









# EC-50-LHD-1000

FULL HD 50-INCH DLP® REAR-PROJECTION CUBE WITH CLUSTER-LED PROJECTION TECHNOLOGY FOR 2D/3D DISPLAY



# ) PRODUCT DESCRIPTION

The eyevis **EC-50-LHD-1000** is a modular rear-projection cube with a **screen diagonal of 50 inch** (ca. 127 cm) and **Full HD resolution (1920 x 1080 pixels)**. The EC-50-LHD-1000 uses innovative Cluster-LED technology for illumination. EC-50-LHD-1000 is a revolutionary development by eyevis and manufactured in Germany. It is especially designed for applications which require a reliable 24/7 operation. Thanks to Cluster LEDs with a higher light output we are able to provide the EC-1000 series as a second generation of our rear-projection cubes with enhanced brightness level.

Through the enhanced brightness levels of the EC-1000 series the new cubes can now also be installed in applications that require brighter image representation, e.g. in presentation areas or broadcast studios. For most other installation, for example in control rooms, the performance of the LEDs can be reduced to lower levels, which results in less power consumption and thermal load. In addition, the reduced power of the LEDs further extends their life-time The cubes from the EC-1000 Series are available in XGA, SXGA, SXGA+, UXGA, Full HD and WUXGA.

The Cluster-LEDs used as light source for the EC-1000 series have an active LED surface divided into several sections. Besides higher light output this also guarantees that in the event of a failure of a single LED section, the image is preserved in almost its entire condition. Of course, all optional features that make our rear-projection units so flexible to use are also available for the EC-1000 Series. This includes the various available screens, different basement options, optimization features for installations in broadcast areas, or the automatic colour/brightness adjustment system for cube walls (ACT).

# ) ECO-FRIENDLY CONCEPT

HEATPIPE COOLING SYSTEM

As with all other eyevis LED cubes, the EC-1000 Series continues to rely on our innovative heatpipe cooling system, which has proven its reliable and highly effective function in thousands of cubes in diverse operating conditions. In addition to that,



our heatpipes require absolutely no servicing and contain no toxic liquids.

#### LOW POWER CONSUMPTION

Although the cubes from the EC-1000 Series have a higher light output, power consumption has not risen. For typical applications like in control rooms, the power consumption is even up to 20% less compared to values of our standard cubes. At the same time the heat dissipation of the cubes could be lowered, which reduces the demands on the HVAC systems in control rooms. Thus, the devices from the EC-1000 Series are not only brighter, they also save energy.



# ) THE ADVANTAGES AT A GLANCE

#### **DURABILITY**

- Durable and constant picture quality on all Cubes
- Modular, highly available display concept for 24/7 operation
- Low service and maintenance costs

#### COLOUR-RESCUE-CONTROL

- Special operation mode to compensate defect LED modules
- Image remains visible even with one or two defective LEDs
- Colour replacement according to the customer's image content

#### **OUTSTANDING IMAGE QUALITY**

- High contrast and best brightness
- Colour uniformity and wide viewing angle
- Best visibility in any lighting condition

### INTEGRATED OPTIMISING OPTIONS

- Perfect system adjustment with eyeDevice Setup software
- Fast and easy parameter setting
- Optional Multi-Cube Auto-Colour-Tracking

#### PRECISION SCREEN CONCEPT

- Different screen options available to suit any requirements
- Minimum gaps between cubes thanks to clipping method
- Very easy and fast installation

#### AVAILABILITY AND RELIABILITY

- Extremely long lifetime of the LED lights
- Qualitative high value components
- Highly efficient maintenance-free heatpipe cooling













