

# Dolby Lake Processor Operating Specifications

## Front-Panel Interface



### Displays

Four daylight readable custom LCD Portal displays, 3 × 10 user configurable character displays per Portal, 2 × 104 circular meter segments per Portal, 16 mute and soft function buttons per Portal, arrow keys and ME button for Portal control and parameter adjustment

### Ethernet

Auto 10/100, Auto Uplink: 1 RJ-45

### Mute Enable Button

Enables muting of outputs and inputs via Portal mute buttons

### Meter Button

Toggles through input and output meter displays

### Menu Button

Provides a menu driven interface for full-function front-panel control

## Audio Performance

### Conversion Resolution

24-bit

### Internal Sample Rate

96 kHz

### Internal Data Path

32-bit floating point

### System Propagation Delay

<2 ms from any input to any output (analog or digital)

### Maximum Available Delay

2 s from any input to any output

## Sample Rate Converters

### Operating Sample Rates

44.1 kHz, 48 kHz, 88.1 kHz, 96 kHz

### Resolution

24-bit

### THD + Noise

0.00003% typical, 20 Hz to 20 kHz, unweighted

### Dynamic Range

140 dB typical, 20 Hz to 20 kHz, unweighted

## Back-Panel Interface

### Analog I/O Connectors

XLR

### AES/EBU I/O Connectors

DB-25, with selectable termination on pairs 1 and 2

### S/PDIF I/O Connectors

Toslink™ optical

### Word Clock Input

BNC with selectable termination

### Ethernet

Auto 10/100, Auto Uplink: 2 RJ-45, 1 EtherCon™

### Power

3-pin IEC, 2 fuses T 1.5A L, 5 × 20 mm

## Digital-to-Analog Outputs

### Frequency Response

+0/−0.1 dB, 3 Hz to 20 kHz

### THD + Noise

0.00040% typical at 1 kHz

0.00056% typical, 20 Hz to 20 kHz, unweighted

### Dynamic Range

113 dB typical, 20 Hz to 20 kHz, unweighted

### Output Impedance

50Ω

### Maximum Output Level

+21 dBu

### Crosstalk

−100 dB, 2 Hz to 40 kHz

## Analog-to-Digital Inputs

### Frequency Response

+0/−0.2 dB, 2 Hz to 20 kHz

### THD + Noise

0.00022% typical at 1 kHz, 0.00033% typical, 20 Hz to 20 kHz, unweighted at +21 dBu headroom setting

### Dynamic Range

116 dB typical, 20 Hz to 20 kHz, unweighted at +21 dBu headroom setting

### Input Impedance

20 kΩ balanced, 10 kΩ unbalanced

### Maximum Input Level

+26 dBu

### Input Sensitivity Settings for Digital Full-Scale

+10 dBu, +16 dBu, +21 dBu, +26 dBu

### Common Mode Rejection

65 dB, 20 Hz to 20 kHz, 75 dB typical at 1 kHz,

70 dB typical at 20 kHz

### Crosstalk

−100 dB, 2 Hz to 40 kHz

## Combined A/D and D/A

### THD + Noise

0.00050% typical at 1 kHz, 0.00063% typical,

20 Hz to 20 kHz, unweighted

### Dynamic Range

113 dB typical, 20 Hz to 20 kHz, unweighted

## AES/EBU I/O and S/PDIF I/O

### Supported Resolutions

Up to 24-bit

### Supported Sample Rates

44.1 kHz, 48 kHz, 88.1 kHz, 96 kHz

## Power Requirements

100–240 VAC ±10%, 120 W maximum

## Dimensions and Weight

2-RU rackmount: 8.74 × 48.26 × 35 cm

(3.44 × 19 × 13.78 inches); net: 9 kg (20 lb)

## Regulatory Notices

North America: complies with limits for a Class A digital device, per Part 15 of FCC rules, and Industry Canada ICES-003 specifications. UL Listed for the US and Canada. Europe: complies with requirements of Low Voltage Directive 73/23/EEC and EMC Directive 89/336/EEC. Carries CE marking accordingly.

## Warranty

One-year limited, parts and labor; see disclaimer. Specifications subject to change without notice.

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