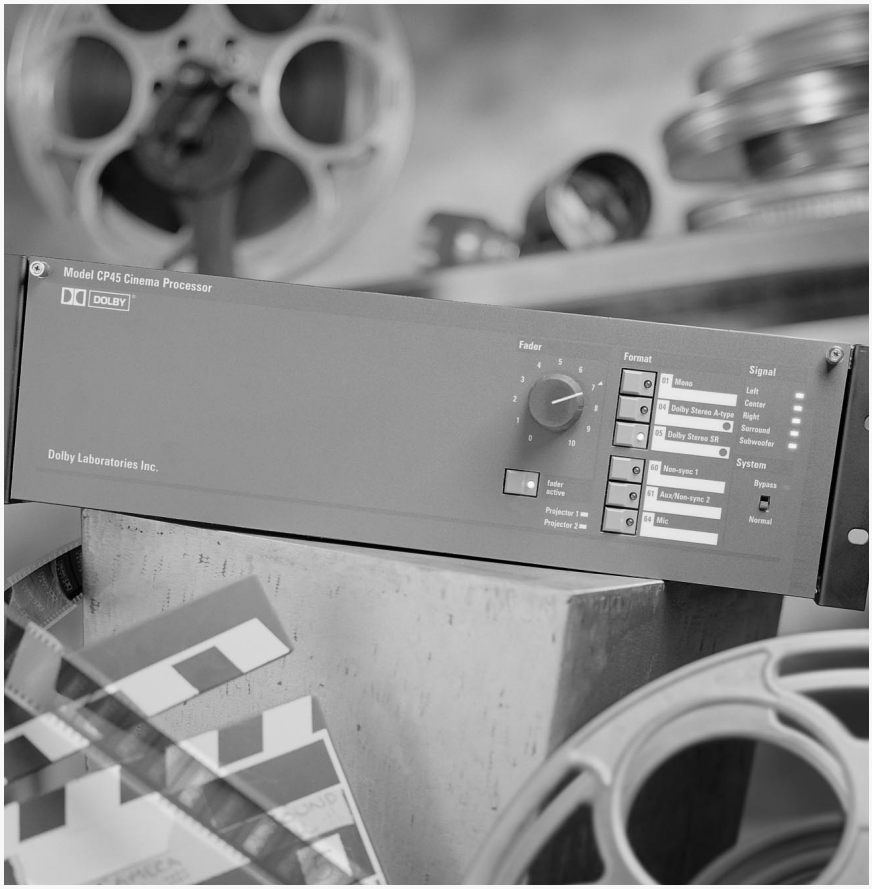
CINEMA PROCESSOR

DOLBY CP45



With the Dolby CP45, you can now afford to install a Dolby cinema processor in any theatre—and put the prestigious Dolby logo up on the marquee. This means that all your audiences will hear Dolby soundtracks as they were meant to be heard, and keep coming back for more.

Second best is no longer good enough

While Dolby has made high-quality, four-channel sound practical in far more theatres than ever before, smaller houses still resort to mono, or in some instances, inferior stereo. But today, with digital sound in first-run theatres and surround sound in millions of homes, audiences expect first-rate multichannel sound *wherever* they see a film. With the CP45, you can meet those expectations and offer the real thing—even in a small theatre on a tight budget.

Real Dolby sound for less

Unlike other units in its price range, the CP45 features authentic Dolby noise reduction processing—exactly the same circuitry in fact, that is used in all current Dolby cinema processors. The four-channel decoder (left, center, right, surround) is also a no-compromise Dolby design.

As a result, the CP45 precisely complements the techniques used in the preparation of thousands of Dolby films. That means better sound—*real Dolby sound*—in your theatre for no more than you'd pay for a lesser processor.

Near-digital quality at a fraction of the cost

With the CP45, *any* theatre can afford Dolby SR, the advanced four-channel analog process with near-digital clarity and fidelity. Real Dolby processing for SR soundtracks comes standard with the CP45—and SR releases are more plentiful than ever (there's an SR track standard on every Dolby Digital print.*

how it's done

The CP45 benefits from economical ICs developed in response to the wide demand for Dolby technologies, and from a simplified power supply design. Significant savings also result from a new approach to speaker equalization.

