QSC™

Digital Cinema Processor

DCP 200

Features

- Digital Input for up to 16-Channels of audio

- Can be combined with QSC's DXP (Digital Expansion Processor) to create the most powerful networked audio solution for cinema

- Networked audio I/O via CobraNet™ – supports behind-the-screen mounting of DXP processors for screen channel and subwoofer DCA amplifiers

- Network control and monitoring via SNMP

- Serial automation control via RS-232

- Analog Inputs for film processors, non-sync and Mic/Line

- Master volume and full 1/3 Octave Graphic EQ on all channels (except subwoofer)

- Booth Monitor with touch screen control for easy operation

- DataPorts for surround channel amplifiers

- Compatible with all existing DCA amplifiers – thousands of DCA equipped screens are ready for full network monitoring and control

- Dual power supplies with load sharing for seamless operation in the event of failure

- SD Memory card for quick unit swap – restores all settings

- Multiple Bypass modes routes audio around failed components to insure that the show will go on

- QSControl and QSCreator allow for the creation of custom control screens and remote access for fault reporting and diagnosis

- Easily integrates with existing film processors for dual film/digital projection systems

- Continued development of software and firmware will add new capabilities to the existing hardware with easy firmware updates

- The DCP 200 is part of a new generation of QSC products designed expressly for the needs of D-Cinema sound systems

A Cinema Processor and Booth Monitor along with network control and monitoring of DSP, amplifiers and speakers in one integrated package.

QSC's Digital Cinema Processor, the DCP 200, builds on the legacy of DCM and DXP to provide all booth-mounted signal processing and monitoring functions for Digital Cinema systems that use DXP and DCA amps behind the screen. The DCP 200 offers most of the features of the DCP 300 but at a lower price point for systems that don't require screen channel crossovers but instead utilize CobraNet network audio distribution to additional DXP processors.

Designed to be used with QSC's Digital Cinema Amplifiers (DCA) and featuring advanced DSP presets for QSC's Digital Cinema Speakers (DCS), the DCP 200 optimizes loudspeaker performance while simplifying cinema sound system wiring and configuration. The DCP 200 covers cinema systems ranging from three to five screen channels and up to 16 digital inputs. Outboard DXP processors support passive, bi-amp, tri-amp or quad-amp crossovers and subwoofer outputs. The DCP 200 is compatible with all analog cinema processor formats including Dolby® Digital Surround-EX and DTS-ES and features a 10-channel analog input for integration with existing 35 mm audio systems.

Digital Signal Processing

The DCP 200 digital signal processing capability outperforms traditional analog processors for optimized audio performance. Fader level, 1/3 octave graphic EQ, parametric equalization, polarity, delay and gain can be precisely adjusted for each channel in your system. DXP processors provide passive and active 2-way, 3-way and 4-way crossovers.

Less Wiring, Faster Set-up

DCPs greatly simplify system wiring and set-up, significantly reducing installation time and labor cost. Input to the DCP is provided via standard DB-25 cables from 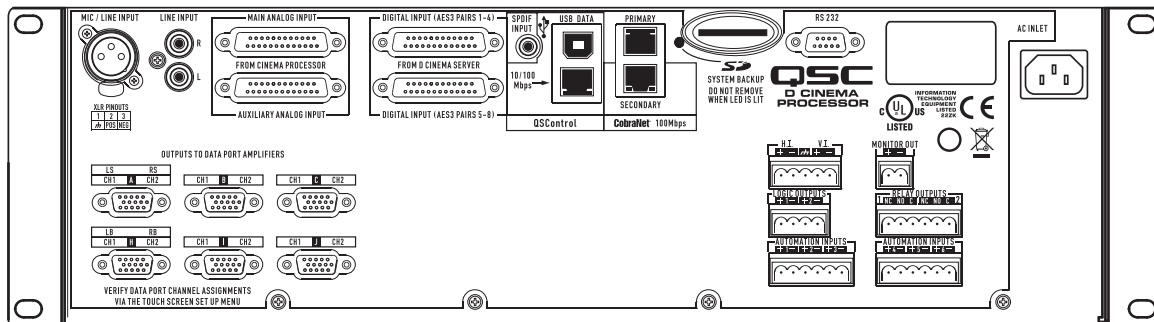the D-Cinema server and/or 35mm cinema processor. Connections to DCA amplifiers for input and monitor signals are made through a single QSC DataPort / VGA-style cable. All traditional XLR and barrier strip terminations are eliminated. DCPs simplify set-up by using a menu-driven, PC-based software program for configuration. Connection to remote-mounted DXP processors is via RJ45 connectors and Cat. 5 cable. Commonly used configurations can also be saved on a disk via USB cable to your PC, allowing you to quickly load them on other DCPs. All system configuration data is saved to an SD memory card, allowing easy transfer of settings to a new DCP, should replacement ever be required.

