High Brightness, Vivid Color and High Performance, Maintenance-free Laser Projector

**High brightness**
EK-831U high brightness of 12,500 lm enables realistic image reproduction, even in a bright projection environment.

**Vivid Color**
To achieve increased color enhancement, a unique color wheel system was adopted. It provides High Brightness and Vivid Color images according to the various environments and applications without changing the color wheel. High Brightness and Vivid Color modes can be selected easily with one click in the on-screen menu.

**Longer Life Projector with High Quality Endurance**
These three features ensure long-term operation.
1. Mercury-free laser light source illuminates brightly up to 20,000 hours.
2. Durable multi heat dissipation cooling function achieves efficient operation.
3. The Color Wheel adopts high temperature sintering processed ceramic.

**Sealed Optical Engine design (IP6X)**
No filters are necessary thanks to sealed optical engine design which is classified with IP6X rating. It offers virtually maintenance-free operation (ability to operate 24/7).

**Recommended Applications & Place of Installations**
- Auditoriums
- Large Conference Rooms
- Exhibitions / Events
- Museums / Galleries
- Theaters / Halls
- Houses of Worship
- Signage

**12,500 Lumens**

**WUXGA (1920 x 1200)**
At 12,500 Lumens brightness, the EK-831U is EIKI’s highest brightness laser projector to date.

This model employs a unique dual-track color wheel system which offers both high-brightness and wide color gamut.

Special features offer increased durability, providing virtually maintenance-free operation, reducing total cost of operation:
- Laser light source illuminates brightly up to 20,000 hours.
- Durable multi heat dissipation cooling function
- Color wheel made by high temperature ceramic sintering process
- Filter-less sealed optical engine design (IP6X)

These features allow the EK-831U to be operated 24/7.

Flexible installation capability and 6 Japanese-made optional lenses enable installation in various places.

**Key Features**
- 20,000hr Light Source Life
- 20,000 : 1 Contrast ratio
- Flexible installation
  - 360° free orientation
  - Portrait Projection
  - Lens Shift
    - V: +60% H: +/- 10% (AH-AC21020)
    - Keystone Correction
    - V: +/- 30 degrees H: +/- 30 degrees
  - 4 Corner
- 6 Option Lenses
- Sealed Optical Engine design IP6X without filters
- Lens Memory (Shift / Zoom / Focus)
**Specifications**

- **Model (EAN):** EK-831U (457194679625)
- **Display Type:** 0.67" 1chip DMD
- **Resolution:** WUXGA (1920 x 1200)
- **Aspect Ratio:** 16:10
- **Brightness:** 12,500 lum*
- **Contrast Ratio:** 20,000:1
- **Projection Light Source:** Laser (Blue) + Phosphor
- **Light Source Life:** 20,000 hours
- **Image Diagonal:** Depends on lens (See below table)
- **Lens (F Value / Focal length):** Depends on lens (See below table)
- **Zoom / Focus Adjustment:** Motorized
- **Zoom Ratio:** Depends on lens (See below table)
- **Throw Distance:** Depends on lens (See below table)
- **Throw Ratio:** Depends on lens (See below table)
- **Lens Shift (Motorized):** V: ±60%, H: +/-10% (AH-AC21020)
- **Keystone Correction:** V: ±30 degrees, H: +/-30 degrees 4-Corner
- **Projection Elevation Adjustment:** Up to 5 degrees
- **Scanning Frequency:**
  - H Sync: 15.73-91.14 kHz
  - V Sync: 23.98 - 119.83 Hz
- **Dot Clock:** 162 MHz
- **Input Signals - Computer:** WUXGA (1920 x 1200) - VGA (640 x 480)
- **Input Signals - Video:** 1080 i/p, 720 p, 576 i/p, 480 i/p

**Terminal**

- 3G-SDI: BNC x 2 (IN / OUT)
- HDBaseT: RJ-115 x 1
- HDMI: HDMI x 1 (Var 1.4)
- DVI-D: DVI-D x 1
- VGA: D-Sub 15 x 2 (IN / OUT)
- RGBHV / Component: 5 BNC x 1
- S-Video: Mini Din 4 Pin x 1
- Video: RCA (Yellow) x 1
- USB: USB Type A x 1 (Power Out)
- USB: USB Type B x 1 (Service)
- LAN: RJ-115 x 1
- RS-232C: D-sub 9 x 2 (IN / OUT)
- 3D Sync: MINI DIN 3 pin x 2 (IN / OUT)
- Remote Control: 3.5mm Mini Jack x 2 (IN / OUT)
- 12V Out: 3.5mm Mini Jack x 2 (Max 0.5A)
- Fan Noise (Eco / Normal): 39 dB / 43 dB
- Dimensions (W x H x D): 21.6 x 7.4 x 21.8" (548 x 189 x 553 mm)
- Weight: 38.4 lb (17.4 kg) without lens
- Power Requirements: AC 100 - 240 V, 50/60 Hz
- Power Consumption (Eco / Normal): 1290 W
- Thermal Dissipation: 4,606 BTU
- Standard Accessories: AC Power Cord x 2 (U.S.A. & Euro), VGA cable x 1, Remote Control (with AAA batteries x 2), Quick Start Guide, Safety Guide, Lens Cover x 1

**Dimensions**

- 21.8"
- 7.4"
- 21.6"

**Terminals**

- RS-232C
- Component / S-Video
- VGA
- DVI-D
- USB B / USB A
- LAN
- 3D SYNC
- HDBaseT
- Video
- HDMI
- 12V Trigger
- Remote Control

**Optional Lenses**

<table>
<thead>
<tr>
<th>Lens</th>
<th>Throw Ratio</th>
<th>Throw Distance (ft)</th>
<th>Zoom Ratio</th>
<th>Screen Size</th>
</tr>
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<tbody>
<tr>
<td>AH-AC22060</td>
<td>0.76-0.95:1</td>
<td>3.2-20.0</td>
<td>1.25x</td>
<td>60&quot;-300&quot;</td>
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<tr>
<td>AH-AC22070</td>
<td>1.14-1.71:1</td>
<td>4.8-36.2</td>
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<tr>
<td>AH-AC21020</td>
<td>1.61-2.42:1</td>
<td>6.8-51.2</td>
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<tr>
<td>AH-AC24020</td>
<td>2.37-3.60:1</td>
<td>10.0-76.3</td>
<td>1.52x</td>
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<tr>
<td>AH-AC3020</td>
<td>3.53-5.65:1</td>
<td>14.9-119.7</td>
<td>1.60x</td>
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<tr>
<td>AH-AC23030</td>
<td>5.52-8.83:1</td>
<td>23.4-187.2</td>
<td>1.60x</td>
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</tr>
</tbody>
</table>

**Optional Accessories**

Wired Remote controller (P/N: AH-AC34010)

EIKI INDUSTRIAL CO., LTD.
6-23 Teramita, Itami Shi, Hyogo, Japan
Tel: +81-72-782-7552 • Web: global.eiki.com

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