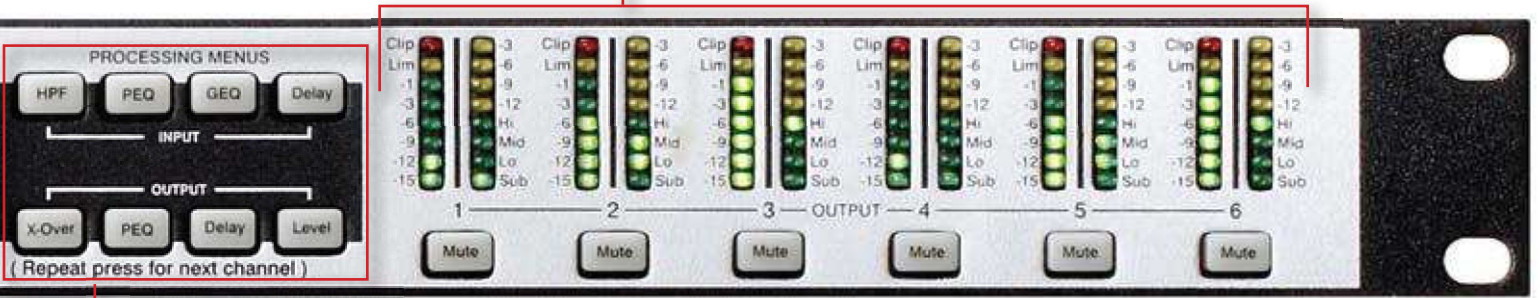
RS-232 port for Master/Slave connections or GPI preset recall

Six analog outputs

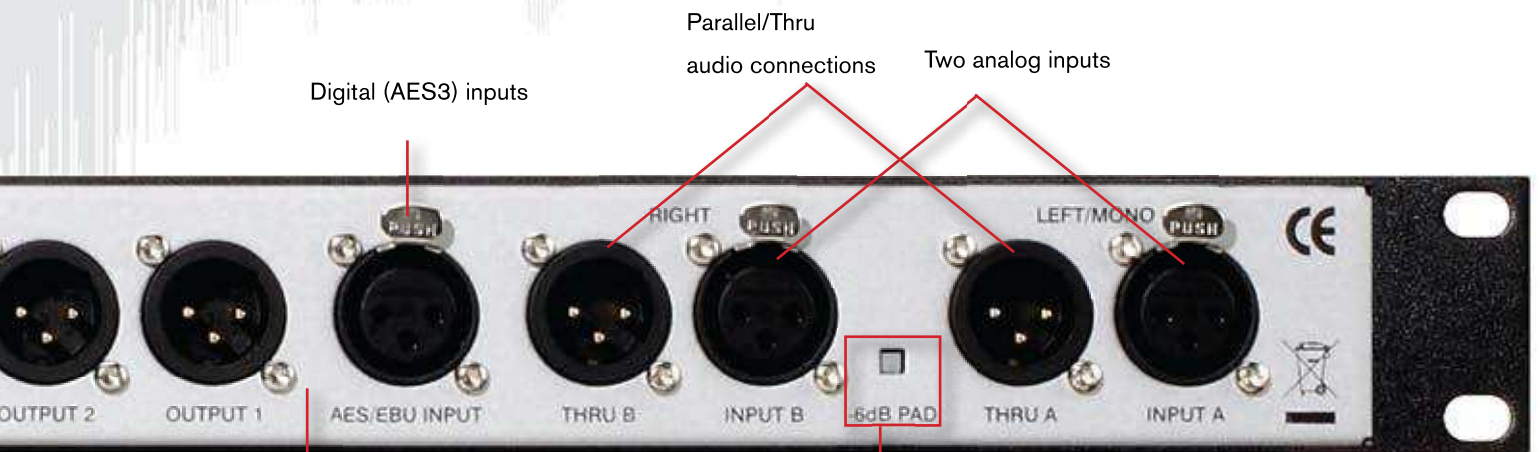




Output metering includes gain reduction and configuration mode indicators.

