

DIGITAL CINEMA PROCESSOR

DOLBY DA20



Featuring both digital and analog soundtracks on the same print, Dolby Digital offers not only superior sound quality, but a comprehensive system—based on Dolby's widely accepted AC-3 digital audio coding technology—suitable for every stage of the production, laboratory, and distribution process. With the second generation Dolby DA20 Digital Film Sound Adaptor, equipping the theatre for Dolby Digital playback is easier and more affordable than ever.

The DA20's highly integrated design fulfills the promise of digital sound for exhibitors and audiences alike at significantly reduced cost, while requiring only minimal maintenance, providing straightforward interface with existing Dolby cinema processors, and offering expansion capability for present and future special applications. Once installed, the DA20 requires no further attention from the projectionist; its operation is fully automatic.

The digital soundhead

The companion Cat. No. 700 is a second generation digital soundhead, with streamlined optics and an integral power supply to reduce costs and simplify installation and maintenance. Designed for easy mounting on any projector, the Cat. No. 700 reads the on-film Dolby Digital optical track by means of a CCD array, then feeds its signal to the DA20 for decoding into six channels (left, center, right, left surround, right surround and subwoofer).

alternatively, several projector manufacturers offer integrated soundheads that read both analog and Dolby Digital tracks, incorporating the same circuitry used in the Cat. No. 700 and further simplifying day-to-day operation and system setup (contact your projector supplier for more information).

Dolby quality and support

Like all professional Dolby cinema equipment, the DA20 and Cat. No. 700 are built to exacting quality standards.

Thoughtful, thorough engineering, backed by a worldwide team of Dolby-trained installation and maintenance technicians, mean that your investment in Dolby Digital will serve you reliably and economically for years.

SPECIFICATIONS

Construction

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

Signal connections

Standard screw-type terminal blocks for audio signals and control connections for projector changeover, remote units, etc. Solder-tag fanning strip supplied for each terminal block. Automation connections via 25-way D-type or screw-type terminal blocks.

Signal Inputs

- a. Optical: Balanced inputs for two projectors with stereo solar cells.
- b. Magnetic/Aux: six inputs for use with external magnetic preamplifier or auxiliary source, internally-selected 100 mV or 1 V operating level.
- c. Non sync: two inputs for stereo non sync source. 50 k input impedance, 200 mV maximum input sensitivity.
- d) Digital: six inputs for use with Dolby DA20 Digital Adapter.

Signal outputs

Output impedance, 22 Ohms. Load, >600 Ohms. Maximum output, +16 dBu. Typical operating level, -6 dBu. Operating range, 10 mV to 1.3 V.

Hearing-impaired output: Center-weighted sum of L, C, R. Output impedance, 5K Ohms.

Noise reduction

Two channels each, Dolby A-type, and Dolby SR. Accommodates up to four channels of A-type for standard Dolby 70 mm magnetic (Format 42).

Loudspeaker equalization

L,C, R: 27-band 1/3-octave EQ plus bass and treble adjustments.

Ls, Rs: Mid-frequency parametric EQ plus bass and treble adjustments.

SW: Parametric EQ.

Remote facilities

Connections for one or more remote faders and format switches.

Noise level*

Typically -70 dB (CCIR/ARM weighted) referenced to Dolby level.

Distortion*

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

Dimensions

4 U rack mount chassis. Faceplate, 78 x 483 mm (7 x 19"). Maximum projection behind mounting surface, 280 mm (11"). Maximum projection in front of mounting surface, 40 mm (1.6"). Weight, 10.1 kgs (22.3 lbs).

Power Requirements

Switched 100/120/140/ 200/220/240 V AC 50-60 Hz, 90 W. Fuses: 1-1/4", 1.25 A slow blow for 100/110/120 volts; 20 mm T630 mA slow blow for 200/220/240 volts.

Ambient operating temperature

Up to 40 degrees C.

Options

Cat. No. 123 (master) and Cat. No. 122 (slave) remote faders.

*With fader at 7 (approximately 10 dB below maximum), output set for -6 dBu (0.775 V) at Dolby level, Dolby A-type selected, equalizers set to flat.



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