Advanced Monitor Functions

In addition to audio monitoring of processor inputs and outputs, DCPs include QSC's exclusive "load fault" detection. DCPs monitor all surround amplifier outputs and indicate opens and shorts in the speaker system, providing confirmation that all amplifier outputs are functioning properly. In addition, the DCP detects all amplifier clipping, protect modes and heat sink temperature for reporting via SNMP or a QSControl Ethernet monitoring system. QSControl and QSCreator allow for the creation of custom control screens and remote access for fault reporting and diagnosis. The NAC 100 Ethernet remote control panel provides remote operation in a multiplex from anywhere on the local network.

DCP 200 Details

Front Panel Controls			**CobraNet RJ45s**	100 Mbps primary/backup network audio
Power switch	Rocker switch		SD card receptacle	Configuration memory card (1 GB min)
Mute control	Push button		**H.I. and V.I. impaired outputs**	
Auditorium fader	Rotary encoder		Output stage type	Single ended (balanced Z)
Monitor volume/parameter adjust	Rotary encoder		Output impedance	50 Ohms
Menu-driven LCD	Touch control LCD		Nominal output level	-11.8 dBu (200 mVrms)
Rear Panel Connectors			Loading requirements	Rmin = 2k Ohms, Cmax = 4nF
D-Cinema input group 1	DB-25 — AES3/EBU channels 1-8		**Audio network**	
D-Cinema input group 2	DB-25 — AES3/EBU channels 9-16		Protocol	CobraNet version 2 protocol
Main analog input	DB-25 — Analog audio channels 1-8		Data rate	100 Mbps (Fast Ethernet)
Extended surround input	DB-25 — DB-25 - Surround and Le/Re Channels		Ports	1 Primary, 1 Backup (auto-failover)
Universal Mic/Line input	XLR — Mic (+ phantom pwr) or line level		Connection requirements	Cat-5 UTP cable or better (100m maximum length), direct connection to wired network switch ports only, dedicated LAN or VLAN
S/PDIF input	RCA — Stereo digital audio interface and Lt/Rt Matrix		**QSControl™ network/ SNMP**	
RCA (L/R) inputs	RCA (2) — Stereo Left and Right and Lt/Rt Matrix		Protocol	Standard TCP/IP implementation over Ethernet or Fast Ethernet
DataPort outputs	HD-15 (6) — QSC amplifier interface		Data rate	10/100 Mbps
Automation inputs	6-pin Euro-style (x2) — TTL compatible dry contact closure		Connection requirements	Cat-5 UTP cable or better (100m maximum length), direct connection to wired network switch ports only, dedicated LAN or VLAN
Logic output	4-pin Euro-style (x2) – outbound control			
Relay outputs	6-pin Euro-style (x2) – outbound control		Dimensions (H/W/D):	5.25" x 19" x 15.2" (133 mm x 483 mm x 386 mm)
Serial Control	DB-9 RS-232 Serial Interface		Line voltage requirements	100 VAC – 240 VAC, 50/60 Hz
USB Type B port	Config and management interface		Weight	16.6 lb (7.5 kg)
QSControl RJ45	10/100 Mbps network management			

All specifications are subject to change without notice.

please recycle