

Digital Cinema Processor

DCP 100

Features

- Ten digital inputs for 5.1 and 7.1DS soundtracks and HI/VI
- 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
- Digital Loudspeaker Crossovers – three passive or bi-amp screen channels
- Compatible with all existing DCA amplifiers – thousands of DCA equipped screens are ready for full network monitoring and control
- Replaces the DCM-1, DCM-10 and DCM-10D for digital projection retrofits
- 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
- DSP presets for DCS speakers for great “out of box” performance and reduced set-up time
- 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 100 is part of a new generation of QSC products designed expressly for the needs of D-Cinema sound systems



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

Everything you need between server and amps.

QSC's Digital Cinema Processor, the DCP 100, builds on the legacy of DCM and Basis to provide all signal processing and monitoring functions for Digital Cinema in a single integrated system. The DCP 100 offers most of the features of the DCP 300 but at a lower price point for 8-channel systems that also don't require CobraNet™ network audio distribution.

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 100 optimizes loudspeaker performance while simplifying cinema sound system wiring and configuration. The DCP 100 covers cinema systems with 3 passive or bi-amp screen channels and 2 or 4 surround channels. The DCP 100 is also compatible with analog cinema processor formats including Dolby® Digital Surround-EX and DTS-ES and features an 8-channel analog input for integration with 35 mm audio systems.

Digital Signal Processing

The DCP 100 digital signal processing capability outperforms traditional analog crossovers and equalizers for optimized speaker performance. Crossover frequency, 1/3 octave graphic EQ, parametric equalization, polarity, delay and gain can be precisely adjusted for each speaker in your system. Passive or active 2-way crossovers are available for three screen channels. Advanced crossover presets for QSC DCS speakers speeds system set-up and insures maximum performance.

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

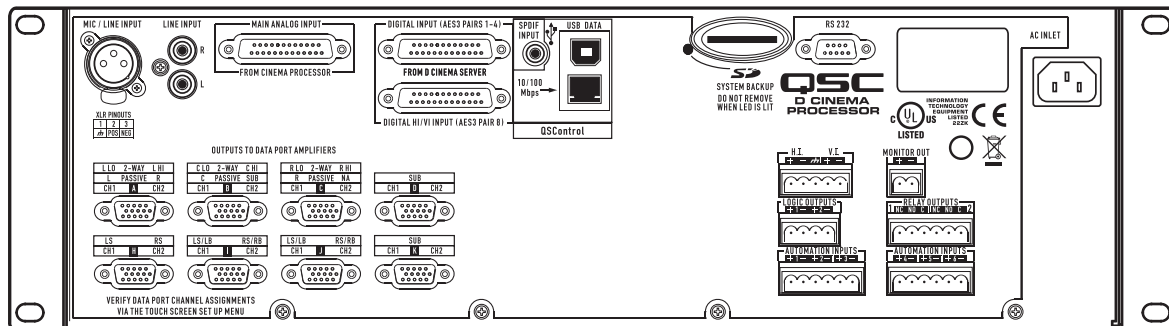
provided via standard DB-25 cables from the D-Cinema server and/or 35 mm cinema processor. Connections to DCA amplifiers for input and monitor signals are made through a single QSC DataPort VGA-style cable. All traditional XLR and barrier strip terminations are eliminated. DCPs simplify set-up by using a menu-driven, PC-based software program for configuration. The program includes a speaker data file that lists default parameters for popular cinema speaker models. Commonly used configurations can also be saved on a disk, 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 amplifier inputs and outputs, DCPs include QSC's exclusive "load fault" detection. DCPs monitor all 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 100 Details

Front Panel Controls		Relay outputs	6-pin Euro-style (x2) – outbound control
Power switch	Rocker switch	USB port	Config and management interface
Mute control	Push button	QSCControl and SNMP RJ45	10/100 Mbps network management
Auditorium fader	Rotary encoder	SD card receptacle	Configuration memory card (1 GB min)
Monitor volume/parameter adjust	Rotary encoder	H.I. and V.I. impaired outputs	
Menu-driven LCD	Touch control LCD	Output stage type	Single ended (balanced Z)
Rear Panel Connectors		Output impedance	50 Ohms
D-Cinema input	DB-25: AES3/EBU channels 1-8 DB-25: AES3/EBU channels 15 & 16 (HI/VI)	Nominal output level	-11.8 dBu (200 mVrms)
Audio formats	5.1, 5.1 EX, 7.1 DS	Loading requirements	Rmin = 2k Ohms, Cmax = 4nF
Analog input	DB-25 – Analog audio channels 1-8	QSCControl™ network/ SNMP	
Universal Mic/Line input	XLR – Mic (+ phantom pwr) or line level	Protocol	Standard TCP/IP implementation over Ethernet or Fast Ethernet
S/PDIF input	RCA – Stereo digital audio interface and Lt/Rt Matrix	Data rate	10/100 Mbps
RCA (L/R) inputs	RCA (2) – Stereo Left and Right and Lt/Rt Matrix	Connection requirements	Cat-5 UTP cable or better (100m maximum length), direct connection to wired network switch ports only, dedicated LAN or VLAN
DataPort outputs	HD-15 (8) – QSC amplifier interface	Dimensions (H/W/D):	5.25" x 19" x 15.2" (133 mm x 483 mm x 386 mm)
Automation inputs	6-pin Euro-style (x2) – TTL compatible dry contact closure	Line voltage requirements	100 VAC – 240 VAC, 50/60 Hz
Serial Control	DB-9 RS-232 serial interface	Weight	16.6 lb (7.5 kg)
Logic output	4-pin Euro-style (x2) – outbound control		



All specifications are subject to change without notice.

QSC™

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