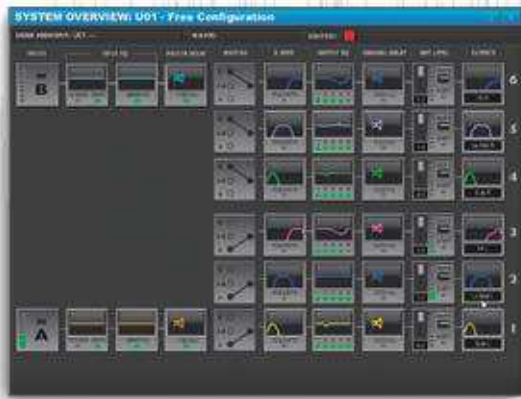


Enhanced processing navigation – Get quick access to the parameter you need without scrolling through endless menus.

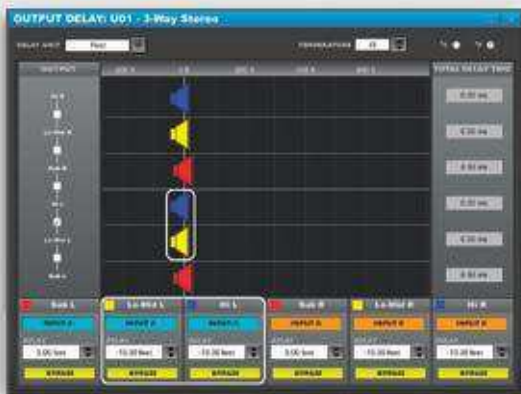


Built in selectable 6 dB pad for system input protection – this analog pad is placed before the A/D converter to provide extra protection against input clipping caused by devices with high output levels, such as DJ mixers.





DC-One Editor Software gives you the option of getting deeper into system control with an intuitive user interface. Functionally, DC-One Editor Software utilizes graphics and color schemes that are stylistically inspired by popular recording software applications. A picture is worth a thousand words – rather than editing your sound with text and numbers, the graphic interface allows you to immediately visualize and control parameters and settings, live and in real time.



Unique Delay Adjustment Interface – Users can position the system components as they actually exist in space, making it possible to move devices forward or backward in the environment. Multiple channel linking options are provided, and total delay time is always displayed.



Selectable Front Panel Access – Variable parameter lockout – keep your system and your investment safe by blocking access to any settings or parameters. The lock icons denote which parameters are not accessible from the front panel.





DC-One Editor Software allows you to take the control and configuration of your system to the next level. Operating on a Windows PC, the DC-One Editor connects to the hardware via a simple, plug-and-play USB interface.

All changes and edits happen in real-time, allowing you to immediately hear the results of any adjustments. All parameters of the system, including VU meters, mute switches, level controls, and DSP functions are instantly visible, providing an in-depth overview of your systems's operation.

DC-One offers maximum flexibility: all changes can be stored in project files on your PC; presets can be stored in the DC-One hardware or software, to be recalled at any time.

Whether you have multiple loudspeaker systems to manage or simply want to store different EQ settings for the different venues in which you work, DC-One Editor Software provides all the tools and flexibility you'll need to make your sound better and your gig easier.



# DC-One Technical Specifications

## General

Mains Voltage	100-240 VAC 50-60 Hz
Power Consumption	25W
Audio	
Analog Inputs	2x XLR IN, electronically balanced 2x XLR THRU OUT, electronically balanced
Digital Inputs	1x XLR AES/EBU IN
Nominal Input Voltage	1.23 V / +4 dBu
Maximum Input Voltage (Without -6dB Analog Pad Engaged)	8.7 V / +21 dBu
Input Impedance	10k ohm
Common Mode Rejection	-80 dB @ 1 kHz (typical)
A/D Conversion	24-Bit Sigma-Delta
Outputs	6x XLR OUT, electronically balanced
Nominal Output Voltage	1.23 V / +4 dBu
Maximum Output Voltage	8.7 V / +21 dBu
Output Impedance	50 ohm
D/A Conversion	24-Bit Sigma-Delta
Frequency Response	10 Hz-22 kHz (+/- 0.5 dB)
THD+N	< 0.01% (band limited 22Hz-22kHz)
Dynamic Range	111 dB unweighted, band limited 22 Hz - 22 kHz

## Interfaces

USB	USB Type B on front panel (PC Interface)
9-pin DSUB	Software Configurable for GPI Preset Recall or Master/Slave Connection to second DC-One unit

## Signal Processing

Sample Rate	48 kHz
Data Format	24-Bit
Internal Processing	32-Bit Floating Point

## Physical

Dimensions (WxHxD)	19 x 14 x 1.75 inches (482.6 x 355.6 x 44.45 mm)
Weight (Net)	10.1 lb (4.6 kg)
Weight (Gross)	13.0 lb (5.9 kg)

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