Each screen channel in the CP45 provides seven EQ bands operating in conjunction with tuneable high- and low-frequency shelving controls. An adjustable electronic crossover within the processor may be used to biamplify the screen channels. The result in a theatre with proper acoustics and modern speakers is smooth response to the international standard curve. Older speakers also benefit from having their response more gently optimized, thereby avoiding undesirable side-effects.

The Dolby edge

The CP45 comes with the unrivaled support of Dolby Laboratories. Hundreds of technicians worldwide have been factory trained in the installation and maintenance of Dolby equipment. Emergency technical assistance is available on call, as is backup from the most experienced distributor network in the industry. The CP45 is the only cinema processor in its price range backed by a 20 year history of making films sound better.

Can you afford to do without it?

With the CP45, it's no longer a question of whether you can afford to install a real Dolby processor: it's a question of whether you can afford not to. For the answer, contact your authorized Dolby cinema equipment distributor.

*While the Dolby DA20 digital adapter can be used with the CP45, the Dolby CP500 processor with built-in digital decoding is the more cost-effective choice for theatres intending to equip for Dolby Digital.

SPECIFICATIONS

Construction
Rack-mount chassis frame construction with plug-in modules accessible behind hinged front panel.

Signal connections; Output Control
Standard pluggable screw-type terminal blocks for audio signals and control connections for projector changeover. Mating halves supplied for each terminal block. Automation connections via 15-way D-type connector. Power supplied via two outboard transformers (one main, one bypass).

Signal Inputs
a) Optical: two pairs of balanced inputs for two projectors with stereo solar cells (available from Dolby Laboratories mounted on brackets for most projector types).
b) Digital/Magnetic/Aux.: six channel input for use with external magnetic preamplifier, digital adapter, or auxiliary source, 300 mV operating level.
c) Non sync: one pair of inputs for stereo non sync source, 10 k nominal input impedance, 30 mV maximum input sensitivity. 2:4 decoder may be used to generate ambient information for surround speakers with stereo non sync sources.
d) Mic input: for dynamic microphone, 1 k nominal input impedance.

Signal outputs
150 ohm output impedance will drive any load greater than
600 ohms. Maximum output level, 2 V rms. Typical operating level,
100 mV. Operating levels from 10 mV to 200 mV may be accommodated.

Output for hearing-impaired
Center-weighted sum of L, C, R for connection to auxiliary system for the hearing-impaired. Output impedance 2.5 k ohms.

Optical preamplifier
Cat. No. 510 stereo preamplifier for two projectors equipped with stereo solar cells. Adjustable slit-loss equalization circuitry for flat response from virtually any type of optical sound head.

Noise reduction (Cat. No. 222 SR/A)
Two channels each for Dolby A-type and Dolby SR soundtracks.

Four channel decoder
Cat. No. 511 2:4 decoder derives left, center, right and surround channels from two tracks on Dolby Stereo optical prints. Incorporates modified Dolby B-type noise reduction and 10 ms-150 ms adjustable delay line to optimize front-to-back surround separation.

Loudspeaker equalization
a) Cat. No. 513 equalizers for left, center, and right screen speakers provide ±10 dB high- and low-frequency controls with adjustable turnover frequency, plus seven adjustable ±8 dB narrowband filters covering the range from 63 Hz to 2 kHz. Adjusted by trained installers to achieve standardized Dolby cinema playback response.
b) Surround equalizer provides bass, mid-frequency, and treble adjustments for left and right surround channels.
c) 50 or 100 Hz Low-Pass Filter for subwoofer channel.

Noise level
Typically -65 dB (CCIR/ARM weighted) referenced to Dolby level.

Distortion
Any channel, 1 kHz: typically less than 0.15 % at Dolby level (50 % modulation).

Ambient operating temperature
Up to 40 ^{O}C.

Dimensions
3 U, 19 ” rack mount chassis: 133 x 483 mm (5.25 ”x 19 ”).
Maximum projection behind mounting surface: 308 mm (12.1 ”). Maximum projection in front of mounting surface: 40 mm (1.6 ”).

Weight
10.1 kgs (22.3 lbs).

Power Requirements
Normal supply 24 VAC at 1 A
Bypass supply 24 VAC at 200 mA

Fuse requirements
One slow-blow fuse: 20 mm, 1.5 A.
Spare fuse provided.

Options
Cat. No. 515 second surround channel module.
Cat. No. 516 remote fader.