#### EC-50-LHD-1000

# FULL HD 50-INCH DLP® REAR-PROJECTION CUBE WITH CLUSTER-LED PROJECTION TECHNOLOGY FOR 2D/3D DISPLAY



| ) TECHNICAL SPECIFICATIONS       |  |
|----------------------------------|--|
| Type:                            | EC-50-LHD-1000, eyevisCube 50" with Cluster-LED illumination and native Full HD resolution   |
| Description:                     | Digital 50 inch DLP®-rear-projection unit, stackable and addible, for data and video representation  |
| Resolution:                      | 1920 × 1080 Pixel (Full HD/16:9)   |
| Processing:                      | 1080P / 0.95 inch DMD@LVDS   |
| Brightness¹:                     | HB Screen: 1299 cd/m² (max. / Full Brightness Mode) / 1115 cd/m² (typ. / Normal Operation Mode) CrossPrism Screen: 705 cd/m² (max. / Full Brightness Mode) / 605 cd/m² (typ. / Normal Operation Mode) ISE Screen: 528 cd/m² (max. / Full Brightness Mode) / 443 cd/m² (typ. / Normal Operation Mode) |
| Contrast Ratio:                  | 1500:1 (typ. / static contrast)  |
| 3D Stereoscopy <sup>2</sup> :    | 120Hz Active Stereo (with active shutter glasses)  |
| Brightness Uniformity:           | ≥95% (SUR25)   |
| Image Size (W×H):                | 1100 × 618 mm (ca. 50 inch / 126 cm screen diagonal)   |
| Dimensions (W×H×D):              | 1100 × 798 × 730 mm  |
| Weight:                          | 79 kg (incl. housing, projector, input box and screen element)   |
| Input:                           | $1\times$ DVI-D, optional with Scaler Board: $2\times$ RGB, $2\times$ DVI, $2\times$ Composite Video, $1\times$ Y/C, $1\times$ YUV, $1\times$ S-Video  |
| Projection Screen:               | High Brightness Screen, CrossPrism Screen, BlackBead Screen, ISE Screen (Improved Screen Element)  |
| Frame:                           | 0.3 mm   |
| Power Consumption <sup>1</sup> : | Full Brightness Mode: 270 W Normal Operation Mode: 185 W Reduced Power Mode: 135 W   |
| Heat Dissipation:                | 631 BTU/h (typ.)   |
| Median LED Lifetime:             | >60,000 hrs under normal environmental conditions / L70B50 manufacturer information) (75,000 - 90,000 hrs in 'Low Power Operation Mode', i.e. additional 15,000 to 30,000 hrs depending on the amount of power reduction)  |
| Software:                        | eyeDevice Setup Software   |

#### ENVIRONMENTAL

| Temperature Conditions: | 10-40° C / recommended 15 - 25 °C / for Seamless Screens 18 - 25 °C / Storage: 0 - 50 °C |
|-------------------------|--|
| Humidity:               | 0% - 80 % not condensing   |
| Altitude:               | 0 - 3000 m   |
| Noise Level:            | ≤ 36 dB  |

# ORDERING INFORMATION

Item Numbers: 18798 -> EC-50-LHD-CP-1000 (50" DLP® Cube with Full-HD resolution and CrossPrism rear-projection screen) 18799 -> EC-50-LHD-BB-1000 (50" DLP® Cube with Full-HD resolution and BlackBead rear-projection screen) 20018 -> EC-50-LHD-ISE-1000 (50" DLP® Cube with Full-HD resolution and ISE rear-projection screen)

#### **OPTIONS**

- Different screen versions to suit the requirements of different fields of application (viewing angles, brightness uniformity, etc.)
- Scaler Board (internal split controller up to 10×10 Matrix, with 2× DVI, 2× RGB, 2× Video)
- ACT Auto-Colour Tracking, auto-adjustment of brightness and colours for each display according to the adjusted values
- EYE-MSP Matrix-Shading-Processor integrated in cube
- EYE-MDP Matrix and Delay Processor integrated in cube
- EYE-SCP Shading and Colour Processor integrated in cube
- EC-MAS Motorized geometry adjustment via IR remote control or PS2
- Network Board
- Service and Maintenance Contracts
- Different Basement Options: Standard Basement, Basements on Wheels, Basements on Rails, Anti-Vibration Basements
- 1 Full Brightness Mode -> full LED brightness with calibrated colours / Normal Operation Mode -> approx. 70% of LED brightness with calibrated colours

<sup>&</sup>lt;sup>2</sup> Available from O1/2016



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