



CP750 Digital Cinema Processor

The Latest in Sound Processing—from Dolby Digital Cinema

The CP750 is Dolby's latest cinema processor specifically designed to work within the new digital cinema environment. The CP750 receives and processes audio from multiple digital audio sources and can be monitored and controlled from anywhere in the network. Plus, Dolby reliability ensures a great moviegoing experience every time.

The Dolby® CP750 is equipped to handle the exciting new entertainment opportunities made possible by digital cinema. While it is ideal for new digital-only theatres, it is also the best choice when converting a cinema with an existing film processor with the capacity to input to a CP750 for hybrid film and digital installations. The CP750 is as economical as it is functional.

Dolby Surround EX™ decoding is supplied for content encoded with a back surround channel. In addition, Dolby Pro Logic® and Dolby Pro Logic II can derive surround from stereo content to enhance programming. Your audience will always enjoy outstanding surround sound before, after, and during the show, no matter the program source.

To take advantage of new, market-expanding programming, the CP750 provides inputs for three additional digital sources as well as your cinema server. The CP750 accepts up to eight PCM channels from any cinema server, supporting access to optional hearing- and visually-impaired tracks. Three additional digital inputs accept PCM or 5.1-channel Dolby Digital from preshow and alternative content sources. Microphone and

analog nonsync inputs round out the CP750's comprehensive connectivity.

The Dolby CP750 can be updated, controlled, and monitored remotely via the Internet. A system integrator's NOC, for example, can keep tabs on all its CP750 installations wherever they are by SNMP messaging or remote/setup monitoring software. This unique feature helps to catch problems before they impact your bottom line, ensuring the glitch-free, quality presentations audiences expect.

The CP750 is a perfect complement to Dolby's Theatre Management System (TMS) software. It responds to digital input selection and volume cues within a show, enables real-time volume control from any TMS client, and recognizes ASCII commands from third-party TMS controllers. In sum, the CP750 is easy to integrate and set up for automatic operation.

The Dolby CP750 combines robust construction, state-of-the-art hardware and software, practical functionality, and legendary Dolby quality. Whether equipping a single screen, a multiplex, or a large network, the Dolby CP750 is the most logical choice.



CP750 Digital Cinema Processor

Audio Inputs

Digital 1 Input

4 x AES 25-pin female D-connector provides four AES/EBU channel pair inputs
Input impedance: 110Ω balanced

Digital 2, 3 Inputs

1 x AES male BNC connectors, unbalanced but floating, per AES-3id-1995/SMPTE 276M
Input impedance: 75Ω

Digital 4 Input

Optical Toslink™ connector

Multichannel Analog Input

Eight-channel 25-pin female D-connector, balanced analog, 10K differential input impedance
Reference level: 300 mV

Nonsync Input

Two-channel RCA connector, 21K input impedance, adjustable input level

Microphone Input

XLR connector, standard pinout, 10K differential input impedance, 12V phantom power available, adjustable gain

Audio Outputs

Main Audio Output

Eight-channel 25-pin male D-connector, balanced floating analog, 100Ω differential output impedance
Do not load with less than 600Ω differential

Auxiliary Output

Two-channel, unbalanced analog, 100Ω output impedance, RCA connectors
Reference level: 200 mV
Always routes channel pair 7/8 of 4 x AES input for alternate uses such as H/I and VI-N transmitters—this fixed-level output has no EQ and is not controlled by the fader

Hearing-Impaired Output

One-channel, unbalanced analog, 100Ω output impedance, RCA connector
Center weighted sum of Left, Center, and Right channels
Output level: 200 mV

Other Inputs/Outputs

Ethernet Connector

RJ-45 for network connection and PC setup software

Automation Connector

25-pin female D-connector, floating ground

RS-232 Serial Port

9-pin female D-connector

Remote Connector

RJ-45 connector for use with optional Cat. No. 868 Remote Fader (not an Ethernet connection)

Backup Power Port

4-pin female XLR connector for use with optional Cat. No. 994 External Power Supply

AC Input

Simple unswitched IEC power inlet module

USB Port

For connection to PC to run setup software

Audio Processing

PCM

44.1, 48, and 96 kHz; 16-, 20-, and 24-bit

Dolby Digital (AC-3)

Up to 5.1 channels

Dolby Pro Logic

L, C, R, and S (SW configurable)

Dolby Pro Logic II

L, C, R, Ls, and Rs (SW configurable)

Dolby Surround EX

L, C, R, Ls, Rs, Bsl, Bsr, and SW

Nonsync

L, R, and S (SW configurable)

Other Parameters

Global Audio Delay

All input sources separately adjustable from 0–250 ms

Surround Delay

Digital surround delay: 0–150 ms
Dolby Pro Logic surround delay: 0–150 ms

Other Parameters (continued)

Equalization

Eight-channel 1/3-octave plus parametric for SW

Dynamic Range

Typically 105 dB clip to CCIR/ARM weighted without noise optimizer enabled, up to 10 dB more with optimizer enabled

Distortion

Typically 0.005% from eight-channel analog input to main output

Optional Accessories

Cat. No. 994 External Backup Power Supply
Cat. No. 868 Remote Fader
CP750-CK Connector Kit
CP750 Installation Manual (DPN 9110270)

Power Requirements

100–240 VAC, 50–60 Hz

Dimensions and Weight

2-U rackmount chassis: 89 x 432 mm (3.5 x 17 inches)

Overall depth, including connectors and fader knob: 269 mm (10.6 inches)

Depth behind rack ears, including connectors: 248 mm (9.75 inches)

Depth in front of rack ear mounting surface: 24 mm (0.94 inches)

Net: 4.2 kg (9.4 lb)

Environmental Conditions

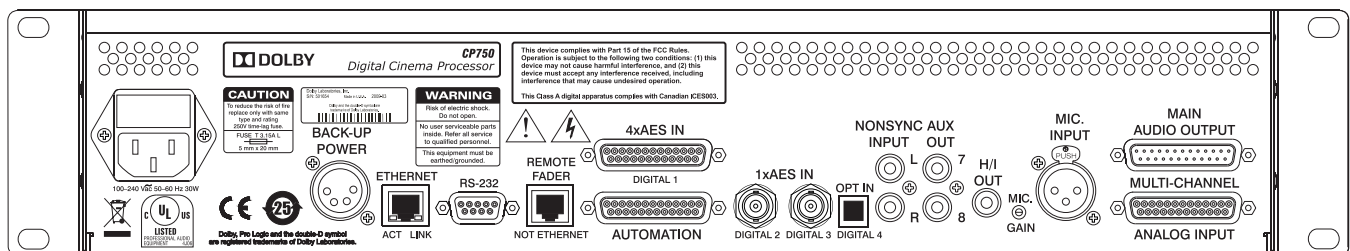
Operating: 0°C–40°C (32°F–104°F)

Humidity: 20%–80% relative humidity (noncondensing)

Regulatory Notices

North America: This unit complies with the limits for a Class A digital device, pursuant to Part 15 of the FCC rules, and Industry Canada ICES-003 specifications. It is UL Listed for the US and Canada.

Europe: This unit complies with the requirements of Low Voltage Directive 2006/95/EC and EMC Directive 2004/108/EC and carries the CE marking accordingly.



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