BSS DCP-555

digital conferencing processor

Prototype shown. Production version subject to change.

Overview

The BSS DCP-555 breaks the mold of traditional digital signal processors (DSP). Featuring a web-sever interface accessible from any device connected on the same network, choose from commonly used audio templates to eliminate the need for custom programming from scratch, thereby saving time, money and effort on common use cases for audio processing such as conference rooms, boardrooms and classrooms. As a fixed configuration DSP, the DCP-555 offers the same pristine audio quality, advanced engineering and reliability that is synonymous with BSS.

The DCP-555 can support up to four rooms simultaneously using bidirectional VoIP connections. The DCP-555 also offers a range of onboard I/O connection options, with AES67, BLU link, USB and 16x8 analog audio all built in. This provides easy compatibility with other HARMAN and third-party audio devices, with GPIO and relays available for simplified control.

To streamline integration with other HARMAN devices, the DCP-555 includes built-in microphone tunings and JBL speaker tuning presets, offering simple, IT-centric configuration. When using the DCP-555 along with AMX SVSI networked AV solutions, encoder syncing is available to ensure the audio and video signals are perfectly aligned for an optimal experience without any manual setup. These features allow integrators to easily design and configure rooms with minimal complexity.

Common Applications

The DCP-555 provides superior sound processing quality in a template-based solution designed for medium- to large-sized conference rooms, boardrooms and classrooms. The easy-to-configure interface is ideal for IT managers and integrators responsible for deploying DSP across global enterprises or buildings with repeated venues (i.e. multiple meeting spaces which are largely similar).

Key Features

- Easy-to-use, template-based interface accessible via web browser
- No DSP programming required
- 12 independently assignable echo cancellers
- 16 x mic/line inputs
- 8 x line outputs
- 16 in / 16 out BLU link expansion
- AES67 network audio
- AMX SVSi video encoders and decoders compatible
- 4 VoIP lines
- 1 x stereo USB audio device class interface
- Expandable up to 4 x USB with BLU link
- 16 control inputs, voltage or logic
- 6 PWM control outputs for multi-color LED control
- 2 x external relays (2A+)

Specifications subject to change.

Technical Specifications

Unit Interface	LCD with rotary push button encoder and a back button
Analog Inputs	16 electronically balanced on Phoenix Combicon removable screw connectors
Mic/Line Inputs	Nominal gain 0dB, electronically switchable up to +60dB,in +2dB steps
Input Impedance	6.0Ω
Maximum Input Level	+20dBu with 0dB input gain
CMRR	>75dB at 1KHz
Input Noise (E.I.N.)	<-124dBu typical with 150Ω source
Phantom Power	48V nominal, selectable per input
A/D Latency	37/Fs [0.77ms@48k]
Analog Outputs	8 electronically balanced on Phoenix/Combicon removable screw connectors
Maximum Output Level	+20dBu
Frequency Response	20Hz-20kHz (+0.5dB/-1dB)
THD	<0.01% 20Hz to 20kHz, +10dBu output
Dynamic Range	108dB typical, 22Hz-22kHz unweighted; 110dB typical, 22Hz-22KHz "A" weighted
Crosstalk	<-75dB
Output Impedance	40Ω balanced and 20Ω unbalanced
D/A Latency	29/Fs [0.60ms@48k]
Control Ports	16 inputs, 6 outputs, and 2 relay contact closures
Control Input Voltage	0 to 5.0v
Control Input Impedance	4.7kΩ to +5V (2-wire mode), >1MΩ (3-wire mode)
Logic Output Voltage	0 or +5V unloaded PWM capable
Logic Output Impedance	440Ω
Logic Output Current	10mA source, 60mA sink
Network	
Connectors	RJ45 Ethernet connector
Maximum Cable Length	100m/300ft on Category 5 cable between device and Ethernet switch
BLU link	
Connectors	2 x RJ45
Maximum Cable Length	100m/300ft on Category 5e cable between devices
Max. Number of Nodes	60
Latency	11/Fs [0.23ms@48k]
Pass Through Latency	4/Fs [0.08ms@48k]
Power and Dimensions	
Mains Voltage	100-240V AC, 50/60Hz
Power Consumption	<65VA
Operating Temp. Range	0º to 45º C (32º to 113º F)
Dims	(H(U) x W x D): 1.7" (1U) x 19" x 13.0" (43mm x 483mm x 330mm). Width includes rack mounts. Weight: 9.4 lbs / 4.3 kg

Specifications subject to change.