

Features

- Centralized processing architecture simplifies signal routing
- Cores are available in three sizes based on channel capacity
- Abundant DSP capacity for the largest and most demanding installations
- Cores offer TCP/IP, GPIO, and RS-232 control for interfacing with external devices
- Intuitive and easy to use design GUI
- Operates using standard Gigabit Ethernet hardware for audio transport and control
- System seamlessly integrates with QSC amplifiers and loudspeakers
- Multiple levels of system redundancy are supported ranging from network-only to complete hardware redundancy including amplifiers
- Q-Sys technical support is available 24/7 - worldwide

24/7



Q-Sys™ is a complete integrated system that encompasses everything from the audio input to the output of the loudspeakers; it provides all the routing, processing, control and monitoring, while maintaining the audio quality and reliability QSC has come to be known for.

The Core is the brain of the system, it receives and sends audio to/from the I/O Frame and Page Station that are local to the audio inputs and outputs. The Core performs all audio processing and handles all control functions. It manages QSC control devices such as the TSC-8 and TSC-3 as well as other control interfaces, recalls snapshots, provides logic functions and executes scripted commands. Three variations of the Q-Sys core are available and differ only in total input and output channel capacity.

Standard gigabit Ethernet switches serve as the interconnect points for Q-LAN networking. To ensure reliable, low-latency audio delivery, these switches must meet Q-LAN performance and feature

requirements. User interface and control components of the system may also be connected to these switches.

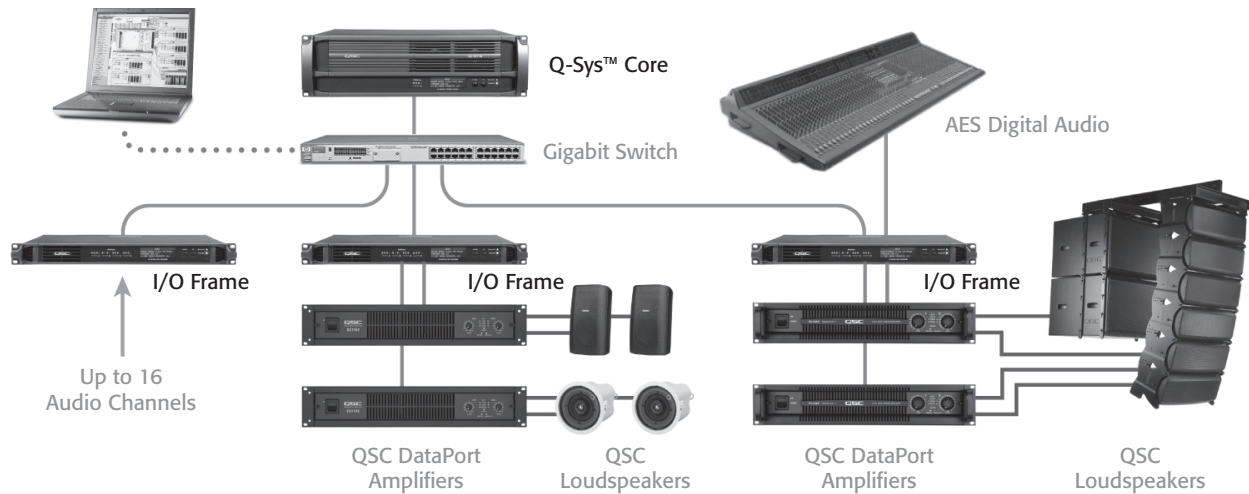
Q-Sys provides extensive levels of system control which can be as simple or sophisticated as the application requires. Advanced control functions are easily created by simply connecting Control Functions in the Q-Sys Designer environment. Controls include an extensive selection of Functions and Scripts that may be used to define automated or user-initiated actions. These actions may be set to control internal Q-Sys parameters as well as external devices via GPIO, RS-232, or TCP/IP. Snapshots of any or all controls can be created and recalled, or when a specific user interface is needed, custom control panels are easily created and published by the Core to any network device.

One of the primary development goals was to create a platform that had ample processing resources to meet the needs of even the most complex system designs. The processing tools are extensive and simple

to apply using a design interface created specifically to be intuitive and easy to use. Q-Sys also offers a useful suite of trouble shooting and measurement tools for system set-up and maintenance.

The strength of the centralized architecture used by Q-Sys is that it facilitates the implementation of total or partial system redundancy. A system can be created with Core, Network, I/O Frame and even amplifier redundancy. In a redundant Q-Sys system, a problem with any of the primary devices will result in the back-up device taking over. If, for example the Core experiences a failure, the backup core automatically takes over ensuring continued flawless operation.

Q-Sys is a powerful and reliable unified system that features rock-solid performance backed by the unrivaled service and support QSC has built its reputation on. For more information please visit www.qscaudio.com/products/network/QSys.



System Hardware

Core 1000 | Core 3000 | Core 4000

Description	System processor and control engine		
Front Panel Controls	LCD page forward momentary switch Unit ID button momentary switch Clear settings momentary switch		
Front Panel Indicators	Power On: Blue LED Device Status: Tri-color LED Audio Signal: Five tri-color LEDs 240 x 64 monochrome LCD graphics display		
Rear Panel Connectors	RS-232: DE-9 (male 9-pin D shell connector) Video Out: HD-15 (female 15-pin D shell connector) Aux ports AUX A set: USB host x2, RJ45 10/100/1000 MBps Aux ports AUX B set: USB host x2, RJ45 10/100/1000 MBps GPIO A: DA-15 (female 15-pin D shell connector) GPIO B: DA-15 (female 15-pin D shell connector) Q-Sys Network LAN A: RJ45 1000 MBps only Q-Sys Network LAN B: RJ45 1000 MBps only		
Capacity			
Network Audio Channels In	64	128	128 – 512 ¹
Network Audio Channels Out	64	128	128 – 512 ¹
Maximum Channels Out ²	1024	2048	2048
End Node Capacity	128	256	512
Processing (Channels of 32-bit audio)	128	256	512
I/O Capacity	Up to 4 channels. Requires purchase of I/O cards		
Line Voltage Requirements	100 VAC – 240 VAC, 50 – 60 Hz		
Current Draw	2.3A (120V mains) 2.8A (120V mains) 2.8A (120V mains)		
Thermal	785 BTU/h (typical) 950 BTU/h (typical) 950 BTU/h (typical)		
Dimensions (HWD)	5.25" x 19" x 15" (133.35 mm x 482.6 mm x 381 mm)		
Accessories Included	6 ft UL/CSA/IEC line cord • User manual • Software CD • Optional audio I/O ship kit		

1) Up to 512 network audio channels when sending 8 or more channels per network audio stream.

2) Using maximum fan-out with 16-channel unidirectional I/O Frames.

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1675 MacArthur Boulevard • Costa Mesa, CA 92626 • Ph: 800/854-4079 or 714/957-7100 • Fax: 714/754-6174

Q-Sys Core Spec Sheet - 05/09/11

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qscaudio.com