The Dolby® CP650 series is designed for easy operation in today’s multiplex environment. A variety of models provide flexibility of configuration choices from film playback to digital cinema audio.

External setup software allows complete control of all processor calibration settings from a laptop computer, including the EQ Assist™ system that enables a rapid initial equalization of the theater. Audio processing configurations may include Dolby Surround 7.1 (D-cinema audio), 5.1 digital PCM (D-cinema audio), Dolby Digital Surround EX™ (film and bitstream), Dolby Digital (film and bitstream), Dolby Pro Logic®, and digital noise reduction processing (Dolby A-type and Dolby SR).
**CP650 Digital Cinema Processor**

**Front Panel**

**Setup Control Panel Access Door**
Mic input level control
Bypass output level control
Test points
RS-232C port (9-pin female D-connector) for PC connection
9-pin female D-connector; balanced, for a microphone or microphone multiplexer; phantom power available

**Mic input level control**
Bypass output level control
Test points
RS-232C port (9-pin female D-connector) for PC connection
9-pin female D-connector; balanced, for a microphone or microphone multiplexer; phantom power available

**Main Display**
Shows current format signal level and processor condition
Displays setup and calibration information for use with menu buttons

**Menu Buttons**
Steps through menu pages
Selects parameters within a page (use main fader knob for parameter choices)
Store settings

**Mute Button**
Mutes all audio outputs

**Fader Display**
Shows fader setting, projector in use, bypass power supply condition

**Format Buttons**
Preprogrammed and user defined audio format control

**Bypass Button**
Selects main or bypass power supply in the CP650; this acts as a power switch

**Rear Panel**

**Automation Connector**
25-pin female D-connector for controlling and indicating format, fader select, projector status, and mute

**Remote Unit/Fader Input**
Terminal strip connector for Dolby Cat. No. 779 remote control unit,
Dolby Cat. No. 771 remote fader, external auditorium faders (100 kΩ linear potentiometer)

**Hearing Impaired Output**
RCA-type female phono connector
Center-weighted sum of L, C, R
Output level: 200 mV fixed

**Digital Reader Inputs**
25-pin female D-connectors for two Dolby Digital readers

**Main Audio Output**
25-pin male D-connector, balanced or floating
Maximum level, balanced loads:
+26 dBu (15.5 V)
Maximum level, unbalanced loads:
+20 dBu (7.75 V)
Dolby level output adjust range:
–31 to +12 dBu (20–780 mV)

**Option Card I/O**
25-pin female D-connector for digital bitstream input and surrounds output when equipped with the Cat. No. 790 option card
L, C, Lm and high crossover outputs with Cat. No. 791 option card

**Nonsync Inputs**
RCA-type female phono connectors for two stereo nonsync sources
Input impedance: 21 kΩ
Sensitivity: 0.2–4 V (NS 1), 0.05–1.5 V (NS 2)

**Six-Channel Audio Input**
25-pin female D-connector for external six-channel analogue source
Input impedance: 10 kΩ (L, R), 27 kΩ (C, Ls, Rs, SW)
Operating level: 300 mV

**RS-232C Serial Data Input Port**
9-pin female D-connector to connect external PC for setup and automation control

**Ethernet Connector**
RJ-45 female for automation control and subtitling timing data

**Motor Start**
9-pin female D-connector for Dolby Digital reader motor start timing and projector changeover

**Microphone Input**
XLR female connector, balanced, for Auditorium Assist, PA, or B-chain alignment mic (or multiplexer)
Phantom power available (+15 V)

**Optical Inputs**
9-pin female D-connectors, balanced, for two stereo solar cells or analogue LED readers
Power available for external cell preamp circuits (14 V/40 mA)

**Loudspeaker Equalization**
L, C, R, Ls, Rs, Bsl, Bsr: digital 27-band, 1/3-octave
Le, Re (with optional Cat. No. 791): digital 27-band, 1/3-octave
SW: Digital parametric

**Distortion**
Typically 0.005% in Dolby SR mode (output -10 dBu, input 10 dB over Dolby level)

**Dynamic Range**
Typically 105 dB with fader set to 7

**Power Requirements**
100–120 and 200–240 VAC, 50–60 Hz,
100 W maximum (including built-in bypass power supply where applicable)

**Dimensions and Weight**
3-U rackmount chassis; faceplate: 133 x 483 mm (5.25 x 19 inches)
Maximum projection behind equipment rack rail: 365 mm (14.4 inches)
Maximum projection in front of mounting plate: 38 mm (1.5 inches)
Net: 10.4 kg (23 lb)

**Environmental Conditions**
Operating: 0°C–40°C (32°F–104°F),
forced-air cooling, 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.

Visit www.dolby.com/warranty for the latest product warranty information.