



**Q-SYS Core 110c**  
Cinema Processor

**Features**

- 128x128 Network Audio Channels
- 16x16 USB Audio Channels
- 24 Channels of Total Analog Audio
- 8 Configurable Flex Channels
- 16x16 GPIO Logic Ports
- 4 Channels of Routable AEC
- 1 VoIP line
- Single POTS Telephone line
- 3 Year Warranty



Combined with DPA-Q amplifiers and DCS loudspeakers, the Q-SYS™ Cinema Core 110c provides a cost-effective solution for implementing Q-SYS in cinemas of all sizes. The continuity of the Q-SYS software based DSP platform is unique within the cinema industry and allows the Q-SYS Core 110c to leverage all the features that are available across the entire Q-SYS platform including complete audio signal processing for all loudspeakers with monitoring and control of all amplifiers, and control of many other devices and components within a cinema complex. It even provides many conferencing functions for using a cinema auditorium for alternate purposes, such as meetings and remote conferencing applications.

The Q-SYS Core 110c is a multipurpose software based digital audio signal

processor with a total of 8 balanced analog line level audio inputs and 8 balanced analog line level audio outputs. In addition to the fixed 8x8 analog audio I/O, the Core 110c features a software definable bank of 8 balanced analog audio Input/Output Flex Channels, a unique QSC innovation, where each channel can be independently configured during design or run time as either a microphone/line level input or a line level output. It also offers class leading 24 analog I/O density plus additional specialized I/O for conferencing applications such as VoIP, POTS, Internal Media Playback/Recording HDD and USB.

The Q-SYS Cinema Core 110c is ideal for multiple room 5.1/7.1 applications, or as the sole audio system processor for Dolby Atmos installations.

# Q-SYS Core 110c

## Inputs

## Q-SYS Core 110c

### Input Frequency Response

20Hz to 20kHz @ +21dBu +0.05 dB / -0.5 dB

### Input THD+N @ 1kHz

@ +21 dBu Sensitivity & +21 dBu input < 0.1%  
 @ +21 dBu Sensitivity & +10 dBu input < 0.0015%  
 @ +10 dBu Sensitivity & +8 dBu input < 0.0007%  
 @ -10 dBu Sensitivity & -10.5 dBu input < 0.0006%  
 @ -39 dBu Sensitivity & -39.5 dBu input < 0.007%

EIN (no weighting, 20Hz to 20kHz) < -121dB

Input to Input Crosstalk @1kHz > 110dB typical, 90dB Max

### Input Dynamic Range

@ +21 dBu Sensitivity > 109.5dB  
 @ +10 dBu Sensitivity > 106.4dB  
 @ -10 dBu Sensitivity > 104.6dB  
 @ -39 dBu Sensitivity > 104.6dB

### Input Common Mode Noise Rejection

@ +21 dBu Sensitivity 50.7dB  
 @ +10 dBu Sensitivity 56.5dB  
 @ -10 dBu Sensitivity 73.2dB  
 @ -39 dBu Sensitivity 63.2dB

Input Impedance (balanced) 5k ohms nominal

Input Sensitivity Range (1dB Steps) -39 dBu min to +21 dBu max

Phantom Power +48V DC, 10mA per input max

Unbalanced Input Signal Level +8 dBu max

Sampling Rate 48kHz

A/D – D/A Converters 24-bit

## Outputs

### Output Frequency Response

20Hz to 20kHz @ all settings +0.2 / -0.5 dB

Output THD 0.003%, +10 dBu max output level

Output Crosstalk @1kHz > 100dB typical, 90dB max

Output Dynamic Range > 108dB

Output Impedance (balanced) 220 ohms

Output Level Range: (1dB Steps) -39 dBu min to +21 dBu max

## USB Inputs & Outputs

### USB B

Bit Depth 16-bit  
 Number of Channels up to 16x16  
 Sample Rate 48kHz

Power Consumption 60 watts, typical, 120 watts max

BTU/Heat load: 205 BTU/Hour

Compliance FCC Part 15B (USA), FCC part 68 / TIA-968-B (USA), JATE (Japan), AS/ACIF S002 (Australia), PTC200 (New Zealand), ES203 021 (Europe), ANATEL Resolution 473 (Brazil), NOM-151-SCTI (Mexico), PSTN01 (Taiwan), Industry Canada CS-03 (Canada), CE marked (Europe), UL and C-UL listed (USA & Canada), RCM (Australia), EAC (Eurasian Customs Union) & RoHS Directive (Europe)

Overall Dimensions/Weight Device Height: 1.75 inches (44 mm)  
 Device Width: 19.0 inches (483 mm)  
 Device Depth: 11.12 inches (282.5 mm)  
 Device Weight: 11 lbs. (5.0 kg)

Shipping Height: 6.0 inches (152 mm)  
 Shipping Width: 23 inches (584 mm)  
 Shipping Depth: 14 inches (356 mm)  
 Shipping Weight: 12.4 lbs. (5.6 kg)

Specifications subject to change without notice.



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