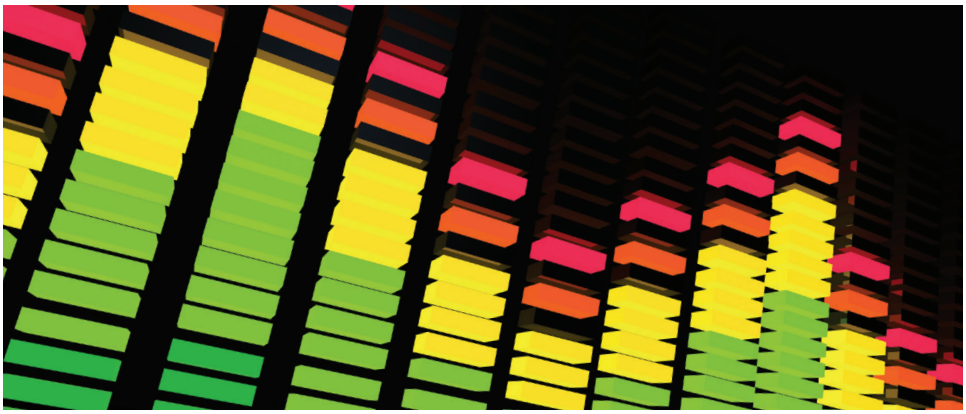
CONTROL CONCEPTS

Engineering Services:
Audio DSP Programming and Commissioning

Audio DSP Programming and Commissioning for Clients Seeking Professional Design and High Quality Sound



It is often said that you can get by with poor video or even complex operation, but you cannot overcome the issues caused by bad audio. If audio is not intelligible, it can ruin a presentation, conference call, or meeting as well as create an embarrassing situation with a client or partner.

Today, the audio portion in an AV system is powered by a programmable digital signal processor, known as an audio DSP. Control Concepts offers audio DSP programming to clients seeking professional design, high quality sound, seamless control, and ease of operation.

Ensuring Effective and Efficient AV System Performance

Most audio DSP equipment is categorized as either open architecture or closed architecture devices. With open architecture, there is no pre-defined structured design in the audio system. Programming of the audio DSP starts with a blank canvas providing ultimate flexibility in the design of the audio processing. These systems require more in-depth knowledge of audio and experience with defining audio systems. Examples of manufacturers that have open architecture products include Biamp, Symetrix, and BSS.

Closed architecture systems are less flexible, but easier to design because of the pre-set static components within it. These systems are easier to program, have fewer variables, and can be handled with a less experienced audio designer. Examples of manufacturers that have closed architectures are ClearOne, Polycom, Crestron, and Extron.

For open architecture, programming of the audio DSP starts with a blank canvas providing ultimate flexibility in the design of the audio processing.

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In addition to programming, we ensure the audio DSP system is set up for high quality audio and peak performance, as well to meet industry best practices. We use measurements and performance testing to confirm optimal quality is achieved.

Key Audio System Variables

Many variables should be considered during the audio system design and programming process, which also impact the hardware selection and software set up. These include:

- Number of microphones and speakers
- Microphone and speaker placement
- Types of microphones and speakers
- Meeting applications (presentation, audio conference, video conference)
- Voice lift
- Approximate number of meeting participants
- Room design and acoustics
- Room combining or audio distribution
- Anticipated user controls

It is important to seek a specialized resource who is both experienced in system design and audio as well as qualified to work with the specified product. Not every field tech or programmer can provide proper audio DSP programming. Enlisting an inexperienced professional can compromise the outcome and quality of meetings, conference calls, and presentations.

As with control programming, it is important to engage a trusted partner to ensure the completed audio system will perform effectively and efficiently.

Please contact us at **projects@controlconcepts.net** to learn more about how our audio DSP programming and commissioning services can address your organization system needs and enhance ROI.

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